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YENMAK®

ENGINE PARTS

IMPORTANT INFORMATION

The catalogue has been complied for the aim of giving general information. Our firm can not be held reponsible for the changes on the desing of the spare parts made by the engine manufacturer. All schematic drawings and other data in the catalogue are given only for explanation and illustration purposes. The given data must not be used for engine renovation, desing and reproduction. In order not to experience any problem, expert advice must be taken from the producer or from authorized service.

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ÖNEMLİ BİLGİ

Bu katalog bilgi vermek amacı ile hazırlanmıştır.Motor üreticisinin, yedek parçaların tasarımlarında yaptığı değişiklikler için firmamız sorumlu tutulamaz. Katalogdaki bütün şemalar, çizimler ve diğer veriler sadece açıklama ve örnek amaçlıdır. Verilen bilgiler, motor yenilemesi, tasarımı ve üretimi için, üreticiden veya onun yetkili tamir servisinden uzman tavsiyesi alınmalıdır.

Bu kataloğun; kopyalanması, taklit edilmesi ve çoğaltılması kesinlikle yasaktır.
Alıntı yapılması; yazılı onayımızın alınmasına ve kesin kaynağın belirtilmesine bağlıdır.

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YENMAK®

ENGINE PARTS

Yenmak, as a small atelier was founded in Konya by Kahvecioğlu family in 1965.Over the years, Yenmak constantly renewing and improving itself regardless of engine parts supplier on domestic and abroad was one of the largest suppliers worldwide.

Yenmak today KIT, PISTONS, PISTON PIN, PISTON and CYLINDER ENGINE LINER production and with supply SEAL, VALVE, ENGINE BEARING; these products are exported to more than 80 different countries on 5 continents.

To our valuable customers and our long-term partners, we ensure to give best quality and reasonable price, as well as sales and after-sales services from a single source. In a single package, we ensure to supply all engine parts. In addition, knowing that most important of all components of the human factor YENMAK gives considerable importance and value of customer relationships.

YENMAK; INMETRO, ISO 9001, ISO / TS 16949, IATF 16949, TS EN ISO 14001 certified.

Today, 2 factories and 1 Head Officw & Logistics building with a total of 50,000 square meters and is based in Konya 1. 2. 3.Organize industrial areas.

Sales and marketing activities in Istanbul in YENMAK export office is performed.

Head Office & Logistics

Piston & Piston Pin Production Facility

Cylinder Liner Production Facility

YENMAK®

ENGINE PARTS

Since 2003, Yenmak products can be packed according to the format shown below and taked place in the market.

Find detailed information in the below about packaging

Be the first to reach the product thanks to special label.

Traceability number

Integrated 3D safety hologram on the box for the aim of ensuring product safety.

Box bottom safety label with the purpose of product safety ensurance.

BUREAU VERITAS
Certification

BUREAU VERITAS Certification

YENMAK PİSTON SEGMAN SANAYİ VE TİC. A.Ş.

2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12 SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

SEÇKİN DEMİRALP
Belgelendirme Müdürü

Sayfa 1/1

BUREAU VERITAS Certification

Certificate of Approval

Awarded to

YENMAK PİSTON SEGMAN SAN. VE TİC. A.Ş.

KIRIM CD. SARIÇİÇEK SK. NO:12 SELÇUKLU KONYA
42000 - Konya - Turkey

Bureau Veritas Certification certify that the Quality Management System of the above organization has been audited and found to be in accordance with the requirements of

ISO/TS 16949:2009

and the applicable customer specific requirements

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

BUREAU VERITAS Certification

YENMAK PİSTON SEGMAN SANAYİ VE TİC. A.Ş.

2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12
SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme Holding SAS – İngiltere Şubesi yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 14001:2004

Belgelendirme Kapsamı

ÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

SEÇKİN DEMİRALP
BVCH SAS İngiltere Şubesi
adına imzalayan

Sayfa 1/1

BUREAU VERITAS Certification

YENMAK MOTOR GÖMLEK SANAYİ VE TİCARET A.Ş.

1.ORGANİZE SANAYİ BÖLGESİ HOROZLUHAN MAH. ATABEY SOK. NO: 8 SELÇUKLU, KONYA, TURKEY

Bureau Veritas Certification Holding SAS - UK Branch certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2015

Scope of certification

MANUFACTURING OF CASTING AND MACHINING CYLINDER LINERS AND CASTING RING CARRIERS

Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

İBRAHİM TAŞKY
Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification

TSE

BUREAU VERITAS
Certification

Certificate of Approval

Awarded to

YENMAK MOTOR GÖMLEK VE TİC. A.Ş.

1. ORGANİZE SANAYİ BÖLGESİ, HOROZLUHAN
MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

STEEL PISTON

Steel piston, moving the interconnected steel piston head and the aluminum piston shaft are formed in piston pin. Due to their high strength and low wearing out values, these pistons are mainly used in heavy-duty diesel engines. Also, they provide low exhaust gas and emission limits.

Steel pistons;

• High compression ratio and new generation of engines with modern combustion chamber design

• Used in Heavy-duty diesel engines

• Multi-fuel system is used in the engine

Advantages of Steel Pistons;

• Steel pistons compared with the aluminum pistons; because of less contact with the cylinder liner, steel pistons provide less losses due less friction rate.

• Steel pistons compared with the aluminum pistons; steel pistons reduce the risk of profile deformation, because of their high resistance to thermal load.The sealing features of rings are increased.

• Aluminum piston, showing pressure resistance up to 100 bar, A steel piston of the same dimensions may show resistance up to 250 bar pressure.

• Provision of highers compression rate. The steel pistons provide 2-5% less emission. They provide reduction the contact problem resulting from the ring carrier (Ni-resist) material.

• Steel piston is closer to the top of the piston cooling groove. Consequently the cooling of the piston top is more efficiently.

• Compared with the aluminum piston, the combustion chamber has a minimized deformation.

• Due to the positive effects of prolonged engine life, they reduce the cost of rectifying the engine.

• When problems occur in supercharging and fuel injection systems, it causes to melting or piston perforation. In the two-parts (articulated) steel pistons, this kind of problems do not occur.

MONOSTEEL PISTON

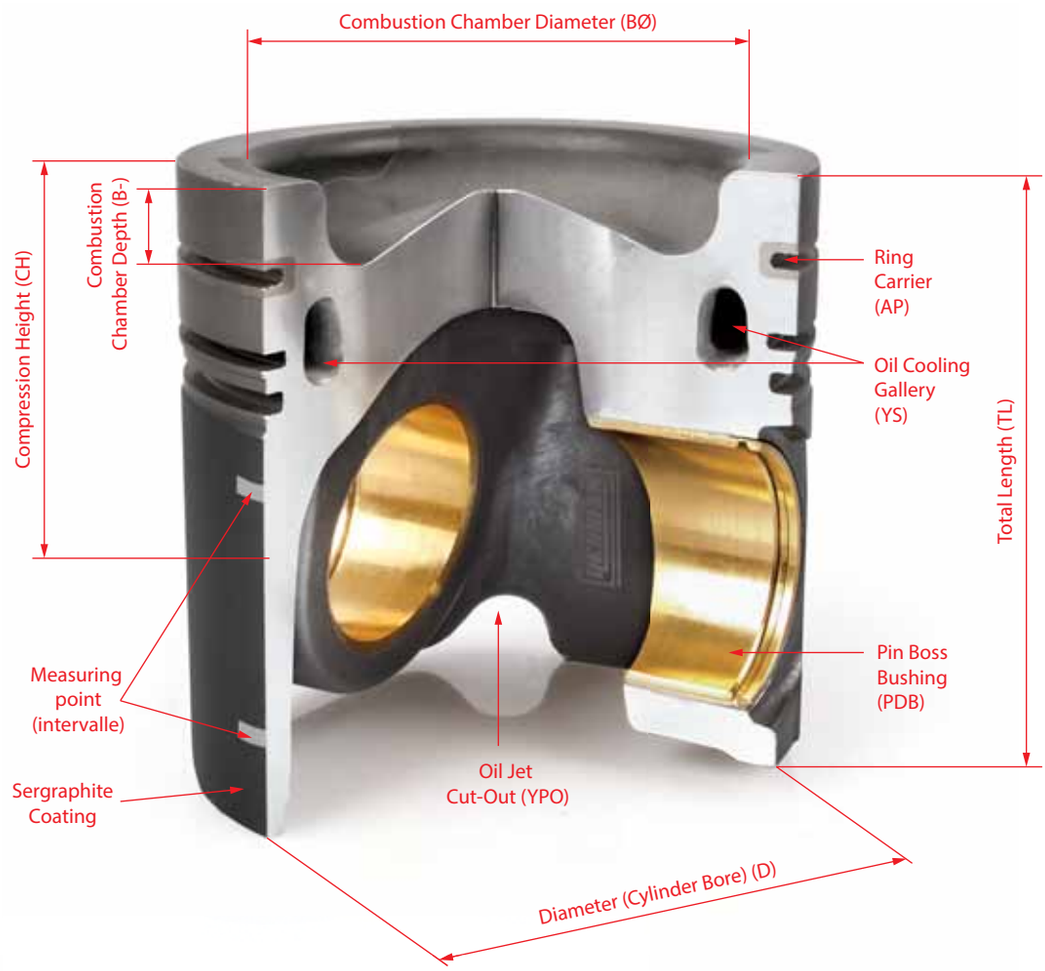
Monosteel piston has maximum load carrying capability and minimum combustion chamber deformation.

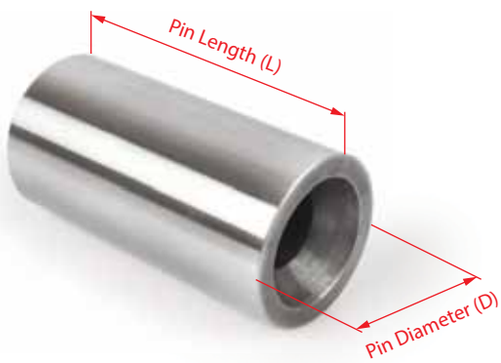
Monosteel pistons have cooling and power capacity which covers the high combustion chamber pressure and temperature demands of new generation engines.

In Monosteel pistons, the cooling groove is near to combustion area and this results as an effective cooling. The large cooling gallery provides much more effective cooling of combustion chamber and the ring groove areas..

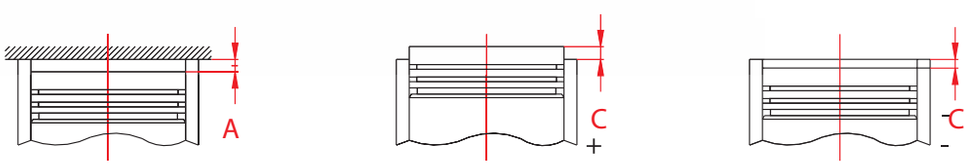
Due to its design, monosteel piston exhibits good wear values in addition to high strength and temperature resistance.This type pistons have better conditions For providing and ensuring lower oil consumption , relatively high surface temperature and low exhaus emission limits.

TECHNICAL DEFINITIONS





5- Piston Description of Clearance Dimensions



A = Clearance Measured to Cylinder

C = Clearance Measured to the Top of the Cylinder Block

GENERAL PISTON RİNG ASSEMBLY INSTRUCTION

The YENMAK replacement piston ring system is suitable for use in the reconditioning of Internal Combustion Engines in different states of wear. YENMAK piston rings are designed for use in engine overhauls where the engine exhibits excessive oil consumption and power loss due to a high mileage and worn cylinders. Prior to fitting the piston rings to the old piston, oil carbon deposits clinging to the piston grooves must be removed from the piston crown. Exercise extreme care when cleaning the groove root, especially the radiused corners between groove root and groove sides, otherwise any sharp nicks can subsequently grow into cracks. The pistons do not need re-machining because YENMAK piston ring sets are designed to fit the original pistons of the engine.

Gasoline Engines: Diameter upto 0.1 mm.

Diesel Engines: Diameter upto 0.15 mm.

Defective and worn pistons especially ones with loose ring carriers or with serious axial wear must always be replaced by YENMAK Pistons. Even if diametric dimensions are acceptable, form distortions that effect the parallel structure of the ring grooves could cause oil consumption and combustion gas leakage (blow-by).

Do not force and bend the rings, this could cause the working surface and the coating of the ring to be de- formed. Deformations that are not visible to the naked eye could cause problems in the engine.

Fit the rings in sequence, using piston ring pliers and inserting them into the piston grooves. Then use a ring tensioner to compress the rings on the piston. Push the piston into the cylinder, pushing and tapping lightly with the handle of a hammer. In the process make quite certain that the tensioner always rests on the surface of the cylinder block in order to prevent axially narrow rings from springing and suffering damage. It is important that chromium plated piston rings must not be fitted into chromium plated cylinder bores.

Located on a surface of piston rings YEN or TOP marks in the marking of the surface into the combustion chamber should be assembled into the piston ring grooves.Without any marking on the piston rings can be assembled in every direction.

RING COATING AND SURFACE TREATMENTS

Cr = Chrome Coating
Mo = Molybdenum Coating
P = Phosphate Coating
Fe = Ferroxyd Coating
Cu = Copper Coating
Nt = Nitrite Coating
Sn = Tin Coating
Ck = Chrome-Ceramic Coating
Pvd = Physical Vapor Deposition
Cdc = Chrome Diamond Coating
Dlc = Diamond Like Carbon
Tef = Teflon Coating

RING COATING

CK (Chrome-Ceramic Coating)

Chrome-Ceramic Coating, chrome and aluminum oxide elements with interpenetrating form gets a kind of composite coating. These coatings are mainly used in the pistons of diesel engines which used for diesel engine pistons top rings. Due to differences in the electrolysis method, chrome ceramic coating provides heigh quality and performance.

The difference between chrome coating and hard chrome plating;

- Higher abrasion resistance
- Higher Melting point
- Higher Hardness and fracture density

Because of these advantages, chrome ceramic coatings provide prolong engine life and reduction of the exhaust gas.

PVD (Physical Vapor Deposition)

PVD dissociates from the vapor phase reactive the accumulation of ring surface is formed. The metal vaporization and ionization is achieved with Electrical arc or ion bombardment by this methode.After the reaction, thin coating is formed in ring working surface. Through the characters in the ceramic coating,rings show a high resistance against wearing out and abrassion.

Mo (Molybdenum Coating)

Ring working surface prevent wearing out with molybdenum coating. The coating process may take place both flame spraying and plasma spraying method.

Molybdenum, provides more resistance on the ring working surface with high melting point(2620 C^0) , porous structure and lubricant effect. Thermal conductivity and abrasion resistance against friction are high.

Tef (Teflon Coating)

- Ability to operate without lubrication or in marginally lubricated conditions; no catastrophic failure if lubricant starvation occurs.
- Reduced wear rates, both of the piston ring and of the mating surface.
- Resistance to chemical attack by corrosive gases.
- Compatibility with unround surfaces.
- No need for running - in procedures.
- Ease of installation; non - brittle resilience allows one - piece construction.

Cr (Chrome Coating)

Hard chrome coating method which increases the resistance of the rings is applied extensively. The purpose of coating with chrome, reducing wearing out and prolong rings and cylinder liner life.

Chrome coating is applied in two methodes:

- Hard chrome coating

- Cellular chrome coating

Hard chrome coating; after rings are coated with chrome, rings grinned to take their final form.

Cellular chrome coating; ring surfaces provide an oil trap feature. Whereby, they provide the wearing out is minimized.

Nt (Nitrite Coating)

All ring surfaces are hardened with nitrite coating. Consequently the relevant ring surfaces get a higher resistance against abrassion. Thus, ring lifetime is extended. The nitride coating is environmental friendly due to production and emission characteristics. Ring of occurring in sensitive points reduce oil loss.Cast iron rings reduce the friableness.The engine life is extended.

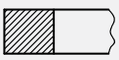
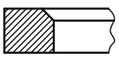
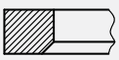
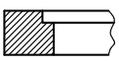
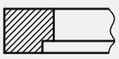
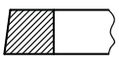
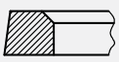
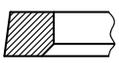
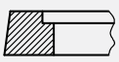
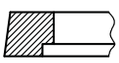
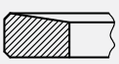
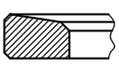
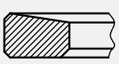
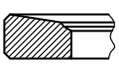
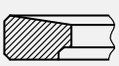
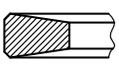
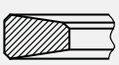
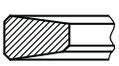
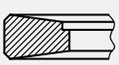
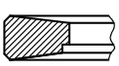
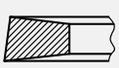
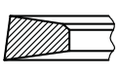
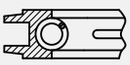
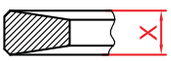
Cdc-Chrome Diamond Coating

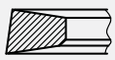
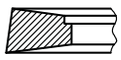
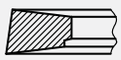
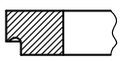
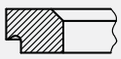
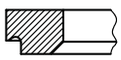
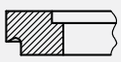
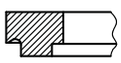
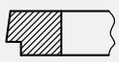
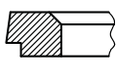
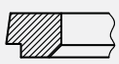
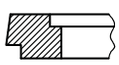
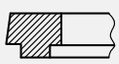
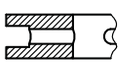
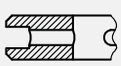
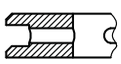
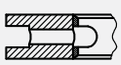
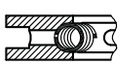
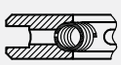
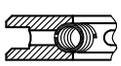
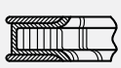
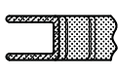
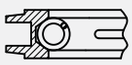
This type of coating is used in the top ring of Euro 4 and diesel engines. Applicable/useable materials for this methods are flexible alloy cast iron.Diamond particles are used instead of ceramic particles. Thus, abrasion resistance and anti-friction performance are increased.

Dlc-Diamond Like Carbon

This coating reduces the friction rate and increased wear resistance. DLC coating is an environmental friendly with features. Chemical bonds are strong. The mechanical stresses are unbreakable. They are not crystalline, but shapeless. Therefore, it is a very strong material. Compared to other coatings, this coating is more resistant and a higher resistant against friction.

TECHNICAL DEFINITIONS

	D	=	Rectangular Ring
	D-IF	=	Rectangular Ring with Internal bevel on top
	D-IFU	=	Rectangular Ring with Internal bevel on bottom
	D-IW	=	Rectangular Ring with Internal Step on top
	D-IWU	=	Rectangular Ring with Internal Step on bottom
	K	=	Taper Faced Ring
	K-IF	=	Taper Faced Ring with Internal bevel on top
	K-IFU	=	Taper Faced Ring with Internal bevel on bottom
	K-IW	=	Taper Faced Ring with Internal step on top
	K-IWU	=	Taper Faced Ring with Internal step on bottom
	TT	=	Half Keystone Ring
	TT-IF	=	Half Keystone Ring with Internal bevel on Top
	TT-IFU	=	Half Keystone Ring with Internal bevel on bottom
	TT-IW	=	Half Keystone Ring with Internal step on top
	TT-IWU	=	Half Keystone Ring with Internal step on bottom
	T	=	Keystone Ring
	T-IF	=	Keystone Ring with Internal bevel on Top
	T-IFU	=	Keystone Ring with Internal bevel on bottom
	T-IW	=	Keystone Ring with Internal step on top
	T-IWU	=	Keystone Ring with Internal step on bottom
	TK	=	Taper Faced Keystone Ring
	TK-IF	=	Taper Faced Keystone Ring with Internal bevel on top
	SDR	=	Steel Oil Control Rings with R-Shaped Groove
	X = Ring Thickness (mm)		

	TI-IFU	=	Taper Faced Keystone Ring with Internal bevel on bottom
	TK-IW	=	Taper Faced Keystone Ring with Internal step on top
	TK-IWU	=	Taper Faced Keystone Ring with Internal step on bottom
	N	=	Napier Ring
	N-IF	=	Napier Ring with Internal bevel on top
	N-IFU	=	Napier Ring with Internal bevel on bottom
	N-IW	=	Napier Ring with Internal Step on top
	N-IWU	=	Napier Ring with Internal Step on bottom
	TN	=	Taper Faced Napier Ring
	TN-IF	=	Taper Faced Napier Ring with Internal bevel on top
	TN-IFU	=	Taper Faced Napier Ring with Internal bevel on bottom
	TN-IW	=	Taper Faced Napier Ring with Internal step on top
	TN-IWU	=	Taper Faced Napier Ring with Internal step on bottom
	SC	=	Slotted Oil Control Ring
	DC	=	Bevelled Edge Oil Control Ring
	DB	=	Double Bevelled Edge Oil Control Ring
	ES	=	Slotted Oil Control Ring with Expanderspring
	SY	=	Coil Spring Loaded Slotted Oil Control Ring
	DY	=	Coil Spring Loaded Bevelled Edge Oil Control Ring
	PS	=	Coil Spring Loaded Double Bevelled Edge Oil Control Ring
	VF	=	Multi-piece Steel-rail Oil Control
	UB	=	U-flex Ring (Multi-piece)
	SDV	=	Steel Oil Control Rings with V-Shaped Groove
	DKS	=	Liner, Taper, Cylindrical Oil Control Rings

General Piston Assembly Instruction

1- The inner surface of the piston cylinder should be rhombic honing lines.If ready assembled piston used and/or assembling to worn cylinder, cylinder rhombic honing lines should be controlled for suitability. If the inner surface rhombic honing lines partially or completely lost and the inner surface has a polished surface, the inner surface should be honed to rebuild rhombic honing lines.

2- All pistons are manufactured sensitive for piston-cylinder make up a correct running clearance when the pistons are assembled inside of the cylinders. Inner diameters of the cylinders should be controlled for suitability according to measurements that they are located on the label shown on the box. If inner diameters of the cylinders are not suitable, the cylinders should be remanufactured.Inside diameters of the worn cylinders must be manufactured to measure the top, the top measure nominal diameter should be manufactured with 0.000-0.020 mm tolerance that this tolerance range is recommended.

3- Piston pin should be removed without damage to piston and piston pin from ready for assembly of the pistons. Piston pins are assembled their relevant pistons according to suitable piston measurements, the piston pins must not be changed randomly.

4- During the assembly of the piston rings, should be used suitable equipment for not deformed piston rings and damged pistons. During the assembly of the piston in the cylinder, should be used suitable piston ring compressor or tapered assembling sleeve. After piston rings has been clamped in accordance with procedures, pistons must not be assembled with using excessive force or hitting, the pistons must be assembled carefully with finger force.

5- Piston and piston pin must be cleaned carefully and especially piston pin hole must be lubricated before assembling the piston in the cylinder. Before the assembly, inside of the cylinders must be lubricated for during the first engine starting and untile lubricating,prevent damage to the cylinders.

6- If assembly direction signs marking locates on the piston crown, during the assembly this direction signs must be taken into consideration for assembly.

7- Please pay utmost attention for avoid damage to piston, piston pin and piston ring.

8- Pistons are manufactured in the direction of generally accepted norms according to the other parts that the other parts are used with the pistons. Therefore, do not make any operation on the pistons.

9- Pins and snap rings should not be used again, please always use a new pin and snap ring.

10- Controlled of piston rods linearity is very important for prevent serious problems. Before assembly, linearity of the connecting rods must be recontrolled again with appropriate equipments.

NOTE: Should act in accordance with specified in this assembly instructions.

The manufacturer is not liable for faulty assembly problems result from fail to comply instructions.

TECHNICAL DEFINITIONS

8- MARKING AND CODING ON THE PISTON CROWN

1- Producer Logo

2- STD/Oversize Information

7- Traceability Number

5- Piston Cylinder Gap (mm)

8- Compansated Compression Height Values (mm)

4- Cylinder Numbers for Installation

6 - Installation Direction Information. This direction is to be observed upon installation.Some special markings that are used expressions such as ''pin hole axial run-out'', ''front'' or ''Abluft''. ''Volant'' is a symbol for used to prevent incorrect assembly.

3- Piston Nominal Diameter

9- PISTON REFERENCE NUMBER

EXAMPLE

Piston Reference Number ← **11-01513-000** →

000 = STD/ Piston+Ring
001 = Compression height -0,20 mm short
002 = Compression height -0,40 mm short
003 = Compression height -0,60 mm short
050 = Oversize + 0,50 mm / Piston

OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
1513 000	11-01513-000

10- PISTON COMPLATE WITH RING REFERENCE NUMBER

EXAMPLE

Piston Complete with ring reference number ← **31-03513-000** →

000 = STD/Piston + Ring
050 = Oversize + 0,50 mm /Piston+Ring

Differences between piston ring types and coatings. ← **38-** **39-**

OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
3513 000	31-03513-000
3513 000-08	38-03513-000
3513 000-09	39-03513-000

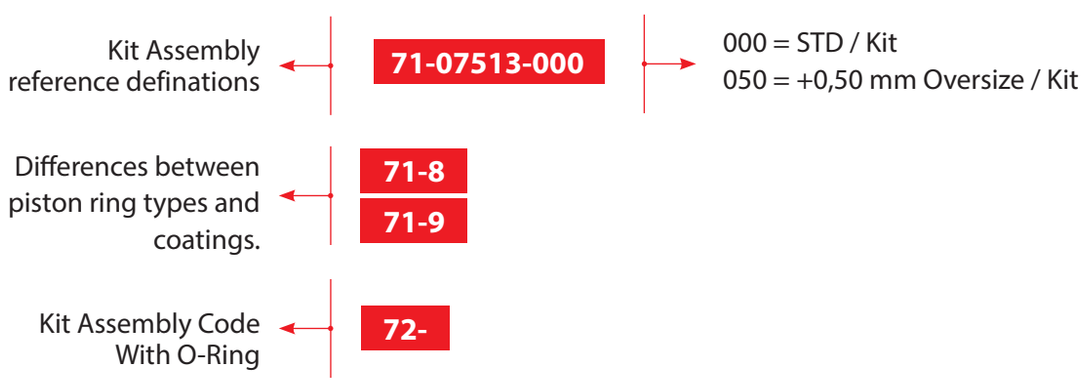
11 - LINER REFERENCE DEFINATIONS

EXAMPLE

OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
5513 000	51-05513-000

12 - KIT, SET REFERENCE DEFINATIONS

Kit Assembly Reference: Piston + Pin + Ring + Liner



OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
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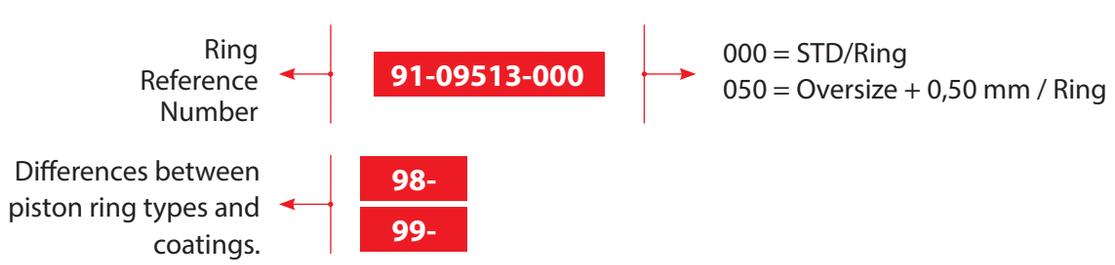
7513 000-08	71-87513-000
7513 000-09	71-97513-000

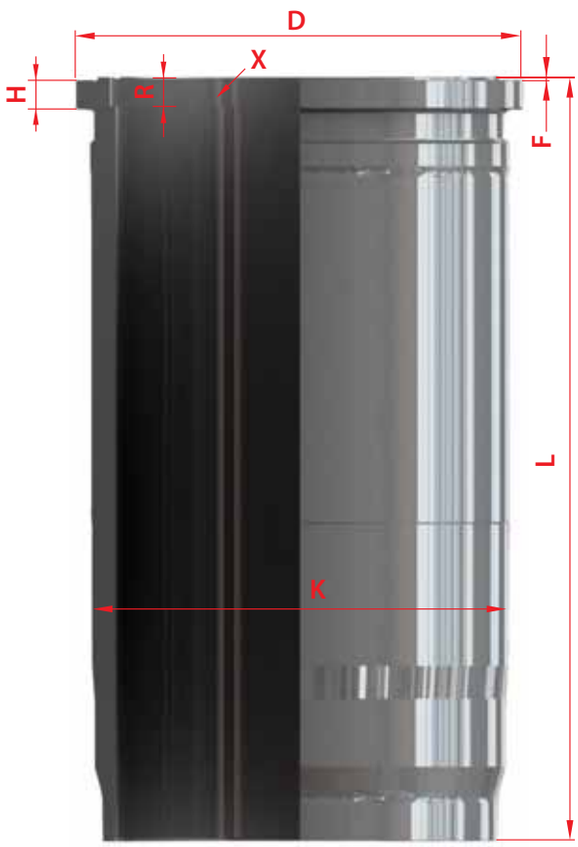
13 - RING REFERENCE NUMBER



OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - SEALING RING REFERANS NUMARASI

TECHNICAL EXPLANATIONS OF CYLINDER LINERS



K = Outside diameter
L = Total length
H = Flange width
F = Flange overlap
D = Flange diameter
X = Fire ring height
R = Relief height

Definition of Cylinder Liners according to TSE 842

In the internal combustion engines the cylinder liners are cast machine elements that are placed in the cylinder block and in which the piston moves and the fuel is combusted. The engine cylinder liners may be examined in two classes.

Wet Cylinder Liners

These are liners that cool the cylinder block that they are placed in with external water.

These are classified in 3 main groups:

a- Flanged and Channeled: These are liners that are placed on the cylinder block from the top with a flange and that have seal channels to prevent the leakage of engine cooling water in the lower section (Figure-1)

b- Flanged and without channel: These are liners that are placed on the cylinder block from the top with a flange and that do not have seal channels to prevent leakage. (Figure-2)

c- Double Flange: These are the cylinder Liners that are fixed on the cylinder block from the top and bottom with a flange and seal in a way to prevent water leakage. (Figure-3)

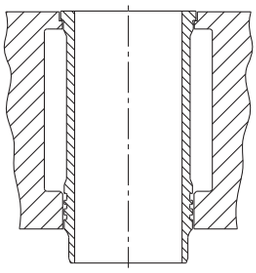


Figure - 1

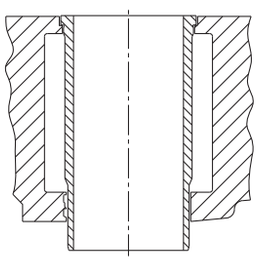


Figure - 2

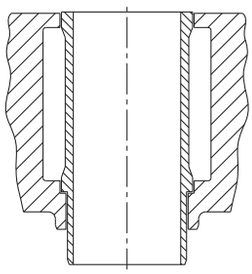


Figure - 3

Dry Cylinder Liners:

These are the liners that do not come into direct contact with the cooling water in cylinder block that they are placed.They can be classified under 2 main groups in term of shape:

A- Flanged (Figure-4)

B- Flangeless-plain (Figure-5)

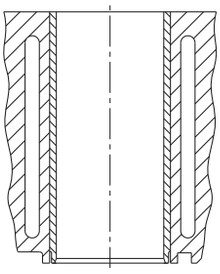


Figure - 4

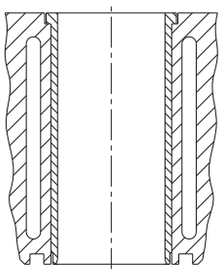


Figure - 5

THE MATTERS TO BE TAKEN INTO CONSIDERATION IN ASSEMBLY OF CYLINDER LINERS

The dry cylinder liners are produced with or without flange. (Figure-6) The displacement frequently seen case of blocking of the piston in the flangeless liners that are under unsuitable operating conditions is not encountered in flange liners. And this is an advantage that is provided by the flange.

Prior to the pressing of the liners to the cylinder, the cylinders are ground or fine machined in accordance with the rated dimensions specified for liner outer diameter(A). The following tolerances must be observed(Figure-7). Otherwise, the risk of unhealthy heat transfer in case of low pre-tension, incompliance with the cylinders with thin walls in case of high pre-tension and thus operation defects may be encountered. The internal diameter is approximately 0,5 - 0,75 mm dry liners with final outer diameter dimensions.

When assembling the flanged dry liner to the cylinder block by pressing, the hole processed for flange should be greater than the outer diameter(C) of the flange to prevent breaking of the flange.

When press assembling the flanged dry liner to the cylinder it should be made sure that the lower section of the flange is placed precisely on the having block.

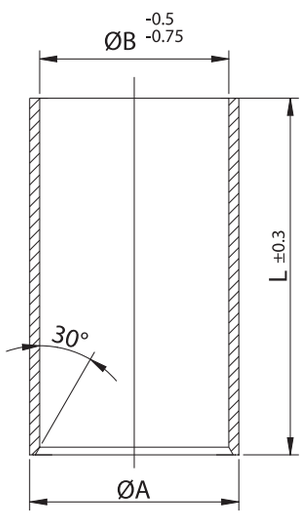


Figure - 6

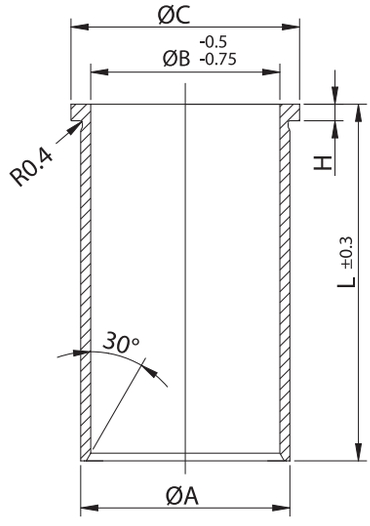


Figure - 7

As it is known, the liners have a radius of 0.4 mm at the lower section of the flange A tolerance of 1.0 mm should be given in the transition section on the block on which the flange is placed in assembly of the liner to the block in order to prevent placement of this radius. Otherwise the breaking of the liner flange is unavoidable.

Prior to mounting of the new liners, the cylinders on the engine block should be cleaned thoroughly and the dimensions should be controlled. The level of ovalness and conicity should not exceed 0.025 mm. When honing a bright surface should be provided and the level of surface roughness should be controlled according to the motor type. Excessively bright and smooth surfaces should be avoided due to the fact that they shall cause in efficient lubrication.

In pressing of the dry cylinder liners a pressure of 3000-5000 kg is efficient. If a solid substance shall be used as lubricator during assembly, this substance shall become coked, thus making the heat transfer difficult. Following the assembly by press the extrusions of the cylinder block from the seal surface should be removed by grinding.

If it shall be necessary to reprocess the seal surface of the cylinder block, the placement surface of the flange in the housing should be processed deeper. Moreover, liners with final outer dimensions and fine machined inner diameters are also available. These liners are pressed into the cylinders with a little honing tolerance and honed in pressed form. The rated dimension tolerance of the cylinder is between +0 and +0.015mm. The rated dimensions tolerance of the outer diameter of the cylinder liner between 0.012 and 0.024 mm.

	Liner Out Diameter Groups		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	Block Bore Diameter (mm)		
	50 - 80	80 - 120	120 - 180
Q_1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25

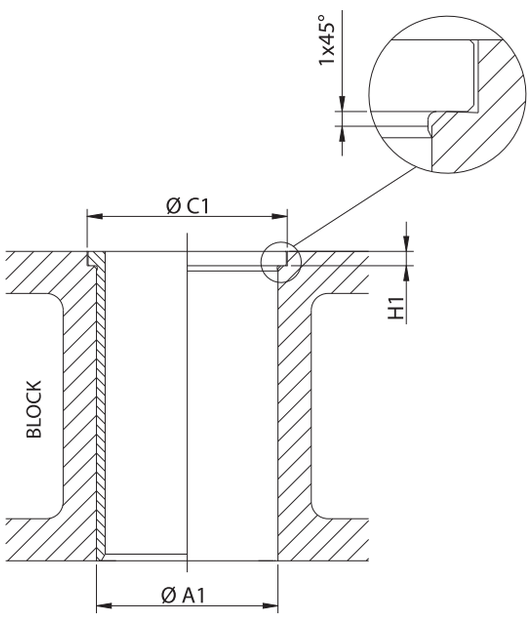


Figure - 9

ASSEMBLY INSTRUCTIONS FOR WET CYLINDER LINERS

Yenmak Engine Cylinder Liners are produced with the Blow Cast method that provides for resistance against wear and shrinking. Care should be given no to damage the housing places on the cylinder when removing the old liners.

The contact points on the engine block should be carefully cleaned of lime, dirt and other substances.Tools such as scrapers, chisels that may cause damage should not be use during cleaning. The most suitable tool for this process is a wire brush. For removal of the liners which are fixed on the cylinder due to corrosion and lime layers, a wooden block is placed on these layers and hit with a hammer. If it shall be impossible to remove the liner with this process, then a hydraulic press should be used. When cleaning care should be taken not to damage the placement surfaces.

The liner flange should be parallel to the surface block on which the lower part is placed as in (Figure-10) and it should not differ in terms of smoothness and linearity. Moreover, it should be controlled that cylinder axis is perpendicular to the seal surface of the cylinder block. (Figure-11) Another matter that must be taken into consideration is damaging of the placement surface by means of compression.(Figure-12) The flange placement surface on the (d) cylinder of the radius on the liner flange sub-surface should be given a radius of 0.5-1.0 mm 450 in order to prevent its placement on the (a) corner.

In order to prevent the risk of breaking, the tightness strength and the counter force should be leveled vertically.

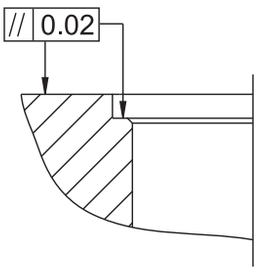


Figure - 10

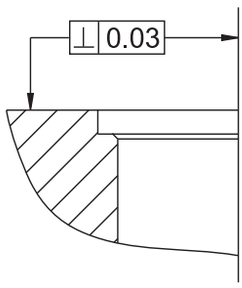


Figure - 11

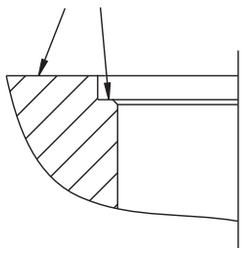


Figure - 12

The hole diameter(b) of the seals and the outer diameter(c) of the liner should be equal to one another.In order to provide for a full tightness the metal framed seals should be used.

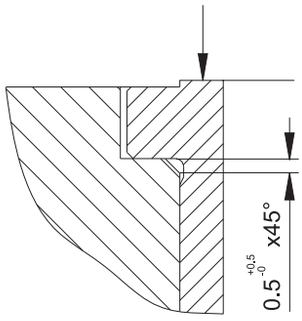


Figure - 14

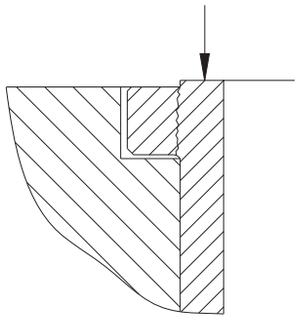


Figure - 15

In order to determine whether the cylinder block is easily established within the cylinder liner and is very large or very wide, cylinder liner should be inserted into the cylinder block by hand without the usage of rubber rings before installation. Especially the correct positioning of the liner flange to the block surface should be controlled. Utilization of a drawing ink is recommended for a correct placement control. In order to determine whether the flange diameter has an efficient space it is recommended that the liners are turned inside out prior to the assembly and placed to the flange placement surface on the flange side. As it is known, the flange is in the section of the motor that is not cooled and it is subject to expansion. At this point a space of 0.3-0.5 mm should be taken into consideration.

The matter that is emphasized the mosts in these instructions is the matter of placement and removal of the liner in accordance with the purpose. In other words, the errors that may be caused by utilization of heavy tools such as hammers etc. may cause severe results.

The elastic rings that shall be used during assembly should be of high quality and resistant against swelling, wear, oil and heat. Otherwise, penetration of water into the crankcase may cause clogging of the liner or defects in dimensions. Lubrication soap is applied on the elastic rings every time and then they are placed to their housings.

Only the high quality brands used by engine producers should be used as elastic rings. The main reason of this preference is the fact that they are resistant against swelling, wear, lubrication and heat.

Piston seizure, which causes breakage of the cylinder liner, is a result of the improper usage of rubber rings. Points where rubber rings are placed must never be scraped.

Following manual placement of the liners, it shall be benefiting to check the cylinder dimension once again. This control should be made especially in the sections that may cause oval formation and shrinkage.

After the liners are placed completely, the cylinder block should be filled with water and the tightness must be controlled.

DETAIL OF LINER MARKING

SEALING RING (O-RING)

The Sealing Ring (O-Ring) from the sealing parts is one of the important parts affecting the operation and performance of the engine. You can order our products using our single Sealing Ring (O-Ring) codes or kit and liner with Sealing Ring (O-Ring) reference codes.

Sealing Ring Material	
EPDM	Rubber EPDM
NBR	Rubber
FPM / VI	Viton
Cu	Copper
T	Tombak
ST	Steel
SC / MVQ	Silicone
Shim / SM	Soft Metal

93,000 (1)		3	4	5	6	7
4JB1 (2)		D	00 2005 > 00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) CH 51,850 (9) VD1 0,550 (10) B- 19,500 (11) BØ 43,900 (12) TL 91,850 (13) 31,00x76,00 (15) Isuzu ve Opel ile Ortak Motor (27)	AP YS HA CP (14)	91-09389-000 1 2,000 P 2 2,000 P 3 4,000 CrP (16)	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)	Ø 93,000 (18)	31-04385-000 (19)
		99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF (16)			39-04385-000
K=95,00 (22) L=181,00 (24) H=0,90 (25) D=101,00 (23)	DF-CR-ST (26)			51-35721-000 (20)	71-08385-000 71-98385-000 (21)
K=120,00 (22) L=229,00 (24) H+F=9,00+1,10 (25) D=128,50 (23)	WF (26)		O-Ring/Seal 55-50613-000 2 FPM 112,00x3,00 (28)	51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

1 - Piston Diameter
2 - Engine Code
3 - Type of Fuel
4 - Model Years
5 - Cylinder Number
6 - Displacement
7 - Engine Power
8 - Piston Code
9 - CH: Compression Height
10 - VD1/VD2: Valve Depth
11 - B- : Combustion Chamber Depth
B+ : Radiated crown
12 - BØ: Bowl Diameter
13 - TL: Total Length
14 - Piston Specifications
*DAP: Double Ring Carrier Piston
*AP: Ring Carrier Piston
*YS: Oil-Cooled Piston
*CP: Steel Sheet Piston
*HA: Hard Anodized Coating
*PDB: Piston Pin Hole Bushing
15 - Piston Pin Diameter- Length
16 - Piston Ring Specifications
17 - Piston Protrusion
18 - Cylinder Diameter
19 - Piston + Ring Reference No
20 - Liner Reference No
21 - KIT Reference No
22 - Cylinder Outside Diameter
23 - Liner Flange Diameter
24 - Liner Total Length
25 - Flange Height / Overlap
26 - Cylinder Liner Specifications
*WS : Wet liner semi finish
*WF : Wet liner full finish
*DS : Dry liner semi finish
*DF : Dry liner full finish
*AF : Air cooled full finish
*PH : Phosphate
*CR : Chrome
*HR : Hardened
*NT : Nitrite
*HT : Heat treatment
*STEEL : Steel
27 - Common engine
28 - Sealing Ring Code

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Motor tipleri, açıklamalar, ürünler, ürün resimleri, üreticiler, araçlar v.b. nitelendirmeler sadece referans amaçlı verilmiştir.

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Yenmak bugün KİT, PİSTON, PİSTON PİMİ, SEGMAN ve SİLİNDİR MOTOR GÖMLEĞİ üretimi; CONTA, SUPAP ve MOTOR YATAĞI tedariği ile bu ürünleri 5 kıtada 95'den fazla ülkeye ihraç etmektedir.

Siz değerli müşterilerimiz için uzun soluklu bir iş ortağı olarak nihai güven, en iyi kalite ve makul fiyatın yanı sıra, satış ve satış sonrası hizmetler olarak, müşterilerine ürün portföyünde tek bir kaynaktan, bir paket içinde bütün motor parçalarının teminini sağlar. Bunun yanı sıra YENMAK insan faktörünün bütün bileşenler içinde en önemlisi olduğunu bilerek müşteri ilişkilerine değer vermektedir.

YENMAK; INMETRO ve ISO 9001, ISO / TS 16949, IATF 16949, ISO 14001 sertifikalarına sahiptir. Bugün, 2 Fabrika ve 1 Genel Merkez & Lojistik binasıyla toplamda 50.000 metrekarelik alanda Konya 1. 2. ve 3. Organize sanayi bölgelerinde kuruludur.

Satış ve pazarlama faaliyetleri İstanbul' da bulunan YENMAK ihracat ofisinde gerçekleştirilmektedir.

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Piston & Pim Fabrikası

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MOTOR PARÇALARI

2003 yılından itibaren Yenmak ürünleri aşağıda gördüğümüz formatta ambalajlanıp pazarda yerini aldı.

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Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

TÜRKAK

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Belgelendirme Müdürü

Sayfa 1/1

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42000 - Konya - Turkey

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SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

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Standart

ISO 14001:2004

Belgelendirme Kapsamı

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Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

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Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

UKAS

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Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
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MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

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TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

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ÇİFT PARÇA ÇELİK PİSTONLAR

Çift parça çelik pistonlar, piston pimi üzerinde hareketli olarak birbirine bağlı bir çelik piston başı ve alüminyum piston şaftından oluşmaktadır. Yüksek mukavemet ve düşük aşınma değerleri nedeniyle, bu pistonlar ağırlıklı olarak ağır hizmet dizel motorlarında düşük egzoz gazı ve emisyon limitlerinde çalışılmasını sağlamaktadır.

Çift Parça Çelik Pistonlar;

• Yüksek sıkıştırma oranına ve modern yanma odalarına sahip yeni nesil motorlarda,

• Ağır hizmet dizel motorlarında,

• Çoklu yakıt sistemlerinin kullanıldığı motorlarda,

Çift Parça Çelik Pistonların Avantajları;

• Çift parça çelik pistonlar alüminyum pistonlara göre; silindir gömleği ile temas mesafesinin daha az olması nedeniyle sürtünme kuvvetlerinden kaynaklı kayıpların daha az olmasını sağlar.

• Çift parça çelik pistonlar alüminyum pistonlara göre; termal yüklere karşı yüksek direnç göstermesi nedeniyle gömlek deformasyon riskini azaltır ve daha düşük silindir boşluğunda çalışabilir, segmanların sızdırmazlık özelliklerini arttırır.

• Normal bir alüminyum piston 100 bar basınca kadar dayanım gösterirken, aynı ölçülerdeki bir çelik piston 250 bar basınca kadar dayanım gösterebilir.

• Motorda daha yüksek sıkıştırma oranı ve %2-5 arasında daha az CO_2 emisyonu oluşumu sağlar. Dizel motorlar için alüminyum pistonlarda kullanılan alfin (Ni-resist) malzemeden kaynaklanan temas problemlerini azaltmayı sağlar.

• Soğutma kanallı pistonlarda soğutma kanalının pistonun üst kısmına daha yakın olmasına olanak sağlar, bu daha etkin bir soğutmanın sağlanmasına yol açar.

• Çift parça çelik pistonlar alüminyum pistonlara göre minimum yanma odası deformasyonuna sahiptir.

• Çift parça çelik pistonlar motorun ömrünün uzamasına pozitif yöndeki etkileri sebebiyle motor rektifiye maliyetlerini düşürürler.

• Aşırı doldurma ve yakıt püskürtme sistemlerinde oluşan arızalar, piston ergime ya da delinme gibi problemlere neden olur. Çift parça çelik pistonlarda ise bu problemler meydana gelmez.

TEK PARÇA ÇELİK PİSTONLAR

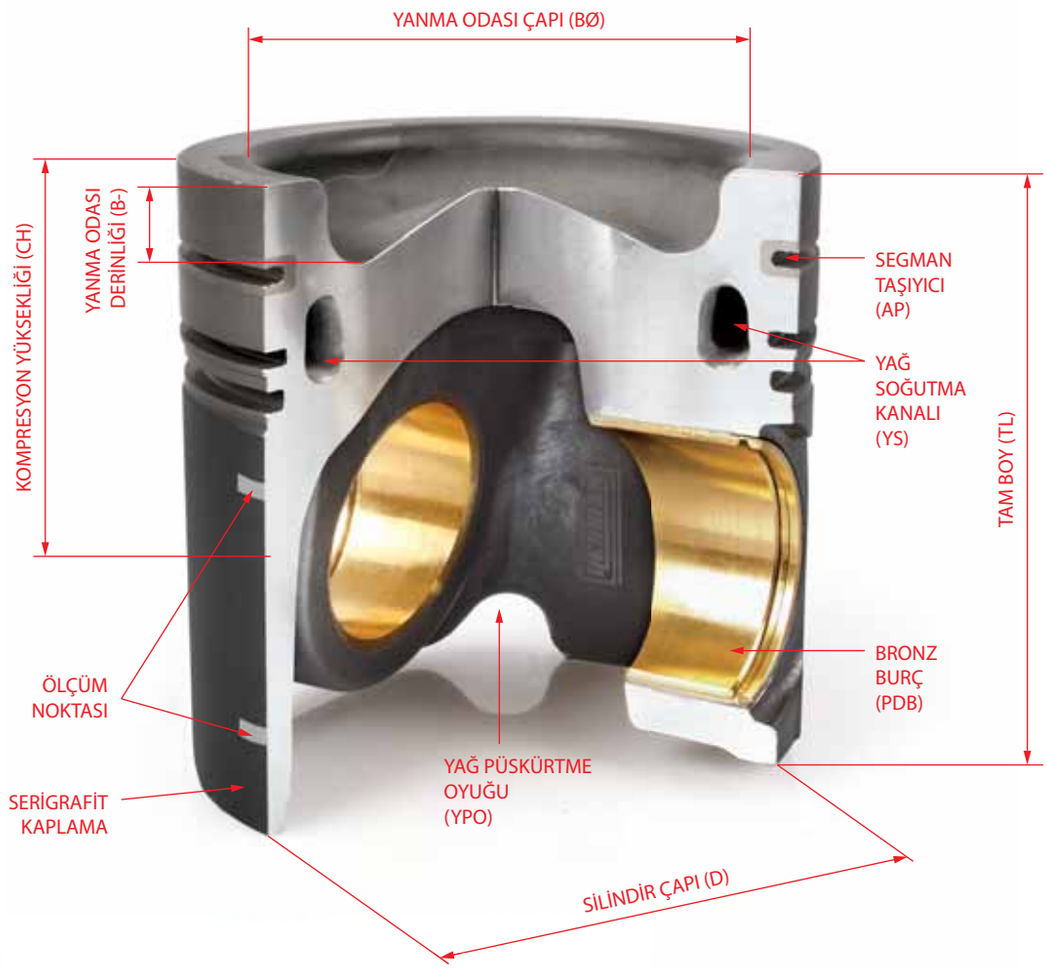
Maksimum yük taşıma kapasitesi ve minimum yanma odası deformasyonuna sahiptir.

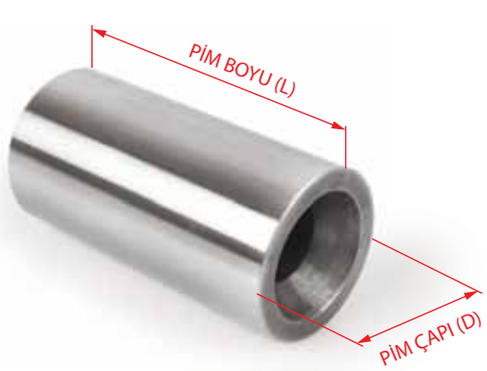
Monosteel pistonların, yeni nesil motorların yüksek yanma odası basıncını ve sıcaklık taleplerini karşılayan soğutma ve güç kapasitesi vardır.

Monosteel pistonlarda, soğutma kanalı pistonun üst kısmına daha yakındır, bu da daha etkin bir soğutmanın gerçekleşmesini sağlar. Geniş soğutma kanalı sayesinde yanma odası ve segman set bölgesinin çok daha verimli soğutulması sağlanmıştır.

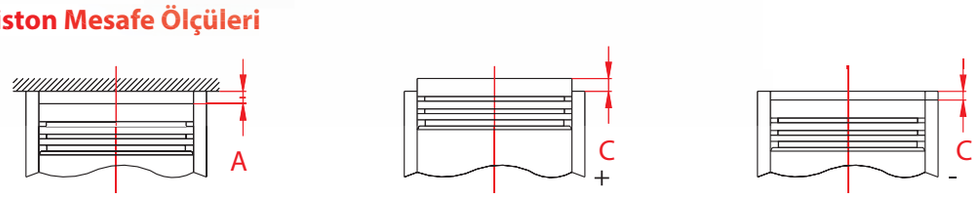
Tasarımı nedeniyle, monosteel piston, yüksek mukavemet ve sıcaklık direncine ek olarak iyi aşınma değerlerine sahiptir. Sürekli düşük yağ tüketimi ve nispeten yüksek yüzey sıcaklığı, düşük egzoz emisyon limitlerini korumak için iyi koşullar sağlar.

TEKNİK TANIMLAMALAR





Piston Mesafe Ölçüleri



A = Silindir kafasına kadar olan ölçü

C = Blok yüzeyinden piston başındaki ölçü

YENMAK PİSTON SEGMANLARI MONTAJ TALİMATI

Kullanılmış pistonlarda takılmak istendiğinde, pistonların, segman yuva kanallarındaki karbon kalıntılarının ve yağ deliklerinin temizlenmesi gerekir. Pistonların tepelerindeki karbon tabakaları dışında, bütün fazla karbon kalıntıları temizlenmelidir. Segman kanallarının temiz olmasına çok dikkat edilmelidir. Yan ve dip yüzeylerin birleştiği kenar kavislerinin temizlenmesi sırasında çizilmeler olmamasına dikkat edilmelidir. Aksi taktirde bu çizilmeler ilerde çatlamaların başlangıcı olabilecektir. Pistonların işlenmesine gerek yoktur, çünkü Yenmak segman setleri motorların orijinal pistonlarına uyacak şekilde dizayn edilmektedirler. Yenmak piston segmanlarının kullanılabileceği silindir aşınma sınır değerleri aşağıda belirtildiği gibidir:

Benzin motorlarında çapta en çok 0, 1 mm

Dizel motorlarında çapta en çok 0, 15 mm

Genelde kullanılmış pistonlarda yukarıda belirtilen boşluk değerlerinin içinde bir aşınma olmuşsa da, segman kanallarında aşırı deformasyon olan pistonları mutlaka değiştiriniz. Çünkü segman kanallarındaki form ve paralellikte bozulmalar olan pistonlarda, boşluk değerinin uygun olması yanıltıcı olur ve segmanlar bu tip pistonlarda doğru bir şekilde çalışamaz, yağ sarfiyatı ve üfleme gibi şikâyetlere neden olurlar.

Segmanları yukarı, aşağı eğme bükme hareketleri yapmak, segmanın çalışma yüzeyi formlarının bozulması ve kaplama malzemesinin deforme olmasına neden olabilir. Gözle görülemeyen bu deformasyonlar motor çalışma şartlarında problemlere yol açabilmektedir.

Segmanları (Segman açma pensesi ile) açarak, sırasıyla pistondaki yuvalarına yerleştiriniz. Daha sonra bir segman sıkma kelepçesi veya konik montaj kovanı kullanarak segmanları sıkınız ve pistonun tepesine çekiç sapı ile iterek gerekirse hafifçe vurarak silindir içine kaydırınız. Bu işlem sırasında, ince segmanların kelepçe dışına çıkıp hasarlanmasını önlemek için kelepçenin sürekli bir şekilde blok yüzüne oturmuş olarak tutulmasına dikkat ediniz. İçi krom kaplı gömlekli motorlarda, krom kaplı segmanlar kullanılmamalıdır.

Bir yüzeyinde YEN veya TOP markalaması bulunan segmanların markalamanın bulunduğu yüzleri yanma odasına bakacak şekilde yuvalarına takılmalıdır. Üzerinde herhangi bir markalama olmayan segmanlar her yönde takılabilir.

SEGMAN KAPLAMA VE YÜZEY İŞLEMLERİ

Cr = Krom Kaplama
Mo = Molibden Kaplama
P = Fosfat Kaplama
Fe = Ferroksit Kaplama
Cu = Bakır Kaplama
Nt = Nitrit Kaplama
Sn = Kalay Kaplama
Ck = Krom Seramik
Pvd= Fiziksel Buhar Birikimi
Cdc= Krom Elmas Kaplama
Dlc = Elmas Kaplamalı Karbon Kaplama
Tef = Teflon Kaplama

SEGMAN KAPLAMA VE YÜZEY İŞLEMLERİ

Ck (Krom-Seramik Kaplama)

Krom-Seramik Kaplamalar (CK), krom ve alüminyum oksit elementlerinin iç içe oluşturduğu ağ yapısı ile elde edilen kompozit bir kaplama türüdür. Bu kaplamalar ağırlıklı olarak dizel motorlu araçların pistonlarının birinci yuva segmanlarının kaplanmasında kullanılır. CK kaplama, elektroliz yöntemindeki farklılık sebebiyle yüksek kalite ve performansı beraberinde getirir.

Ck kaplamanın sert krom kaplamadan farkları;

- Aşınma direnci daha yüksek
- Erime noktası daha yüksek
- Sertliği ve çatlak yoğunluğu daha yüksek

Bu avantajlarından dolayı kullanıldığı araçlarda CK kaplamalar motor ömrünü uzatmayı, düşük emisyonlu egzoz gazlarının oluşmasını sağlar.

Pvd (Fiziksel Buhar Birikimi)

Sert kaplamaların buhar fazından reaktif olarak ayrışarak segman yüzeyine birikimi sonucunda oluşan bir yöntemdir. Elektrik arkı ya da iyon bombardımanı ile metalin buharlaşması ve iyonlaşması bu yöntem ile sağlanır.

Ayrışmış ve düzenlenmiş metal iyonları bileşenin yüzeyine doğru ilerletilir. Bunun sonucunda metal atomları reaktif gazlar ile reaksiyona girer ve nitrit, karbit, ve oksit oluşturur. Reaksiyon sonrası segman çalışma yüzeyinde ince bir kaplama oluşmuş olur. Kaplama içindeki seramik karakter sayesinde aşınma ve yıpranmalara karşı yüksek direnç gösterir.

Mo (Molibden Kaplama)

Segman çevresi aşınmaları önlemek için molibden ile kaplanır.Yanık izlerinden kaçınılması için segmanların çalışma yüzeyi molibden ile doldurulabilir veya tüm yüzeyi kaplanabilir. Kaplama işlemi, hem alev ile püskürtme hem de plazma ile püskürtme yöntemi ile gerçekleşebilir.

Molibden, yüksek erime noktası(2620 C^0), gözenekli yapısı ve yağlayıcı etkisi sayesinde piston segmanı çalışma yüzeyinin daha dayanıklı olmasını sağlar.Isıl iletkenliği ve sürtünmelere karşı aşınma direnci yüksektir.

Tef (Teflon Kaplama)

- Yağlama olmadan ya da çok az yağlı şartlarda çalışabilme özelliğine sahiptir. Yağlama yetersizliği meydana gelirse yıkımsal iş görmezlik meydana getirmez.
- Segmanda ve temas ettiği yüzeylerde aşınma miktarını azaltır.
- Aşındırıcı gazların kimyasal madde etkisine dirençlidir.
- Yuvarlak/dairesel olmayan yüzeylere uygundur.
- Alıştırma işlemine gerek yoktur.
- Montaj kolaylığı sağlar, kırılgan olmayan /esnek yapısı sayesinde tek parça bir yapıdadır.

Cr (Krom Kaplama)

Segmanların dayanıklılıklarının arttırılmasında yaygın bir biçimde uygulanan yöntem sert kromla kaplamadır. Krom ile kaplamadan amaç aşınmayı azaltarak segmanın ve silindir gömleğinin servis ömrünü uzatmaktır. Segman ve silindir duvarı aşınmasının azaltılması, en üstteki segmanın krom kaplanmasıyla mümkündür. Günümüzde sadece en üst segman değil, aynı zamanda iki veya daha fazla segmanının kromla kaplanması eğilimi vardır.

Kromla kaplamanın sert bir yüzey oluşturması nedeniyle, segmanların kendisinde aşınmayı azaltacağı açıktır.

Kromla kaplama başlıca iki şekilde uygulanmaktadır:

- Sert

- Gözenekli kromla kaplama

Sert krom kaplamada segmanlar yüzeyleri kromla kaplandıktan sonra taşlanarak son şekillerini almaktadırlar. Segmanlar, gözenekli olarak kromla kaplanmalarından dolayı yüzeyleri yağ tutucu bir özellik kazanır. Böylece, hem kendileri ve hem de çalışacakları gömlek yüzeylerinde aşınmanın en aza inmesini sağlarlar.

Nt (Nitrit Kaplama)

Nitrit kaplama işlemi ile segman yüzeyinin tümü sertleştirilir. Bu kaplama ile yüzeyin sürtünmelere karşı direnci arttırılır. Bu sayede segman kullanım ömrü uzatılmış olur. Nitrit kaplama üretimi ve emisyon özellikleri ile çevre dostudur. Nitrit kaplama ile kritik performans yüzeylerinden daha etkin çalışma sonuçları çıktığı görülmüştür. Segmanların hassas noktalarından oluşan yağ kayıplarını azaltır. Dökme demir segmanların kırılganlığını azaltır. Motor ömrünü uzatır.

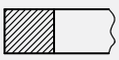
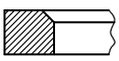
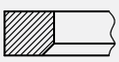
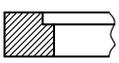
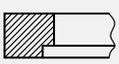
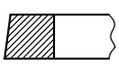
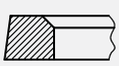
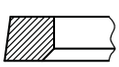
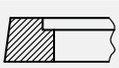
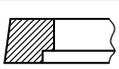
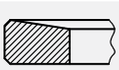
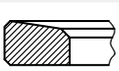
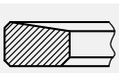
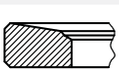
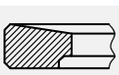
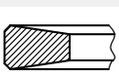
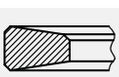
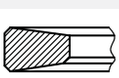
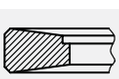
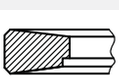
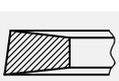
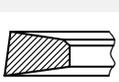
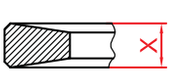
Cdc (Krom Elmas Kaplama)

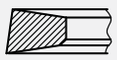
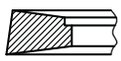
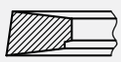
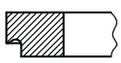
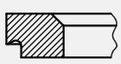
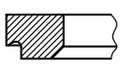
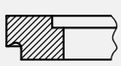
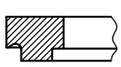
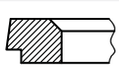
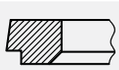
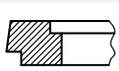
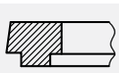
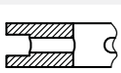
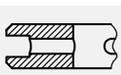
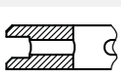
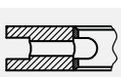
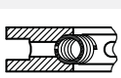
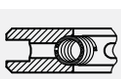
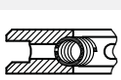
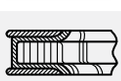
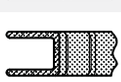
Bu kaplama tipi Euro 4 ve dizel motorların tepe segmanlarında kullanılmaktadır. Esnek ve alaşımlı dökme demirlere, karbon çeliğine uygulanabilir. Elmas parçacık seramik parçacığın yerine kullanılmıştır. Bu sayede aşınma direnci ve sürtünmeye karşı performansı artmıştır.

Dlc (Diamond Like Carbon) (Elmas Görünümlü Karbon Kaplama)

Bu kaplama sayesinde sürtünme azaltılmakta aşınmaya karşı direnç arttırılmaktadır. DLC kaplama özellikleri itibari ile çevre dostu bir yapıdadır. Kimyasal bağları güçlüdür mekanik gerilim altında kırılmaz. Kristal yapılı değildirler, şekilsizdirler. Bu malzeme yapısından dolayı çok kuvvetli bir malzemedir. Diğer kaplamalara göre daha dayanıklı, sürtünmelere karşı direnci daha yüksektir.

TEKNİK TANIMLAMALAR

	D	=	Dikdörtgen segman
	D-IF	=	İç kenar üst yüzey pahlı dikdörtgen segman
	D-IFU	=	İç kenar alt yüzey pahlı dikdörtgen segman
	D-IW	=	İç kenar üst yüzey kademeli dikdörgen segman
	D-IWU	=	İç kenar alt yüzey kademeli dikdörgen segman
	K	=	Konik segman
	K-IF	=	İç kenar üst yüzey pahlı konik segman
	K-IFU	=	İç kenar alt yüzey pahlı konik segman
	K-IW	=	İç kenar üst yüzey kademeli konik segman
	K-IWU	=	İç kenar alt yüzey kademeli konik segman
	TT	=	Tek taraflı trapez segman
	TT-IF	=	İç kenar üst yüzey pahlı tek taraflı trapez segman
	TT-IFU	=	İçkenar alt yüzey pahlı tek taraflı trapez segman
	TT-IW	=	İç kenar üst yüzey kademeli tek taraflı trapez segman
	TT-IWU	=	İç kenar alt yüzey kademeli tek taraflı trapez segman
	T	=	Çift taraflı trapez segman
	T-IF	=	İç kenar üst yüzey pahlı çift taraflı trapez segman
	T-IFU	=	İç kenar alt yüzey pahlı çift taraflı trapez segman
	T-IW	=	İç kenar üst yüzey kademeli çift taraflı trapez segman
	T-IWU	=	İç kenar alt yüzey kademeli çift taraflı trapez segman
	TK	=	Çift taraflı trapez konik segman
	TK-IF	=	İç kenar üst yüzey pahlı çift taraflı trapez konik segman
	SDR	=	Spiral yaylı V tipi kanallı çelik yağ kontrol segmanı
	X = Segman kalınlığı (mm)		

	TI-IFU	=	İç kenar alt yüzey pahlı çift taraflı trapez konik segman
	TK-IW	=	İç kenar üst yüzey kademeli çift taraflı trapez konik segman
	TK-IWU	=	İç kenar alt yüzey kademeli çift taraflı trapez konik segman
	N	=	Burun sıyırıcı segman
	N-IF	=	İç kenar üst yüzey pahlı burun sıyırıcı segman
	N-IFU	=	İç kenar alt yüzey pahlı burun sıyırıcı segman
	N-IW	=	İç kenar üst yüzey kademeli burun sıyırıcı segman
	N-IWU	=	İç kenar alt yüzey kademeli burun sıyırıcı
	TN	=	Burun sıyırıcı konik segman
	TN-IF	=	İç kenar üst yüzey pahlı burun sıyırıcı konik segman
	TN-IFU	=	İç kenar alt yüzey pahlı burun sıyırıcı konik segman
	TN-IW	=	İç kenar üst yüzey kademeli burun sıyırıcı konik segman
	TN-IWU	=	İç kenar alt yüzey kademeli burun sıyırıcı konik segman
	SC	=	Yarıklı yağ kontrol segmanı
	DC	=	Pahlı yağ kontrol segmanı
	DB	=	Çift pahlı yağ kontrol segmanı
	ES	=	Yaprak yaylı yarıklı yağ kontrol segmanı
	SY	=	Spiral yaylı yarıklı yağ kontrol segmanı
	DY	=	Spiral yaylı kenarları pahlı yağ kontrol segmanı
	PS	=	Spiral yaylı kenarları çift pahlı yağ kontrol segmanı
	VF	=	Çelik bantlı VF yaylı yağ kontrol segmanı
	UB	=	Çelik bantlı U tipi yağ kontrol segmanı
	SDV	=	Spiral yaylı V tipi kanallı çelik yağ kontrol segmanı
	DKS	=	Düz konik silindir uçlu yağ kontrol segmanı

GENEL PİSTON MONTAJ TALİMATI

1- Pistonun monte edileceği silindir iç yüzeyinde baklavaması honlama çizgileri olmalıdır. Şayet montaja hazır piston kullanılmış ve/veya aşınmış silindire monte edilecekse, silindir iç yüzeyi honlama çizgilerinin uygunluğu açısından kontrol edilmelidir. Eğer silindir iç yüzeyinde honlama çizgileri kısmen veya tamamen kaybolmuş ve parlak bir yüzey oluşmuşsa, silindir iç yüzeyi honlama çizgileri tekrar oluşacak şekilde honlanmalıdır.

2- Bütün pistonlar, doğru ölçülü bir silindir içine monte edildiklerinde belirlenmiş olan doğru piston-silindir çalışma boşluğu oluşturmaları için hassas olarak imal edilirler. Silindir iç çapları, kutu üstündeki etiketlerde gösterilen ölçülere uygunluklarını kontrol etmek ve bu şekilde yeniden işlenmelerinin gerekli olup olmadığını saptamak için kontrol edilmelidir. Yıpranmış silindirlerin iç çapları üst ölçüye işlenmesi gerektiğinde, üst ölçü nominal çapı 0.000-0.025 mm toleransında işlenmesi tavsiye edilir.

3- Montaja hazır pistonlardan piston pimi, pistona ve pime zarar vermeyecek şekilde uygun metodlarla çıkarılmalıdır. Piston pimleri ilgili pistonlara ölçüsel uygunlukları sağlanacak şekilde eşleştirilerek monte edilmiştir, rastgele değiştirilmemelidir.

4- Segmanların pistona takılması esnasında segmanları deforme etmeyecek ve pistona zarar vermeyecek şekilde uygun ekipman kullanınız. Pistonun silindire montajı esnasında uygun bir segman sıkma kelepçesi veya konik montaj kovanı kullanınız. Uygun şekilde segman sıkma işlemi gerçekleştirildikten sonra pistonu silindir içerisine aşırı kuvvet uygulayarak veya vurarak monte etmekten kaçınılmalı, parmak kuvveti ile dikkatlice monte edilmelidir.

5- Pistonun silindire montajından önce pistonun dikkatlice temizlenmesi ve özellikle piston pim deliğinin temizlenerek yağlanması önemlidir. Montaj öncesi silindir içleri ilk çalışma esnasında yağlama gerçekleşene kadar piston ve silindirin zarar görmemesi için iyice yağlanmalıdır.

6- Şayet piston tepe kısmında montaj yönünü belirtir işarete yönelik markalama mevcutsa, montaj esnasında bu işaret dikkate alınarak uygun şekilde montaj gerçekleştirilmelidir.

7- Pistona, piston pimine ve segmana zarar vermemek için azami dikkat gösteriniz.

8- Pistonlar genel kabul gören normlar doğrultusunda birlikte kullanılacakları diğer parçalara uygun üretilmektedir. Bu sebeple sonradan üzerinde işlem yapmayınız.

9- Pim ve emniyet segmanları yeniden kullanılmamalıdır, her zaman yeni pim ve emniyet segmanı kullanınız.

10- Montajda kullanılacak biyel kolunun doğrusallığının kontrolü, doğabilecek çok ciddi sorunların önüne geçilmesi açısından önemlidir. Biyel kolunun doğrusallığı, montaj öncesinde uygun cihazlarla yeniden kontrol edilmelidir.

NOT : Bu montaj talimatında belirtilenlere uygun hareket edilmelidir. Talimata uygun olmayan montajdan kaynaklanacak sorunlardan üretici sorumlu tutulamaz.

8- PİSTON MARKALAMA VE KODLAR

1- Firma logosu

2- STD / Üst ölçü bilgisi

7- İzlenebilirlik No.

5- Piston silindir boşluğu (mm)

8- Kompresyon yüksekliği kısa ölçüsü (mm)

4- Montaj yapılacak silindir numarası

6 - Piston takma yönü. Pim delik eksen kaçıklığı, "front" "Abluft" gibi özel yön belirleyici işaretleri olabilir. "Volant" sembolü ise pistonun motora hatasız montajını sağlar.

3- Piston anma çapı

9- PİSTON REFERANS NUMARASI

ÖRNEK

Piston referans numarası ← **11-01513-000**

000 = STD / Piston + Segman
001 = Kompresyon (strok) yüksekliği -0,20 mm kısa
002 = Kompresyon (strok) yüksekliği -0,40 mm kısa
003 = Kompresyon (strok) yüksekliği -0,60 mm kısa
050 = +0,50 mm üst ölçü / Piston + Segman

ESKİ REFERANS NUMARASI	YENİ REFERANS NUMARASI
1513 000	11-01513-000

10- PİSTON + SEGMAN REFERANS NUMARASI

ÖRNEK

Piston + Segman referans numarası ← **31-03513-000**

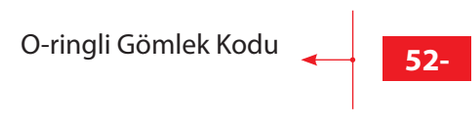
000 = STD / Piston + Segman
050 = +0,50 mm üst ölçü / Piston + Segman

ESKİ REFERANS NUMARASI	YENİ REFERANS NUMARASI
3513 000	31-03513-000
3513 000-08	38-03513-000
3513 000-09	39-03513-000

Segman tip ve kaplamalarındaki farklılıklar. ← **38-** **39-**

11 - GÖMLEK REFERANS TANIMLAMALARI

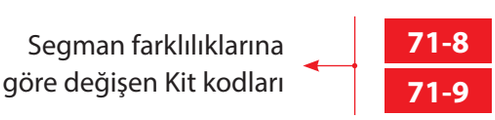
ÖRNEK



ESKİ REFERANS NUMARASI	YENİ REFERANS NUMARASI
5513 000	51-05513-000

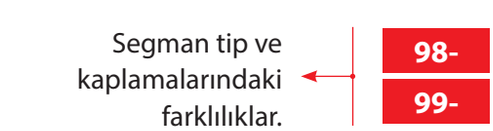
12 - KİT, SET, REFERANS TANIMLAMALARI

KİT Referans : Piston + Pim + Segman + Gömlek



ESKİ REFERANS NUMARASI	YENİ REFERANS NUMARASI
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13 - SEGMAN REFERANS NUMARASI



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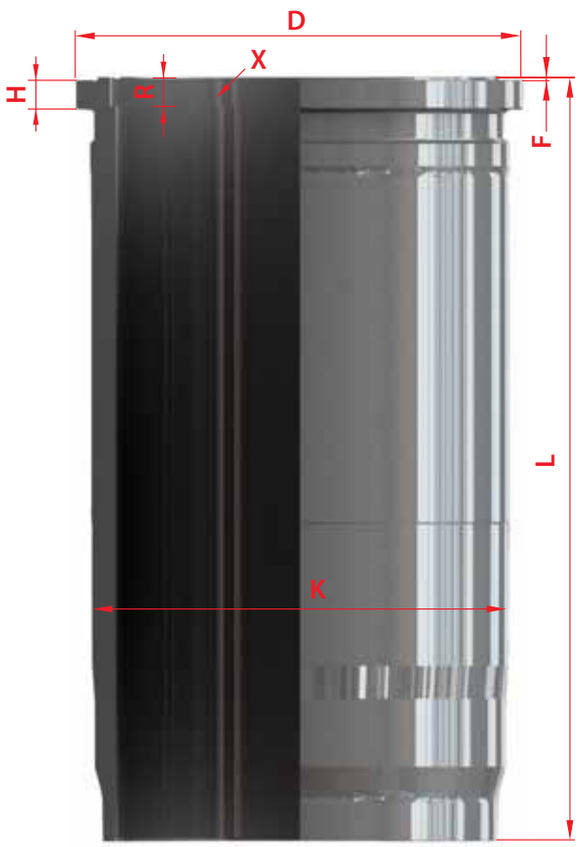
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - O-RİNG REFERANS NUMARASI

SİLİNDİR GÖMLEĞİ TEKNİK AÇIKLAMA



K = Dış çap
L = Toplam boy
H = Flanş boyu
F = Conta derinliği
D = Flanş çapı
X = Kurum yeri segman boyu
R = Kurum yeri boyu

TSE 482' ye Göre Silindir Gömleklerinin Tarifi:

Silindir gömlekleri içten yanmalı motorlarda, silindir blokuna takılan, içinde pistonun hareket ettiği ve yakıtın yandığı, silindir biçiminde kır döküm makine elemanıdır.

Motor Silindir Gömlekleri iki sınıfta incelenebilir.

Yaş Silindir Gömlekleri:

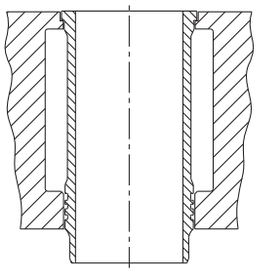
Takıldıkları silindir blokunda dıştan su ile soğutulan gömleklerdir.

3 ana grupta toplanır:

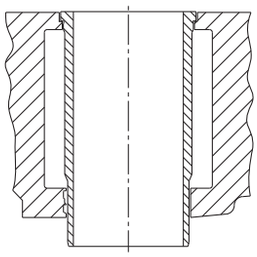
a- Flanşlı ve Kanallı: Silindir blokuna, üsten flanşla oturan, alt kısmında motor so¤utma suyunun sızmasını sağlamak için conta kanalları bulunan gömleklerdir. (Şekil-1)

b- Flanşlı ve Kanalsız: Silindir blokuna, üstten flanşlı oturan ve alt kısımda conta kanalları bulunmayan gömleklerdir. Sızdırmazlık contaları blokta açılan kanallarda bulunur. (Şekil-2)

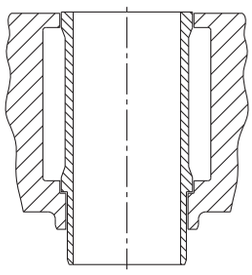
c- Çift Flanşlı: Silindir blokuna, motor soğutma suyunu kaçırmayacak şekilde üstten ve alttan flanşlı ve contalı olarak tespit edilen silindir gömleklerdir. (Şekil-3)



Şekil - 1



Şekil - 2



Şekil - 3

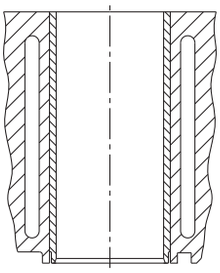
Kuru Silindir Gömlekleri:

Takıldıkları silindir blokunda soğutma suyu ile direkt olarak temas etmeyen gömleklerdir.

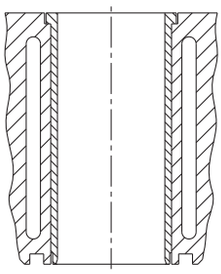
Şekil yönünden 2 ana sınıfa incelenebilir:

A- Flanşlı (Şekil-4)

b- Flanşsız-Düz (Şekil-5)



Şekil - 4



Şekil - 5

SİLİNDİR GÖMLEKLERİNİN MONTAJINDA DİKKAT EDİLECEK HUSUSLAR

KURU SİLİNDİR GÖMLEKLERİ İÇİN MONTAJ TALİMATI

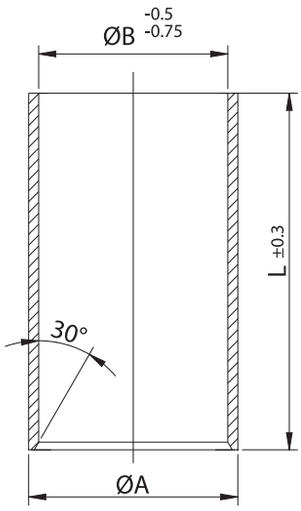
Kuru silindir gömlekleri flanşlı ve flanşsız olarak imal edilir. (Şekil-6) Kötü çalışma şartları altında bulunan flanşsız gömleklerde pistonun takılması halinde eksenel yönde sık sık görülmesi muhtemel olan kaymalara flanşlı gömleklerde rastlanmaz. Bu da flanşın sağladığı bir avantajdır.

Gömlekler, silindire preslenmeden önce mutlaka silindirler aşağıdaki listede gömlek dış çapı için (A) gösterilen Nominal ölçülere uygun olarak ya taşlanır veya hassas tornalama ve honlama işlemine tabi tutulur.

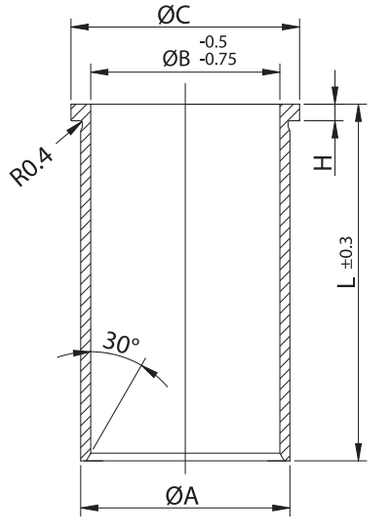
Aşağıdaki toleranslara özellikle dikkat edilmelidir. (Şekil-7) Aksi takdirde ön gerilim çok düşük ise ısı transferinin sıhhatli olmayacağı, ön gerilim çok yüksek ise çok ince cidarlı olan gömleklerin silindire uyumsuzluklar sebep olma tehlikesini doğuracağı ve bu yüzden işletme arızalarına sebebiyet vereceği, ortaya çıkması muhtemel olan hususlardır. Dış çapları nihai ölçü olarak işlenen kuru gömlekler iç çapları yaklaşık olarak 0.5-0.75 mm küçük olarak tornalanarak sevk edilir.

Flanşlı kuru gömleği silindir bloğuna presle monte ederken, flanşın kopmasını önlemek maksadı ile, blokta flanş için işlenen deliğin, flanşın dış çapından (C) daha büyük olarak işlenmesi gerekir

Flanşlı kuru gömlekler, pres geçme yapılırken, flanşın alt yüzeyinin bloktaki yuvanın oturma yüzeyine çok iyi bir şekilde oturması sağlanmalıdır.



Şekil - 6



Şekil - 7

Bilindiği gibi gömlekler, flanşın alt tarafında yaklaşık 0.4 mm lik bir radyüse sahiptir Gömleğin bloka montajında bu radyüsün oturmasını önlemek için, blokta flanşın oturduğu geçiş bölgesine 1.0 mm lik bir pah verilmelidir. Aksi taktirde gömlek flanşının kopması kaçınılmazdır

Yeni gömlekler monte edilmeden önce motor blokundaki silindirler özenle temizlenmeli ve ölçüleri hassas olarak kontrol edilmelidir. Ovallik ya da koniklik 0.025 mm yi aşmamalıdır. Honlama yapılırken parlak bir yüzey elde edilmeye çalışılmalı ve motorun tipine göre yüzey pürüzlülük değerleri kontrol edilmelidir. Çok parlak ve pürüzsüz yüzeyler yağlamanın eksik olmasına sebep olacağı için bu durumdan kaçınılmalıdır.

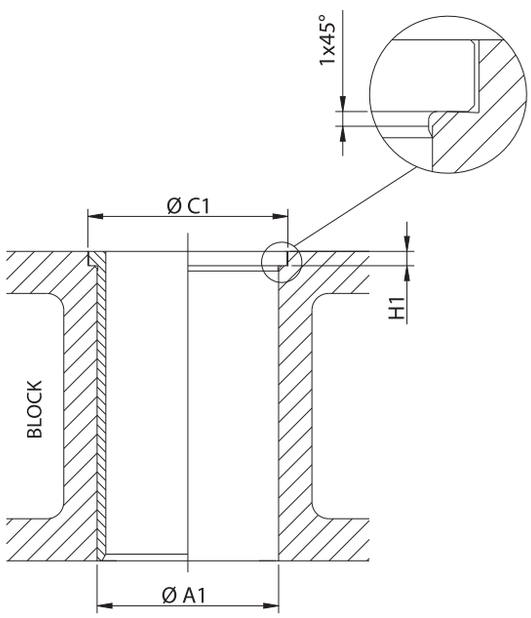
Kuru silindir gömleklerinin presle basılmalarında 3000-5000 kg lık bir basınç yeterlidir. Montaj esnasında yağlama maddesi olarak katı bir madde kullanılacak olursa daha sonra ısıdan dolayı bu madde koklaşacak ve ısı transferini zorlaştıracaktır. Presle yapılan montajdan sonra silindir blokunu conta yüzeyinden taşlamalar yüzey taşlama ile alınmalıdır.

Silindir bloğunun conta yüzeyini işleme tabi tutmak gerektiği taktirde, buna uygun olarak flanşın yuvadaki oturma yüzeyi daha derin işlenmelidir. Ayrıca dış çapları bitmiş ölçüde iç çapları ise hassas tornalanmış silindir gömlekleride mevcuttur.

Bu gömlekler çok az bir honlama payına haiz olarak silindire preslenirler ve preslenmiş durumda honlanırlar. Silindirin iç çapı nominal ölçü toleransı +0 ile +0.015 mm. Silindir gömleğinin dış çapı ise nominal ölçü toleransı +0.012 ile 0.024 mm. arasındadır.

	Gömlek Dış Çap Grupları		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	Blok Delik Çapları (mm)		
	50 - 80	80 - 120	120 - 180
Q_1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25



Şekil 9

SULU SİLİNDİR GÖMLEKLERİ MONTAJ TALİMATI

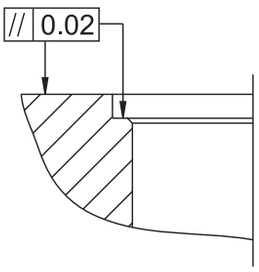
YENMAK Motor Silindir Gömlekleri aşınmaya ve çekmeye karşı mukavim bir yapı özellikleri elde edilmesini sağlayan savurma döküm yöntemiyle imal edilir. Silindirde oturma yüzeylerinde tahribata sebep olmamak için eski gömlekler çıkartılırken büyük bir itina gösterilmelidir.

Motor blokunda silindirlerin temas yerleri kireç çamur ve diğer kirli maddelerden özenle temizlenmelidir. Temizlik esnasında çizilmeye yol açacak raspa, keski gibi aletler kullanılmamalıdır. Bu işlem için elverişli araç çelik telli fırçadır. Pas kireç tabakaları ile silindirde sabitleşen gömleklerin çıkarılması için üzerlerine konan bir araç takoz parçasına çekiçle vurulur, buna rağmen gömlek çıkartmak mümkün olmassa o zaman hidrolik pres' e başvurulur. Temizleme yapılırken oturma yüzeylerine son derece dikkat edilerek, hasar görmemeleri sağlanmalıdır.

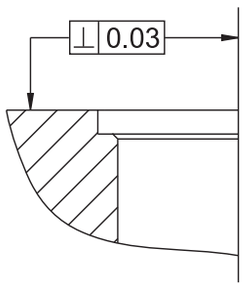
Gömlek flanşı alt yüzeyinin oturduğu yüzey bloku yüzeyine parelel olmalı. (Şekil-10) da gösterildiği gibi düzgünlük ve düzlemsellik bakımından farklılık göstermemelidir. Ayrıca silindir eksenin, silindir blokunun conta yüzeyine dik olup olmadığı kontrol edilmelidir. (Şekil-11) Daima dikkat edilmesi gereken bir konuda silindirdeki oturma yüzeylerinin ezilerek tahrip edilmemeleridir. (Şekil 12)

Gömlek flanş alt yüzeyindeki radyüsün (d) silindirdeki flanş oturma yüzeyi (a) daki köşeye oturmasını önlemek için silindir çapını (c) geçiş yaptığı noktada 0.5-1.0 mm. 45° lik bir radyüs verilmelidir.

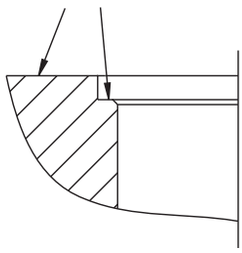
Kırılma tehlikesinin önlenmesi için sızdırmazlık kuvveti ile karşı kuvvet düşey olarak karşılıklı bulunmalıdır.



Şekil 10

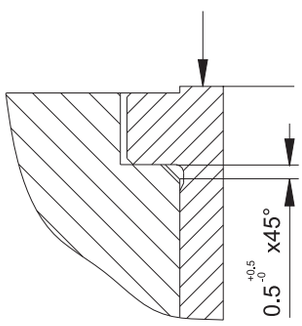


Şekil 11

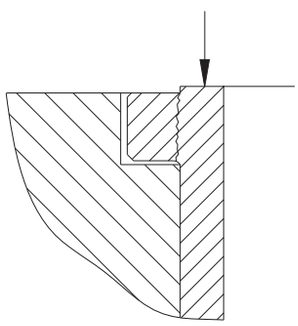


Şekil 12

Contaların delik çapı (b) ile gömleğin dış çapı (c) birbirine eşit olmalıdır. Yanma odasında tam bir sızdırmazlığın sağlanabilmesi için metal çerçeveli contaların kullanılması gerekir.



Şekil 14



Şekil 15

Gömleğin kolaylıkla yerleşip yerleşmediğini ve bloktaki silindirin çok büyük yahut çok geniş olup olmadığını tespit etmek için, gömlekler montajdan önce el ile lastik ring kullanmadan silindire sokulmalıdır. Bilhassa gömlek flanşının blok yüzeyine olan pozisyonunun doğru olup olmadığını tespit etmek için, montajdan önce gömlekleri ters çevirerek, flaş tarafından, flanş oturma yüzeyine yerleştirilmesi tavsiye edilir. Flanş bilindiği gibi, motorun soğumayan bölgesinde olup genleşmek durumundadır. Burada 0.3-0.5 mm. lik bir boşluk nazari dikkate alınmalıdır.

Bu montaj talimatında her fırsatta önemle vurgulanan şey, gömleği takma ve sökme işleminin maksada uygun olarak yapılması hususudur. Yani montaj esnasında çekiç vb. diğer ağır takımların kullanılmasıyla ki bu şekil doğru değildir, ortaya çıkan hatalar kötü sonuç verir.

Montaj esnasında kullanılacak lastik ringler mutlaka kaliteli olmalı ve kabarmaya, eskimeye dayanaklı, yağ ve ısıya karşı mukavim olmalıdır. Aksi halde kartere su inmesi, gömleğin sıkışmasına ve ölçülerin bozulmasına yol açar. Lastik ringlere her defasında yağlama sabunu sürülür ve böylece yuvalarına yerleştirilir.

Lastik ringler olarak yanlızca motor üreticileri tarafından kullanılan kaliteli markalar tercih edilmelidir.Bu tercihteki asıl sebep lastik ringlerin kabarmaya ve eskimeye dayanıklı, yağ ve ısıya karşı mukavim olmalarıdır.

Gömlekte kopmalara neden olan piston krepajı, uygun olmayan lastik ring kullanmanın bir neticesidir. Lastik ringlerin oturduğu kısımlar hiçbir zaman kazınmamalıdır.

Gömlekler el ile yerleştirildikten sonra silindirin ölçüsünü bir kere daha kontrol edilmesinde fayda vardır. Bu kontrol bilhassa lastik ringlerin bulunduğu bölgelerde ovalleşme ve büzülmelerin meydana gelebileceği yerlerde yapılmalıdır.

Gömlekler tamamen yerleştirildikten sonra silindir bloku su ile doldulurak sıkıştırılmalı ve sızdırmazlık durumu mutlaka kontrol edilmelidir.

GÖMLEK MARKALAMA DETAYI

O-RİNG (GÖMLEK LASTİĞİ)

Sızdırmazlık parçalarından o-ring, motorun çalışmasını ve performansını etkileyen önemli parçalardan bir tanesidir. Tek O-ring kodlarımızı veya O-ringli kit ve gömlek referans numaralarımızı kullanarak ürünlerimizi sipariş verebilirsiniz.

O-Ring Materyalleri	
EPDM	Kauçuk EPDM
NBR	Kauçuk
FPM / VI	Viton
Cu	Bakır
T	Tombak
ST	Çelik
SC / MVQ	Silikon
Shim / SM	Yumuşak Metal

93,000 (1)		(3)	(4)	(5)	(6)	(7)
4JB1 (2)		D	00 2005 > 00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) (9) CH 51,850 VD1 0,550 (10) (11) B- 19,500 BØ 43,900 (12) (13) TL 91,850 (15) 31,00x76,00		AP YS (14) HA CP	91-09389-000 1 2,000 P 2 2,000 P 3 4,000 CrP (16)	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)	Ø 93,000 (18)	31-04385-000 (19)
			99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF (16)			39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
(22) K=95,00 (24) L=181,00 (25) H=0,90 (23) D=101,00		DF-CR-ST (26)			51-35721-000 (20)	71-08385-000 71-98385-000 (21)
(22) K=120,00 (24) L=229,00 (25) H+F=9,00+1,10 (23) D=128,50		WF (26)		O-Ring/Seal 55-50613-000 (28) 2 FPM 112,00x3,00	51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

1 - Piston Çapı
2 - Araç Bilgisi
3 - Yakıt Bilgisi
4 - Model Yılları
5 - Silindir Sayısı
6 - Silindir Hacmi
7 - Motor Gücü
8 - Piston Kodu
9 - CH: Kompresyon Yüksekliği
10 - VD1/VD2: Supap Derinliği
11 - B- : Yanma Odası Derinliği
B+ : Tepe Bombesi
12 - BØ: Hücre Çapı
13 - TL: Tam Boy
14 - Piston Özellikleri
*DAP: Double Alfinli Piston
*AP: Alfinli Piston
*YS: Yağ Soğutmalı Piston
*CP: Çelik Saclı Piston
*HA: Hard Anodized Kaplamalı
*PDB: Pim Deliği Burçlu
15 - Pim Çapı - Boyu
16 - Segman Özellikleri
17 - Piston Kafa Çıkıntısı
18 - Silindir Çapı
19 - Piston + Segman Kodu
20 - Gömlek Kodu
21 - Kit + O-Ring Kodu
22 - Silindir Dış Çapı
23 - Gömlek Flanş Çapı
24 - Gömlek Tam Boyu
25 - Flanş Fatura Kalınlığı
26 - Gömlek Özellikleri
*WS : İç çapı semi yaş gömlek
*WF : İç çapı honlanmış yaş gömlek
*DS : İç çapı semi kuru gömlek
*DF : İç çapı honlanmış kuru gömlek
*AF : İç çapı honlanmış hava soğutma gömlek
*PH : Fosfat
*CR : Krom
*HR : Sertleştirilmiş
*NT : Nitrür
*HT : Isıl işlem
*STEEL: Çelik
27 - Ortak Motor
28 - O-Ring Kodu

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ДЕТАЛИ ДЛЯ ДВИГАТЕЛЕЙ

Компания Yenmak была основана в 1965 году в Конье семьей Кахведжиоглу в качестве небольшой семейной мастерской. На протяжении последующих лет компания YENMAK постоянно обновлялась и развивалась, в результате чего стала одним из крупнейших мировых поставщиков деталей для двигателей, как на внутреннем, так и на внешнем рынке.

Сегодня компания Yenmak, производящая КОМПЛЕКТЫ, ПОРШНИ, ПОРШНЕВЫЕ ПАЛЬЦЫ, КОЛЬЦА и ГИЛЬЗЫ ЦИЛИНДРОВ ДВИГАТЕЛЯ и поставляющая УПЛОТНИТЕЛИ, КЛАПАНЫ И ВКЛАДЫШИ ДЛЯ ДВИГАТЕЛЯ, экспортирует свою продукцию в более чем 80 различных стран на 5 континентах.

В качестве долгосрочного бизнес-партнера для вас, наши дорогие клиенты, компания обеспечивает для своих клиентов комплексную поставку из одного источника всех деталей двигателя, представленных в ассортименте компании, в дополнение к окончательной надежности, самому лучшему качеству и разумной цене предлагая продажное и послепродажное обслуживание. Помимо этого YENMAK знает, что человеческий фактор является наиболее важным среди всех компонентов, и поэтому придает большое значение взаимоотношениям с клиентами и высоко ценит их.

Компания YENMAK имеет сертификаты INMETRO, ISO 9001, ISO / TS 16949, IATF 16943, TS EN ISO 14001. На сегодняшний день компания, имеющая 2 фабрики и здание центральной администрации и логистики, ведет деятельность на площадях в 50.000 квадратных метров в 1-й, 2-й и 3-й Организованной промышленной зоне города Коньи.

Сбытовая и маркетинговая деятельность компании осуществляется в экспортном офисе YENMAK, который находится в Стамбуле.

Центральная администрация и логистика

Фабрика поршней и пальцев

Фабрика гильз цилиндров

YENMAK

ДЕТАЛИ ДЛЯ ДВИГАТЕЛЕЙ

Начиная с 2003 года, продукция компании Yenmak упаковывается и поставляется на рынок в представленном ниже виде.

Сведения, содержащие подробную информацию об упаковке, представлены ниже:

Благодаря нашей специальной наклейке на стыке коробки с крышкой станьте первым, кто коснется продукта.

Номер отслеживаемости

Защитная 3D-голограмма, которая интегрирована в поверхность упаковки с целью обеспечения защиты продукции.

Защитная этикетка в нижней части упаковки с целью обеспечения защиты продукции.

BUREAU VERITAS
Certification

BUREAU VERITAS Certification

YENMAK PİSTON SEGMAN SANAYİ VE TİC. A.Ş.

2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12 SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

TÜRKAK

SEÇKİN DEMİRALP
Belgelendirme Müdürü

Sayfa 1/1

BUREAU VERITAS Certification

Certificate of Approval

Awarded to

YENMAK PİSTON SEGMAN SAN. VE TİC. A.Ş.

KIRIM CD. SARIÇİÇEK SK. NO:12 SELÇUKLU KONYA
42000 - Konya - Turkey

Bureau Veritas Certification certifi that the Quality Management System of the above organization has been audited and found to be in accordance with the requirements of

ISO/TS 16949:2009

and the applicable customer specific requirements

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

BUREAU VERITAS Certification

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2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12
SELÇUKLU, KONYA, TÜRKİYE

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Standart

ISO 14001:2004

Belgelendirme Kapsamı

ÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

UKAS

SEÇKİN DEMİRALP
BVCH SAS İngiltere Şubesi
adına imzalayan

Sayfa 1/1

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1.ORGANİZE SANAYİ BÖLGESİ HOROZLUHAN MAH. ATABEY SOK. NO: 8 SELÇUKLU, KONYA, TURKEY

Bureau Veritas Certification Holding SAS - UK Branch certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2015

Scope of certification

MANUFACTURING OF CASTING AND MACHINING CYLINDER LINERS AND CASTING RING CARRIERS

Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

UKAS

İBRAHİM TAŞKY
Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification

BUREAU VERITAS
Certification

Certificate of Approval

YENMAK MOTOR GÖMLEK VE TİC. A.Ş.

1. ORGANİZE SANAYİ BÖLGESİ, HOROZLUHAN
MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

KONYA BELGELENDİRME MÜDÜRÜ

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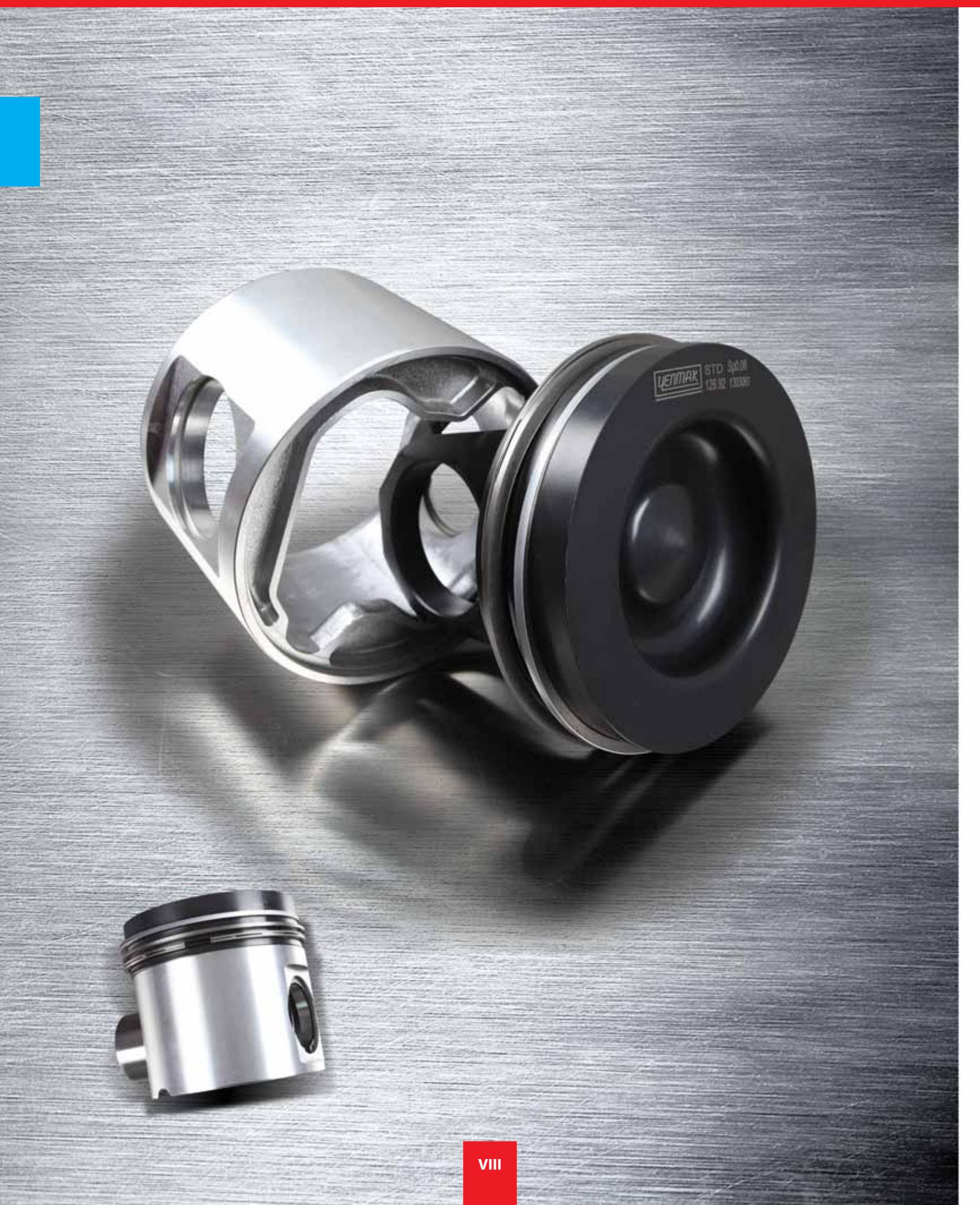
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

KONYA BELGELENDİRME MÜDÜRÜ

СОСТАВНЫЕ СТАЛЬНЫЕ ПОРШНИ



Составные стальные поршни состоят из подвижно соединенных друг с другом на поршневом пальце стальной головки поршня и алюминиевого вала поршня. Благодаря высокой прочности и низким значениям износа эти поршни, в основном, обеспечивают работу дизельных двигателей, предназначенных для тяжелого режима работы, в низких пределах выхлопных газов и эмиссии.

Составные стальные поршни используются:

• В двигателях нового поколения с высокими коэффициентами сжатия и с современными камерами сгорания,

• В дизельных двигателях, предназначенных для тяжелого режима работы,

• В двигателях, в которых используются мультитопливные системы,

Преимущества составных стальных поршней:

• По сравнению с алюминиевыми поршнями составные стальные поршни обеспечивают меньшие потери от сил трения за счет меньшего контактного расстояния с гильзой цилиндра.

• По сравнению с алюминиевыми поршнями составные стальные поршни за счет своей высокой стойкости к тепловой нагрузке уменьшают риск деформации гильзы и могут работать в меньшей полости цилиндра, улучшают уплотнительные свойства колец.

• Если обычный алюминиевый поршень выдерживает давление до 100 бар, то стальной поршень таких же параметров может выдержать давление до 250 бар.

• Обеспечивают более высокий коэффициент сжатия в двигателе и уменьшение уровня выбросов CO_2 на 2-5%. Обеспечивают уменьшение контактных проблем, возникающих из-за материала алфин (нирезист), который используется в алюминиевых поршнях для дизельных двигателей.

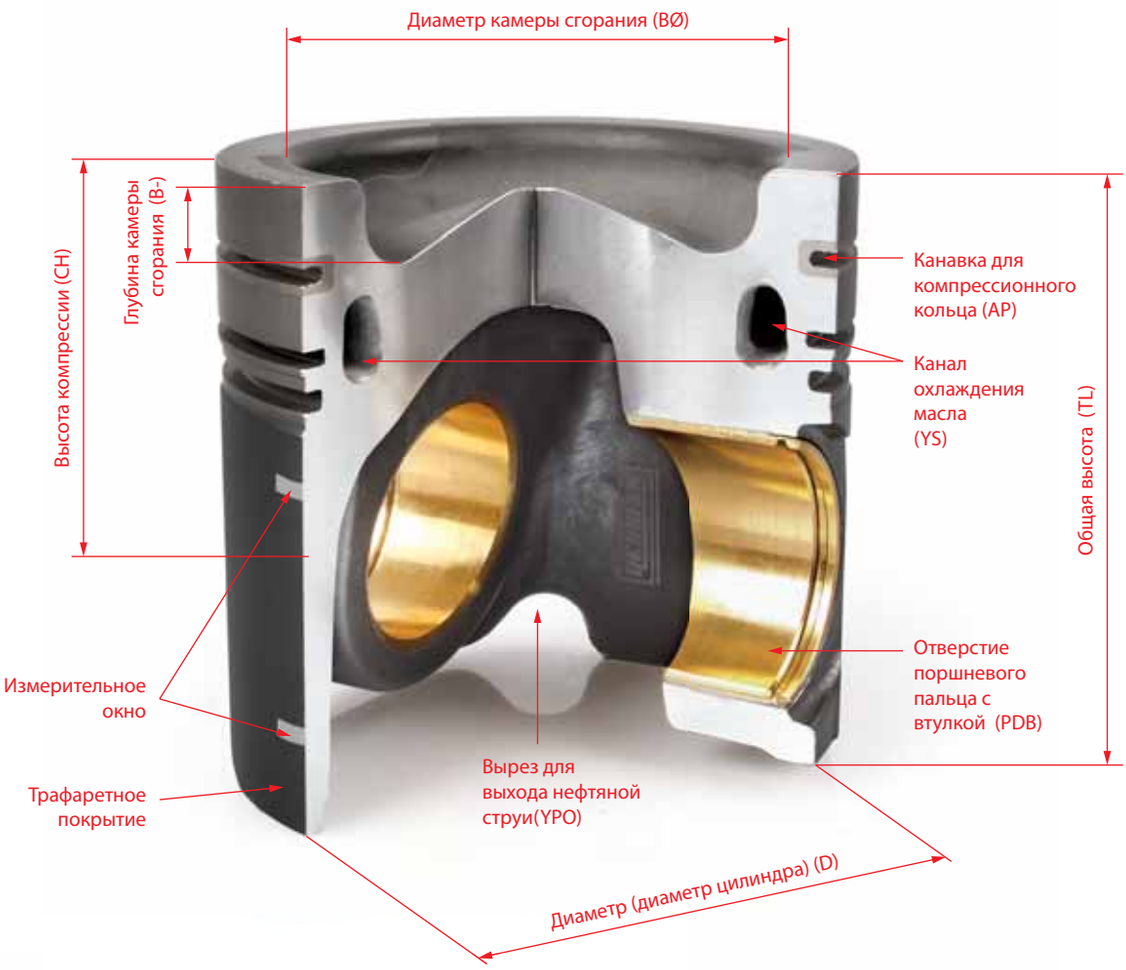
• В поршнях с охлаждающим каналом дают возможность более близкого расположения охлаждающего канала к верхней части поршня, что приводит к обеспечению более эффективного охлаждения.

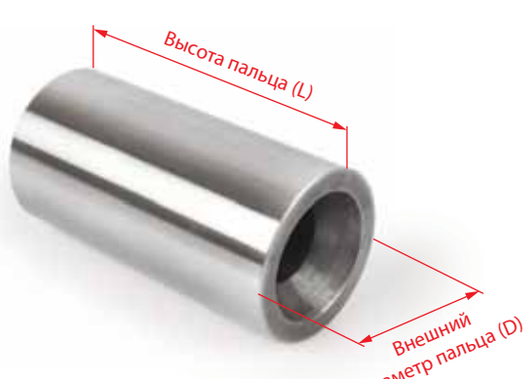
• По сравнению с алюминиевыми поршнями составные стальные поршни обладают минимальной деформацией камеры сгорания.

• Благодаря положительному влиянию на увеличение срока службы двигателя составные стальные поршни уменьшают затраты на ремонт двигателя.

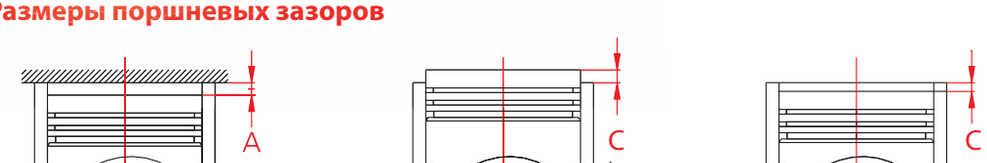
• При использовании составных стальных поршней не возникает таких проблем, как плавка поршня, прогорание поршня, вызываемых чрезмерными показателями систем наддува и систем впрыска топлива.

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ





Размеры поршневых зазоров



A = Расстояние до головки блока цилиндров

C = Расстояние от головки поршня до поверхности блока цилиндров

ИНСТРУКЦИЯ ПО УСТАНОВКЕ ПОРШНЕВЫХ КОЛЕЦ YENMAK

Если вы хотите установить кольца на бывшие в употреблении поршни, то следует произвести очистку поршней, канавок для поршневых колец от углеродного нагара, а также масляных отверстий. Помимо углеродного слоя на верхушках поршней должны быть вычищены все излишки углеродного нагара. Следует уделить большое внимание чистоте кольцевых канавок. Следует обратить внимание, чтобы во время очистки краевых стыков в местах схождения боковых и нижних поверхностей не оставалось царапин. В противном случае в будущем подобные царапины могут положить начало образованию трещин. Наборы поршневых колец Yenmak разрабатываются таким образом, чтобы соответствовать оригинальным поршням двигателей, поэтому нет необходимости подвергать поршни обработке. Предельные значения износа цилиндра, при которых могут быть использованы поршневые кольца Yenmak, представлены ниже:

Для бензиновых двигателей - максимум 0,1 мм в диаметре

Для дизельных двигателей - максимум 0,15 мм в диаметре

Как правило, даже если износ, присутствующий в бывших в употреблении поршнях, находится в пределах вышеуказанных значений зазоров, обязательно замените поршни, имеющие чрезмерную деформацию в канавках поршневых колец. Потому что в поршнях с нарушениями формы и параллельности канавок поршневых колец значение зазора может быть обманчивым, а кольца в таких поршнях не могут выполнять свои функции должным образом, что приводит к жалобам на повышенный расход масла и утечку газов.

Отгибание поршневых колец вверх, вниз, их сгибание может привести к нарушению формы рабочей поверхности поршневого кольца и деформированию материала покрытия. Подобные невидимые невооруженным глазом деформации могут привести к проблемам в условиях работы двигателя.

Раскройте поршневые кольца (при помощи щипцов для снятия поршневых колец) и поочередно поместите их в канавки поршня. Затем затяните кольца, используя зажим для сжатия поршневых колец или конический монтажный кожух, и подвиньте их в направлении верхней части поршня, подталкивая их ручкой молотка, а при необходимости слегка ударяя по ним ею. Во время этой процедуры старайтесь держать зажим таким образом, чтобы он непрерывно сидел на блоке, для предотвращения повреждения тонких поршневых колец в случае, если они выйдут за пределы зажима. В двигателях, внутренние поверхности гильз цилиндров которых покрыты хромом, не должны использоваться хромированные поршневые кольца.

Те поршневые кольца, на одной из сторон которых имеется маркировка YEN или TOP, должны устанавливаться в канавки таким образом, чтобы поверхность с маркировкой была обращена к камере сгорания. Поршневые кольца без какой-либо маркировки могут устанавливаться в любом положении.

ВИДЫ ПОКРЫТИЙ И ОБРАБОТКИ ПОВЕРХНОСТЕЙ ПОРШНЕВЫХ КОЛЕЦ

Cr = Хромовое покрытие
Mo = Молибденовое покрытие
P = Фосфатное покрытие
Fe = Покрытие оксидом железа
Cu = Медное покрытие
Nt = Нитридное покрытие
Sn = Оловянное покрытие
Ck = Хромо-керамика
Pvd = Физическое осаждение из паровой фазы
Cdc = Хромо-алмазное покрытие
Dlc = Углеродное покрытие с алмазным напылением
Tef = Тефлоновое покрытие

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

ВИДЫ ПОКРЫТИЙ И ОБРАБОТКИ ПОВЕРХНОСТЕЙ ПОРШНЕВЫХ КОЛЕЦ

Ck (хромо-керамическое покрытие)

Хромо-керамическое покрытие (CK) представляет собой разновидность композитного покрытия, образованного сетчатой структурой, формируемой соединением элементов хрома и оксида алюминия. Эти покрытия используются в основном в транспортных средствах с дизельными двигателями для покрытия первых компрессионных поршневых колец. Благодаря отличиям в процессе электролиза покрытие CK обеспечивает высокое качество и производительность.

Отличия покрытия Ck от покрытия твердым хромом:

- Более высокая износостойкость

- Более высокая точка плавления

- Более высокая твердость и интенсивность трещин

Благодаря вышеуказанным преимуществам покрытия CK обеспечивают продление срока службы двигателей транспортных средств, в которых они используются, а также формирование выхлопных газов с низкой теплоотдачей.

Pvd (Физическое осаждение из паровой фазы)

Метод, при котором твердые покрытия, реактивным образом диссоциируясь в паровой фазе, оседают на поверхности поршневого кольца, носит название метода PVD. При данном методе обеспечивается испарение и ионизация металла посредством электрической дуги или ионной бомбардировки.

Диссоциированные и упорядоченные ионы металла направляются непосредственно на поверхность детали. В результате этого атомы металла вступают в реакцию с реактивными газами и образуют нитриды, карбиды и оксиды. Таким образом, по окончании реакции на рабочей поверхности поршневого кольца формируется тончайшее покрытие. Благодаря своей керамической составляющей покрытие обладает высокой устойчивостью к износу.

Mo (Молибденовое покрытие)

Окружность поршневого кольца покрывается молибденом для предотвращения износа. В целях избегания следов горения молибденом может быть покрыта только рабочая поверхность поршневых колец, либо же вся их поверхность. Процесс нанесения покрытия может осуществляться либо методом пламенного распыления, либо методом плазменного распыления. Благодаря высокой температуре плавления (2620 C^0), пористой структуре и смазочным эффектам молибден обеспечивает дополнительную прочность рабочей поверхности поршневого кольца. Обладает высокой теплопроводностью и стойкостью к износу и истиранию.

Cr (Хромовое покрытие)

Покрытие твердым хромом - это метод, который широко применяется для увеличения долговечности поршневых колец. Цель хромового покрытия - уменьшение износа и увеличение срока службы поршневых колец и гильз цилиндра. Уменьшение износа поршневого кольца и стенок цилиндра возможно путем нанесения хрома на самое верхнее поршневое кольцо. В настоящее время имеется тенденция к покрытию хромом не только самого верхнего кольца, но и второго и следующих поршневых колец.

Благодаря тому, что хромирование формирует твердую поверхность, уменьшение износа самого поршневого кольца не вызывает сомнений.

Хромовое покрытие наносится двумя основными способами:

- Твердое покрытие

- Пористое покрытие хромом

При твердом покрытии хромом после хромирования поверхности поршневых колец подвергаются шлифовке, в результате которой принимают свою окончательную форму. Благодаря пористому нанесению хромового покрытия поверхность поршневых колец приобретает свойство удерживать смазку. Таким образом, кольца обеспечивают сведение к минимуму как собственного износа, так и износа поверхности гильзы, внутри которой они работают.

Nt (Нитридное покрытие)

Процедура покрытия нитридом делает более твердой всю поверхность поршневого кольца. Благодаря этому виду покрытия увеличивается устойчивость поверхности к истиранию. Это, в свою очередь, приводит к увеличению срока службы поршневого кольца. Производство нитридного покрытия, а также характеристики выбросов с использованием таких деталей являются экологически чистым. Было установлено, что с использованием нитридного покрытия поверхности с критическим уровнем производительности показывают более эффективные результаты. Уменьшает потери масла, обусловленные наиболее подверженными воздействиям точками поршневых колец. Снижает ломкость чугунных колец. Увеличивает срок службы двигателя.

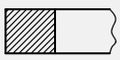
Cdc (Хромо-алмазное покрытие)

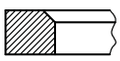
Данный вид покрытия используется для верхних поршневых колец в двигателях Euro 4 и в дизельных двигателях. Может применяться для гибких сплавов чугуна, углеродистой стали. В этом покрытии вместо керамических частиц используются алмазные частицы. Благодаря этому увеличена устойчивость к износу и улучшены показатели против истирания.

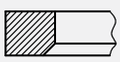
Dlc (Diamond Like Carbon) (Углеродное покрытие с алмазным напылением)

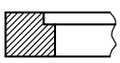
Благодаря этому покрытию уменьшается истирание и увеличивается стойкость к износу. Благодаря своим характеристикам покрытие DLC обладает экологически чистой структурой. Его химические связи сильны, оно не ломается под механическим воздействием. Его структура не кристаллическая, а аморфная. Благодаря своей структуре данный материал в высшей степени прочен. Это покрытие - более стойкое по сравнению с другими видами покрытий, с более высоким сопротивлением износу.

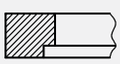
ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

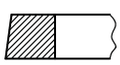

D = Прямоугольное в поперечном сечении кольцо

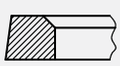

D-IF = Прямоугольное в поперечном сечении кольцо со скошенной выточкой на верхней поверхности внутреннего края

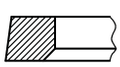

D-IFU = Прямоугольное в поперечном сечении кольцо со скошенной выточкой на нижней поверхности внутреннего края

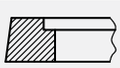

D-IW = Прямоугольное в поперечном сечении кольцо с прямоугольной выточкой на верхней поверхности внутреннего края

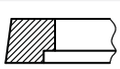

D-IWU = Прямоугольное в поперечном сечении кольцо с прямоугольной выточкой на нижней поверхности внутреннего края

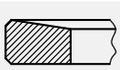

K = Кольцо с конической рабочей поверхностью

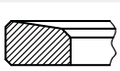

K-IF = Кольцо с конической рабочей поверхностью со скошенной выточкой на верхней поверхности внутреннего края

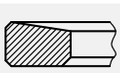

K-IFU = Кольцо с конической рабочей поверхностью со скошенной выточкой на нижней поверхности внутреннего края

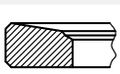

K-IW = Кольцо с конической рабочей поверхностью с прямоугольной выточкой на верхней поверхности внутреннего края

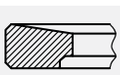

K-IWU = Кольцо с конической рабочей поверхностью с прямоугольной выточкой на нижней поверхности внутреннего края

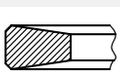

TT = Кольцо с поперечным сечением в виде несимметричной трапеции

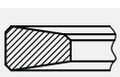

TT-IF = Кольцо с поперечным сечением в виде несимметричной трапеции со скошенной выточкой на верхней поверхности внутреннего края

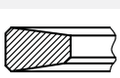

TT-IFU = Кольцо с поперечным сечением в виде несимметричной трапеции со скошенной выточкой на нижней поверхности внутреннего края

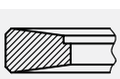

TT-IW = Кольцо с поперечным сечением в виде несимметричной трапеции с прямоугольной выточкой на верхней поверхности внутреннего края

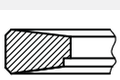

TT-IWU = Кольцо с поперечным сечением в виде несимметричной трапеции с прямоугольной выточкой на нижней поверхности внутреннего края

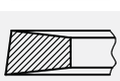

T = Кольцо с поперечным сечением в виде симметричной трапеции

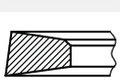

T-IF = Кольцо с поперечным сечением в виде симметричной трапеции со скошенной выточкой на верхней поверхности внутреннего края


T-IFU = Кольцо с поперечным сечением в виде симметричной трапеции со скошенной выточкой на нижней поверхности внутреннего края

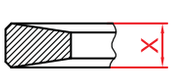

T-IW = Кольцо с поперечным сечением в виде симметричной трапеции с прямоугольной выточкой на верхней поверхности внутреннего края

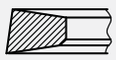

T-IWU = Кольцо с поперечным сечением в виде симметричной трапеции с прямоугольной выточкой на нижней поверхности внутреннего края

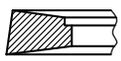

TK = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью

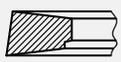

TK-IF = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью со скошенной выточкой на верхней поверхности внутреннего края

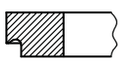
SDR = Стальное маслосъемное кольцо с V-образной канавкой со спиральной пружиной

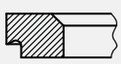

X = Толщина поршневого кольца (мм)

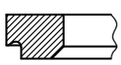

TI-IFU = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью со скошенной выточкой на нижней поверхности внутреннего края

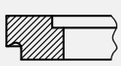

TK-IW = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью с прямоугольной выточкой на верхней поверхности внутреннего края

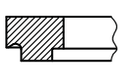

TK-IWU = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью с прямоугольной выточкой на нижней поверхности внутреннего края


N = Скребковое кольцо

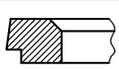

N-IF = Скребковое кольцо со скошенной выточкой на верхней поверхности внутреннего края

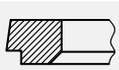

N-IFU = Скребковое кольцо со скошенной выточкой на нижней поверхности внутреннего края

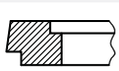

N-IW = Скребковое кольцо с прямоугольной выточкой на верхней поверхности внутреннего края

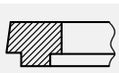

N-IWU = Скребковое кольцо с прямоугольной выточкой на нижней поверхности внутреннего края

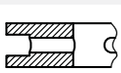
TN = Скребковое кольцо с конической рабочей поверхностью

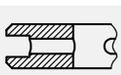

TN-IF = Скребковое кольцо с конической рабочей поверхностью со скошенной выточкой на верхней поверхности внутреннего края

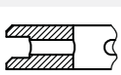

TN-IFU = Скребковое кольцо с конической рабочей поверхностью со скошенной выточкой на нижней поверхности внутреннего края

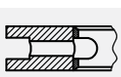

TN-IW = Скребковое кольцо с конической рабочей поверхностью с прямоугольной выточкой на верхней поверхности внутреннего края

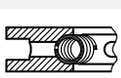

TN-IWU = Скребковое кольцо с конической рабочей поверхностью с прямоугольной выточкой на нижней поверхности внутреннего края

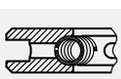

SC = Раздвоенное маслосъемное кольцо

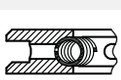

DC = Маслосъемное кольцо со скошенной выточкой

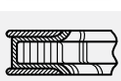

DB = Маслосъемное кольцо с двойной скошенной выточкой

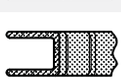

ES = Раздвоенное маслосъемное кольцо с пластинчатой пружиной


SY = Раздвоенное маслосъемное кольцо со спиральной пружиной


DY = Маслосъемное кольцо со спиральной пружиной со скошенной выточкой по краям


PS = Маслосъемное кольцо со спиральной пружиной с двойной скошенной выточкой по краям


VF = Маслосъемное кольцо с VF-пружиной и стальной лентой


UB = Маслосъемное кольцо U-образного типа со стальной лентой

SDV = Стальное маслосъемное кольцо с V-образной канавкой со спиральной пружиной

DKS = Футеровочный, конический, цилиндрические кольца контроля масла

ОБЩАЯ ИНСТРУКЦИЯ ПО УСТАНОВКЕ ПОРШНЕЙ

1- На внутренней поверхности цилиндра, в который будет устанавливаться поршень, должны присутствовать ромбовидные хонинговальные линии. Если использован готовый к установке поршень и/или если он будет устанавливаться в изношенный цилиндр, то внутренняя поверхность цилиндра должна быть проверена на предмет соответствия хонинговальных линий. Если хонинговальные линии на внутренней поверхности цилиндра частично или полностью исчезли, и образовалась отполированная до блеска поверхность, то внутренняя поверхность цилиндра должна быть отхонингована таким образом, чтобы снова появились хонинговальные линии.

2- Все поршни производятся с тем уровнем точности, чтобы в процессе установки вовнутрь цилиндра соответствующих размеров они образовывали указанное нужное рабочее пространство между поршнем и цилиндром. Следует проверить внутренние диаметры цилиндров на соответствие размерам, указанным на этикетках на коробке, и, таким образом, установить, нуждаются ли они в повторной обработке. Если необходима обработка внутреннего диаметра изношенного цилиндра до верхнего размера, то рекомендуется обрабатывать номинальный диаметр верхнего размера в пределах допуска 0.000-0.025 мм.

3- Поршневые пальцы из готовых к установке поршней должны быть извлечены с помощью соответствующих методов таким образом, чтобы не повредить поршень и поршневой палец. Поршневые пальцы скомпонованы с поршнями и установлены в них таким образом, чтобы обеспечить их совпадение по размерам, поэтому не должны заменяться произвольным образом.

4- При установке на поршень поршневых колец используйте соответствующий инструмент, чтобы не деформировать поршневые кольца и не повредить поршень. Во время установки поршня в цилиндр используйте соответствующий зажим для сжатия поршневых колец или конический монтажный кожух. После осуществления процедуры сжатия поршневых колец должным образом следует аккуратно, при помощи силы пальцев установить поршень внутрь цилиндра, при этом следует избегать применения чрезмерной силы или ударов.

5- Перед установкой поршня в цилиндр очень важно провести тщательную очистку поршня, и в особенности очистку и смазку отверстия поршневого пальца. Перед установкой следует тщательно смазать поршень и цилиндр, чтобы они не получили повреждений до того, как будет произведена смазка внутренней поверхности цилиндра во время первого запуска.

6- Если в верхней части поршня имеется маркировка, содержащая обозначение, указывающее направление установки, то при установке следует следовать данным указаниям и производить установку соответствующим образом.

7- Проявите предельную осторожность, чтобы избежать повреждения поршня, поршневого пальца и поршневых колец.

8- В соответствии с общепринятыми нормами поршни производятся таким образом, чтобы соответствовать другим деталям, вместе с которыми они будут использоваться. Поэтому не подвергайте их последующей обработке.

9- Не следует повторно использовать пальцы и стопорные кольца, всегда используйте новые пальцы и стопорные кольца.

10- Проверка используемого в процессе установки поршневого штока на предмет линейности очень важна для того, чтобы предотвратить очень серьезные проблемы, которые могут возникнуть в связи с этим. Линейность поршневого штока следует проверить еще раз непосредственно перед установкой при помощи соответствующих инструментов.

ПРИМЕЧАНИЕ: Следует следовать указаниям, изложенным в этой инструкции. Производитель не несет ответственности за любые проблемы, связанные с неправильной установкой, при которой не были соблюдены требования инструкции.

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

8- МАРКИРОВКА И КОДЫ ПОРШНЕЙ

9- СПРАВОЧНЫЙ НОМЕР ПОРШНЯ

ПРИМЕР

Справочный номер поршня ← **11-01513-000**

000 = STD / поршень + кольцо
001 = Высота компрессии (хода) -0,20 мм (коротк.)
002 = Высота компрессии (хода) -0,40 мм (коротк.)
003 = Высота компрессии (хода) -0,60 мм (коротк.)
050 = +0,50 мм верхний размер / поршень + кольцо

СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
1513 000	11-01513-000

10- СПРАВОЧНЫЙ НОМЕР ПОРШЕНЬ + КОЛЬЦО

ПРИМЕР

Справочный номер поршень + кольцо ← **31-03513-000**

000 = STD / поршень + кольцо
050 = +0,50 мм верхний размер / поршень + кольцо

СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
3513 000	31-03513-000
3513 000-08	38-03513-000
3513 000-09	39-03513-000

Разница между поршневыми кольцами и покрытиями ← **38-** / **39-**

11 - СПРАВОЧНЫЕ ОПРЕДЕЛЕНИЯ ДЛЯ ГИЛЬЗ ЦИЛИНДРА

ПРИМЕР

Справочный номер гильзы ← **51-05513-000** → 000 = STD / гильза
050 = +0,50 мм верхний размер / гильза

СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
5513 000	51-05513-000

12 - СПРАВОЧНЫЕ ОПРЕДЕЛЕНИЯ ДЛЯ КОМПЛЕКТА, НАБОРА

Комплект: поршень, штырь, кольцо,футеровка

Номер комплектации ← **71-07513-000** → 000 = STD / кольцо
050 = +0,50 мм Комплект большего размера

Разница между поршневыми кольцами и покрытиями ← **71-8** / **71-9**

СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13- СПРАВОЧНЫЙ НОМЕР ПОРШНЕВЫЕ КОЛЬЦА

Справочный номер поршневых колец ← **91-09513-000** → 000 = STD / кольцо
050 = +0,50 мм верхний размер / кольцо

Разница между поршневыми кольцами и покрытиями ← **98-** / **99-**

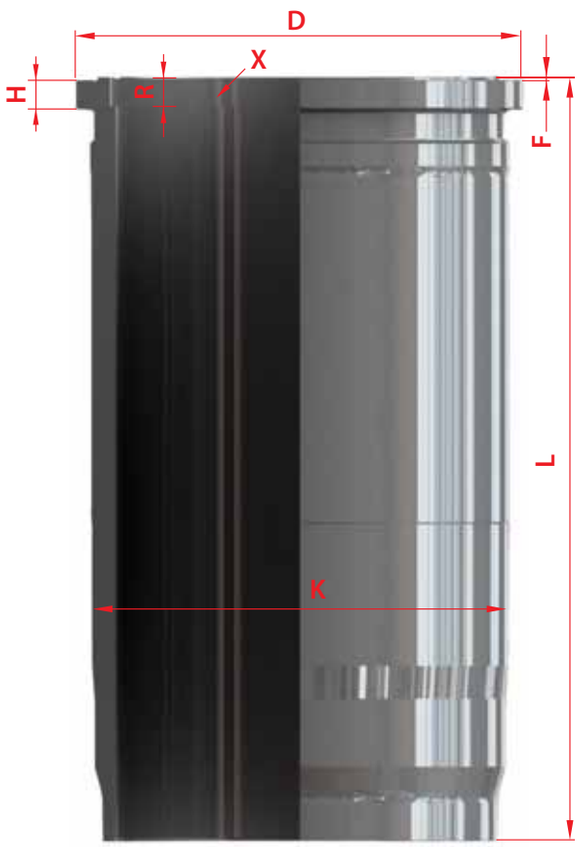
СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - “СПРАВОЧНЫЙ НОМЕР УПЛОТНИТЕЛЬНОЕ КОЛЬЦО”

Справочный номер Уплотнительное кольцо ← **55-50701-000**

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

ТЕХНИЧЕСКОЕ ОПИСАНИЕ ДЛЯ ГИЛЬЗЫ ЦИЛИНДРА



K = Внешний диаметр
L = Общая высота
H = Высота фланца
F = Глубина уплотнителя
D = Диаметр фланца
X = Высота кольца в месте установки
R = Высота в месте установки

Описание гильз цилиндров в соответствии с TSE 482:

Гильзы цилиндров в двигателях внутреннего сгорания - это литые машинные элементы цилиндрической формы, устанавливаемые в блок цилиндров, внутри которых движется поршень и сгорает топливо. Гильзы цилиндров двигателя можно рассматривать в качестве двух классов.

Мокрые гильзы цилиндров:

Гильзы, которые снаружи охлаждаются жидкостью внутри блока цилиндров, в котором они установлены.

Делятся на три основные группы:

a- С фланцем и каналами: Гильзы, которые садятся в блок цилиндров сверху на фланец, а в их нижней части имеются уплотнительные каналы для обеспечения циркуляции охлаждающей двигатель жидкости (Рисунок 1).

b- С фланцем без каналов: Гильзы, которые садятся в блок цилиндров сверху на фланец, а в их нижней части отсутствуют уплотнительные каналы. Герметичные уплотнители имеются в каналах в блоке (Рисунок 2).

c- С двойным фланцем: Гильзы двигателя, которые устанавливаются в блок цилиндров посредством верхнего и нижнего фланца таким образом, чтобы не пропускать охлаждающую двигатель жидкость (Рисунок 3).

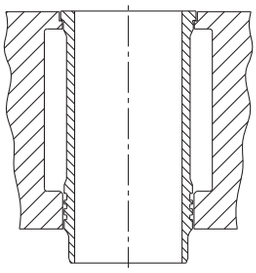


Рисунок 1

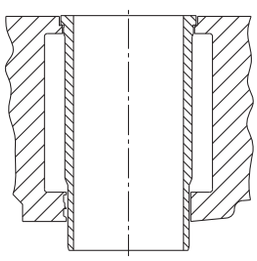


Рисунок 2

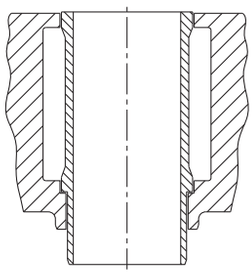


Рисунок 3

Сухие гильзы цилиндров:

Гильзы, которые не соприкасаются непосредственно с охлаждающей жидкостью внутри блока цилиндров, в котором они установлены.

С точки зрения формы могут быть разделены на два основных класса:

a- С фланцем (Рисунок 4) b- Без фланца - прямые (Рисунок 5)

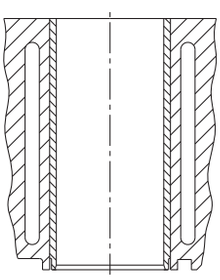


Рисунок 4

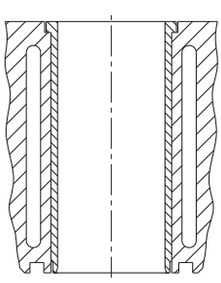


Рисунок 5

МОМЕНТЫ, НА КОТОРЫЕ СЛЕДУЕТ ОБРАТИТЬ ВНИМАНИЕ ПРИ УСТАНОВКЕ ГИЛЬЗ ЦИЛИНДРОВ

ИНСТРУКЦИЯ ПО УСТАНОВКЕ СУХИХ ГИЛЬЗ ЦИЛИНДРОВ :

Сухие гильзы цилиндров выпускаются с фланцем и без фланца (Рисунок 6). Сдвиги в осевом направлении, которые можно часто наблюдать в случае установки поршня в гильзы цилиндров без фланца, которые эксплуатируются в тяжелых условиях, не встречаются при использовании гильз с фланцем. Это является преимуществом фланца.

Перед запрессовкой гильз в тело цилиндров сами цилиндры должны обязательно быть отшлифованы в соответствии с номинальными значениями, указанными в перечне ниже для внешнего диаметра (A), либо подвергнуты процедуре тонкой расточки и хонингования.

Особое внимание следует уделить нижеуказанным допускам (Рисунок 7). В противном случае если напряжение смещения будет слишком низким, то не будет здоровой теплопередачи, а если напряжение смещения будет слишком высоким, то возникнет опасность того, что гильзы с очень тонкими стенками окажутся причиной несоответствия цилиндру, что может привести к поломкам в процессе эксплуатации. Сухие гильзы, внешний диаметр которых обработан в окончательный размер, поставляются расточенными таким образом, чтобы их внутренний диаметр был на 0.5-0.75 мм меньше.

В процессе установки методом запрессовки сухой гильзы с фланцем в блок цилиндров для предотвращения обрыва фланца необходимо, чтобы отверстие для фланца в блоке было больше внешнего диаметра фланца (C).

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

При запрессовке сухих гильз с фланцем следует обеспечить очень хорошую посадку нижней поверхности фланца на поверхность посадочного гнезда блока.

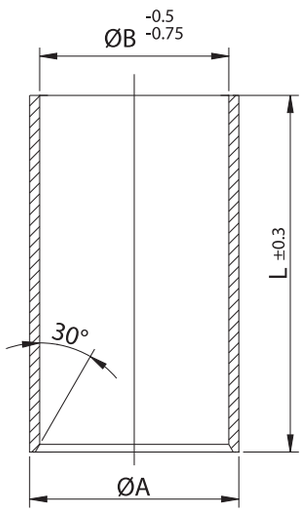


Рисунок 6

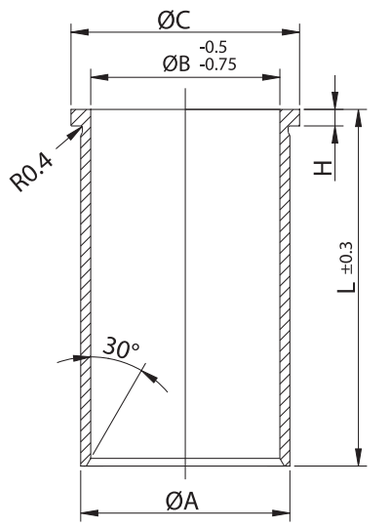


Рисунок 7

Как известно, гильзы в нижней части фланца имеют радиус около 0,4 мм. Для того чтобы в процессе установки гильзы в блок предотвратить посадку этого радиуса, в блоке в зоне перехода, куда встанет фланец, делается фаска в 1.0 мм. В противном случае обрыв фланца будет неизбежен.

Перед установкой новых гильз цилиндры в блоке двигателя должны быть тщательно очищены, а их размеры проверены с особой точностью. Овальность или конусность не должна превышать 0,025 мм. В процессе хонингования нужно стремиться к получению глянцевой поверхности, также следует проверить значения шероховатости поверхности в соответствии с типом двигателя. Излишне блестящие и гладкие поверхности станут причиной недостаточности смазки, поэтому следует избегать этого.

Для запрессовки сухих гильз цилиндров достаточно давления 3000-5000 кг. Если в процессе установки в качестве смазывающего материала будет использована твердая смазка, то впоследствии из-за высоких температур такая смазка будет коксоваться, что затруднит теплообмен. После установки, выполняемой при помощи пресса, неровности с уплотнительной поверхности блока цилиндров должны быть устранены шлифованием поверхности.

При необходимости обработки уплотнительной поверхности блока цилиндров поверхность посадки фланца в гнезде должна быть обработана в соответствии с этим на большую глубину. Кроме того, имеются гильзы цилиндров, внешние диаметры которых выполнены в окончательный размер, а внутренние диаметры - под тонкую расточку.

Такие гильзы, имеющие очень небольшой пай для хонингования, запрессовываются в цилиндр и хонингуются уже в запрессованном виде. Номинальный размерный допуск внутреннего диаметра цилиндра имеет диапазон от +0 до +0.015 мм. А номинальный размерный допуск наружного диаметра гильзы цилиндра имеет диапазон от+0.012 до +0.024 мм.

	Группы наружных диаметров гильз		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	Диаметры отверстий блока (мм)		
	50 - 80	80 - 120	120 - 180
Q_1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25

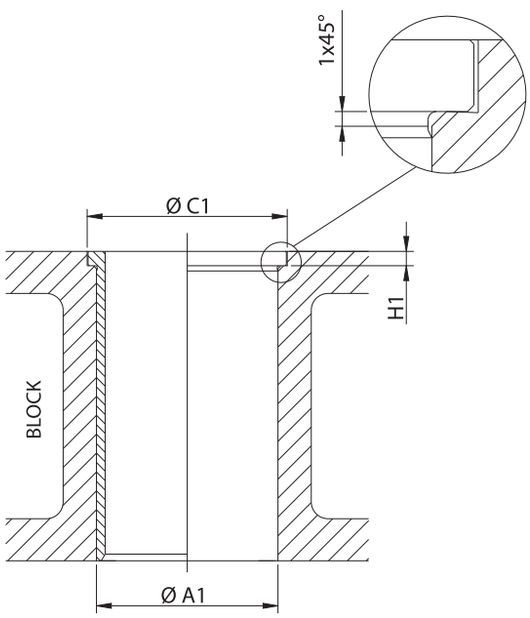


Рисунок 9

ИНСТРУКЦИЯ ПО УСТАНОВКЕ МОКРЫХ ГИЛЬЗ ЦИЛИНДРОВ:

Гильзы цилиндров двигателя YENMAK изготавливаются методом центробежного литья, что позволяет получить структурные характеристики, устойчивые к износу и растяжению. Следует соблюдать предельную осторожность при извлечении старых гильз, чтобы избежать повреждения посадочной поверхности цилиндра.

Контактные поверхности цилиндров в блоке двигателя должны быть тщательно очищены от отложений, грязи и прочих загрязняющих веществ. Проводя очистку, не следует использовать такие инструменты, как скребки, стамески, которые могут привести к появлению царапин. Наиболее подходящий для данной процедуры инструмент - щетка со стальной щетиной. Для извлечения гильз, прикипевших внутри цилиндра за счет слоев ржавчины и отложений, следует наставить на них клин и ударять по нему молотком, если, несмотря на это, извлечь гильзу не удается, то следует применить гидравлический пресс. Производя очистку, крайнюю осторожность следует проявлять по отношению к посадочным поверхностям, чтобы не повредить их.

Посадочная поверхность нижней части фланца гильзы должна быть параллельна поверхности блока. Как показано на Рисунке 10, не должно быть различий с точки зрения гладкости и ровности. Кроме того, следует проверить, чтобы ось цилиндра была перпендикулярна уплотнительной поверхности блока цилиндров (Рисунок 11). Еще один момент, на который всегда следует обращать внимание, - посадочные поверхности цилиндра не должны быть продавлены либо повреждены (Рисунок 12).

Для того чтобы предотвратить посадку радиуса (d) нижней поверхности фланца гильзы в угол посадочной поверхности для фланца (a) внутри цилиндра, в точке, где он проходит диаметр цилиндра (c), ему следует дать радиус 45° 0.5-1.0 мм.

Для предотвращения поломки сила герметизации и противодействующая сила должны быть взаимно перпендикулярны.

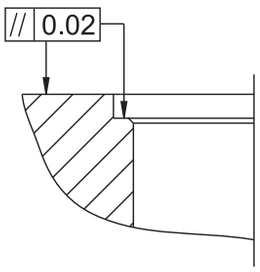


Рисунок 10

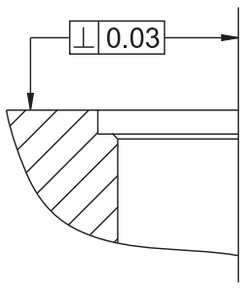


Рисунок 11

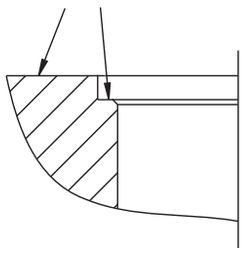


Рисунок 12

Диаметр отверстия в уплотнителе (b) и наружный диаметр гильзы (c) должны быть одинаковыми. Для обеспечения абсолютной герметичности в камере сгорания следует использовать уплотнители с металлической оправой. Диаметр отверстия в уплотнителе (b) и наружный диаметр гильзы (c) должны быть одинаковыми. Для обеспечения абсолютной герметичности в камере сгорания следует использовать уплотнители с металлической оправой.

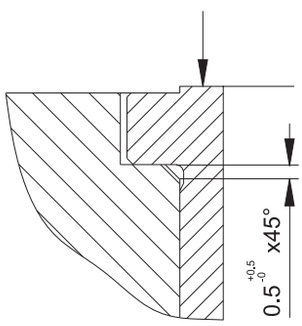


Рисунок 14

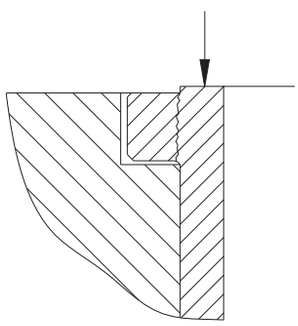


Рисунок 15

Чтобы определить, легко ли гильза помещается в цилиндр и не является ли цилиндр блока двигателя слишком большим или слишком широким, перед установкой следует поместить гильзы в цилиндр без использования кольца. Кроме того, чтобы определить, является ли положение фланца гильзы по отношению к поверхности блока правильным, рекомендуется перед началом установки перевернуть гильзы вверх дном и поместить их на посадочную поверхность фланца со стороны фланца. Как известно, фланец находится в неохлаждаемой зоне двигателя и постоянно расширяется.

Здесь следует обратить внимание на то, чтобы остался зазор в 0.3-0.5 мм.

В данной инструкции по установке при каждом удобном случае настойчиво подчеркивается, что процедура установки и демонтажа гильз должна производиться в соответствии с целью операции. То есть дефекты, которые возникнут при использовании в процессе установки молотка и других тяжелых инструментов, что само по себе неправильно, приведут к негативным результатам.

Используемые в процессе установки резиновые кольца должны обязательно быть качественными, устойчивыми к появлению пузырей, износостойкими, маслостойкими и термостойкими. В противном случае попадание жидкости в картер приведет к застопориванию гильзы и ее деформации. На резиновые кольца каждый раз наносится смазочная паста, после чего они устанавливаются в гнезда.

Резиновые кольца следует предпочесть только тех качественных марок, которые используются производителями двигателей. Основной причиной для такого предпочтения является то, что резиновые кольца должны быть устойчивыми к появлению пузырей, износостойкими, маслостойкими и термостойкими.

Деформация поршня, которая может привести к обрыву гильзы, является результатом использования несоответствующих резиновых колец. Места посадки резиновых колец никогда не должны подвергаться действиям, в результате которых возникают царапины.

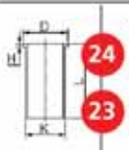
После установки гильз на места вручную будет не лишним еще раз проверить размер цилиндра. Подобная проверка должна быть проведена, в первую очередь, в местах возможной овализации и деформации в зонах установки резиновых колец.

После окончательной установки гильз следует наполнить блок цилиндров водой и приложить давление, таким образом, проведя проверку на герметичность.

СВЕДЕНИЯ О МАРКИРОВКЕ ГИЛЬЗ

УПЛОТНИТЕЛЬНОЕ КОЛЬЦО

Уплотнительное кольцо	
EPDM	Каучук EPD
NBR	Каучук NBR
FPM / VI	Витон(FPM / FKM)
Cu	Медь
T	Томпак
ST	Сталь
SC / MVQ	Силикон (VMQ)
Shim / SM	Мягкий металл

93,000 (1)		(3)	(4)	(5)	(6)	(7)
4JB1 (2)		D 00 2005	> 00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) (9) CH 51,850 VD1 0,550 (10) (11) B- 19,500 BØ 43,900 (12) (13) TL 91,850 (15) 31,00x76,00	(14) AP YS HA CP	91-09389-000 1 2,000 P 2 2,000 P 3 4,000 CrP (16)	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)		Ø 93,000 (18)	31-04385-000 (19)
		99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF (16)				39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
 K=95,00 (22) (24) L=181,00 H=0,90 (25) (23) D=101,00	DF-CR-ST (26)				51-35721-000 (20)	71-08385-000 71-98385-000 (21)
K=120,00 (22) (24) L=229,00 H+F=9,00+1,10 (25) (23) D=128,50	WF (26)		O-Ring/Seal 55-50613-000 2 FPM 112,00x3,00 (28)		51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

1 - Диаметр поршня
2 - Код двигателя
3 - Сведения о топливе
4 - Годы выпуска модели
5 - Количество цилиндров
6 - Объем цилиндра
7 - Мощность двигателя
8 - Поршневой Код
9 - CH: Ход
10 - VD1/VD2: Глубина клапана
11 - B- : Глубина камеры сгорания
B+ : Првышение днища
12 - BØ: Диаметр ячейки
13 - TL: Полная длина
14 - Характеристики поршня
*DAP: Двойной алфиновый поршень
*AP: Алфиновый поршень
*YS: Поршень с масляным охлаждением
*CP: Поршень из листовой стали
*HA: С твердым анодированным покрытием
*PDB: Отверстие поршневого
15 - Диаметр - длина -
характеристики пальца
пальца с втулкой
16 - Характеристики кольца
17 - Выступ головки поршня
18 - Диаметр цилиндра
19 - Код поршень + кольцо
20 - Код гильзы
21 - Код комплекта
22 - Наружный диаметр цилиндра
23 - Диаметр фланцы гильзы
24 - Полная длина гильзы
25 - Толщина фланца
26 - Тип и характеристики гильзы
*WS : Влажные лайнер полуфабриката
*WF : Влажные подкладка полная отделка
*DS : Сухой лайнер полуфабриката
*DF : Сухая подкладка полная отделка
*AF : Воздушное охлаждение полной отделкой
*PH : Фосфат
*CR : Хром
*HR : Закаленный
*NT : нитрит
*HT : Термическая обработка
*STEEL: Стали
27 - Общий двигатель
28 - Уплотнительное Кольцо Код

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Motor tipleri, açıklamalar, ürünler, ürün resimleri, üreticiler, araçlar v.b. nitelendirmeler sadece referans amaçlı verilmiştir.

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تأسست شركة ينماك عام 1965 كورشة صغيرة من قبل عائلة قهوجي اوغلوا في مدينة قونيا ، ومنذ ذلك التاريخ تقوم الشركة بتجديد وتطوير نفسها بشكل مستمر حتى غدت من اكبر المجهزين لقطع المحركات على الصعيد المحلي والعالمي . تقوم الشركة بانتاج اطقم الكيتات والبساتم وبنزاتها والشانبر وحامل الحلقات الفولاذية للبساتم، كما تقوم بتوريد وتسويق سبائك المحركات والصبابات والكاسكيتات وتقوم بتصدير كل هذه القطع الى اكثر من 80 دولة في القارات الخمسة ،

انتم عملائنا الكرام شركائنا على المدى الطويل نوفر لكم جميع قطع اجزاء المحرك ضمن باقة واحدة ومن مصدر واحد فضلا على المبيعات وخدمات مابعد البيع باسعار معقولة .

ينماك على دراية بان العامل البشري هو العنصر الاهم ضمن جميع العناصر لذا تعطي الاهمية القصوى للعلاقات مع زبائنها .

ان الشركة حائزة على شهادة الجودة INMETRO ISO 9001, ISO/TS 16949, TS EN ISO 14001

الشركة مستمره في عملها من خلال مصنعين ومركز عام ومركز لوجستي على مساحة 50.000 الف متر مربع في المنطقة الصناعية الاولى والثانية والثالثة في مدينة قونيا ، كما تقوم الشركة ببيع وتسويق منتوجاتها من خلال مكتب التصدير والتوزيع المحلي والواقع في مدينة اسطنبول .

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ستجد التفاصيل المتعلقة بالعلبه ادناه :

بفضل ختم العلبه كن اول من
يحصل على المنتوج .

رقم التتبع

من اجل ضمان سلامة المنتج
وضعت على العلب صور
ذات الابعاد الثلاثية .

من اجل ضمان سلامة
المنتج وضع مصلق الامان
في الفوهة السفلية للعلبه .

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Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

TÜRKAK

SEÇKİN DEMİRALP
Belgelendirme Müdürü

Sayfa 1/1

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Awarded to

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42000 - Konya - Turkey

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ISO/TS 16949:2009

and the applicable customer specific requirements

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

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SELÇUKLU, KONYA, TÜRKİYE

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Standart

ISO 14001:2004

Belgelendirme Kapsamı

ÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

UKAS

SEÇKİN DEMİRALP
BVCH SAS İngiltere Şubesi
adına imzalayan

Sayfa 1/1

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Bureau Veritas Certification Holding SAS - UK Branch certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2015

Scope of certification

MANUFACTURING OF CASTING AND MACHINING CYLINDER LINERS AND CASTING RING CARRIERS

Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

UKAS

İBRAHİM TAŞKY
Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification

BUREAU VERITAS
Certification

Certificate of Approval

YENMAK MOTOR GÖMLEK VE TİC. A.Ş.

1. ORGANİZE SANAYİ BÖLGESİ, HOROZLUHAN
MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

TÜRK STANDARDLARI ENSTİTÜSÜ
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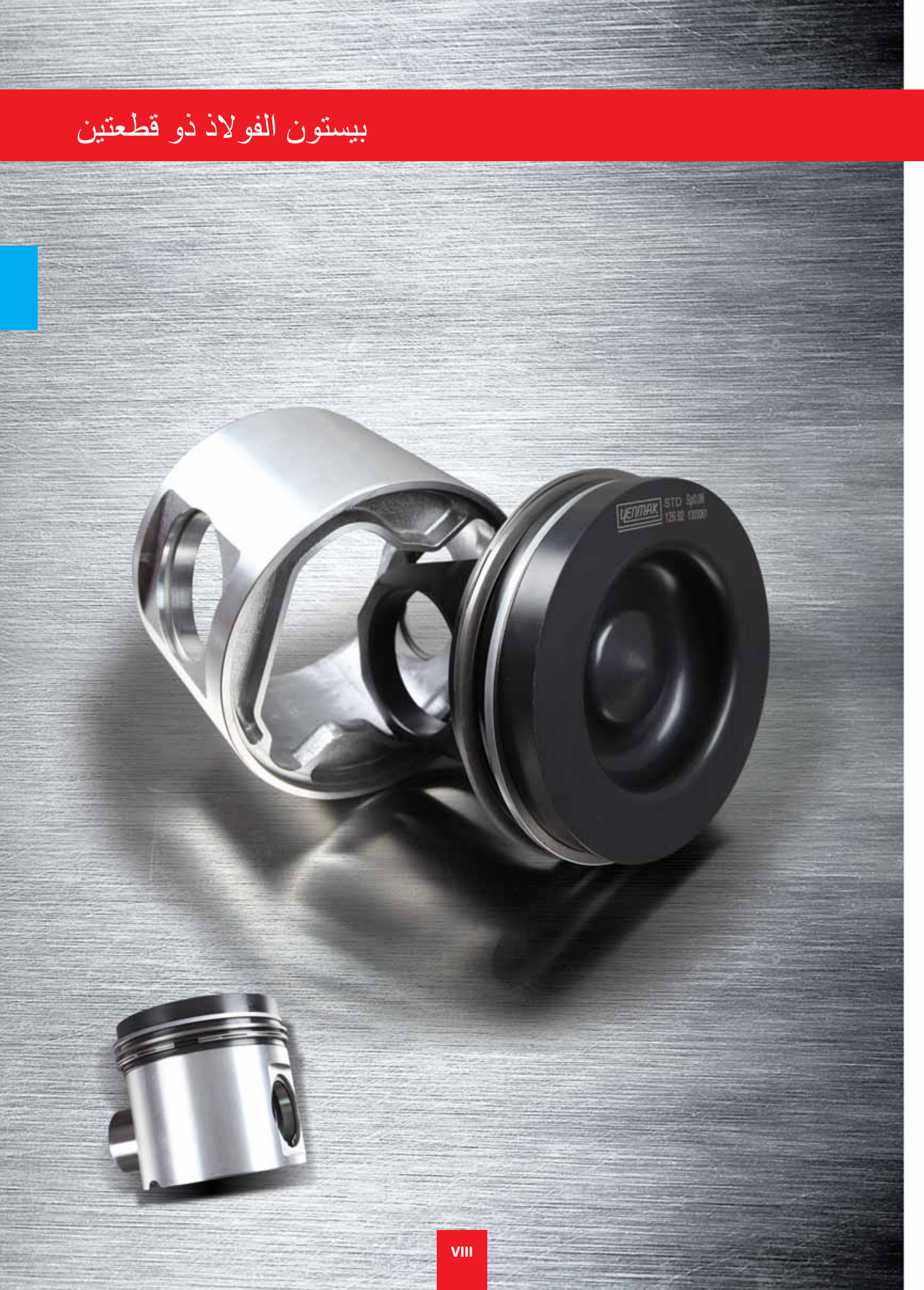
KONYA BELGELENDİRME MÜDÜRÜ

بيستون الفولاذ ذو قطعتين



بساتم الفولاذ ذات القطعتين يتكون من راس بيستون فولاذ صلب ومرتبط بشكل حر بواسطة البنزات مع هيكل من الالومنيوم ، نظرا لمقاومته العالية ونسبة التاكل المنخفض صمم هذا البيستون لتقديم افضل الاداء في محركات الديزل التقيلة ذات الانبعاثات المنخفضة

بيستون الفولاذ ذو قطعتين :

- الجيل الجديد من محركات مع نسب ضغط عالية وغرفة الاحتراق الحديثة.
- محركات الديزل ذات الخدمات الثقيلة .
- في المحركات ذات استعمال الوقود المتعدد.

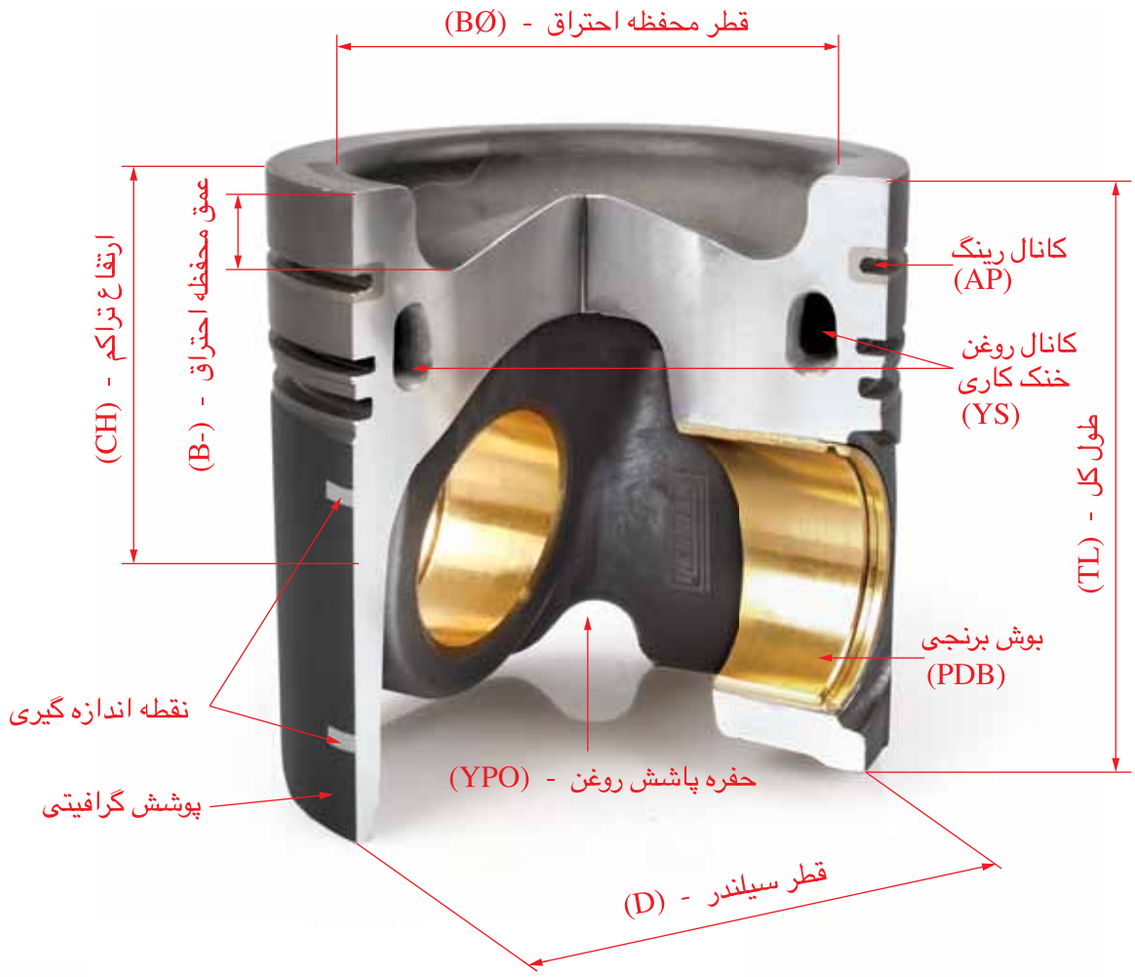
مزايا بساتم الفولاذ ذات قطعتين :

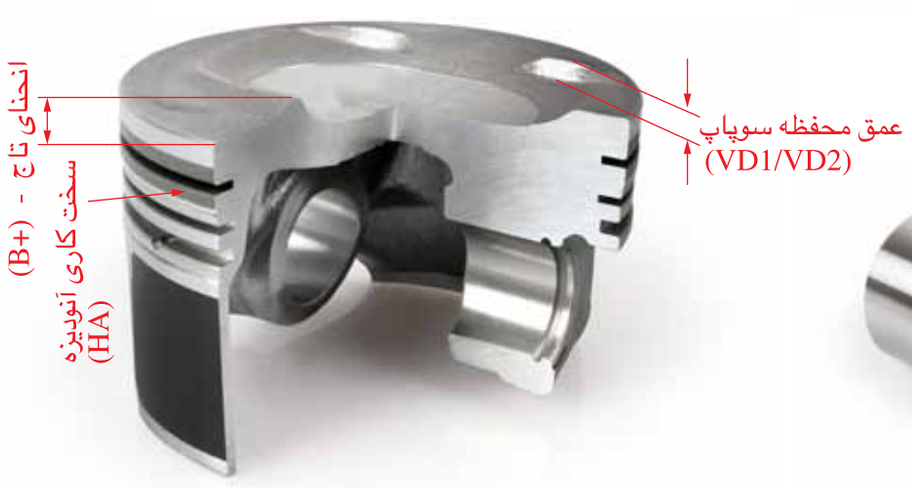
بساتم الفولاذ ذات قطعتين مسافة تماسها مع قمصان سلندر اقل قياسا من بساتم الالومنيوم وهذا يودي ايجابا بتقليل الفقدان المنتجة نتيجة قوة الاحتكاك .

بيستون الفولاذ ذو قطعتين قياسا الى بساتم الالومنيوم :

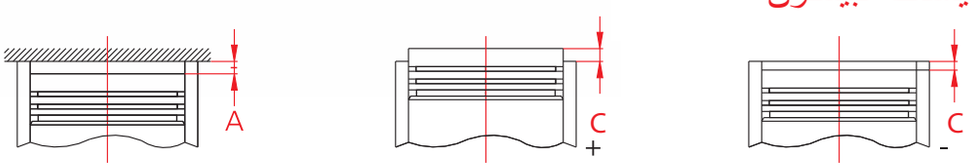
- بسبب ارتفاع المقاومة للاحمال الحرارية العالية يقلل من خطر التشوهات التي تطرا على قمصان سلندر وبامكانه العمل في فراغات اقل وهذا يزيد من قوة مقاومة تسريبات الشنابر .
- بيستون الومنيوم يستطيع مقاومة ضغط 100 بار بيد ان بيستون الفولاذ ذو قطعتين يستطيع مقاومة ضغط يصل الى 250 بار .
- يوفر قوة ضغط اعلى في المحركات ويقلل 5-2٪ من نسبة ثان اوكسيد الكاربون في العادم كما يوفر من مقاومة التماس التي تحصل في بساتم الالومنيوم التي تسعمل حلقات الفولاذ .
- في بساتم ذات التبريد الذاتي بامكان قنوات التبريد ان تصل الى مسافة اقرب من سطح البيستون وهذا يؤدي ايجابا الى زيادة كفاءة عملية التبريد .
- غرف احتراق بساتم ذات القطعتين مقاومة اكثر للتشوهات التي تحصل نتيجة الاحتراق والانفجار قياسا بغرف الاحتراق في بساتم الالومنيوم التقليدية .
- بساتم الفولاذ ذات القطعتين تزيد من عمر المحرك وهذا يؤدي الى تقليل من تكلفة تجديد المحركات .
- التزويد المفرط للوقود والخلل في نظام حقن الوقود يسبب ذوبان البيستون او تثقيبه بيد ان هذه المشاكل لاتحصل في بساتم الفولاذ ذات قطعتين .

المصطلحات الفنية





قیاسات البیستون



A = القیاس الی راس السلندر
C = القیاس من سطح المحرك الی راس البیستون

عند تركيبك للبساتم المستعملة يجب تنظيف مجرى الشنبر و ثقب التزيت من مخلفات الكربون والشوائب ، كما يجب تنظيف جميع الكربونات المتعلقة بالبيستون ماعدا طبقات الكربون الموجودة على راس البيستون ، يجب ان يكون مجرى الشنابر نظيفة جدا، يجب مراعاة بعدم ايذاء التجاويف والزوايا للبيستون عند عملية التنظيف والا فان اي خدش بسيط سوف يكون سبب للتشقوقات المستقبلية . قياسات ينماك متوافقة مع الشنابر الاصلية لذا لا داعي باجراء اي تغير في قياسات البيستون يمكن استخدام شنابر البساتم ماركة ينماك حسب نسب التاكل في السلندر على النحو المبين ادناه :

في محركات البنزين القطر في نطاق 0,1 ملم

في محركات الديزل قطر في نطاق 0,15 ملم

حتى لو كانت قياسات البساتم المستعملة ضمن نسبة التاكل المسموح بها اعلاه الا اننا نوصي بتغير البساتم التي حصلت فيها تشويهات في مجرى الشنابر ، لان البساتم التي حصلت فيها التشوهات في الاخاديد المتوازية في مجرى الشنابر سوف تكون مضللة ولا يمكن تشخيص مثل تلك العيوب بالعين المجرده لذا ان الشنابر سوف لن تعمل بشكل سليم في مثل تلك الحالات وسوف يؤدي الى مشاكل صرف الزيت والتبخير .
حركة الشنابر العلوي والسفلي داخل قنوات البساتم قد تتعرض الى اضرار وهذا يعوق دون عمل المحرك بشكل سليم .

تركيب الشنابر بشكل متوالي بعدة تركيب خاصة ثم شد الشنابر بواسطة عدة تركيب الشنبر وتنزيلها داخل القميص او السندر بدفعها بخشبة المطرقة ويجوز استعمال الطرق الخفيف دون اللجوء الى القوة المفرطة وفي هذا الاثتناء قد تخرج الشنابر الرفيعة من مجراها لذا يجب الاستمرار في شد الشنابر بعدتها الى ان تتم عملية التنزيل بسلام وينبغي عدم استعمال الشنابر المغطى بالكروم عند تركيبها في قمصان المغطى بالكروم داخليا .
TOP او YEN
هذه الكلمة يجب ان تقع الى الاعلى محاذاة غرفة الاحتراق عند تركيبها على البساتم وفي حالة عدم وجود مثل تلك الكتابة انذاك بالامكان تركيب الشنبر كيفما يشاء

طلاء الشنابر والمعالجة السطحية

Sn	=	طلاء القصدير	
Ck	=	السيراميك كروم	
Pvd	=	تراكم البخار المادية	
Cdc	=	كروم المطلي بالماس	
Dlc	=	طلاء الماس طلاء الكاربون	
Tef	=	پوشش تفلونى	
Cr	=	طلاء الكربون	
Mo	=	طلاء الموليبدين	
P	=	طلاء الفوسفات	
Fe	=	طلاء فيروكسيت	
Cu	=	طلاء النحاس	
Nt	=	طلاء نتريت	

طلاء الشنابر والمعالجة السطحية

Ck طلاء السيراميك كروم

طلاء الكروم الخزفية

الكروم الطلاءات الخزفية

نوع من الطلاء يتكون من تركيب هيكلة الشبكة التي تحصل نتيجة اكسدة عناصر الكربون مع الالومنيوم . هذا النوع من الطلاء يستعمل عادة في طلاء قنوات الشنبر الاولى في بساتم محركات الديزل .وبسبب الاختلاف في اسلوب التحليل الكهربائي بفضل هذا الطلاء فان الشنبر يكسب الجودة والاداء العالي .

ميزات الطلاء الخزفية من الطلاء بالكروم
- المقاومة الاعلى للتاكل
- نقطة انصهار أعلى اكثر
- الصلابة وكثافة التصدع اعلى

بسبب هذا المزايا يكون عمر المحرك الذي يستعمل هذا النوع من الطلاء اطول، كما يكون نسبة الغازات المنبعثة من العادم اقل .

Pvd ترسبات البخار المادية

هي طريقة انفصال التراكمي من خلال المرحلة التفاعلية للبخار على السطوح القاسية للشنابر . وتحصل على هذا عن طريق اسلوب تبخير و تاين المعدن بطريقة قصف الايونات والتحليل الكهربائي

وتحرير أيونات المعادن على سطح حقن عنصر متقدم. نتيجة لذلك سوف تتفاعل ذرات المعدن مع الغازات التفاعلية والنترات، كربيد وأكسيد. وشكلت رد فعل طلاء رقيقة على سطح العامل في الشنابر. طلاء بالسيراميك يعطي مقاومة عالية ضد البلى والتمزق.

Mo طلاء الموليبدين

لمنع تاكل سطع الشنبر يطلى بمادة الموليبدن لتفادي من اثار الاحتراق يحشى الوجه العامل للشنبر بهذه المادة او يطلى الشنبر بالكامل بالموليبدن وبالامكان الحصول مثل هذا الطلاء عن طريق الرش باللهيب او عن طريق التاين الكهربائي .(C° 2620) نقطة انصهار العليا للموليبدن
وبفضل النتوءات الموجودة على مادة المولبيدن حيث انها تساعد على بقاء سطح الشنبر مزيته وهذا يساعد ايجابا بزيادة المقاومة و من عمر الشنبر والعمل بانزلاقية جيده .

Cr طلاء الكروم

الطلاء بالكروم القاسي هي عملية شائعة من اجل زيادة متانة الشنبر ، والغاية منها تقليل البلى وزيادة من عمر اداء قميص السندر ، ويتم ذلك بوساطة طلاء الجدار الخارجي اللشنابر حيث هذه العملية تقلل من التاكل في الجدار الداخلي للقمصان وبسبب القساوة التي تعطي الكروم لسطح الشنبر تجعل من الشنبر ان تحافظ على متانتها وقوتها امام التاكل والبلى ان الطرق الحديثة تميل الى ليس طلاء الشنبر العلوي بالكروم فحسب بل تتعدى الى طلاء جميع الشنابر بهذه المادة المقاومة

يتم تطبيق طلاء الكروم بطريقتين الأولى:

- صلد
- مطلي المسامية بالكروم

في عملية الطلاء بالكروم الصلد يتم طلاء سطوح الشنبار بالكروم ثم تجري عملية التخليج لاعطاء الشكل النهائي للشنابر وبما ان السطوم بعد التخليخ يكون ذو مسامات وهذا يؤدي الى الاحتفاظ بالزيت عند التشغيل وبهذا يكون يحتفظ على نفسه اولا ويحافظ على جدار القمصان من التردي .

Nt طلاء نتريت

يتم باعطاء الصلادة على جميع سطوح الشنابر بواسطة الطلاء بالنتريت . وبهذه الطريقة تتم زيادة من العمر الافتراضي للشنابر وبخصوصية هذا الطلاء يقلل من الانبعثات في العادم ويكون صديقا للبيئة ، كما يزيد من فعالية الاداء الحرجة و يقوم بتقليل من فقدان الزيت في المناطق الحساسة للشنابر ومن الهشاشات المادية التي تطرا على حلقات الشنابر وهذا يؤدي ايجابا الى زيادة من عمر المحرك

Cdc (كروم المغلفة بالاماس)

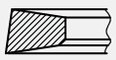
هذا النوع من الطلاء يستعمل في طلاء الشنبر العلوي لمحركات ايرو 4 . بالامكان تطبيق هذا العملية على الحديد المرن والزهر والفولاذ الكربوني . قطع الالماس استعمل بدل قطع السراميك وبهذا زادت من مقاومة التاكل واثرت ايجابا بالاداء ضد الاحتكاك

Dlc طلاء الماس طلاء كاربون

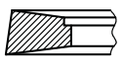
بهذه الطريقة يقلل من الاحتكاك ويزيد من مقاومة التاكل كما انها صديق للبيئة اواصرها الكيمائية متينة، لا ينكسر تحت الظغوطات ، انها ذو هيكل غير بلورية لذا بدون شك انها مادة قوية جدا وقياسا الى المواد الاخرى انها اكثر مقاوما كما انها تقلل من قوة الاحتكاك.

المصطلحات الفنية

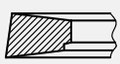
TI-IFU = شنبر مخروطي ثنائية الانحراف السطح السفلي من الحافة الداخلية مشطوفة



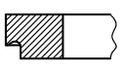
TK-IW = شنبر السطح العلوي من الحافة الداخلية كلا الطرفين منحرف تدريجي



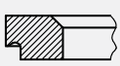
TK-IWU= شنبر السطح السفلي من الحافة الداخلية كلا الطرفين منحرف تدريجي



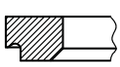
N = شنبر مكشوط الراس



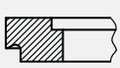
N-IF = شنبر مكشوط الراس، السطح العلوي من الحافة الداخلية مشطوفة



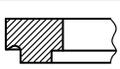
N-IFU = شنبر مكشوط الراس ، السطح السفلي من الحافة الداخلية مشطوفة



N-IW = شنبر السطح العلوي من الحافة الداخلية مكشوط الراس تدريجي

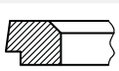


N-IWU = شنبر السطح السفلي من الحافة الداخلية مكشوط الراس تدريجي

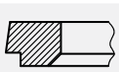


TN = شنبر مخروطي مكشوط الراس

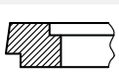
TN-IF = شنبرمكشوط الراس مخروطي ، السطح العلوي من الحافة الداخلية مشطوفة



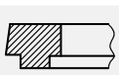
TN-IFU= شنبرمكشوط الراس مخروطي ، السطح السفلي من الحافة الداخلية مشطوفة



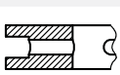
TN-IW = شنبرمخروطي ، السطح العلوي من الحافة الداخلية مكشوط الراس تدريجي



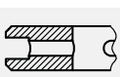
TN-IWU= شنبرمخروطي ، السطح السفلي من الحافة الداخلية مكشوط الراس تدريجي



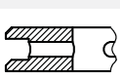
SC = شنبر ذو شق ضبط الزيت



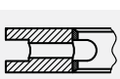
DC = شنبر ذو شطف ضبط الزيت



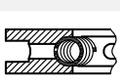
DB = شنبر ذو ثنائي ظبط الزيت



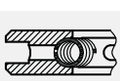
ES = شنبر ذو شق ظبط الزيت نابض ورقي



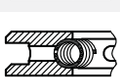
SY = شنبر ذو شق ظبط الزيت نابض حلزوني



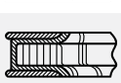
DY = شنبر ظبط الزيت نابض حلزوني مشطوف الحافة



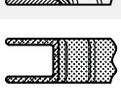
PS = شنبر ظبط الزيت نابض حلزوني مزدوج مشطوف الحافة



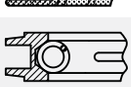
VF = شنبر ذو حزام فولاذي لولب ضبط الزيت على شكل VF



UB = شنبر ذو حزام فولاذي لولب ضبط الزيت على شكل U

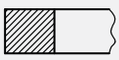


SDV = شنبر ذو حزام فولاذي لولب ضبط الزيت على شكل V

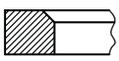


DKS = رينگ كنترل روغن سه تكه اى تخت،ذوزنقه اى و استوانه اى

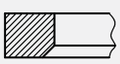
D = شنبر قائم



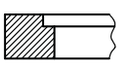
D-IF= شنبر قائم السطح العلوي من الحافة الداخلية مشطوفة



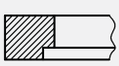
D-IFU = شنبر قائم السطح السفلي من الحافة الداخلية مشطوفة



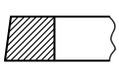
D-IW = شنبر السطح العلوي من الحافة الداخلية قائم تدريجي



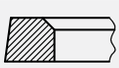
D-IWU = شنبر السطح السفلي من الحافة الداخلية قائم تدريجي



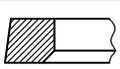
K = شنبر مخروطي



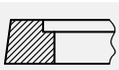
K-IF = شنبرمخروطي السطح العلوي من الحافة الداخلية مشطوفة



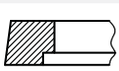
K-IFU = شنبرمخروطي السطح السفلي من الحافة الداخلية مشطوفة



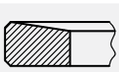
K-IW = شنبر السطح العلوي من الحافة الداخلية مخروط تدريجي



K-IWU = شنبر السطح العلوي من الحافة السفلية مخروط تدريجي

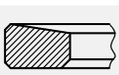


TT = شنبر احادية الانحراف

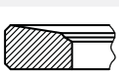


TT-IF = شنبراحادية الانحراف السطح العلوي من الحافة الداخلية مشطوفة

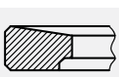
TT-IFU=شنبراحادية الانحراف السطح السفلي من الحافة الداخلية مشطوفة



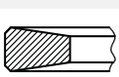
TT-IW = شنبر السطح العلوي من الحافة الداخلية منحرف احد طرفه تدريجي



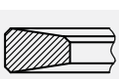
TT-IWU= شنبر السطح السفلي من الحافة الداخلية منحرف احد طرفة تدريجي



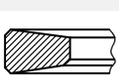
T = شنبر ثنائية الانحراف



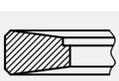
T-IF = شنبرثنائية الانحراف السطح العلوي من الحافة الداخلية مشطوفة



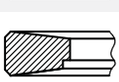
T-IFU = شنبرثنائية الانحراف السطح السفلي من الحافة الداخلية مشطوفة



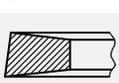
T-IW = شنبر السطح العلوي من الحافة الداخلية منحرف الطرفين تدريجيا



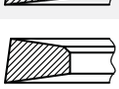
T-IWU = شنبر السطح العلوي من الحافة السفلية منحرف الطرفين تدريجيا



TK = شنبر مخروطي ثنائية الانحراف



TK-IF = شنبر مخروطي ثنائية الانحراف السطح العلوي من الحافة الداخلية مشطوفة



SDR = شنبر قناة السطره على الزيت فولاذي ذات لولب على شكل V

X = سمك الشنبر (مم)

تعليمات تركيب البساتم

1 - يجب ان يكون سطح السلندر المراد تركيب البيستون عليه مشحوذ على شكل خطوط مربعة و عند تركيب البساتم على سلندرات اوعلى قمصان مستعلمة يجب مراعاة والتاكيد من تواجد تلك المربعات على السطوح الداخلية لتجويف السندر وعند اختفاء او مسح تلك الخطوط يجب شخذ السلندر او القميص من جديد.

2 - يصنع البساتم التي تركب بشكل سليم على السلندرات بقياسات حساسة وياخذ بنظر الاعتبار الفراغات المسموحة بها عند صناعة البساتم ، يجب التاكيد من قطر البيستون المذكور على مصلق البيانات الموجودة على العلبة وبهذه الطريقة تتم تحديد ما اذا كانت المعالجة مطلوبة ام لا ، عند ضرورة تجليخ السطح الداخلي للسندر في حالة البلى يجب ان تكون نسبة السماح في القطرضمن نطاق 0,000 الى 0,025 ملم .

3 - ينبغي تركيب بنزات البساتم الجاهزة على البساتم بصورة صحيحة ماخذتا بنظر الاعتبار القياسات لكلا القطعتين لان اي اختلاف في القياسات سوف تؤذي البيستون والبنزات معا . نوصي بقياس البنزات قبل التركيب و بالابتعاد من العشوائية عند التركيب .

4 - بعد تركيب الشنابر على البساتم بواسطة عدة تركيب خاصة لهذا الغرض اضغط الشنابر بواسطة عدة طوق الشنابراو عدة القمع المخروطي وتزيتها جيدا ثم قم بتنزيل البيستون على تجويف السلندر بشكل صحيح ودون استعمال القوة المفرطة في عميلة التنزيل لانها نسبب في كسر الشنابر كما يجب ان تاخذ بنظر الاعتبار اتجاه الشنابر مع بعظها

5 - قبل تركيب البساتم بعناية يجب تنظيفها تنظيفا جيدا وتزيت ثقب البنز على الخصوص كما يجب تزيت تجويف السلندر جيدا لتفادي الاضرار التي تنجم في التشغيل لاول مرة .

6 - عند تركيب البساتم اذا كانت هناك اشارة اوسهم يبين اتجاه تركيب البسيون موجوده على راس البيستون يجب اخذ هذه الاشارات بنظر الاعتبار .

7 - يجب ابداء الاهتمام القصوى للشنابر والبساتم وبنزاتها عند التركيب تفاديا للاضرار .

8 - يصنع البساتم حسب الموصفات والقياست المطلوبة والمتوافقه عليها لذا لايمكن اجراء اي عملية تعديل على البساتم قبل تركيبها .

9 - لايمكن استعمال البنزات وشنابر البنزات المستعلمة لذا يجب تغير هذه القطع عند كل تركيب .

10 - يجب فحص اذرع البيل قبل التركيب في كل مرة لان اي اعوجاج او خلل في الذاراع ينجم اضرارا كبيرة جدا .

ملاحظة : الشركة المنتجة للقطع غير مسوؤلة عن الاضراراو التلف التي تنجم من خلال تركيب القطع دون مراعاة النقاط المبينة اعلاه .

8 - وسمة ورموز البيستون

2 - شعار الشركة

2 - القياس الاصلي او القياسات العليا .

7 - رقم التتبع

5 - فراغ بيستون وتجويف السلندر (مم)

8 - حجم قصيرة لإرتفاع ا لضغط (مم)

4 - رقم السلندر المراد تركيب عليها البيستون.

6 - تثبيت اتجاه البيستون. انحراف البنز هول، الاشارت الخاصة لاتجاه الانحراف يرشدك على تركيب البساتم بصورة صحيحة.

3 - قياس قطر البيستون

9 - رقم مرجع المكبس

نموذج

11-01513-000

رقم مرجع االبيستون

000 = القياس الاصلى / بيستون+ شنبر
001 = ارتفاع انضغاط البيستون 0,20 مم قصيرة
002 = ارتفاع انضغاط البيستون 0,40 مم قصيرة
003 = ارتفاع انظغاط البيستون 0,60 مم قصيرة
050 = بيستون + شنبر/ اعلى مقياس 0,50

رقم المرجع الجديد	رقم المرجع القديم
11-01513-000	1513 000

10 - رقم مرجع البيستون+ شنبر

نموذج

31-03513-000

رقم مرجع البيستون+ شنبر

000 = المقاسات الاصلية/ بيستون + شنبر
050 = المقاس الاعلى / بيستون + شنبر ملم 0,50

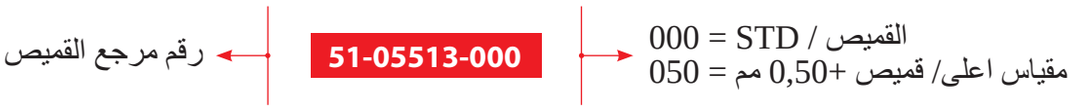
رقم المرجع الجديد	رقم المرجع القديم
31-03513-000	3513 000
38-03513-000	3513 000-08
39-03513-000	3513 000-09

38-
39-

المختلفة الطلاء ونوعية الشنبر شكل

11 - رقم مرجع تعريفات القميص

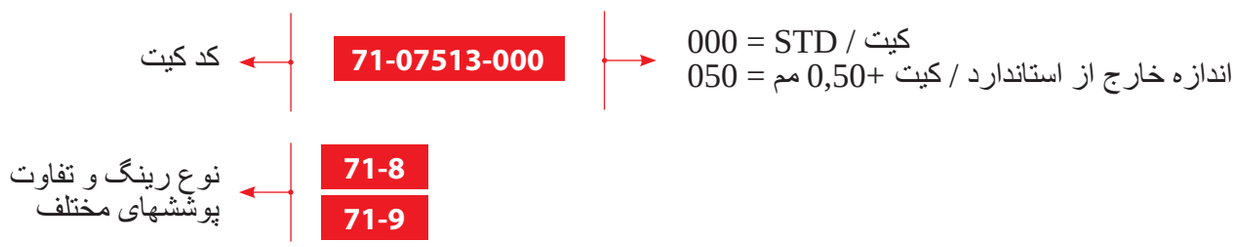
نموذج



رقم المرجع الجديد	رقم المرجع القديم
51-05513-000	5513 000

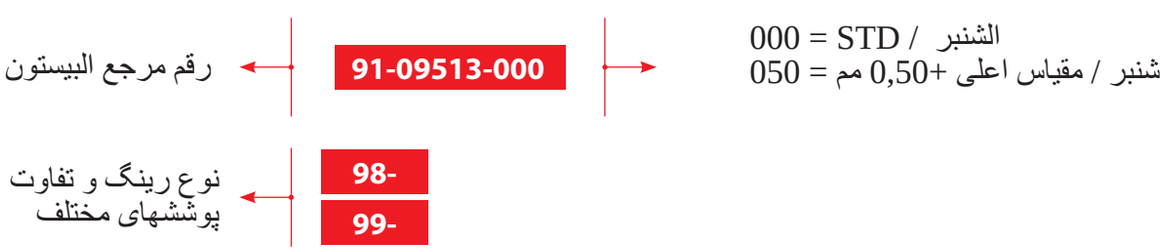
12 - ارقام مراجع اطقم الكيتات

كد كيت: پيستون + گژن پين + رينگ + بوش



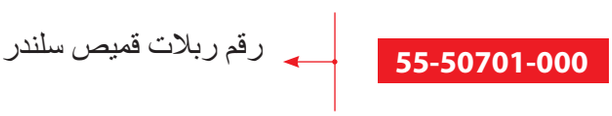
رقم المرجع الجديد	رقم المرجع القديم
71-07513-000	7513 000
71-87513-000	7513 000-08
71-97513-000	7513 000-09

13 - رقم مرجع الشنبر

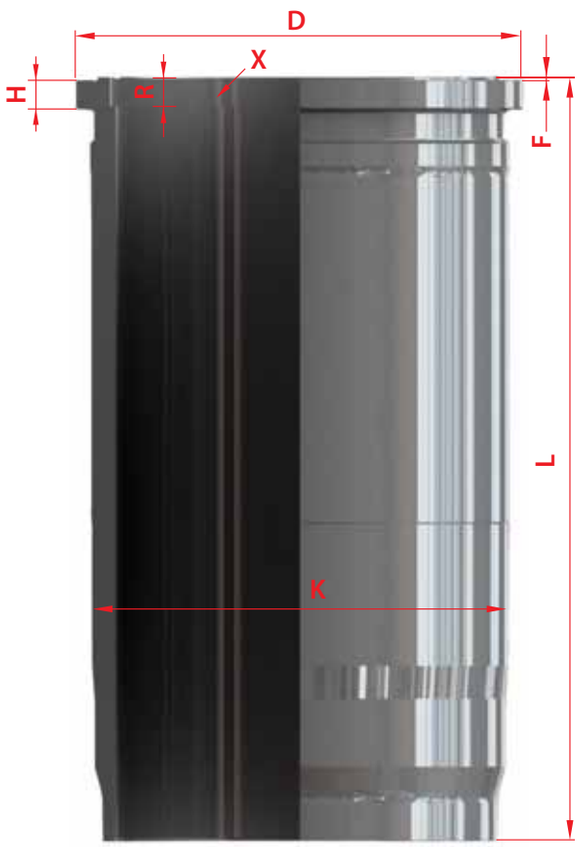


رقم المرجع الجديد	رقم المرجع القديم
91-09513-000	9513 000
98-09513-000	9513 000-08
99-09513-000	9513 000-09

14 - رقم ربلات قميص سلندر



توضيحات حول الموصفات الثقنية للقمصان



K = القطر الخارجي
L = الطول الإجمالي
H = طول الشفة
F = عمق الحشية
D = قطر الشفة
X = طول الشنبر مكان تجمع الكربون
R = طول مكان تجمع الكربون

تعريف قميص سلندر حسب معهد المواصفات التركية TSE 482
قمصان سلندر في محركات ذات الاحتراق الداخلي والذي يتحرك البيستون في داخله وتتم في داخله عملية الاحتراق ويتكون على شكل اسطوانه مصنوعة من الحديد الزهر الرمادية وينقسم الى قسمين .

قمصلن سلندر مبللة :

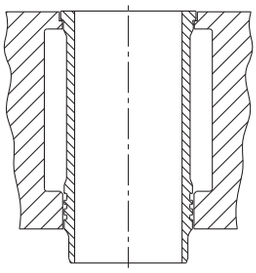
تلك القمصان التي تركب على سلندرات والتي تتم فيها عملية التبريد بواسطة الماء مباشرة اي تمس الماء الجدار الخارجي للقميص في داخل بلوك سلندر

يتكون من ثلاثة اقسام رئيسية :

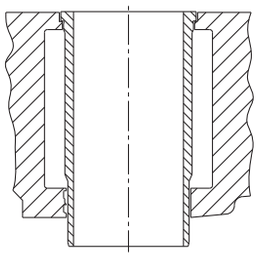
ا- ذو شفة وقناة : يجلس على بلوك السندر بواسطة شفة بارزة وله قناة يركب عليه ربلات لكي يمنع تسرب الماء الذي يمسه في عملية للتبريد . (الشكل 1)

ب - ذو شفة وبدون قناة :يجلس على بلوك السندر بواسطة شفة بارزة ولايحتوي على قناة لان القناة موجودة في بلوك السندر . (الشكل 2)

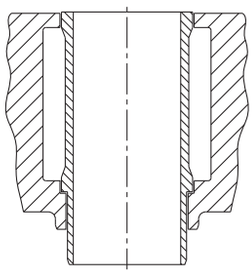
ت - ثنائية الشفة : لاجل يمنع تسرب الماء من بلوك السندر تكون هناك شفة من الاعلى و شفة من الاسفل (الشكل 3)



الشكل-1



الشكل-2



الشكل-3

قميص سلندر جاف :

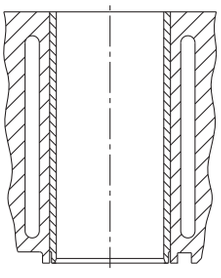
قميص لايمسه الماء مباشرة عند عملية التبريد في بلوك المحرك الذي يركب عليه هذا النوع من القميص

.

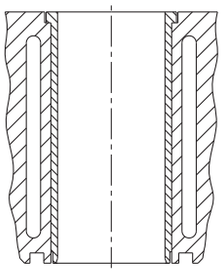
يمكن تصنيفه على فئتين على اساس الشكل :

أ- ذي شفة (شكل 4)

ب- بدون شفة - مسطح (شكل 5)



شكل- 4



شكل- 5

المسائل التي يجب اخذها بنظر الاعتبار عند تركيب القمصان :

ارشادات تركيب قمصان سلندر جافة

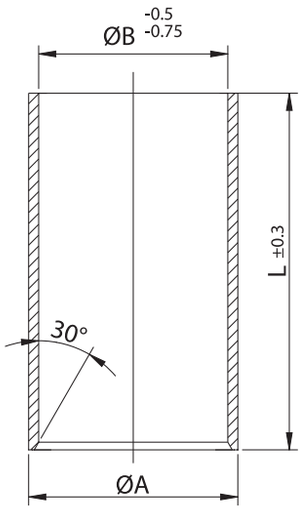
يصنع قميص سلندرجاف على شكل نوعين ذو شفة وبدون شفة (الشكل-6) ظروف العمل السيئة وتركيب البساتم بشكل غير صحيح كل هذ ه الامور تؤدي الى انحراف في الاتجاه المحوري في قمصان جافة بدون شفة لذا يرجح تركيب قمصان جافة ذو شفة تفاديا تلك المشاكل .

قبل تنزيل القمصان بالظغط يجب ان يكون المقياس الخارجي مطابقة كما في القيم الموجود في القائمة (أ) وعند عدم ملائمة القياس يجب شحذ القميص او خراطته .

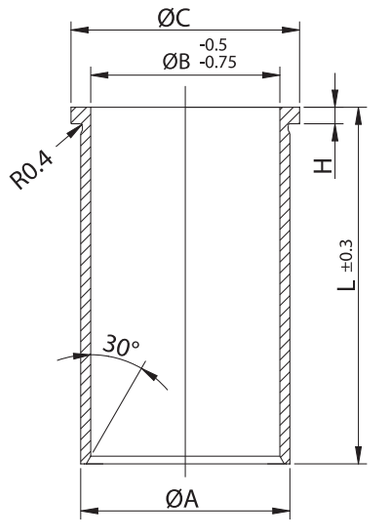
ويجب مراعاة القياسات ادناه كما في الشكل 7 وعلى خلاف ذلك فلو كانت الارتداد الامامي واطئة جدا فان عملية تصريف الحرارة سوف لن تكون بشكل مرضي ولو كانت االارتداد الامامي عالية جدا فانها تؤدي الى عدم تطابق الجدار الرقيق للقمصان مع بطانة السلندر فمن المحتمل ظهور اعطال التشغيل انذاك . القمصان الجافة الجاهزة قياستها الخارجية يتم خراطة القطر الداخلي اصغر بحوالي 0,5-0,75 ملم .

عند تنزيل القمصان الجافة ذات شفة على بلوك سلندربواسطة المكبس يجب خراطة القطر الخارجي للشفة من فوهة السلندر التي تجلس عليها شفة القميص بقطر اكبر تفاديا من تعرض شفة القميص الى القطع .

يجب التاكد من ان السطح السفلي من وجه شفة القميص جلست في مكانها في فوهة السلندر بشكل صحيح عند تنزيلها بالمكبس على السلندر .



6- الشكل



7- الشكل

من المعلوم بان القسم السفلي لشفة القمصان منحي بدرجة 0,4 ملم . لذا يجب اعطاء شطب بدرجة 1,0 على المكان الذي يجلس عليها الشفة وعلى خلاف ذلك فان الشفة تتعرض للقطع عند التنزيل .

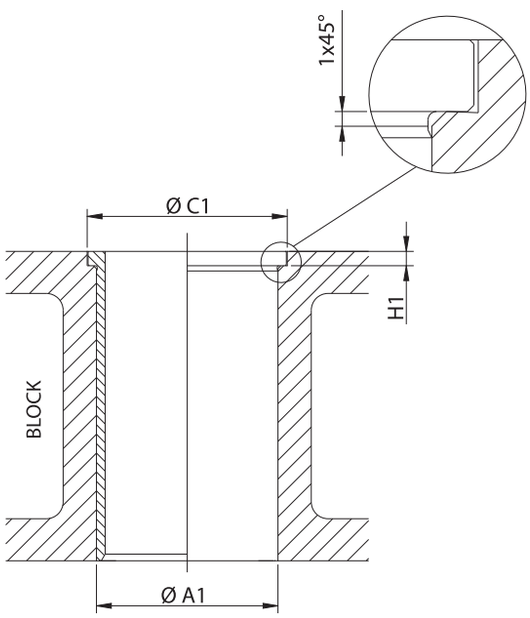
عند تركيب قمصان جديدة على السلندرات يجب تنظيف تجويف السندر تنظيفا جيدا وظبط قياسته الحساسة بشكل دقيق ويجب ان لا يتعدى مخروطيته وبيضويته من 0,025 ملم . وعند الشحذ يجب محاولة تحقيق سطح لامع كما يجب تحقيق خشونه سطحية ملائمة حسب نوعية المحرك . ومن اجل تحقيق عملية تزيت صحية يجب الابتعاد من تحقيق لمعان او خشونه مفرطة .
ضغط 3000- 5000 كغم كافية عند كبس القميص الجاف في عملية تنزيله الى السلندرات . يجب الابتعاد من استعمال المواد الصلبه (غير مائعة) في عملية التزيت عند تنزيل القمصان لان تلك المواد سوف تتفحم وتعدوا مادة عازلة تعوق دون اتمام تسريب الحرارة في اثناء عملية التبريد . كما يجب تخليخ سطح السلندر بعد تنزيل القمصان لاجل عمل سطح مناسب للكاسكيت .

في حالة ايجاب معالجة السطح العلوي للبلوك - مكان تجليس الكاسكيت- يجب انذاك معالجة فوهة جلوس الكاسيت بشكل اعمق في محركات التي تستعمل قمصان منتهية القياسات خارجيا ومخروطة من الداخل بحساسية .

هذه الانواع من القمصان التي انزلت عن طريق الكبس على البلوك لديها حصة قليلة للشحذ نسبة سماح القطر الداخلي تتراوح بين + 0 الى +0,015 ملم والقطر الخارجي تتراوح السماح بين +0,012 الى 0,024 ملم

	مجموعة القطر الخارجي للقمصان		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	اقطار تجويف البلوك (مم)		
	50 - 80	80 - 120	120 - 180
Q 1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25



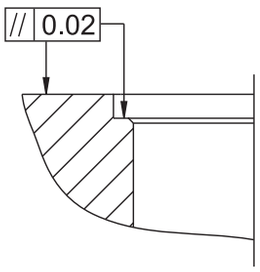
الشكل-9

تعليمات تركيب قمصان مبللة

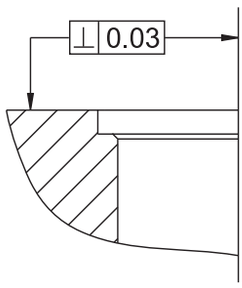
يتم تصنيع قمصان سلندر في ينماك بطريقة الطرد المركزي لمقاومة الانكماش والتأكل . لتفادي حدوث تخريبات على البلوك يوصي اخراج القمصان من البلوك بعناية فائقة . يجب تنظيف بلوك السندر من التركمات الطينية والجيرية والتراكمات الملوحية ويجب عدم استعمال الات حادة وثاقبة في عملية التنظيف بل يوصى باستعمل الفرشاة السلكية لهذا الغرض . عند محاولة اخراج القميص من البلوك قد يكون القميص عالق انذاك يوصى بوضع وتد ومحاولة تحريك القمصان بالضرب على الوتد وفي حالة عدم جدوى هذه الطريقة انذاك يخرج القمصان باستعمال الماكبس الهيدروليكية وعند التنظيف يجب ابداء الاهتمام الخاصة على السطوح التي تجلس عليها القميص .

يجب ان يكون سطح البلوك الذي يجلس عليه القميص والسطح السفلي لشفة القميص موازيا مع بعض كما في الشكل (10) . ويجب ان لايكون هناك اي اختلاف في التسطيح والنعومة لكلا الوجهين . بالإضافة إلى ذلك، يجب فحص ما إذا كان محور سطح البلوك مقعد الكاسكيت عموديا ام لا. (الشكل 11) كما هناك نقطة مهمة جدا وهي فحص سطح البلوك الذي يجلس عليه القميص ما انه غير تالف او متاكل وانها بحالة جيده .كما في الشكل (12) .

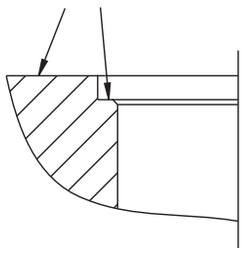
لتفادي مسالة عدم جلوس الزاويا السفلى من شفة القميص (د) مع الزاوية القائمة لمكان جلوس القميص في البلوك (أ) قطر السلندر (س) من نقطة العبور يجب اعطاء انحراف 0,5-1.0 ملم بزاوية 45 درجة لمنع خطر الانكسار يجب ايجاد القوة العمودية بين قوة عدم التسرب وقوة الرد المقابله لها .



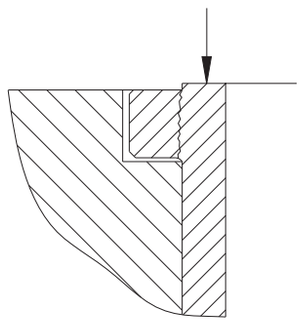
الشكل- 10



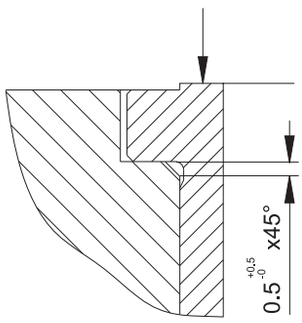
الشكل- 11



الشكل- 12



الشكل-15



الشكل- 14

قطر فوهة الكاسكيت (ب) يجب ان يكون مساوية مع القطر الخارجي للقميص (ج) . ولمنع التسرب من غرفة الاحتراق يجب ان يكون اطار فوهة الكاسكيت معدنية .

- لمعرفة ما اذا كان القميص المراد تركيبه كبير او صغير ينزل القميص على داخل بلوك سلندر بدون تركيب الربلات قبل تركيبه النهائي. وبالاخص التاكيد من ان شفة القميص تجلس في مكانها بشكل جيد يوصى قبل التركيب بقلب القميص ووضعه على فوهة السلندر ومعرفة اذا كانت ملائمة ام لا و كما هو معروف ان شفة القميص تقع في المنطقة التي لاتصل اليها عملية التبريد وانها تتعرض للتمدد لذا يجب اخذ بنظر الاعتبار ان يكون الفراغ هنا 0,3-0.5 ملم

هنا في تعليمات التركيب ننتهز كل فرصة لكي نؤكد باستعمال ادواة خاصة معدة لهذا الغرض وعدم استعمال المطارق او بعض اللات الغير ملائمة في عملية اخرج وتركيب القمصان لان اي خلل بسيط قد يؤدي الى عواقب وخيمة لذا نوصي بابداء الاهتمام والعناية .

الربلات التي تسعمل في التركيب يجب ان تكون ذات جودة عالية تتحمل الحرارة العالية والزيت ومقاومة للانتفاخ والبلى وخلاف ذلك فانها تسرب الماء الى الكارتير وهذا يودي الى تعصي القميص ويفسد القياسات ويكون سببا في اعطال المحرك . يجب تشحيم الربلات بالصابون في كل مرة قبل التركيب لاجل اجلاس الربلات في محله بشكل سهل وصحيح.

مسك البيستون والذي يؤدي الى قطع القمصان سببه استعمال ربلات غير ملائمة ينبغى عدم حفر فنوات الربلات مطلاقا .

من الاحسن اعادة قياسات السلندر بعد تجليس القميص فيه ، هذه القياسات يجب ان تجري تحديدا في المناطق الموجوده فيها الربلات للتاكيد من عدم حصول البيضوية او في المناطق التي قد تحدث فيها الانكماشات .

بعد تركيب القمصان على السلندر يجب املاء السلندر بالماء وضغطها للتاكيد من عدم وجود التسربات

تفاصيل علامات القميص

ربلات القمصان

ربلات القمصان	
مطاط EPDM	EPDM
مطاط NBR	NBR
فايتون	FPM / VI
نحاس	Cu
سبيكة من نحاس والزنك	T
فولاذ	ST
سليكون	SC / MVQ
معدن لين	Shim / SM

93,000 (1)		3	4	5	6	7
4JB1 (2)		D 00 2005	> 00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) (9) CH 51,850 VD1 0,550 (10) (11) B- 19,500 BØ 43,900 (12) (13) TL 91,850	AP YS (14) HA CP	91-09389-000 1 2,000 P 2 2,000 P (16) 3 4,000 CrP	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)		Ø 93,000 (18)	31-04385-000 (19)
(15) 31,00x76,00		99-09389-000 1 2,000 FeP 2 2,000 FeP (16) 3 4,000 TeF				39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
K=95,00 (22) (24) L=181,00 H=0,90 (25) (23) D=101,00	DF-CR-ST (26)				51-35721-000 (20)	71-08385-000 71-98385-000 (21)
K=120,00 (22) (24) L=229,00 H+F=9,00+1,10 (25) (23) D=128,50	WF (26)		O-Ring/Seal 55-50613-000 (28) 2 FPM 112,00x3,00		51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

-1 قطر البيستون
-2 رمز المحرك
-3 معلومات الوقود
-4 موديل الاعوام
-5 عدد االسلندرات
-6 حجم السندر
-7 قوة المحرك
-8 رمز البيستون
-9 التخزين: CH
-10 عمق الصباب : VD1/VD2
-11 الاحتراق غرفة عمق (-B)
العليا القبة (+B)
-12 قطر الغرفة :BØ
-13 الطول الكلي :TL
خصائص البيستون
بيستون ثنائية التسليح :*DAP
بيستون مسلح :*AP
بيستون تبريد زيت :*YS
بيستون ذو رقائق فولاذ :*CP
معالج بأكسيد الصلب :*HA
ثقب البنز ذو بطانه:*PDB

-15 قطر البنز - طول- خصائص
-16 خصائص الرنك .
-17 بروزات رأس البيستون
-18 قطر السلندر
-19 رمز البيستون + الرنك
-20 رمز القميص
-21 رمز اطقم الكيتات
-22 القطر الخارجي للقميص
-23 قطر شفة القميص
-24 طول القميص
-25 سمك الشفة
-26 ميزات القمصان

*WS بوش مرطوب نيمه به پايان رسيد
*WF بوش مرطوب پايان كامل
*DS بوش خشک نيمه به پايان رسيد
*DF بوش خشک پايان كامل
*AF هوا سرد می شود پايان كامل
*PH فسفات
*CR كروم
*HR سخت
*NT نيتريت
*HT حرارت درمانی
*STEEL فولاد

-27 موتور معمولی
-28 رمز ربلات قمصان

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Yenmak, a été créé en 1965 par la famille Kahvecioğlu à Konya dans un petit atelier. Avec le temps YENMAK n'a cessé de s'évoluer et de se renouveler et est devenu l'un des plus grands fournisseurs indépendant, pour les pièces du moteur en Turquie et à l'étranger.

Yenmak aujourd'hui fait la production d'ENSEMBLE, PİSTON, AXES DE PİSTON, SEGMENT et CHEMİSE; JOINT De CULASSE, et fait la distribution de SOUPAPE et COUSSİNET DE MOTEUR, elle fait l'exportation de ces produits dans plus de 80 pays différents sur les 5 continents du monde.

Nous offrons à nos clients un partenariat à long terme, avec une confiance ultime, un rapport qualité prix exceptionnel, un service de vente et après vente, pour la fourniture de toutes les pièces du moteur. Yenmak donne beaucoup d'importance à la valeur humaine car c'est l'un des points le plus important pour une bonne relation avec ces clients.

YENMAK; est en possession des certificats de INMETRO, ISO 9001, ISO / TS 16949, IATF 16943, TS EN ISO 14001.

Aujourd'hui, 2 sites de production, 1 siège social et un bâtiment logistique, avec une superficie totale de 50.000 m^2 est installé à la zone industrielles 1,2 et 3 à Konya.

Les services ventes et opérations de marketing sont au bureau d'İstanbul.

Siège Social & Logistique

Site de Production Piston & axe de piston

Site de Production Chemise de Moteur

PİECES MOTEUR

Depuis 2003, les produits Yenmak on pris une place dans le marché sous la forme ci- dessous.

Voici les détails de l'emballage:

Grace à notre labelle, soyez le premier à ouvrir le produit.

Numéro de traçabilité

Un hologramme 3D est intégré sur la boîte, pour assurer la sécurité du produit.

Etiquette de sécurité pour assurer la sécurité du produit dessous de la boite.

BUREAU VERITAS
Certification

BUREAU VERITAS Certification

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Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

TÜRKAK

SEÇKİN DEMİRALP
Belgelendirme Müdürü

Sayfa 1/1

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Certificate of Approval

Awarded to

YENMAK PİSTON SEGMAN SAN. VE TİC. A.Ş.

KIRIM CD. SARIÇİÇEK SK. NO:12 SELÇUKLU KONYA
42000 - Konya - Turkey

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ISO/TS 16949:2009

and the applicable customer specific requirements

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

BUREAU VERITAS Certification

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Bureau Veritas Belgelendirme Holding SAS – İngiltere Şubesi yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 14001:2004

Belgelendirme Kapsamı

ÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

UKAS

SEÇKİN DEMİRALP
BVCH SAS İngiltere Şubesi
adına imzalayan

Sayfa 1/1

BUREAU VERITAS Certification

YENMAK MOTOR GÖMLEK SANAYİ VE TİCARET A.Ş.

1.ORGANİZE SANAYİ BÖLGESİ HOROZLUHAN MAH. ATABEY SOK. NO: 8 SELÇUKLU, KONYA, TURKEY

Bureau Veritas Certification Holding SAS - UK Branch certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2015

Scope of certification

MANUFACTURING OF CASTING AND MACHINING CYLINDER LINERS AND CASTING RING CARRIERS

Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

UKAS

İBRAHİM TAŞKY
Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification

BUREAU VERITAS
Certification

Certificate of Approval

YENMAK MOTOR GÖMLEK VE TİC. A.Ş.

1. ORGANİZE SANAYİ BÖLGESİ, HOROZLUHAN
MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

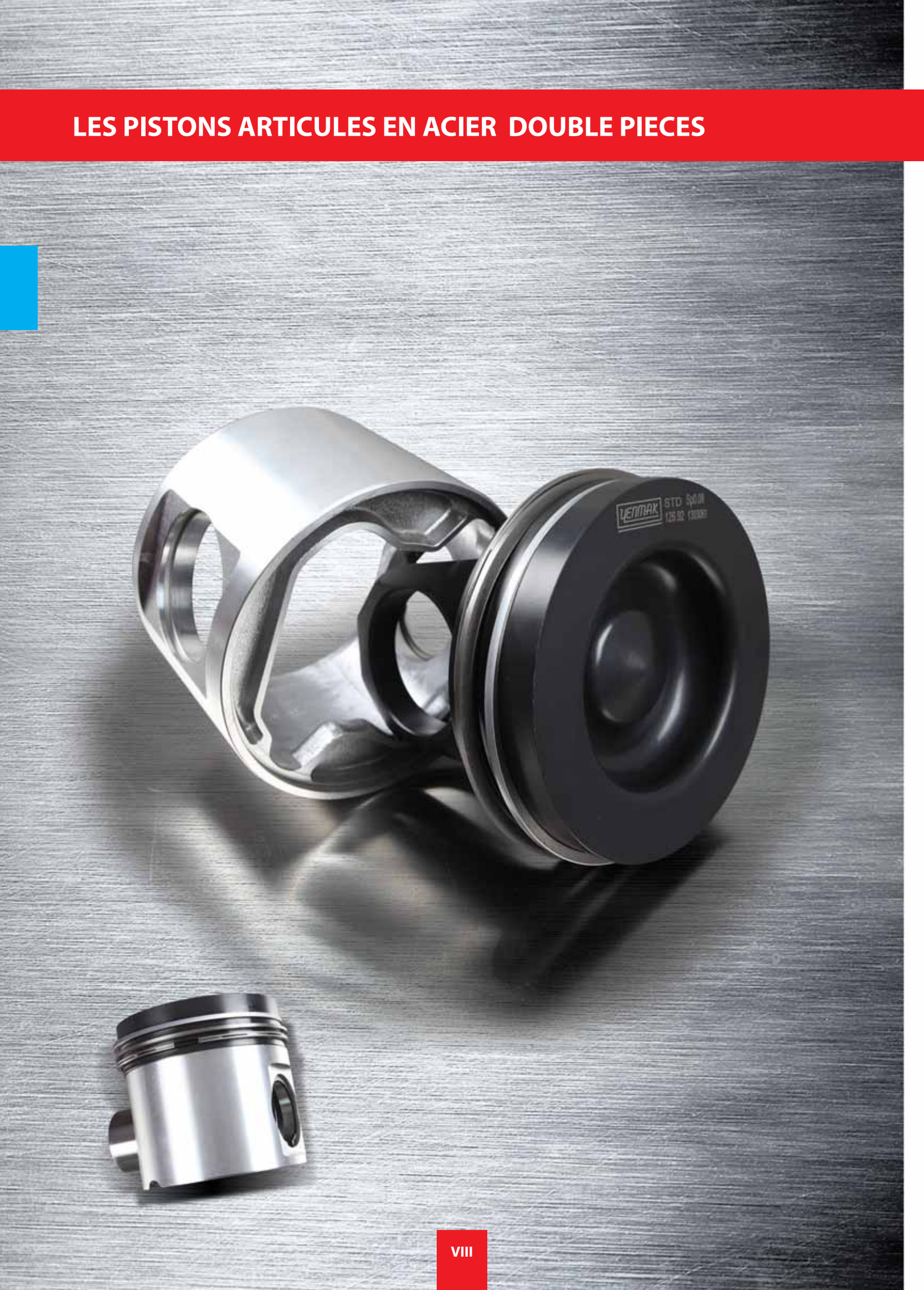
TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

KONYA BELGELENDİRME MÜDÜRÜ

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

KONYA BELGELENDİRME MÜDÜRÜ

LES PISTONS ARTICULES EN ACIER DOUBLE PIECES



Les pistons articulés en acier est formées d'une tête de piston en acier et d'un corps en aluminium reliés entre eux et mouvementé sur l'axe de piston. Due a des valeurs de résistance très élevée et de faible abrasion, ces pistons sont principalement utilisés pour des moteurs diesel avec gaz d'échappement et des émissions basse et limités.

Les pistons articulés en acier sont utilisés pour;

• Les moteurs ayant un taux de compression élevés avec des chambres de combustion moderne.

• Les Moteurs diesel lourd pour service

• Les moteurs au système de carburant multiple

Les avantages de piston articulés en acier à doubles pièces

• Moins de perte du au frottement.

• Grâce à sa forte résistance face aux charges thermiques, il réduit le risque de déformation des chemises et peut fonctionner des le bas de la chemise tout en augmentant les propriétés d'étanchéité des segments.

• Un piston normal en aluminium peut résister a une pression allant jusqu'à 100 bars, tandis que le piston articulé peut résister jusqu'à 250 bars de pression.

• Un taux de compression plus haut et une émission de CO_2 en baisse de % 2-5. L'alfin (anneaux d'acier) utilisé sur les pistons en aluminium sur les moteurs diesel, essaye de réduire ces problèmes de contact.

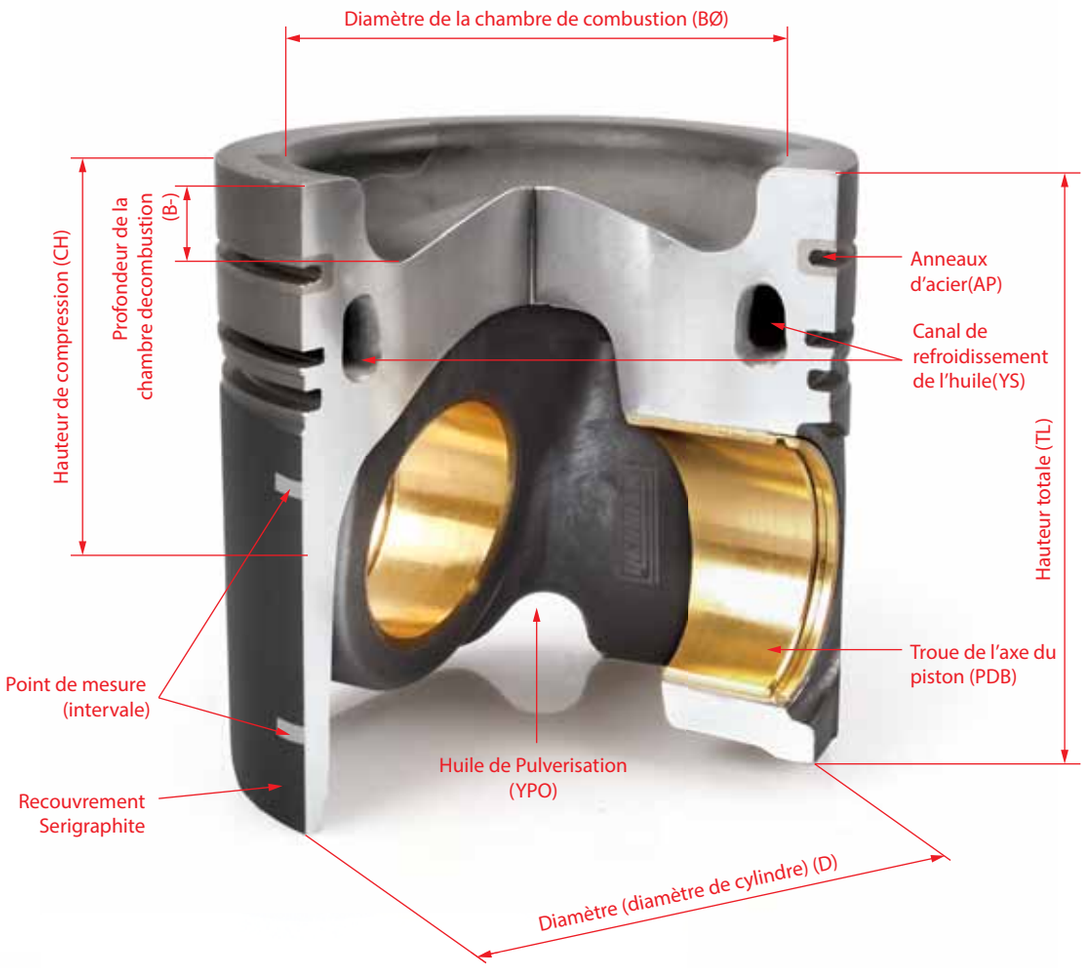
• Pour les pistons avec canaux de refroidissements, il donne l'occasion aux canaux d'être plus près de la partie supérieure du piston et cela donne un refroidissement plus efficace.

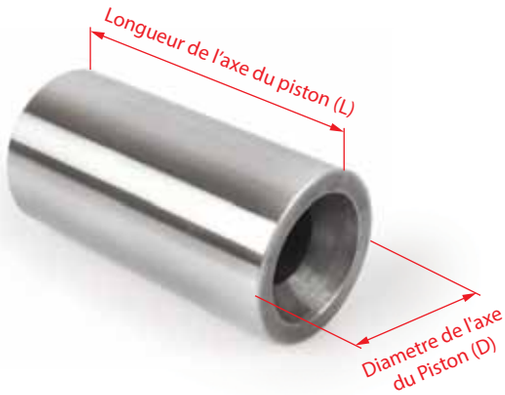
• Les pistons acier articulé par rapport au piston en aluminium ont une déformation minimum dans la chambre de combustion

• Les pistons acier articulé baissent les coûts de rectification de moteurs, liés à leur effet positif sur la vie de moteur.

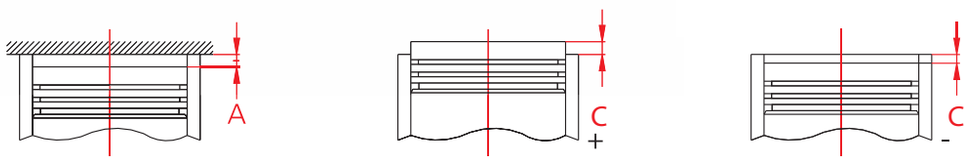
• Les pistons acier articulé, n'on pas le problème de perforation ni la fonte de piston, lié au système d'injection de carburant excessif.

SPECIFICATIONS TECHNIQUES





Mesure des têtes des pistons



A = longueur jusqu'à la tête du cylindre

C = longueur de la tête de piston depuis la surface du bloque

INSTRUCTIONS DU MONTAGE DES SEGMENTS DE PİSTON YENMAK

Nettoyer les canaux d'huiles et les résidus de carbone qui sont dans les canaux du piston avant installation des segments. Il faut bien nettoyer tous les résidus, sauf les couches de carbones situés sur le haut du piston. Faire attention à ce que les canaux soient propres. Il faut veiller à ce qu'il n'y ait pas de rayures quand on nettoie les courbures du bord de la jonction de faces latérales et inférieures. Sinon dans l'avenir, ces rayures seront le début des craquages. les segments Yenmak sont conformes au piston original des moteurs. Les valeurs des limites d'abrasion des cylindres des segments de piston de Yenmak sont citées en bas:

Pour les moteurs en essence, plus 0, 1 mm au diamètre

Pour les moteurs Diesel plus 0, 15 mm au diamètre

Même s'il ya une abrasion dans les limites cités en haut du piston usée, un changement des pistons est préconiser car il y a une déformation excessive dans les canaux des segments. Les pistons ayant une valeur d'espace acceptable peut être trompeuse car les défauts sur les canaux de la segmentation et cela vas engendrer un mauvais fonctionnement du travail des segments et une surconsommation d'huile.

Tordre les segments peut causer la détérioration de la surface de travail des segments et déformer les matériaux de revêtements. Cette déformation invisible peut conduire à des problèmes de fonctionnement du moteur.

Placer les pistons dans leur fente dans l'ordre, en ouvrant les segments (avec une pince de segment). Après, il faut serrer les segments en utilisant un serre segment de piston ou bien un manchon d'installation et pousser le haut du piston avec la tige du marteau et le faire glisser dans le cylindre. Pendant ce processus et pour empêcher que les segments fin sortent de leur canaux et causent des dommages, il faut faire attention à bien tenir les menottes. Il ne faut pas utiliser des segments chromés pour les moteurs ayant une chemise chromée. Il faut accrocher les segments dans les fentes en mettant le marquage YEN ou TOP vers le côté de la chambre de combustion. Si aucun marquage sur les segments, alors il peut être monte sur tous les sens.

REVETEMENTS DE PISTON ET TRAITEMENTS DE SURFACE

Cr = Chromage
Mo = Revêtement de molybdène
P = Revêtement phosphate
Fe = Revêtement de Ferroksyte
Cu = Revêtement de cuivre
Nt = Revêtement de nitrure
Sn = Revêtement d'étain
Ck = Revêtement de Céramique chrome
Pvd = Accumulation de Vapeur physique
CDC = Revêtement de Diamant chrome
Dlc = Revêtement de carbone revêtu de diamant
Tef = Recouvrement Teflon

REVETEMENT DE PISTON ET TRAİTEMENTS DE SURFACE

Ck (Chrome-céramique revêtement)

Les revêtements de chrome-céramique est une sorte de revêtement composite qui est formé des éléments nichés de chrome, aluminium et d'oxyde. Ces revêtements sont utilisés pour les premier segment de pistons pour véhicules a moteur de diesel. Les revêtements CKS ont une très haute performance et haute qualité avec sa différence de méthode en électrolyse.

Différence de revêtement Ck de revêtement de chrome dur;

- Résistance à l'abrasion plus élevée

- Point de fusion plus élevé

- Densité de fissure et dureté plus élevée

Grâce à ces avantages, les revêtements CK fournissent une extension de vie au moteurs et une formation des gaz d'échappement à faible émission.

Pvd (L'accumulation du vapeur physique)

Le procédé PVD est le résultat de l'accumulation des segments sur la surface en se décomposant ré activement par la phase vapeur du revêtement dur. La vaporisation et l'ionisation du métal avec le bombardement d'ion et l'arc électrique se font avec ce procédé.

Les ions en métal dissociés et organisés se font avancer sur la surface des composants. A la fin de ceci, les atomes métales entrent en réaction avec les gaz réactifs et produisent oxyde, nitrure et carbure. Après la réaction sur la surface de travail des segments, se produit une couche mince. Cette couche montre une forte résistance face à l'abrasion et à la corrosion grâce au caractère se trouvant dans le céramique.

Mo (Molybdène Revêtement)

Pour empêcher l'abrasion de l'entourage des segments, il faut le revêtir avec le molybdène. Pour éviter les traces des brulures, on peut revêtir ou remplir avec le molybdène les surfaces de travail des segments. Le procédé de revêtement se fait soit avec la pulvérisation de flamme et soit avec la pulvérisation de plasma. Avec son point de fusion élevé, avec sa structure poreuse, son effet lubrifiant, Molybdène fournit une surface (2620 C0) de travail de piston de segment plus résistant. Sa résistance d'abrasion face aux frictions et à la conductivité thermique est élevée.

Cr (Chromage)

La méthode est utilisé pour augmenter la dureté des segments. Le but du revêtir de chrome, c'est réduire l'usure et prolonger la durée de vie des chemises de cylindre et des segments. Il est possible de réduire l'usure du flanc de la chemise du cylindre et du segment, en couvrant le 1er segment avec du chrome. Aujourd'hui, non seulement le 1er segment en est recouvert de chrome, mais deux ou plus de deux segments en sont recouvert.

L'usure liée au segment sera moins forte car le chromage va former une surface dure.

Le chromage s'applique en deux façons:

- Dure

- Couvrir avec chrome poreux

Pour le chromage dur, après avoir couvert la surface des segments avec le chrome, celui-ci prend sa forme finale après être rectifié. Les surfaces des segments détiennent l'huile car ils sont couvert avec du chrome poreux. Avec celle ci, ils fournissent une usure minimum sur les surfaces des chemises de cylindre où elle vont travailler.

Nt (Revêtement Nitrure)

Toute la surface du segment est durcit avec une opération de revêtement de nitrure. Avec cette couverture, la résistance de la surface augmente face à la friction. Donc la durée de vie du segment augmente.
La production de revêtement de nitrure et les spécifications d'émission sont respectueuses fasse à l'environnement. On a vu des résultats de travail plus performant avec le revêtement nitrure depuis les surfaces de performances critique. Il abaisse les pertes d'huile produite par les points faible des segments. La fonte baisse la fragilité des segments. Il prolonge la vie des moteurs.

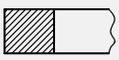
Cdc (Couvert de chrome diamant)

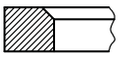
Ce revêtement est utilisé pour le 1er des segments, des moteurs diesel et euro 4. On peut l'utiliser pour des fontes en alliage, souples et acier en carbone. Les Particules de diamant sont utilisées à la place des particules de céramique. Ainsi, la résistance à l'abrasion et la performance antifriction est augmentée.

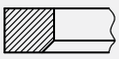
Dlc (Diamond Like Carbon)

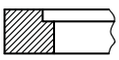
Grâce à son revêtement, la friction baisse et la résistance contre l'usure augmente. Les spécifications des revêtements DLC sont respectueuses à l'environnement. Leur liaison chimique est forte et ne se casse pas sous la tension mécanique. Ils ne sont pas en forme de cristal mais uniformes. Ces matériaux sont très forts en raison de sa structure. Il est plus résistant par rapport à d'autre revêtement et en même temps sa résistance est plus élevé contre l'abrasion.

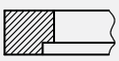
SPECIFICATIONS TECHNIQUES

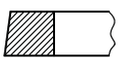

D = Segment rectangulaire

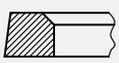

D-IF = bord intérieure surface supérieur biseautée segment rectangulaire

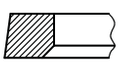

D-IFU = bord intérieur la surface intérieure segment rectangulaire

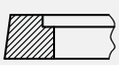

D-IW = bord intérieure la surface supérieur segment rectangulaire

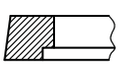

D-IWU= bord intérieur surface intérieure graduelle segment rectangulaire

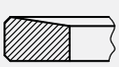

K = Segment conique

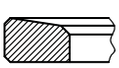

K-IF = Segment, le bord intérieure la surface supérieur conique biseautée

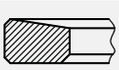

K-IFU = Segment, le bord intérieure la surface intérieure conique biseautée


K-IW = Segment, le bord intérieure la surface supérieur conique graduelle


K-IWU= Segment, le bord intérieure la surface intérieure conique graduelle


TT = Segment de trapèze unilatérale


TT-IF = Le bord intérieure la surface supérieur segment de trapèze biseauté unilatérale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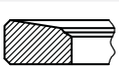
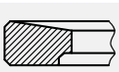
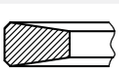
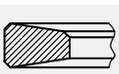
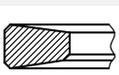
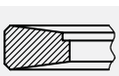

TT-IW = Le bord intérieure la surface supérieur segment de trapèze graduelle unilatérale

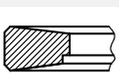

TT-IWU= Le bord intérieure la surface intérieure segment de trapèze graduelle unilatérale

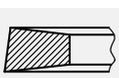

T = Segment de trapèze à deux côtés

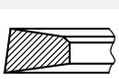

T-IF = Le bord intérieure la surface supérieur segment de trapèze biseauté à deux côtés


T-IFU = Le bord intérieure la surface intérieure segment de trapèze biseauté à deux côtés

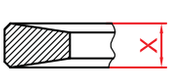

T-IW = Le bord intérieure la surface supérieur segment de trapèze graduelle à deux côtés

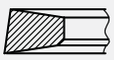

T-IWU = Le bord intérieure la surface intérieure segment de trapèze graduelle à deux côtés

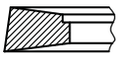

TK = Segment de trapèze conique à deux côtés

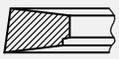

TK-IF = Le bord intérieure la surface supérieur segment de trapèze biseauté conique à deux côtés

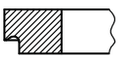
SDR = Type V, avec un canal, segment de contrôle d'huile en acier, spiral avec arc

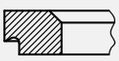

X = L'épaisseur de segment (mm)

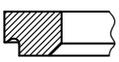

TI-IFU = Le bord intérieure la surface intérieure segment de trapèze biseauté conique à deux côtés

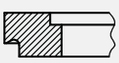

TK-IW = Le bord intérieure la surface supérieur segment de trapèze graduelle conique à deux côtés

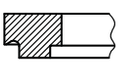

TK-IWU= Le bord intérieure la surface intérieure segment de trapèze graduelle conique à deux côtés

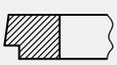

N = Segment au nez éraflant

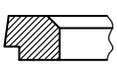

N-IF = Le bord intérieure la surface supérieur segment biseauté au nez éraflant

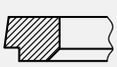

N-IFU = Le bord intérieure la surface intérieure segment biseauté au nez éraflant

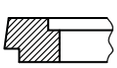

N-IW = Le bord intérieure la surface supérieur segment graduelle au nez éraflant

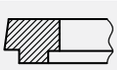

N-IWU= Le bord intérieure la surface intérieure segment graduelle au nez éraflant

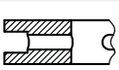

TN = Segment conique au nez éraflant

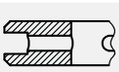

TN-IF = Le bord intérieure la surface supérieur segment biseauté conique au nez éraflant

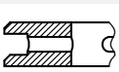

TN-IFU= Le bord intérieure la surface supérieur segment biseauté conique au nez éraflant

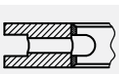

TN-IW = Le bord intérieure la surface supérieur segment graduelle conique au nez éraflant

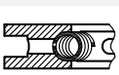

TN-IWU= Le bord intérieure la surface intérieure segment graduelle conique au nez éraflant

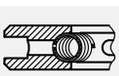

SC = Segment fendu de contrôle de l'huile

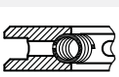

DC = Segment biseauté de contrôle de l'huile

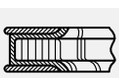

DB = Segment à deux biseautées de contrôle de l'huile


ES = Segment de contrôle de l'huile fendu ressort à feuille


SY = Segment spirale à feuilles de contrôle de l'huile


DY = Ressort à spirale côtés biseautés segment de contrôle de l'huile


PS = Ressort à spirale côtés à deux biseautés segment de contrôle de l'huile


VF = Bande d'acier ressort à VF segment de contrôle de l'huile

UB = Bande d'acier type U segment contrôle de l'huile

SDV = Ressort à spirale type V avec canal segment acier de contrôle de l'huile

DKS = Cylindre Konique huile de Control du segment

INSTRUCTIONS GENERALES DU MONTAGE DES PISTONS

1- Il faut qu'il y ait des lignes de rodage en forme de losange sur la surface intérieur du cylindre où sera le montage du piston. Il faut contrôler l'aptitude des lignes de rodage, sur la surface intérieur du cylindre si celui ci sera installé sur le cylindre usé et/ou utilisé. Si les lignes de rodage sur la surface intérieur du cylindre a disparu et qu'il y a une surface clair, il faut encore faire des lignes de rodage.

2- Quand tous les pistons s'installent dans un cylindre ayant des dimensions bonnes, la fabrication se fait sensiblement en déterminant les bons pistons- espace de travail du cylindre. Il faut contrôler les diamètres intérieurs du cylindre pour voir l'aptitude avec les étiquettes sur les boites et décider s'il faut encore les traiter ou pas. Quand il faut traiter les diamètres intérieurs des cylindres usés, il faut traiter la tolérance comme diamètre nominal de dimension haut 0.000 - 0.025 mm.

3- Il faut enlever le maneton avec des méthodes sans donner dommage au piston ni au pin. Il ne faut pas changer les manetons de façon aléatoire, les manetons sont assemblés avec les pistons en jumelant leur conformité dimensionnelle

4- Pendant le montage des segments au piston, utilisez un équipement convenable à ne pas donner dommage au piston et déformer les segments. Pendant le montage du piston au cylindre, utilisez un serrage de pince de segment convenable ou bien un manchon d'installation conique. Après avoir réalisé la procédure du serrage de segment, évitez d'assembler le piston dans le cylindre avec beaucoup d'effort ou bien en tapant, faut juste assembler avec attention par la force du doigt.

5- Avant le montage du piston au cylindre, il faut nettoyer le piston avec attention et notamment faut nettoyer le trou du maneton et mettre de l'huile. Avant le montage, l'intérieur du cylindre, il faut mettre de l'huile complètement pour que le piston et le cylindre n'aient pas de dommage pendant le premier travail, jusqu'à la lubrification du piston

6-S'il y a un étiquetage qui montre la direction du montage au sommet du piston comme marque, il faut faire l'installation en conformité avec ce marque

7- Il faut faire attention maximum à ne pas endommager le piston ni le segment et le maneton

8- Les pistons sont fabriqués convenable aux autre pièces qu'ils vont être utilisés ensemble et qui sont acceptés en général conforme aux normes. A cause de cela, il ne faut pas faire de traitement dessus après.

9- Il ne faut pas utiliser les pins et les segments de sécurité encore une fois, chaque fois, il faut utiliser des nouveaux.

10- Contrôle de la linéarité de la tige à être utilisé dans l'installation, il est important d'éviter les problèmes très graves qui peuvent survenir. La linéarité de la tige doit être vérifiée de nouveau avant l'assemblage de dispositifs appropriés.

NOT : Pendant les instructions de montage, il faut suivre ces instructions. Le fabricant n'est pas responsable des problèmes liés au montage non convenable.

SPECIFICATIONS TECHNIQUES

8- LES CODES ET LES MARQUAGES DES PİSTONS

1- Logo de la société

2- STD / L'information de dimension du haut

7- No de traçabilité.

5- L'espace de cylindre de Piston (mm)

8- Hauteur de la compression, dimension court (mm)

4- Numéro du cylindre pour le montage

6 -La direction de l'insertion pour le Piston. Le désalignement du trou du pin et peut avoir des marquages spéciaux tels que la détermination de la direction comme "avant" "Abluft". Le symbole du "volant" aide que le montage du piston se fasse sans faute sur le moteur

3- Piston diamètre nominal

9- LE NUMERO DE REFERENCE DE PİSTON

EXEMPLE

Le numéro de référence de Piston ← **11-01513-000**

000 = STD / Piston + Segment
001 = Hauteur de compression (stroke) -0,20 mm court
002 = Hauteur de compression (stroke) -0,40 mm court
003 = Hauteur de compression (stroke) -0,60 mm court
050 = +0,50 mm dimension du haut / Piston + Segment

ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
1513 000	11-01513-000

10- PİSTON + LE NUMERO DE REFERENCE DE SEGMENT

EXEMPLE

Piston + Segment numéro de référence ← **31-03513-000**

000 = STD / Piston + Segment
050 = +0,50 mm dimension du haut / Piston + Segment

ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
3513 000	31-03513-000
3513 000-08	38-03513-000
3513 000-09	39-03513-000

Differences entre types de segments et recouvrements ← **38-** **39-**

11 - DESCRIPTIONS DES REFERENCES DES CHEMISES

EXEMPLE

Numéro de référence des Chemises ← **51-05513-000** → 000 = STD / Chemise
050 = +0,50 mm dimension du haut / Chemise

ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
5513 000	51-05513-000

12 - KİT, SET, DESCRIPTION DES REFERENCES

Ensemble Kit : Piston + Segment + Chemise + Pim

Kit Description Des References ← **71-07513-000** → 000 = STD / Kit
050 = +0,50 mm dimension du haut / Kit

Differences entre types de segments et recouvrements ← **71-8** / **71-9**

ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13 - LES NUMEROS DES REFERENCES DES SEGMENTS

Les numéros des références du segment ← **91-09513-000** → 000 = STD / Segment
050 = +0,50 mm dimension du haut/ Segment

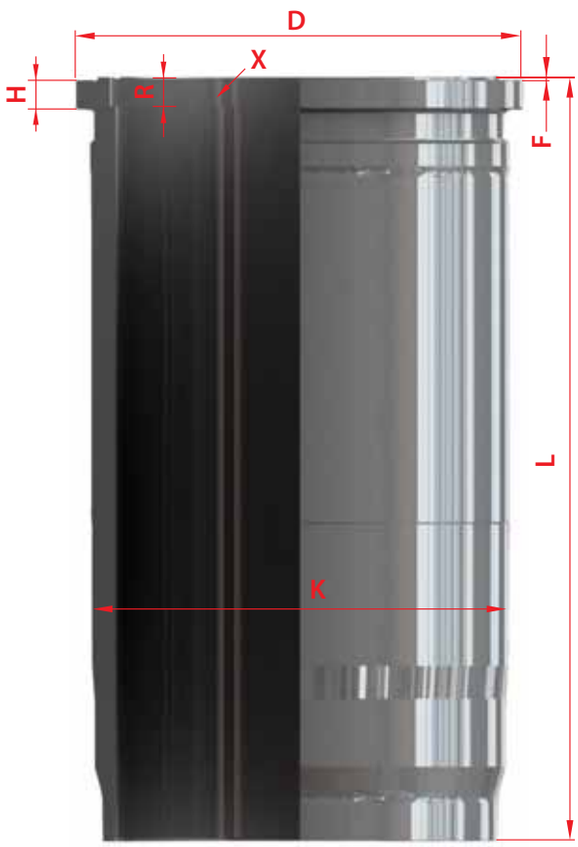
Differences entre types de segments et recouvrements ← **98-** / **99-**

ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - LE NUMÉRO DE RÉFÉRENCE DE BAGUE D'ÉTANCHÉİTÉ

Le numéro de référence de Bague d'étanchéité ← **55-50701-000**

DESCRIPTION TECHNIQUE CHEMISE DE CYLINDRE



K = Diamètre extérieur
L = Longueur total
H = Hauteur de la bride
F = Profondeur du joint d'étanchéité
D = Diamètre de la bride
X = Longueur du segment de la place d'institution
R = Longueur de place d'institution

La description des chemises de cylindre d'après TSE 482:

Dans les moteurs à combustion interne, les chemises de cylindre sont des éléments de machine en forme de cylindre, dedans le piston bouge et le carburant brûle, celui-ci est accrochées au bloque du cylindre. On pourra les examiner en 2 parties.

Les chemises de cylindres humides:

Ce sont des chemises qu'on fait refroidir par dehors, dans le bloque où ils sont accrochés.

Il y a 3 groupes principaux:

a- Avec la Bride et canal: Ce sont les chemises qui s'assoit sur le bloque du cylindre par la bride du haut; et en bas il ya des canaux de joint d'étanchéité pour la pénétration de l'eau du refroidissement du moteur. (Figure-1)

b- Avec la bride et sans canal: Ce sont les chemises qui s'assoit au bloque du cylindre par la bride du dessus et en bas il n'y a pas de canaux de joint d'étanchéité. Les joint d'étanchéité de pénétration se trouvent aux canaux ouvertes dans le bloque. (Figure -2)

c- Avec deux brides: Ce sont les chemises de cylindres qui ne vont pas manquer l'eau du refroidissement du moteur au bloque du cylindre, du haut et du bas, elles sont détectées avec bride et joint d'étanchéité. (Figure-3)

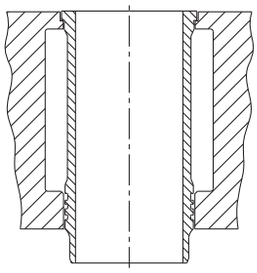


Figure - 1

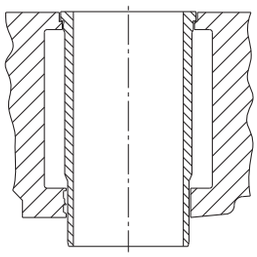


Figure - 2

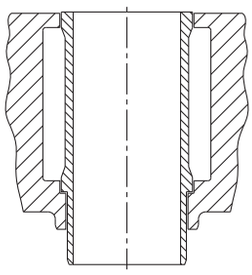


Figure - 3

Les Chemises de cylindre sèches:

Ce sont les chemises qui n'ont pas de contact avec l'eau de refroidissement au bloque de cylindre où ils sont accrochés.

On peut les analyser en 2 parties :

A- Avec la bride (Figure-4)

B- Sans bride-plate (Figure-5)

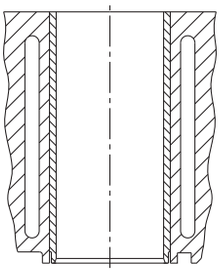


Figure - 4

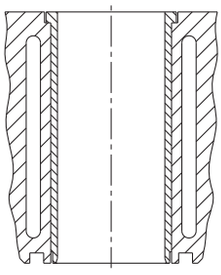


Figure - 5

QUESTIONS À ENVISAGER PENDANT L'INSTALLATION DES CHEMISES DE CYLINDRE

L'INSTRUCTION DE MONTAGE POUR LES CHEMISES SECHES DU CYLINDRE

Ces chemises sont fabriquées avec la bride et sans bride. (Figure -6) On ne voit pas de dislocation sur les chemises avec la bride par contre sur les chemises sans bride, qui sont sous de mauvaises conditions de travail; quand on accroche le piston, il ya des dislocations axiales qu'on constate plusieurs fois. C'est un avantage que la bride crée.

Les chemises avant d'être pressé dans le cylindre, il faut absolument roder, et meuler, en accord à dimensions nominales, qu'on voit dans la liste (A), convenable au diamètre extérieur de la chemise.

Il faut faire attention aux tolérances en bas. (Figure-7)

Sinon si la tension du devant est très basse, le transfert de chaleur ne sera pas bon, si la tension est très haute, il y aura des incompatibilités entre les chemises et les cylindres et ceci peut causer des fautes d'exploitation. Les chemises sèches qui ont des diamètres extérieurs finals, on les expédie 0,5-0,75 mm plus petit, par leur diamètre intérieur.

Quand on va assembler la chemise sèche avec la bride au bloque du cylindre à l'aide de la presse, pour empêcher que la bride ait une rupture, le trou qu'on a engravé pour la bride au bloque, faut l'engraver plus grande que le diamètre extérieur (C) de la bride.

SPECIFICATIONS TECHNIQUES

Les chemises sèches avec la bride, quand on passe avec la presse, il faut que la surface bas de la bride s'assoit très bien sur la surface des sièges du nid au bloque prés.

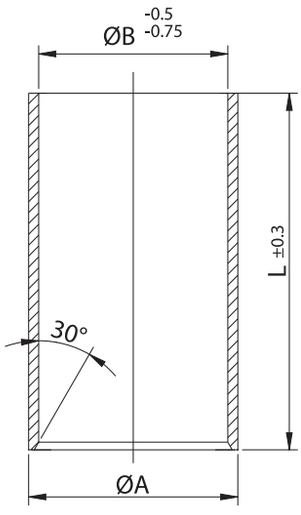


Figure - 6

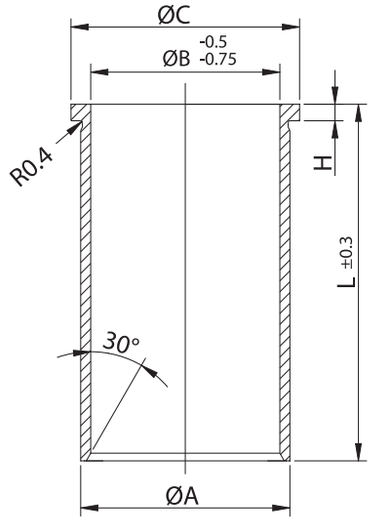


Figure - 7

Comme on le sait, les chemises la partie inférieure de la bride a un rayon d'environ 0,4 mm. Pendant l'assemblage de la chemise au bloque, pour empêcher que le rayon s'assoit, il faut donner un part de 1,0 mm au passage où la bride s'assoit. Sinon, la bride de la chemise peut couper.

Il faut nettoyer les cylindres au bloque du moteur avant d'assembler les nouvelles chemises et faut contrôler les dimensions précieusement. La rondeur et la forme de conique ne doit pas dépasser 0,025 mm. En faisant le honing, il faut essayer d'avoir une surface brillante et d'âpres le type du moteur, faut contrôler les valeurs de rugosité des surfaces. Il faut éviter d'avoir des surfaces lisses et très brillantes car cela va causer manque de lubrification.

Une pression de 3000-5000 kg suffit pour les chemises de cylindres sèches, pour appuyer avec la presse. Pendant le montage, si on va utiliser un matériel comme matériel de lubrification, par la suite cette matière roucoulera à cause de la chaleur et ce sera difficile pour le transfert de chaleur. Apres le montage fait avec la presse, des blocs-cylindres de broyage à partir des surfaces d'étanchéité doivent être pris avec meulage de surface.

S'il faut traiter la surface du joint d'étanchéité du bloque de cylindre, il faut traiter plus profondément la surface d'appui au nid de la bride. En plus il y a des chemises de cylindre ayant des diamètres extérieurs finis et des diamètres intérieurs précieusement blanchi.

Ces chemises se pressent dans la presse avec une petite part de honing et elles ont le honing en être pressant. .Le diamètre en tolérance de l'intérieur du cylindre est entre +0 ile +0.015 mm. Le diamètre en tolérance de l'extérieur de la chemise du cylindre est entre +0.012 ile 0.024 mm.

	Groupe de diamètre extérieur de la chemise		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	Diamètre de trou du bloc (mm)		
	50 - 80	80 - 120	120 - 180
Q_1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25

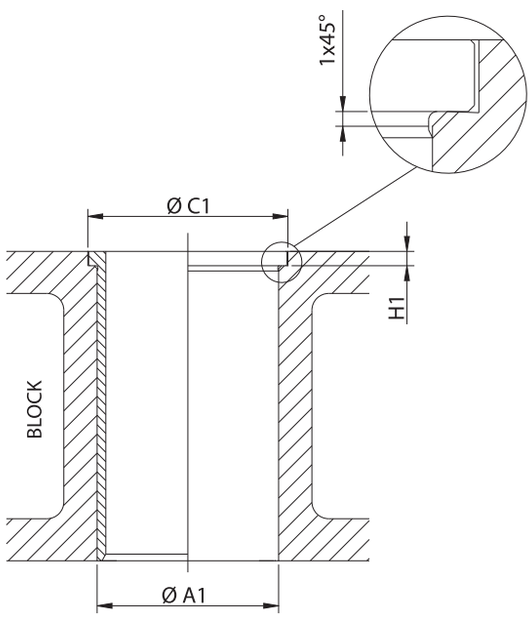


Figure 9

INSTRUCTION DE MONTAGE DE LA CHEMISE DE CYLINDRE AQUEUSE

Les chemises de cylindre du moteur de YENMAK se fabriquent, permettant d'obtenir un résistant caractéristique structure méthode de coulée centrifuge, contre l'abrasion et la traction. Une grande attention doit être accordée en sortant les anciennes chemises afin de ne pas endommager les surfaces du cylindre d'appui.

Il faut nettoyer la chaux la boue et d'autres contaminent soigneusement aux emplacements de contact de cylindre dans le bloc-moteur. Pendant le nettoyage il ne faut pas utiliser des outils comme grattoir et burin qui peut causé à se tracer. L'appareil le plus efficace pour ce processus est la brosse métallique en acier. Pour sortir les chemises stabilisées avec la couche de rouille chaux, on lance avec un marteau au morceau de coin qui est mis sur les chemises, malgré ce la si ce n'est pas possible de sortir les chemises alors on utilise presse hydraulique. En faisant le nettoyage on fait vraiment attention à la surface d'appui pour assurer qu'il n'y aura pas de dégât.

Le bride de la chemise, il faut qu'il soit parallèle à la surface au bloc de surface qui appuie la surface intérieure, comme montre la (Figure-10) qu'il ne doit pas montrer des diversités en concernant la régularité et la coplanarité. De plus, il faire le contrôle si l'axe de cylindre est droit (vertical) à la surface de joint du cylindre de bloc. (Figure -11) Un sujet aussi qu'on doit faire attention, les surfaces d'appui aux cylindres ne doit pas être détruites en écrasant. (Figure 12)

Le rayon qui est à la surface intérieure de la bride de la chemise (d) la surface d'appui de bride au cylindre, pour empêcher qu'il appuie à la côte(a), le diamètre de cylindre (c) au point de transition, il faut donner un rayon de 0.5-1.0 mm. 45°

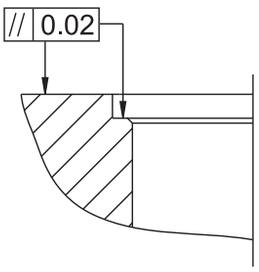


Figure 10

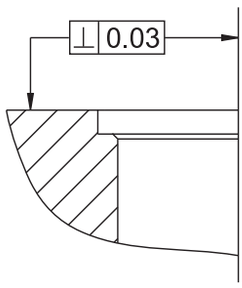


Figure 11

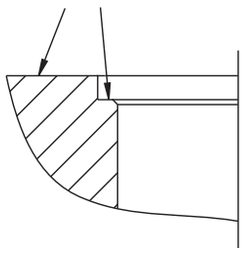


Figure 12

Il faut qu'il soit égale le diamètre du trou des joints (b) avec le diamètre extérieur de la chemise (c). Afin d'assurer une étanchéité complète de la chambre de combustion, il nécessite l'utilisation d'armature en métal.

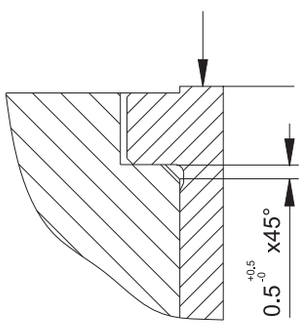


Figure 14

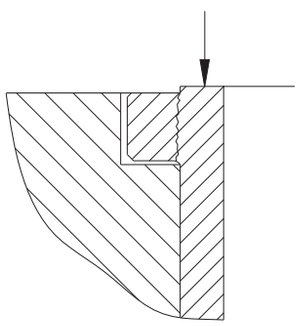


Figure 15

Pour relever si la chemise se fixe facilement ou pas et si le cylindre dans le bloc est trop grand et trop large ou pas, il faut enfoncer les chemises dans le cylindre avec la main sans utiliser le Ring avant le montage. Surtout pour relever si la position de bride de la chemise est correcte à la surface du bloc, en retournant les chemises avant le montage, il est recommandé de se fixer à la surface de bride par la bride. Comme on le sait, la bride est dans la partie qui ne se refroidit pas et va se dilater. Ici il faut prendre en compte une cavité spéculative de 0,3-0,5 mm.

Dans l'instruction de ce montage ce qui est souligné fortement, faut monter et démonter les chemises opportunément dans tous les cas. C'est à dire, lors de montage utilisation de marteau etc. équipes lourds n'est pas juste ; les erreurs peuvent produire de mauvais résultats.

Lors de montage, le ring caoutchoucs d'occasion doit être sûrement en qualité et doit être résistants au gonflement, au vieillissement, à l'huile et à la chaleur. Sinon il cause à arriver l'eau à la carter, à l'oppression de la chemise et à la déformation des dimensions. A chaque fois on met du savon pour la lubrification et les installe à leur nid.

Comme ring caoutchouc il faut seulement préférer les marques de qualité qui s'utilisent par les fabriquant de moteur. La vraie raison pour cette préférence, c'est que les rings caoutchoucs soient résistants au gonflement, au vieillissement, à l'huile et à la chaleur.

Le grippage de piston qui cause des ruptures en chemise est le résultat d'utilisation du ring caoutchoucs inéligibles. Les parties où sont mis les rings caoutchoucs ne doivent jamais gagner.

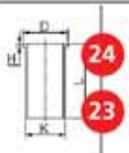
Après avoir placé les chemises avec la main, c'est avantageux de refaire encore un contrôle de la mesure du cylindre. Ce contrôle doit se faire surtout au lieu où ça peut arriver l'ovalisation et le rétrécissement dans les parties où se trouvent les rings caoutchoucs.

Apres avoir placé complètement les chemises, il faut comprimer le bloc de cylindre en remplaçant de l'eau et sûrement il faut faire le contrôle qu'il n'y a pas de fuite.

DETAIL DU MARQUAGE DE LA CHEMISE

BAGUE D'ÉTANCHÉITÉ

Bague d'étanchéité	
EPDM	Caoutchouc EPDM
NBR	Caoutchouc NBR
FPM / VI	FPM / FKM
Cu	Cuivre
T	Laiton Rouge
ST	Acier
SC / MVQ	Silicone (VMQ)
Shim / SM	Métal Doux

93,000 (1)		(3)	(4)	(5)	(6)	(7)
4JB1 (2)		D 00 2005 > 00 2005		4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) CH 51,850 (9) VD1 0,550 (10) B- 19,500 (11) BØ 43,900 (12) TL 91,850 (13) (15) 31,00x76,00	AP YS HA CP (14)	91-09389-000 1 2,000 P 2 2,000 P 3 4,000 CrP (16)	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)		Ø 93,000 (18)	31-04385-000 (19)
		99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF (16)				39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
 K=95,00 (22) L=181,00 (24) H=0,90 (25) D=101,00 (23)	DF-CR-ST (26)				51-35721-000 (20)	71-08385-000 71-98385-000 (21)
K=120,00 (22) L=229,00 (24) H+F=9,00+1,10 (25) D=128,50 (23)	WF (26)		O-Ring/Seal 55-50613-000 2 FPM 112,00x3,00 (28)		51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

1 - Diamètre de piston
2 - Code de moteur
3 - Information de carburant
4 - Années de modèle
5 - Nombres de cylindres
6 - Volume de cylindre
7 - Puissance du moteur
8 - Piston Code
9 - CH: Stroke(Coup)
10 - VD1/VD2: Profondeur de soupape
11 - B- : Combustion Chamber Depth
B+ : Bombe de la tête du piston
12 - BØ: Diamètre de la cellule
13 - TL: Taille réelle
14 - Propriétés de piston
*DAP: Piston à double alfin
*AP: Piston à l'alfin
*YS: Piston refroidi par l'huile
*CP: Piston en tôle d'acier
*HA: Enduit anodisé hard
*PDB: Goupille-trou douillé
15 - Diamètre de goupille - Taille- Propriété
16 - Propriété de segment
17 - La Saillie de la tête de piston
18 - Diamètre de cylindre
19 - Piston + Code de Segment
20 - Code de chemise
21 - Code de Kits
22 - Diamètre extérieur du cylindre
23 - Diamètre de la bride de cylindre
24 - Taille réel de la chemise
25 - L'épaisseur de la facture de bride
26 - Modèles de chemise et propriétés
*WS: Revêtement humide semi-fini
*WF: Revêtement humide finition complète
*DS : Dry Liner semi-fini
*DF : Dry Liner finition complète
*AF : Air refroidi pleine finition
*PH : Phosphate
*CR : Chrome
*HR : Blindé
*NT : Nitrate
*HT : Traitement thermique
*STEEL: Acier
27 - Moteur commun
28 - Bague d'étanchéité Code

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Motor tipleri, açıklamalar, ürünler, ürün resimleri, üreticiler, araçlar v.b. nitelendirmeler sadece referans amaçlı verilmiştir.

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ینماک، در سال ۱۹۶۵ به عنوان یک کارگاه کوچک توسط خانواده **کاهوجی اغلو** در شهر قونیه تاسیس شد.
ینماک در طول سالها با به روز کردن و بهبود مستمرخود در زمینه تولید قطعات موتور به طور مستقل در بازار داخلی و جهانی جایگاه خود را به عنوان یکی از بزرگترین تامین کنندگان قطعات موتور بدست آورده است.

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فعالیت فروش و بازاریابی در استانبول در دفتر صادرات **ینماک** صورت می گیرد.

ساختمان مرکزی و تدارکات و حمل

کارخانه پیستون و گژن پین

کارخانه بوش سیلندر موتور

YENMAK

قطعات موتور

ازسال ۲۰۰۳ محصولات ینماک بصورت ذیل بسته بندی شده و
جایگاه خود را در بازار کسب کرده است
مشخصات و جزئیات اطلاعات موجود بر
روی بسته بندی در ذیل ارائه شده است

در سایه درپوشهای مخصوص اولین
کسی باشید که به محصول
دسترسی پیدا می کند

شماره قابلیت ردیابی

به منظور ایمنی و اطمینان برچسب
هولوگرام سه بعدی بر روی
جعبه بسته بندی محصول وجود دارد

به منظور حفظ ایمنی محصول در
پایین جعبه محصول برچسب
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Standart

ISO 9001:2008

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Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

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Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

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7.3 - Product design responsibility

PRODUCT(S) DELIVERED
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Standart

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15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

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Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

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42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
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موتورهای دیزلی سنگین

در موتورهای با سیستم های سوخت چند گانه

مزایای پیستون فلزی دوپارچه:

پیستونهای دو پارچه فولادی نسبت به پیستونهای آلومینیومی در فاصله کم بین پیستون و بوش سیلندر تلفات ناشی از سایش را بدلیل مقاومت سایشی بالا کاهش می دهند.

پیستون های فولادی دو پارچه نسبت به پیستونهای آلومینیومی بدلیل مقاومت گرمایی بالاتر ریسک تغییر شکل بوش سیلندر را کاهش داده و در فاصله کم با بوش سیلندر بخوبی کار می کند و عملکرد عایقی رینگها را نیز افزایش می دهد.

در حالی که یک پیستون آلومینیومی معمولی نهایتا تا فشار ۱۰۰ بار می تواند مقاومت نشان دهد، یک پیستون فولادی با همان ابعاد تا فشار ۲۵۰ بار قدرت مقاومت دارد.

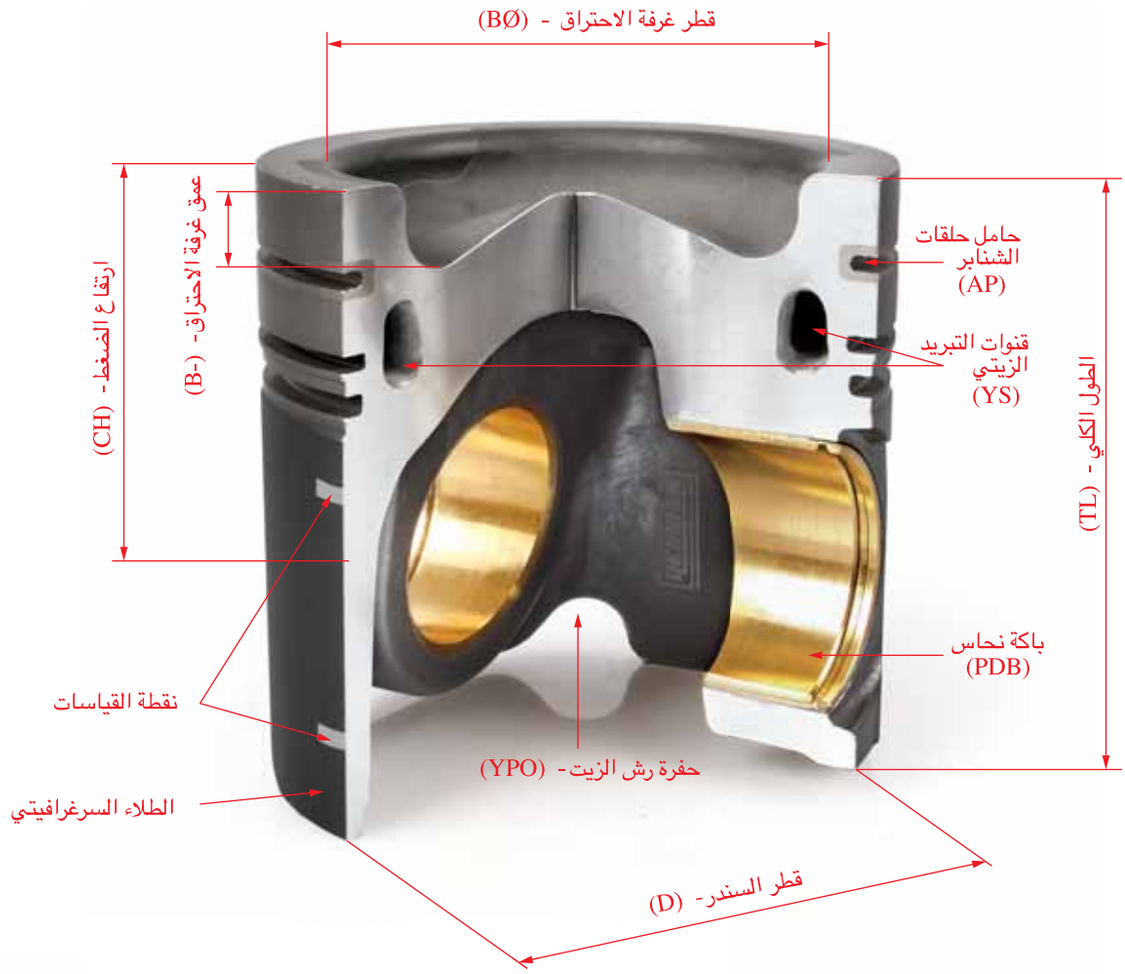
قابلیت تراکم موتور را افزایش می دهد و بمیزان ۲الی ۵ درصد میزان تولید گاز CO_2 را کاهش می دهد.
آلفین (مقاوم شده با نیکل) بکار رفته در پیستونهای آلومینیومی موتورهای دیزلی مشکلات تماسی ناشی از مواد بکار رفته را کاهش می دهد.

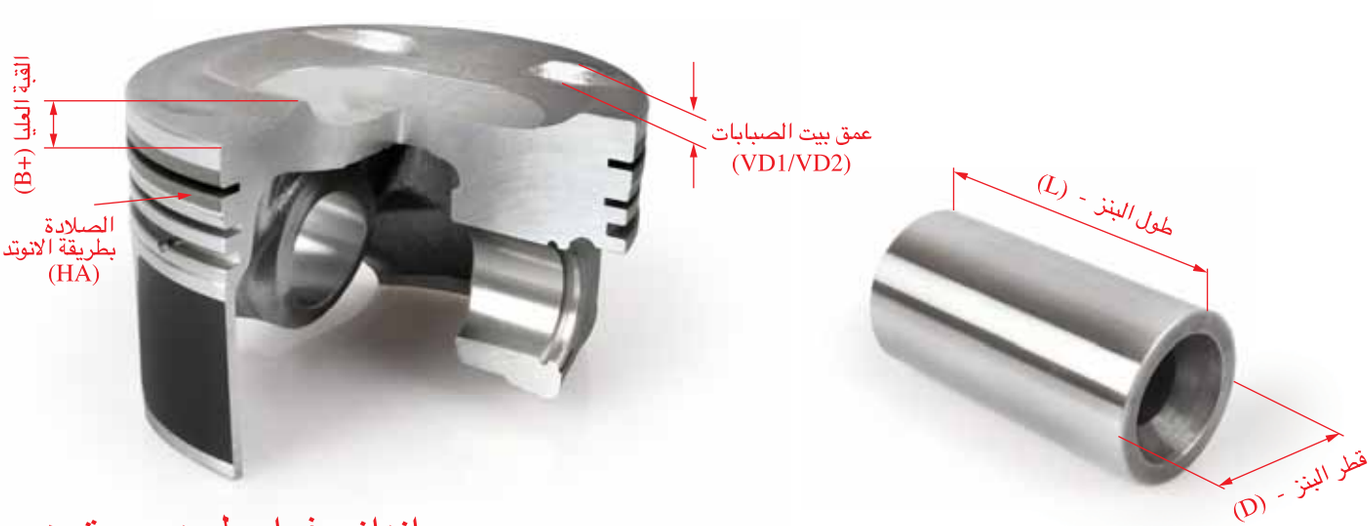
پیستون های دارای کانال خنک کننده، باعث نزدیکتر شدن کانال خنک کننده به قسمت فوقانی پیستون شده و فرآیند خنک کاری را بهبود می بخشند.

پیستون های فولادی دو پارچه باعث افزایش عمر موتور و کاهش هزینه های تعمیر موتور می شوند.

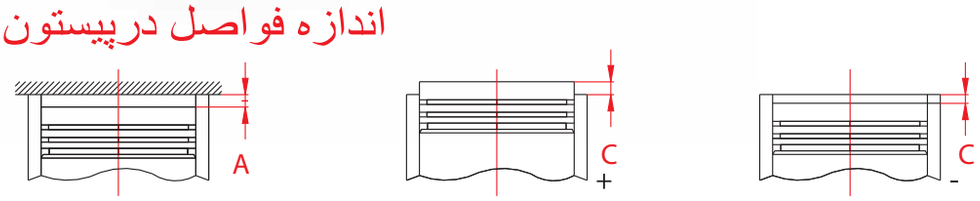
که در پیستون های دو در نتیجه ایراد در سیستم پاشش سوخت و تزریق بیش از اندلزه سوخت احتمال ذوب پیستون وجود دارد تکه ای این احتمال از بین می رود

مشخصات فنی





اندازه فواصل درپیستون



A = فاصله تا سر سیلندر

C = فاصله سر پیستون از سطح بلوک

دستورالعمل مونتاژ رینگ پیستون ینماک

در صورت مونتاژ بر روی پیستون کارکرده ابتدا بایستی کانالهای رینگ از بقایای کربن تمیز شده و سوراخ های روغن کاری نیز تمیز شوند به استثنای قسمت تاج پیستون بقایای کربن موجود در تمامی قسمتها بایستی تمیز شود به تمیز بودن کانالهای رینگ بایستی بسیار دقت شود بهنگام تمیز کردن محل تقاطع سطوح عمودی و افقی بایستی بسیار دقت شود تا زدگی و خراش بوجود نیاید در غیر اینصورت این محلها بعدا به محل پیداش ترکها تبدیل می شوند نیاز به ماشینکاری در پیستون نمی باشد چرا که رینگهای ین ماک بر اساس پیستونهای موتورهای اورجینال طراحی شده اند حداکثر محدوده سائیدگی سیلندرهایی که رینگهای ین ماک در آنها استفاده می شود به شکل ذیل می باشد:

در موتورهای بنزینی حداکثر ۰،۱ میلی متر از قطر
در موتورهای دیزلی حداکثر ۰،۱۵ میلی متراز قطر

معمولا در پیستون های کارکرده حتی اگر میزان سایش موجود در محدوده ذکر شده بالا هم باشد بایستی پیستونهایی که در کانالهای رینگ آنها تغییر شکل بوجود آمده تعویض شوند چراکه در پیستونهایی که در کانال رینگ آنها توازی از بین رفته و تغییر شکل داده اند ، به اندازه بودن فاصله پیستون و سیلندر می تواند ما را به اشتباه بیاندازد چرا که رینگها در چنین پیستونهایی نمی توانند بدرستی عمل کنند و شکایتهایی نظیر روغن سوزی و بخار کردن بوجود می آورد
خم کردن رینگها ،پیچ و تاب دادن و امثال آن موجب ایجاد خرابی در سطح عملکرد و آسیب دیدن پوشش رینگ می شود اینگونه خرابیها که به چشم دیده نمی شوند موجب بروز مشکلات درحین کار کردن موتور می شوند.

رینگ را بایستی با استفاده از رینگ باز کن باز کرد و به ترتیب در کانالهای موجود در پیستون جای داد سپس با استفاده از جمع کن رینگ یا وسیله مونتاژ مخروطی شکل رینگ آنها را فشرده و با فشردن سر پیستون و در صورت لزوم با ضربه زدن آهسته، با استفاده از دسته چکش ،پیستون را داخل سیلندر قرار داد در حین انجام این کار بمنظور جلوگیری خروج رینگهای نازک از رینگ جمع کن و آسیب دیدن آنها بایستی رینگ جمع کن را بطریقی پیوسته روی بلوک ثابت نگه داریم برای بوش سیلندرهایی که پوشش داخلی آنها کروم می باشد نباید رینگ با پوشش کروم استفاده کرد.

رینگهایی که بر روی یک سطح آنها علامتYEN ویا TOP وجود دارد بایستی بطریقی در پیستون قرار گیرند که این نوشته ها رو به بالا یعنی بطرف محفظه احتراق باشند رینگهایی که بر روی آنها هیچگونه علامتی وجود ندارد در هر دو جهت قابل مونتاژ هستند.

روکش رینگ و عملیات روی سطح آنها

روکش قلع = Sn
کروم سرامیک = Ck
روکش رسوب فیزیکی بخار = Pvd
روکش کروم الماس = Cdc
روکش کربن با پوشش الماس = Dlc
الطلاء بالتفلون = Tef

روکش کروم = Cr
روکش مولیبدن = Mo
روکش فسفات = P
روکش فررو اکسید = Fe
روکش مس = Cu
روکش نیترید = Nt

روکش رینگ و عملیات سطح

روکش کروم سرامیک CK

روکش کروم و سرامیک CK، یک نوع روکش کامپوزیتی متشکل از شبکه تودرتوی عناصر کروم و اکسید آلومینیوم می باشد این نوع روکش ها بیشتر در روکش اولین رینگ از پیستونهای موتورهای دیزلی کاربرد دارند روکش CK به دلیل استفاده از روش الکتروز عملکرد و کیفیت بالاتری را فراهم می کند.

تفاوت روکش CK با روکش کروم سخت
مقاومت سایشی بالاتر
نقطه ذوب بالاتر
دارای تنش شکست و سختی بالاتر
بدلیل این مزیتها موتورهایی که از رینگ با روکش CK استفاده می کنند دارای عمر بیشتر بوده و میزان آلاینده های کمتری تولید می کنند.

Pvd(روکش رسوب فیزیکی بخار)

روکشهای سخت را به شکل بخارطی واکنش تجزیه ای بر روی سطح رینگ می پوشانند که به این روش PVD گفته می شود بخار شدن و یونیزه شدن فلزات با استفاده از قوس الکتریکی و بمباران یونی بدین طریق صورت می گیرد
یونهای جدا شده و تنظیم شده فلز به سمت سطح جزء مورد نظر هدایت می شود در نتیجه اتمهای فلز با گازهای واکنشی واکنش داده و نیترید،کاربید و اکسید تولید می کنند بعد از اتمام واکنش بر روی رینگ پوشش بوجود می آید در سایه وجود عناصر سرامیکی در پوشش ،مقاومت سایشی و فرسایشی بالایی بوجود می آید.

Mo (روکش مولیبدن)

برای جلوگیری از سایش محوطه اطراف رینگ ، رینگ با پوشش مولیبدن استفاده می شود. برای جلوگیری از اثرات سوختگی سطح عمل کننده رینگ با مولیبدن پوشش داده می شود و یا کل سطح پوشش داده می شود. پوشش مولیبدن هم بطریق اسپری با شعله و هم از طریق اسپری با پلاسما می تواند انجام گیرد مولیبدن با نقطه ذوب بالا (۲۶۲۰درجه سانتی گراد)، ساختار منفذ دار و خاصیت روغنکاری سطح عمل کننده مقاومی برای رینگ پیستون فراهم می کند. هدایت گرمایی و مقاومت سایش اصطکاکی بالایی دارد.

Cr (روکش کروم)

جهت افزایش مقاومت رینگ یکی از روشهای متداول استفاده از روکش کروم سخت می باشد هدف از روکش کروم کاهش میزان سایش و افزایش عمر رینگ و بوش سیلندر می باشد کاهش ساییدگی رینگ و بوش سیلندر از طریق پوشش کروم بالاترین رینگ امکانپذیر می باشد امروزه نه تنها اولین رینگ بلکه تمایل به پوشش رینگهای دوم و بیشتر نیز با کروم وجود دارد
به دلیل سطح سختی که پوشش کروم فراهم می کند سایش در خود رینگها نیز کاهش می یابد.
پوشش کروم به دو شکل انجام می گیرد:
سخت
روکش کروم متخلخل
در روکش کروم سخت بعد از اینکه سطح رینگها با کروم پوشش داده شدند با سنگکاری شکل نهایی خود را پیدا می کنند رینگها بعلت دارا بودن پوشش متخلخل قابلیت نگه داشتن روغن در این حفرها را پیدا می کنند. و بدین ترتیب میزان سایش خود رینگ و سطح بوش سیلندر که با آن در تماس هستند را به حداقل می رسانند.

Nt (روکش نیترات)

با روکش نیترید تمامی سطح رینگ سخت می شود با این روکش مقاومت سطح در مقابل سایش افزایش می یابدو عمر رینگ نیز افزایش می یابد روکش نیترید به لحاظ ویژگیهای تولید و نشر گازهای آلاینده دوست طبیعت می باشد با استفاده از روکش نیترید در عملکردهای حساس نتایج بسیار بهتری بدست می آید میزان روغن از دست رفته از قسمتهای حساس رینگ کاهش می یابد مقاومت در مقابل شکست رینگهای چدنی را افزایش می دهد و عمر موتور نیز افزایش می یابد.

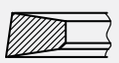
Cdc (روکش کروم الماس)

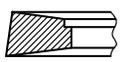
این نوع پوشش در موتورهای Euro4 و دیزلی برای رینگ بالا بکار میروند در چدن های نرم و آلیاژی و فولادهای کربنی کاربرد دارد در این پوشش ذرات الماس بجای سرامیک جایگزین شده اند و بهمین دلیل مقاومت سایشی و اصطکاکی بالاتری دارند.

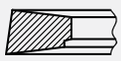
Dlc (روکش کربن با پوشش الماس) (روکش کربن با پوشش الماس)

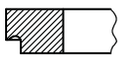
در سایه این پوشش میزان سایش کم شده و مقاومت در مقابل ساییدگی کاهش می یابد. DLC دارای خواص پوششی دوستدار طبیعت می باشد دارای پیوندهای شیمیایی مستحکمی می باشد و تحت تنشهای مکانیکی نمی شکند. دارای ساختار کریستالی نمی باشد و بدون شکل می باشد. بدلیل ساختار ماده تشکیل دهنده خود دارای استحکام بالایی می باشد در مقایسه با سایر پوشش ها دارای مقاوت بیشتری بوده و استحکام سایشی بالاتری دارد.

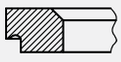
مشخصات فنی

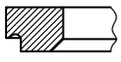

TI-IFU = رینگ گوه ای دو طرفه مخروطی با پخ سطح پایینی لبه داخلی


TK-IW = رینگ گوه ای دو طرفه مخروطی با سطح بالایی پلکانی لبه داخلی

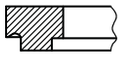

TK-IWU = رینگ گوه ای دو طرفه مخروطی با سطح پایینی پلکانی لبه داخلی

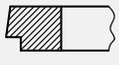

N = رینگ خاردار

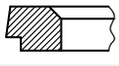

N-IF = رینگ خاردار با پخ سطح بالایی لبه داخلی

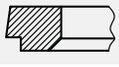

N-IFU = رینگ خاردار با پخ سطح پایینی لبه داخلی

N-IW = رینگ خاردار با سطح بالایی پلکانی لبه داخلی


N-IWU = رینگ خاردار با سطح پایینی پلکانی لبه داخلی


TN = رینگ خاردار مخروطی


TN-IF = رینگ خاردار مخروطی با پخ سطح بالایی لبه داخلی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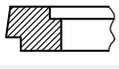
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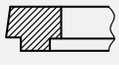
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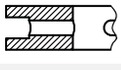
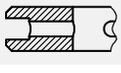
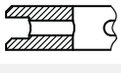
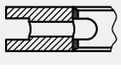
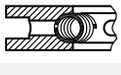
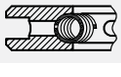

SC = رینگ شیاردار کنترل روغن

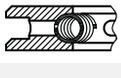

DC = رینگ کنترل روغن با لبه پخدار

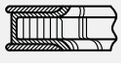

DB = رینگ کنترل روغن با دو لبه پخدار

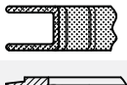

ES = رینگ شیاردار با فنر ورقه ای کنترل روغن

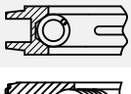

SY = رینگ شیاردار با فنر مارپیچی کنترل روغن


DY = رینگ با فنر مارپیچی و با لبه پخدار کنترل روغن


PS = رینگ با فنر مارپیچی و با لبه های پخدار کنترل روغن

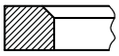

VF = رینگ کنترل روغن با ریلهای فولادی فنر بندی VF


UB = رینگ کنترل روغن با ریلهای فولادی فنر بندی U

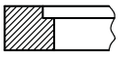

SDV = رینگ فنری مارپیچی کنترل روغن، دارای کانال فلزی به شکل V

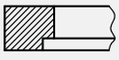
DKS = شنبر التحكم بالتزيت حافته على شكل انحراف استقامي

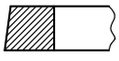
D = رینگ مستطیلی

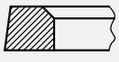

D-IF = رینگ مستطیلی با پخ سطح بالایی لبه داخلی

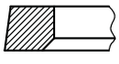
D-IFU = رینگ مستطیلی با پخ سطح پایینی لبه داخلی

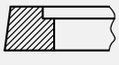

D-IW = رینگ مستطیلی با سطح بالایی پلکانی لبه داخلی

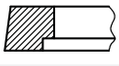

D-IWU = رینگ مستطیلی با سطح پایینی پلکانی لبه داخلی

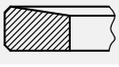

K = رینگ مخروطی

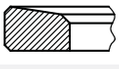

K-IF = رینگ مخروطی با پخ سطح بالایی لبه داخلی

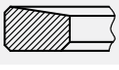

K-IFU = رینگ مخروطی با پخ سطح پایینی لبه داخلی

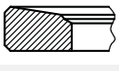

K-IW = رینگ مخروطی با سطح بالایی پلکانی لبه داخلی

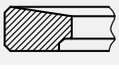

K-IWU = رینگ مخروطی با سطح پایینی پلکانی لبه داخلی

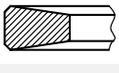

TT = رینگ گوه ای یک طرفه

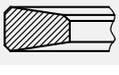

TT-IF = رینگ گوه ای یک طرفه با پخ سطح بالایی لبه داخلی

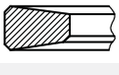

TT-IFU = رینگ گوه ای یک طرفه با پخ سطح پایینی لبه داخلی

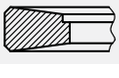

TT-IW = رینگ گوه ای یک طرفه با سطح بالایی پلکانی لبه داخلی

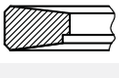

TT-IWU = رینگ گوه ای یک طرفه با سطح پایینی پلکانی لبه داخلی

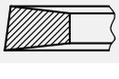

T = رینگ گوه ای دو طرفه


T-IF = رینگ گوه ای دو طرفه با پخ سطح بالایی لبه داخلی


T-IFU = رینگ گوه ای دو طرفه با پخ سطح پایینی لبه داخلی


T-IW = رینگ گوه ای دو طرفه با سطح بالایی پلکانی لبه داخلی


T-IWU = رینگ گوه ای دو طرفه با سطح پایینی پلکانی لبه داخلی


TK = رینگ گوه ای دو طرفه مخروطی

TK-IF = رینگ گوه ای دو طرفه مخروطی با پخ سطح بالایی لبه داخلی

SDR = رینگ کنترل روغن فولادی با کانال نوع V و فنرهای مارپیچی

X = ضخامت رینگ(میلی متر)

راهنمای کلی مونتاژ پیستون

۱. در داخل سیلندری که قرار است پیستون مونتاژ شود بایستی خطوط هونینگ لوزی شکل وجود داشته باشد شاید پیستون آماده شده جهت مونتاژ بر روی سیلندر استفاده شده و یا ساییده شده بکار خواهد رفت در این صورت بایستی مناسب بودن خطوط هونینگ درون سیلندر کنترل شود در صورتیکه خطوط هونینگ داخل سیلندر کاملا و یا قسمتی از بین رفته و سطح براقی بوجود آمده باشد بایستی عمل هونینگ جهت ایجاد این خطوط انجام گیرد.

۲.تمامی پیستونها به نحوی تولید می شوند که وقتی در داخل یک سیلندر، که بصورت صحیح عمل هونینگ بر روی آن اعمال گردیده ،مونتاژ شوند فاصله صحیح بین پیستون و سیلندر جهت عملکرد درست آنها را فراهم می کند بایستی قطر داخلی سیلندر اندازه گیری شود و با مشخصات نوشته شده رو ی قوطی مقایسه شود تا در صورت نیاز ماشین کاری مورد نیاز بر روی سیلندر بمنظور تنظیم قطر داخلی آن صورت گیرد در صورتیکه نیاز به ماشینکاری سیلندر کارکرده وجود داشته باشد بایستی در محدوده تلرانس ۰/۰۰۰ ۰/۰۲۵ ماشینکاری گردند.

۳. زمانی که پیستون جهت مونتاژ آماده شد بایستی گژن پین به شکلی که به پیستون و گژن پین آسیب نیاید از پیستون جدا شود گژن پین هر پیستون متناسب با اندازهای آن پیستون انتخاب و نصب شده است و نباید بشکل تصادفی گژن پینی روی پیستون نصب کرد.

۴ موقع نصب رینگ بر روی پیستون بایستی از ابزار مناسب نصب رینگ استفاده کرد تا به پیستون و رینگ آسیب وارد نشود . موقع نصب پیستون داخل سیلندر بایستی از رینگ جمع کن و یا محفظه مخروطی مونتاژ استفاده کرد. بعد از اینکه رینگها بروش صحیح فشرده شدند پیستون بایستی با نیروی دست و به آرامی داخل سیلندر قرار گیرد و نباید نیروی بیش از اندازه وارد کرد و یا ضربه زد.

۵. قبل از نصب پیستون داخل سیلندر بایستی پیستون بدقت تمیز شود بخصوص محل سوراخ گژن پین تمیز شده و روغن کاری شود بدین منظور برای اینکه در ابتدای شروع کار پیستون و سیلندر تا شروع روغن کاری آسیب نبینند موقع مونتاژ بایستی پیستون و سیلندر روغن کاری شوند.

۶. در صورتیکه در قسمت سر پیستون علامت جهت مونتاژ وجود داشته باشد با یستی موقع نصب این علامت در نظر گرفته شود و بر اساس آن مونتاژ صورت گیرد.

۷. برای آسیب ندیدن پیستون،گژن پین و رینگ بایستی حداکثر دقت عمل را بکار برد

۸. پیستون ها با در نظر گرفتن قواعد و استانداردهای کلی جهت عملکرد صحیح با سایر قطعات موتور تولید می شوند بدین دلیل بعدا نبایستی تغییری در آنها ایجاد شود.

۹. گژن پین و گیره نگهدارنده آن را فقط یکبار می توان استفاده کرد و قابل استفاده مجدد نمی باشند و بایستی تعویض شوند.

۱۰.موقع مونتاژ بایستی عمود بودن شاتون پیستون جهت پیشگیری از مشکلات جدی بایستی صورت گیرد. عمود بودن شاتون پیستون قبل از مونتاژ بایستی با تجهیزات مناسب بررسی گردد.

قتّ: در حین مونتاژ باید به دستورالعملهای فوق دقت شود. تولید کننده مسئولیت هرگونه مشکلات ناشی از مونتاژ نادرست را بر عهده نمی گیرد.

۸ برچسب زنی و شماره گذاری پیستون

۱ لوگوی شرکت (نشان تجاری)

۲ استاندارد/ فوق اندازه استاندارد

۳ قطر اسمی پیستون

۴ شماره سیلندر قابل مونتاژ با آن

۵ فضای بین پیستون و سیلندر (میلی متر)

۶ نشانگر جهت مونتاژ میزان خروج از مرکز سوراخ گژن پین، عبارتهایی مانند " front " و "Abluft" میتواند برای نشان دادن جهت بکار رود علامت"Volant " نیز جهت نصب بدون نقص پیستون بر روی موتور بکار می رود.

۷ کد قابلیت ردیابی

۸ میزان ارتفاع کم شده ازارتفاع تراکم استاندارد (برحسب میلی متر)

۹ شماره مرجع پیستون

مثال

رینگ پیستون استاندارد = 000
ارتفاع تراکم به اندازه 0.20 میلی متر کوتاهتر از استاندارد = 001
ارتفاع تراکم به اندازه 0.40 میلی متر کوتاهتر از استاندارد = 002
ارتفاع تراکم به اندازه 0.60 میلی متر کوتاهتر از استاندارد = 003
رینگ پیستون به میزان 0.50 میلیمتر بزرگتر از استاندارد = 050

شماره مرجع پیستون ← **11-01513-000**

کد فنی جدید	کد فنی قدیمی
11-01513-000	1513 000

۱۰ شماره مرجع رینگ + پیستون

مثال

رینگ + پیستون / استاندارد = 000
به میزان 0,50+ میلیمتر بزرگتر از استاندارد = 050 رینگ + پیستون /

شماره مرجع رینگ + پیستون ← **31-03513-000**

کد فنی جدید	کد فنی قدیمی
31-03513-000	3513 000
38-03513-000	3513 000-08
39-03513-000	3513 000-09

مختلف پوششهای تفاوت و رینگ نوع ← **38-** **39-**

١١ توضيحات شماره مرجع بوش سيلندر

مثال

بوش سيلندر / استاندارد = 000
به ميزان 0,50+ ميليمتر بزرگتر از استاندارد = 050
بوش سيلندر /

51-05513-000

شماره مرجع بوش سيلندر

كد فنى جديد	كد فنى قديمى
51-05513-000	5513 000

١٢ توضيحات كد مرجع كيتها و ستها

رقم الكيت بيستون + بنز + شنبر + قميص

رينگ / كيت =000
كيت\استاندارد از خارج اندازه = 0.50
رينگ / به ميزان 0.50

71-07513-000

ارقام التعرف لاطقم الكيتات

71-8
71-9

شكل الشنبر ونوعية الطلاء المختلفة

كد فنى جديد	كد فنى قديمى
71-07513-000	7513 000
71-87513-000	7513 000-08
71-97513-000	7513 000-09

١٣ شماره مرجع رينگ

رينگ / استاندارد =000
ميليمتر بزرگتر از استاندارد = 0.50
رينگ / به ميزان 0.50

91-09513-000

شماره مرجع رينگ

98-
99-

شكل الشنبر ونوعية الطلاء المختلفة

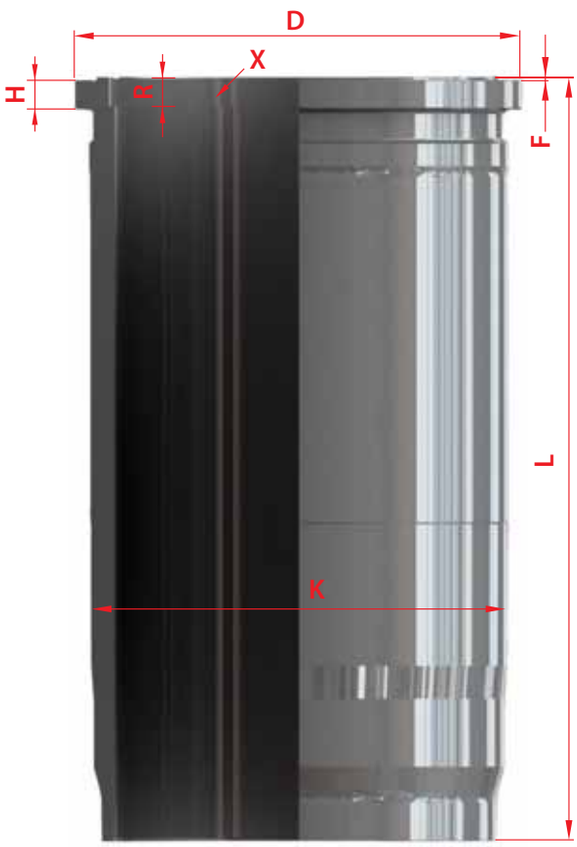
كد فنى جديد	كد فنى قديمى
91-09513-000	9513 000
98-09513-000	9513 000-08
99-09513-000	9513 000-09

١٤ شماره فنى اورينگ

55-50701-000

شماره فنى اورينگ

توضیحات فنی بوش سیلندر



K = قطر خارجی
L = طول کل
H = طول فلانج
F =ضخامت واشر سر سیلندر
D = قطر !فلانج
X = ارتفاع رینگ احتراق
R = ارتفاع منطقه احتراق

تعریف بوش سیلندر بر اساس TSE482:

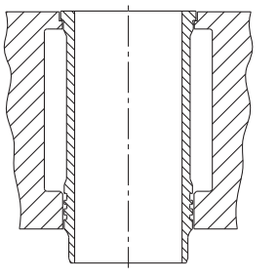
در موتورهای احتراق داخلی قطعه از چدن ریخته شده می باشد که داخل بلوک سیلندر قرار می گیرد و محفظه حرکت پیستون و محل انجام احتراق می باشد.بوش سیلندر موتورها شامل دو گروه می شوند.
بوش سیلندر های تر:
بوش هایی هستند که داخل بلوک سیلندر از اطراف بوسیله آب خنکاری می شوند.
شامل سه گروه اصلی می شوند:

الف دارای کانال و فلانج:

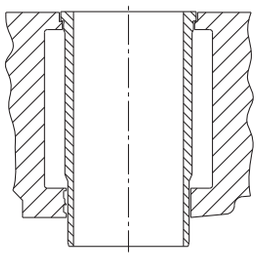
دراین نوع، بوش سیلندر از بالا از طریق فلانج بر روی بلوک سیلندر قرار می گیرد و از پایین برای جلوگیری از نشت آب خنک کاری به داخل بوش سیلندر کانالهایی جهت قرار گرفتن اورینگ جود دارد. (شکل ۱)

ب بدون کانال فلانج دار
در این نوع ، بوش سیلندر از بالا از طریق فلانج خود بر روی بلوک سیلندر قرار می گیرد و در قسمت پایین این نوع بوش سیلندر کانال اورینگ وجود ندارد. کانالهای عایقبندی اورینگ در این نوع موتورها بر روی سیلندر قرار دارد.(شکل ۲)

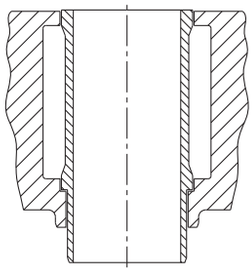
ج دارای دو فلانج
در این نوع، بوش سیلندر از بالا و پایین دارای فلانج و کانال جهت قرار گرفتن بوش می باشد. (شکل ۳)



شکل ۱

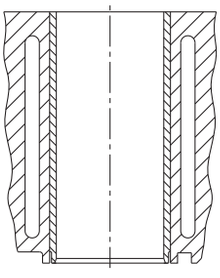


شکل ۲

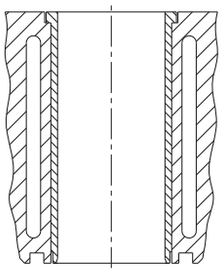


شکل ۳

بوش سیلندر خشک
بوش سیلندرهایی که وقتی داخل بلوک سیلندر قرار می گیرند به طور
مستقیم با آب خنک کاری در تماس نمی باشند
دارای دو نوع اصلی می باشند
الف فلانج دار (شکل۴)
ب بدون فلانج (شکل ۵)



شکل۴



شکل ۵

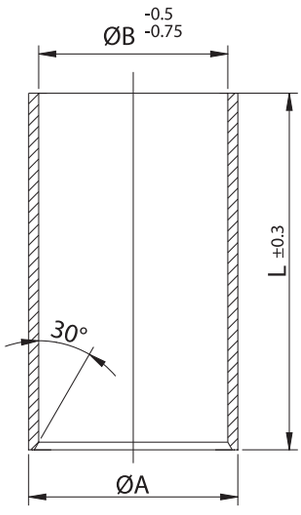
مواردی که بایستی در مونتاژ بوش سیلندرها رعایت شود

دستورالعمل مونتاژ بوش سیلندرهای خشک:
سیلندرهای خشک بصورت فلانج دار و بدون فلانج تولید می شوند.(شکل۶) در شرایط کارکرد نامناسب در موتورهایی که پیستون داخل بوش سیلندر بدون فلانج نصب می شود لغزشهایی در راستای محور مشاهده می شود که چنین مشکلی در بوش سیلندرهای فلانج دار بوجود نمی آید که این از مزایای فلانج می باشد

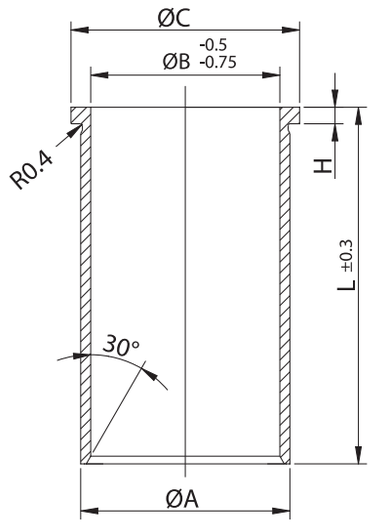
قبل از پرس شدن بوش سیلندر داخل سیلندر بایستی به اندازه های قطر بوش سیلندرها که در لیست نشان داده شده در پایین آمده است(آ) ، دقت شود و بر اساس قطر اسمی داده شده،در داخل سیلندر سنگ کاری یا ماشینکاری حساس و هونینگ صورت گیرد
بایستی به تلرانس های ذکر شده در پایین دقت شود. (شکل 7) در غیر اینصورت اگر میزان پیش تنیدگی خیلی کم باشد انتقال گرما بشکل صحیحی صورت نخواهد گرفت و اگر میزان پیش تنیدگی خیلی بالا باشد در بوش سیلندرهایی که دارای جداره خیلی نازک می باشند باعث بوجود آوردن عدم تناسب با سیلندر و بوجود آمدن مشکلات در عملکرد می شود در سیلندرهای خشکی که قطر خارجی آنها به اندازه مقدار نهایی آن ماشینکاری شده اند قطر داخلی آنها به ۰/۵ تا ۰/۷۵ میلیمتر کوچکتر از انداز نهایی ماشینکاری می شود

موقع مونتاژپرسی بوش سیلندر در داخل سیلندر، بمنظور آسیب ندیدن فلانج بوش ،بایستی قطر محل قرار گرفتن فلانج در سیلندر کمی بزرگتر از قطر خارجی فلانج (C) باشد

در بوش سیلندرهای خشک فلانج دار سطح پایین فلانج بایستی به طور صحیح در محل خود در سیلندر قرار بگیرد.



شکل ۶



شکل ۷

همانطور که می دانیم فلانج در قسمت پایین دارای رادیوسی به قطر ۰/۴ می باشد که برای جلوگیری از نشستن این انحنا بر روی سیلندر، در محل تماس فلانج و سیلندر ، درگوشه محل تماس بر روی سیلندر پخی به اندازه ۱ میلیمتر داده می شود.در غیر اینصورت شکستن فلانج بوش سیلندر اجتناب ناپذیر است.

قبل از مونتاژ بوش سیلندر جدید بایستی بلوک سیلندر به دقت تمیز شده و اندازه های آن کنترل شود.در صورت مخروطی یا بیضوی شدن بلوک این مقدار نباید از ۰ ۲ ۵ / ۰ تجاوز کند. بعد از مرحله هونینگ

بایستی به یک سطح براق دست یافت و بسته به نوع موتور بایستی میزان صافی سطح کنترل شود سطح های بسیار صاف و براق باعث عدم روغنکاری مناسب شده و بایستی اجتناب گردند

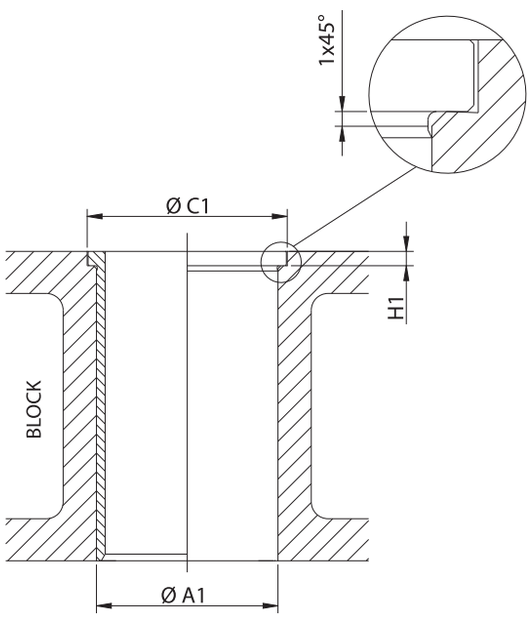
برای پرس بوش سیلندرهای خشک فشاری به اندازه ۰۰۰ ۵ ۰۰۰ ۳ کیلوگرم کافی است در طی مراحل مونتاژ اگر ماده ای که برای روغن کاری بکار می رود غلیظ باشد در اثر گرما این ماده دچار فرآیند ککسازی شده و در انتقال گرما دچار مشکل می شود.
بعد از مونتاژ از طریق پرس، سنگ زنی سطحی از بلوک سیلندر که بوش سر سیلندر قرار خواهد گرفت بایستی بوسیله سنگ زن سطح صورت گیرد.

در صورتیکه سطحی از بلوک سیلندر که بوش سر سیلندر آنجا قرار میگیرد نیاز به ماشینکاری داشته باشد متناسب با آن بایستی محلی که فلانج بوش سیلندر در آن قرارمی گیرد به عمق بیشتری ماشینکاری شود علاوه بر اینها بوش سیلندرهایی که قطر داخلی آنها به اندازه نهایی ماشینکاری شده و قطر داخلی نیز به شکل کاملا حساسی تراشکاری شده نیز موجود می باشد.

در این نوع بوش سیلندرها ضخامت بسیار کمی جهت عمل هونینگ در نظر گرفته شده که بعد از مونتاژ پرسی در داخل سیلندر عمل هونینگ بر روی آنها انجام می گیرد میزان تلرانس قطر داخلی سیلندر ازاندازه اسمی آن بین ۰ و ۰۱۵ ۰میلی متراست میزان تلرانس قطر بیرونی بوش سیلندراز اندازه اسمی بین ۰۱۲/ ۰ + و ۰۲۴ ۰ میلی متر می باشد.

	گروه بندی قطر خارجی بوش سیلندر		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	قطر سوراخهای بلوک سیلندر (میلیمتر)		
	50 - 80	80 - 120	120 - 180
Q_1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25



شکل ۹

دستورالعمل مونتاژ بوش سیلندر های تر

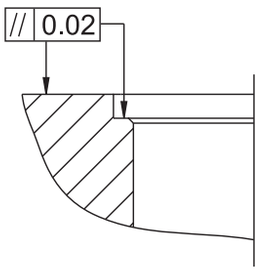
ین ماک برای بدست آوردن مقاومت لازم در مقابل ساییدگی وتغییر شکل از روش ریخته گری گریز از مرکز برای تولید بوش سیلندر های خوداستفاده می کند. برای جلوگیری از وارد آمدن هرگونه خسارت به سطوح تماس سیلندر موقع خارج کردن بوش سیلندر قدیمی بایستی بسیار دقت شود.

در بلوک سیلندر محل های تماس بایستی بدقت از بقایای گل،زنگ و سایر آلودگیها تمییز شود.بهنگام تمییزکاری هرگونه وسیله مانند سمباده یا چکش که موجب ایجاد خراش می شود نبایستی استفاده شود.بهترین وسیله برای اینکار فرچه با سیمهای فولادی است.در صورتیکه بوش سیلندر در نتیجه زنگ زدگی و رسوب به بلوک محکم چسبیده باشدبا گذاشتن تخته پارچه روی آن و وارد کردن ضربات با استفاده از چکش آنرا جدا میکنیم. اگر با این وجود جدا نشد بایستی از پرس هیدرولیکی استفاده نمود. بهنگام تمیزکاری بایستی نهایت دقت صورت گیرد تا از آسیب دیدن سطوح تماس جلوگیری شود.

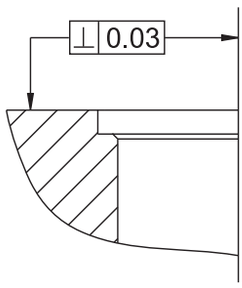
سطح پایینی فلانج بوش سیلندر بایستی کاملا موازی با سطح بلوک باشد. همانطور که در (شکل ۱۰) نشان داده شده است از لحاظ صافی و مسطح بودن نباید تفاوتی داشته باشند.از طرفی بایستی عمود بودن محور سیلندر بر سطحی از سیلندر که بوش سر سیلندر قرار می گیرد نیز کنترل شود. (شکل ۱۱) نکته ای که همواره باید به آن دقت شود این است که سطوح تماسی در سیلندر نباید با له کردن تخریب شوند. شکل۱۲)

برای جلوگیری از برخورد رادیوس موجود در قسمت پایین فلانج بوش سیلندر(د) با سیلندردر نقطه (آ) در محل تغییر زاویه سیلندر پخی به اندازه ۰/ ۱ـ ۵/ ۰میلی متر به شعاع ۴۵ درجه داده می شود.

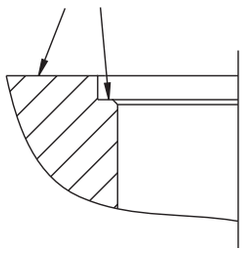
برای جلوگیری از احتمال شکست بایستی نیروی آببندی و نیروی عکس العمل بصورت نزولی مقابل یکدیگر باشند.



شکل ۱۰

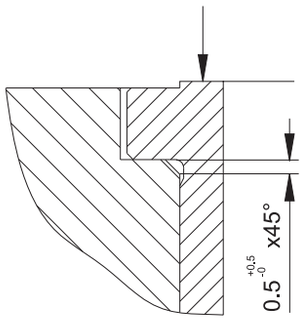


شکل ۱۱

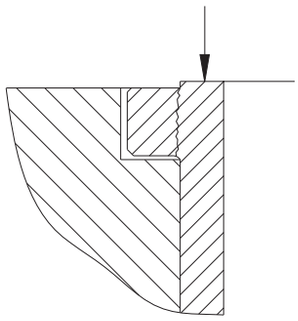


شکل ۱۲

قطر سوراخ واشرسرسیلندر (ب) با قطر خارجی بوش سیلندر (ج) باید یکسان باشد به منظور حصول اطمینان از آب بندی کامل محفظه ی احتراق استفاده از واشرهایی با قالب فلزی الزامی می باشد.



شکل ۱۴



شکل ۱۵

بزرگ یا کوچک بودن سیلندر یا بوش را بتوانیم بسنجیم برای اینکه از مناسب بودن اندازه بوش برای سیلندر مورد نظر مطمئن شویم و قبل از مونتاژ بوش داخل سیلندر آن را بصورت دستی و بدون اورینگ داخل بلوک سیلندر قرار میدهیم .

بخصوص برای بررسی قرار گرفتن صحیح فلانج بوش سیلندر در جایگاه خود در بلوک سیلندر،قبل از مونتاژ بوش سیلندر را به حالت معکوس در آورده و در محل قرار گرفتن فلانج در سیلندر قرار می گیرد. همانطور که می دانیم فلانج در قسمتی از موتور که عمل خنک کاری در آن صورت نمی گیرد قرار دارد.در اینجا فضایی به اندازه ۰/۳ ۰/۵ میلی مترمورد نظر می باشد.

آنچه که در این راهنمای مونتاژ در هر فرصت بر روی آن تاکید می شود این است که عمل خارج کردن و جایگذاری بوش سیلندر باسیتی بطور صحیح انجام شود یعنی در هنگام مونتاژاستفاده از وسایلی مانند چکش و سایر ابزارالات سنگین که باعث بوجود آمدن اشتباهات جبران ناپذیری می شود مجاز نمی باشد.

رینگهای لاستیکی که در حین مونتاژ بکار می روند بایستی دارای کیفیت خوب بوده ودر مقابل ورم کردن،استهلاک ،گرما و روغن مقاوم باشند در غیر اینصورت موجب نفوذ آب به داخل کارتر شده وباعث گیر کردن بوش سیلندر و تغییر ابعاد می شود هر بار به رینگهای لاستیکی صابون روغنکاری مالیده شده و در کانالهایشان قرار می گیرند.

رینگهای لاستیکی فقط از برندهای با کیفیت که سازندگان موتور استفاده می کنند بایستی مورد استفاده قرار گیرد علت این ترجیح نیز الزامی بودن مقاومت رینگهای لاستیکی در مقابل تورم،استهلاک،روغن و گرما می باشد.

گیر کردن و ساییدگی پیستون در داخل بوش سیلندر از نتایج استفاده از رینگ لاستیکی نامناسب می باشد کانالهای رینگهای لاستیکی نباید کنده شود.

جدا شدن بوش که در نتیجه موجب گیرپاژ پیستون می شود به دلیل بدلیل استفاده از اورینگ نامناسب می باشد کانالهای محل قرار گیری اورینگها نبایستی کنده شود

بعد از اینکه بوش سیلندرها در جای خود قرار گرفتند بلوک سیلندر بایستی با آب پر شده و وضعیت نفوذ آب حتما بایستی بررسی شود.

جزئیات برچسب زنی بوش سیلندر

اورینگ

EPDM لاستیکی	EPDM
لاستیک NBR	NBR
وایتون	FPM / VI
مسی	Cu
لاستیک تومباک	T
فولادی	ST
سیلیکونی	SC / MVQ
فلز نرم	Shim / SM

93,000 (1)		(3)	(4)	(5)	(6)	(7)
4JB1 (2)		D 00 2005 >	00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) (9) CH 51,850 VD1 0,550 (10) (11) B- 19,500 BØ 43,900 (12) (13) TL 91,850	AP YS HA CP (14)	91-09389-000 1 2,000 P 2 2,000 P 3 4,000 CrP (16)	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)		Ø 93,000 (18)	31-04385-000 (19)
(15) 31,00x76,00		99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF (16)				39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
K=95,00 (22) (24) L=181,00 H=0,90 (25) (23) D=101,00	DF-CR-ST (26)				51-35721-000 (20)	71-08385-000 71-98385-000 (21)
K=120,00 (22) (24) L=229,00 H+F=9,00+1,10 (25) (23) D=128,50	WF (26)		O-Ring/Seal 55-50613-000 2 FPM 112,00x3,00 (28)		51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

۱ - قطر پیستون
۲ - کد موتور
۳ - اطلاعات سوخت
۴ - سالهای مدل
۵ - تعداد سیلندر
۶ - حجم سیلندر
۷ - قدرت موتور
۸ - کد پیستون
۹ - استرک(زمانه) :CH
۱۰- عمق سوپاپ VD1/VD2:
۱۱- B- احتراق محفظه عمق
B+ تاج انحنای
۱۲- قطرمحفظه: Bø
۱۳- طول کلی : TL
۱۴- ویژگی های پیستون
DAP: پیستون با دو آلفین
AP: پیستون آلفین دار
YS: پیستون دارای کانال خنک کننده روغن
CP: پیستون دارای ورق فولادی
HA: روکش هارد آنودایز
PDB: سوراخ پین بوشدار

۱۵- قطر پین طول ویژگیها
۱۶- ویژگی های رینگ
۱۷- برآمدگی سر پیستون
۱۸- قطر سیلندر
۱۹- کد رینگ+ پیستون
۲۰- کد بوش سیلندر
۲۱- کد کیت
۲۲- قطربیرونی سیلندر
۲۳- قطر فلنج بوش سیلندر
۲۴- طول کلی بوش سیلندر
۲۵- ضخامت فلانج
۲۶- مشخصات بوش
WS بطانة الرطب الانتهاء من شبه
WF بطانة الرطب الانتهاء الكامل
DS بطانة جافة الانتهاء من شبه
DF بطانة جافة النهاية الكامل
AF تبريد الهواء النهاية الكامل
PH فوسفات
CR كروم
HR تصلب
NT النتريت
HT المعالجة الحرارية
STEEL فولاذ
۲۷- المحرك المشترك
۲۸- کد اورینگ

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GRADE: 3A

YENMAK®

PİEZAS DE MOTOR

Yenmak, fue creada en 1965 por la familia Kahvecioglu en la ciudad de Konya, en un taller pequeño. Con los años YENMAK que siempre se ha ido avanzando y renovándose, se convirtió en uno de los grandes proveedores de piezas de motor dentro y fuera de país.

Hoy en día Yenmak produce KIT, PISTÓN, PASADOR DE PISTÓN, SEGMENTO y CAMISA DE MOTOR SILINDRO; y exporta a más de 80 paises en 5 continentes las piezas como JUNTA, VALVULA y BANCADA DE MOTOR.

A nuestros valiosos clientes y nuestros socios a largo plazo, aseguramos de dar la mejor calidad y precio razonable, así como las ventas y servicios de post-venta de una sola fuente. En un solo paquete, nos aseguramos de suministrar todas las piezas del motor. Proveemos las todas las piezas de motor que se encuentran en nuestro portafolio de productos, de única fuente, dentro de un paquete. Además de esto, YENMAK que considera el factor humano como lo más importante, da mucha importancia y valor a las relaciones que establece con los clientes.

YENMAK cuenta con certificados como INMETRO, ISO 9001, ISO / TS 16949, IATF 16943, TS EN ISO 14001.
Hoy en día, la empresa se encuentra en 1., 2. y 3. organizado zona industrial de Konya, con 2 fabricas, 1 Sede & Edificio de Logísticas, en total una área de 50.000 metros cuadrados.

Las actividades de venta y marketing se realiza en la oficina de exportación que se encuentra en Estambul.

Sede & Logística

Fabrica de Pistona & Pasador

Fabrica de Camisa de Motor

PİEZAS DE MOTOR

Desde el año 2003 los productos de Yenmak se toman lugar en el mercado envesado el formato que se puede ver aquí abajo.

La información sobre detalles de envesado se puede ver aquí abajo:

Gracias a cubertura especial será usted la primera persona en tocar el producto.

Número de Trazabilidad

Para asegurar la seguridad del producto sobre el envase se encuentra integrado un holograma 3D de seguridad.

Una etiqueta que se encuentra bajo envase para proporcionar seguridad al producto.

BUREAU VERITAS
Certification

BUREAU VERITAS Certification

YENMAK PİSTON SEGMAN SANAYİ VE TİC. A.Ş.

2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12 SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

TÜRKAK

SEÇKİN DEMİRALP
Belgelendirme Müdürü

Sayfa 1/1

BUREAU VERITAS Certification

Certificate of Approval

Awarded to

YENMAK PİSTON SEGMAN SAN. VE TİC. A.Ş.

KIRIM CD. SARIÇİÇEK SK. NO:12 SELÇUKLU KONYA
42000 - Konya - Turkey

Bureau Veritas Certification certifi that the Quality Management System of the above organization has been audited and found to be in accordance with the requirements of

ISO/TS 16949:2009

and the applicable customer specific requirements

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

BUREAU VERITAS Certification

YENMAK PİSTON SEGMAN SANAYİ VE TİC. A.Ş.

2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12
SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme Holding SAS – İngiltere Şubesi yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 14001:2004

Belgelendirme Kapsamı

ÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

UKAS

SEÇKİN DEMİRALP
BVCH SAS İngiltere Şubesi
adına imzalayan

Sayfa 1/1

BUREAU VERITAS Certification

YENMAK MOTOR GÖMLEK SANAYİ VE TİCARET A.Ş.

1.ORGANİZE SANAYİ BÖLGESİ HOROZLUHAN MAH. ATABEY SOK. NO: 8 SELÇUKLU, KONYA, TURKEY

Bureau Veritas Certification Holding SAS - UK Branch certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2015

Scope of certification

MANUFACTURING OF CASTING AND MACHINING CYLINDER LINERS AND CASTING RING CARRIERS

Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

UKAS

İBRAHİM TAŞKY
Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification

TSE

BUREAU VERITAS
Certification

Certificate of Approval

Awarded to

YENMAK MOTOR GÖMLEK VE TİC. A.Ş.

1. ORGANİZE SANAYİ BÖLGESİ, HOROZLUHAN
MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

PISTONES DE ACERO DE DOS PIEZAS

Pistón de acero de dos piezas, se conforma de una cabecera de acero da pistón y un eje de aluminio de pistón los dos juntados uno a otro con movilidad. Por los valores altos de resistencia y valores bajos de corrosión, estos pistones se pueden funcionar especialmente en los motores diésel de funcionamiento duro en limites bajos de emisión y gases de escape.

Pistones de Acero de Dos Piezas

• En motores de generación nueva que cuentan con ratio alto de comprimir y modernas cámaras de combustión.

• En los motores diésel de funcionamiento duro.

• En los motores que funcionan con sistemas de multi-combustible.

Ventajas de Pistones de Acero de Dos Piezas

• Pistones de acero de dos piezas comparando con los pistones de aluminio; área de contacto con la camisa de cilindro es menos así que hace que sean menos los perdidos que se causan por rozamiento,.

• Pistones de acero de dos piezas comparando con los pistones de aluminio; gracias a la resistencia que muestra contra los cargos termales, disminuye el riesgo de deformación de la camisa, puede funcionar en menos espacio de cilindro, aumenta la característica de impermeabilidad de los segmentos.

• Un pistón normal de aluminio muestra resistencia hasta 100 bares pero un pistón de acero de mismo tamaño puede ser hasta 250 bares.

• Proporciona mas alto ratio de comprimir y menos %2-5 emisión de CO_2 . Disminuye problemas de contacto causados por material alfin (Ni-resist) que se utilizan en pistones de aluminio para motores diésel.

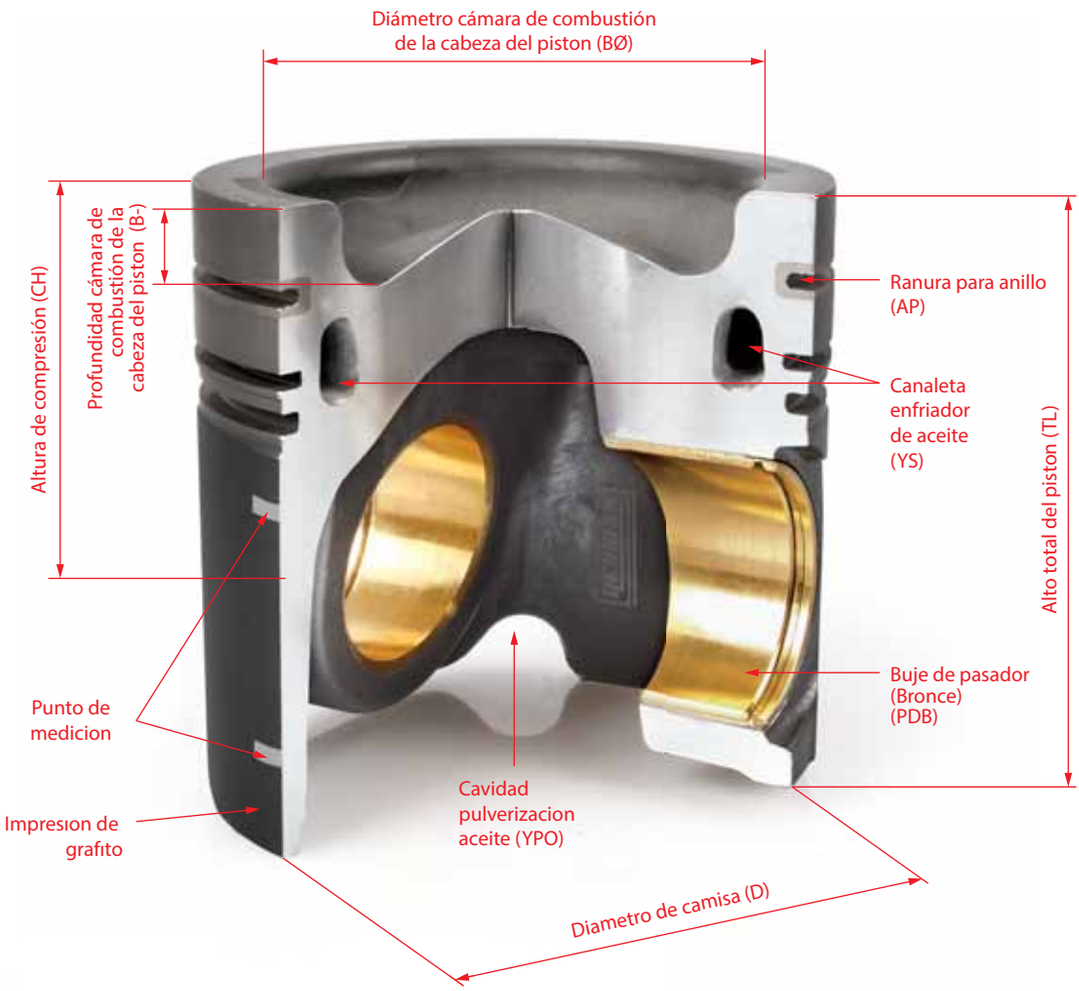
• En pistones con cadenas de enfriamiento, hace que cadena de enfriamiento sea más cerca al pistón, y eso proporciona un enfriamiento efectivo.

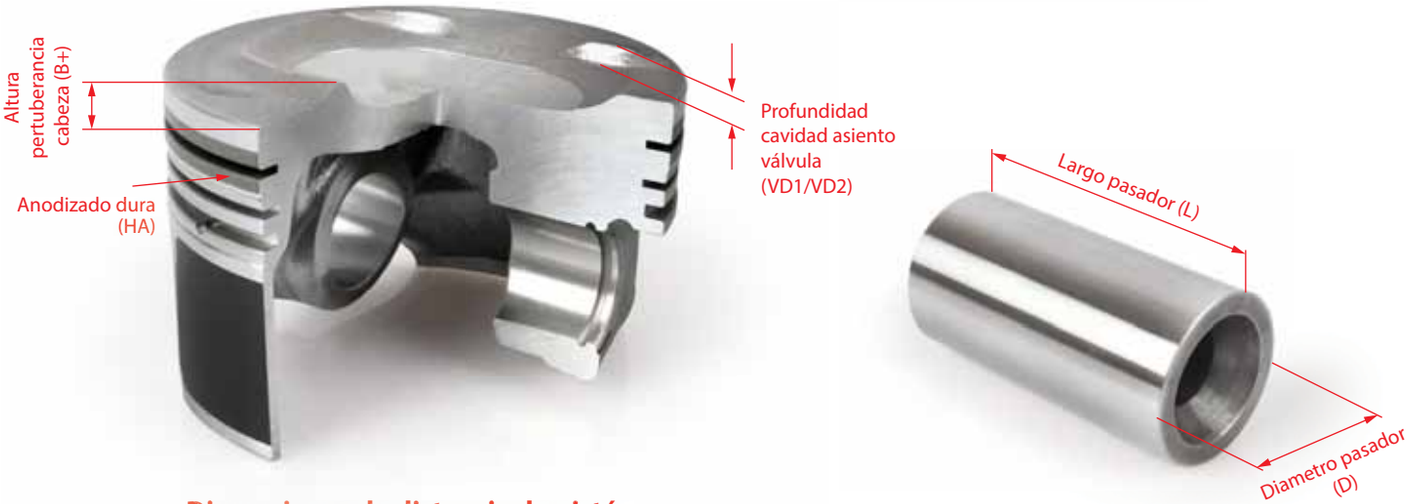
• Pistones de acero de dos piezas comparando con los pistones de aluminio proporcionan menos deformación de la cámara de combustión.

• Pistones de acero de dos piezas disminuyen los gastos de rectificación del motor gracias a los efectos positivos que alargan la duración de uso de motor.

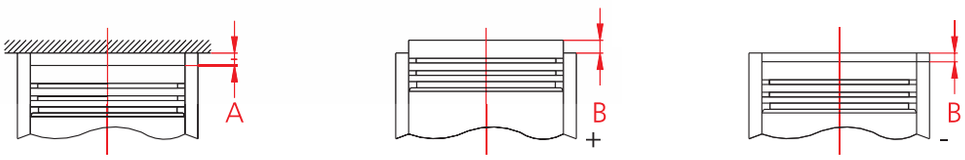
• Cuando hay problemas en la sobrealimentación y sistemas de inyección de combustible, causa a la fusión o perforación del pistón. En los dos-partes (articulado) pistones de acero, este tipo de problemas no se producen.

DESCRIPCIONES TECNICAS





Dimensiones de distancia de pistón



A = Dimensión hasta cabecera de cilindro

C = Dimensión de cabecera de pistón desde el superficie de bloqueo

INSTRUCCIONES DE MONTAJE DE LOS SEGMENTOS DE PISTON DE YENMAK

Si se desea poner en pistones ya usados, es necesario limpiar los agujeros de aceite y los residuos de carbón en canales de alojamiento de segmento. Es necesario limpiar todos los residuos de carbón excepto capas de carbón que se encuentran en las cúpulas de pistón. Hay que prestar atención en la limpieza de canales de pistón. Hay que prestar atención para que no se realicen rayas cuando se limpian las curvas de margenes donde se juntan superficies laterales y superficies de base. Sino estas rayos pueden causar quiebras en futuro. No es necesario procesar los pistones, porque kit de segmento de Yenmak son diseñados para sentar de de modo que convengan con los pistones originales. Los valores limites de gasto de cilindro que pueden utilizar los segmentos de pistones de Yenmak son:

En motores de bencina, en diámetro como máximo 0, 1 mm

En motores de diésel, en diametro como maximo 0, 15 mm

Si en los pistones utilizados existe un desgaste dentro de valores espacio mencionados arriba, se debe cambiar los pistones que tienen mucha deformación en canales de segmento. Porque pistones que tiene sus canales desgastados como forma y paralelismo, los valores de ajuste de espacio son incorrectos y los segmentos no funcionan correctamente en estos tipos de pistones y causan desperdicio de aceite y soplo.

Torcer los segmentos hacia abajo o arriba, causa la deformación en el funcionamiento de superficie de segmento y desgaste de material de cobertura. Estos desgastes invisibles causan problemas en las condiciones de funcionamiento de motor.

Abre los segmentos (con la ayuda de pinzas) y coloque los segmentos en los alojamientos que se encuentran en pistón. Después apriete los segmentos utilizando clips de aprieta o un manguito cónico de montaje y empujando o si es necesario golpeando suavemente con un martillo coloquelos dentro de cilindro. Mientras este proceso, para prevenir que los segmentos finos salgan fuera de clips y se dañen, sostenga los clips sobre superficie de bloqueo. No se pueden utilizar segmentos cubiertos de cromo con motores con camisa cuyos dentro está cubierto de cromo.

Los segmentos marcados como YEN y TOP se deben colocar en los alojamientos de modo que los lados marcados sean hacia la cámara de combustión. Los segmentos que no tienen ningún marca encima, se pueden colocar hacia cualquier lado.

PROCESOS DE REVESTIMIENTO DE SEGEMENTO y PROCESOS DE SUPERFICIE

Cr = Revestimiento de Cromo
Mo = Revestimiento Molibdeno
P = Revestimiento de Fosfato
Fe = Revestimiento de Colcótar
Cu = Revestimiento de Cobre
Nt = Revestimiento de Nitrito
Sn = Revestimiento de Bidón
Ck = Revestimiento de Cromo
Pvd = Acumulación de Vapor Físico
Cdc = Revestimiento de Diamente Cromo
Dlc = Revestimiento de Carbono con
Tef = Revestimiento teflon

PROCESOS DE REVESTIMIENTO DE SEGEMENTO y PROCESOS DE SUPERFICIE

Ck (Revestimiento de Cromo-Cerámica)

Revestimiento de Cromo-Cerámica (CK), es un tipo de revestimiento compuesto, con estructura de red que se forman los elementos de oxido como cromo y aluminio. Estos revestimientos generalmente se utilizan para procesos de revestimiento de segmentos de primero alojamiento de los pistones de vehículos con motor diésel. Revestimiento CK lleva rendimiento alto y calidad alta gracias a la diferencia de electro plastia.

Diferencias entre Revestimiento de Ck y revestimiento de cromo duro

- Más resistencia contra desgaste

- Más alto punto de fusión

- Más alto dureza y concentración de fractura

Por estos ventajas los revestimientos de CK, proporcionan más largo vida de uso de motor y producción gases de escape de emisión baja.

Pvd (Acumulación de Vapor Físico)

Se denomina método de PVD, método que se forma por la acumulación en superficie del segmento de los duros revestimientos que se separan re-activamente de fase de vapor. Con este método se realiza evaporación y ionización de metal por arco eléctrico o bombardeo de iones

İones de metal puros y regulados se hace avanzar hacia superficie de componente. Como conclusión de esto, átomos de metal se forman nitrito, carburo y oxido reaccionando con las gases reactivos. Después de reacción sobre el superficie de funcionamiento de segmento se forma un revestimiento fino. Muestra alta resistencia contra desgastes gracias a carácter cerámica dentro de revestimiento.

Mo (Revestimiento Molibdeno)

Segmento se cubre con molibdeno para prevenir desgastes. Para prevenir los rastros de quemadura superficie de funcionamiento de segmento se llena con molibdeno o también toda la superficie se puede cubrir. Proceso de revestir se puede realizar por método de propagación de las llamas o propagación por la plasma.proyección de plasma. Punto alto de fusión de molibdeno (2620 C^0), gracias a efecto de aceitar y a carácter de superficie porosa, superficie de funcionamiento de segmento de pistón es más durable. Tiene resistencia alta contra desgastes por la fricción y conductividad térmica.

Cr (Revestimiento de Cromo)

Este método de revestir con cromo duro es muy comun para mejorar la dureza de los segmentos. El objetivo de revestimiento de cromo es prolongar la vida de uso de la camisa de cilindro y segmento, disminuyendo desgastes. Disminuir desgastes en el segmento y en pared de cilindro es posible con revestir con cromo el segmento que se encuentra más arriba. Hoy en día, hay la inclinación de cubrir dos y más segmentos, no solamente el segmento que se encuentra más arriba .

Como que el revestimiento con cromo proporciona una superficie dura, es obvio que disminuye desgaste en los segmentos.

Revestimiento con cromo se aplica en dos diferentes modos:

- Duro

- Revestimiento con cromo poroso

En revestimiento con cromo superficies de segmentos, después de revestimiento se mole y toma su última forma. Por revestimiento con cromo poroso, la superficie de segmento gana una carácter que retiene aceite. Así, proporcionan menos desgaste en sus mismas y en camisas que funcionan.

Nt (Revestimiento de Nitrito)

Con este método toda la superficie del segmento se endurece. Con este revestimiento la resistencia de superficie contra las fricciones se aumenta. Así se prolonga la vida de uso del segmento. Revestimiento con nitrito por sus caracteres de producción y emisión, es favorable al medio ambiente. Se ha visto que con revestimiento nitrito, se obtiene soluciones más efectivos de funcionamiento en superficies de rendimiento. Disminuye desperdicios de aceite en puntos sensibles del segmento. Hierro fundido aumento fragilidad de los segmentos. Prolonga vida de uso de motor.

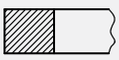
Cdc (Revestimiento de Diamente Cromo)

Este tipo de revestimiento se utiliza en segmentos más altos de motores de tipo Euro 4 y diésel. Se puede aplicar a hierros fundidos aleados y flexibles y aceros de carbón. Pieza de diamente se utiliza en lugar de pieza de cerámica. Así la resistencia contra desgastes y rendimiento contra la fricción se aumenta.

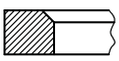
Dlc (Diamente Como Carbono) (Revestimiento de Carbono con Revestimiento de Diamente)

Gracias a esto revestimiento se disminuye la fricción y se aumenta la resistencia contra desgaste. Revestimiento de DLC tiene carácter favorable al medio ambiente. Tiene fuertes enlaces químicos y no se rompe bajo tensión mecánica. No es de estructura cristal, es sin forma. Este producto es muy fuerte por su carácter. Es más durable comparando con otros, y tiene más resistencia contra la fricción.

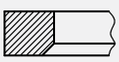
DESCRIPCIONES TECNICAS



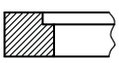
D = Segmento rectangular



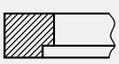
D-IF = Segmento rectangular con superficie superior de margen interior achaflanado.



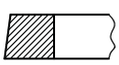
D-IFU= Segmento rectangular con superficie inferior de margen interior achaflanado.



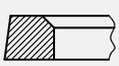
D-IW = Segmento rectangular con superficie superior de margen interior escalonado.



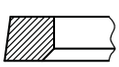
D-IWU = Segmento rectangular con superficie inferior de margen interior escalonado.



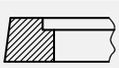
K = Segmento cónico



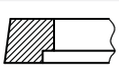
K-IF = Segmento cónico con superficie superior de margen interior achaflanado.



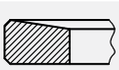
K-IFU = Segmento cónico con superficie inferior de margen interior achaflanado.



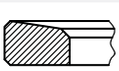
K-IW = Segmento cónico con superficie superior de margen interior escalonado.



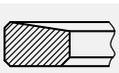
K-IWU = Segmento cónico con superficie inferior de margen interior escalonado.



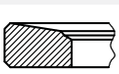
TT = Segmento trapecio de unilateral



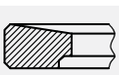
TT-IF = Segmento unilateral con superficie superior de margen interior achaflanado.



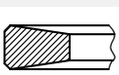
TT-IFU = Segmento unilateral con superficie inferior de margen interior achaflanado.



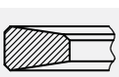
TT-IW = Segmento unilateral con superficie superior de margen interior escalonado.



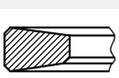
TT-IWU = Segmento unilateral con superficie inferior de margen interior escalonado.



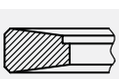
TT = Segmento trapecio bilateral



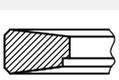
T-IF = Segmento bilateral con superficie superior de margen interior achaflanado.



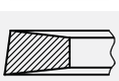
T-IFU = Segmento bilateral con superficie inferior de margen interior achaflanado.



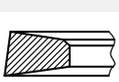
T-IW = Segmento bilateral con superficie superior de margen interior escalonado.



T-IWU = Segmento bilateral con superficie inferior de margen interior escalonado.

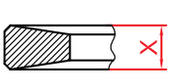


TK = Segmento cónico trapecio bilateral

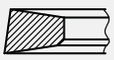


TK-IF = Segmento bilateral con superficie superior de margen interior achaflanado.

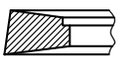
SDR = Segmento de acero con canales tipo V y con muelle helicoidal para control de aceite



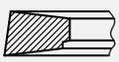
X = Espesor del segmento (mm)



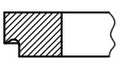
T-IFU = Segmento cónico con superficie inferior de margen interior achaflanado.



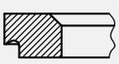
TK-IF = Segmento cónico con superficie superior de margen interior escalonado.



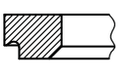
TK-IWU = Segmento cónico con superficie inferior de margen interior escalonado.



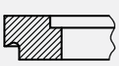
N = Segmento rascador



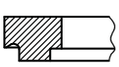
N-IF = Segmento rascador con superficie superior de margen interior achaflanado.



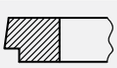
N-IFU = Segmento rascador con superficie inferior de margen interior achaflanado.



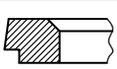
N-IW = Segmento rascador con superficie superior de margen interior escalonado.



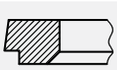
N-IWU = Segmento rascador con superficie inferior de margen interior escalonado.



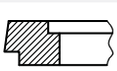
TN = Segmento rascador cónico



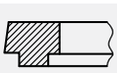
TN-IF = Segmento rascador cónico con superficie superior de margen interior achaflanado.



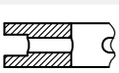
TN-IFU = Segmento rascador cónico con superficie inferior de margen interior achaflanado.



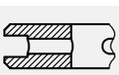
TN-IW = Segmento rascador cónico con superficie superior de margen interior escalonado.



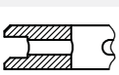
TN-IWU = Segmento rascador cónico con superficie inferior de margen interior escalonado.



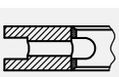
SC = Segmento dentado para control aceite



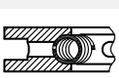
DC = Segmento achaflanado para control aceite



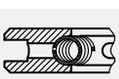
DB = Segmento achaflanado doble para control aceite



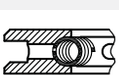
ES = Segmento dentado y con muelle plano para control de aceite



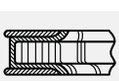
SY = Segmento dentado y con muelle helicoidal para control de aceite



DY = Segmento achaflanado con muelle helicoidal para control de aceite

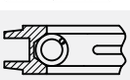


PS = Segmento de doble achaflanado con muelle helicoidal para control de aceite



VF = Segmento con cinturón acero y muelle VF de control de aceite

UB = Segmento con cinturón acero tipo U para control de aceite



SDV = Segmento de acero con canales tipo V y con muelle helicoidal para control de aceite

DKS = Aceitero con punta conica

INSTRUCCIONES GENERALES PARA MONTAJE DE LOS PISTONES

1- Superficie interior del cilindro que se va a montar el pistón debe tener rayas de rectificado. Si el pistón se va a montar en un cilindro usado y /o desgastado, se debe controlar la conformidad de las rayas de rectificado de la superficie inferior. Si las rayas de rectificado de la superficie inferior del cilindro se perdieron por parte o completamente o si se ha formado una superficie reluciente, las rayas de rectificado se deben formar de nuevo.

2- Todos los pistones se producen sensibles para formar correcto espacio de funcionamiento de pistón - cilindro, cuando se montan dentro de un cilindro de tamaño correcto. Diámetros interiores de cilindro se deben controlas si son iguales con los tamaños que se mencionan sobre envase y así definir si es necesario que se procesen de nuevo. Cuando es necesario procesar diámetros interiores de cilindros desgastes a medida superior, se recomienda que diámetro de medidas superiores se procesan en tolerancia de 0.000-0.025 mm.

3- Pasador de pistón se debe quitar de los pistones listos para montaje sin dañar a pistón y el pasador de pistón. Pasadores de pistón deben ser montados combinándose con los tamaños de pistones y no se deben cambiar al azar.

4- Al montar los segmentos en los pistones, se debe utilizar herramientas adecuadas que no dañan a pistón y no deforman a segmentos. Al montar el pistón en el cilindro se debe utilizar adecuado clips de aprieta o manguito cónico de montaje. Después de realizar el proceso de apriete, se debe evitar montar el pistón dentro de cilindro aplicando fuerza excesiva o golpeando, se debe montar por la fuerza de dedo, con cuidado.

5- Antes de montaje del pistón al cilindro hay que limpiar cuidadosamente el cilindro y especialmente hay que limpiar los agujeros de pasador de cilindro y limpiarlos. Antes de montaje se debe aceitar dentro cilindro, para que en el primer funcionamiento hasta que realice el proceso de aceitar no se dañen el pistón y el cilindro.

6-Si en la parte arriba de pistón existe un señal que indica la dirección de montaje, el montaje se realiza conforme a este señal.

7- Debe tener mucha cuidado para no dañar el pistón, pasador de pistón y el segmento.

8- Los pistones se producen conforme a las normas, con otras piezas que se van a utilizar juntos. Por eso no se debe hacer ningún proceso sobre los pistones.

9- Pasador y segmentos de seguridad no tienen que ser usados de nuevo, siempre hay que usar nuevos pasadores y segmentos de seguridad.

10- Control de la linealidad del brazo de biela que se va a utilizar en el montaje es importante para prevenir posibles problemas graves. La linealidad del brazo de biela, se debe controlar otra vez antes de montaje con aparatos adecuados.

NOTA: Hay que actuar conforme de los mencionados en esta instrucción de montaje. El productor no aceptará responsabilidad por problamas causadas de montaje no realizado conforme las instrucciones.

DESCRIPCIONES TECNICAS

8- MARCAJE DE PISTON Y CODIGOS

1- Logotipo de empresa

2- STD / Información sobre medida superior

7- Número de Trazabilidad

5- Espacio pistón cilindro(mm)

8- Tamaño corto de altura de compresión (mm)

4- Número de cilindro que se realizará el montaje

3- Diámetro nominal de pistón

6- Dirección de montaje de pistón Defecto de alineación de agujero de pasador, se puede haber señales determinantes como "front" "Abluft". Símbolo de "Volant" proporciona montaje correcto de pistón al motor.

9- NÚMERO DE REFERENCIA DE PISTÓN

EJEMPLO

Número de referencia de pistón ← **11-01513-000**

000 = STD / Pistón + Segmento
001 = Altura de compresión (strok) -0,20 mm corto
002 = Altura de compresión (strok) -0,40 mm corto
003 = Altura de compresión (strok) -0,60 mm corto
050 = +0,50 mm medida superior / Pistón + Segmento

NÚMERO DE REFERENCIA ANTERIOR	NUEVO NÚMERO DE REFERENCIA
1513 000	11-01513-000

10- NÚMERO DE REFERENCIA DE PISTÓN + SEGMENTO

EJEMPLO

Número de referencia de pistón + segmento ← **31-03513-000**

000 = STD / Pistón + Segmento
050 = +0,50 mm medida superior / Pistón + Segmento

Diferencias entre tipos y revestimientos de los anillos motor. ← **38-** **39-**

NÚMERO DE REFERENCIA ANTERIOR	NUEVO NÚMERO DE REFERENCIA
3513 000	31-03513-000
3513 000-08	38-03513-000
3513 000-09	39-03513-000

11- DESCRIPCIONES DE REFERENCIA DE CAMISA

EJEMPLO

Número de r eferencia de camisa ← **51-05513-000** → 000 = STD / Camisa
050 = +0,50 mm medida superior / Camisa

NÚMERO DE REFERENCIA ANTERIOR	NUEVO NÚMERO DE REFERENCIA
5513 000	51-05513-000

12- DESCRIPCIONES DE REFERENCIA DE KIT, SET

Referencia del Kit Motor : Piston + Pasador + Anillos + Camisa

Numero de referencia del kıt ← **71-07513-000** → 000 = STD / Kit
050 = +0,50 mm sobremedida / Kit

Diferencias entre tipos y revestimientos de los anillos motor. ← **71-8** / **71-9**

NÚMERO DE REFERENCIA ANTERIOR	NUEVO NÚMERO DE REFERENCIA
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13- NÚMERO DE REFERENCIA DE SEGMENTO

Número de referencia de segmento ← **91-09513-000** → 000 = STD / Segmento
050 = +0,50 mm medida superior / Segmento

Diferencias entre tipos y revestimientos de los anillos motor. ← **98-** / **99-**

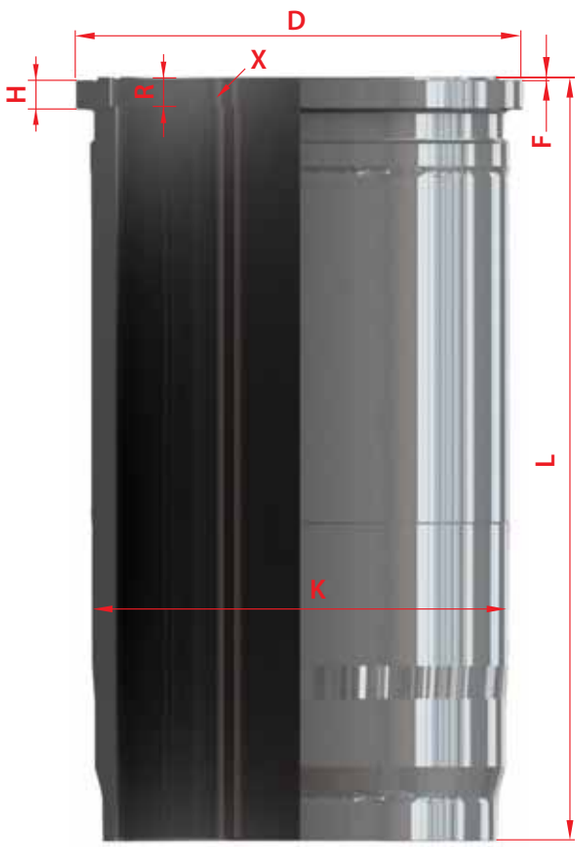
NÚMERO DE REFERENCIA ANTERIOR	NUEVO NÚMERO DE REFERENCIA
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - NÚMERO DE REFERENCİA DE RETÉN

Número de referencia de Retén ← **55-50701-000**

DESCRIPCIONES TECNICAS

DESCRIPCIÓN TECNICO DE LA CAMISA DE CILINDRO



K = Diámetro exterior
L = Altura total
H = Altura de brida
F = Profundidad de junta
D = Diámetro de brida
X = Altura de segmento en lugar de montaje
R = Altura de lugar de montaje

Descripción de Las Camisas de Cilindro Conforme a TES 482

En motores de combustión interna, es elemento de maquina de forma cilindro y de fundición gris que se monta a bloqueo de cilindro, y dentro de este elemento pistón se mueve y el combustible se quema. Camisas de Cilindro de Motor se puede analizar en dos grupos:

Camisa de Cilindro Húmeda

Son camisas de cilindro que en el bloqueo de cilindro se enfrían por agua desde exterior.

Se agrupa en tres grupos principales:

a- : Con Brida y Canal: Son camisas que se montan en el bloque de cilindro con brida desde arriba, en parte baja de motor existen canales de junta para permitir la fuga de agua de enfriamiento. (Imagen-1)

b- Con Brida y Sin Canal: Son camisas que se montan en el bloque de cilindro con brida desde arriba y en parte baja no tienen canales de junta. Juntas de impermeabilidad se encuentran en las canales abiertas en bloque. (Imagen-2)

c- Con Doble Brida: Son camisas que se montan en el bloque de cilindro con brida y junta desde arriba y abajo de un modo que no permita a fuga de agua de enfriamiento de motor. (Imagen-3)

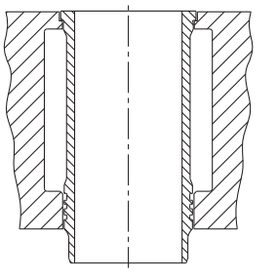


Imagen- 1

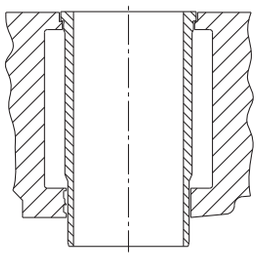


Imagen- 2

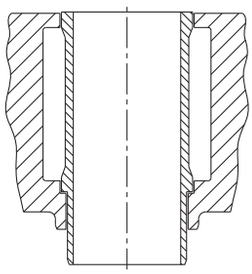


Imagen- 3

Camisas Secas de Cilindro:

Son camisas que no tienen contacto directo con agua de enfriamiento en el bloque de cilindro que se montan.

Se pueden analizar en dos grupos según sus formas:

a- Con Brida (Imagen -4)

b- Sin Brida - Liso (Imagen-5)

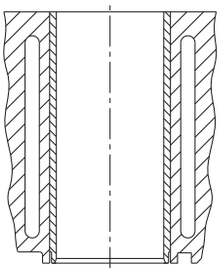


Imagen- 4

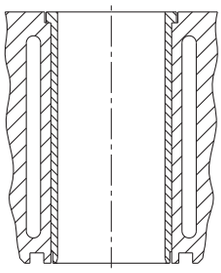


Imagen- 5

LOS PUNTOS A CONSIDERAR EN EL MONTAJE DE CAMISAS DE CILINDRO

INSTUCCIÓN DE MONTAJE DE CAMISAS SECAS DE CILINDRO

Las camisas secas de cilindro se producen con brida y sin brida. (Imagen-6) Mientras que en camisas sin bridas baja condiciones malas es común deslizamiento axial, en caso de montaje de pistón, no es común en camisas con bridas. Es una ventaja de la brida.

Antes de que se presionan las camisas a cilindros, hay que moler o realizar torneado sensible o el proceso de rectificado en los cilindros conforme a valores Nominales que se presentan en la lista de diámetro exterior de las camisas (A) que se ve aquí abajo.

Hay que prestar atención especial a las tolerancias que se mencionan aquí abajo. (Imagen -7). Si no, en caso de que tensión delantera sea muy baja la transferencia de calor no se realiza correctamente, en caso de que tensión delantera sea muy alta, las camisas que tienen paredes muy finos corren peligro de causar desajuste en el cilindro y eso puede causar fallos de operaciones. Las camisas secas cuyas dimensiones exteriores se procesan como medida final, se envían después de atorneado 0.5-0.75 mm más pequeño las diámetros interiores.

Cuando la camisa seca con brida se monta con presión al bloque de cilindro, para evitar que se rompa la brida, el agujero preparado para brida en el bloque debe ser más grande que el diámetro exterior (C) de la brida.

DESCRIPCIONES TECNICAS

En camisas secas con brida, cuando se realiza la presión, parte baja de la brida tiene que sentar bien a superficie de sentar sobre el alojamiento de bloque.

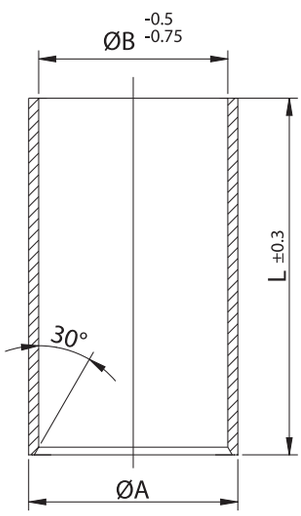


Imagen- 6

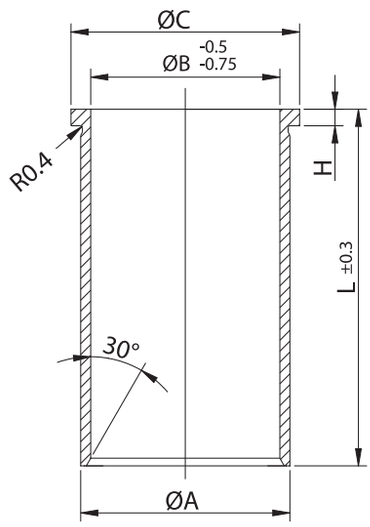


Imagen- 7

Como se sabe las camisas tienen en la parte baja de la brida radio de 0.4 mm. Al montar la camisa al bloque para evitar que se sienta este radio, hay que dejar un achaflanado de 1.0 mm al área donde se sienta la brida. Sino, es inevitable la rotura de brida de la camisa.

Antes de montar nuevas camisas los cilindros que se encuentran en bloque de motor se deben limpiar cuidadosamente y hay que controlar dimensiones de los mismos. La ovalidad y conicidad no debe superar a 0.025 mm. En el proceso de rectificado hay que trabajar para obtener un superficie reluciente y hay que controlar los valores de suavidad conforme a tipo de motor. Superficies muy relucientes y suaves causan que el proceso de aceitar se falte por eso no hay que evitar que sean así los superficies.

Presiones de 3000-5000 kg son bastantes para camisas secas de cilindro. Si se utiliza un material duro como material de aceite, después de un tiempo este material pasa por coquificación por el calor y transferencia de calor se dificulta. Después de montaje con presión, los molidos deben quitarse de superficie de la junta de bloque de cilindro mediante molidos de superficie.

Si es necesario procesar superficie de junta de bloque de cilindro, superficie de sentar para las bridas en alojamiento debe ser más profunda. También se pueden encontrar camisas de cilindro que tienen dimensiones interiores torneadas y otras que tienen dimensiones terminadas.

Estas camisas se presionan a cilindro con poca cuota de retrificado y el proceso de retrificado se realiza después de presionar. Tolerancia de medida nominal de diámetro interior de cilindro es de +0 ile +0.015 mm. Tolerancia de medida nominal de diámetro exterior de cilindro es de +0.012 ile 0.024 mm.

	Grupos de Diámetro Exterior de Camisas		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	Diámetros de Agujero de Bloque (mm)		
	50 - 80	80 - 120	120 - 180
Q_1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25

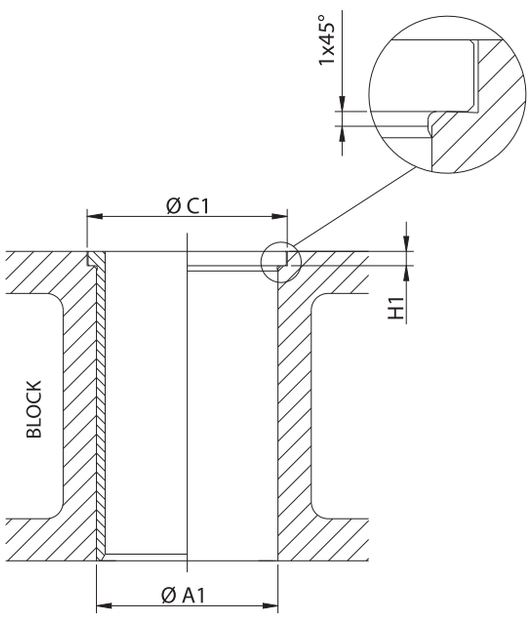


Imagen- 9

INSTUCCIÓN DE MONTAJE DE CAMISAS DE CILINDRO HUMEDAS

Camisas de Cilindro de YENMAK Motor se producen por método de fundición centrifugada que proporciona resistencia contra desgaste y tire. Cuando se quita camisas antiguas de cilindro hay que prestar mucha atención para no causar daño en las superficies de cilindro.

Se debe limpiar cuidadosamente el cal, barro o otros materiales de suciedad si cuando existen en bloque de motor, en puntos de contacto de cilindro. En la limpieza no hay que utilizar cortadores o rascadores que pueden rayar superficies. Para este proceso el utensilio apto es cepillo de alambres. Para quitar capas de cal, oxidación y para quitar antiguas camisas que se fijan en cilindro hay que golpear con una chaveta y martillo, si la camisa no se puede quitar asi se utiliza presión hidráulica. Mientras se limpia hay que prestar atención en superficies de sentar para que estas no se dañen.

Superficie que se sienta brida de camisa debe ser paralelo a superficie de bloque. No debe presentar ninguna diferencia en sentido de plenitud y lisura como se ve en (Imagen-10). Además hay que controlar si el eje de cilindro es vertical según superficie de junta de bloque de cilindro. (Imagen-11) Siempre hay que tener cuidado tambien para no aplastar superficies de sentar de cilindro. (Imagen 12)

Para evitar que radio que se encuenta debajo de brida de camisa (d) se sienta en lugar de superficie de sentar de brida (a) hay que dejar un radio de 45° 0.5-1.0 mm en el punto donde se encuentra diámetro de cilindro (c). Para evitar el peligro de rotura la fuerza de impermeabilidad y fuerza opositor tienen que colocarse en sentidos opositos.

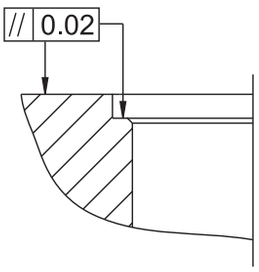


Imagen- 10

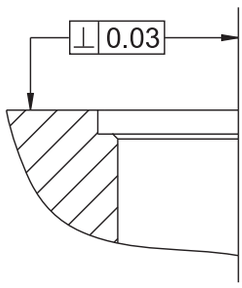


Imagen- 11

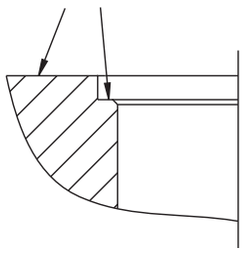


Imagen- 12

Debe de ser de mismo tamaño el diámetro de agujero de juntas (b) y diámetro exterior de la camisa (c). Para proporcionar impermeabilidad completa a cámara de combustión hay que utilizar juntas de marco metálico.

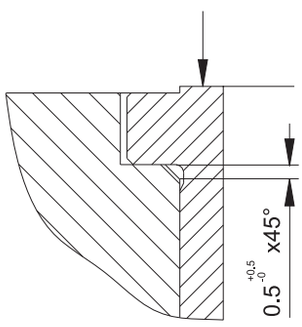


Imagen- 14

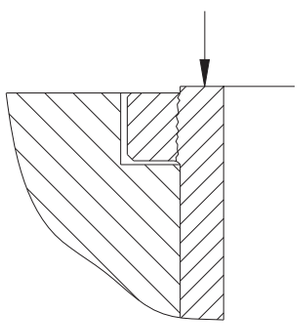


Imagen- 15

Con el fin de determinar si el bloque de cilindros se establece fácilmente dentro de la camisa de cilindro y es muy grande o muy amplia, camisa de cilindro debe ser insertado en el bloque de cilindros a mano sin el uso de anillos de goma antes de la instalación. Especialmente para controlar si la posicionamiento de brida de la camisa con la superficie es correcto o no, se recomienda trastornar la camisa y ponerla a superficie de montaje de brida antes de montaje. Como se sabe, brida debe estar en parte que no se enfría de motor y se expande.

Aquí hay que tener en cuenta un espacio de 0.3-0.5 mm.

En esta instrucción de montaje, la cosa que más se subraya es que el proceso de montar y quitar la camisa se debe realizar conforme a objetivo. O sea, problemas causados por el uso de martillo u otros utensilios en el proceso de montaje dan una solución mala.

Rings de caucho que se utilizarán en el montaje deben ser de buena calidad y resistentes a inflamación, envejecimiento, el aceite y el calor. Sino, el agua baja a cárter y presión a la camisa y deformación de las medidas se realiza. Cada vez se aplica jabón de aceite a rings de caucho y así se colocan en alojamientos.

Rings de caucho solamente pueden ser los que se prefieren por productores de motor. Porque son resistentes a inflamación, envejecimiento, el aceite y el calor.

Agarrotamiento del pistón, lo que provoca la rotura de la camisa del cilindro, es un resultado de la utilización inadecuada de los anillos de goma. Puntos donde se colocan los anillos de goma no deben ser raspados.

Hay que controlar una vez más la medida de cilindro después de poner las camisas manualmente. Este control especialmente debe realizar en los lugares de rings de caucho donde se pueden ocurrir ovalidad o inclinación.

Después de poner comletamente las camisas bloque de cilindro debe llenarse con agua y presionarse para controlar el estado de impermeabilidad.

DETALLES DE MARCAJE DE CAMISA

RETÉN

Junta Torica	
EPDM	Caucho EPD
NBR	Goma/Perbunan (NBR)
FPM / VI	FPM / FKM
Cu	Cobre
T	Latón Rojo
ST	Acero
SC / MVQ	Silicona (VMQ)
Shim / SM	Metal Blando

93,000 (1)		(3)	(4)	(5)	(6)	(7)
4JB1 (2)		D	00 2005 > 00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) (9) CH 51,850 VD1 0,550 (10) (11) B- 19,500 BØ 43,900 (12) (13) TL 91,850 (15) 31,00x76,00	(14) AP YS HA CP	91-09389-000 1 2,000 P 2 2,000 P 3 4,000 CrP (16)	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)		Ø 93,000 (18)	31-04385-000 (19)
		99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF (16)				39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
K=95,00 (22) (24) L=181,00 H=0,90 (25) (23) D=101,00	DF-CR-ST (26)				51-35721-000 (20)	71-08385-000 71-98385-000 (21)
K=120,00 (22) (24) L=229,00 H+F=9,00+1,10 (25) (23) D=128,50	WF (26)		O-Ring/Seal 55-50613-000 2 FPM 112,00x3,00 (28)		51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

1 - Diámetro de Pistón
2 - Código de Motor
3- Información de Combustible
4- Años de Modeles
5 - Número de Cilindro
6 - Volumen de Cilindro
7 - Potencia de Motor
8 - Código de Pistón
9 - CH: Strok
10 - VD1/VD2: Profundidad de Válvula
11- B- : Profundidad de cámara de combustión
B+ : Altura pertuberancia cabeza
12- BØ: Diámetro de Célula
13- TL: Longitud Total
14 - Especialidades de Pistón
*DAP: Pistón Con Alfin Doble
*AP: Pistón Con Alfin
*YS: Piston con enfriamiento de aceite
*CP: Piston Con Chapa de Acero
*HA: Con Revestimiento de Anodizado Duro
*PDB: Agujero de Pasador Con Cojinete
15- Diámetro de Pasador - Tamaño - Especialidades
16 - Especialidades de Segmento
17- Alzas de Cabecera de pistón
18- Diámetro de Cilindro
19- Piston + Brazo de Segmento
20 - Código de Camisa
21 - Código de Kit
22- Diámetro Exterior de Cilindro
23- Diámetro de Brida de Camisa
24- Longitud Total de Camisa
25- Espesor de Brida
26- Especificaciones de la camisa.
*WS : Revestimiento húmedo semi terminado
*WF : Revestimiento húmedo final completo
*DS : Revestimiento seco semi terminado
*DF : Revestimiento seco final completo
*AF : Refrigerado por aire final completo
*PH : Fosfato
*CR : Cromo
*HR : Curtido
*NT : Nitrato
*HT : Tratamiento térmico
*STEEL : Acero
27- Moteur commun
28- Código de Retén

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Motor tipleri, açıklamalar, ürünler, ürün resimleri, üreticiler, araçlar v.b. nitelendirmeler sadece referans amaçlı verilmiştir.

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Yenmak em 1965 pela família Kahvecioğlu foi fundada em Konya como uma pequena oficina. YENMAK Ao longo dos anos, sempre se renovando e melhorando a casa e no exterior como um fornecedor independente de peças de motor, tornou-se um dos maiores fornecedores mundiais. Yenmak hoje "produção de equipamento, êmbolo, pino do pistão, anel de pistão, forro do cilindro do motor, selo, válvula do motor e berço" abastecimento destes produtos são exportados para mais de 80 países diferentes dos cinco continentes.

Para nossos clientes, nós, como um parceiro de longo prazo; Além da melhor qualidade e preço razoável e máxima confiabilidade; tais como serviço pós-venda e as vendas, o portfólio de produtos aos seus clientes a partir de uma única fonte assegura o fornecimento de todas as peças de motor em um pacote.

Yenmak tem INMETRO, ISO 9001, ISO / TS 16949, IATF 16943, TS EN ISO 14001. Yenmak, um total de 50.000 metros quadrados de área, está localizado em Konya Organizado Zona Industrial 1,2,3.(Planta Sede 1 e 2 ea construção de logística,). Vendas e atividades de marketing YENMAK em Istambul, realizado no escritório de exportação.

Sede E Logística

E Pino Do Pistão Fábrica

Camisa De Motor De Fábrica

PEÇAS DE MOTOR

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Os dados para encontrar os detalhes do pacote são:

Graças ao nosso selo especial, você é o primeiro a abrir o produto.

Número de rastreabilidade

Com o objetivo de ser segura, uma holograma 3D integrado na caixa.

Com o objetivo de garantir a segurança dos produtos, aplicado caixa de seis etiqueta de segurança.

BUREAU VERITAS
Certification

BUREAU VERITAS Certification

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2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12 SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 9001:2008

Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN ALÜMİNYUM KOKİL DÖKÜM PİSTON VE PİSTON PİMİ ÜRETİMİ

İlk Döngü Başlangıç Tarihi: 23 Eylül 2014
Önceki Döngü Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Döngüsü Başlangıç Tarihi: 21 Eylül 2017

Kuruluşun yönetim sistemi, standardın yeterliliklerini karşılamaya devam ettiği sürece bu sertifika 14 Eylül 2018 tarihine kadar geçerlidir.

Sertifika Numarası: TR000075-1 Sürüm No: 1 Revizyon Tarihi: 21 Eylül 2017

TÜRKAK

SEÇKİN DEMİRALP
Belgelendirme Müdürü

Sayfa 1/1

BUREAU VERITAS Certification

Certificate of Approval

Awarded to

YENMAK PİSTON SEGMAN SAN. VE TİC. A.Ş.

KIRIM CD. SARIÇİÇEK SK. NO:12 SELÇUKLU KONYA
42000 - Konya - Turkey

Bureau Veritas Certification certifi that the Quality Management System of the above organization has been audited and found to be in accordance with the requirements of

ISO/TS 16949:2009

and the applicable customer specific requirements

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
7.3 - Product design responsibility

PRODUCT(S) DELIVERED
PISTONS AND PISTON PINS BY ALUMINIUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

BUREAU VERITAS Certification

YENMAK PİSTON SEGMAN SANAYİ VE TİC. A.Ş.

2.ORGANİZE SANAYİ BÖLGESİ KIRIM CAD.
SARIÇİÇEK SOK. NO: 12
SELÇUKLU, KONYA, TÜRKİYE

Bureau Veritas Belgelendirme Holding SAS – İngiltere Şubesi yukarıda adı geçen kuruluşun, Yönetim Sisteminin aşağıda detayları belirtilen Yönetim Standardı gerekletirine uygunluğunu değerlendirmiş olup, onaylamaktadır.

Standart

ISO 14001:2004

Belgelendirme Kapsamı

ÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Döngüsü Başlangıç Tarihi: 26 Ağustos 2016

15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Orjinal Sertifika Tarihi: 26 Ağustos 2016

Sertifika Numarası: TR004743-1 Sürüm No : 1 Revizyon Tarihi: 26 Ağustos 2016

UKAS

SEÇKİN DEMİRALP
BVCH SAS İngiltere Şubesi
adına imzalayan

Sayfa 1/1

BUREAU VERITAS Certification

YENMAK MOTOR GÖMLEK SANAYİ VE TİCARET A.Ş.

1.ORGANİZE SANAYİ BÖLGESİ HOROZLUHAN MAH. ATABEY SOK. NO: 8 SELÇUKLU, KONYA, TURKEY

Bureau Veritas Certification Holding SAS - UK Branch certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2015

Scope of certification

MANUFACTURING OF CASTING AND MACHINING CYLINDER LINERS AND CASTING RING CARRIERS

Original cycle start date: 01 February 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 04 October 2017
Certification / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of he organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006347-1 Version No: 1 Revision date: 12 January 2018

UKAS

İBRAHİM TAŞKY
Signed on behalf of
BVCH SAS UK Branch

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification

BUREAU VERITAS
Certification

Certificate of Approval

YENMAK MOTOR GÖMLEK VE TİC. A.Ş.

1. ORGANİZE SANAYİ BÖLGESİ, HOROZLUHAN
MAHALLESİ, ATABEY SOKAK No:8, SELÇUKLU
42120 - KONYA - Turkey

IATF 16949

SCOPE
Manufacturing

PERMITTED EXCLUSION(S)
8.3 - Design and development of products and services

PRODUCT(S) DELIVERED
Casing and machining cylinder liners and casting ring carriers

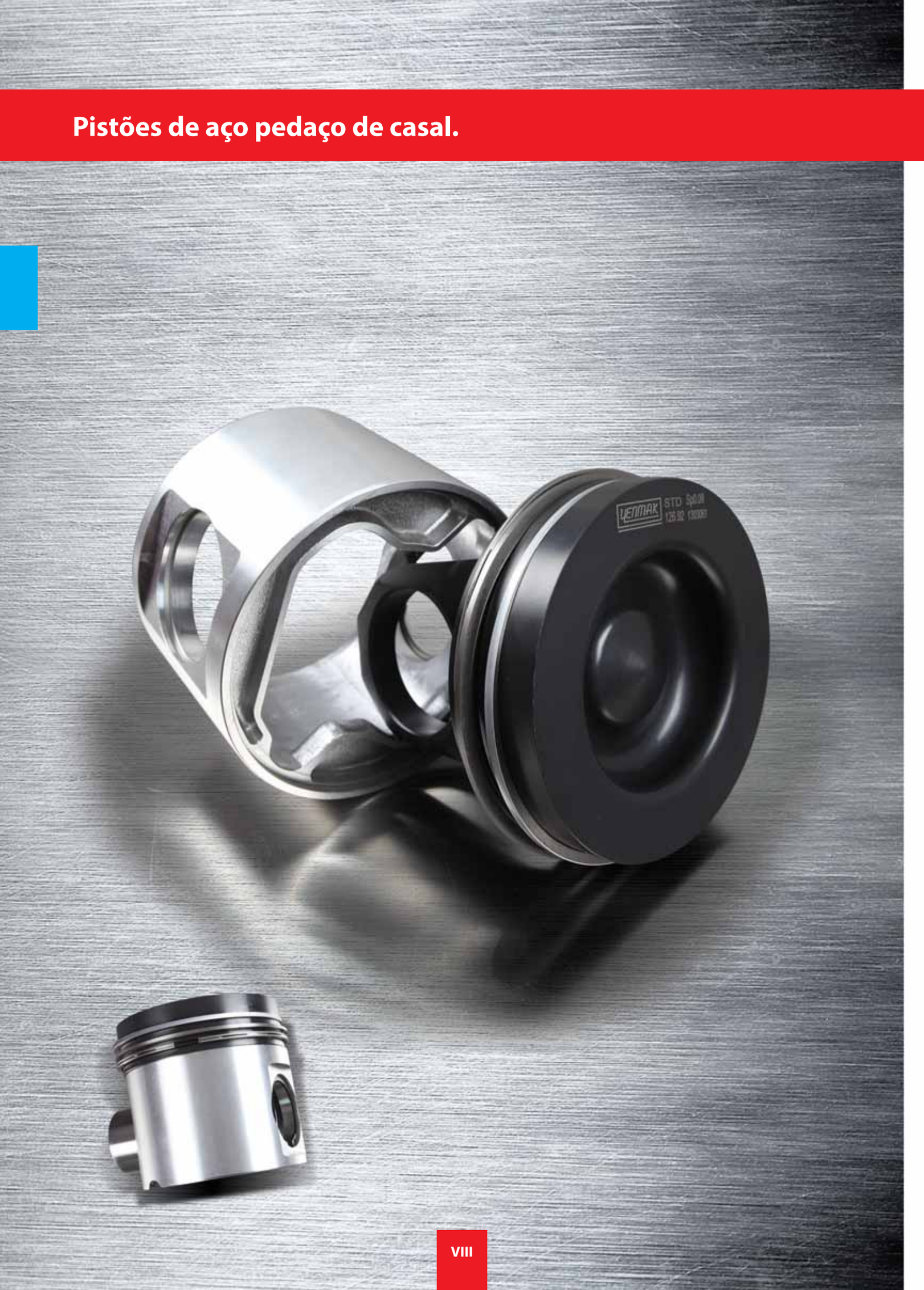
TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

KONYA BELGELENDİRME MÜDÜRÜ

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

KONYA BELGELENDİRME MÜDÜRÜ

Pistões de aço pedaço de casal.



Duplo peça pistão de aço, consiste em o movimento do pino de êmbolo na cabeça do êmbolo e do aço e alumínio interligado haste do êmbolo.

Devido à resistência elevada e valores baixos de desgaste, esses pistões são, principalmente, oferece trabalho em baixa as emissões de escape e limites de emissões para os motores diesel pesados.

Peça de aço Pistons dupla;

• A nova geração de motores com altas taxas de compressão e câmara de combustão moderno,

• Nos motores pesados com motores diesel,

• Em motores que utilizam os vários sistemas de combustível,

Vantagens de via dupla pistão de aço;

• De acordo com os pistões pistões de aço de alumínio peças de casal; Devido às distâncias de menos contacto com o revestimento, que garante menos forças de atrito induzido perdas.

• Pistões de aço dupla peça, em comparação com pistões de alumínio;

• Devido à sua elevada resistência à carga térmica, reduzir o risco de deformação e revestimentos podem operar em uma câmara inferior do cilindro aumenta as propriedades de vedação dos anéis.

• Normalmente, um pistão de alumínio mostrando resistência à pressão de até 100 bar, um pistão de aço com as mesmas dimensões podem suportar a pressão até 250 bar.

• Uma maior taxa de compressão no motor e permite a formação de entre 2-5% menos emissões de CO_2. ALF utilizado em cilindros de alumínio para motores diesel (Ni-resistir) permite reduzir os problemas decorrentes do contato material.

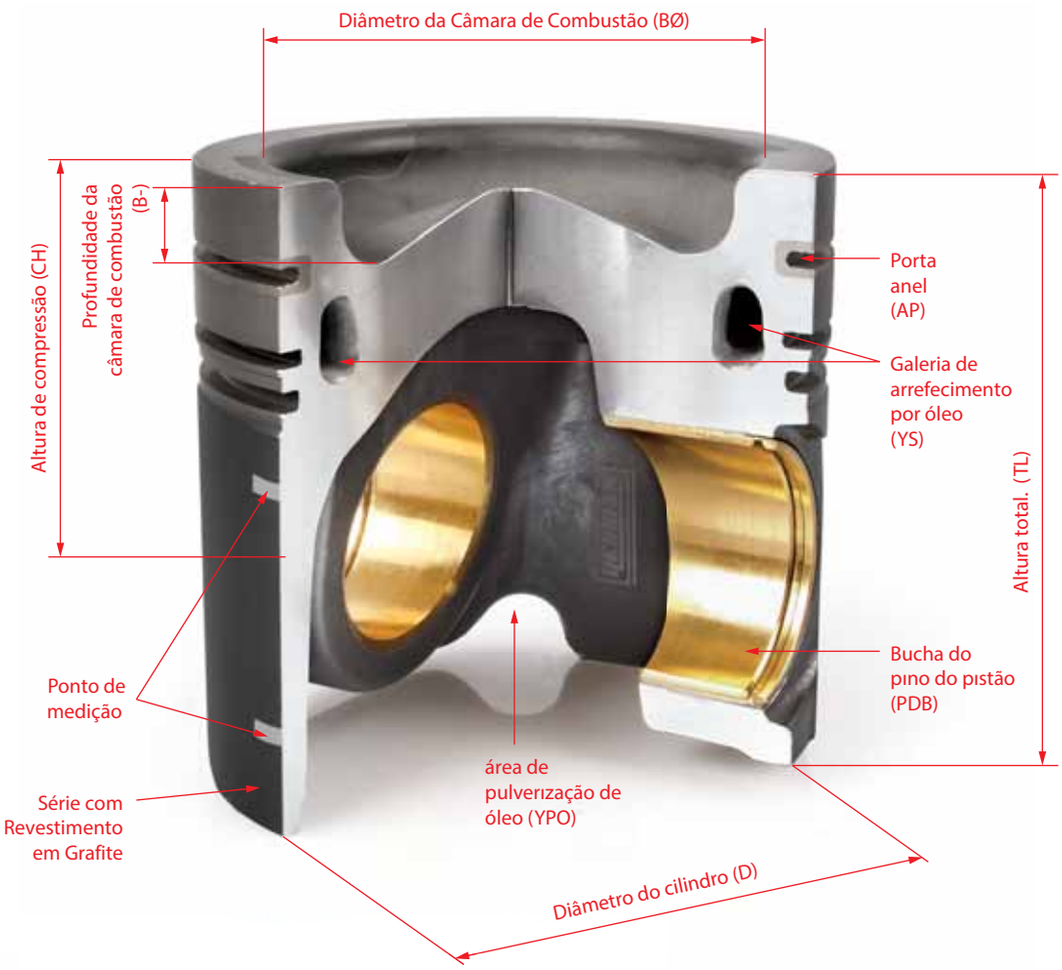
• A conduta de arrefecimento de êmbolo, o êmbolo pode estar mais perto do topo do canal de arrefecimento, permitindo, assim, um arrefecimento mais eficaz pode ser fornecido.

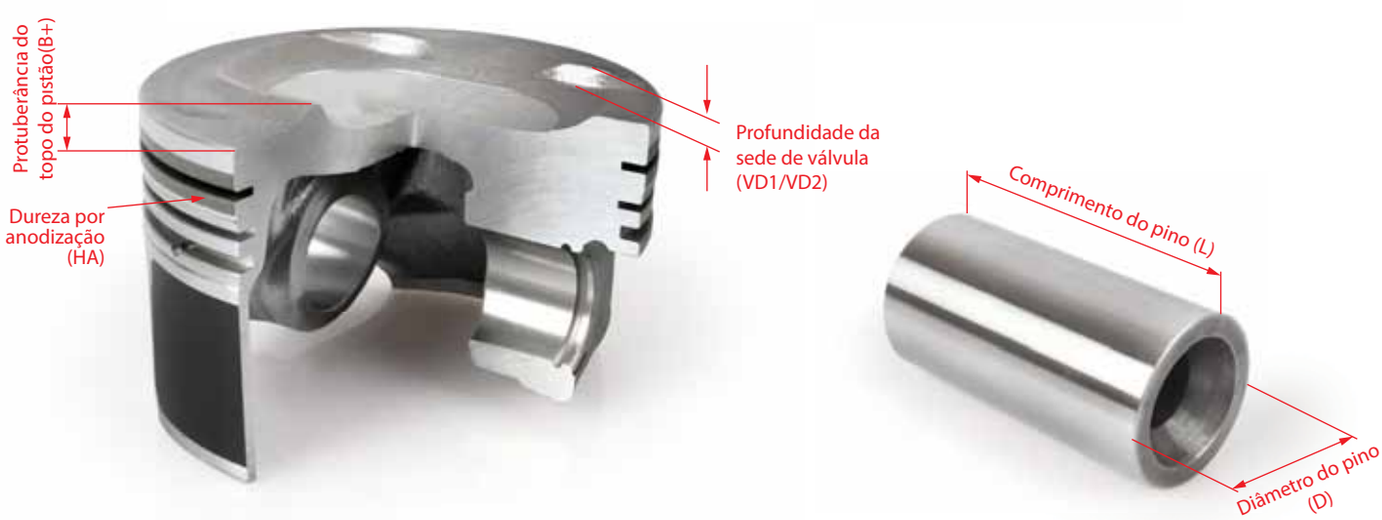
• Pistões de aço dupla peça, em comparação com pistões de alumínio; a câmara de combustão uma distorção mínima.

• Pistões de aço dupla peça prolongar a vida útil do motor, os efeitos positivos, o motor irá moer inferior.

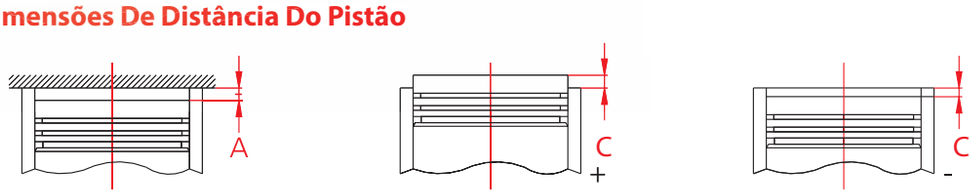
• Pistões de aço duplo peças e pistão ocorreu sistema de sistemas de injeção de combustível sobrealimentação, que resulta da fusão dos problemas de perfuração pistão não ocorrem.

DEFININDO DESCRIÇÃO TÉCNICA;





Dimensões De Distância Do Pistão



A = as dimensões da cabeça do cilindro.

C = tamanho do êmbolo no início da superfície do bloco.

INSTRUÇÕES DE MONTAGEM PISTÃO YENMAK

Quando solicitado, usado para pendurar no pistão, pistons devem ser apuradas de resíduo de carbono nos canais sulco anel e buracos de óleo. Camada de carbono nas colinas fora os Pistons devem ser limpos todos os mais resíduo de carbono. Canais anel deve ser cuidadosamente. Tenha cuidado para não arranhar durante a limpeza da junção do lado e as curvas borda inferior. Caso contrário, começando futuras rachaduras arranhões. Há máquina de ter o anel do pistão porque YENMAK propõe, para adaptar os motores de pistão originais foram projetados. Anéis de pistão do cilindro Yenmak podem ser utilizados, os valores-limite de desgaste são:

Diâmetro A maioria dos motores a gasolina é 0, 1 mm.

O diâmetro dos motores diesel é também 0, 15 mm.

Em geral; que estão no pistão, a cavidade é uma erosão dos valores definidos acima,

Deformação excessiva da ranhura para o anel de pistão é para ser substituída. À medida que os segmentos de pistões e perturbações na forma de paralelismo no canal, é enganadora para um valor adequado e segmentos espacial bem neste tipo de êmbolo, causar sintomas como óleo e drenagem. Anel de dobragem para cima e para baixo, a fim de tornar o movimento da superfície de trabalho na forma de anéis e deterioração do material de revestimento pode causar deformado. Esta deformação e invisível, pode levar a problemas com as condições de funcionamento do motor.

Arruelas (abertura anel com uma pinça) é aberta, coloque seus slots no pistão, respectivamente. Então, através de um cônicas clips anel ou apertar o anel com manga e martelo cabo de montagem no topo do pistão, cilindro, se necessário, tocando em seu slide. Durante este processo, para evitar danos por ficar braçadeira de anel fino, como o bloco terminal de rosto para baixo de forma contínua, preste atenção para a conservação. No motor de forros intra-crómio, cromados anéis de pistão não deve ser usado.

A superfície em YEN ou TOP do segmento com as marcas, que enfrenta o branding, queimadura, de frente para a câmara, deve ser anexado à habitação. Sem uma marcação sobre os anéis de pistão pode ser instalada em qualquer direcção.

ANEL REVESTIMENTOS E TRATAMENTOS DE SUPERFÍCIE

Cr = cromagem.
Mo = revestimento do molibdênio
P = revestimento de fosfato
Fe = revestimento ferroksit
Cu = bainha de cobre
Nt = revestimento de nitreto
Sn = tin chapeamento
Ck = cromo cerâmica
Pvd= deposição de vapor físico
Cdc= revestimento de cromo diamante
Dlc = revestimento de carbono revestido de diamante
Tef = revestimento de Teflon

DEFININDO DESCRIÇÃO TÉCNICA;

REVESTIMENTOS E TRATAMENTOS DE SUPERFÍCIE DE PISTÃO,

Ck (O crómio revestimento cerâmico)

Revestimentos de cromo-cerâmico (CK) e crómio obtidos por a estrutura da rede da alumina formar um elemento de envelope aninhados compósito. Estes revestimentos são principalmente veículos com pistões do motor diesel, anéis de pistão utilizados para cobrir os primeiros slots. CK revestimento, como resultado das diferenças no processo de electrólise, adicionando alta qualidade e desempenho.

A diferença entre o revestimento Ck e cromagem dura;

- Abrasão superior.

- Ponto de fusão mais elevado.

- Dureza e densidade de crack maior.

Devido a estas vantagens, revestimentos de CK são usados em veículos, a extensão da vida do motor permite a criação de baixa emissão de gases de escape.

PVD (Physical Vapor Deposition)

A decomposição do reagente na fase de vapor do revestimento duro, um método devido à acumulação de segmentos de superfície, chamado método PVD. Para arco eléctrico ou bombardeamento iónico, evaporação do metal e ionização por meio deste método. E providenciado iões metálicos dissociados, é avançada para a superfície do componente. Como resultado, os átomos de metal reagir gases reagentes, e nitreto, carboneto e óxido. Após a reacção, a superfície do anel de operação é formada uma camada fina. Devido à natureza do revestimento de cerâmica é altamente resistente à abrasão.

Mo (Molibdénio)

De modo a evitar influências ambientais anéis são revestidos com molibdénio. A fim de evitar as queimaduras, a superfície de trabalho dos segmentos pode ser preenchido com molibdénio ou de toda a superfície a ser revestida. O processo de revestimento por pulverização e tanto chama de plasma pode ser realizada pelo método de pulverização. Molibdênio, elevado ponto de fusão (2620 C⁰), graças à sua estrutura porosa, e o efeito lubrificante dos anéis de pistão sobre a superfície de trabalho, faz com que seja mais resistente. Resistência ao desgaste e abrasão alta condutividade térmica.

Cr (cromagem)

Para aumentar a durabilidade dos anéis, que método é usado extensivamente revestidas com cromo duro. Chromium alvo menos desgaste prolongar a vida útil dos anéis de pistão e camisas de cilindro. Redução da parede do cilindro e do anel de desgaste, pode ser feito por revestimento dos anéis de topo de crómio. Hoje em dia, não só o anel de pistão superior, mas também tem a tendência de crómio a partir de dois ou mais segmentos. O revestimento com cromo, porque para criar uma superfície dura, é claro que reduz o desgaste dos aros do êmbolo.

Revestimento de crómio é aplicada de duas maneiras:

- Difícil,

- Revestimento poroso com crómio,

Em processo de cromagem dura, depois de as superfícies de pistão revestidas com cromo, apedrejado para obter a sua forma final. Anéis, apenas o revestimento poroso com cromo, superfície adquire uma função de separador de gordura. Por conseguinte, limitar tanto as próprias obras bem como a sua superfície lateral, também ao desgaste.

Nt (Nitrito De Revestimento)

Nitrito processo de revestimento, todas as superfícies do anel são endurecidas. Com este revestimento, a resistência ao atrito da superfície aumenta. Assim, o tempo de vida é prolongado anel. De produção e de emissão de propriedades do revestimento de nitreto é ambientalmente amigável. Resultados mais efetivos de trabalho dos revestimentos de superfície desempenho críticos com nitrito foram demonstrados. Anel de reduzir derramamentos de petróleo que consistem em pontos sensíveis. Reduz a fragilidade de anéis de ferro fundido. Aumenta a vida útil do motor.

CDC (revestimento de diamante cromo)

Este tipo de revestimento pode ser utilizado nas colinas e anéis em Euro 4 motores diesel.

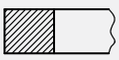
flexível e pode ser aplicado a liga de ferro fundido de aço carbono. Partículas de diamante são usados em vez de partículas de cerâmica. Pelo qual a resistência ao desgaste contra o atrito e melhorar o desempenho.

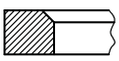
DLC (de carbono diamante)(Revestimento de carbono revestido de diamante)

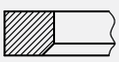
Com este revestimento reduz o atrito e aumento da resistência à abrasão. Tal como acontece com as propriedades de revestimento DLC, é um edifício ambientalmente amigável. As ligações químicas são fortes, inquebrável sob estresse mecânico.

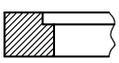
Eles são não-cristalino, amorfo. Devido a este material de construção é um material muito forte. Outros revestimentos com base em mais durável, mais resistente ao desgaste e ao rasgamento.

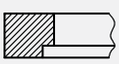
DEFININDO DESCRIÇÃO TÉCNICA;

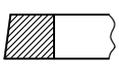

D = Anéis retangulares.

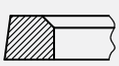

D-IF = Superfície chanfrada anel rectangular borda interna.

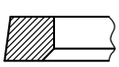

D-IFU = Anel inferior interior borda chanfrada oblongo.

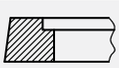

D-IW = Superfície de Borda dentro gradualmente anel retangular.

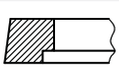

D-IWU = Borda interna gradualmente menor anel retangular superfície.

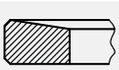

K = Arruelas cônicas.

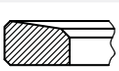

K-IF = Anel interno cônico cantos chanfrados superfície.

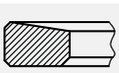

K-IFU = Bordas chanfradas cônico anel inferior interior.

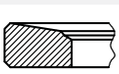

K-IW = Superfície periférica interna gradualmente reduzida anel.

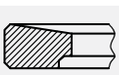

K-IWU = Gradualmente afunilada bordo interior do anel inferior.

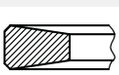

TT = Anéis de trapézio unilaterais.

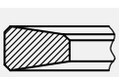

TT-IF = Arestas interiores de superfície chanfrada anéis trapézio lados.

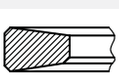

TT-IFU= İçken faces chanfradas anéis de trapézio de superfície.

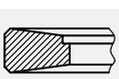

TT-IW = Dentro superfície Borda gradualmente anéis de trapézio lados.

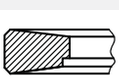

TT-IWU = Borda interna gradualmente inferiores anéis trapézio unilaterais.

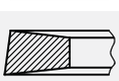

T = Anéis trapezoidais frente e verso.

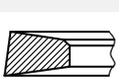

T-IF = Superfície chanfrada dentro de anéis de trapézio borda duplex.


T-IFU = Com dois lados bordas da superfície inferior do anel interior chanfrada trapézio.

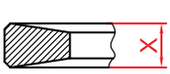

T-IW = Superfície do bordo interior anéis trapezoidais duplas gradualmente.

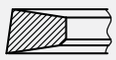

T-IWU = Borda interna gradualmente mais baixo face anéis trapezoidais.

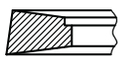

TK = Trapezoidal anéis cônicos de dupla face.

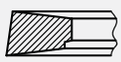

TK-IF = Superfície chanfrada dentro de borda dupla trapezoidais anéis cônicos.

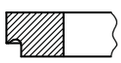
SDR = V-channel anel de controle de óleo de aço mola helicoidal.

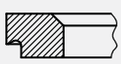

X = Espessura do corte (mm)

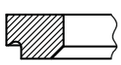

TI-IFU = Com dois lados bordas da superfície inferior do anel de trapézio cone superior chanfrada.

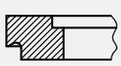

TK-IW = Superfície de dupla face gradualmente reduzida anéis trapézio borda interna.

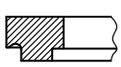

TK-IWU=Anéis de trapézio Duplex gradualmente reduzida borda interna da superfície do fundo.


N = Anéis de nariz raspador.

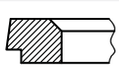

N-IF= Superfície chanfrada dentro anéis raspadores nariz borda.

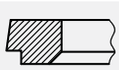

N-IFU = A superfície inferior da borda interna chanfrada anéis raspadores nariz.

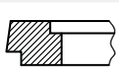

N-IW = Inside Edge skimmers de superfície gradualmente anéis de nariz.

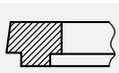

N-IWU = Nariz dentro de borda skimmers gradualmente inferiores.

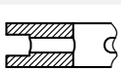
TN = Anéis Nosecone raspador.

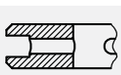

TN-IF = Superfície interior bordas chanfradas nariz afilado anel raspador

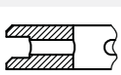

TN-IFU= Bordas chanfradas interior inferior nariz afilado anel raspador

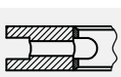

TN-IW = Dentro superfície Borda anel raspador de nariz gradualmente reduzida

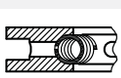

TN-IWU= Fundo borda interna do anel raspador de nariz gradualmente reduzida

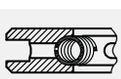

SC = Fenda anel de controle de óleo

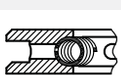

DC = Anel de controle de óleo chanfrada

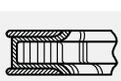

DB = Anel de controle de óleo duas vezes chanfrada

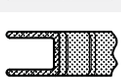

ES = Reed fenda anel de controle de óleo


SY = Mola helicoidal com fenda anel de controle de óleo


DY = Mola helicoidal bordas chanfradas anel de controle de óleo


PS = Mola helicoidal bordas chanfradas casal, anel de controle de óleo


VF = Anéis de controle de óleo VF feito de banda de aço mola


UB = Aço do tipo banda de anel de controle de óleo

SDV = Canal-V anel de controle de óleo de aço mola helicoidal

DKS = Anel de óleo com fenda, ponta cônica e mola

INSTRUÇÕES DE MONTAGEM PISTÃO GERAL.

1- O cilindro de pistão está preso à superfície interior deve baklavams linhas de moagem. Se pistão usado pronto para a instalação e / ou no cilindro desgastado instalada no interior deve ser verificada a conformidade com as linhas que afiam. Se a superfície interior do cilindro, é aperfeiçoar linhas e superfície lisa é composto por parcialmente ou totalmente perdida, aperfeiçoar reveste a superfície interior da garrafa tem de ser cortado para voltar a ocorrer.

2- Todo o êmbolo, se for medido correctamente instalado num cilindro, e pistão-cilindro de trabalho definido para a realização do furo, fabricado com precisão. o diâmetro interior do cilindro, para determinar a medição no rótulo da caixa ou a adequação deve ser verificado e re-processada de modo a que eles têm de ser verificados. o diâmetro interior de cilindros gastos, o processamento de medição superior é, o diâmetro nominal da medida de tolerância superior recomendada processamento de 0000-0025 mm.

3- Pronto para a montagem do pistão do pino de êmbolo, o pino do êmbolo, e que não sejam prejudiciais para ser removido por um método adequado. Pino de êmbolo, a fim de proporcionar combinado montado em conformidade dimensional do pistão é alterada de forma aleatória.

4- Durante a inserção dos segmentos de pistões; anéis de distorcer e danificar o pistão, utilizar equipamento adequado. Durante o elemento pistão-cilindro, com um anel de grampos adequados ou manga cónica de montagem. Adequadamente, o processo de fiação de anéis, levada a cabo após o pistão no cilindro deve evitar a instalar a aplicação de força excessiva, ou para fotografar deve ser cuidadosamente instalado com a força de dedo.

5- Os pistões, antes da montagem do cilindro cuidadosamente limpos e a limpeza do furo do pistão e do pistão do pino, especialmente a lubrificação de interesse. Durante a primeira execução antes da instalação para evitar danos no pistão do cilindro interno e lubrificação cilindro Até então, bem untada.

6- Se a coroa do pistão, a marcação indica a direcção de montagem do sinal, considerando que marca durante a instalação, a instalação deve ser feito corretamente.

7- Para evitar danos nos anéis de pistão e pinos de pistão, tomar o máximo cuidado.

8- Pistons, em conformidade com as normas geralmente aceites, são fabricados para as outras partes são utilizadas em conjunto. Por conseguinte, faz depois.

9- Alfinetes de segurança e anéis não podem ser reutilizados, use sempre um novo pino eo retentor.

10- A linearidade da haste de ligação para uso no controle é importante para os problemas graves que as impedem. A linearidade da haste deve ser verificado novamente antes da montagem com o equipamento certo.

Nota: Isto deve ser observada de acordo com as instruções de instalação. Instruções do fabricante não é responsável por quaisquer problemas causados pela instalação incorreta.

DEFININDO DESCRIÇÃO TÉCNICA;

8- PISTON MARCAÇÃO E CODIFICAÇÃO;

1- Logotipo da empresa

2- Std informações métricas superior /

7- Número de rastreabilidade.

5- Cavidade cilindro do pistão (mm)

8- Altura de compressão (mm)

4- Montagem será realizada número de cilindro

6 - Direcção de inserção do pistão. Alinhamento dos furos, "front""abluft" pode ter marcações especiais, tais como a determinação da direção. Símbolo "volante" faz uma fixação exacta dos êmbolos do motor.

3- Pistões nominais de diâmetro

9- NÚMERO DE REFERÊNCIA DO PISTÃO

EXEMPLO

Referência Pistão ← **11-01513-000**

000 anéis = std / + pistão.
001 = compressão (acidente vascular cerebral)
Altura - 0,20 mm mais curto.
002 = compressão (acidente vascular cerebral)
Altura - 0,40 milímetros mais curto.
003 = compressão (acidente vascular cerebral)
Altura - 0,60 mm mais curto.
050 = 0,50 mm acima da medição / pistão + segmento.

NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
1513 000	11-01513-000

10- NÚMERO DE REFERÊNCIA DO ANEL + PISTÃO

EXEMPLO

Número de referência do anel + pistão ← **31-03513-000**

000 anéis = std / + pistão.
050 = 0,50 mm acima da medição / pistão + segmento.

NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
3513 000	31-03513-000
3513 000-08	38-03513-000
3513 000-09	39-03513-000

Diferenças entre tipos de pistão e revestimentos. ← **38-** **39-**

11 - REFEREM-SE AOS FORROS DESCRIÇÕES.

EXEMPLO

Número de referência camisa. ← **51-05513-000** → 000 = STD / camisas.
050 = 0,50 mm acima das medições / forros.

NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
5513 000	51-05513-000

12 - DEFINIÇÕES DE EQUIPAMENTOS E KIT.

Referência do kit montado : Pistão + pino + anel de segmento + camisa de cilindro

Referência do kit montado - Definição ← **71-07513-000** → 000 = STD / Kit
050 = +0,50 mm Sob medida / Kit

Diferenças entre tipos de pistão e revestimentos. ← **71-8** / **71-9**

NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13 - NÚMERO DE REFERÊNCIA DO ANEL.

Número de referência do anel. ← **91-09513-000** → 000 = STD / anéis.
050 = 0,50 milímetros de benchmarking / Anéis.

Diferenças entre tipos de pistão e revestimentos. ← **98-** / **99-**

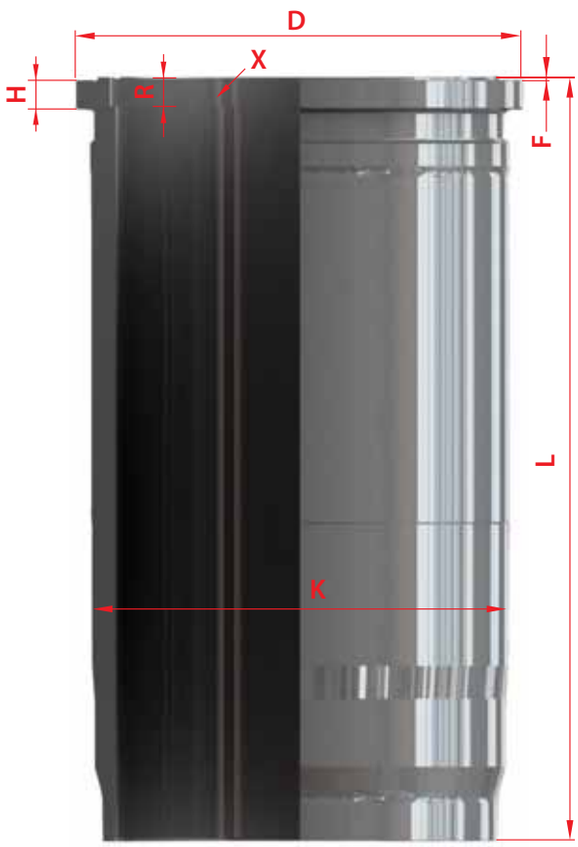
NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - REFERÊNCIA VEDAÇÃO

Referência Vedação ← **55-50701-000**

DEFININDO DESCRIÇÃO TÉCNICA;

DESCRIÇÃO TÉCNICA DA CAMISA DO CILINDRO



K = diâmetro externo
L = comprimento total
H = altura da flange
F = profundidade selo
D = diâmetro da flange
X = comprimento do segmento instituições.
R = em vez definições de comprimento.

TS 482 'de acordo com a descrição do revestimento do cilindro:

Camisas de cilindro, em um motor de combustão interna montada no bloco do motor, que se desloca no pistão e combustível é queimado um ferro fundido máquina cilíndrica partes.

Camisas de cilindro de motor, podem ser divididos em duas classes.

Idade gömklek dos cilindros:

De água gelada na qual estes estão ligados externa para o bloco de cilindros é forros.

Acumulados três grupos principais:

a- Flange e canal: Bloco de cilindros, sentando-se em cima da flange, para garantir a fuga do líquido de refrigeração na parte inferior, há camisas canais vedantes. (Figura 1)

b- Flange e semcanal: Estes são os blocos de camisas de cilindro, ao sentar-se nas flanges superiores e inferiores sem canais vedantes. Selos no bloco localizado no canal de abertura. (Figura 2)

c- Flange Duplo: motores, água de arrefecimento de modo a não perder a parte superior e inferior e flanges são detectados como um camisas de cilindro fechadas. (Figura 3)

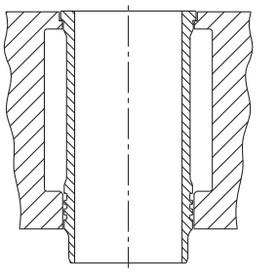


Figura - 1

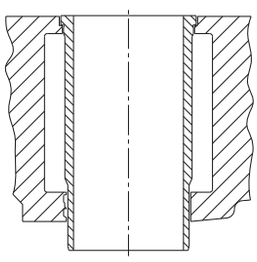


Figura - 2

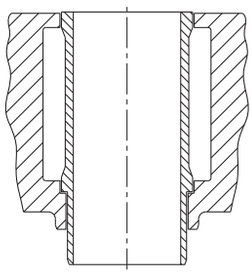


Figura - 3

Camisas De Cilindro Secas:

Eles não estão em contacto com as camisas de cilindro são inseridos bloco diretamente com água de arrefecimento.

A forma podem ser analisados em duas categorias principais:

a- flange (Figura 4)

b- flange de carga (Figura 5)

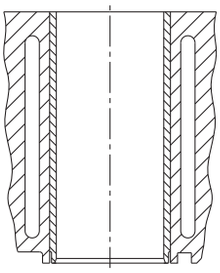


Figura - 4

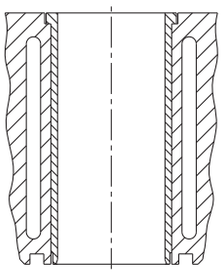


Figura - 5

ASPECTOS IMPORTANTES DA INSTALAÇÃO DO REVESTIMENTO.

INSTRUÇÕES DE INSTALAÇÃO PARA AS CAMISAS DE CILINDRO SECO.

Camisas de cilindros secos são fabricados como flange e sem flange. (Figura 6) geralmente visto na direcção axial do êmbolo no caso de montagem de flanges camisa sob más condições de trabalho não pode ser encontrada em um flange de forros são susceptíveis de deslizar. Esta é uma vantagem da flange.

Forros, antes do cilindro é pressionado, fortes camisas de cilindro de diâmetro externo na lista a seguir para (A) de acordo com o tamanho nominal, ou é vítima de torneamento de precisão ou de moagem e aprimorando processos.

As seguintes tolerâncias, a atenção deve ser pago. (Figura 7) Caso contrário, a tensão é muito baixa, a transferência de calor vai ser saudável, pré-tensão é muito alto, paredes muito finas, o que levará ao perigo de as razões da não-conformidade com camisas de cilindro e, assim, levar para dar questões de falência são susceptíveis de surgir. O diâmetro exterior é enviada como a medida final de camisas secos transformados tornalanarak diâmetro interno pequeno de cerca de 0,5-0,75 mm.

Quando flange de montagem pressiona o bloco de cilindro de revestimento seco, a fim de evitar a ruptura da flange, o furo para o processamento de flange solto, o diâmetro exterior da flange (C) que é maior processada.

DEFININDO DESCRIÇÃO TÉCNICA;

Flangeadas camisas secos, enquanto prima passe, assim como o ajuste direito deve ser fornecida no lado de baixo do assento do alojamento da flange de bloco.

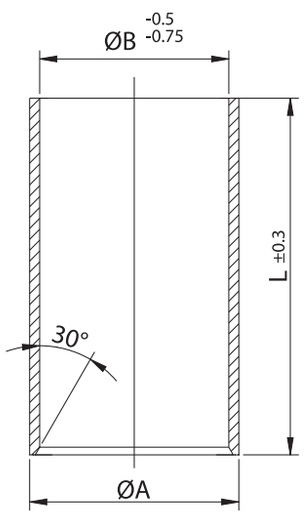


Figura - 6

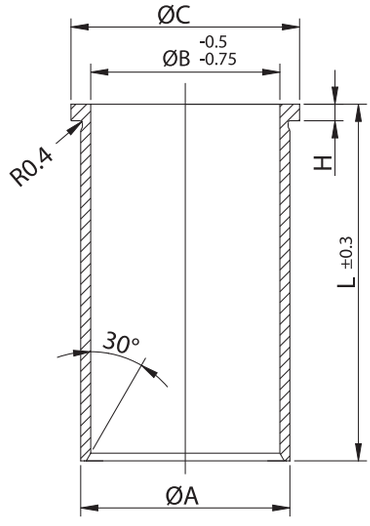


Figura - 7

Como é bem conhecido, as camisas têm o lado inferior da flange tem um raio de 0,4 mm. a camisa do conjunto do bloco, a fim de evitar esse raio de permanência, passagem bloco habitada do flange tem de ser dada de um chanfro de 1,0 mm. Caso contrário, a ruptura da camisa é flanges inevitáveis.

Antes de instalar o novo camisola; cilindro deve ser monitorado cuidadosamente limpos a precisão do motor e de medição. Arredondamento e afunilamento não deve exceder 0.025 milímetros. enquanto aperfeiçoa rugosidade da superfície procurará alcançar o tipo de motor deverá ser verificada pela superfície brilhante. Muito superfície brilhante e lisa para a falta de lubrificação fará com que esta situação, deverá ser evitada.

Antes de instalar o novo camisola; cilindro deve ser monitorado cuidadosamente limpos a precisão do motor e de medição. A pressão de 3000-5000 kg de camisas de cilindros secos imprensa escrita é suficiente. Quando usado como lubrificante sólido durante a montagem, em seguida, coque devido ao calor, e este material é difícil de transferência de calor. Prensas feito após a instalação do bloco de cilindros de fecho e de rectificação plana.

Bloco de cilindros, se necessário, para tratar as superfícies da junta,

Deste modo, o assento na flange da carcaça edição mais profunda. Além disso, o diâmetro exterior do diâmetro interno dos rolos acabados mate maquinada com precisão em camisas. Estas camisas têm uma parte muito pequena de brunimento, os cilindros são pressionados e pressionou, eles apertaram no estado. O diâmetro interno do cilindro de medição com nominal de tolerância 0 0,015 milímetros.

O diâmetro exterior da camisa do cilindro, as dimensões nominais e tolerância entre 0012-0024 mm.

	Camisa De Fora Grupos De Diâmetro.		
	50 - 80	80 - 120	120 - 180
QA	+0.03 +0.04	+0.04 +0.06	+0.05 +0.07
H	+0.2 -0	+0.2 -0	+0.2 -0
QC	-0.06 -0.10	-0.06 -0.10	-0.06 -0.10

	Diâmetro Do Furo Do Bloco (mm)		
	50 - 80	80 - 120	120 - 180
Q 1A	+0.01	+0.01	+0.01
H_1	+0 -0.15	+0 -0.15	+0 -0.15
QC_1	+0.10 +0.25	+0.10 +0.25	+0.10 +0.25

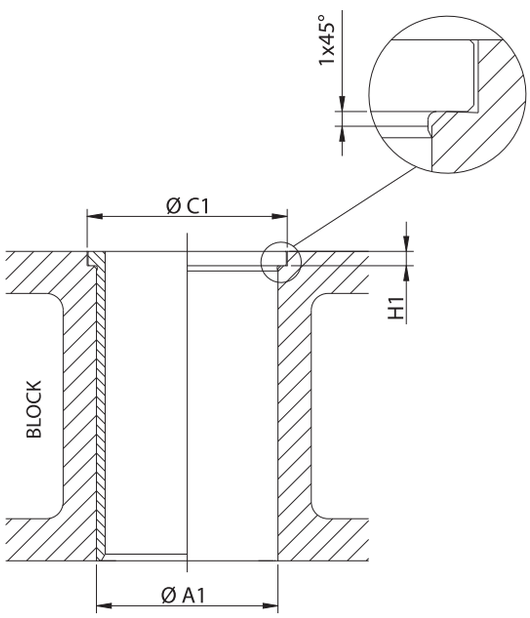


Figura - 9

CAMISAS DE CILINDRO MOLHADAS INSTRUÇÕES DE INSTALAÇÃO

YENMAK camisas de cilindro motor contra o desgaste e resistência à tracção, para assim se obter uma estrutura de propriedades de resistência, é fabricado pelo método de fundição centrífuga.

A fim de evitar danos para a sede do cilindro, deve mostrar cuidado ao remover camisas velhas.

O contacto do cilindro no motor, limpar cuidadosamente a lama de cal e de outros poluentes. Durante a limpeza, então zero raspador de usar ferramentas como formões.

Este processo é escova de aço ferramenta adequada. Para a remoção de ferrugem e cal estabilizado camada das camisas de cilindro é atingido com um martelo monta uma peças do carro sobre eles, embora seja possível para a camisa olmassa prensa hidráulica, em seguida, 'tiro, a fim de remover a cabeça. A limpeza é feita com muito cuidado com o assento, devem ser fornecidos os danos.

Sente-se sobre a superfície inferior do plano paralelo ao colar as superfícies de bloco.

(Figura 10) não diferem em termos de suavidade e planicidade conforme mostrado.

Além disso, o eixo do cilindro perpendiculares ao bloco de cilindros, assegurar que a superfície de vedação. (Figura 11) é chão em um único superfícies de assentamento da garrafa deve sempre ter cuidado que eles são destruídos. (Figura 12)

L raio na parte inferior do colar (D) da superfície da flange do cilindro de assentamento (a) no canto ao diâmetro do cilindro (C) de 0,5-1,0 mm, para impedir que para além do seu ponto. No caso de uma gama de 45 °.

Força contra a força de vedação para impedir a falha, tem de ser perpendiculares entre si.

DEFININDO DESCRIÇÃO TÉCNICA;

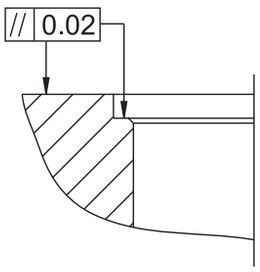


Figura - 10

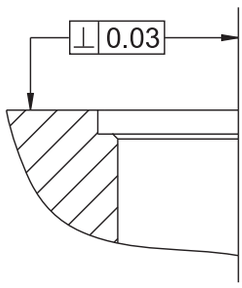


Figura - 11

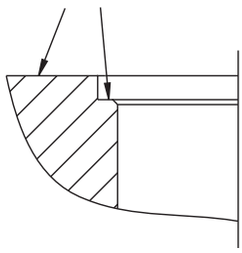


Figura - 12

O diâmetro exterior da manga com um diâmetro do orifício da junta de vedação deve ser igual. Câmara de combustão, a fim de garantir uma vedação completa, o selo terá de utilizar a estrutura de metal.

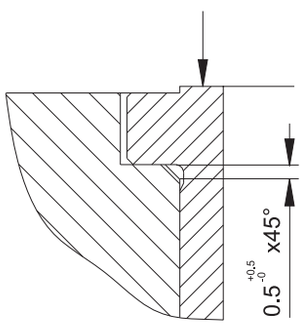


Figura - 14

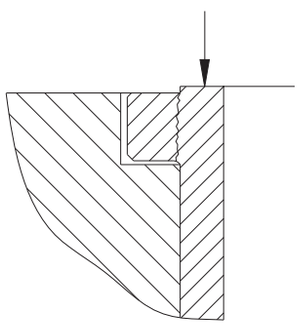


Figura - 15

Para determinar se o cilindro é facilmente organizados no assentamento da camisa e é muito grandes ou muito grandes camisas blocos no cilindro deve ser inserido à mão sem o uso do anel para a instalação. Em particular, a fim de determinar se a posição correta para sua camisa antes de as superfícies do flange de montagem do bloco de inversão de flash, colocando as superfícies de assento flange recomendado. Conhecido como para arrefecer o flange no motor, para aumentá-la. Deve ser considerado como uma abertura teórico de 0,3-0,5 mm.

Ele salienta que nada nas instruções de instalação em todas as oportunidades, é usar camisas e considerações em conformidade com a finalidade de remoção. Quando o conjunto de martelos e assim por diante. Que o uso de outro time pesado, desta forma não é correto, dar maus resultados de ocorrência de erros.

Os anéis de borracha para ser usado durante a instalação, há a qualidade e as bolhas necessitam de ser, resistente ao desgaste, óleo e deve ser resistente ao calor. Caso contrário, cobrir a água que vem para baixo, o que conduz a uma deterioração da camisa e a compressão medida. Sabão macio cada vez que o anel de borracha é accionado e, assim, inserido na ranhura.

Como anel de borracha, usado somente pelas marcas de fabricantes de motores de qualidade pode ser designada. Esta é a principal razão para a escolha, elásticos inchar e resistente ao desgaste, não óleo e calor.

Apreensão do pistão, que pode causar a quebra camisa é um resultado do uso indevido de anéis de borracha. Peças habitadas por anéis de borracha não deve nunca ganhar.

Depois de camisas inserido manualmente, é importante para controlar o tamanho do cilindro uma vez. Este controle, especialmente em áreas onde os anéis de borracha são oval em forma e têm de encolhimento pode ocorrer.

Shirts Uma vez totalmente inseridos, doldulurak ser comprimida pelo bloco de cilindros e estado da água de selagem devem ser monitorados.

DETALHES CAMISA TAG.

VEDAÇÃO

Anel de Vedação	
EPDM	Borracha EPD
NBR	Borracha NBR
FPM / VI	FPM / FKM
Cu	Cobre
T	Latão Vermelho
ST	Aço
SC / MVQ	Silicone (VMQ)
Shim / SM	Metal Macio

93,000 (1)		(3)	(4)	(5)	(6)	(7)
4JB1 (2)		D 00 2005	> 00 2005	4 Cyl	2771cc	57kW (78ps)
11-02385-000 (8) (9) CH 51,850 VD1 0,550 (10) (11) B- 19,500 BØ 43,900 (12) (13) TL 91,850	AP YS (14) HA CP	91-09389-000 1 2,000 P 2 2,000 P (16) 3 4,000 CrP	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87) (17)		Ø 93,000 (18)	31-04385-000 (19)
(15) 31,00x76,00		99-09389-000 1 2,000 FeP 2 2,000 FeP (16) 3 4,000 TeF				39-04385-000
Isuzu ve Opel ile Ortak Motor (27)						
(24) K=95,00 (22) L=181,00 H=0,90 (25) (23) D=101,00	DF-CR-ST (26)				51-35721-000 (20)	71-08385-000 71-98385-000 (21)
(24) K=120,00 (22) L=229,00 H+F=9,00+1,10 (25) (23) D=128,50	WF (26)		O-Ring/Seal 55-50613-000 2 FPM 112,00x3,00 (28)		51-06067-000 52-06067-000 (20)	71-07152-000 72-07152-000 (21)

1 - Diâmetro Do Pistão
2 - Código De Motor
3 - Informações De Combustível
4 - Anos De Modelo
5 - O Número De Cilindros
6 - Volume Do Cilindro
7 - A Potência Do Motor
8 - Código De Pistão
9 - Ch: Acidente Vascular Cerebral
10 - Vd1 / Vd2: Profundidade Válvula
11 - B- : Profundidade da câmara de combustão.
B+ : Protuberâncıa do topo do pıstão
12 - Bo: Diâmetro De Célula
13 - Tl: Tamanho Grande
14 - Funções De Pistão
* Dap: Pistões Duplos Alf
* Ap: Pistão Alfinl
* Ys: Pistões Refrigerados A Óleo
* Cpu: Pistões De Aço
* Ha: Revestimento Anodizado Duro
* Pdb: Ônibus Pinhole
15 - Pin Diâmetro - Altura - Recursos
16 - Características Do Segmento
17 - Projeção Cruzeta
18 - Diâmetro
19 - Código De Pistão +
20 - Código De Camisa
21 - Código Kit
22 - Diâmetro Exterior Do Cilindro
23 - Diâmetro Camisas Flange
24 - Camisa De Corpo Inteiro
25 - Flange Bill Espessura
26 - Tipo E Características Camisa
*WS : Liner Wet semi-acabados
*WF : Liner Wet acabamento completo
*DS : Liner seca semi-acabados
*DF : Liner seca acabamento completo
*AF : Refrigerado a ar acabamento completo
*PH : Fosfato
*CR : Cromado
*HR : Endurecido
*NT : Nitrito
*HT : Tratamento termico
*STEEL : Aço
27 - Motor comum
28 - Código De Vedação

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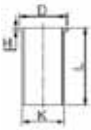
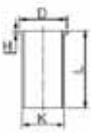
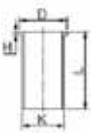
Motor tipleri, açıklamalar, ürünler, ürün resimleri, üreticiler, araçlar v.b. nitelendirmeler sadece referans amaçlı verilmiştir.

ALFA ROMEO

		Type		B C		

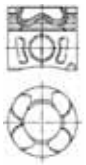
69,600

199 A3.000 Mito 1.3 JTDM 16V D 11 2009 > 4 Cyl **1248cc** **66-77kW** (90-105ps)

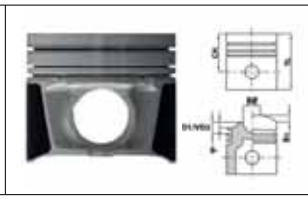
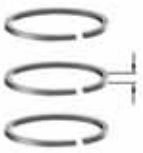
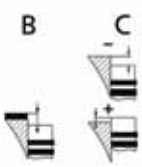
	11-02289-000 CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43 **23,00x56,70** Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor	AP YS	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm conta ile (+0,028/+0,127) 0,77/0,87mm conta ile (+0,127/+0,227) 0,87/0,97mm conta ile (+0,228/+0,327)	Ø 69,600 Ø 70,000	**31-04289-000** **31-04289-040**
	K=72,50 L=142,00 H=5,10 D=74,00	DS			**51-65451-000**	
	K=73,00 L=142,00 H=5,20 D=74,50	DS +0,50			**51-65451-050**	
	K=73,50 L=142,00 H=5,20 D=75,00	DS +1,00			**51-65451-100**	

69,600

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

	**11-02289-001** CH 40,230 VD1 0,904 B- 12,400 BØ 38,000 TL 62,230 **23,00x56,70** Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor	AP YS CH -0,20 mm	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm conta ile (+0,028/+0,127) 0,77/0,87mm conta ile (+0,127/+0,227) 0,87/0,97mm conta ile (+0,228/+0,327)	Ø 69,600 Ø 70,000	**31-04289-001** **31-04289-041**

ALFA ROMEO

		Type				

82,000

839 A6.000 / 841 C.000	156 2.4 JTD	09 2000	> 12 2001		(140-150ps)
839 A6.000 / 841 C.000	166 2.4 JTD	09 2000	>		(140-150ps)
937 A2.000 / AR 37101	147 1.9 JTD	11 2000	> 05 2005		(105-115ps)
937 A2.000 / AR 37101	156 1.9 JTD	01 2002	> 10 2005		(105-115ps)
939 A1.000	159 1.9 JTDM	06 2005	>		(120ps)

11-02281-000
CH 46,500
VD1 0,500
B- 17,500
BØ 37,500
TL 72,500

26,00x61,00

AP
PDB

AA=22,35 mm

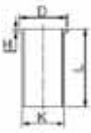
91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

0,77-0,87mm Conta ile (+0,014/+0,104)
0,87-0,97mm Conta ile (+0,105/+0,205)
0,97-1,07mm Conta ile (+0,236/+0,294)

Ø 82,000
Ø 82,400
Ø 82,600

31-04281-000
31-04281-040
31-04281-060

Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor



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L=155,00
H=5,00
D=86,00

DS

51-65268-000

82,000

192 B1.000	147 / 156 1.9 JTD	11 2002	> 03 2010		(136ps)
841 G/M/N.000	156 / 166 2.4 JTD	06 2003	>		(163-200ps)
937 A5.000	147 / 156 / GT 1.9 JTD	11 2003	> 09 2010		(150ps)
939 A2.000	159 1.9 JTDM 16V	09 2005	> 11 2011		(150ps)

11-02293-000
CH 46,500
VD1 0,400
VD2 0,600
B- 15,400
BØ 41,500
TL 73,500

26,00x61,00

AP
YS
PDB

91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

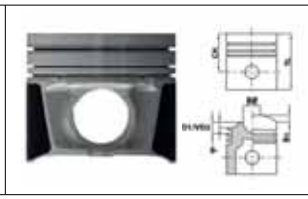
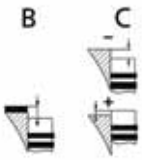
Ø 82,000
Ø 82,400
Ø 82,600

31-04293-000
31-04293-040
31-04293-060

Alfa Romeo ve Opel ile Ortak Motor

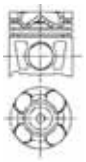
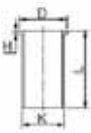
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

ALFA ROMEO

		Type		B C		
						

83,000

844 A2 / 939 B3 / 939 B4.000	159 2.0 JTDM 16V	D	04	2009	>	4 Cyl	**1956cc**	**100-125kW**	(136-170ps)
844 A2. / 939 B3.000	Brera 2.0 JTDM 16V	D	04	2009	>	4 Cyl	**1956cc**	**120-125kW**	(163-170ps)
844 A2./ 939 B3.000	Spider (939) 2.0 JTDM 16V	D	04	2009	>	4 Cyl	**1956cc**	**120-125kW**	(163-170ps)
940 A4.000	Giulietta (940) 2.0 JTDM 16V	D	04	2010	>	4 Cyl	**1956cc**	**125kW**	(170ps)
940 A5. / A7 / A8.000 Euro 5	Giulietta (940) 2.0 JTDM 16V	D	04	2010	>	4 Cyl	**1956cc**	**100-120kW**	(136-163ps)

	**11-02197-000** CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630 **29,98x67,00** Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor	AP YS	**91-09790-000** 1 1,500 CkP 2 1,500 P 3 2,000 NT St	0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)	Ø 83,000 Ø 83,400	**31-04197-000** **31-04197-040**
			98-09790-000 1 1,500 CrP St 2 1,500 P 3 2,000 CR St			**38-04197-000** **38-04197-040**
			99-09790-000 1 1,500 NtPvD St 2 1,500 P 3 2,000 NT St			**39-04197-000**
	K=86,00 L=155,00 H=5,00 D=87,50	DS			**51-65778-000**	

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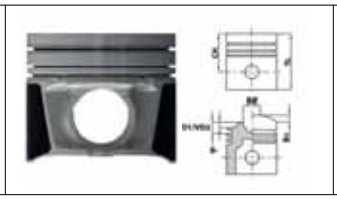
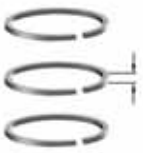
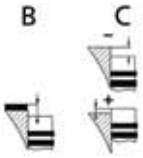
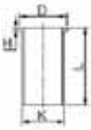
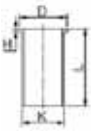
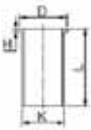
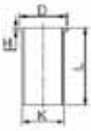
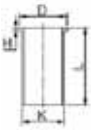
		Type				

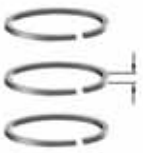
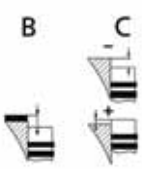
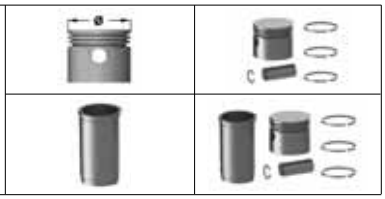
93,000

8140.27.2700 30 AR 8 Turbo D 04 1985 > 12 1988 4 Cyl **2499cc** **69-76 kW** (94-103 ps)

	11-01685-000 CH 58,750 B- 18,000 BØ 38,000 TL 96,750 **32,00x78,00** Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor	AP PDB	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03685-000** **31-03685-040** **31-03685-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

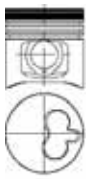
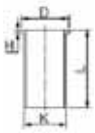
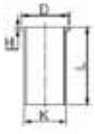
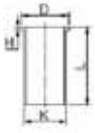
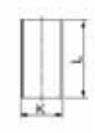
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

ALFA ROMEO

		Type		B C									

93,000

8140.61.200	30 AR 8		D	04	1978	>	12	1989	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200 / 8144.61.200	35 AR 8		D	04	1978	>	12	1989	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200 / 8144.61.200	40 AR 8		D	04	1978	>	12	1989	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8144.61.200	10 AR 6		D	04	1985	>	02	1986	4 Cyl	**2445cc**	**53kW**	(72ps)
8144.61.200	13 AR 6		D	04	1985	>	02	1986	4 Cyl	**2445cc**	**53kW**	(72ps)
8144.61.200	14 AR 6		D	04	1985	>	02	1986	4 Cyl	**2445cc**	**53kW**	(72ps)
8144.61.200	32 AR 8		D	04	1978	>	12	1989	4 Cyl	**2445cc**	**53kW**	(72ps)

	**11-01686-000** CH 55,000 B- 2,200 TL 90,000 **32,00x75,00** Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor	AP HA CP	**91-09686-000** 1 3,000 CR 2 2,000 P 3 4,000 CR		Ø 93,000 Ø 93,400 Ø 93,600	**31-03686-000** **31-03686-040** **31-03686-060**
			98-09686-000 1 3,000 CrP 2 2,000 P 3 4,000 CrP			**38-03686-000** **38-03686-040** **38-03686-060**
			99-09686-000 1 3,000 CR St 2 2,000 Fe 3 4,000 CR			**39-03686-000** **39-03686-040** **39-03686-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=167,30	DS			**51-65452-000**	

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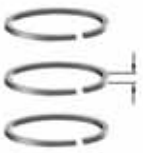
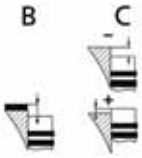
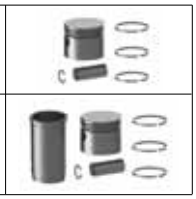
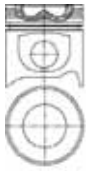
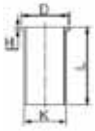
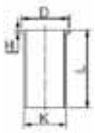
ALFA ROMEO

		Type		B C		
						

93,000

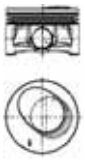
8140.21.200	30 AR 8 Turbo		D	04	1985	>	12	1988	4 Cyl	**2445cc**	**68kW**	(92ps)
8140.21.200	35 AR 8 Turbo		D	04	1985	>	12	1988	4 Cyl	**2445cc**	**68kW**	(92ps)
8140.21.200	40 AR 8 Turbo		D	04	1985	>	12	1988	4 Cyl	**2445cc**	**68kW**	(92ps)
8144.21.220	10 AR 6 Turbo		D	03	1968	>	12	1989	4 Cyl	**2445cc**	**68kW**	(92ps)
8144.21.220	14 AR 6 Turbo		D	03	1986	>	12	1989	4 Cyl	**2445cc**	**68kW**	(92ps)

	**11-01688-000** CH 59,650 B- 14,800 BØ 52,000 TL 97,650 **32,00x75,20** Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor	AP CP	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03688-000** **31-03688-040** **31-03688-060**
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

71,010

CBZA	A1			B	05	2010	>			Cyl	**1197cc**	**63kW**	(86ps)
CBZB	A3			B	03	2010	>	03	2013	Cyl	**1197cc**	**77kW**	(105ps)



11-01959-000
CH 28,940
VD1 2,000
B- 4,350
TL 46,940

19,00x42,00

HA

91-09106-000
1 1,200 Nt St
2 1,200 CrP
3 2,000 NtP St

Ø 71,010 **31-03959-000**
Ø 71,260 **31-03959-025**
Ø 71,510 **31-03959-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

CMSA / CAXC	A3 1.4 TFSI 16V				04	2010	>	07	2012	4 Cyl	**1390cc**	**92kW**	(125ps)
CNVA / CAXA	A1 1.4 TFSI				05	2011	>			4 Cyl	**1390cc**	**90kW**	(122ps)

11-01284-000
CH 29,200
VD1 0,800
VD2 3,580
B+ 2,000
B- 4,600
TL 50,210

19,00x52,00

HA

91-09313-000
1 1,200 NT St
2 1,200
3 2,000 NtP St

Ø 76,510 **31-03284-000**
Ø 77,010 **31-03284-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

CTJA / CTHG / CAVG	A1 1.4 TFSI			B	11	2011	>			4 Cyl	**1390cc**	**136kW**	(185ps)

11-01287-000
CH 28,970
B+ 2,000
B- 4,570
TL 49,970

19,00x54,00

AP

99-09326-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 76,510 **39-03287-000**
Ø 77,010 **39-03287-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

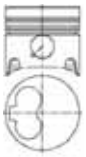
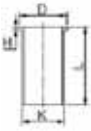
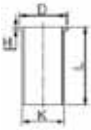
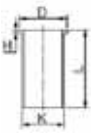
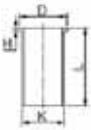
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

AUDI

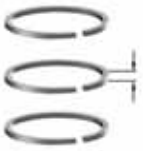
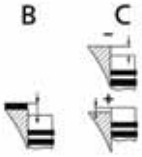
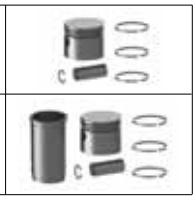
		Type		B C		

76,510

CY	4000 1.6 TD	D	08	1981	>	07	1985	4 Cyl	**1986cc**	**51kW**	(70ps)
CY / RA / SB	80 1.6 TD	D	02	1982	>	03	1987	4 Cyl	**1986cc**	**51-59kW**	(70-80ps)
CY / RA / SB	90 1.6 TD	D	08	1984	>	07	1986	4 Cyl	**1986cc**	**51-59kW**	(70-80ps)
DE	5000 2.0 TDI	D	03	1982	>	07	1985	5 Cyl	**1986cc**	**66kW**	(90ps)
DE / NC	100 2.0 TDI	D	11	1981	>	12	1987	5 Cyl	**1986cc**	**66-74kW**	(90-100ps)

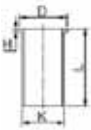
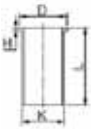
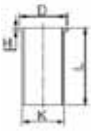
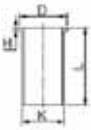
	**11-01301-000** CH 41,700 B- 1,600 TL 71,700 **24,00x64,00**	AP CP	**91-09301-000** 1 1,750 CrP 2 2,000 CrP 3 3,000 CrP	1. Centik 1,53mm (+0,66/+0,80) 2. Centik 1,57mm (+0,81/+0,90) 3. Centik 1,61mm (+0,91/+1,02)	Ø 76,510 Ø 77,010 Ø 77,510	**31-03301-000** **31-03301-050** **31-03301-100**
	Audi, Nissan, Volkswagen ve Volvo ile Ortak Motor					
	K=79,50 L=145,00 H=4,70 D=81,50	DS			**51-65301-000**	
	K=80,00 L=145,00 H=6,00 D=82,00	DS +0,50			**51-65301-050**	
	K=80,50 L=145,00 H=6,00 D=82,50	DS +1,00			**51-65301-100**	
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

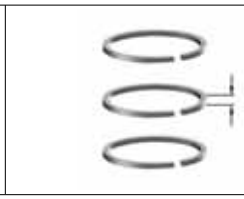
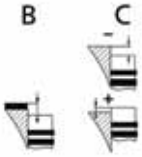
		Type		B C		
						

76,510

CN	100 2.0 D		D	10	1978	> 07	1989	4 Cyl	**1598cc**	**51kW**	(70ps)
CN	5000 2.0 D		D	10	1978	> 02	1982	4 Cyl	**1598cc**	**51kW**	(70ps)
CR / JK	4000 1.6 D		D	03	1981	> 07	1982	4 Cyl	**1598cc**	**40kW**	(54ps)
CR / JK	80 1.6 D		D	08	1980	> 07	1982	4 Cyl	**1598cc**	**40kW**	(54ps)

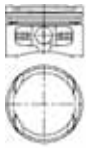
	11-01305-000 CH 41,700 B- 1,600 TL 71,700 **24,00x64,00** Audi, Volkswagen ve Volvo ile Ortak Motor	AP CP	**91-09301-000** 1 1,750 CrP 2 2,000 CrP 3 3,000 CrP	1. Conta ile 1,40mm (+0,67/+0,80) 2. Conta ile 1,50mm (+0,81/+0,90) 3. Conta ile 1,60mm (+0,91/+1,02)	Ø 76,510 Ø 77,010 Ø 77,510	**31-03305-000** **31-03305-050** **31-03305-100**
	K=79,50 L=145,00 H=4,70 D=81,50	DS			**51-65301-000**	
	K=80,00 L=145,00 H=6,00 D=82,00	DS +0,50			**51-65301-050**	
	K=80,50 L=145,00 H=6,00 D=82,50	DS +1,00			**51-65301-100**	
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

76,510

AUA / BBY	A2 1.4i 16V	B	05	2000	>	04	2002	4 Cyl	**1390cc**	**55kW**	(75ps)		



11-02304-000
CH 28,920
VD1 2,323
B- 1,980
BØ 61,900
TL 49,920

17,00x54,00

AA=20,40 mm

91-09306-000
1 1,200 CR St
2 1,500 P
3 2,500 CrP St

Ø 76,510
Ø 77,010

31-04304-000
31-04304-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

78,310

AKE	A8 2.5 TDI	D	11	1999	>	09	2002	6 Cyl	**2499cc**	**132kW**	(179ps)		
AKE / AYM / BAU / BCZ / BFC	A4 2.5 TDI 24V	D	12	2000	>	05	2003	6 Cyl	**2499cc**	**114-132kW**	(155-179ps)		
AKE / AYM / BAU / BCZ / BFC	A6 / A6 Allroad 2.5 TDI 24V	D	11	1999	>	08	2003	6 Cyl	**2499cc**	**114-132kW**	(159-179ps)		

11-02331-000
CH 47,830 *CH 47,580
VD1 1,380 *VD1 1,380
B- 17,250 *B- 17,250
BØ 36,000 *BØ 36,000
TL 71,830 *TL 71,580

* For Oversize Piston Dimensions

26,00x58,00

AP
YS

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04331-000
31-04331-050

Cyl.1/2/3 to be used with 2332 000

98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

38-04331-000
38-04331-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

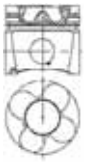
39-04331-000
39-04331-050

Audi, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl **cc** **kW** (ps)



11-02332-000

CH 47,830	*CH 47,580
VD1 1,380	*VD1 1,380
B- 17,250	*B- 17,250
BØ 36,000	*BØ 36,000
TL 71,830	*TL 71,580

* For Oversize Piston Dimensions

26,00x58,00

Audi, Skoda ve Volkswagen ile Ortak Motor

AP
YS

Cyl.4/5/6 to be used with 2331 000

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04332-000
31-04332-050

98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

38-04332-000
38-04332-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

39-04332-000
39-04332-050

78,310

AFB / AKN	A4 2.5 TDI 24V	11 1997	>	06 2000	(150ps)
AFB / AKN	A6 2.5 TDI 24V	04 1997	>	05 2000	(150ps)
AFB / AKN	A8 2.5 TDI	06 1997	>	06 2000	(150ps)

11-02333-000

CH 47,830	*CH 47,580
VD1 1,380	*VD1 1,380
B- 16,500	*B- 16,500
BØ 35,800	*BØ 35,800
TL 71,830	*TL 71,580

* For Oversize Piston Dimensions

26,00x65,50

Audi ve Volkswagen ile Ortak Motor

AP
YS

Cyl.1/2/3 to be used with 2334 000

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04333-000
31-04333-050

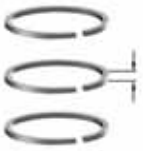
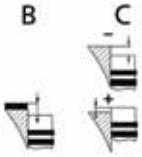
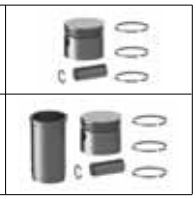
98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

38-04333-000
38-04333-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

39-04333-000
39-04333-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

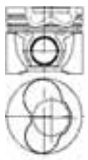
78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl **cc** **kW** (ps)

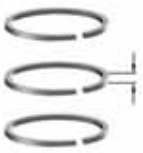
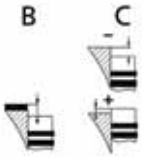
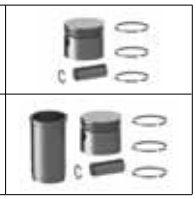
	11-02334-000 CH 47,830 *CH 47,580 VD1 1,380 *VD1 1,380 B- 16,500 *B- 16,500 BØ 35,800 *BØ 35,800 TL 71,830 *TL 71,580 * For Oversize Piston Dimensions **26,00x65,50**	AP YS	**91-09331-000** 1 1,750 CK 2 2,000 P 3 3,000 CR		Ø 78,310 Ø 78,810	**31-04334-000** **31-04334-050**
		Cyl.4/5/6 to be used with 2333 000	**98-09331-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP			**38-04334-000** **38-04334-050**
	Audi ve Volkswagen ile Ortak Motor		**99-09331-000** 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**39-04334-000** **39-04334-050**

79,500

AMF A2 1.4 TDI 06 2000 > 08 2003 (75ps)

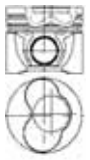
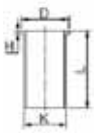
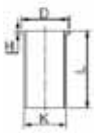
	**11-02311-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00**	AP PDB Cyl.1/2 to be used with 2312 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04311-000** **31-04311-050**
	Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,500

Silindir 3 de Kullanilacak / To Cylinder 3 > Cyl **cc** **kW** (ps)

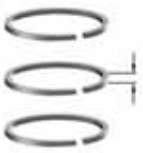
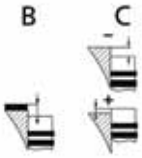
	**11-02312-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00**	AP PDB Cyl.3 to be used with 2311 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04312-000** **31-04312-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

79,510

CAYB / CAYC / CLHA A1 / A1 Sportback 1.6 TDI 03 2011 > (90-105ps)

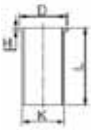
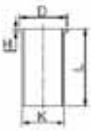
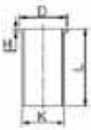
CAYB / CAYC / CLHA A3 1.6 TDI 05 2009 > 08 2012 (90-105ps)

	11-01286-000 CH 45,300 B- 11,000 BØ 49,000 TL 68,130 **26,00x66,00**	AP YS	**91-09627-000** 1 1,750 CkP 2 2,000 P 3 2,000 CrP		Ø 79,510 Ø 80,010	**31-03286-000** **31-03286-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						

		Type		B C		
					

79,510

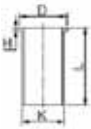
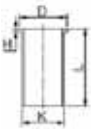
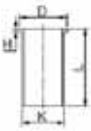
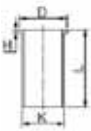
AAZ 80 1.9 TD D 09 1991 > 07 1995 4 Cyl **1896cc 55kW** (75ps)

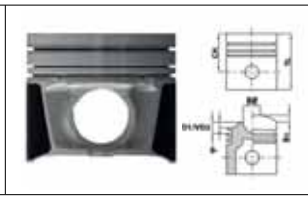
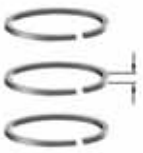
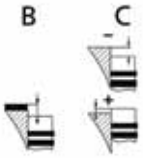
	11-01302-000 CH 45,650 B- 1,900 TL 71,700 **26,00x66,00**	AP HA CP	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. Centik 1,53mm (+0,66/+0,86) 2. Centik (1,57mm +0,87/+0,90) 3. Centik 1,61mm (+0,91/+1,02)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-03302-000** **31-03302-025** **31-03302-050** **31-03302-100**
	Audi, Seat ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

79,510

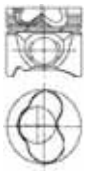
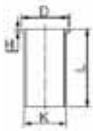
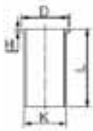
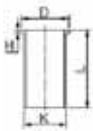
1Y	80 1.9 D			D	08	1989	> 12	1991	4 Cyl	**2370cc**	**47kW** (64ps)
3D / AAS	100 2.4 D			D	08	1989	> 12	1990	5 Cyl	**2370cc**	**60kW** (82ps)

	Type					
	11-01309-000 CH 39,650 B- 1,900 TL 65,650 **24,00x64,00** Audi, Seat, Skoda ve Volkswagen ile Ortak Motor	AP CP	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,53mm conta ile (+0,66/+0,86) 2. centik 1,57mm conta ile (+0,87/+0,90) 3. centik 1,61mm conta ile (+0,91/+1,02)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-03309-000** **31-03309-025** **31-03309-050** **31-03309-100**
	K=82,50 L=155,00 H=5,10 D=85,60	DS			**51-65157-000**	
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

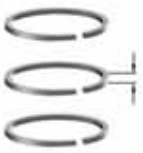
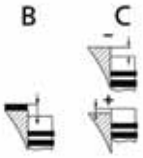
		Type				

79,510

1Z	80 1.9 TDI	D	09	1991	> 07	1995	4 Cyl	**1896cc**	**66kW**	(90ps)
1Z / AHU	Cabriolet 1.9 TDI	D	07	1995	> 07	1996	4 Cyl	**1896cc**	**66kW**	(90ps)
AFN / AVG / AHU	A6 1.9 TDI	D	04	1997	> 05	2001	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)
AFN / AVG / BKE	A4 1.9 TDI	D	03	1996	> 07	1999	4 Cyl	**1896cc**	**81-85kW**	(110-116ps)
AGR / AHF / ALH / ASV	A3 1.9 TDI	D	09	1996	> 08	2000	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)
AHH / AHU / AFF	A4 1.9 TDI	D	03	1996	> 06	2000	4 Cyl	**1896cc**	**55-66kW**	(75-90ps)

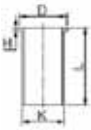
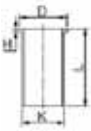
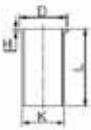
	**11-02301-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.1/2 to be used with 2302 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04301-000** **31-04301-025** **31-04301-050** **31-04301-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

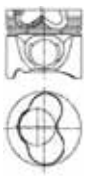
79,510

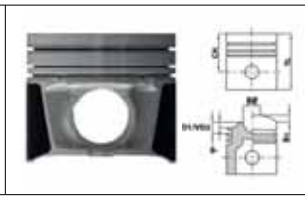
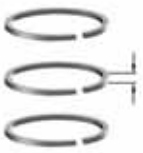
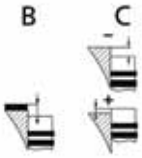
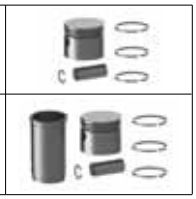
Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.3/4 to be used with 2301 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04302-000** **31-04302-025** **31-04302-050** **31-04302-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

79,510

1Z	80 1.9 TDI	09 1991	> 07 1995	(90ps)
1Z / AHU	Cabriolet 1.9 TDI	07 1995	> 07 1996	(90ps)
AFN / AVG / AHU	A6 1.9 TDI	04 1997	> 05 2001	(90-110ps)
AFN / AVG / BKE	A4 1.9 TDI	03 1996	> 07 1999	(110-116ps)
AGR / AHF / ALH / ASV	A3 1.9 TDI	09 1996	> 08 2000	(90-110ps)
AHH / AHU / AFF	A4 1.9 TDI	03 1996	> 06 2000	(75-90ps)

	**11-02305-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.1/2 to be used with 2306 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04305-000** **31-04305-025** **31-04305-050** **31-04305-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						

		Type		B C		
						

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

11-02306-000
CH 45,800
VD1 1,100
B- 17,650
BØ 37,900
TL 71,800

26,00x66,00

AP

Cyl.3/4 to be used with 2305 000

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

Ø 79,510 **31-04306-000**
Ø 79,760 **31-04306-025**
Ø 80,010 **31-04306-050**
Ø 80,510 **31-04306-100**

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor

79,510

ASZ	A3 1.9 TDI	05 2000	>	06 2003	(130ps)
AVF / AWX	A4 1.9 TDI	12 2000	>	11 2004	(130ps)
AVF / AWX	A6 1.9 TDI	06 2001	>	01 2005	(130ps)

11-02313-000
CH 45,800
VD1 1,100
B- 17,900
BØ 38,000
TL 68,800

26,00x66,00

AP
YS
PDB

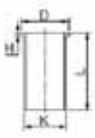
Cyl. 1/2 to be used with 2314 000

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

1,45mm +0,91/+1,00
1,53mm +1,01/+1,10
1,61mm +1,11/+1,20

Ø 79,510 **31-04313-000**
Ø 79,760 **31-04313-025**
Ø 80,010 **31-04313-050**

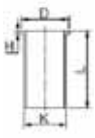
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor



K=82,57
L=151,80
H=4,70
D=85,40

DS

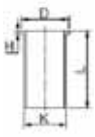
51-65303-000



K=83,07
L=151,80
H=6,00
D=85,90

DS
+0,50

51-65303-050



K=83,57
L=151,80
H=6,00
D=86,40

DS
+1,00

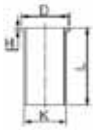
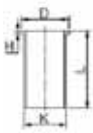
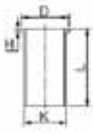
51-65303-100

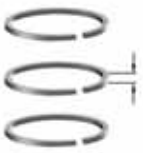
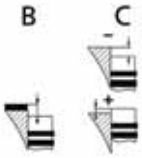
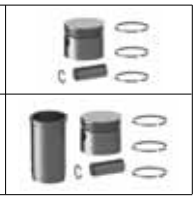
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

79,510

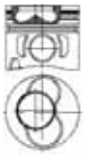
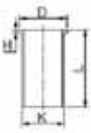
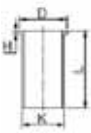
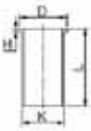
Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 3/4 to be used with 2313 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04314-000** **31-04314-025** **31-04314-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

		Type		B C		
						

79,510

ATD / AXR / BKC / BXE	A3 1.9 TDI	05 2001	> 06 2003		(101-105ps)
AVB	A4 1.9 TDI	09 2001	> 11 2004		(101ps)

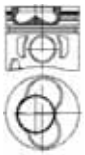
	**11-02319-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.1/2 to be used with 2320 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04319-000** **31-04319-025** **31-04319-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)



11-02320-000
CH 45,800
VD1 0,650
B- 17,100
BØ 38,000
TL 68,800

26,00x66,00

AP
YS
PDB

Cyl.3/4 to be used with 2319 000

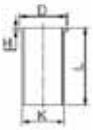
91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

1,45mm +0,91/+1,00
1,53mm +1,01/+1,10
1,61mm +1,11/+1,20

Ø 79,510
Ø 79,760
Ø 80,010

31-04320-000
31-04320-025
31-04320-050

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor



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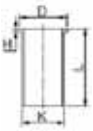
L=151,80
H=4,70
D=85,40

DS

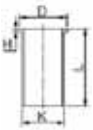
51-65303-000



K=83,07
L=151,80
H=6,00
D=85,90

DS
+0,50

51-65303-050



K=83,57
L=151,80
H=6,00
D=86,40

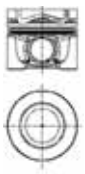
DS
+1,00

51-65303-100

79,510

CAYC / CAYB Euro 5 A1 1.6 TDI 05 2010 > (90-105ps)

CAYC / CAYB Euro 5 A3 1.6 TDI 16V 05 2009 > 07 2012 (90-105ps)



11-02340-000
CH 45,300
B- 10,700
BØ 49,000
TL 67,900

26,00x66,00

AP
YS

91-09625-000
1 1,750 CR
2 2,000 P
3 3,000 CR

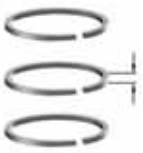
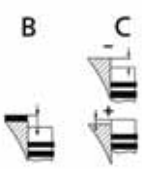
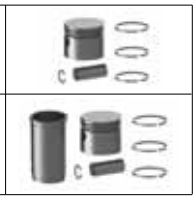
1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)

Ø 79,510
Ø 80,010

31-04340-000
31-04340-050

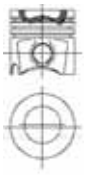
Audi, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
						

81,000

CRLB	A3 2.0 TDI 16V		D	08	2012	>		4 Cyl	**1968cc**	**110kW**	(150ps)



11-01283-000
CH 45,810
B- 12,900
BØ 50,900
TL 68,800

26,00x66,00

AP
YS
PDB

91-09628-000
1 1,750 CK
2 2,000 P
3 2,000 CR

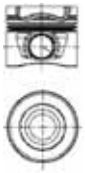
Ø 81,000

31-03283-000

Audi, Seat ve Volkswagen ile Ortak Motor

81,000

CFHD / CFHB	A1 2.0 TDI		D	09	2011	>		4 Cyl	**1968cc**	**100-105kW**	(136-143ps)
CGLD / CMGB / CGLC	A6 2.0 TDI 16V		D	05	2011	>		4 Cyl	**1968cc**	**120-130kW**	(163-177ps)
CGLD / CMGB / CGLC / CGLC / CGLD	A4 / A4 Allroad 2.0 TDI 16V		D	11	2011	>		4 Cyl	**1968cc**	**120-130kW**	(163-177ps)
CGLE	A6 2.0 TDI 16V		D	01	2012	>		4 Cyl	**1968cc**	**100kW**	(136ps)
CJCA / CGLC	A5 2.0 TDI 16V		D	10	2011	>		4 Cyl	**1968cc**	**105-130kW**	(143-177ps)
CJCA / CJCB	A4 / A4 Allroad 2.0 TDI 16V		D	01	2008	>		4 Cyl	**1968cc**	**100-105kW**	(136-143ps)
CJCA / CJCB	Q5 2.0 TDI 16V		D	11	2010	>		4 Cyl	**1968cc**	**100-105kW**	(136-143ps)
CLJA / CFFA / CFFB	Q3 2.0 TDI 16V		D	09	2011	>		4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
CLJA / CFFA / CFFB / CFGB	A3 2.0 TDI 16V		D	02	2010	>	07 2012	4 Cyl	**1968cc**	**100-125kW**	(136-170ps)
CLLB / CFGC / CFGD	Q3 2.0 TDI 16V		D	06	2011	>		4 Cyl	**1968cc**	**120-130kW**	(163-177ps)
CMGA / CGLD / CGLB / CMGB / CGLC / CGLA	Q5 2.0 TDI 16V		D	10	2010	>	09 2012	4 Cyl	**1968cc**	**120-130kW**	(163-177ps)



11-02344-000
CH 45,800
B- 13,100
BØ 50,880
TL 68,800

26,00x66,00

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)

Ø 81,000
Ø 81,500

31-04344-000
31-04344-050

98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

38-04344-000
38-04344-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

39-04344-000
39-04344-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		

81,010

AEB / ANB / APU / ARK	A4 1.8i Turbo 20V	B	11	1994	> 12	1998	4 Cyl	**1751cc**	**110kW**	(150ps)
AEB / ANB / APU / ARK	A6 1.8i Turbo 20V	B	04	1997	> 01	1999	4 Cyl	**1751cc**	**110kW**	(150ps)
AGU / AQA / ARZ	A3 1.8i Turbo 20V	B	12	1996	> 07	1998	4 Cyl	**1751cc**	**110kW**	(150ps)

11-01296-000

CH 32,700	*CH 32,400
B- 2,050	*B- 2,050
BØ 70,000	*BØ 70,000
TL 53,700	*TL 53,400

* For Oversize Piston Dimensions

20,00x59,00

91-09296-000

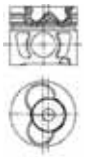
1	1,500	MoP
2	1,750	P
3	2,000	CR

Ø 81,010	**31-03296-000**
Ø 81,260	**31-03296-025**
Ø 81,510	**31-03296-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

81,010

1T / AAT / ABP	100 2.5 TD	D	01	1990	> 12	1990	5 Cyl	**2461cc**	**85-88kW**	(115-120ps)
1T / AAT / ABP	100 2.5 TDI	D	08	1991	> 07	1994	5 Cyl	**2461cc**	**85-88kW**	(115-120ps)
AAT	A6 2.5 TDI	D	06	1994	> 10	1997	5 Cyl	**2461cc**	**85kW**	(115ps)
AEL	A6 2.5 TDI	D	10	1994	> 10	2000	5 Cyl	**2461cc**	**103kW**	(140ps)



11-01297-000

CH 45,750	*CH 45,500
VD1 1,350	*VD1 1,350
B- 17,200	*B- 17,200
BØ 39,600	*BØ 39,600
TL 69,750	*TL 69,500

* For Oversize Piston Dimensions

26,00x68,00

AP

PDB

Cyl. 1/2 to be used with 1298 000 AA=22,20mm

91-09297-000

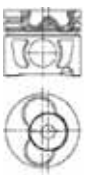
1	2,500	CrP
2	2,000	P
3	3,000	CR

Ø 81,010	**31-03297-000**
Ø 81,260	**31-03297-025**
Ø 81,510	**31-03297-050**

Audi ve Volvo ile Ortak Motor

81,010

Silindir 3/4/5 de Kullanilacak	/ To Cylinder 3 / 4 / 5				>		Cyl	**cc**	**kW**	(ps)



11-01298-000

CH 45,750	*CH 45,500
VD1 1,350	*VD1 1,350
B- 17,200	*B- 17,200
BØ 39,600	*BØ 39,600
TL 69,750	*TL 69,500

* For Oversize Piston Dimensions

26,00x68,00

AP

PDB

Cyl. 3/4/5 to be used with 1297 000 AA=22,20mm

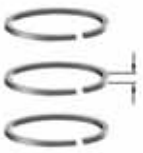
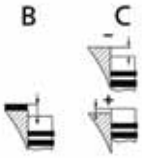
91-09297-000

1	2,500	CrP
2	2,000	P
3	3,000	CR

Ø 81,010	**31-03298-000**
Ø 81,260	**31-03298-025**
Ø 81,510	**31-03298-050**

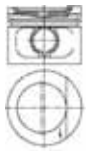
Audi ve Volvo ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

81,010

DS — 80 / 100 / Coupe 1.8 — 05 1983 > 07 1989 — (90ps)



11-01307-000

CH 32,200	*CH 31,900
B+ 1,300	*B+ 1,300
B- 4,400	*B- 4,400
BØ 56,000	*BØ 56,000
TL 62,500	*TL 62,200

* For Oversize Piston Dimensions

20,00x57,00

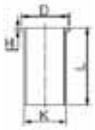
CP

91-09307-000

1	1,500	CrP
2	1,750	P
3	3,000	CrP

Ø 81,010	**31-03307-000**
Ø 81,260	**31-03307-025**
Ø 81,510	**31-03307-050**
Ø 82,010	**31-03307-100**

Audi, Seat ve Volkswagen ile Ortak Motor



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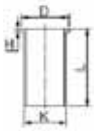
L=146,00
H=4,70
D=86,00

DS

51-65307-000



K=84,50
L=146,00
H=6,00
D=86,50

DS

+0,50

51-65307-050

81,010

ABM / JU — 80 1.6i — B — 01 1992 > 06 1994 — 4 Cyl — **1595cc** — **52-55kW** — (71-75ps)

11-01308-000

CH 35,600	*CH 35,300
B+ 2,200	*B+ 2,200
B- 2,300	*B- 2,300
BØ 62,600	*BØ 62,600
TL 66,800	*TL 66,500

* For Oversize Piston Dimensions

20,00x57,00

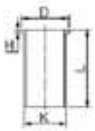
CP

91-09307-000

1	1,500	CrP
2	1,750	P
3	3,000	CrP

Ø 81,010	**31-03308-000**
Ø 81,260	**31-03308-025**
Ø 81,510	**31-03308-050**
Ø 81,760	**31-03308-075**
Ø 82,010	**31-03308-100**

Audi ve Seat ile Ortak Motor



K=84,00
L=146,00
H=4,70
D=86,00

DS

51-65307-000

K=84,50
L=146,00
H=6,00
D=86,50

DS

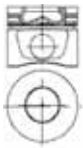
+0,50

51-65307-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

81,010

AZV / BKD / BMN / BUY	A3 2.0 TDI 16V	D	05	2003	>	04	2008	4 Cyl	**1968cc**	**100-125kW**	(136-170ps)
BLB / BNA / BRE / BRF / BVF / BVG / BRD / BVA	A4 2.0 TDI 16V	D	11	2004	>	03	2008	4 Cyl	**1968cc**	**93-125kW**	(121-170ps)
BLB / BNA / BRE / BRF / BVG	A6 2.0 TDI 16V	D	07	2004	>	10	2008	4 Cyl	**1968cc**	**89-103kW**	(121-140ps)



11-02298-000
CH 45,800
B- 17,800
BØ 38,000
TL 68,800

26,00x66,00

Audi, Mitsubishi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP YS PDB	**91-09298-000** 1 1,750 CkP 2 2,000 P 3 3,000 CrP		1,55mm conta ile (0,91/1,00) 1,63mm conta ile (1,01/1,10) 1,71mm conta ile (1,11/1,20)	Ø 81,010 Ø 81,510	**31-04298-000** **31-04298-050**
	98-09298-000 1 1,750 CrP 2 2,000 P 3 3,000 CrP	St			**38-04298-000** **38-04298-050**
	99-09298-000 1 1,750 CrP 2 2,000 Fe 3 3,000 CR	St			**39-04298-000** **39-04298-050**

81,010

ARX / AUM / ARY / AUQ	A3 1.8i Turbo 20V	B	09	2000	>	06	2003	4 Cyl	**1781cc**	**110-132kW**	(150-180ps)
ARY / AUQ / BVR / AUM / BVP	TT 1.8i Turbo 20V	B	09	2000	>	05	2005	4 Cyl	**1781cc**	**110-140kW**	(150-190ps)
AVJ / AWT / BFB / AMB / BEX	A4 1.8i Turbo 20V	B	07	2001	>	12	2004	4 Cyl	**1781cc**	**110-140kW**	(150-190ps)
AWT	A6 1.8i Turbo 20V	B	05	2000	>	01	2005	4 Cyl	**1781cc**	**110kW**	(150ps)

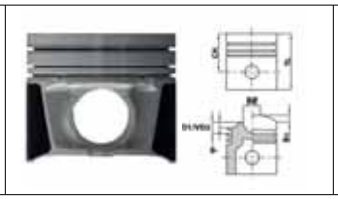
11-02299-000
CH 32,700
B- 1,900
BØ 68,000
TL 53,700

19,00x50,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA	**91-09296-000** 1 1,500 MoP 2 1,750 P 3 2,000 CR		Ø 81,010 Ø 81,260 Ø 81,510	**31-04299-000** **31-04299-025** **31-04299-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



81,010

ADP / AHL / ARM	A4 1.6i	B	11	1994	>	10	1996	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AKL / APF	A3 1.6i	B	09	1996	>	06	2001	4 Cyl	**1595cc**	**74kW**	(101ps)

11-02307-000

CH 32,700	*CH 32,400
VD1 0,700	*VD1 0,700
B- 2,300	*B- 2,300
BØ 61,400	*BØ 61,400
TL 53,700	*TL 53,400

* For Oversize Piston Dimensions

20,00x57,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

91-09107-000

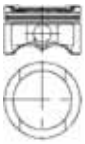
1	1,200	CR	St
2	1,500	P	
3	2,000	CrP	St

+0,700/+0,900

Ø 81,010	**31-04307-000**
Ø 81,260	**31-04307-025**
Ø 81,510	**31-04307-050**
Ø 82,010	**31-04307-100**

81,010

ALZ / ANA	A4 1.6i	B	11	2004	>	03	2008	4 Cyl	**1600cc**	**75kW**	(102ps)
BFQ / AVU / BFQ / BGU / BSE / BSF	A3 1.6i	B	05	2002	>	06	2003	4 Cyl	**1600cc**	**75kW**	(102ps)



11-02316-000

CH 29,780
VD1 0,700
B- 2,700
BØ 62,300
TL 50,700

19,00x42,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

91-09303-000

1	1,000	CR	
2	1,200	P	
3	2,000	CrP	St

+0,60/+0,65

Ø 81,010	**31-04316-000**
Ø 81,510	**31-04316-050**
Ø 82,010	**31-04316-100**

99-09303-000

1	1,000	CR	
2	1,200	P	
3	2,000	CrP	St

39-04316-000
39-04316-050
39-04316-100

81,010

APX	TT 1.8i Turbo 20V	B	10	1998	>	08	2001	4 Cyl	**1781cc**	**165kW**	(224ps)
APY / AUL / AMK	S3 1.8i Turbo 20V	B	11	1998	>	08	2000	4 Cyl	**1781cc**	**154kW**	(209ps)

11-02329-000

CH 32,700
B- 2,100
BØ 70,300
TL 53,700

20,00x62,00

HA

91-09294-000

1	1,500	CR	
2	1,750	P	
3	2,000	CR	St

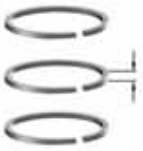
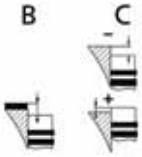
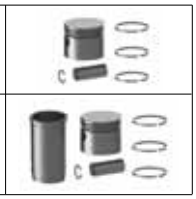
Ø 81,010	**31-04329-000**
Ø 81,510	**31-04329-050**

99-09294-000

1	1,500	CrP	St
2	1,750	Fe	
3	2,000	NtP	St

39-04329-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

81,010

BDV	A4 2.4i 30V	B	09	2001	>	10	2005	6 Cyl	**2393cc**	**125kW**	(170ps)
BDV	A6 2.4i 30V	B	06	2001	>	01	2005	6 Cyl	**2393cc**	**125kW**	(170ps)

11-02335-000
CH 30,300
VD1 2,900
B+ 3,600
TL 53,900

20,00x44,00

HA

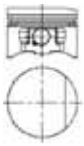
99-09335-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 81,010
Ø 81,510

39-04335-000
39-04335-050

81,010

ADR	A4 1.8i / 1.8i 20V	B	00	1995	>	00	2001	4 Cyl	**1781cc**	**92kW**	(125ps)
ADR	A6 1.8i / 1.8i 20V	B	00	1995	>	00	2001	4 Cyl	**1781cc**	**92kW**	(125ps)
ADR	Cabriolet 1.8i 20V	B	04	1997	>	08	2000	4 Cyl	**1781cc**	**92kW**	(125ps)
ADR / AGN	A3 1.8i / 1.8i 20V	B	00	1995	>	00	2001	4 Cyl	**1781cc**	**92kW**	(125ps)



11-02336-000
CH 32,550 *CH 32,250
VD1 3,600 *VD1 3,600
TL 56,550 *TL 56,250

* For Oversize Piston Dimensions

20,00x59,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

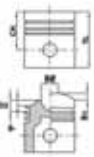
91-09296-000
1 1,500 MoP
2 1,750 P
3 2,000 CR

1.Conta ile +0.80/+0.90
2.Conta ile +0.90/+1.00
3.Conta İle +1.00/+1.10

Ø 81,010
Ø 81,510

31-04336-000
31-04336-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018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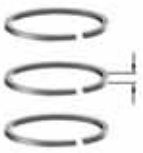
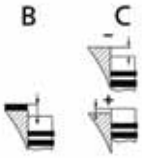



81,010

AZV/CBAA/CFFA/CBAA/CFFA / BKD/CBAB/CFFB/CLJA	A3 II 2.0 TDI	D	05	2003	>	08	2012	4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
BMN / CBBB / CFGB	A3 II 2.0 TDI	D	03	2006	>	10	2012	4 Cyl	**1998cc**	**125kW**	(170ps)
BNA / BRF / CAGB	A6 2.0 TDI	D	07	2004	>	03	2011	4 Cyl	**1998cc**	**100kW**	(136ps)
CAGA / CJCA / CAGB / CJCB	Q5 2.0 TDI	D	08	2009	>			4 Cyl	**1998cc**	**100-105kW**	(136-143ps)
CAGA / CMEA / CJCA / CMFA / CAGB / CJCB	A4 2.0 TDI	D	11	2007	>			4 Cyl	**1998cc**	**100-105kW**	(136-143ps)
CAGA / CMEA / CJCA / CMFA / CAGB / CJCB	A5 2.0 TDI	D	09	2009	>			4 Cyl	**1998cc**	**100-105kW**	(136-143ps)
CAGC / CJCC	A4 2.0 TDI	D	06	2008	>			4 Cyl	**1998cc**	**88kW**	(120ps)
CAHA / CGLB / CMGA / CAHB / CGLA	Q5 2.0 TDI	D	11	2008	>			4 Cyl	**1998cc**	**120-125kW**	(163-170ps)
CAHB / CAHA	A6 2.0 TDI	D	04	2009	>	08	2011	4 Cyl	**1998cc**	**120-125kW**	(163-170ps)
CAHB / CGLD / CAHA	A4 2.0 TDI	D	08	2008	>			4 Cyl	**1998cc**	**120-125kW**	(163-170ps)
CAHB / CGLD / CAHA	A5 2.0 TDI	D	08	2008	>			4 Cyl	**1998cc**	**120-125kW**	(163-170ps)
CBBB / CFGB	TT 2.0 TDI	D	06	2008	>			4 Cyl	**1998cc**	**125kW**	(170ps)

11-02341-000
CH 45,800
B- 12,700
BØ 50,900
TL 68,800

26,00x66,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

Ø 81,010
Ø 81,510

31-04341-000
31-04341-050

98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

38-04341-000
38-04341-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

39-04341-000
39-04341-050

82,510

BLR / BLX / BLY / BVY / BVZ	A3 2.0 FSI 16V	B	01	2005	>	11	2005	4 Cyl	**1984cc**	**110kW**	(150ps)

11-01285-000
CH 29,400
VD1 1,980
B+ 12,460
B- 7,360
TL 47,400

19,00x44,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

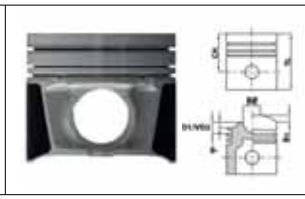
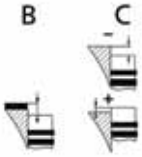
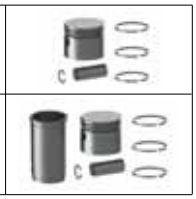
HA

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510
Ø 83,010

31-03285-000
31-03285-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

82,510

AAH	100 2.8i	B	12	1990	>	07	1994	6 Cyl	**2771cc**	**128kW**	(174ps)
AAH	80 2.8i	B	09	1991	>	07	1995	6 Cyl	**2771cc**	**128kW**	(174ps)
AAH	A4 2.8i	B	11	1994	>	07	1997	6 Cyl	**2771cc**	**128kW**	(174ps)
AAH	Cabriolet 2.8i	B	11	1992	>	08	2000	6 Cyl	**2771cc**	**128kW**	(174ps)
AAH	Coupé 2.8i	B	08	1991	>	12	1995	6 Cyl	**2771cc**	**128kW**	(174ps)
AAH / AEJ	A8 2.8i	B	06	1994	>	03	1996	6 Cyl	**2771cc**	**120-128kW**	(163-174ps)
AEJ / AFC / AAH	A6 2.8i / 2.8i 24V	B	06	1994	>	10	1997	6 Cyl	**2771cc**	**120-128kW**	(163-174ps)

11-01294-000

CH 30,800	*CH 30,500
B+ 0,700	*B+ 0,700
B- 4,250	*B- 4,250
TL 60,500	*TL 60,200

* For Oversize Piston Dimensions

21,00x56,00

CP

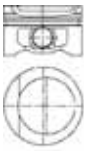
91-09311-000

1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

Ø 82,510	**31-03294-000**
Ø 82,760	**31-03294-025**
Ø 83,010	**31-03294-050**
Ø 83,510	**31-03294-100**

82,510

AAR	A6 2.3i	B	06	1994	>	06	1996	5 Cyl	**2309cc**	**98kW**	(133ps)
AAR / NF	100 2.3i	B	12	1990	>	07	1994	5 Cyl	**2309cc**	**98-100kW**	(133-136ps)
NF	5000 2.3i	B	08	1986	>	05	1988	5 Cyl	**2309cc**	**100kW**	(136ps)
NG	4000 2.3	B	01	1987	>	09	1987	5 Cyl	**2309cc**	**100kW**	(136ps)
NG	80 2.3i	B	09	1991	>	11	1994	5 Cyl	**2309cc**	**100kW**	(136ps)
NG	90 2.3i	B	04	1987	>	12	1991	5 Cyl	**2309cc**	**100kW**	(136ps)
NG	Cabriolet 2.3i	B	06	1991	>	07	1994	5 Cyl	**2309cc**	**100kW**	(136ps)
NG	Coupé 2.3i	B	08	1986	>	07	1994	5 Cyl	**2309cc**	**100kW**	(136ps)



11-01295-000

CH 32,200	*CH 31,900
B+ 1,100	*B+ 1,100
B- 4,400	*B- 4,400
BØ 59,600	*BØ 59,600
TL 52,800	*TL 52,500

* For Oversize Piston Dimensions

20,00x57,00

CP

91-09295-000

1	1,500	MoP
2	1,750	P
3	3,000	CrP

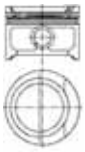
Ø 82,510	**31-03295-000**
Ø 82,760	**31-03295-025**
Ø 83,010	**31-03295-050**
Ø 83,510	**31-03295-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

82,510

AAD	100 2.0i	B	12	1990	>	12	1992	4 Cyl	**1984cc**	**85kW**	(115ps)	
AAD	80 2.0i	B	08	1990	>	12	1991	4 Cyl	**1984cc**	**85kW**	(115ps)	
AAD	Coupé 2.0i	B	08	1990	>	07	1991	4 Cyl	**1984cc**	**85kW**	(115ps)	



11-01303-000
CH 30,900
B+ 0,890
B- 5,000
BØ 64,000
TL 51,790

21,00x56,00

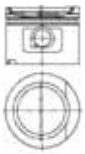
91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510 **31-03303-000**
Ø 83,010 **31-03303-050**
Ø 83,510 **31-03303-100**

Audi ve Seat ile Ortak Motor

82,510

AAD / ABK	100 2.0i	B	12	1990	>	12	1992	4 Cyl	**1984cc**	**85kW**	(115ps)	
AAD / ABK	80 2.0i	B	08	1990	>	12	1991	4 Cyl	**1984cc**	**85kW**	(115ps)	
AAD / ABK	Coupé 2.0i	B	08	1990	>	07	1991	4 Cyl	**1984cc**	**85kW**	(115ps)	
ABK	A6 2.0i	B	06	1994	>	06	1996	4 Cyl	**1984cc**	**85kW**	(115ps)	
ABK	Cabriolet 2.0i	B	01	1993	>	09	1998	4 Cyl	**1984cc**	**85kW**	(115ps)	



11-01311-000
CH 30,900
B+ 0,890
B- 5,000
BØ 63,500
TL 63,800

21,00x59,00

CP

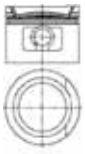
91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510 **31-03311-000**
Ø 83,010 **31-03311-050**
Ø 83,510 **31-03311-100**

Audi, Seat ve Volkswagen ile Ortak Motor

82,510

AAE	100	B	12	1990	>	01	1994	4 Cyl	**1984cc**	**74kW**	(100ps)	
ABT	80 2.0i	B	09	1991	>	06	1995	4 Cyl	**1984cc**	**66kW**	(90ps)	



11-01312-000
CH 30,900
B+ 0,890
B- 7,200
BØ 66,800
TL 63,790

21,00x59,00

CP

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510 **31-03312-000**
Ø 83,010 **31-03312-050**
Ø 83,510 **31-03312-100**

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82,510

CDAA	A3 1.8 TFSI 16V	B	05	2008	>	07	2012	4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA	TT 1.8 TFSI 16V	B	06	2008	>			4 Cyl	**1798cc**	**118kW**	(160ps)
CDHB	A5 1.8 TFSI 16V	B	05	2009	>			4 Cyl	**1798cc**	**118kW**	(160ps)
CDHB / CDHA	A4 1.8 TFSI 16V	B	06	2008	>			4 Cyl	**1798cc**	**88-118kW**	(120-160ps)

11-02295-000
CH 29,800
B+ 5,680
B- 4,750
TL 55,980

23,00x51,00

AP

Trapezoidal Connecting Rod

99-09327-000

1	1,200	NT	St
2	1,200		St
3	2,000	CR	

Ø 82,510
Ø 83,010

39-04295-000
39-04295-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

ALT	A4 2.0i 20V	B	12	2000	>	10	2005	4 Cyl	**1984cc**	**96kW**	(131ps)
ALT	A6 2.0i 20V	B	06	2001	>	01	2005	4 Cyl	**1984cc**	**96kW**	(131ps)

11-02327-000
CH 29,600
VD1 2,510
B- 1,200
BØ 64,000
TL 50,600

19,00x44,00

91-09311-000

1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

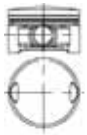
Ø 82,510
Ø 82,760
Ø 83,010

31-04327-000
31-04327-025
31-04327-050

Audi ve Volkswagen ile Ortak Motor

82,510

ALG / ACK	A4 2.8i 30V	B	05	1997	>	07	1998	6 Cyl	**2771cc**	**142kW**	(193ps)
ALG / ACK	A6 2.8i 30V	B	04	1997	>	05	2001	6 Cyl	**2771cc**	**142kW**	(193ps)
ALG / ACK	A8 2.8i 30V	B	10	1997	>	12	1998	6 Cyl	**2771cc**	**142kW**	(193ps)



11-02330-000

CH 30,160	*CH 29,860
VD1 1,310	*VD1 1,310
B+ 2,560	*B+ 2,560
TL 53,720	*TL 53,420

* For Oversize Piston Dimensions

21,00x56,00

99-09330-000

1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

Ø 82,510
Ø 83,010

39-04330-000
39-04330-050

Audi ve Volkswagen ile Ortak Motor

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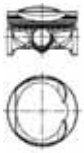
82,510

BZB / BYT	A3 1.8 TFSI 16V	B	11	2006	>	05	2008	4 Cyl	**1781cc**	**118kW**	(160ps)
CABA / CABB	A4 1.8 TFSI 16V	B	11	2007	>	05	2008	4 Cyl	**1781cc**	**88-118kW**	(120-160ps)
CABD	A5 1.8 TFSI 16V	B	10	2007	>	11	2008	4 Cyl	**1781cc**	**125kW**	(170ps)



11-02342-000
CH 29,800
B+ 4,750
B- 6,000
BØ 67,000
TL 55,980

21,00x53,00

Type: AP

91-09329-000

1	1,200	CrP	St
2	1,500	P	
3	2,000	CR	St

Ø 82,510 **31-04342-000**
Ø 82,765 **31-04342-025**
Ø 83,015 **31-04342-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

CADA Euro 5	Q5 2.0 TFSI 16V	B	01	2010	>			4 Cyl	**1984cc**	**155kW**	(211ps)
CCTA / CCZC	Q3 2.0 TFSI 16V	B	06	2011	>			4 Cyl	**1984cc**	**125-147kW**	(170-200ps)
CCZA / CBFA / CAWB	A3 2.0 TFSI 16V	B	04	2009	>	07	2012	4 Cyl	**1984cc**	**147kW**	(200ps)
CCZA / CCTA	TT 2.0 TFSI 16V	B	06	2008	>	05	2010	4 Cyl	**1984cc**	**147kW**	(200ps)
CDZA / CADA Euro 5	A4 2.0 TFSI 16V	B	06	2008	>			4 Cyl	**1984cc**	**132-155kW**	(180-211ps)

11-02343-000
CH 29,600
VD1 3,000
B- 6,200
BØ 50,000
TL 50,100

21,00x56,00

Type: AP

91-09329-000

1	1,200	CrP	St
2	1,500	P	
3	2,000	CR	St

Ø 82,510 **31-04343-000**
Ø 82,760 **31-04343-025**
Ø 83,010 **31-04343-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

CCTA/CPMA/CPMB/CPSA/CCZC/CAEB/ CDNC/CDNB/CHJA Euro 5	Q3-5-7 2.0 TFSI	B	11	2008	>			4 Cyl	**1984cc**	**125-162kW**	(170-220ps)
CAEB/CDNB/CAED/CHJA Euro 5	A6-8 2.0 TFSI	B	05	2011	>			4 Cyl	**1984cc**	**132-162kW**	(180-220ps)
CCZA/CCTA/CBFA/CAWB/CDNC	A3 2.0 TFSI	B	09	2004	>			4 Cyl	**1984cc**	**147-155kW**	(200-211ps)
CDNB/CDNC/CAEA/CDNB/CAEB/ CAED/CPMB	A5 2.0 TFSI	B	06	2008	>	01	2017	4 Cyl	**1984cc**	**132-162kW**	(180-220ps)
CAEA/CDNB/CAEB/CDNC/CAED/ CPMB/CPMA/	A4 2.0 TFSI	B	06	2008	>	12	2015	4 Cyl	**1984cc**	**132-162kW**	(180-220ps)

11-02587-000
CH 29,600
VD1 3,500
B- 6,200
TL 50,100

23,00x53,00

Type: AP

99-09327-000

1	1,200	NT	St
2	1,200		St
3	2,000	CR	

Ø 82,510 **31-04587-000**
Ø 83,010 **31-04587-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

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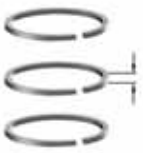
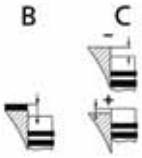
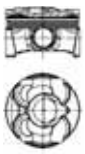
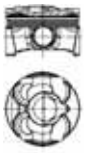
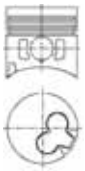
BMW

			Type									
77,010												
N13 B16 A		1 Series			B	11	2011	>		4 Cyl	**1598cc**	**75-130kW** (102-177ps)
N13 B16 A		3 Series			B	10	2012	>		4 Cyl	**1598cc**	**100-125kW** (136-170ps)
	**11-02595-000** CH 28,500 VD1 3,300 B- 3,500 BØ 34,700 TL 51,200 **20,00x48,00**		HA	**91-09874-000** 1 1,200 NT St 2 1,500 P 3 2,000 CrP St							Ø 77,010 Ø 77,260 Ø 77,510	**31-04595-000** **31-04595-025** **31-04595-050**
Bmw ve Mini (Bmw) ile Ortak Motor												
77,010												
Strok Boyu 0,20mm Kisa Piston		/ Stroke Lenght 0,20mm Shorter			B	02	2012	>		4 Cyl	**1598cc**	**100-125kW** (136-170ps)
	**11-02595-001** CH 28,300 VD1 3,300 B- 3,500 BØ 34,700 TL 51,200 **20,00x48,00**		HA CH -0,20 mm	**91-09874-000** 1 1,200 NT St 2 1,500 P 3 2,000 CrP St							Ø 77,010 Ø 77,260	**31-04595-001** **31-04595-025**
Bmw ve Mini (Bmw) ile Ortak Motor												
80,000												
M21D24WA		324 TD 2.4			D	10	1987	>	12 1980	6 Cyl	**2443cc**	**85kW** (115ps)
M21D24WA		524 TD 2.4			D	09	1983	>	12 1987	6 Cyl	**2443cc**	**85kW** (115ps)
	**11-02608-000** CH 46,400 *CH 46,200 B- 2,000 *B- 2,000 TL 79,300 *TL 79,300 * For Oversize Piston Dimensions **26,00x69,00**		AP YS	**91-09612-000** 1 2,500 CR 2 2,000 P 3 3,500 CR							Ø 80,000 Ø 80,250 Ø 80,500	**31-04608-000** **31-04608-025** **31-04608-050**

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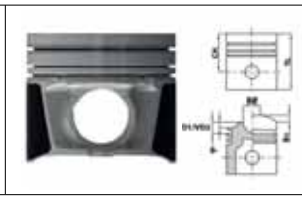
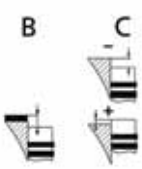
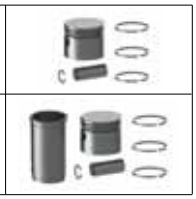
		Type		B C		
						

80,000

M41 B17 / D17	318tds 1.7	D	09	1994	>	02	1998	4 Cyl	**1665cc**	**66kW**	(90ps)
M51 D25 OL / TU OL / UL	525td / 525tds 2.5	D	12	1992	>	06	1996	6 Cyl	**1665cc**	**85-105kW**	(115-143ps)
M51 D25 TU OL	725tds 2.5	D	03	1996	>	02	2000	6 Cyl	**1665cc**	**105kW**	(143ps)
M51 D25 TU UL / UL / OL	325td / 325tds 2.5	D	02	1996	>	02	1998	6 Cyl	**1665cc**	**85-105kW**	(115-143ps)

	11-02613-000 CH 39,450 VD1 2,500 TL 62,450 **27,00x63,00**	AP YS CP	**91-09613-000** 1 3,000 CrP 2 1,750 P 3 3,000 CrP	1. Conta ile 1,55mm +0,64/+0,78 2. Conta ile 1,68mm +0,79/+0,91 3. Conta ile 1,87mm +0,92/+1,08	Ø 80,000 Ø 80,250 Ø 80,500	**31-04613-000** **31-04613-025** **31-04613-050**

Bmw, Opel ve Rover ile Ortak Motor

82,010

N52 B25 OL	325i 2.5 24V	B	03	2005	>	07	2008	6 Cyl	**2497cc**	**160kW**	(218ps)
N52 B25 OL	523i 2.5 24V / 525i 2.5 16V-24V	B	04	2007	>	05	2010	6 Cyl	**2497cc**	**130-160kW**	(177-218ps)
N52 B25 UL	523i 2.5 24V / 525i 2.5 16V-24V	B	03	2005	>	03	2007	6 Cyl	**2497cc**	**130-160kW**	(177-218ps)

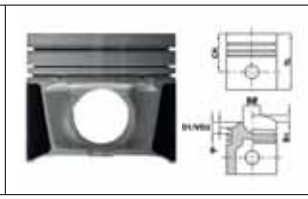
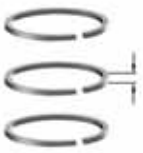
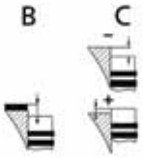
	11-02619-000 CH 27,550 B+ 3,800 TL 50,300 **20,00x46,00**	HA	**91-09350-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 82,010 Ø 82,510	**31-04619-000** **31-04619-050**

84,000

M47 N	118d (E87)	D	00	2001	>			4 Cyl	**2000cc**	**kW**	(ps)
M47 N	338d (E90)	D	00	2001	>			4 Cyl	**2000cc**	**kW**	(ps)
M47 N	338d (E91)	D	00	2001	>			4 Cyl	**2000cc**	**kW**	(ps)

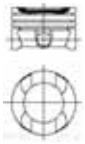
	11-02596-000 CH 44,870 VD1 1,360 VD2 1,480 B+ 14,500 B- 14,500 BØ 47,500 TL 70,370 **30,00x68,00**	AP YS	**91-09629-000** 1 3,000 CK 2 2,000 3 3,000 CK	1,45mm conta +0,45/+0,56 1,55mm conta +0,56/+0,65 1,65mm conta +0,65/+0,75	Ø 84,000 Ø 84,500	**31-04596-000** **31-04596-050**

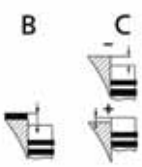
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type				

84,000

N20 B20 A (2013 oncesi)	125i (F20/F21)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	220i (F22/F23)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	228i (F22/F23) / N20-N26 (F22)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	228iX N20-26 (F22) / /F23)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	320i (F30/F34)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	320iX (F30/F34)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	320Li (F35)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	328i N20-26 (F30-**34**)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	328iX N20-26 (F30-34)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	328Li / LiX (F35)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	420i / iX (F32)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	428i N20-26 (F32-33-36)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	428iX N20-26(F32-33-36)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	520i (F10-F10N-F11N)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	520Li N20 (F18) / (F18) / (F18N)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	528i N20 (F07-10-11)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	528iX (F10-F10N-F11-F11N)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	528Li-LiX (F18N)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	530Le (F18N)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	X1 18i N20 (E84)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	X3 20i-iX (F25) / 28i N20 (F25)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	X4 20iX-28iX (F26)	B	>	4 Cyl		(163-184ps)
N20 B20 A (2013 oncesi)	Z4 18-20-28i (E89)	B	>	4 Cyl		(163-184ps)

	**11-02597-000** CH 32,430 VD1 3,630 B- 3,750 BØ 52,500 TL 51,100 **22,00x51,80**	HA	**99-09624-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 84,000	**39-04597-000**

		Type		B C		
						

84,000

N20 B20 A (2013 sonrasi)	125i (F20/F21)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	220i (F22/F23)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	228i (F22/F23) / N20-N26 (F22)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	228iX N20-26 (F22) / /F23)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	320i (F30/F34)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	320iX (F30/F34)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	320Li (F35)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	328i N20-26 (F30-**34**)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	328iX N20-26 (F30-34)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	328Li / LiX (F35)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	420i / iX (F32)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	428i N20-26 (F32-33-36)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	428iX N20-26(F32-33-36)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	520i (F10-F10N-F11N)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	520Li N20 (F18) / (F18) / (F18N)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	528i N20 (F07-10-11)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	528iX (F10-F10N-F11-F11N)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	528Li-LiX (F18N)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	530Le (F18N)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	X1 18i N20 (E84)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	X3 20i-iX (F25) / 28i N20 (F25)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	X4 20iX-28iX (F26)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)
N20 B20 A (2013 sonrasi)	Z4 18-20-28i (E89)	B	>	4 Cyl	**1997cc**	**120-135kW**	(163-184ps)

	11-02598-000 CH 36,600 VD1 7,900 B- 8,400 BØ 48,500 TL 55,300 **22,00x51,80**	HA	**99-09624-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 84,000	**39-04598-000**

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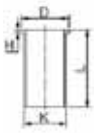
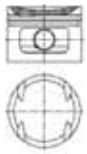
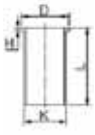
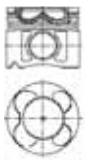
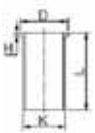
		Type		B	C		
84,000							
M20 B25 E/8 KAT	525 i	B	09 1987 > 08 1991	6 Cyl	**2494cc**	**125kW**	(170ps)
M20 B25 M.E.	325i 2.5	B	09 1985 > 06 1991	6 Cyl	**2494cc**	**125kW**	(170ps)
11-02600-000 CH 34,090 B+ 4,340 B- 4,950 BØ 71,200 TL 69,430 **22,00x54,00**		CP	**91-09600-000** 1 1,500 CR 2 1,750 3 3,000		Ø 84,000 Ø 84,250 Ø 84,500		**31-04600-000** **31-04600-025** **31-04600-050**
 K=88,05 L=147,00 H=5,00 D=89,08		DS			**51-65344-000**		
84,000							
M50 B25 M	325i 2.5 24V	B	04 1990 > 09 1992	6 Cyl	**2494cc**	**141kW**	(192ps)
M50 B25 M	525i 2.5 24V	B	09 1989 > 09 1992	6 Cyl	**2494cc**	**141kW**	(192ps)
 **11-02601-000** CH 38,200 VD1 2,240 B- 4,010 BØ 70,000 TL 63,200 **22,00x54,00**		CP	**91-09600-000** 1 1,500 CR 2 1,750 3 3,000		Ø 84,000 Ø 84,250 Ø 84,500		**31-04601-000** **31-04601-025** **31-04601-050**
 K=88,05 L=147,00 H=5,00 D=89,08		DS			**51-65344-000**		
84,000							
M47N	3 Series	D	03 2003 > 03 2005	4 Cyl	**2000cc**	**85-150kW**	(115-204ps)
M47N	520d 2.0 16V	D	07 2005 > 08 2007	4 Cyl	**2000cc**	**120kW**	(163ps)
M57N	525d 2.5 24V	D	04 2004 > 09 2006	6 Cyl	**2000cc**	**120-130kW**	(163-177ps)
M57N	730d 3.0 24V	D	09 2002 > 11 2008	6 Cyl	**2000cc**	**160kW**	(218ps)
M57N	X3	D	09 2006 > 08 2010	6 Cyl	**2000cc**	**160-210kW**	(218-286ps)
M57N	X5 3.0d 24V	D	09 2003 > 09 2006	6 Cyl	**2000cc**	**160kW**	(218ps)
 **11-02614-000** CH 44,870 VD1 1,360 B- 13,500 BØ 46,900 TL 70,620 **30,00x68,00**		AP YS PDB	**91-09606-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP	1. Kertik conta ile +0,85/+0,90 2. Kertik conta ile +0,90/+1,00 3. Kertik conta ile +1,00/+1,10	Ø 84,000 Ø 84,500		**31-04614-000** **31-04614-050**
 K=87,00 L=149,00 H=6,00 D=88,50		DS			**51-65158-000**		

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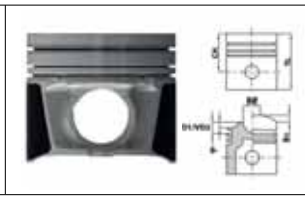
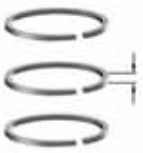
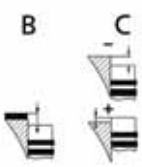
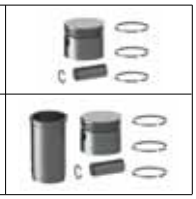
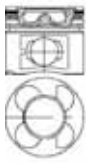
		Type		B C		
						

84,000

M57 D30	330d 3.0 24V	D	09	1999	>	02	2003	6 Cyl	**2926cc**	**135kW**	(184ps)
M57 D30	530d 3.0 24V	D	09	1998	>	05	2004	6 Cyl	**2926cc**	**135kW**	(184ps)
M57 D30	730d 3.0 24V	D	09	1998	>	07	2001	6 Cyl	**2926cc**	**135kW**	(184ps)
M57 D30	X5 3.0d 24V	D	04	2001	>	09	2003	6 Cyl	**2926cc**	**135kW**	(184ps)



11-02615-000
CH 47,000
VD1 1,360
B- 16,500
BØ 41,550
TL 71,000

30,00x68,00

AP
YS

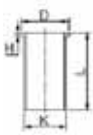
91-09606-000
1 3,000 CrP
2 2,000 P
3 3,000 CrP

1. Kertik conta ile +0,80/+0,90 2. Kertik conta ile +0,90/+1,00

Ø 84,000
Ø 84,250
Ø 84,500

31-04615-000
31-04615-025
31-04615-050

Bmw ve Rover ile Ortak Motor



K=87,00
L=149,00
H=6,00
D=88,50

DS

51-65158-000

84,000

N 47TU	3 Series	D	00	2013	>			4 Cyl	**1995cc**	**135kW**	(181ps)
N 47TU	5 Series	D	00	2013	>			4 Cyl	**1995cc**	**135kW**	(181ps)

11-02616-000
CH 47,000
B- 14,500
BØ 47,500
TL 73,000

32,00x64,00

AP
YS

99-09601-000
1 1,750 CK
2 1,750 P
3 2,000 NT St

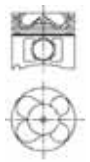
1 Centik conta ile 0,72/0,83 2 Centik conta ile 0,84/0,93 3 Centik conta ile 0,94/1,05

Ø 84,000
Ø 84,500

39-04616-000
39-04616-050

84,000

M57N2 306 D3	3 Series (E60-90-91-92)	D	01	2009	>			4 Cyl	**2993cc**	**150-180kW**	(204-245ps)
M57N2 306 D3	5 Series (E60)	D	01	2009	>			4 Cyl	**2993cc**	**150-180kW**	(204-245ps)
M57N2 306 D3	X3 (E83) xDrive 30d	D	09	2008	>			4 Cyl	**2993cc**	**150-180kW**	(204-245ps)
M57N2 306 D3	X6 (E71-72)	D	05	2008	>			4 Cyl	**2993cc**	**150-180kW**	(204-245ps)



11-02617-000
CH 44,980
VD1 1,600
B- 16,500
BØ 47,500
TL 71,000

30,00x68,00

AP
YS

91-09610-000
1 2,500 CR
2 2,000 P
3 2,000 NT St

Ø 84,000
Ø 84,500

31-04617-000
31-04617-050

99-09610-000
1 2,500 CR
2 2,000 P
3 2,000 NT St

39-04617-000

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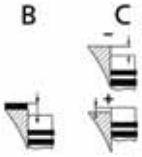
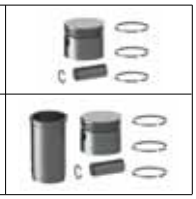

		Type		B		C						

84,000

N46 B20 B	520i 2.0 16V	B	03	2008	>	09	2009	4 Cyl	**1995cc**	**95-125kW**	(129-170ps)
N46 B20 B	X1 18i 2.0 16V	B	10	2009	>			4 Cyl	**1995cc**	**95-125kW**	(129-170ps)
N46 B20 B / OL / UL	3 Series	B	09	2005	>	03	2007	4 Cyl	**1995cc**	**95-125kW**	(129-170ps)
N46 B20 OL	X3 2.0i 16V	B	09	2005	>	09	2006	4 Cyl	**1995cc**	**95-110kW**	(129-150ps)
N46 B20 OL	Z4 2.0i	B	04	2005	>	08	2008	4 Cyl	**1995cc**	**95-110kW**	(129-150ps)
N46 B20 UL / OL	1 Series	B	12	2004	>	03	2007	4 Cyl	**1995cc**	**95-110kW**	(129-150ps)

11-02618-000
CH 29,500
VD1 2,800
VD2 3,200
TL 50,500

HA

91-09624-000

Ø 84,000
Ø 84,250
Ø 84,500

31-04618-000
31-04618-025
31-04618-050

20,00x50,00

Trapezoidal Connecting Rod

99-09624-000

1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

39-04618-000

84,000

N42 B18	316 1.8i 16V (E46)	B	00	2001	>	00	2004	4 Cyl	**1796cc**	**85kW**	(116ps)
N42 B20	318 2.0i 16V (E46)	B	00	2001	>	00	2004	4 Cyl	**1796cc**	**105kW**	(143ps)
N45 B16	116 1.6i 16V (E87)	B	00	2004	>	00	2007	4 Cyl	**1796cc**	**85kW**	(116ps)
N45 B16	316 1.6i 16V (E46)	B	00	2004	>	00	2007	4 Cyl	**1796cc**	**85kW**	(116ps)
N45 B16	316 1.6i 16V (E90)	B	00	2004	>	00	2007	4 Cyl	**1796cc**	**85kW**	(116ps)
N45 B16	316 1.6i 16V (E92)	B	00	2004	>	00	2007	4 Cyl	**1796cc**	**85kW**	(116ps)
N46 B20	318 2.0i 16V (E46)	B	00	2004	>	00	2005	4 Cyl	**1796cc**	**105kW**	(143ps)

11-02621-000
CH 29,800
VD1 4,750
TL 50,800

HA

99-09624-000

1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

Ø 84,000

39-04621-000

20,00x50,00

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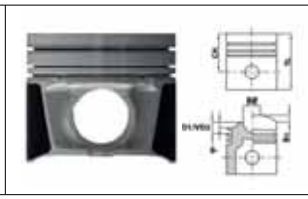
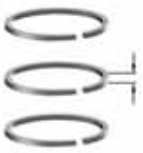
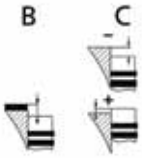
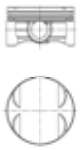
		Type		B C		
						

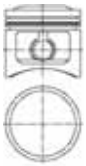
84,000

M54 256	Z4 / X3 / 325 / 525	B	00	2003	>	00	2010	4 Cyl	**2494cc**	**125-170kW**	(170-231ps)			

	**11-02623-000** CH 27,600 VD1 2,600 TL 47,600 **22,00x56,00**		**99-09624-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St	Ø 84,000 Ø 84,500	**39-04623-000** **39-04623-050**

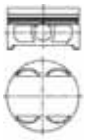
89,000

M10 B18 K / S / V / LU	3 Series	B	09	1980	>	12	1983	4 Cyl	**1766cc**	**66-77kW**	(90-105ps)			
M10 B18 S / LE	518 1.8 / 518i 1.8	B	06	1981	>	08	1984	4 Cyl	**1766cc**	**66-77kW**	(90-105ps)			

	**11-02609-000** CH 47,100 B+ 4,500 TL 83,600 **22,00x58,00**	CP	**91-09609-000** 1 1,750 CrP 2 2,000 P 3 4,000 CrP	Ø 89,000 Ø 89,500	**31-04609-000** **31-04609-050**

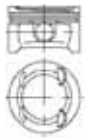
92,000

M62 B44	540i 4.4 32V	B	01	1996	>	09	1998	8 Cyl	**4395cc**	**210kW**	(286ps)			
M62 B44	740i 4.0 32V / 4.4 32V	B	03	1996	>	09	1998	8 Cyl	**4395cc**	**210kW**	(286ps)			
M62 B44	840 Ci 32V / 4.4i 32V	B	01	1995	>	04	1998	8 Cyl	**4395cc**	**210kW**	(286ps)			
M62 B44	X5 4.4i 32V	B	03	1999	>	09	2006	8 Cyl	**4395cc**	**210kW**	(286ps)			

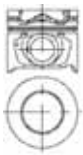
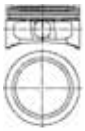
	**11-02611-000** CH 31,300 VD1 2,700 TL 53,300 **22,00x60,00**	HA	**91-09611-000** 1 1,500 CR 2 1,500 P 3 2,000 CR	Ø 92,000 Ø 92,250 Ø 92,500	**31-04611-000** **31-04611-025** **31-04611-050**

Bmw ve Rover ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
73,400						
A14XER	Aveo II 1.4i 16V	B	03 2011 >	4 Cyl	**1364cc 74kW**	(101ps)
 **11-01913-000** CH 25,850 VD1 3,600 B- 1,600 BØ 52,500 TL 46,800 **18,00x53,00** Chevrolet ve Opel ile Ortak Motor		HA	**91-09222-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 73,400 Ø 73,900	**31-03913-000** **31-03913-050**
73,400						
A 12 XER Euro5	Aveo II 1.2i 16V	B	03 2011 >	4 Cyl	**1229cc 63kW**	(86ps)
11-02196-000 CH 26,900 VD1 1,350 VD2 3,950 B- 0,650 BØ 54,600 TL 74,900 **18,00x53,00** Chevrolet ve Opel ile Ortak Motor		HA	**91-09222-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 73,400 Ø 73,900	**31-04196-000** **31-04196-050**
77,900						
OPTRA	Aveo-III	B	>	4 Cy	1400ccl	(ps)
11-01038-000 CH 31,900 VD1 0,400 VD2 0,600 B- 1,400 BØ 44,200 TL 51,900 **18,00x54,00**			**91-09270-000** 1 1,200 2 1,500 3 2,500		Ø 77,900 Ø 78,400	**31-03038-000** **31-03038-050**
79,000						
OPTRA E-TEC II	Aveo / Lacetti	B	00 2004 > 00 2005	4 Cyl		(ps)
11-01037-000 CH 27,800 VD1 1,300 VD2 2,600 B- 2,000 BØ 67,800 TL 49,800 **18,00x55,00**			**91-09733-000** 1 1,200 CR St 2 1,500 P 3 3,000 CR St		Ø 79,000 Ø 79,500	**31-03037-000** **31-03037-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
Z20S	Captiva 2.0 16V D	D 00 2006 >	4 Cyl	**1998cc 110kW**	(150ps)	
 **11-02200-000** CH 46,350 B- 13,950 BØ 51,900 TL 72,350 **28,00x66,80**	AP YS	**91-09880-000** 1 2,000 CkP 2 2,000 CrP 3 3,000 NT St	1 Kertik 0,11/0,23 2 Kertik 0,24/0,33 3 Kertik 0,34/0,42	Ø 83,000 Ø 83,500	**31-04200-000** **31-04200-050**	
Chevrolet ve Opel ile Ortak Motor		**99-09880-000** 1 2,000 NT St 2 2,000 CrP 3 3,000 CR			**39-04200-000** **39-04200-050**	
86,000						
Z22SE	Speedster 2.2i 16V	B 09 2002 >	4 Cyl	**2198cc 108kW**	(147ps)	
 **11-02221-000** CH 26,750 B- 0,610 BØ 70,000 TL 48,900 **20,00x62,84**	HA	**91-09221-000** 1 1,200 CR St 2 1,500 P 3 2,500 CrP St		Ø 86,000 Ø 86,500 Ø 87,000	**31-04221-000** **31-04221-050** **31-04221-100**	
Chevrolet ve Opel ile Ortak Motor						
87,500						
Z24XE	Captiva 2.4i 16V	B 09 2006 >	4 Cyl	**2405cc 100-103kW**	(136-140ps)	
11-02232-000 CH 26,700 B- 6,000 BØ 74,500 TL 50,000 **21,00x61,70**		**91-09814-000** 1 1,200 NT St 2 1,500 P 3 2,500 NtP St		Ø 87,500 Ø 88,000	**31-04232-000** **31-04232-050**	
Chevrolet ve Opel ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

83,000

OM 651.925 | Compass 2.2 CRD | D | 05 | 2011 | > | 4 Cyl | **2143cc** | **100kW** | (136ps)

11-02688-000
CH 48,500
VD1 0,970
B- 13,250
BØ 49,400
TL 75,500

30,00x66,00

Chrylser ve Mercedes-Benz ile Ortak Motor

AP
YS

99-09644-000
1 2,000 CkP
2 1,750 P
3 2,000 NT St

+0,50/+0,75

Ø 83,000
Ø 83,500

39-04688-000
39-04688-050

83,010

OM 642.910 | 300 C 3.0 CRD 24V | D | 10 | 2005 | > | 6 Cyl | **2987cc** | **160-165kW** | (218-224ps)

11-02760-000
CH 45,650
VD1 1,330
VD2 1,490
B- 14,650
BØ 43,400
TL 71,650

30,00x66,00

Chrylser ve Mercedes-Benz ile Ortak Motor

AP
YS

Cly. 1-2-3 to be used with 2761 000

99-09642-000
1 2,000 NT St
2 2,000 CR
3 2,000 NT St

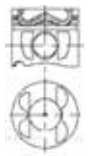
+0,53/+0,77

Ø 83,010
Ø 83,260
Ø 83,510
Ø 83,760

39-04760-000
39-04760-025
39-04760-050
39-04760-075

83,010

OM 642.910 | 300 C 3.0 CRD 24V | D | 10 | 2005 | > | 6 Cyl | **2987cc** | **160-165kW** | (218-224ps)



11-02761-000
CH 45,650
VD1 1,330
VD2 1,490
B- 14,650
BØ 43,400
TL 71,650

30,00x66,00

Chrylser ve Mercedes-Benz ile Ortak Motor

AP
YS

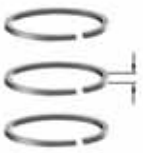
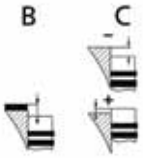
Cyl. 4-5-6 to be used with 2760 000

99-09642-000
1 2,000 NT St
2 2,000 CR
3 2,000 NT St

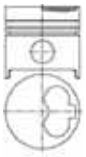
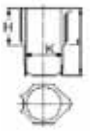
Ø 83,010
Ø 83,260
Ø 83,510
Ø 83,760

39-04761-000
39-04761-025
39-04761-050
39-04761-075

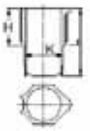
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

86,000

J8S800	Jeep CJ-7 2.1 D		D	01	1988	>	12	1998	4 Cyl	**2068cc**	**44kW**	(60ps)	
	**11-01907-000** CH 51,000 B- 4,200 TL 92,900 **28,00x75,00**		**91-09907-000** 1 2,000 MoP 2 2,000 3 4,000 CR							Ø 86,000		**31-03907-000**	
Chrysler ve Renault ile Ortak Motor													
	K=93,55 L=166,00 H=93,05	WS								**51-95907-000**		**71-07907-000**	
	K=93,55 L=166,00 H=93,05	WS								**51-95908-000**		**71-07911-000**	

86,000

J8S 708 / 814 / 890	Cherokee 2.1 TD		D	01	1988	>	08	1995	4 Cyl	**2068cc**	**63-65kW**	(86-88ps)	
J8S 814	Comanche 2.1 TD		D	01	1988	>	12	1998	4 Cyl	**2068cc**	**63-65kW**	(86-88ps)	
J8S 814	Wagoneer 2.1 TD		D	01	1988	>	12	1994	4 Cyl	**2068cc**	**63-65kW**	(86-88ps)	
J8S 814	XJ 2.1 TD		D	04	1984	>	12	1987	4 Cyl	**2068cc**	**63-65kW**	(86-88ps)	
	11-01908-000 CH 50,990 B- 4,000 TL 93,000 **28,00x75,00**	AP	**91-09908-000** 1 2,500 Mo 2 2,500 3 4,000 CR							Ø 86,000		**31-03908-000**	
Chrysler ve Renault ile Ortak Motor													
	K=93,55 L=166,00 H=93,05	WS								**51-95908-000**		**71-07908-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

89,910

EGW Concorde 3.2i 24V B 01 1998 > 12 2001 6 Cyl **3199cc** **168kW** (228ps)

11-01647-000

CH 31,100	*CH 30,800
B- 1,200	*B- 1,200
BØ 74,500	*BØ 74,500
TL 54,600	*TL 54,600

* For Oversize Piston Dimensions

22,00x56,00

AA=22,20 mm

98-09647-000

1	1,500	NT	St
2	1,750	P	
3	3,000	CrP	

Ø 89,910
Ø 90,160
Ø 90,410
Ø 90,910

38-03647-000
38-03647-025
38-03647-050
38-03647-100

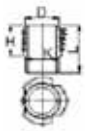
Chrysler, Daewoo ve Mercedes-Benz ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

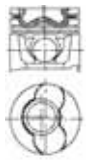
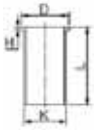
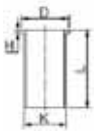
68,500

A79 / 4	20 CV Dyane4	B	>	4 Cyl	435cc kW	(ps)

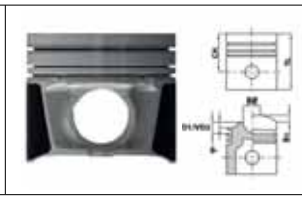
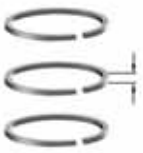
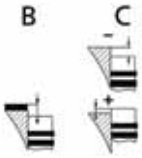
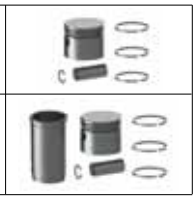
	11-01358-000 CH 33,500 B- 11,000 TL 73,500 **20,00x58,20**	CP	**91-09358-000** 1 1,750 CR 2 2,000 P 3 4,000 CR		Ø 68,500 Ø 69,000 Ø 69,500	**31-03358-000** **31-03358-050** **31-03358-100**
	K=80,00 L=115,50 H=76,63 D=82,00	AF			**51-95315-000**	**71-07358-000**

73,700

8 HT	C1 1.4 HDi	D	06 2005	>	4 Cyl	(54ps)
8 HX	C2 1.4 HDi	D	09 2003	>	4 Cyl	(68ps)
8 HX	Nemo 1.4 HDi	D	02 2008	>	4 Cyl	(68ps)
8 HX / 8 HZ	C3 1.4 HDi	D	01 2002	> 08 2005	4 Cyl	(68ps)
8 HZ	Xsara 1.4 HDi	D	01 2003	>	4 Cyl	(68ps)

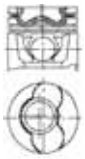
	**11-01460-000** CH 42,940 VD1 1,650 B- 14,700 BØ 37,150 TL 65,440 **25,00x60,00** Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor	AP	**91-09460-000** 1 2,500 CkP 2 1,950 P 3 2,500 CrP	1. Conta ile 1,252mm (+0,618/+0,725) 2. Conta ile 1,303mm (+0,726/+0,775) 3. Conta ile 1,351mm (+0,776/+0,825) 4. Conta ile 1,400mm (+0,83/+0,88) 5. Conta ile 1,450mm (+0,88/+0,98)	Ø 73,700 Ø 74,200	**31-03460-000** **31-03460-050**
	K=76,75 L=136,00 H=5,10 D=78,15	DS			**51-65819-000**	
	K=77,25 L=136,00 H=6,00 D=78,65	DS +0,50			**51-65819-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

73,700

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)



11-01460-001
CH 42,740
VD1 1,650
B- 14,700
BØ 37,150
TL 65,240

25,00x60,00

AP

CH -0,20 mm

91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

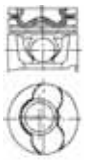
Ø 73,700
Ø 74,200

31-03460-001
31-03460-051

Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor

73,700

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)



11-01460-002
CH 42,540
VD1 1,650
B- 14,700
BØ 37,150
TL 65,040

25,00x60,00

AP

CH -0,40 mm

91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

Ø 73,700
Ø 74,200

31-03460-002
31-03460-052

Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor

73,700

8HY (DV4TED4) C3 1.4 HDI 02 2002 > 04 2005 (90ps)

11-02112-000
CH 42,944
VD1 1,179
B- 14,390
BØ 37,160
TL 65,444

25,00x60,00

AP
YS

91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

Ø 73,700
Ø 73,950
Ø 74,200

31-04112-000
31-04112-025
31-04112-050

Citroen ve Peugeot ile Ortak Motor

73,700

DV4C 1.4 HDi D 11 2009 > 4 Cyl **1398cc** **50kW** (68ps)

DV4C DS3 1.4 Hdi 70 D 12 2011 > 4 Cyl **1398cc** **50kW** (68ps)

11-02494-000
CH 42,944
B- 12,500
BØ 45,000
TL 65,440

25,00x60,00

AP

91-09882-000
1 2,500 CK
2 1,950
3 2,000 CR

1. Conta ile 1,252mm (+0,618/+0,725) 2. Conta ile 1,303mm (+0,726/+0,775) 3. Conta ile 1,351mm (+0,776/+0,825) 4. Conta ile 1,400mm (+0,83/+0,88) 5. Conta ile 1,450mm (+0,88/+0,98)

Ø 73,700
Ø 74,200

31-04494-000
31-04494-050

Citroen ve Peugeot ile Ortak Motor

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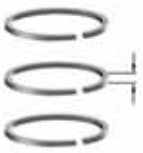
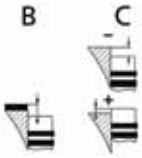
		Type		B C		
						

73,700

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

11-02494-001
CH 42,744
B- 12,500
BØ 45,000
TL 65,240

25,00x60,00

AP

CH -0,20 mm

91-09882-000
1 2,500 CK
2 1,950
3 2,000 CR

Ø 73,700
Ø 74,200

31-04494-001
31-04494-051

Citroen ve Peugeot ile Ortak Motor

73,700

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

11-02494-002
CH 42,544
B- 12,500
BØ 45,000
TL 65,040

25,00x60,00

AP

CH -0,40 mm

91-09882-000
1 2,500 CK
2 1,950
3 2,000 CR

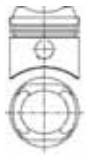
Ø 73,700
Ø 74,200

31-04494-002
31-04494-052

Citroen ve Peugeot ile Ortak Motor

74,000

M28	Ami 6 / 8	05 1968 > 07 1969		(30-32ps)
M28	Dyane 6	01 1968 > 07 1983		(30-32ps)



11-01359-000
CH 34,800
B+ 11,200
B- 13,900
TL 77,400

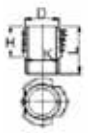
20,00x63,90

CP

91-09359-000
1 1,750 CR
2 2,000 P
3 3,500 CrP

Ø 74,000
Ø 74,500
Ø 75,000

31-03359-000
31-03359-050
31-03359-100



K=83,00
L=129,00
H=99,50
D=82,00

AF

51-95316-000

71-07359-000

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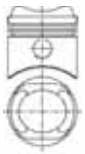
		Type		B	C		

74,000

A06/635 / M28/1	2 CV 6	B	07 1979	>	07 1990	2 Cyl	**602cc**	**19-23kW**	(25-31ps)
A06/635 / M28/1	Acadiane 6	B	05 1968	>	00 1991	2 Cyl	**602cc**	**19-23kW**	(25-31ps)
A06/635 / M28/1	Dyane 6	B	05 1968	>	00 1991	2 Cyl	**602cc**	**19-23kW**	(25-31ps)
M28 / 1	Ami 6 / 8	B	05 1968	>	07 1969	2 Cyl	**602cc**	**21-23kW**	(29-31ps)
M28 / 1	LN 0.6	B	11 1976	>	07 1979	2 Cyl	**602cc**	**21-23kW**	(29-31ps)



11-01360-000
CH 34,800
B+ 11,500
B- 13,900
TL 77,500

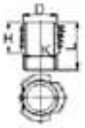
20,00x63,90

CP

91-09359-000
1 1,750 CR
2 2,000 P
3 3,500 CrP

Ø 74,000
Ø 74,500
Ø 75,000

31-03360-000
31-03360-050
31-03360-100



K=83,00
L=129,00
H=99,50
D=82,00

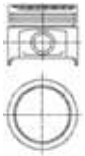
AF

51-95316-000

71-07360-000

75,000

150B (XY8), KAZ	VISA 14	B	03 1982	>	03 1987	4 Cyl	**1361cc**	**55kW**	(75ps)
K1F / K1G / KDX/Z (TU3M/Z) / KDY (TU3FM/M) / K2A/B	AX 14	B	06 1988	>	12 1989	4 Cyl	**1361cc**	**49-62kW**	(67-84ps)
K3A	C15 1.4 E	B	07 1987	>	12 1996	4 Cyl	**1361cc**	**40kW**	(54ps)
KDY (TU3FM) / KDY (TU3M) / K1H (TU3A)	C15 1.4	B	07 1987	>	12 1996	4 Cyl	**1361cc**	**49-55kW**	(67-75ps)
KDZ (TU3M/Z)	AX 14 GT	B	01 1989	>	12 1991	4 Cyl	**1361cc**	**59kW**	(80ps)
KDZ (TU3M/Z)	ZX 1.4	B	03 1991	>	06 1997	4 Cyl	**1361cc**	**55kW**	(75ps)
KDZ (TU3M/Z) / KDY (TU3M) / K1H (TU3A)	BX 14	B	01 1989	>	12 1989	4 Cyl	**1361cc**	**47-55kW**	(64-75ps)
KDZ/KDX (TU3M/Z), KFX (TU3JP), KDY(TU3M)	ZX 1.4 i	B	03 1991	>	06 1997	4 Cyl	**1361cc**	**55kW**	(75ps)
KFT/KFV (TU3A)	NEMO 1.4	B	02 2008	>		4 Cyl	**1361cc**	**54kW**	(73ps)
KFV (TU3JP)	C3 I 1.4 I	B	02 2002	>	04 2005	4 Cyl	**1361cc**	**54kW**	(73ps)
KFY / KFZ (TU3FJ2)	AX 14 GTI	B	08 1991	>	12 1996	4 Cyl	**1361cc**	**66-74kW**	(90-101ps)
TU3A	C3 II 1.4	B	11 2009	>	11 2012	4 Cyl	**1361cc**	**54kW**	(73ps)



11-01888-000
CH 40,500
B- 1,100
TL 64,500

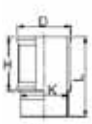
19,50x62,00

Citroen ve Peugeot ile Ortak Motor

91-09299-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

Ø 75,000

31-03888-000



K=79,45
L=134,50
H=90,00
D=89,20

WF

51-05873-000

71-07888-000

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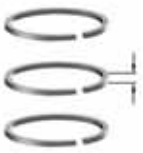
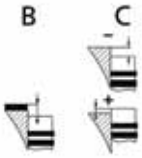
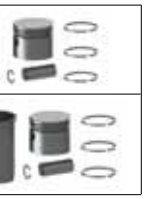
		Type		B C		
						

75,000

1.2 VTi Euro 5	C-Elysee 1.2 VTI	B	11 2012 >	3 Cyl	**1199cc** **53kW**	(72ps)

11-02105-000
CH 28,810
VD1 1,200
B- 8,000
BØ 64,500
TL 46,820

17,00x51,00

HA

91-09873-000
1 1,000 NT St
2 1,000 P
3 2,000 NT St

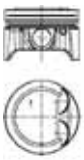
Ø 75,000
Ø 75,500

31-04105-000
31-04105-050

Citroen, Peugeot ve Toyota ile Ortak Motor

75,000

KFU (ET3J4)	C2, C3, C4	D	12 2003 >	4 Cyl	**1360cc** **65kW**	(88ps)



11-02127-000
CH 28,250
VD1 3,100
B+ 1,300
TL 52,330

17,98x44,50

91-09963-000
1 1,200 MoP
2 1,500 P
3 2,500 P

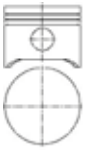
Ø 75,000

31-04127-000

Citroen ve Peugeot ile Ortak Motor

75,000

129-5 / XY 8	VISA	B	> 00 1980	4 Cyl	**1360cc** **47-59kW**	(64-80ps)



11-02154-000
CH 40,500
TL 65,500

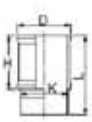
19,50x65,00

91-09154-000
1 1,750 CR
2 2,000 P
3 4,000 CR

Ø 75,000

31-04154-000

Citroen, Peugeot ve Renault ile Ortak Motor



K=79,45
L=134,50
H=90,00
D=89,20

WF

51-05873-000

71-08154-000

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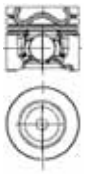
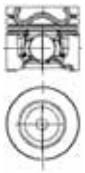
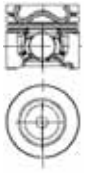
		Type		B C		
75,000						
1.6HDi (9HR / DV6C)	BERLINGO 1.6 8V	D	00 2011 >	4 Cyl	**1560cc** **kW**	(110-115ps)
1.6HDi (9HR / DV6C)	C4 (B7)	D	00 2011 >	4 Cyl	**1560cc** **kW**	(110-115ps)
1.6HDi (9HR / DV6C)	DS4 (9HR-9HL)	D	00 2011 >	4 Cyl	**1560cc** **kW**	(110-115ps)
1.6HDi (9HR / DV6C)	DS5	D	00 2011 >	4 Cyl	**1560cc** **kW**	(110-115ps)
 **11-02496-000** CH 41,750 B- 13,850 BØ 45,000 TL 65,200 **26,00x61,00**		AP YS	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR	1 Kertik 0,50/0,63 2 Kertik 0,63/0,68 3 Kertik 0,68/0,73 4 Kertik 0,73/0,78 5 Kertik 0,78/0,88	Ø 75,000 Ø 75,500	**31-04496-000** **31-04496-050**
Citroen, Ford ve Peugeot ile Ortak Motor						
75,000						
Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			>	Cyl	**kW** (ps)
 **11-02496-001** CH 41,550 B- 13,850 BØ 45,000 TL 65,000 **26,00x61,00**		AP YS CH -0,20 mm	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR		Ø 75,000 Ø 75,500	**31-04496-001** **31-04496-051**
Citroen, Ford ve Peugeot ile Ortak Motor						
75,000						
Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter			>		(ps)
 **11-02496-002** CH 41,350 B- 13,850 BØ 45,000 TL 64,800 **26,00x61,00**		AP YS CH -0,40 mm	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR		Ø 75,000 Ø 75,500	**31-04496-002** **31-04496-052**
Citroen, Ford ve Peugeot ile Ortak Motor						

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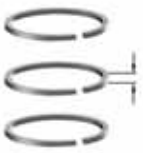
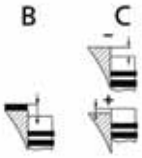
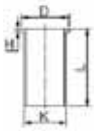
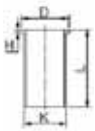
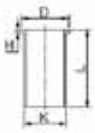
		Type		B C		
						

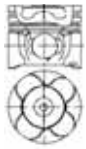
75,000

9HU / 9HX / DV6TED 4 Euro4	Jumpy 1.6 HDi 16V	01 2007	>	05 2008	(92ps)
9HX / 9HY / 9HZ	C4 / C4 Picasso 1.6 HDi 16V	11 2004	>		(92-109ps)
9HX / 9HY / 9HZ	C5 1.6 HDi 16V	11 2004	>		(92-109ps)
9HX / 9HZ	Berlingo 1.6 HDi 16V	09 2005	>		(92-109ps)
9HX / 9HZ	Xsara Picasso 1.6 HDI 16V	05 2004	>		(92-109ps)
9HX / 9HZ / DV6TED 4 Euro4	C3 / C3 Picasso 1.6 HDi 16V	09 2005	>		(92-109ps)
9HZ	C2 1.6 HDi 16V	01 2006	>		(109ps)

	11-02498-000 CH 41,700 VD1 1,200 B- 13,250 BØ 41,800 TL 65,300 **26,00x61,00**	AP YS	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP	1,25 Conta ile (+0,53/+0,63) 1,30 Conta ile (+0,63/+0,68) 1,35 Conta ile (+0,68/+0,73)	Ø 75,000 Ø 75,500 Ø 75,600	**31-04498-000** **31-04498-050** **31-04498-060**
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor						
	K=78,05 L=142,00 H=5,00 D=79,45	DS			**51-65826-000**	
	K=78,55 L=142,00 H=6,00 D=79,95	DS +0,50			**51-65826-050**	
	K=79,05 L=142,00 H=6,00 D=80,45	DS +1,00			**51-65826-100**	

75,000

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>	Cyl	**cc**	**kW**	(ps)

	**11-02498-001** CH 41,500 VD1 1,200 B- 13,250 BØ 41,800 TL 65,100 **26,00x61,00**	AP YS CH -0,20 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000 Ø 75,500	**31-04498-001** **31-04498-051**
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor						

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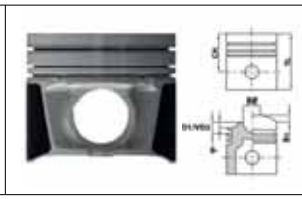
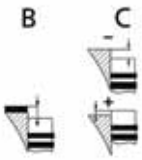
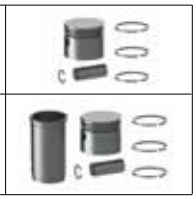
		Type		B C		
						

75,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

	11-02498-002 CH 41,300 VD1 1,200 B- 13,250 BØ 41,800 TL 64,900 **26,00x61,00**	AP YS CH -0,40 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000 Ø 75,500	**31-04498-002** **31-04498-052**

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

75,000

Strok Boyu 0,60mm Kisa Piston / Stroke Lenght 0,60mm Shorter > (ps)

	11-02498-003 CH 41,100 VD1 1,200 B- 13,250 BØ 41,800 TL 64,700 **26,00x61,00**	AP YS CH -0,60 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000	**31-04498-003**

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

75,000

KDX(TU3M / Z) / KDY(TU3M) / KFX(TU3JP)	ZX 1.4 i	10 1993	>	10 1997	(75ps)
KDZ / KDX(TU3M / Z) / KFX(TU3JP)	ZX 1.4 i	03 1991	>	06 1997	(75ps)
KFW / KFX(TU3JP)	SAXO 1.4 I	05 1996	>	06 2003	(75ps)
KFW(TU3JP)	BERLINGO 1.4 / 1.4i bivalent	11 2002	>	12 2009	(65-75ps)
KFX / KFW(TU3JP)	XSARA 1.4 i	04 1997	>	03 2005	(75ps)
KFX(TU3JP) / KFW(TU3JP) / KFW(TU3JP)	BERLINGO 1.4 / 1.4i / 1.4 GNC	11 2002	>	12 2009	(65-75ps)

	11-02500-000 CH 27,800 B+ 0,180 TL 49,800 **18,00x55,00**		**91-09889-000** 1 1,500 CR 2 1,500 3 2,500 P		Ø 75,000	**31-04500-000**

Citroen ve Peugeot ile Ortak Motor

	K=79,45 L=134,50 H=90,00 D=89,20	WF			**51-05873-000**	**71-08500-000**

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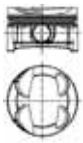
		Type		B	C		

77,000

5FK (EP6 CB) / 5FS (EP6C)	Berlingo 1.6 VTI	B	07	2010	>	4 Cyl	**1598cc**	**72-88kW**	(98-120ps)
5FS (EP6C)	C4 GRAND PICASSO II 1.6 VTI	B	09	2013	>	4 Cyl	**1598cc**	**88kW**	(120ps)
5FS (EP6C)	C4 II 1.6 VTI / VTI LPG	B	11	2009	>	4 Cyl	**1598cc**	**88kW**	(120ps)
5FS (EP6C)	C4 PICASSO II 1.6 VTI	B	02	2013	>	4 Cyl	**1598cc**	**88kW**	(120ps)
5FS (EP6C)	C5 III 1.6 VTI	B	07	2010	>	4 Cyl	**1598cc**	**88kW**	(120ps)
5FS (EP6C)	DS3 1.6 VTI	B	04	2010	>	4 Cyl	**1598cc**	**88kW**	(120ps)
5FS (EP6C)	DS4 1.6 VTI	B	04	2011	>	4 Cyl	**1598cc**	**88kW**	(120ps)
5FW(EP6) / 5FS (EP6C)	C3 PICASSO 1.6 VTI	B	02	2009	>	4 Cyl	**1598cc**	**88kW**	(120ps)
EP6C	C3 II 1.6	B	11	2009	>	4 Cyl	**1598cc**	**88kW**	(120ps)



11-02104-000
CH 27,500
VD1 5,700
B- 2,000
BØ 56,600
TL 47,500

18,00x43,00

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

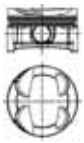
Ø 77,000
Ø 77,508

31-04104-000
31-04104-050

Citroen ve Peugeot ile Ortak Motor

77,000

Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter	B	04	2011	>	4 Cyl	**1598cc**	**88kW**	(120ps)



11-02104-002
CH 27,100
VD1 5,700
B- 2,000
BØ 56,600
TL 47,500

18,00x43,00

CH -0,40 mm

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

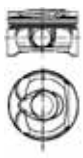
Ø 77,000

31-04104-002

Citroen ve Peugeot ile Ortak Motor

77,000

5FV (EP6CDT) Euro 5	C4 Grand Picasso 1.6 16V	B	10	2010	>	4 Cyl	**1598cc**	**115kW**	(156ps)
5FV (EP6CDT) Euro 5	C4 II / C4 Picasso 1.6i THP 16V	B	10	2010	>	4 Cyl	**1598cc**	**115kW**	(156ps)
5FV (EP6CDT) Euro 5	C5 II 1.6i THP 16V	B	04	2009	>	4 Cyl	**1598cc**	**115kW**	(156ps)
5FV (EP6CDT) Euro 5	DS3 / DS4 / DS5 1.6 THP 155	B	03	2010	>	4 Cyl	**1598cc**	**115kW**	(156ps)



11-02106-000
CH 30,200
VD1 1,900
B- 3,630
BØ 31,000
TL 48,450

20,00x47,90

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 77,000
Ø 77,500

31-04106-000
31-04106-050

Citroen ve Peugeot ile Ortak Motor

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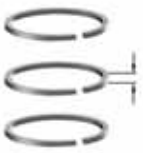
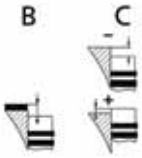
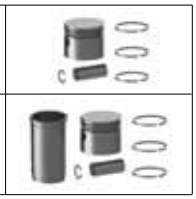
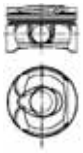
		Type		B C		
					

77,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter B 10 2010 > 4 Cyl **1598cc** **115kW** (156ps)



11-02106-001
CH 30,000
VD1 1,900
B- 3,630
BØ 31,000
TL 48,450

20,00x47,90

CH -0,20 mm

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

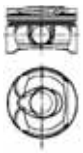
Ø 77,000

31-04106-001

Citroen ve Peugeot ile Ortak Motor

77,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter B 10 2010 > 4 Cyl **1598cc** **115kW** (156ps)



11-02106-002
CH 29,800
VD1 1,900
B- 3,630
BØ 31,000
TL 48,450

20,00x47,90

CH -0,40 mm

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 77,000

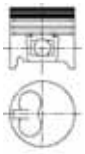
31-04106-002

Citroen ve Peugeot ile Ortak Motor

77,000

TUD5 (VJY) AX 15 D / Saxo 1.5D / ZX Break 1.5D D 08 1994 > 09 2003 4 Cyl **1527cc** **42kW** (57ps)

TUD5 (VJZ) AX 15 D / Saxo 1.5D / Xsara 1.5D D 08 1994 > 06 2001 4 Cyl **1527cc** **42kW** (57ps)



11-02107-000
CH 40,370 *CH 40,100
B- 1,650 *B- 1,650
TL 66,320 *TL 66,320

* For Oversize Piston Dimensions

23,00x60,00

91-09896-000
1 2,000 MoP
2 1,750 P
3 3,000 CrP

Ø 77,000
Ø 77,400

31-04107-000
31-04107-040

Citroen, Nissan ve Peugeot ile Ortak Motor

77,000

EP3C 1.4 vti C3 B > 4 Cyl **1400cc** **kW** (ps)

11-02108-000
CH 30,800
VD1 5,880
VD2 3,540
B+ 3,200
TL 50,800

18,00x43,00

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 77,000

31-04108-000

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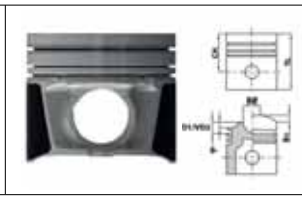
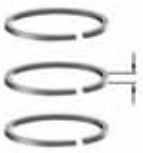
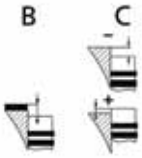
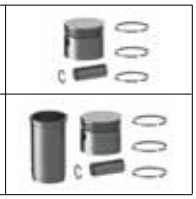
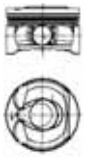
		Type		B	C		
						

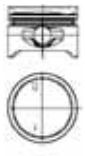
77,000

EP6	C4, C5, DS3, DS4		B		>		4 Cyl			(ps)
	**11-02129-000** CH 30,150 VD1 2,010 VD2 2,020 B- 3,580 BØ 31,000 TL 48,450 **20,00x47,90**	HA	**91-09967-000** 1 1,200 MoP St 2 1,200 P 3 2,000 CR					Ø 77,000		**31-04129-000**
Citroen ve Peugeot ile Ortak Motor										

78,500

NFU	C2 1.6i 16V	B	09	2003	>		4 Cyl			(109ps)
NFU	C3 / C3 Pluriel 1.6i 16V	B	01	2002	>	08 2005	4 Cyl			(109ps)
NFU	C4 1.6i 16V	B	11	2004	>		4 Cyl			(109ps)
NFU	Elysee 1.6i 16V	B	06	2002	>		4 Cyl			(109ps)
NFU	Xsara / Xsara Picasso 1.6i 16V	B	09	2000	>		4 Cyl			(109ps)
TU 5JP4 / NFU	Berlingo 1.6 16V / 1.6i 16V	B	05	2008	>		4 Cyl			(109ps)
	11-02101-000 CH 32,350 B+ 0,150 TL 50,000 **19,50x57,00**		**91-09929-000** 1 1,200 MoP 2 1,500 P 3 2,500 NtP					Ø 78,500 Ø 78,750 Ø 79,000 Ø 79,500		**31-04101-000** **31-04101-025** **31-04101-050** **31-04101-100**
			99-09929-000 1 1,200 NT St 2 1,500 P 3 2,500 CrP St							**39-04101-000** **39-04101-025** **39-04101-050** **39-04101-100**
Citroen ve Peugeot ile Ortak Motor										

78,500

NFV (TU5JP)	Xsara Picasso 1.6	B	12	1999	>		4 Cyl	**1587cc**	**70kW**	(95ps)
NFZ (TU5JP)	Saxo 1.6i	B	02	1996	>	06 2003	4 Cyl	**1587cc**	**65-66kW**	(88-90ps)
NFZ (TU5JP)	Xsara 1.6i	B	04	1997	>	09 2000	4 Cyl	**1587cc**	**65kW**	(88ps)
NFZ (TU5JP)	Xsara Picasso 1.6i	B	06	2002	>	04 2004	4 Cyl	**1587cc**	**65kW**	(88ps)
	**11-02109-000** CH 32,250 B- 1,500 BØ 68,500 TL 57,500 **19,50x62,91**		**91-09362-000** 1 1,500 CkP 2 1,500 P 3 3,000 CrP					Ø 78,500 Ø 78,900		**31-04109-000** **31-04109-040**
Citroen ve Peugeot ile Ortak Motor										

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
78,500						
TU5JP4	Berlingo 1.6 16V	B	05 2008 >	4 Cyl	**1587cc** **80kW**	(109ps)
11-02929-000 CH 32,350 B+ 1,300 TL 51,300 **19,50x57,00** Citroen ve Peugeot ile Ortak Motor			**91-09929-000** 1 1,200 MoP 2 1,500 P 3 2,500 NtP		Ø 78,500 Ø 78,900 Ø 79,000	**31-04929-000** **31-04929-040** **31-04929-050**
80,000						
161A	BX 1.8 D	D	07 1985 > 09 1993	4 Cyl	**1768cc** **44kW**	(60ps)
161A	C 15 1.8 D	D	07 1986 > 12 1997	4 Cyl	**1768cc** **44kW**	(60ps)
161A	Visa 1.8 D	D	04 1984 > 03 1991	4 Cyl	**1768cc** **44kW**	(60ps)
A9A(XUD7) / 161 A	Berlingo 1.8 D	D	07 1996 > 11 2002	4 Cyl	**1768cc** **44kW**	(60ps)
A9A(XUD7) / 161 A	Xsara 1.8 D	D	07 1997 > 08 2000	4 Cyl	**1768cc** **44kW**	(60ps)
A9A(XUD7) / 161 A	ZX 1.8 D	D	03 1991 > 10 1997	4 Cyl	**1768cc** **44kW**	(60ps)
11-01876-000 CH 46,800 B- 2,000 TL 84,300 **25,00x69,80** Citroen ve Peugeot ile Ortak Motor			**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP	1,61mm Conta ile +0,54/+0,77 1,73mm Conta ile +0,77/+0,82	Ø 80,000 Ø 80,200 Ø 80,500 Ø 80,800	**31-03876-000** **31-03876-020** **31-03876-050** **31-03876-080**
K=83,05 L=154,00 H=4,50 D=86,00		DS			**51-65876-000**	

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		Type		B C		
83,000						
171 A / B / BZ / B1A	BX 1.6	B	10 1982 > 06 1984	4 Cyl	**1560cc**	**58-69kW** (79-94ps)
171B	C 25 2.0	B	09 1981 > 03 1994	4 Cyl	**1560cc**	**66kW** (90ps)
	11-01877-000 CH 37,500 B- 2,100 TL 67,500 **22,00x66,20** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor		**91-09877-000** 1 1,750 CR 2 1,750 3 4,000 CrP St		Ø 83,000	**31-03877-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07877-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05882-000**	**71-07878-000**

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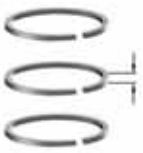
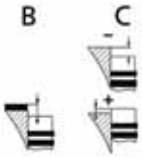



Type

83,000

162 / D9A / D9B / DJY / DJZ	BX 1.9 D	D	09	1983	>	12	1994	4 Cyl	**1905cc**	**47-52kW**	(64-71ps)
D9B	C 25 1.9 D	D	07	1987	>	03	1994	4 Cyl	**1905cc**	**51kW**	(70ps)
D9B	Jumpy 1.9 D	D	10	1995	>			4 Cyl	**1905cc**	**51kW**	(70ps)
D9B / DJY	Berlingo 1.9 D	D	07	1996	>	11	2002	4 Cyl	**1905cc**	**51kW**	(70ps)
D9B / DJY	Jumper I 1.9 D	D	02	1994	>	02	2002	4 Cyl	**1905cc**	**51kW**	(70ps)
D9B / DJY / DJZ	Xantia 1.9 D	D	07	1993	>	01	1998	4 Cyl	**1905cc**	**51kW**	(70ps)
D9B / DJY / DJZ	ZX 1.9 D	D	03	1991	>	10	1997	4 Cyl	**1905cc**	**51kW**	(70ps)
DJY	Xsara 1.9 D	D	07	1997	>	08	2000	4 Cyl	**1905cc**	**50-52kW**	(68-71ps)

11-01879-000
CH 46,800
B- 2,200
TL 84,300

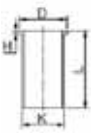
25,00x72,00

Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor

91-09879-000
1 2,000 CR
2 2,000
3 3,000 CR

1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)

Ø 83,000	**31-03879-000**
Ø 83,200	**31-03879-020**
Ø 83,500	**31-03879-050**
Ø 83,800	**31-03879-080**
Ø 84,000	**31-03879-100**



K=86,00
L=153,50
H=4,80
D=89,00

DS

51-65820-000

K=86,04
L=153,50

DS

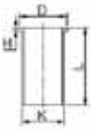
51-65879-000

K=86,54
L=153,50

DS

+0,50

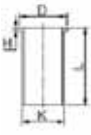
51-65879-050



K=85,66
L=153,50
H=3,90
D=88,45

DS

51-65885-000



K=86,15
L=153,50
H=3,90
D=88,45

DS

+0,50

51-65885-050

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		Type		B C		
83,000						
D2A / C / E / F	BX 1.9	B	07 1986 > 04 1991	4 Cyl	**1905cc**	**70-79kW** (95-107ps)
D61A / D6E	BX 1.9i	B	09 1986 > 02 1993	4 Cyl	**1905cc**	**90-96kW** (122-131ps)
D6E	ZX 1.9i	B	03 1991 > 10 1997	4 Cyl	**1905cc**	**93-96kW** (126-131ps)

	11-01885-000 CH 37,500 B- 9,000 TL 67,500 **22,00x66,20** Citroen ve Peugeot ile Ortak Motor	CP	**91-09885-000** 1 1,500 CR 2 1,500 3 4,000 CR		Ø 83,000	**31-03885-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05878-000**	**71-07885-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07890-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
L6A / LFX / LFZ	Xantia 1.8i	B	03 1993 > 01 1998	4 Cyl	**1782cc**	**66-76kW** (90-103ps)
L6A / LFX / LFZ	Xsara 1.8i	B	07 1997 > 08 2000	4 Cyl	**1782cc**	**66-76kW** (90-103ps)
L6A / LFZ	ZX 1.8i	B	07 1992 > 10 1997	4 Cyl	**1782cc**	**70-76kW** (95-103ps)
LFW / LFZ	Evasion 1.8i	B	09 1996 > 07 2002	4 Cyl	**1782cc**	**72-76kW** (98-103ps)
LFX	Berlingo 1.8i	B	03 1997 > 11 2002	4 Cyl	**1782cc**	**66kW** (90ps)

11-01887-000
CH 33,300
B- 6,380
BØ 66,500
TL 53,300

22,00x62,00

CP

91-09887-000
1 1,500 Mo
2 1,500
3 3,000 CR

Ø 83,000

31-03887-000

Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor

K=88,60
L=141,00
H=95,14
D=97,00

WF

51-05868-000

71-07887-000

K=88,60
L=141,00
H=95,14
D=97,00

WF

51-05878-000

71-07892-000

K=88,60
L=141,00
H=95,19
D=97,00

WF

51-05881-000

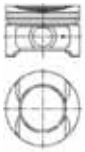
71-07882-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
XU 52C B2A / XU 52C BX 1.6i	B 07 1986 > 10 1989 4 Cyl **1580cc** **59-69kW** (80-94ps)					
	11-02116-000 CH 37,500 B- 2,600 TL 67,000 **22,00x66,20** Citroen ve Peugeot ile Ortak Motor		**91-09877-000** 1 1,750 CR 2 1,750 3 4,000 CrP St		Ø 83,000	**31-04116-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-08116-000**
83,000						
159 A / 159 Z / XY 9S BX 1.9	B 07 1986 > 05 1989 4 Cyl **1905cc** **75-77kW** (102-105ps)					
159 A / 159 Z / XY 9S BX 1.9i	B 10 1984 > 06 1986 4 Cyl **1905cc** **75-77kW** (102-105ps)					
D6A / D6D BX 1.9i	B 07 1986 > 03 1993 4 Cyl **1905cc** **89-92kW** (121-125ps)					
	11-02120-000 CH 37,500 B+ 0,600 TL 67,000 **22,00x66,20** Citroen ve Peugeot ile Ortak Motor	CP	**91-09885-000** 1 1,500 CR 2 1,500 3 4,000 CR		Ø 83,000	**31-04120-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-08120-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
LFY	Xantia 1.8i 16V	B	06 1995 > 12 2001	4 Cyl	**1761cc**	**82kW** (111ps)
LFY	Xsara / Xsara Picasso 1.8i 16V	B	07 1997 > 08 2000	4 Cyl	**1761cc**	**82kW** (111ps)
LFY	ZX 1.8i 16V	B	01 1996 > 02 1998	4 Cyl	**1761cc**	**82kW** (111ps)



11-02924-000
CH 33,300
VD1 1,950
B+ 7,120
B- 1,000
BØ 52,000
TL 56,300

22,00x62,00

CP

91-09887-000
1 1,500 Mo
2 1,500
3 3,000 CR

Ø 83,000

31-04924-000

Citroen ve Peugeot ile Ortak Motor

K=88,60
L=141,00
H=95,19
D=97,00

WF

51-05881-000

71-08924-000

84,000						
169B	C 25 1.8	B	11 1981 > 03 1994	4 Cyl	**1796cc**	**50kW** (69ps)

11-01881-000
CH 37,800
TL 69,300

23,00x70,00

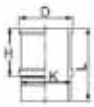
CP

91-09881-000
1 1,500 CrP
2 2,000 P
3 4,000 CrP St

Ø 84,000

31-03881-000

Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor



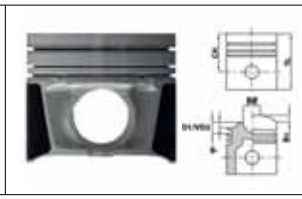
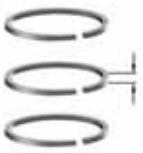
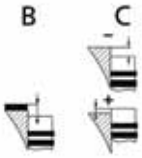
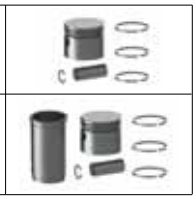
K=92,95
L=136,20
H=90,00
D=99,20

WF

51-05880-000

71-07881-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

85,000

EW10J4	XSARA PICASSO	B	03	2004	>	03	2007	4 Cyl	**1997cc**	**97-99kW**	(132-135ps)
RFN (EW10J4)	C4	B	11	2004	>	07	2007	4 Cyl	**1997cc**	**100-105kW**	(136-143ps)
RFN (EW10J4)	C5	B	03	2001	>	08	2004	4 Cyl	**1997cc**	**100-105kW**	(136-143ps)
RFN (EW10J4)	C8	B	07	2002	>			4 Cyl	**1997cc**	**100-105kW**	(136-143ps)
RFN (EW10J4)	EVASION	B	05	2000	>	07	2002	4 Cyl	**1997cc**	**100-105kW**	(136-143ps)
RFN (EW10J4)	JUMPY	B	04	2000	>	10	2006	4 Cyl	**1997cc**	**100-105kW**	(136-143ps)
RFN (EW10J4)	XSARA	B	09	2000	>	03	2005	4 Cyl	**1997cc**	**100-105kW**	(136-143ps)

11-02117-000
CH 29,000
B- 0,750
BØ 48,000
TL 51,000

21,00x58,00

91-09145-000
1 1,200 Mo
2 1,500 CR
3 2,500 CR

Ø 85,000	**31-04117-000**
Ø 85,200	**31-04117-020**
Ø 85,400	**31-04117-040**
Ø 85,600	**31-04117-060**
Ø 85,800	**31-04117-080**

85,000

P8A / PHZ / P8B	XM 2.1 TD 12V	D	05	1989	>	06	1994	4 Cyl	**2088cc**	**80-81kW**	(109-110ps)

11-02145-000
CH 44,800
B- 2,700
BØ 26,000
TL 74,800

30,00x71,50

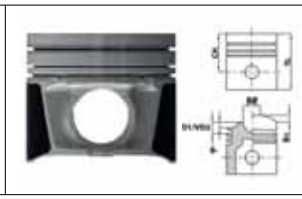
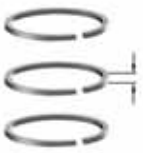
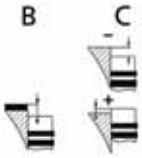
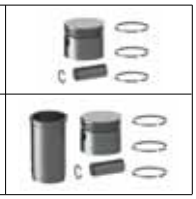
AP
YS
HA

91-09143-000
1 3,000 Mo
2 2,000 Mo
3 3,000 CrP

Ø 85,000	**31-04145-000**
Ø 85,250	**31-04145-025**
Ø 85,600	**31-04145-060**

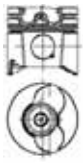
Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor

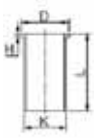
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

85,000

RHS / RHZ / RHY	C5 2.0 HDi	D	03	2001	>	09	2004	4 Cyl	**2000cc**	**66-81kW**	(90-110ps)
RHV(DW10TD) / RHZ	Jumper I 2.0 HDi / II 2.0 Hdi 16V	D	02	2002	>	04	2006	4 Cyl	**2000cc**	**63-81kW**	(86-110ps)
RHX / RHZ / RHY	Jumpy 2.0 HDi	D	10	1999	>			4 Cyl	**2000cc**	**66-80kW**	(90-109ps)
RHY	Berlingo 2.0 HDi	D	12	1999	>			4 Cyl	**2000cc**	**66kW**	(90ps)
RHY / RHZ	Xantia 2.0 HDi	D	10	1998	>	12	2001	4 Cyl	**2000cc**	**66-81kW**	(90-110ps)
RHY / RHZ	Xsara Picasso / Xsara 2.0 HDi	D	09	2000	>			4 Cyl	**2000cc**	**66-81kW**	(90-110ps)
RHZ	Evasion 2.0 HDi	D	01	1999	>	07	2002	4 Cyl	**2000cc**	**80-81kW**	(109-110ps)

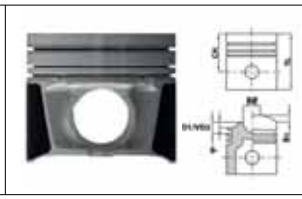
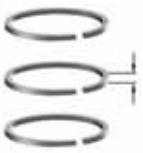
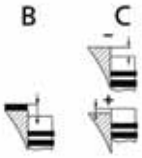
	**11-02495-000** CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750 **28,00x70,00**	AP	**91-09799-000** 1 3,500 CK 2 2,000 3 3,000 CR	1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)	Ø 85,000 Ø 85,500 Ø 85,600	**31-04495-000** **31-04495-050** **31-04495-060**
Citroen, Fiat / Iveco, Lada, Lancia, Peugeot ve Suzuki ile Ortak Motor						

	K=89,00 L=155,00 H=4,50 D=91,20	DS			**51-65167-000**	

85,000

RHR (DW10BTED4)	Berlingo 2.0 HDi	D	12	1999	>			4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	C4 / C4 Picasso / C4 Grand Picasso 2.0 HDi 16V	D			>		2004	4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	C5 2.0 HDi 16V	D	09	2004	>			4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	C8 2.0 HDi 16V	D	03	2006	>			4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	Jumpy 2.0 HDi 140 / 16V	D	01	2007	>			4 Cyl	**1997cc**	**100kW**	(136ps)

	11-02497-000 CH 46,705 VD1 0,520 B- 15,400 BØ 44,800 TL 80,705 **28,00x70,00**	AP YS	**91-09799-000** 1 3,500 CK 2 2,000 3 3,000 CR		Ø 85,000 Ø 85,600	**31-04497-000** **31-04497-060**
Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor						

		Type		B C		
						

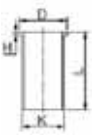
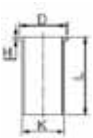
86,000

RFV	Evasion 2.0i 16V	B	05	1998	>	04	2000	4 Cyl	**1998cc**	**97-100kW** (132-136ps)
RFV	Xantia 2.0i 16V	B	03	1993	>	12	2001	4 Cyl	**1998cc**	**97-100kW** (132-136ps)
RFV	XM 2.0i 16V	B	07	1994	>	10	2000	4 Cyl	**1998cc**	**97-100kW** (132-136ps)
RFV	Xsara 2.0i 16V	B	07	1997	>	08	2000	4 Cyl	**1998cc**	**97-100kW** (132-136ps)

	11-02499-000 CH 33,800 VD1 1,700 B- 4,300 BØ 52,000 TL 53,800 **22,00x62,00**	CP	**91-09499-000** 1 1,500 Mo 2 1,750 3 3,000		Ø 86,000 Ø 86,500	**31-04499-000** **31-04499-050**
Citroen, Fiat / Iveco, Lancia ve Peugeot ile Ortak Motor						

86,010

QWFB V347 DURATORQ	Yeni JUMPER 2.2 HDI	D	01	2008	>			4 Cyl	**2200cc**	**88kW** (120ps)

	11-01461-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820 **30,00x66,85**	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)	Ø 86,010 Ø 86,510	**31-03461-000** **31-03461-050**
Citroen, Ford ve Peugeot ile Ortak Motor						
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

86,010

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter				>			Cyl	**cc**	**kW** (ps)

	11-01461-001 CH 43,220 B- 15,850 BØ 46,900 TL 69,620 **30,00x66,85**	AP YS CH -0,20 mm	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)	Ø 86,010 Ø 86,510	**31-03461-001** **31-03461-051**
Citroen, Ford ve Peugeot ile Ortak Motor						

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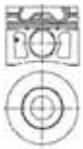
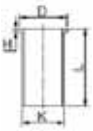
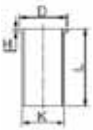
		Type		B C		

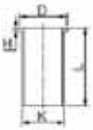
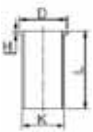
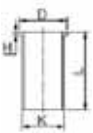
86,010

4HU / 4HV (P22DTE) Euro4 Jumper III 2.2 HDi 16V 04 2006 > (101-140ps)

	**11-02034-000** CH 43,420 B- 15,850 BØ 46,900 TL 69,820 **30,00x66,85** Citroen, Fiat / Iveco, Ford ve Peugeot ile Ortak Motor	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,510	**31-04034-000** **31-04034-050**
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

86,400

220 A2.000 Jumpy 1.6i B 10 1995 > 4 Cyl **1580cc** **58kW** (79ps)

	11-01395-000 CH 33,300 VD1 3,000 B- 2,500 TL 72,800 **22,00x63,00** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor	CP	**91-09395-000** 1 1,500 CrP 2 1,750 P 3 3,000 CrP		Ø 86,400 Ø 86,800 Ø 87,000 Ø 87,200 Ø 87,400	**31-03395-000** **31-03395-040** **31-03395-060** **31-03395-080** **31-03395-100**
	K=90,05 L=127,00 H=5,00 D=91,00	DS			**51-65270-000**	
	K=90,50 L=127,00 H=6,00 D=91,50	DS +0,50			**51-65270-050**	
	K=91,05 L=127,00 H=6,00 D=92,00	DS +1,00			**51-65270-100**	

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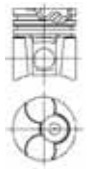
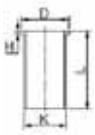
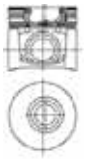
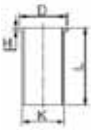
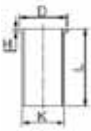
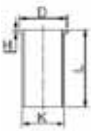
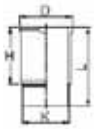
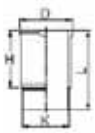
		Type		B C		
88,000						
829A5	CX 2000	B	07 1979 > 06 1982	4 Cyl	**1995cc**	**75-78kW** (102-106ps)
J6RA 500 / 829 A 5	CX 2.0	B	07 1982 > 12 1992	4 Cyl	**1995cc**	**75-78kW** (102-106ps)
J6TA500	CX 2.2	B	07 1985 > 12 1992	4 Cyl	**1995cc**	**83-85kW** (113-115ps)
	11-02160-000 CH 40,500 B+ 1,500 TL 67,000 **23,00x75,00** Citroen, Peugeot ve Renault ile Ortak Motor		**91-09160-000** 1 1,750 CR 2 2,000 3 4,000 CrP St		Ø 88,000	**31-04160-000**
	K=93,60 L=148,50 H=93,06 D=104,00	WF			**51-05888-000**	**71-07097-000**
	K=93,53 L=140,50 H=93,10 D=104,00	WF			**51-05909-000**	**71-08160-000**
92,000						
DJ5TDI/TED (THX)	Jumper Box 2.5 TDI	D	12 1996 > 11 2000	4 Cyl	**2446cc**	**79kW** (107ps)
DJ5TDI/TED (THX)	Jumper Bus 2.5 TDI 4x4	D	12 1996 > 11 2000	4 Cyl	**2446cc**	**79kW** (107ps)
	**11-02113-000** CH 57,000 VD1 1,400 B- 18,250 BØ 41,000 TL 89,000 **34,00x68,00** Citroen ve Peugeot ile Ortak Motor	AP YS	**99-09096-000** 1 3,500 CrP 2 2,000 P 3 3,500 CrP	1,30mm conta ile +0,50/+0,60	Ø 92,000 Ø 92,500	**39-04113-000** **39-04113-050**
	K=96,00 L=160,00 H=5,00 D=97,00	DS			**51-65886-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
94,400						
8140.43S.4030 Euro3 Jumper 2.8 HDi		D 09 2000 >		4 Cyl	**2798cc 92-94 kW**	(125-128 ps)
	**11-01692-000** CH 58,750 B- 21,350 BØ 39,300 TL 87,600 **32,00x72,00**	AP YS	**91-09691-000** 1 2,500 CR 2 2,000 P 3 2,500 CrP	1,20 Conta ile +0,40/+0,50 1,30 Conta ile +0,51/+0,60 1,40 Conta ile +0,61/+0,70 1,50 Conta ile +0,71/+0,80	Ø 94,400 Ø 94,800 Ø 95,000	**31-03692-000** **31-03692-040** **31-03692-060**
Citroen, Fiat / Iveco, Peugeot ve Renault ile Ortak Motor						
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	
95,800						
F1 CE 0481 D / F30DT Euro 4 Jumper III 3.0 HDi		D 04 2006 >		4 Cyl	**2998cc 115kW**	(157ps)
	11-02836-000 CH 63,000 B- 16,000 BØ 50,500 TL 93,400 **36,00x81,00**	AP YS	**91-09839-000** 1 2,500 CrP 2 2,000 P 3 2,500 CrP	1,60mm conta ile (+0,718/+0,773) 1,65mm conta ile (+0,773/+0,819) 1,70mm conta ile (+0,819/+0,874)	Ø 95,800 Ø 96,200 Ø 96,400	**31-04836-000** **31-04836-040** **31-04836-060**
Citroen, Fiat / Iveco, Mitsubishi ve Peugeot ile Ortak Motor						
	K=99,00 L=175,00 H=4,80 D=102,00	DS			**51-65754-000**	

		Type		B C		
73,000						
810.99 1310 1.3			B 01 1979 > 12 1989 4 Cyl		**1289cc 36-44 kW**	(49-60 ps)
	11-01902-000 CH 37,500 B- 1,600 BØ 50,000 TL 62,500 **20,00x62,00** Dacia, Daf, Renault ve Volvo ile Ortak Motor		**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St		Ø 73,000	**31-03902-000**
	K=78,50 L=134,00 H=94,85 D=87,65	WF			**51-05902-000**	**71-07902-000**
73,000						
810 01 / 02 / 03 / 10 / B 7 / F 7 R 10			B	> 00 1970 4 Cyl	**1289cc 27-44kW**	(37-60ps)
810 01 / 02 / 03 / 10 / B 7 / F 7 R 12			B	> 00 1970 4 Cyl	**1289cc 27-44kW**	(37-60ps)
	11-01903-000 CH 37,500 TL 62,500 **20,00x62,00** Dacia, Daf, Renault ve Volvo ile Ortak Motor		**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St		Ø 73,000	**31-03903-000**
	K=78,50 L=134,00 H=94,85 D=87,65	WF			**51-05902-000**	**71-07903-000**

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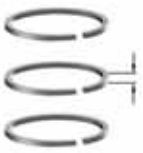
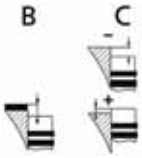
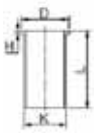
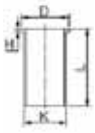
		Type								

76,000

K9K 790 / 792 / 794	Logan 1.5 dCi	D	06	2005	>	4 Cyl	**1461cc**	**48-50 kW**	(65-68 ps)
K9K 790 / 792 / 794	Sandero 1.5 dCi	D	01	2009	>	4 Cyl	**1461cc**	**48-50 kW**	(65-68 ps)
K9K 792 / 796	Logan Express 1.5 dCi	D	03	2009	>	4 Cyl	**1461cc**	**48-63kW**	(65-86ps)
K9K 792 / 796	Logan MCV 1.5 dCi	D	01	2006	>	4 Cyl	**1461cc**	**48-63kW**	(65-86ps)
K9K 792 / 796	Logan Pick Up 1.5 dCi	D	03	2008	>	4 Cyl	**1461cc**	**48-63kW**	(65-86ps)
K9K 796	Duster 1.5 dCi	D	04	2010	>	4 Cyl	**1461cc**	**63kW**	(86ps)
K9K 796	Logan 1.5 dCi	D	09	2007	>	4 Cyl	**1461cc**	**63kW**	(86ps)
K9K 796	Sandero 1.5 dCi	D	01	2009	>	4 Cyl	**1461cc**	**63kW**	(86ps)

	11-02162-000 CH 41,750 VD1 0,250 VD2 0,400 B- 14,000 BØ 39,700 TL 66,000 **25,00x60,00**	AP	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 Ø 76,500 Ø 77,000	**31-04162-000** **31-04162-050** **31-04162-100**
	Dacia, Nissan, Renault, Suzuki ile Ortak Motor					
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**	

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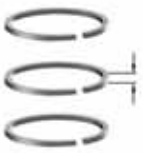
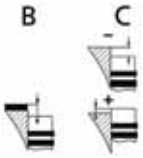
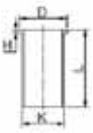
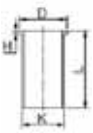
		Type		B C		
					

76,000

K9K 792 / 796	Logan 1.5 dCi	D	01	2006	>	4 Cyl	**1496cc**	**50-63kW** (68-86ps)
K9K 792 / 796	Logan MCV 1.5 dCi	D	01	2006	>	4 Cyl	**1496cc**	**50-63kW** (68-86ps)

	11-02164-000 CH 41,700 VD1 0,200 B- 13,950 BØ 39,700 TL 66,000 **26,00x60,00**	AP	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP	(+0,25/+0,30)	Ø 76,000 **31-04164-000** Ø 76,500 **31-04164-050** Ø 77,000 **31-04164-100**
	Dacia, Nissan, Renault, Suzuki ile Ortak Motor				
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**

76,000

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter				>	Cyl	**cc**	**kW** (ps)

	11-02164-001 CH 41,500 VD1 0,200 B- 13,950 BØ 39,700 TL 65,800 **26,00x60,00**	AP CH -0,20 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 **31-04164-001** Ø 76,500 **31-04164-051** Ø 77,000 **31-04164-101**
	Dacia, Nissan, Renault, Suzuki ile Ortak Motor				

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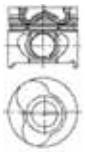
		Type		B C		

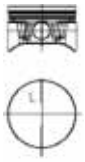
76,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

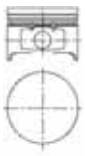
	**11-02164-002** CH 41,300 VD1 0,200 B- 13,950 BØ 39,700 TL 65,600 **26,00x60,00**	AP CH -0,40 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 Ø 76,500 Ø 77,000	**31-04164-002** **31-04164-052** **31-04164-102**

Dacia, Nissan, Renault, Suzuki ile Ortak Motor

79,500

K7M 710	Logan		09 2004 >			(ps)
K7M 710	Sandero		06 2008 >			(ps)
	**11-02151-000** CH 28,260 TL 51,600 **19,00x62,00**		**91-09175-000** 1 1,500 Mo 2 1,500 P 3 2,500 CrP St		Ø 79,500	**31-04151-000**

79,500

K7J 710	Solenza 1.4i	B	00 2004 >	4 Cyl		(75ps)
K7J 710 / 714	Logan / Logan Express / Logan MCV 1.4i	B	07 2004 >	4 Cyl		(75ps)
K7J 710 / 714	Sandero 1.4i	B	05 2008 >	4 Cyl		(75ps)
	**11-02169-000** CH 35,830 TL 58,000 **19,00x62,00**		**91-09166-000** 1 1,500 Mo 2 1,500 3 2,500		Ø 79,500 Ø 80,000	**31-04169-000** **31-04169-050**

Dacia ve Renault ile Ortak Motor

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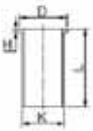
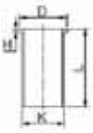
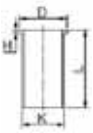
		Type		B C		
79,500						
K4M 690	Duster 1.6i 16V	B	04 2010 >	4 Cyl	**1598cc** **77kW**	(104ps)
K4M 690 / 694 / 697 / 698	Logan / Logan MCV 1.6i 16V	B	12 2005 >	4 Cyl	**1598cc** **77kW**	(104ps)
11-02171-000 CH 31,700 VD1 1,900 B- 1,300 TL 55,000 **20,00x62,00** Dacia, Nissan ve Renault ile Ortak Motor			**91-09166-000** 1 1,500 Mo 2 1,500 3 2,500		Ø 79,500 Ø 79,750 Ø 80,000 Ø 80,500	**31-04171-000** **31-04171-025** **31-04171-050** **31-04171-100**
80,000						
F8Q 636	Solenza 1.9 D	D	04 2003 >	4 Cyl	**1870cc** **45kW**	(63ps)
11-02170-000 CH 42,500 B- 0,700 TL 70,500 **24,00x63,00** Dacia, Opel ve Renault ile Ortak Motor		AP CP	**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP		Ø 80,000 Ø 80,500 Ø 80,800	**31-04170-000** **31-04170-050** **31-04170-080**
	K=83,05 L=154,00 H=5,00 D=85,00	DS			**51-65903-000**	
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50			**51-65903-050**	
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00			**51-65903-100**	

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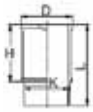
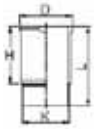
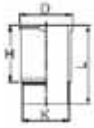
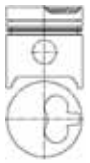
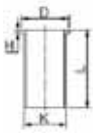
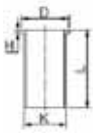
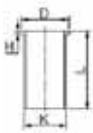
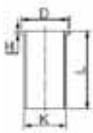
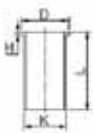
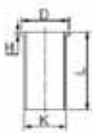
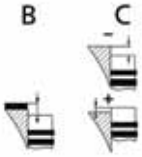
		Type		B C		
70,000						
688.02 / 13	DAF 55	B	00 1967 > 00 1975	4 Cyl	**1108cc**	**33-39kW** (45-53ps)
688.02 / 13	DAF 66	B	00 1967 > 00 1975	4 Cyl	**1108cc**	**33-39kW** (45-53ps)
11-01901-000 CH 40,000 TL 68,000 **18,00x62,00** Daf, Renault ve Volvo ile Ortak Motor			**91-09901-000** 1 1,750 CR 2 2,000 P 3 3,500 CrP St		Ø 70,000	**31-03901-000**
 K=75,50 L=135,00 H=94,85 D=86,00		WF			**51-05901-000**	**71-07901-000**
73,000						
810.03 / 810.29	DAF 66	B	00 1973 > 03 1989	4 Cyl	**1289cc**	**29-40kW** (40-54ps)
11-01902-000 CH 37,500 B- 1,600 BØ 50,000 TL 62,500 **20,00x62,00** Dacia, Daf, Renault ve Volvo ile Ortak Motor			**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St		Ø 73,000	**31-03902-000**
 K=78,50 L=134,00 H=94,85 D=87,65		WF			**51-05902-000**	**71-07902-000**
73,000						
1.3	66 Series	B	> 03 1973	4 Cyl	**1289cc**	**42kW** (57ps)
11-01903-000 CH 37,500 TL 62,500 **20,00x62,00** Dacia, Daf, Renault ve Volvo ile Ortak Motor			**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St		Ø 73,000	**31-03903-000**
 K=78,50 L=134,00 H=94,85 D=87,65		WF			**51-05902-000**	**71-07903-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
94,000						
EN55 / XD3P Series 400			D 02 1987 > 09 1993 4 Cyl		**2304cc 51-58kW**	(70-79ps)
	11-01892-000 CH 57,420 B- 2,000 TL 99,920 **28,00x81,00** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	0/+0,84 Conta ile 0,75/0,90	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03892-000** **31-03892-040** **31-03892-060** **31-03982-100**
94,000						
EN55 / XD3P Series 400			D 02 1987 > 09 1993 4 Cyl		**2498cc 51-58kW**	(70-79ps)
	**11-01893-000** CH 53,920 B- 1,800 TL 96,420 **30,00x78,80** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,53mm Conta ile 0/+0,79 1,63mm Conta ile +0,79/+0,89 1,73mm Conta ile +0,89/…	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03893-000** **31-03893-040** **31-03893-060** **31-03893-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**	
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**	
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**	
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**	
	K=97,05 L=166,00 H=4,00 D=99,50	DS			**51-65915-000**	
	K=97,55 L=166,00 H=5,00 D=100,00	DS +0,50			**51-65915-050**	

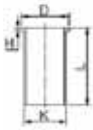
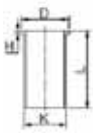
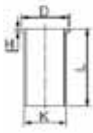
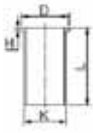
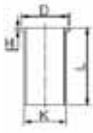
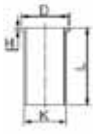
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

DAF

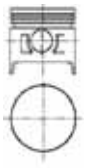
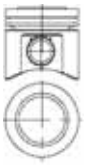
		Type		B C		
						

94,000

XD3P Series 400 D 02 1987 > 09 1993 4 Cyl **2498cc** **51-58kW** (70-79ps)

	11-01895-000 CH 53,920 B- 1,750 TL 91,420 **30,00x78,80** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,56mm Conta ile 0/+0,84 1,70mm Conta ile 0/+0,84	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03895-000** **31-03895-040** **31-03895-060** **31-03895-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**	
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**	
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**	
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**	
	K=97,05 L=166,00 H=4,00 D=99,50	DS			**51-65915-000**	
	K=97,55 L=166,00 H=5,00 D=100,00	DS +0,50			**51-65915-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
62,000						
100D000	Multipla	B	00 1960 > 00 1970	4 Cyl	**767cc**	**kW** (ps)
100D006	600d	B	00 1960 > 00 1970	4 Cyl	**767cc**	**kW** (ps)
100D008	Jagts 770	B	00 1960 > 00 1970	4 Cyl	**767cc**	**kW** (ps)
	**11-02294-000** CH 30,750 TL 61,750 **20,00x50,80**	CP	**91-09261-000** 1 2,000 CrP 2 2,000 P 3 3,947 P		Ø 62,000 Ø 62,400 Ø 62,600 Ø 63,000 Ø 63,500	**31-04294-000** **31-04294-040** **31-04294-060** **31-04294-100** **31-04294-150**
65,000						
156 A4.000	750 (141AA) PANDA Hatchback	B	01 1986 > 01 1995	4 Cyl		(34ps)
	**11-01357-000** CH 37,550 B+ 0,800 TL 63,350 **18,00x53,00**		**91-09283-000** 1 1,500 CrP 2 1,500 P 3 3,000 CR		Ø 65,000 Ø 65,400 Ø 65,600	**31-03357-000** **31-03357-040** **31-03357-060**
			99-09283-000 1 1,500 CrP 2 1,500 P 3 3,000 CrP			**39-03357-000** **39-03357-040** **39-03357-060**
	K=68,04 L=115,00	DS			**51-65390-000**	
	K=69,04 L=115,00	DS +1,00			**51-65390-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
65,000						
100 G.000 / G.002 / GB.000	850 0.85	B	05 1964 > 10 1972	4 Cyl	**843cc**	**25-27kW** (34-37ps)
100 GC.000 / GS.000	850 0.85	B	07 1964 > 10 1972	4 Cyl	**843cc**	**35-36kW** (47-49ps)
100 GF.000 / GF.0C.0 / GL.0N.0	Series 900	B	12 1979 > 12 1987	4 Cyl	**843cc**	**26-33kW** (35-45ps)
100 GF.0C.0	850 0.9	B	05 1964 > 12 1972	4 Cyl	**843cc**	**29kW** (40ps)
100 GL.0N.0 / 9C.0 / 9N.0	Fiorino 0.9	B	10 1977 > 03 1981	4 Cyl	**843cc**	**33kW** (45ps)
100 GL.0N.0 / GL.3C.0 / GL.9N.0 / GL3.000	Panda I 900	B	01 1983 > 12 1985	4 Cyl	**843cc**	**33kW** (45ps)
100 GL.9N.0	Uno 45 0.9	B	01 1983 > 09 1992	4 Cyl	**843cc**	**33kW** (45ps)
100GL.000 / 048 / 064 / 0N.0 / 9N.0	127 0.9	B	00 1975 > 00 1985	4 Cyl	**843cc**	**26-33kW** (35-45ps)

11-01390-000
CH 30,750
TL 61,250

20,00x54,00

Fiat / Iveco, Lada ve Seat ile Ortak Motor

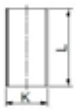
91-09390-000
1 1,750 CrP
2 2,000 P
3 3,947 CrP

Ø 65,000	**31-03390-000**
Ø 65,200	**31-03390-020**
Ø 65,400	**31-03390-040**
Ø 65,600	**31-03390-060**
Ø 65,800	**31-03390-080**

K=68,04
L=115,00

DS

51-65390-000



K=69,04
L=115,00

DS
+1,00

51-65390-100

69,600						
1.3 75HP MULTIJET II 1.6V Euro 5	Fiorino CARGO	D	00 2009 >	4 Cyl	**1248cc**	**70kW** (95ps)
1.3 75HP MULTIJET II 1.6V Euro 5	Fiorino COMBI	D	00 2009 >	4 Cyl	**1248cc**	**70kW** (95ps)

11-02198-000
CH 40,430
VD1 0,904
B- 12,700
BØ 37,000
TL 62,430

23,00x56,70

Fiat / Iveco ve Opel ile Ortak Motor

AP
YS

91-09797-000
1 1,500 CkP
2 1,500 P
3 2,000 CrP

0,67/0,77mm conta ile (+0,028/+0,127)
0,77/0,87mm conta ile (+0,127/+0,227)
0,87/0,97mm conta ile (+0,228/+0,327)

Ø 69,600	**31-04198-000**
Ø 70,000	**31-04198-040**

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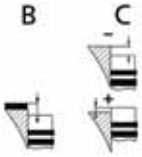
		Type		B C		
						

69,600

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>	Cyl	cc	kW	(ps)

11-02198-001
CH 40,230
VD1 0,904
B- 12,700
BØ 37,000
TL 62,230

23,00x56,70

AP
YS

CH -0,20 mm

91-09797-000
1 1,500 CkP
2 1,500 P
3 2,000 CrP

0,67/0,77mm conta ile (+0,028/+0,127)
0,77/0,87mm conta ile (+0,127/+0,227)
0,87/0,97mm conta ile (+0,228/+0,327)

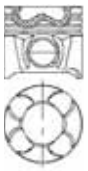
Ø 69,600
Ø 70,000

31-04198-001
31-04198-041

Fiat / Iveco ve Opel ile Ortak Motor

69,600

188 A9.000	Doblo 1.3 JTD 16V	05 2004	>		(69ps)
188 A9.000	Idea 1.3 JTD 16V	01 2004	>		(69ps)
188 A9.000	Palio 1.3 JTD	07 2003	>		(69ps)
188 A9.000	Punto (188) 1.3 JTD 16V	07 2003	>	04 2007	(69ps)
199 A2.000	Fiorino 1.3 JTD 16V	02 2008	>		(75ps)
199 A2.000	Grande Punto 1.3D Multijet 16V	10 2005	>		(75ps)
199 A2.000	Punto (199) 1.3D Multijet 16V	03 2012	>		(75ps)
199 A2.000	Punto EVO 1.3D Multijet 16V	10 2009	>	02 2012	(75ps)
199 A2.000 / A8.000 / A9.000	Panda II 1.3 JTD 16V	10 2003	>		(69-75ps)



11-02282-000
CH 40,430
VD1 1,000
B- 12,400
BØ 37,000
TL 63,430

23,00x56,70

AP

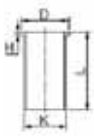
91-09282-000
1 2,000 CK
2 1,500 P
3 2,000 NT St

0,67/0,77mm Conta ile (+0,02/+0,13)
0,77/0,87mm Conta ile (+0,13/+0,23)
0,87/0,97mm Conta ile (+0,23/+0,33)

Ø 69,600
Ø 70,000
Ø 70,200
Ø 70,400
Ø 70,600

31-04282-000
31-04282-040
31-04282-060
31-04282-080
31-04282-100

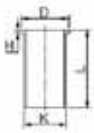
Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor



K=72,50
L=142,00
H=5,10
D=74,00

DS

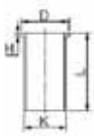
51-65451-000



K=73,00
L=142,00
H=5,20
D=74,50

DS
+0,50

51-65451-050



K=73,50
L=142,00
H=5,20
D=75,00

DS
+1,00

51-65451-100

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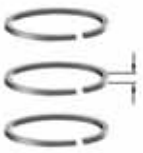
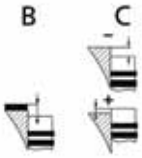
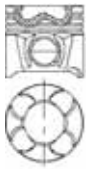
		Type		B C		
						

69,600

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)



11-02282-001
CH 40,230
VD1 1,000
B- 12,400
BØ 37,000
TL 63,230

23,00x56,70

AP

CH -0,20 mm

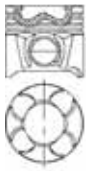
91-09282-000
1 2,000 CK
2 1,500 P
3 2,000 NT St

Ø 69,600 **31-04282-001**
Ø 70,000 **31-04282-041**
Ø 70,200 **31-04282-061**

Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor

69,600

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)



11-02282-002
CH 40,030
VD1 1,000
B- 12,400
BØ 37,000
TL 63,030

23,00x56,70

AP

CH -0,40 mm

91-09282-000
1 2,000 CK
2 1,500 P
3 2,000 NT St

Ø 69,600 **31-04282-002**
Ø 70,000 **31-04282-042**
Ø 70,200 **31-04282-062**

Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor

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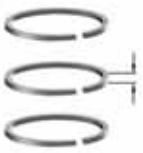
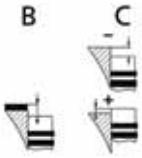
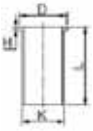
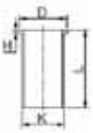
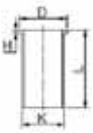
		Type		B C		
						

69,600

199 A3.000	Doblo II 1.3 M-Jet 16V	01 2010	>		(90-105ps)
199 A3.000	Grande Punto 1.3D Multijet 16V	10 2005	>		(90-105ps)
199 A3.000	Idea 1.3 JTD 16V	10 2005	>		(90-105ps)
199 A3.000	Linea 1.3 JTD 16V	06 2007	>		(90-105ps)
199 A3.000	Punto EVO 1.3D Multijet 16V	10 2009	>	02 2012	(90-105ps)

	11-02289-000 CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43 **23,00x56,70**	AP YS	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm conta ile (+0,028/+0,127) 0,77/0,87mm conta ile (+0,127/+0,227) 0,87/0,97mm conta ile (+0,228/+0,327)	Ø 69,600 Ø 70,000	**31-04289-000** **31-04289-040**
Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor						
	K=72,50 L=142,00 H=5,10 D=74,00	DS			**51-65451-000**	
	K=73,00 L=142,00 H=5,20 D=74,50	DS +0,50			**51-65451-050**	
	K=73,50 L=142,00 H=5,20 D=75,00	DS +1,00			**51-65451-100**	

69,600

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			>	Cyl	**cc**	**kW** (ps)
	11-02289-001 CH 40,230 VD1 0,904 B- 12,400 BØ 38,000 TL 62,230 **23,00x56,70**	AP YS CH -0,20 mm	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St		0,67/0,77mm conta ile (+0,028/+0,127) 0,77/0,87mm conta ile (+0,127/+0,227) 0,87/0,97mm conta ile (+0,228/+0,327)	Ø 69,600 Ø 70,000	**31-04289-001** **31-04289-041**
Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor							

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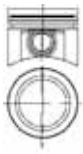
		Type		B C		

70,000

156 A3.000	PANDA I 1000		01	1985	>	12	1992				(50ps)



11-02290-000
CH 33,900
B- 0,500
BØ 55,000
TL 57,400

17,98x53,00

CP

91-09207-000
1 1,500 CR
2 1,500 P
3 3,000 CrP St

Ø 70,000 **31-04290-000**
Ø 70,400 **31-04290-040**
Ø 70,600 **31-04290-060**

Fiat / Iveco ve Lancia ile Ortak Motor

70,000

176 A6.000 / 176 B2.000	PUNTO I 1.1	B	09	1993	>	09	1999	4 Cyl	**1108cc**	**40kW**	(54ps)
176 B2.000	CINQUECENTO 1.1 I	B	10	1994	>	01	1998	4 Cyl	**1108cc**	**40kW**	(54ps)
176 B2.000 / 187 A1.000	PANDA I 1100 / PANDA II 1.1	B	02	1995	>	07	2004	4 Cyl	**1108cc**	**40kW**	(54ps)
176 B2.000 / 187 A1.000	SEICENTO 1.1	B	01	1998	>	01	2010	4 Cyl	**1108cc**	**40kW**	(54ps)

11-02291-000
CH 30,000
VD1 0,700
B- 1,500
BØ 60,000
TL 50,000

17,98x53,00

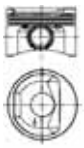
91-09284-000
1 1,200 CR
2 1,200 P
3 2,500 CR

Ø 70,000 **31-04291-000**
Ø 70,400 **31-04291-040**
Ø 70,600 **31-04291-060**

Fiat / Iveco ve Lancia ile Ortak Motor

70,800

199 A4.000	Grande Punto 1.2i	B	10	2005	>			4 Cyl	**1242cc**	**48kW**	(65ps)
199 A4.000	Punto EVO 1.2	B	10	2009	>	02	2012	4 Cyl	**1242cc**	**48kW**	(65ps)



11-02268-000
CH 18,000
B- 3,950
BØ 47,000
TL 48,000

18,00x53,00

91-09285-000
1 1,200 NT St
2 1,200 P
3 2,500 NtP St

Ø 70,800 **31-04268-000**
Ø 71,200 **31-04268-040**
Ø 71,400 **31-04268-060**

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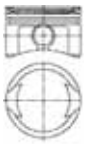
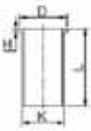
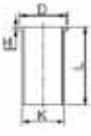
		Type		B	C		
70,800							
188 A4.000	Palio 1.2i	B	09 1997 >		4 Cyl	**1242cc** **44kW**	(60ps)
188 A4.000	Panda II 1.2i	B	10 2003 >		4 Cyl	**1242cc** **44kW**	(60ps)
188 A4.000	Punto 1.2i	B	05 2009 >		4 Cyl	**1242cc** **44kW**	(60ps)
188 A4.000	Strada 1.2i	B	05 2001 >		4 Cyl	**1242cc** **44kW**	(60ps)
	**11-02285-000** CH 28,000 VD1 1,400 B- 2,100 BØ 60,000 TL 48,000 **18,00x53,00**		**91-09285-000** 1 1,200 NT St 2 1,200 P 3 2,500 NtP St			Ø 70,800 Ø 71,200 Ø 71,400	**31-04285-000** **31-04285-040** **31-04285-060**
	Fiat / Iveco ve Lancia ile Ortak Motor						
	K=73,80 L=128,00 H=5,00 D=75,00	DS				**51-65491-000**	
70,800							
188 A5.000	Albea 1.2i 16V	B	01 2002 >		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Brava 1.2i 16V	B	08 2000 > 09 2001		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Bravo 1.2i 16V	B	08 2000 > 09 2001		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Idea 1.2i 16V	B	01 2004 >		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Palio 1.2i / Palio 1.2i 16V	B	09 2001 >		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Petra 1.2i 16V	B	03 2003 >		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Punto (188) 1.2i 16V	B	09 1999 > 04 2007		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Siena 1.2i 16V	B	10 2001 >		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
188 A5.000	Stilo 1.2i 16V	B	10 2001 > 12 2003		4 Cyl	**1242cc** **59-63kW**	(80-86ps)
	11-02287-000 CH 28,000 VD1 2,000 B- 5,100 TL 48,000 **18,00x49,00**		**91-09285-000** 1 1,200 NT St 2 1,200 P 3 2,500 NtP St			Ø 70,800 Ø 71,200 Ø 71,400	**31-04287-000** **31-04287-040** **31-04287-060**
	Fiat / Iveco ve Lancia ile Ortak Motor						
	K=73,80 L=128,00 H=5,00 D=75,00	DS				**51-65491-000**	

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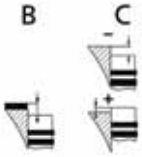
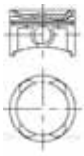


Type

72,000

843 A1.000	500L 1.4 16V	D	00	2003	>	4 Cyl	**1368cc**	**66-70kW**	(90-96ps)
843 A1.000	DOBLO 1.4 16V	D	00	2003	>	4 Cyl	**1368cc**	**66-70kW**	(90-96ps)
843 A1.000	IDEA 1.4 16V	D	00	2003	>	4 Cyl	**1368cc**	**66-70kW**	(90-96ps)
843 A1.000	PUNTO II 1.4 16V	D	00	2003	>	4 Cyl	**1368cc**	**66-70kW**	(90-96ps)
843 A1.000	STILO 1.4 16V	D	00	2003	>	4 Cyl	**1368cc**	**66-70kW**	(90-96ps)



11-01332-000
CH 26,800
VD1 1,400
VD2 2,300
B- 8,000
BØ 61,000
TL 49,800

18,00x53,00

99-09695-000
1 1,200 CK
2 1,200 P
3 2,000 CrP

Ø 72,000
Ø 72,400

39-03332-000
39-03332-040

72,000

350 A1.000	Doblo 1.4i	B	10	2005	>	4 Cyl	**1368cc**	**57kW**	(77ps)
350 A1.000	Grande Punto 1.4i	B	10	2005	>	4 Cyl	**1368cc**	**57kW**	(77ps)
350 A1.000	Idea 1.4i	B	01	2004	>	4 Cyl	**1368cc**	**57kW**	(77ps)
350 A1.000	Linea 1.4i	B	03	2007	>	4 Cyl	**1368cc**	**57kW**	(77ps)
350 A1.000	Punto (199) 1.4i / Punto EVO 1.4	B	03	2012	>	4 Cyl	**1368cc**	**57kW**	(77ps)

11-02266-000
CH 26,000
VD1 2,050
B- 4,750
TL 49,000

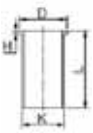
18,00x49,00

91-09263-000
1 1,000 NT St
2 1,200 P
3 2,000 CrP

Ø 72,000
Ø 72,400

31-04266-000
31-04266-040

Fiat / Iveco ve Lancia ile Ortak Motor

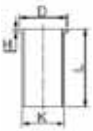
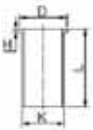
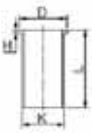
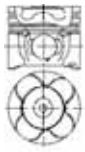


K=75,00
L=126,00
H=5,10
D=76,50

DS

51-65269-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
75,000						
9HU	Scudo 1.6 JTD 90 16V	D 01 2007 >		4 Cyl	**1560cc 66kW**	(92ps)
	11-02498-000 CH 41,700 VD1 1,200 B- 13,250 BØ 41,800 TL 65,300 **26,00x61,00** Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor	AP YS	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP	1,25 Conta ile (+0,53/+0,63) 1,30 Conta ile (+0,63/+0,68) 1,35 Conta ile (+0,68/+0,73)	Ø 75,000 Ø 75,500 Ø 75,600	**31-04498-000** **31-04498-050** **31-04498-060**
	K=78,05 L=142,00 H=5,00 D=79,45	DS			**51-65826-000**	
	K=78,55 L=142,00 H=6,00 D=79,95	DS +0,50			**51-65826-050**	
	K=79,05 L=142,00 H=6,00 D=80,45	DS +1,00			**51-65826-100**	
75,000						
Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>		Cyl	**cc kW**	(ps)
	11-02498-001 CH 41,500 VD1 1,200 B- 13,250 BØ 41,800 TL 65,100 **26,00x61,00** Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor	AP YS CH -0,20 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000 Ø 75,500	**31-04498-001** **31-04498-051**
75,000						
Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter	>				(ps)
	**11-02498-002** CH 41,300 VD1 1,200 B- 13,250 BØ 41,800 TL 64,900 **26,00x61,00** Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor	AP YS CH -0,40 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000 Ø 75,500	**31-04498-002** **31-04498-052**

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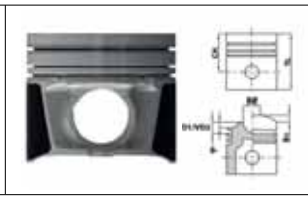
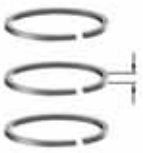
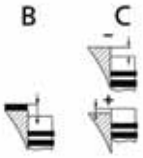


Type





75,000

Strok Boyu 0,60mm Kisa Piston / Stroke Lenght 0,60mm Shorter > (ps)

11-02498-003
CH 41,100
VD1 1,200
B- 13,250
BØ 41,800
TL 64,700

26,00x61,00

AP
YS

CH -0,60 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000

31-04498-003

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

76,000

131A000 131 1.3 10 1974 > 00 1980 (55ps)

11-01392-000
CH 38,450
B- 0,500
BØ 45,000
TL 77,950

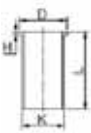
22,00x61,00

CP

91-09392-000
1 1,500 CrP
2 2,000 P
3 3,947 CrP

Ø 76,000
Ø 76,400
Ø 76,600

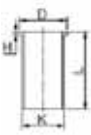
31-03392-000
31-03392-040
31-03392-060



K=80,01
L=133,50
H=5,00
D=81,18

DS

51-65392-000



K=80,50
L=133,50
H=6,00
D=81,50

DS

+0,50

51-65392-050

76,000

127 A5.000 / M 703 AA 13.0	127 1.3	D	00	1981	> 00	1986	4 Cyl	**1302cc**	**33kW** (45ps)
127 A5.000 / M 703 AA 13.0	Panda 1.3	D	00	1984	> 00	1992	4 Cyl	**1302cc**	**33kW** (45ps)
127 A5.000 / M 703 AA 13.0	Spazio 1.3	D	00	1985	> 00	1987	4 Cyl	**1302cc**	**33kW** (45ps)
127 A5.000 / M 703 AA 13.0	Uno 1.3	D	00	1984	> 00	1992	4 Cyl	**1302cc**	**33kW** (45ps)

11-01393-000
CH 47,150
B- 4,900
TL 79,150

22,00x64,50

AP
CP

91-09393-000
1 2,500 CrP
2 2,000 P
3 3,000 CrP

Ø 76,000
Ø 76,400
Ø 76,600
Ø 76,800
Ø 77,000

31-03393-000
31-03393-040
31-03393-060
31-03393-080
31-03393-100

K=79,08
L=135,50

DS

51-65393-000

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		Type		B C		

76,000

131 B.000 / BC74.0	131 1.3		B	00	1978	>	00	1981	4 Cyl	**1297cc**	**57-60kW**	(78-82ps)	

11-02275-000
CH 38,450
VD1 5,000
TL 82,950

22,00x60,90

91-09392-000
1 1,500 CrP
2 2,000 P
3 3,947 CrP

Ø 76,000 **31-04275-000**
Ø 76,200 **31-04275-020**
Ø 76,400 **31-04275-040**
Ø 76,600 **31-04275-060**

77,000

115 C 000	1500 1.5		B	00	1964	>	00	1968	4 Cyl	**1481cc**	**51-55kW**	(70-75ps)	
115 C 000	Stationary engine 1.5		B			>			4 Cyl	**1481cc**	**51-61kW**	(70-82ps)	

11-01751-000
CH 36,500
B- 9,500
TL 89,000

22,00x65,00

CP

91-09751-000
1 2,000 CrP
2 2,000 P
3 3,947 CrP

Ø 77,000 **31-03751-000**
Ø 77,400 **31-03751-040**
Ø 77,600 **31-03751-060**
Ø 77,800 **31-03751-080**
Ø 78,000 **31-03751-100**

79,500

1.6 16V MULTIJET (Euro 5)	BRAVO 1.6 16v		D	00	2010	>			4 Cyl	**1598cc**	**74kW**	(100ps)	
1.6 16V MULTIJET (Euro 5)	DOBLO II 1.6 16V		D	00	2010	>			4 Cyl	**1598cc**	**74kW**	(100ps)	
1.6 16V MULTIJET (Euro 5)	LINEA 1.6 16V		D	00	2010	>			4 Cyl	**1598cc**	**74kW**	(100ps)	

11-02292-000
CH 43,950
VD1 0,460
B- 13,800
BØ 41,700
TL 68,950

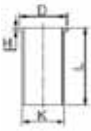
26,00x62,80

AP

91-09694-000
1 1,500 CkP
2 1,500 P
3 2,000 CrP

Deliksiz conta ile 0,82mm (+0,2/+0,10)
Tek delik conta ile 0,92mm (+0,10/+0,20)
iki delik conta ile (+0,20/+0,30)

Ø 79,500 **31-04292-000**
Ø 79,900 **31-04292-040**

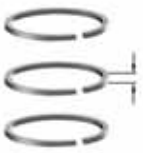
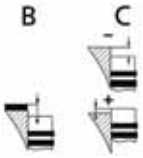


K=82,50
L=142,00
H=5,00
D=84,00

DS

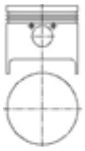
51-65756-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

80,000

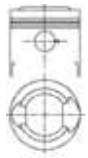
124 B2.000 — 124 1.4 — B — 00 1968 > 00 1974 — 4 Cyl — **1438cc** — **51.5-55kW** (70-75ps)

	**11-01752-000** CH 37,750 TL 77,250 **22,00x71,00**	CP	**91-09755-000** 1 1,500 CrP 2 2,000 P 3 3,947 P		Ø 80,000 **31-03752-000** Ø 80,400 **31-03752-040** Ø 80,600 **31-03752-060** Ø 80,800 **31-03752-080** Ø 81,000 **31-03752-100**
	K=84,06 L=145,50	DS			**51-65385-000**

80,000

132 A.000 / 132BB.0A / 132AB.0A.0 — 132 1.6 — B — 00 1983 > 00 1985 — 4 Cyl — **1592cc** — **72kW** (98ps)

132A.9000 / 132AC.000 — 124 1.6 — B — 00 1972 > 00 1975 — 4 Cyl — **1592cc** — **70-80kW** (95-108ps)

	**11-01753-000** CH 37,750 B- 4,500 TL 81,750 **22,00x68,00**	CP	**91-09755-000** 1 1,500 CrP 2 2,000 P 3 3,947 P		Ø 80,000 **31-03753-000** Ø 80,400 **31-03753-040** Ø 80,600 **31-03753-060** Ø 80,800 **31-03753-080** Ø 81,000 **31-03753-100**
	K=84,06 L=145,50	DS			**51-65385-000**

80,000

128 A.000 / AC5.000 / BB.0A0 — 128 1.1 — B — 03 1969 > 12 1984 — 4 Cyl — **1116cc** — **40-48 kW** (55-65 ps)

138 AE.0A.0 — Ritmo 60 1.1 — B — 10 1978 > 09 1982 — 4 Cyl — **1116cc** — **44 kW** (60 ps)

	11-01755-000 CH 34,400 B- 0,500 TL 77,100 **22,00x68,00**	CP	**91-09755-000** 1 1,500 CrP 2 2,000 P 3 3,947 P		Ø 80,000 **31-03755-000** Ø 80,400 **31-03755-040** Ø 80,600 **31-03755-060** Ø 80,800 **31-03755-080** Ø 81,000 **31-03755-100**

80,500

13891RON — Sahin 1.4 — B — > — 4 Cyl — **1372cc** — **kW** (ps)

	11-01396-000 CH 33,300 B- 2,900 BØ 61,000 TL 65,300 **22,00x58,20**		**91-09396-000** 1 1,500 CrP 2 1,750 P 3 3,000 P		Ø 80,500 **31-03396-000** Ø 80,700 **31-03396-020** Ø 80,800 **31-03396-030** Ø 80,900 **31-03396-040** Ø 81,100 **31-03396-060**

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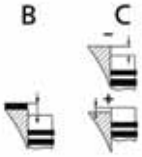
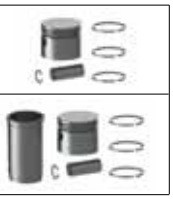
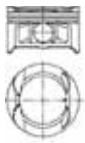




Type

80,500

182 B6.000	Albea 1.6i 16V	B		>		4 Cyl				(103ps)
182 B6.000	Brava 1.6i 16V	B	08 2000	>	09 2001	4 Cyl				(103ps)
182 B6.000	Bravo 1.6i 16V	B	08 2000	>	09 2001	4 Cyl				(103ps)
182 B6.000	Doblo 1.6i 16V	B	01 2001	>		4 Cyl				(103ps)
182 B6.000	Marea 1.6i 16V	B	08 2000	>		4 Cyl				(103ps)
182 B6.000	Multipla 1.6i 16V	B	01 1999	>		4 Cyl				(103ps)
182 B6.000	Palio 1.6i 16V	B	09 1997	>		4 Cyl				(103ps)
182 B6.000	Petra 1.6i 16V	B	03 2003	>		4 Cyl				(103ps)
182 B6.000	Siena 1.6i 16V	B	04 1997	>		4 Cyl				(103ps)
182 B6.000	Stilo 1.6i 16V	B	10 2001	>		4 Cyl				(103ps)



11-02267-000
CH 28,650
VD1 2,200
B- 1,200
BØ 62,000
TL 50,700

21,00x56,00

91-09262-000
1 1,200 CR St
2 1,200 P
3 2,000 CrP St

Ø 80,500
Ø 80,900

31-04267-000
31-04267-040

Fiat / Iveco ve Lancia ile Ortak Motor

80,500

146 C1.000 / 160 A1.046 KAT	Uno 70 1.4i	B	09 1989	>	09 1992	4 Cyl	**1372cc**	**51-53 kW**	(70-72 ps)	
146 C5 / D5.000 KAT	Fiorino 1.4i	B	09 1993	>	06 1995	4 Cyl	**1372cc**	**50 kW**	(67 ps)	
146 C5.000 KAT / M605 PB.13.C014 KAT	Elba 1.4i	B	09 1993	>		4 Cyl	**1372cc**	**51kW**	(70 ps)	
160 A1.046 / 836 A4.000 / M605 FB.13.CO14 KAT	Tempra 1.4i	B	03 1992	>	12 1996	4 Cyl	**1372cc**	**51 kW**	(70 ps)	
M202 PA.13.0 / 160 A1.046 KAT / 836 A4.000 KAT	Tipo 1.4i	B	07 1987	>	10 1995	4 Cyl	**1372cc**	**51 kW**	(70 ps)	

11-02303-000
CH 33,300
B- 2,900
TL 65,300

22,00x58,00

91-09396-000
1 1,500 CrP
2 1,750 P
3 3,000 P

Ø 80,500
Ø 80,900
Ø 81,100

31-04303-000
31-04303-040
31-04303-060

Fiat / Iveco ve Lancia ile Ortak Motor

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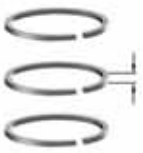
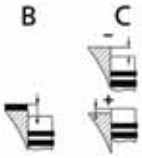
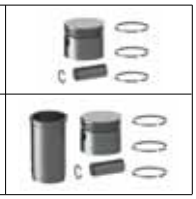
Type

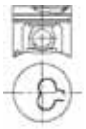






82,000

188 A3.000 Euro3	Punto II 1.9 D / DS	D	01	2001	>	08	2004	4 Cyl	**1910cc**	**44kW**	(60ps)
223 A6.000 Euro3	Doblo 1.9 D	D	07	2000	>	12	2005	4 Cyl	**1910cc**	**46kW**	(63ps)
223 A6.000 Euro3	Palio 1.9 D	D	01	2003	>			4 Cyl	**1910cc**	**46kW**	(63ps)
223 A6.000 Euro3	Strada 1.9 D	D	11	2000	>			4 Cyl	**1910cc**	**46kW**	(63ps)



11-01399-000
CH 44,500
B- 1,300
TL 70,300

26,00x65,00

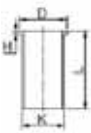
AA=22,50 mm

91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

0,76-0,84mm Conta ile (+0,045/+0,125)
0,86-0,94mm Conta ile (+0,126/+0,225)
0,96-1,04mm Conta ile (+0,226/+0,305)

Ø 82,000
Ø 82,400
Ø 82,600

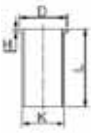
31-03399-000
31-03399-040
31-03399-060



K=85,00
L=155,00
H=4,50
D=88,00

DS

51-65265-000



K=85,00
L=155,00
H=5,00
D=86,00

DS

51-65268-000

82,000

186 A8.000	Multipla 1.9 JTD	D	04	2002	>			4 Cyl	**1910cc**	**85kW**	(115ps)
186 A9.000 / 223 A7.000	Doblo 1.9 JTD	D	10	2005	>			4 Cyl	**1910cc**	**77-88kW**	(105-120ps)
188 B2.000	Idea 1.9 JTD	D	01	2004	>			4 Cyl	**1910cc**	**74kW**	(101ps)
188 B2.000	Punto (188) 1.9 JTD	D	07	2003	>	04	2007	4 Cyl	**1910cc**	**74kW**	(101ps)
192 A1.000 / A8.000 / 937 A7.000	Stilo 1.9 JTD	D	10	2001	>	12	2003	4 Cyl	**1910cc**	**85-88kW**	(115-120ps)
192 A8.000	Bravo 1.9 JTD / II 1.9 D 16V	D	03	2007	>			4 Cyl	**1910cc**	**88kW**	(120ps)
199 A5.000 / 939 A1.000	Grande Punto 1.9D Multijet	D	10	2005	>			4 Cyl	**1910cc**	**88-96kW**	(120-130ps)
939 A1.000	Croma 1.9 JTD	D	06	2005	>			4 Cyl	**1910cc**	**88kW**	(120ps)
D19AA	Sedici 1.9 JTD	D	03	2006	>			4 Cyl	**1910cc**	**88kW**	(120ps)

11-02281-000
CH 46,500
VD1 0,500
B- 17,500
BØ 37,500
TL 72,500

26,00x61,00

AP

PDB

AA=22,35 mm

91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

0,77-0,87mm Conta ile (+0,014/+0,104)
0,87-0,97mm Conta ile (+0,105/+0,205)
0,97-1,07mm Conta ile (+0,236/+0,294)

Ø 82,000
Ø 82,400
Ø 82,600

31-04281-000
31-04281-040
31-04281-060

Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor

K=85,00
L=155,00
H=5,00
D=86,00

DS

51-65268-000

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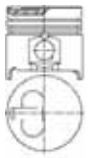
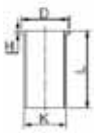
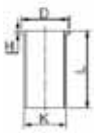
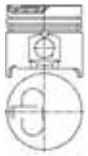
		Type		B C		
82,200						
DW8 Scudo 1.9 D		D 09 1998 >	4 Cyl	**1868cc 51kW**	(69ps)	
	**11-01878-000** CH 46,700 B- 1,200 TL 78,000 **25,00x65,50** Fiat / Iveco ve Peugeot ile Ortak Motor		**91-09878-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,26mm Conta ile +0,51/+0,55 1,30mm Conta ile +0,55/+0,59 1,34mm Conta ile +0,59/+0,63	Ø 82,200 Ø 82,700 Ø 82,800 Ø 83,000	**31-03878-000** **31-03878-050** **31-03878-060** **31-03878-080**
	K=85,05 L=154,00 H=5,10 D=86,95	DS			**51-65866-000**	
	K=85,55 L=154,00 H=6,00 D=87,45	DS +0,50			**51-65866-050**	
82,200						
Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter		D 09 1998 >	4 Cyl	**1868cc 51kW**	(69ps)	
	**11-01878-001** CH 46,500 B- 1,200 TL 78,000 **25,00x65,50** Fiat / Iveco ve Peugeot ile Ortak Motor	CH -0,20 mm	**91-09878-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,26mm Conta ile +0,51/+0,55 1,30mm Conta ile +0,55/+0,59 1,34mm Conta ile +0,59/+0,63	Ø 82,200	**31-03878-001**

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Type

82,600

138C.000 / 149 B3.000 / M705 BA.190	Ritmo 1.7 D / 60 1.7 D	D	05	1985	>	12	1987	4 Cyl	**1698cc**	**40-44kW**	(58-60 ps)
146 B2.000 / 149 B3.000 / M705BA.190	Uno 1.7 D / 60 1.7 D / Mondo 1.7 D	D	00	1988	>			4 Cyl	**1698cc**	**40-44kW**	(57-60ps)
146 B2.000/149 B3.000/B4. / M705BA.190	Fiorino 1.7 D	D	01	1988	>	12	2001	4 Cyl	**1698cc**	**40-44kW**	(57-60ps)
146B2.000/149B3.000/B4. / M705BA.190	Fiorino 1.7 D	D	01	1988	>	12	2001	4 Cyl	**1698cc**	**40-44kW**	(57-60ps)
149 A1.000 / 160 A7.000	Marengo 1.9 D	D	01	1986	>	07	1989	4 Cyl	**1698cc**	**48 kW**	(65 ps)
149 A1.000 / 160 A7.000	Tempra 1.9 D	D	02	1990	>	05	1993	4 Cyl	**1698cc**	**48 kW**	(65 ps)
149 B1.000	Talento 1.9 D	D	03	1988	>	12	1994	4 Cyl	**1698cc**	**52 kW**	(70 ps)
149 B1.000 / 280 A1.000	Ducato 10 1.9 D / 10-14 1.9 D Turbo	D	02	1987	>	02	1994	4 Cyl	**1698cc**	**52-62kW**	(70-82ps)
149 B3.000	Strada 1.7 D	D	05	1985	>	12	1987	4 Cyl	**1698cc**	**42-44 kW**	(58-60 ps)
149 B3.000 / M705BA.190	Duna 1.7 D	D	10	1986	>	12	1990	4 Cyl	**1698cc**	**40-44kW**	(58-60 ps)
149 B5.046	Uno 1.9 D	D	09	1989	>	03	1994	4 Cyl	**1698cc**	**44 kW**	(60 ps)
149A1.000-B4.000-B4.046/M705BA.190/160 A7.000	Tipo 1.7 D / 1.9 D	D	00	1988	>			4 Cyl	**1698cc**	**40-48kW**	(58-65ps)
160 A7.000	Brava 1.9 D	D	10	1995	>	10	1998	4 Cyl	**1698cc**	**48 kW**	(65 ps)
160 A7.000	Bravo 1.9 D	D	10	1995	>	10	1998	4 Cyl	**1698cc**	**48 kW**	(65 ps)
176 B3.000	Palio 1.7 D	D	03	1998	>			4 Cyl	**1698cc**	**42 kW**	(57 ps)
176 B3.000	Punto 1.7 D	D	05	1997	>	08	1999	4 Cyl	**1698cc**	**42 kW**	(57 ps)
176 B3.000	Siena 1.7 D	D	01	1998	>			4 Cyl	**1698cc**	**42 kW**	(57 ps)
831 D1.000	Ritmo 80 1.9 TD	D	12	1985	>	12	1987	4 Cyl	**1698cc**	**59 kW**	(80 ps)
831 D1.000 / 149 A1.000	Regata 65 / 80 1.9 D	D	04	1984	>	07	1989	4 Cyl	**1698cc**	**48-59kW**	(65-80ps)
M705 BA.190 / 149 B3.000	Regata 1.7 D / 60 1.7 D	D	05	1985	>	03	1989	4 Cyl	**1698cc**	**40-44kW**	(58-60 ps)

11-01394-000
CH 42,600
B- 2,400
TL 84,400

25,00x69,50

AP

91-09394-000
1 2,500 CrP
2 2,000 P
3 4,000 CrP

Ø 82,600
Ø 83,000
Ø 83,200

31-03394-000
31-03394-040
31-03394-060

Fiat / Iveco, Lancia ile Ortak Motor

K=86,08
L=154,00

DS

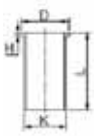
51-65394-000

K=87,08
L=154,00

DS

+1,00

51-65394-100



K=86,06
L=154,00
H=4,50
D=89,00

DS

51-65395-000

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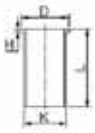
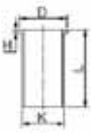
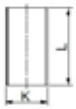
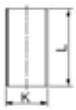
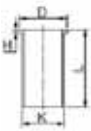
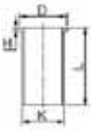
		Type		B C		
	K=87,06 L=154,00 H=5,50 D=90,00	DS +1,00			**51-65395-100**	

83,000

171B Ducato I (280) 2.0 B 07 1982 > 12 1993 4 Cyl **1560cc** **66kW** (90ps)

	11-01877-000 CH 37,500 B- 2,100 TL 67,500 **22,00x66,20** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor		**91-09877-000** 1 1,750 CR 2 1,750 3 4,000 CrP St		Ø 83,000	**31-03877-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07877-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05882-000**	**71-07878-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
XUD9A / D9B	Scudo 1.9 D	D	10 1995 > 05 2000	4 Cyl	**1905cc**	**47-52kW** (64-71ps)
XUD9A / DJY	Ducato II (230) 1.9 D	D	04 1998 > 10 2001	4 Cyl	**1905cc**	**47-52kW** (64-71ps)
	11-01879-000 CH 46,800 B- 2,200 TL 84,300 **25,00x72,00** Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor		**91-09879-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)	Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000	**31-03879-000** **31-03879-020** **31-03879-050** **31-03879-080** **31-03879-100**
	K=86,00 L=153,50 H=4,80 D=89,00	DS			**51-65820-000**	
	K=86,04 L=153,50	DS			**51-65879-000**	
	K=86,54 L=153,50	DS +0,50			**51-65879-050**	
	K=85,66 L=153,50 H=3,90 D=88,45	DS			**51-65885-000**	
	K=86,15 L=153,50 H=3,90 D=88,45	DS +0,50			**51-65885-050**	

		Type		B C		
83,000						
XU7JP	Scudo 1.8i	B	10 1995 >	4 Cyl	**1782cc**	**73-76kW** (99-103ps)
XU7JP / LFW	Ulysse 1.8i	B	05 1996 >	4 Cyl	**1782cc**	**72-76kW** (98-103ps)
11-01887-000 CH 33,300 B- 6,380 BØ 66,500 TL 53,300 **22,00x62,00** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor		CP	**91-09887-000** 1 1,500 Mo 2 1,500 3 3,000 CR		Ø 83,000	**31-03887-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05868-000**	**71-07887-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05878-000**	**71-07892-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07882-000**

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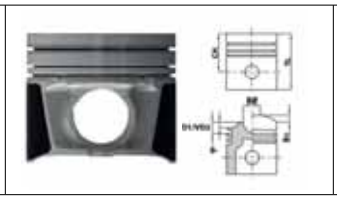
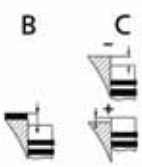
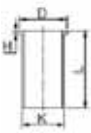
		Type				

83,000

198 A5.000	Bravo 2.0 M-Jet 16V	D	10	2008	>	4 Cyl	**1956cc**	**120kW**	(163ps)
250 A1.000 Euro 5	Ducato III 2.0D 115 M-Jet	D	06	2011	>	4 Cyl	**1956cc**	**85kW**	(115ps)
263 A1.000 Euro 5	Doblo 2.0 M-Jet 16V	D	01	2010	>	4 Cyl	**1956cc**	**99kW**	(135ps)
844 A2. / 198 A5.000	Bravo 2.0 M-Jet 16V	D	10	2008	>	4 Cyl	**1956cc**	**120kW**	(163ps)
940 A5.000 Euro 5 / 939 B5.000	Freemont 2.0D Multijet 16V	D	08	2011	>	4 Cyl	**1956cc**	**100-125kW**	(140-170ps)

	11-02197-000 CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630 **29,98x67,00** Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor	AP YS	**91-09790-000** 1 1,500 CkP 2 1,500 P 3 2,000 NT St	0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)	Ø 83,000 Ø 83,400	**31-04197-000** **31-04197-040**
			98-09790-000 1 1,500 CrP St 2 1,500 P 3 2,000 CR St			**38-04197-000** **38-04197-040**
			99-09790-000 1 1,500 NtPvD St 2 1,500 P 3 2,000 NT St			**39-04197-000**
	K=86,00 L=155,00 H=5,00 D=87,50	DS			**51-65778-000**	

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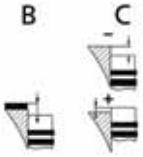
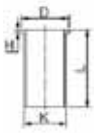
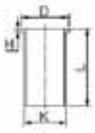
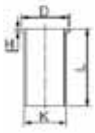
		Type		B C		
						

84,000

131 A.000 131 1.6 B 10 1974 > 02 1981 4 Cyl **1585cc** **55kW** (75ps)

	11-01389-000 CH 38,600 TL 78,100 **22,00x71,00**	CP	**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP		Ø 84,000 Ø 84,200 Ø 84,400 Ø 84,600 Ø 84,800	**31-03389-000** **31-03389-020** **31-03389-040** **31-03389-060** **31-03389-080**
	K=88,00 L=133,50 H=5,00 D=89,18	DS			**51-65397-000**	
	K=88,50 L=133,50 H=6,00 D=90,00	DS +0,50			**51-65397-050**	
	K=89,00 L=133,50 H=6,00 D=90,50	DS +1,00			**51-65397-100**	

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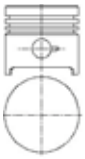
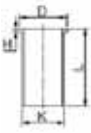
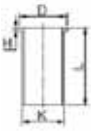
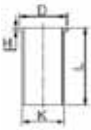
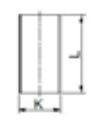
		Type		B C		
84,000						
131 A1.000	DoGan	B 10 1974 > 00 1980 4 Cyl	**1585cc**	**55kW**	(75ps)	
131 A1.000	Kartal	B 10 1974 > 00 1980 4 Cyl	**1585cc**	**55kW**	(75ps)	
131 A1.000	Sahin	B 10 1974 > 00 1980 4 Cyl	**1585cc**	**55kW**	(75ps)	
	**11-01397-000** CH 38,450 TL 77,950 **22,00x69,00**		**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP		Ø 84,000 Ø 84,400 Ø 84,600 Ø 84,800 Ø 85,000	**31-03397-000** **31-03397-040** **31-03397-060** **31-03397-080** **31-03397-100**
	K=88,00 L=133,50 H=5,00 D=89,18	DS			**51-65397-000**	
	K=88,50 L=133,50 H=6,00 D=90,00	DS +0,50			**51-65397-050**	
	K=89,00 L=133,50 H=6,00 D=90,50	DS +1,00			**51-65397-100**	
84,000						
133A1.000/AB000-AB1A.0/B1.000 - BB1A.0/C1.000-CB.1A	132 1.8	B 00 1972 > 00 1977 4 Cyl	**1756cc**	**77-82kW**	(105-111ps)	
134A1.000/132AB000-AB1A.0 - B1.000-BB1A.0-C1.000	124 1.8	B 00 1972 > 00 1977 4 Cyl	**1756cc**	**77-82kW**	(105-111ps)	
	11-01757-000 CH 38,450 VD1 4,850 B- 1,600 TL 79,850 **22,00x69,00** Fiat / Iveco, Lancia ve Seat ile Ortak Motor	CP	**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP		Ø 84,000 Ø 84,400 Ø 84,600 Ø 84,800 Ø 85,000	**31-03757-000** **31-03757-040** **31-03757-060** **31-03757-080** **31-03757-100**
	K=88,02 L=145,50	DS			**51-65410-000**	

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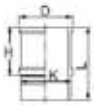
		Type		B C		

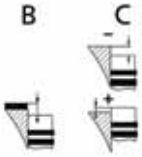
84,000

169 B / XM 7T	Ducato I (280) 1.8			B	09	1981	>	12	1990	4 Cyl	**1796cc**	**44-51kW**	(60-69ps)		
	11-01881-000 CH 37,800 TL 69,300 **23,00x70,00**		CP	**91-09881-000** 1 1,500 CrP 2 2,000 P 3 4,000 CrP St									Ø 84,000		**31-03881-000**
Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor															
	K=92,95 L=136,20 H=90,00 D=99,20		WF										**51-05880-000**		**71-07881-000**

84,000

124 B3.000	Series 242			B	06	1973	>	05	1978	4 Cyl	**1995cc**	**46 kW**	(62 ps)		
131 B2 / C3 / C4.000	131 2.0			B	06	1978	>	03	1981	4 Cyl	**1995cc**	**85 kW**	(115 ps)		
132 B2.000 / C2.000 / DB.2A.0	132 2.0			B	03	1981	>	08	1983	4 Cyl	**1995cc**	**83 kW**	(112 ps)		
132 C3.000	132 2.0i			B	01	1980	>	05	1981	4 Cyl	**1995cc**	**90 kW**	(122 ps)		
132 C3.000 / 054	Argenta 2.0i			B	06	1981	>	12	1985	4 Cyl	**1995cc**	**90 kW**	(122 ps)		
132 C3.031	Spider 2.0i			B	03	1982	>	09	1985	4 Cyl	**1995cc**	**77 kW**	(105 ps)		
132 D1.000	Argenta 2.0			B	06	1981	>	12	1985	4 Cyl	**1995cc**	**83 kW**	(113 ps)		
	11-02270-000 CH 38,450 VD1 3,800 TL 77,950 **22,00x69,00**		CP	**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP									Ø 84,000 Ø 84,400 Ø 84,600 Ø 84,800 Ø 85,000		**31-04270-000** **31-04270-040** **31-04270-060** **31-04270-080** **31-04270-100**
Fiat / Iveco, Lancia ve Seat ile Ortak Motor															

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

85,000

RFN (EW10J4)	SCUDO	B	05	2000	>	12	2006	4 Cyl	**1997cc**	**100kW**	(136ps)
RFN (EW10J4)	ULYSSE	B	08	2002	>	06	2011	4 Cyl	**1997cc**	**100kW**	(136ps)

11-02117-000
CH 29,000
B- 0,750
BØ 48,000
TL 51,000

21,00x58,00

91-09145-000
1 1,200 Mo
2 1,500 CR
3 2,500 CR

Ø 85,000	**31-04117-000**
Ø 85,200	**31-04117-020**
Ø 85,400	**31-04117-040**
Ø 85,600	**31-04117-060**
Ø 85,800	**31-04117-080**

85,000

XUD 11ATE	Ulysse 2.1 TD 12V	D	03	1996	>			4 Cyl	**2088cc**	**80kW**	(109ps)

11-02145-000
CH 44,800
B- 2,700
BØ 26,000
TL 74,800

30,00x71,50

AP
YS
HA

91-09143-000
1 3,000 Mo
2 2,000 Mo
3 3,000 CrP

Ø 85,000	**31-04145-000**
Ø 85,250	**31-04145-025**
Ø 85,600	**31-04145-060**

Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor

85,000

RHV(DW10TD)	Ducato II (230-244) 2.0 JTD	D	10	2001	>			4 Cyl	**2000cc**	**63-68kW**	(86-92ps)
RHX / RHZ	Scudo 2.0 JTD	D	10	1999	>			4 Cyl	**2000cc**	**80kW**	(109ps)
RHZ	Ulysse 2.0 JTD	D	07	1999	>	09	2002	4 Cyl	**2000cc**	**80-81kW**	(109-110ps)

11-02495-000
CH 46,750
VD1 1,000
B- 18,300
BØ 38,000
TL 80,750

28,00x70,00

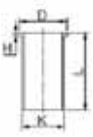
AP

91-09799-000
1 3,500 CK
2 2,000
3 3,000 CR

1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)

Ø 85,000	**31-04495-000**
Ø 85,500	**31-04495-050**
Ø 85,600	**31-04495-060**

Citroen, Fiat / Iveco, Lada, Lancia, Peugeot ve Suzuki ile Ortak Motor



K=89,00
L=155,00
H=4,50
D=91,20

DS

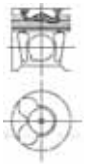
51-65167-000

		Type		B C		

85,000

RHR (DW10BTED4) Scudo 2.0 JTD 140 16V D 01 2007 > 4 Cyl **1997cc** **100kW** (136ps)

RHR (DW10BTED4) Ulysse 2.0 JTD 16V D 07 2006 > 4 Cyl **1997cc** **100kW** (136ps)



11-02497-000
CH 46,705
VD1 0,520
B- 15,400
BØ 44,800
TL 80,705

28,00x70,00

AP
YS

91-09799-000
1 3,500 CK
2 2,000
3 3,000 CR

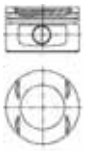
Ø 85,000
Ø 85,600

31-04497-000
31-04497-060

Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor

86,000

RFV Ulysse 2.0i 16V B 05 1998 > 02 2000 4 Cyl **1998cc** **97-100kW** (132-136ps)



11-02499-000
CH 33,800
VD1 1,700
B- 4,300
BØ 52,000
TL 53,800

22,00x62,00

CP

91-09499-000
1 1,500 Mo
2 1,750
3 3,000

Ø 86,000
Ø 86,500

31-04499-000
31-04499-050

Citroen, Fiat / Iveco, Lancia ve Peugeot ile Ortak Motor

86,010

4HV(P22DTE) Euro4 Ducato III 2.2D 100 M-Jet D 07 2006 > 4 Cyl **2200cc** **74-103kW** (101-140ps)

11-02034-000
CH 43,420
B- 15,850
BØ 46,900
TL 69,820

30,00x66,85

AP
YS

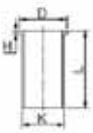
91-09425-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62

Ø 86,010
Ø 86,510

31-04034-000
31-04034-050

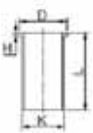
Citroen, Fiat / Iveco, Ford ve Peugeot ile Ortak Motor



K=89,00
L=156,00
H=5,00
D=90,50

DS

51-65496-000



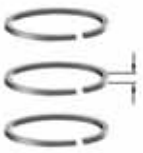
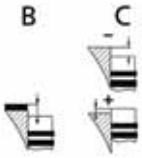
K=89,50
L=156,00
H=5,50
D=91,00

DS
+0,50

51-65496-050

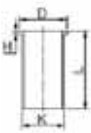
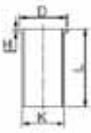
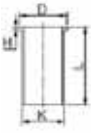
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

FIAT / IVECO

		Type		B C		
						

86,400

146 C6 / D6.000	Fiorino 1.6i	B	06	1995	>	12	2001	4 Cyl	**1580cc**	**55-69kW** (75-94ps)
146 C6.000	Elba 1.6i	B	09	1993	>			4 Cyl	**1580cc**	**69kW** (94ps)
160 A2.000 / 159 A3.000	Tempra 1.6	B	02	1990	>	03	1993	4 Cyl	**1580cc**	**60-62kW** (82-84ps)
160 A2.000 / 159 A3.000	Tipo 1.6	B	07	1987	>	03	1990	4 Cyl	**1580cc**	**60-62kW** (82-84ps)
176 A9.000	Punto (176) 1.6i	B	01	1994	>	04	1997	4 Cyl	**1580cc**	**65kW** (88ps)
220 A2.000	Scudo 1.6i	B	10	1995	>	05	2000	4 Cyl	**1580cc**	**58kW** (79ps)

	11-01395-000 CH 33,300 VD1 3,000 B- 2,500 TL 72,800 **22,00x63,00** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor	CP	**91-09395-000** 1 1,500 CrP 2 1,750 P 3 3,000 CrP	Ø 86,400 Ø 86,800 Ø 87,000 Ø 87,200 Ø 87,400	**31-03395-000** **31-03395-040** **31-03395-060** **31-03395-080** **31-03395-100**
	K=90,05 L=127,00 H=5,00 D=91,00	DS		**51-65270-000**	
	K=90,50 L=127,00 H=6,00 D=91,50	DS +0,50		**51-65270-050**	
	K=91,05 L=127,00 H=6,00 D=92,00	DS +1,00		**51-65270-100**	

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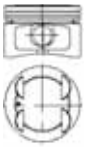
86,400

182 B6.000	Albea 1.6i 16V	B	01	2002	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Brava 1.6i 16V	B	08	2000	>	09 2001	4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Bravo 1.6i 16V	B	08	2000	>	09 2001	4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Doblo 1.6i 16V	B	01	2001	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Marea 1.6i 16V	B	08	2000	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Multipla 1.6i 16V	B	01	1999	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Palio 1.6i 16V	B	09	1997	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Petra 1.6i 16V	B	03	2003	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Siena 1.6i 16V	B	04	1997	>		4 Cyl	**1580cc**	**76kW**	(103ps)
182 B6.000	Stilo 1.6i 16V	B	10	2001	>		4 Cyl	**1580cc**	**76kW**	(103ps)



11-02269-000
CH 34,170
VD1 2,200
TL 59,430

22,00x56,00

Fiat / Iveco ve Lancia ile Ortak Motor

91-09969-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP St

Ø 86,400 **31-04269-000**
Ø 86,800 **31-04269-040**
Ø 87,000 **31-04269-060**

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FIAT / IVECO

86,400

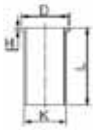
146 C6 / D6.000 KAT	Fiorino 1.6i	B	09	1993	>	06	1995	4 Cyl	**1600cc**	**55-69kW**	(75-94ps)
146 C6.000 KAT	Elba 1.6i	B	09	1993	>			4 Cyl	**1600cc**	**69 kW**	(94 ps)
159 A3.000 / 160 A2.000 / M202 PA.15.0	Tempra 1.6	B	02	1990	>	12	1996	4 Cyl	**1600cc**	**60-63 kW**	(82-86 ps)
159 A3.000 / 160 A2.000 / M202 PB.15.0 KAT	Tipo 1.6 / 1.6i	B	03	1990	>	03	1993	4 Cyl	**1600cc**	**57-65 kW**	(78-88 ps)
176 A9.000 KAT / M202 PB.15.0 KAT	Punto 1.6i	B	01	1994	>	04	1997	4 Cyl	**1600cc**	**57-65 kW**	(78-88 ps)
M202 PB.15.0 KAT	Scudo 1.6i	B	10	1995	>	05	2000	4 Cyl	**1600cc**	**57-65 kW**	(78-88 ps)
M202 PB.15.0 KAT	Tempra 1.6i	B	02	1990	>	03	1993	4 Cyl	**1600cc**	**57-65 kW**	(78-88 ps)

11-02273-000
CH 33,300
VD1 3,100
B- 2,300
TL 65,200

22,00x63,00

91-09395-000
1 1,500 CrP
2 1,750 P
3 3,000 CrP

Ø 86,400 **31-04273-000**
Ø 86,800 **31-04273-040**
Ø 87,000 **31-04273-060**
Ø 87,200 **31-04273-080**
Ø 87,400 **31-04273-100**



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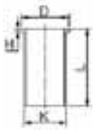
H=5,00
D=91,00

DS

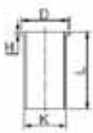
51-65270-000



K=90,50
L=127,00
H=6,00
D=91,50

DS
+0,50

51-65270-050

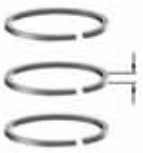
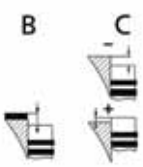


K=91,05
L=127,00
H=6,00
D=92,00

DS
+1,00

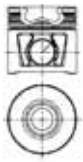
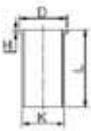
51-65270-100

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

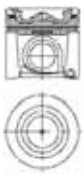
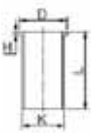
88,000

F1AE 0481C Euro3	Chassis 2.3 J	D	00	2002	>		4 Cyl	**2287cc**	**81kW**	(110ps)
F1AE 0481C Euro3	Ducato Box-Bus 2.3 JTD / Platform	D	00	2002	>		4 Cyl	**2287cc**	**81kW**	(110ps)

 **11-02831-000** CH 57,000 B- 18,180 BØ 44,700 TL 84,000 **31,00x67,00**	AP	**91-09838-000** 1 2,500 CK 2 2,000 P 3 2,500 CrP	1,10mm conta ile (0,30/0,40) 1,20mm conta ile (0,40/0,50) 1,30mm conta ile (0,50/0,60)	Ø 88,000 Ø 88,600	**31-04831-000** **31-04831-060**
 K=91,00 L=160,00 H=4,70 D=95,00	DS			**51-65753-000**	

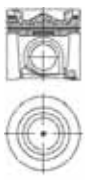
88,000

F1 AE 0481 D Euro 4	Ducato III 2.3D 120 M-Jet	D	07	2006	>		4 Cyl	**2286cc**	**88kW**	(120ps)
F1 AE 0481 F Euro 4	Daily IV 29 / 35 / 40	D	07	2006	>	10 2011	4 Cyl	**2286cc**	**70kW**	(95ps)
F1 AE 0481 G / H / R Euro 4	Daily IV 29 / 35 / 40	D	07	2006	>	10 2011	4 Cyl	**2286cc**	**85kW**	(116ps)
F1 AE 0481 M Euro 3/4	Daily III 29 / 35 / 40 2.3	D	09	2002	>	07 2006	4 Cyl	**2286cc**	**100kW**	(136ps)
F1 AE 0481 U / V Euro 4	Daily V 35 S 11 / 13	D	10	2011	>		4 Cyl	**2286cc**	**78kW**	(106ps)

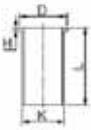
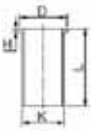
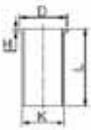
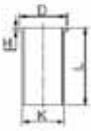
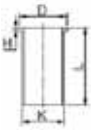
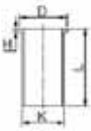
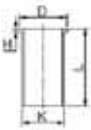
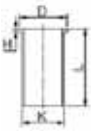
 **11-02838-000** CH 57,000 B- 13,750 BØ 50,000 TL 84,000 **31,00x67,00**	AP YS	**91-09838-000** 1 2,500 CK 2 2,000 P 3 2,500 CrP	1,10mm conta ile (0,30/0,40) 1,20mm conta ile (0,40/0,50) 1,30mm conta ile (0,50/0,60)	Ø 88,000 Ø 88,400 Ø 88,600	**31-04838-000** **31-04838-040** **31-04838-060**
 K=91,00 L=160,00 H=4,70 D=95,00	DS			**51-65753-000**	

88,000

F1 AE 3481 E	Daily-Karsan 2.3 JTD	D	00	2011	>		4 Cyl	**2299cc**	**109kW**	(148ps)
F1 AE 3481 E	Ducato 2.3 JTD	D	00	2011	>		4 Cyl	**2299cc**	**109kW**	(148ps)

 **11-02979-000** CH 57,000 B- 14,300 BØ 49,150 TL 84,270 **31,00x67,00**	AP YS	**91-09404-000** 1 1,750 CR 2 1,500 3 2,000 CrP	Ø 88,000	**31-04979-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
91,480						
D3.152 Series AC 160 D 01 1971 > 12 1975 3 Cyl **2503cc** **35kW** (47ps)						
	11-01834-000 CH 62,000 B- 19,250 BØ 59,800 TL 109,600 **31,75x75,30** Fiat / Iveco ve Perkins ile Ortak Motor		**91-09834-000** 1 2,385 CrP 2 2,385 P 3 2,385 P 4 4,747 CrP	-0,025/+0,010	Ø 91,480	**31-03834-000**
	K=93,80 L=216,00 H=5,00 D=97,00	DS			**51-65831-000**	
	K=94,30 L=216,00 H=5,00 D=97,00	DS +0,50			**51-65831-050**	
	K=94,80 L=216,00 H=5,00 D=97,65	DS +1,00			**51-65831-100**	
	K=95,05 L=216,00 H=6,00 D=98,00	DS +1,25			**51-65831-125**	
	K=95,30 L=216,00 H=6,00 D=98,25	DS +1,50			**51-65831-150**	
	K=95,80 L=216,00 H=6,00 D=98,75	DS +2,00			**51-65831-200**	
	K=96,30 L=216,00 H=6,00 D=99,25	DS +2,50			**51-65831-250**	
	K=96,80 L=216,00 H=6,00 D=99,75	DS +3,00			**51-65831-300**	

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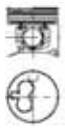
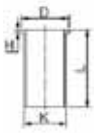
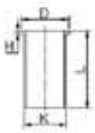
		Type		B C		
93,000						
8140.67.X230-F3700-F3711-2585 DUCATO 2.5 D Biyel Kolu Duz	D	00 1994 >	4 Cyl	**2499cc**	**63kW**	(83ps)
	**11-01331-000** CH 54,000 B- 2,200 TL 89,000 **32,00x75,20**	AP HA	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP	1,60mm conta (+0,72/+0,81) 1,80mm conta (+0,82/+1,14)	Ø 93,000	**31-03331-000**
	K=97,50 L=167,00 H=5,00 D=100,90	DS			**51-65757-000**	
93,000						
8140.67.3700 / Sofim Ducato 2.5 D	D	01 1996 >	4 Cyl	**2499cc**	**60kW**	(82ps)
	11-01684-000 CH 54,000 B- 2,200 TL 89,000 **32,00x68,00** Fiat / Iveco ve Renault ile Ortak Motor	AP HA	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP	1,20mm conta ile (+0,40/+0,50) 1,30mm conta ile (+0,51/+0,60) 1,40mm conta ile (+0,61/+0,70)	Ø 93,000 Ø 93,400 Ø 93,600	**31-03684-000** **31-03684-040** **31-03684-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	

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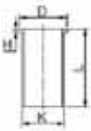
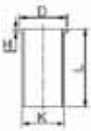
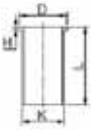
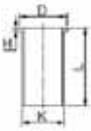
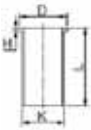
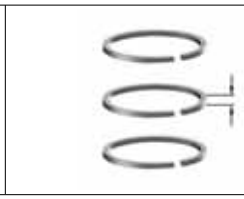
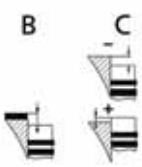
		Type		B C		

93,000

8140.27.200 / 2100 / 67.2100	Ducato 10-12-14-18 2.5 D Turbo	D	07	1990	>	02	1994	4 Cyl	**2499cc**	**70-76kW**	(95-103ps)
8140.27.2101/2720/2811/S.2700/S.2785/S.2801/S.2885	Daily 35-40-45-49.10	D	00	1989	>	02	1994	4 Cyl	**2499cc**	**69-76 kW**	(94-103 ps)
8140.27.2720 / 2811 / S.2700 / S.2785	Grinta 40-45-49.10	D	07	1989	>	04	1996	4 Cyl	**2499cc**	**69-76 kW**	(94-103 ps)
8140.27R.2700 / 2782	Daily 35.10 / 49.10	D	05	1990	>	09	1990	4 Cyl	**2499cc**	**67-70 kW**	(92-95 ps)
8140.27R.2700-2782	Grinta 35.10-12 / 49.10	D	05	1990	>	09	1990	4 Cyl	**2499cc**	**67-70 kW**	(92-95 ps)
8140.27S.2700 / S.2785	Grinta 35.10	D	07	1989	>	04	1996	4 Cyl	**2499cc**	**76 kW**	(103 ps)

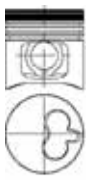
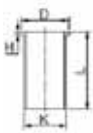
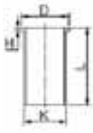
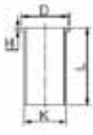
	11-01685-000 CH 58,750 B- 18,000 BØ 38,000 TL 96,750 **32,00x78,00** Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor	AP PDB	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03685-000** **31-03685-040** **31-03685-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

93,000

8140.61.200	Series 238	D	06	1978	>	05	1983	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200	Series 40	D	10	1985	>	05	1989	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200	Series 900	D	06	1978	>	05	1983	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200	Series A 40-8	D	10	1985	>	05	1989	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200-204 / 207 / 212 / 217 / 230 / 300 / 303	Daily I 30-8 / 35-8 / 40-8	D	04	1978	>	06	1989	4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.200-300	Ducato I (280) 2.4 D / 2.5 D	D	04	1978	>	00	1985	4 Cyl	**2445cc**	**53kW**	(72ps)
8142.61	Campagnola 2.5 D	D	06	1979	>	10	1986	4 Cyl	**2445cc**	**53kW**	(72ps)
8142.61 / 61.200	131 2.5 D	D	06	1978	>	12	1984	4 Cyl	**2445cc**	**53kW**	(72ps)
8144.61.200	132 2.5 D	D	03	1978	>	05	1981	4 Cyl	**2445cc**	**53kW**	(72ps)
8144.61.200	2.5 D	D	06	1981	>	11	1985	4 Cyl	**2445cc**	**53kW**	(72ps)
8144.61.200	Marengo 2.5 D	D	05	1980	>	09	1983	4 Cyl	**2445cc**	**53kW**	(72ps)

	**11-01686-000** CH 55,000 B- 2,200 TL 90,000	AP HA CP	**91-09686-000** 1 3,000 CR 2 2,000 P 3 4,000 CR		Ø 93,000 Ø 93,400 Ø 93,600	**31-03686-000** **31-03686-040** **31-03686-060**
	32,00x75,00		**98-09686-000** 1 3,000 CrP 2 2,000 P 3 4,000 CrP			**38-03686-000** **38-03686-040** **38-03686-060**
Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor			**99-09686-000** 1 3,000 CR St 2 2,000 Fe 3 4,000 CR			**39-03686-000** **39-03686-040** **39-03686-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=167,30	DS			**51-65452-000**	

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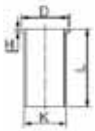
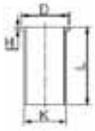
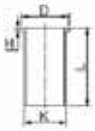
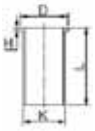
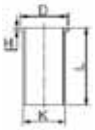
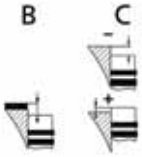
		Type		B C		

93,000

8140.27S.3700 / 3701 / 3710 / 3780 Euro1	Daily II 30-10	D	01	1997	>	05	1999	4 Cyl	**2499cc**	**77kW**	(104ps)
8140.27S.3700 Series / 3800 Euro1	Daily II 35-10 2.5	D	09	1989	>	08	1998	4 Cyl	**2499cc**	**77kW**	(104ps)
8140.27S.3700 Series/B.3790-3795/Euro1	Daily II 49-10 2.5	D	01	1989	>	04	1996	4 Cyl	**2499cc**	**76-83kW**	(103-113ps)
8140.27S.3750 / 3751 / 3760 / 3771 / 3780 / 3800 Euro1	Daily II 45-10	D	01	1989	>	04	1996	4 Cyl	**2499cc**	**77kW**	(104ps)
8140.27S.3770 / 3771 / 3780 / 3781 / 3800 / 3811 Euro1	Daily I 35-40-49.10	D	00	1994	>			4 Cyl	**2499cc**	**77kW**	(104ps)
8140.40.3710 Euro1	Ducato II (230) 2.5 TD	D	03	1994	>	03	1998	4 Cyl	**2499cc**	**52kW**	(71ps)
8140.47.2585 / 3700 Euro1	ENGINE	D	10	1994	>			4 Cyl	**2499cc**	**85kW**	(116ps)
8140.47.2700 / 2785 Euro1	Daily II 40-12 2.5	D	10	1990	>	04	1996	4 Cyl	**2499cc**	**85kW**	(116ps)
8140.47.2700 Series / 3700 Series / S.2785 Euro1	Daily II 35-12 2.5	D	01	1990	>	04	1996	4 Cyl	**2499cc**	**85kW**	(115ps)
8140.47.2700 Series / 3700 Series / S.2785 Euro1	Daily II 49-12 2.5	D	06	1990	>	04	1996	4 Cyl	**2499cc**	**85kW**	(115ps)
8140.47.2700 Series / 3700 Series / S.2785 Euro1	Daily II 59-12 2.5	D	05	1991	>	04	1996	4 Cyl	**2499cc**	**85kW**	(115ps)
8140.47.2700/2721/2731/2785 /3700/3721/3731/S.2785Euro1	Daily II 45-12 2.5	D	06	1990	>	04	1996	4 Cyl	**2499cc**	**85kW**	(115ps)
8140.47.2790/B.3790/B.3795/ R.2790/R.2795 Euro1	Daily II 35-10 2.5	D	07	1992	>	08	1998	4 Cyl	**2499cc**	**76-83kW**	(103-113ps)
8140.47.3700 / 3731 / R.2210 / RC.2790 Euro1	Ducato II (230) 2.5 TD	D	03	1994	>	03	1998	4 Cyl	**2499cc**	**80-85kW**	(109-116ps)

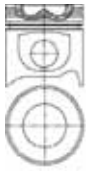
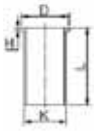
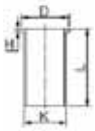
	11-01687-000 CH 58,750 B- 18,400 BØ 38,000 TL 96,750 **32,00x78,00**	AP YS PDB	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03687-000** **31-03687-040** **31-03687-060**
Fiat / Iveco ve Renault ile Ortak Motor						
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

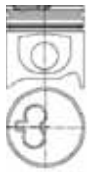
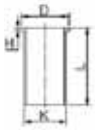
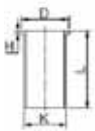
93,000

8140.21.200-203 / 212 / 214 / 290	Daily I 35-45-49.10	D	02	1985	>	06	1989	4 Cyl	**2445cc**	**68-77kW** (92-105ps)
8140.21.235	ENGINE	D	06	1987	>	12	1989	4 Cyl	**2445cc**	**68kW** (92ps)
8144.21.200-220 / 8140.21.200	Ducato I (280) 2.4 TD / 2.5 TD	D	01	1986	>	06	1990	4 Cyl	**2445cc**	**68kW** (92ps)

 **11-01688-000** CH 59,650 B- 14,800 BØ 52,000 TL 97,650 **32,00x75,20** Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor	AP CP	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03688-000** **31-03688-040** **31-03688-060**
 K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
 K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

93,000

8140.67.3700 / Sofim	Ducato 2.5 D	D	01	1996	>			4 Cyl	**2499cc**	**60kW** (82ps)

 **11-01689-000** CH 54,000 B- 2,200 TL 89,000 **32,00x68,00**	AP	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03689-000** **31-03689-040** **31-03689-060**
 K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
 K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	

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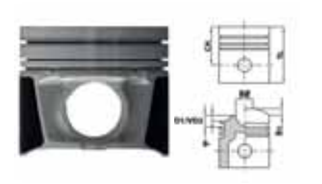
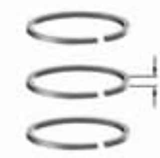
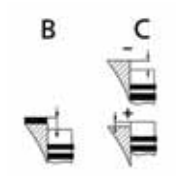
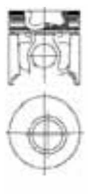
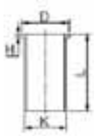
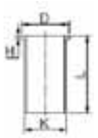
FIAT / IVECO

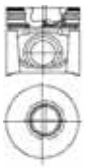
	Type				

94,400

8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 30-10	D	01	1997	>	05	1999	4 Cyl	**2798cc**	**76kW**	(103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 35-10 2.8	D	01	1996	>	05	1999	4 Cyl	**2798cc**	**76kW**	(103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 35-12 2.8	D	01	1996	>	05	1999	4 Cyl	**2798cc**	**76kW**	(103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 40-10 2.8	D	01	1997	>	05	1999	4 Cyl	**2798cc**	**76kW**	(103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 49-10 2.8	D	05	1996	>	05	1999	4 Cyl	**2798cc**	**76kW**	(103ps)
8140.23.2585 / 3700 Euro2	ENGINE	D	01	1996	>			4 Cyl	**2798cc**	**76kW**	(103ps)
8140.23.3700 Euro2	Series 35-10	D	05	1996	>			4 Cyl	**2798cc**	**76kW**	(103ps)
8140.43.2200 / 3780 Euro2	ENGINE	D	01	1996	>			4 Cyl	**2798cc**	**86kW**	(117ps)
8140.43.2210 / 2585 / 3700 / 3900 Euro2	ENGINE	D	12	1996	>			4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.2585 / 3700 Euro2	Ducato II (230) 2.8 TD	D	10	1997	>	03	2002	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3700 / 3711 / 3713 / 3721 / 3723 / 3731	Daily II 49-12 2.8	D	05	1996	>	08	1999	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3700 / 3718 / 3721 / 3731 Euro2	Daily II 59-12 2.8	D	05	1996	>	08	1999	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3700 / 3721 / 3723 / 3731 Euro2	Daily II 40-12 2.8	D	05	1996	>	05	1999	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3700 / 3721 / 3723 / 3731 Euro2	Daily II 45-12 2.8	D	05	1996	>	05	1999	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3700 Euro2	Ducato II (244) 2.8 TD	D	10	2002	>	06	2006	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3728 Euro2	Daily II 59-12 2.8	D	05	1996	>	05	1999	4 Cyl	**2798cc**	**77-85kW**	(105-115ps)

	**11-01690-000** CH 58,750 B- 19,450 BØ 39,300 TL 96,750 **32,00x78,00**	AP YS	**91-09690-000** 1 3,000 CR 2 2,000 P 3 3,000 CR	1,20mm conta ile (+0,40/+0,50) 1,30mm conta ile (+0,51/+0,60) 1,40mm conta ile (+0,61/+0,70) 1,50mm conta ile (+0,71/+0,80)	Ø 94,400 Ø 94,800 Ø 95,000	**31-03690-000** **31-03690-040** **31-03690-060**
Fiat / Iveco, Opel ve Renault ile Ortak Motor						
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	

		Type		B C		
94,400						
8140.23.2500 / 3700 / 3800 / 3900 Euro2	Daily II 35-12 2.8	D	01 1996	> 05 1999	4 Cyl	**2798cc** **76kW** (103ps)
8140.23.2500 / 3700 / 3800 / 3900 Euro2	Daily II 40-10 2.8	D	01 1997	> 05 1999	4 Cyl	**2798cc** **76kW** (103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 30-10	D	01 1997	> 05 1999	4 Cyl	**2798cc** **76kW** (103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 35-10 2.8	D	01 1996	> 05 1999	4 Cyl	**2798cc** **76kW** (103ps)
8140.23.2500 / 3700 / 3800 / 3900 Series Euro2	Daily II 49-10 2.8	D	05 1996	> 05 1999	4 Cyl	**2798cc** **76kW** (103ps)
8140.23.2585 / 3700 Euro2	ENGINE	D	01 1996	>	4 Cyl	**2798cc** **76kW** (103ps)
8140.23.3700 Euro2	Series 35-10	D	05 1996	>	4 Cyl	**2798cc** **76kW** (103ps)
8140.43.2200 / 2210 / 2585 / 3700 / 3780 / 3900 Euro2	ENGINE	D	12 1996	>	4 Cyl	**2798cc** **85-90kW** (116-122ps)
8140.43.2585 / 3700 Euro2	Ducato II (230) 2.8 TD	D	10 1997	> 03 2002	4 Cyl	**2798cc** **90kW** (122ps)
8140.43.3700 / 3721 / 3723 / 3731 Euro2	Daily II 40-12 2.8	D	05 1996	> 05 1999	4 Cyl	**2798cc** **90kW** (122ps)
8140.43.3700 / 3721 / 3723 / 3731 Euro2	Daily II 45-12 2.8	D	05 1996	> 05 1999	4 Cyl	**2798cc** **90kW** (122ps)
8140.43.3700 Euro2	Ducato II (244) 2.8 TD	D	10 2002	> 06 2006	4 Cyl	**2798cc** **90kW** (122ps)
8140.43.3700 Series Euro2	Daily II 49-12 2.8	D	05 1996	> 08 1999	4 Cyl	**2798cc** **90kW** (122ps)
8140.43.3700 Series Euro2	Daily II 59-12 2.8	D	05 1996	> 08 1999	4 Cyl	**2798cc** **77-90kW** (105-122ps)
8140.43C.4000 Series Euro3	Daily III 35 C 11	D	05 1999	> 09 2002	4 Cyl	**2798cc** **77kW** (105ps)
8140.43C.4000 Series Euro3	Daily III 35 S 11	D	05 1999	> 09 2002	4 Cyl	**2798cc** **77kW** (105ps)
8140.43C.4000 Series Euro3	Daily III 40 C 11	D	05 1999	> 09 2002	4 Cyl	**2798cc** **77kW** (105ps)
8140.43C.4000 Series Euro3	Daily III 50 C 11	D	05 1999	> 09 2002	4 Cyl	**2798cc** **77kW** (105ps)
8140.43C.4030 Euro3	Daily III 29 L 11	D	05 1999	> 07 2006	4 Cyl	**2798cc** **77kW** (105ps)
8140.43C.4031 Euro3	ENGINE	D	02 1998	>	4 Cyl	**2798cc** **77kW** (105ps)



11-01691-000
CH 58,750
B- 19,450
BØ 39,300
TL 87,600

32,00x72,00

AP
YS

91-09691-000
1 2,500 CR
2 2,000 P
3 2,500 CrP

1,20mm Conta ile +0,40/+0,50 1,30mm Conta ile +0,51/+0,60 1,40mm Conta ile +0,61/+0,70

Ø 94,400
Ø 94,800
Ø 95,000

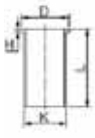
31-03691-000
31-03691-040
31-03691-060

Fiat / Iveco, Opel ve Renault ile Ortak Motor

K=97,50
L=167,00
H=5,10
D=100,90

DS

51-65453-000

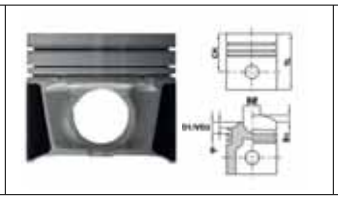


K=98,00
L=167,00
H=6,00
D=101,35

DS
+0,50

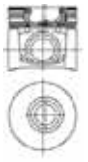
51-65453-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



94,400

8140.43 SEDC Euro3	Daily 50.13	D	11	1999	>		4 Cyl	**2798cc**	**92 kW**	(125 ps)
8140.43 SEDC Euro3	Grinta 29 / 35 / 40 / 45 / 49.13	D	07	1999	>		4 Cyl	**2798cc**	**92 kW**	(125 ps)
8140.43S.4030 / 43 SEDC Euro3	Daily 29-35-40-45-49.11 / 13	D	07	1999	>		4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)
8140.43S.4030 Euro3	Daily 35 C 9 / 11 / 13	D	05	1999	>		4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)
8140.43S.4030 Euro3	Daily 35 S 9 / 11 / 13	D	05	1999	>		4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)
8140.43S.4030 Euro3	Daily 50 C 11 / 13	D	05	1999	>		4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)
8140.43S.4030 Euro3	Ducato 10 / 11 / 14 / 15 / 18 2.8 JTD	D	09	2000	>	03 2002	4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)



11-01692-000
CH 58,750
B- 21,350
BØ 39,300
TL 87,600

32,00x72,00

Citroen, Fiat / Iveco, Peugeot ve Renault ile Ortak Motor

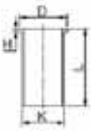
AP
YS

91-09691-000
1 2,500 CR
2 2,000 P
3 2,500 CrP

1,20 Conta ile +0,40/+0,50 1,30 Conta ile +0,51/+0,60 1,40 Conta ile +0,61/+0,70 1,50 Conta ile +0,71/+0,80

Ø 94,400
Ø 94,800
Ø 95,000

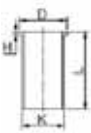
31-03692-000
31-03692-040
31-03692-060



K=97,50
L=167,00
H=5,10
D=100,90

DS

51-65453-000



K=98,00
L=167,00
H=6,00
D=101,35

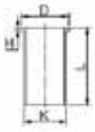
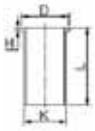
DS

+0,50

51-65453-050

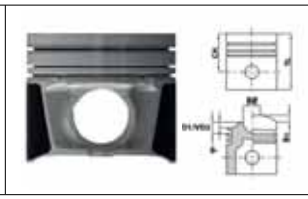
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
94,400						
814063.2200 Euro2 (Sofim)	30.8 New Daily 2.8D	D	>	4 Cyl	**2798cc**	**63kW** (85ps)
814063.2200 Euro2 (Sofim)	35.8 New Daily 2.8D	D	>	4 Cyl	**2798cc**	**63kW** (85ps)
814063.2200 Euro2 (Sofim)	Ducato 2.8D	D	>	4 Cyl	**2798cc**	**63kW** (85ps)

	11-01693-000 CH 55,000 B- 2,800 TL 90,000 **32,00x68,00**	AP HA	**91-09693-000** 1 3,000 CrP 2 2,000 P 3 2,500 CrP	1,20mm Conta ile +0,40/+0,50 1,30mm Conta ile +0,51/+0,60 1,40mm Conta ile +0,61/+0,70	Ø 94,400 Ø 94,800 Ø 95,000	**31-03693-000** **31-03693-040** **31-03693-060**
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

FIAT / IVECO



95,800

F1 CE 0481 A / B Euro 3	Daily III 35 C / S 14 3.0 / S 17	D	09	2002	>	07	2006	4 Cyl	**2998cc**	**100-122kW**	(136-166ps)
F1 CE 0481 A / B Euro 3	Daily III 40 C / 40 C 14 3.0 / S 17	D	09	2004	>	07	2006	4 Cyl	**2998cc**	**100-122kW**	(136-166ps)
F1 CE 0481 A / B Euro 3	Daily III 50 C / C 17 / S 14	D	09	2004	>	07	2006	4 Cyl	**2998cc**	**100-122kW**	(136-166ps)
F1 CE 0481 A / B Euro 3	Daily III 65 C 14 / C 17	D	09	2004	>	07	2006	4 Cyl	**2998cc**	**100-122kW**	(136-166ps)
F1 CE 0481 D Euro 4	Ducato III 3.0D 160 M-Jet	D	07	2006	>			4 Cyl	**2998cc**	**116kW**	(158ps)
F1 CE 0481 E / L / HA / HC Euro 4	Daily IV 65 C 14-15-17-18	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**100-130kW**	(136-176ps)
F1 CE 0481 E / FA / L Euro 4	Daily IV 35 C 14-15 / S 14	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**100-107kW**	(136-146ps)
F1 CE 0481 E / HA / L Euro 4	Daily IV 50 C 14-15-17-18	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**100-130kW**	(136-176ps)
F1 CE 0481 HA / HC Euro 4	Daily IV 60 C 17-18	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**130kW**	(176ps)
F1 CE 0481 HA / L Euro 4	Daily IV 40 C 15-17-18	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**107-130kW**	(146-176ps)
F1 CE 0481 HA Euro 4	Daily IV 35 C 17-18 / S 17-18	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**130kW**	(176ps)
F1 CE 0481 HA Euro 4	Daily IV 45 C 17 / 18	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**130kW**	(176ps)
F1 CE 0481 HA Euro 4	Daily IV 70 C 17	D	07	2006	>	10	2011	4 Cyl	**2998cc**	**130kW**	(176ps)

11-02836-000
CH 63,000
B- 16,000
BØ 50,500
TL 93,400

36,00x81,00

AP
YS

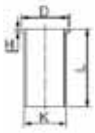
91-09839-000
1 2,500 CrP
2 2,000 P
3 2,500 CrP

1,60mm conta ile (+0,718/+0,773)
1,65mm conta ile (+0,773/+0,819)
1,70mm conta ile (+0,819/+0,874)

Ø 95,800
Ø 96,200
Ø 96,400

31-04836-000
31-04836-040
31-04836-060

Citroen, Fiat / Iveco, Mitsubishi ve Peugeot ile Ortak Motor



K=99,00
L=175,00
H=4,80
D=102,00

DS

51-65754-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

68,685

G6A	Fiesta III 1.1			B	03	1989	>	07	1996	4 Cyl	**1119cc**	**36-37kW**	(49-50ps)
GUF	Escort 1.1			B	08	1990	>	12	1994	4 Cyl	**1119cc**	**40kW**	(54ps)

11-01457-000
CH 29,400
B- 3,500
BØ 36,000
TL 53,900

18,03x59,00

CP

91-09457-000
1 1,500 CR
2 1,750 P
3 3,000 CR

Ø 68,685 **31-03457-000**
Ø 69,185 **31-03457-050**
Ø 69,685 **31-03457-100**

71,910

DHA DHB / DHC / 1.25 ZETEC-SE 16V	Fiesta IV 1.25i 16V			B	08	1995	>	01	2002	4 Cyl	**1242cc**	**55kW**	(75ps)

11-02951-000
CH 28,250
B- 0,930
BØ 52,000
TL 53,250

19,00x49,00

91-09432-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

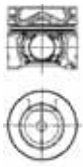
Ø 71,910 **31-04951-000**
Ø 72,410 **31-04951-025**

99-09432-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

39-04951-000
39-04951-050

73,500

UGCA 1.5 L Duratorq Euro5	B-Max / C-Max			D	01	2014	>			4 Cyl	**1499cc**	**55kW**	(75ps)
UGCA 1.5 L Duratorq Euro5	Fiesta / Focus			D	01	2014	>			4 Cyl	**1499cc**	**55kW**	(75ps)



11-02955-000
CH 41,700
B- 13,400
BØ 45,000
TL 65,200

26,00x59,00

AP
YS

91-09456-000
1 2,000 CK
2 2,000 P
3 2,000 CR

Ø 73,500 **31-04955-000**
Ø 74,000 **31-04955-050**

73,500

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			D	01	2014	>			4 Cyl	**1499cc**	**55kW**	(75ps)

11-02955-001
CH 41,500
B- 13,400
BØ 45,000
TL 65,000

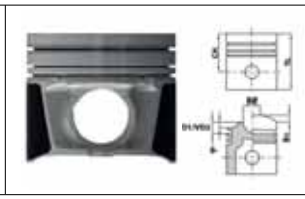
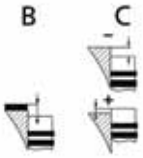
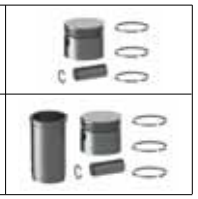
26,00x59,00

AP
YS

91-09456-000
1 2,000 CK
2 2,000 P
3 2,000 CR

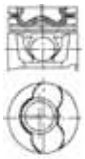
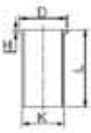
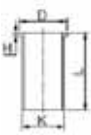
Ø 73,500 **31-04955-001**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

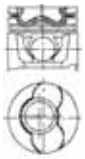
73,700

DV4 TD	Fiesta V 1.4 TDCi	D	11	2001	>	08	2008	4 Cyl	**1399cc**	**50kW**	(68ps)
DV4 TD	Fiesta VI 1.4 TDCi	D	01	2009	>			4 Cyl	**1399cc**	**50kW**	(68ps)
DV4 TD	Fusion 1.4 TDCi	D	10	2002	>			4 Cyl	**1399cc**	**50kW**	(68ps)

	**11-01460-000** CH 42,940 VD1 1,650 B- 14,700 BØ 37,150 TL 65,440 **25,00x60,00**	AP	**91-09460-000** 1 2,500 CkP 2 1,950 P 3 2,500 CrP	1. Conta ile 1,252mm (+0,618/+0,725) 2. Conta ile 1,303mm (+0,726/+0,775) 3. Conta ile 1,351mm (+0,776/+0,825) 4. Conta ile 1,400mm (+0,83/+0,88) 5. Conta ile 1,450mm (+0,88/+0,98)	Ø 73,700 Ø 74,200	**31-03460-000** **31-03460-050**
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor						
	K=76,75 L=136,00 H=5,10 D=78,15	DS			**51-65819-000**	
	K=77,25 L=136,00 H=6,00 D=78,65	DS +0,50			**51-65819-050**	

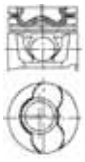
73,700

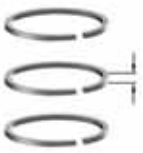
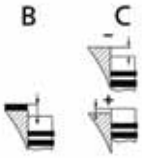
Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter				>			Cyl	**cc**	**kW**	(ps)

	**11-01460-001** CH 42,740 VD1 1,650 B- 14,700 BØ 37,150 TL 65,240 **25,00x60,00**	AP CH -0,20 mm	**91-09460-000** 1 2,500 CkP 2 1,950 P 3 2,500 CrP		Ø 73,700 Ø 74,200	**31-03460-001** **31-03460-051**
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor						

73,700

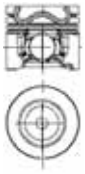
Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter				>					(ps)

	**11-01460-002** CH 42,540 VD1 1,650 B- 14,700 BØ 37,150 TL 65,040 **25,00x60,00**	AP CH -0,40 mm	**91-09460-000** 1 2,500 CkP 2 1,950 P 3 2,500 CrP		Ø 73,700 Ø 74,200	**31-03460-002** **31-03460-052**
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor						

		Type		B C		
						

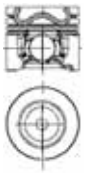
75,000

1.6 TDCI (DV6C) FOCUS 00 2011 > (95-110-115 ps)

	**11-02496-000** CH 41,750 B- 13,850 BØ 45,000 TL 65,200 **26,00x61,00**	AP YS	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR	1 Kertik 0,50/0,63 2 Kertik 0,63/0,68 3 Kertik 0,68/0,73 4 Kertik 0,73/0,78 5 Kertik 0,78/0,88	Ø 75,000 Ø 75,500	**31-04496-000** **31-04496-050**
Citroen, Ford ve Peugeot ile Ortak Motor						

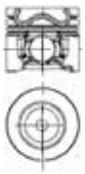
75,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **kW** (ps)

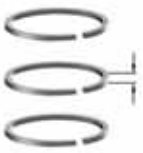
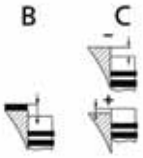
	**11-02496-001** CH 41,550 B- 13,850 BØ 45,000 TL 65,000 **26,00x61,00**	AP YS CH -0,20 mm	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR		Ø 75,000 Ø 75,500	**31-04496-001** **31-04496-051**
Citroen, Ford ve Peugeot ile Ortak Motor						

75,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

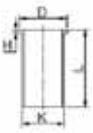
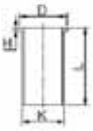
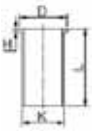
	**11-02496-002** CH 41,350 B- 13,850 BØ 45,000 TL 64,800 **26,00x61,00**	AP YS CH -0,40 mm	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR		Ø 75,000 Ø 75,500	**31-04496-002** **31-04496-052**
Citroen, Ford ve Peugeot ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

75,000

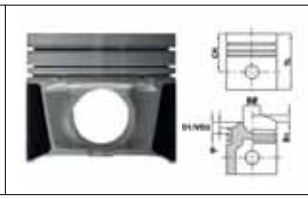
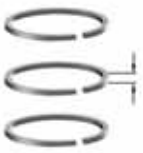
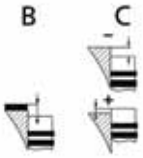
G8DA / G8DB / HHDA / HHDB	C-MAX 1.6 TDCI 16V	04 2007	> 11 2010		(90-109ps)
G8DA / G8DB / HHDA / HHDB	Focus C-Max 1.6 TDCi 16V	10 2003	> 03 2007		(90-109ps)
G8DA / G8DB / HHDA / HHDB	Focus II 1.6 TDCi 16V	11 2004	> 11 2010		(90-109ps)

	11-02498-000 CH 41,700 VD1 1,200 B- 13,250 BØ 41,800 TL 65,300 **26,00x61,00** Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor	AP YS	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP	1,25 Conta ile (+0,53/+0,63) 1,30 Conta ile (+0,63/+0,68) 1,35 Conta ile (+0,68/+0,73)	Ø 75,000 Ø 75,500 Ø 75,600	**31-04498-000** **31-04498-050** **31-04498-060**
	K=78,05 L=142,00 H=5,00 D=79,45	DS			**51-65826-000**	
	K=78,55 L=142,00 H=6,00 D=79,95	DS +0,50			**51-65826-050**	
	K=79,05 L=142,00 H=6,00 D=80,45	DS +1,00			**51-65826-100**	

75,000

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			> Cyl	**cc**	**kW** (ps)
	11-02498-001 CH 41,500 VD1 1,200 B- 13,250 BØ 41,800 TL 65,100 **26,00x61,00** Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor	AP YS CH -0,20 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000 Ø 75,500	**31-04498-001** **31-04498-051**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

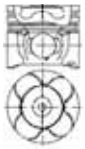
75,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

	11-02498-002 CH 41,300 VD1 1,200 B- 13,250 BØ 41,800 TL 64,900 **26,00x61,00**	AP YS CH -0,40 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000 Ø 75,500	**31-04498-002** **31-04498-052**
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor						

75,000

Strok Boyu 0,60mm Kisa Piston / Stroke Lenght 0,60mm Shorter > (ps)

	**11-02498-003** CH 41,100 VD1 1,200 B- 13,250 BØ 41,800 TL 64,700 **26,00x61,00**	AP YS CH -0,60 mm	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP		Ø 75,000	**31-04498-003**
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor						

76,000

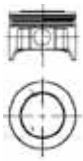
L1E	Orion 1.6i 16V	09 1992	> 12 1993		(88-90ps)
L1E / H / K	Escort 1.6i 16V	09 1992	> 09 2001		(90ps)
L1F / J	Mondeo 1.6i 16V	01 1993	> 11 1996		(90ps)
L1G	Fiesta III 1.6i 16V	03 1994	> 07 1996		(88-90ps)
L1J / L / N / Q	Mondeo II 1.6i 16V	11 1996	> 11 2000		(88-95ps)
LUH	Fiesta III 1.6i	03 1989	> 07 1996		(88-90ps)
LUJ	Escort 1.6	07 1990	> 12 1994		(88-90ps)
LUJ	Orion 1.6	07 1990	> 09 1992		(88-90ps)

	11-01769-000 CH 32,650 B+ 1,700 BØ 61,400 TL 58,350 **20,63x63,40**	CP	**91-09448-000** 1 1,500 CrP 2 1,600 P 3 2,500 CrP		Ø 76,000 Ø 76,500 Ø 77,000	**31-03769-000** **31-03769-050** **31-03769-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

76,010

FXDA / FXDB / FXDC / FXDD	Focus 1.4i 16V	B	08	1998	>	11	2004	4 Cyl	**1388cc**	**55-59kW**	(75-80ps)
FXJA / FXJB	Fiesta V 1.4i 16V	B	11	2001	>	06	2008	4 Cyl	**1388cc**	**58kW**	(80ps)
FXJA / FXJB	Fusion 1.4i 16V	B	08	2002	>	06	2012	4 Cyl	**1388cc**	**58kW**	(80ps)



11-02953-000
CH 28,250
B+ 4,000
TL 55,500

19,00x50,00

91-09449-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 76,010
Ø 76,510

31-04953-000
31-04953-050

Ford ve Mazda ile Ortak Motor

79,000

1.6ZETEC-S	C-Max 1.6V, Focus	B	00	2003	>			4 Cyl	**1596cc**	**kW**	(115ps)
1.6ZETEC-S	Focus, Mondeo	B	00	2007	>			4 Cyl	**1596cc**	**kW**	(115ps)

11-01795-000
CH 25,350
VD1 3,100
B- 0,700
BØ 52,000
TL 48,300

18,00x54,00

91-09795-000
1 1,200 CR St
2 1,500 P
3 2,000 NtP St

Ø 79,000
Ø 79,250
Ø 79,500

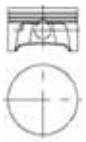
31-03795-000
31-03795-025
31-03795-050

99-09795-000
1 1,200 CrP St
2 1,500 P
3 2,000 NtP St

39-03795-000
39-03795-050

79,000

ZH16ZETECS	Focus Ghia	B	00	1998	>			4 Cyl		**73kW**	(99ps)
ZH16ZETECS	LX	B	00	1998	>			4 Cyl		**73kW**	(99ps)



11-02259-000
CH 25,050
TL 48,100

18,00x51,00

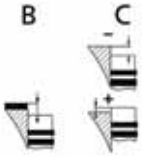
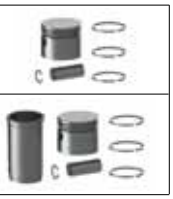
99-09795-000
1 1,200 CrP St
2 1,500 P
3 2,000 NtP St

-1,40/-1,60

Ø 79,000
Ø 79,500

39-04259-000
39-04259-050

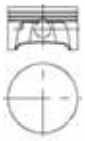
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,000

Strok Boyu 0,20mm Kisa / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

Piston

	**11-02259-001** CH 24,650 TL 47,700 **18,00x51,00**	CH -0,20 mm	**99-09795-000** 1 1,200 CrP St 2 1,500 P 3 2,000 NtP St		Ø 79,000 Ø 79,500	**39-04259-001** **39-04259-051**

79,000

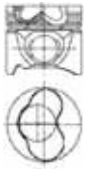
1.6 ZETEC-S C-Max 1,6i 16V 00 2003 > (115ps)

	11-02950-000 CH 25,050 B- 0,650 BØ 57,300 TL 48,050 **18,00x50,90**		**99-09795-000** 1 1,200 CrP St 2 1,500 P 3 2,000 NtP St		Ø 79,000 Ø 79,500	**39-04950-000** **39-04950-050**

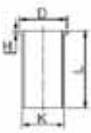
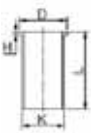
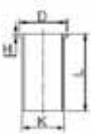
79,510

1Z / AHU Galaxy 1.9 TDI D 02 1995 > 09 1996 4 Cyl **66kW** (90ps)

AFN Galaxy 1.9 TDI D 09 1996 > 03 2000 4 Cyl **81kW** (110ps)

	**11-02301-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.1/2 to be used with 2302 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04301-000** **31-04301-025** **31-04301-050** **31-04301-100**

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor

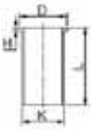
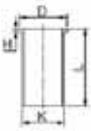
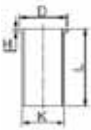
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

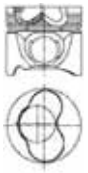
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.3/4 to be used with 2301 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04302-000** **31-04302-025** **31-04302-050** **31-04302-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

79,510

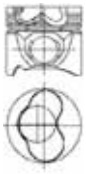
1Z / AHU	Galaxy 1.9 TDI	02 1995	> 09 1996	(90ps)
AFN	Galaxy 1.9 TDI	09 1996	> 03 2000	(110ps)

	**11-02305-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.1/2 to be used with 2306 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04305-000** **31-04305-025** **31-04305-050** **31-04305-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						

		Type		B C		

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)



11-02306-000
CH 45,800
VD1 1,100
B- 17,650
BØ 37,900
TL 71,800

26,00x66,00

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor

AP

Cyl.3/4 to be used with 2305 000

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

cc	kW (ps)
Ø 79,510	**31-04306-000**
Ø 79,760	**31-04306-025**
Ø 80,010	**31-04306-050**
Ø 80,510	**31-04306-100**

79,510

ASZ Galaxy 1.9 TDI 01 2003 > 02 2006 (130ps)

11-02313-000
CH 45,800
VD1 1,100
B- 17,900
BØ 38,000
TL 68,800

26,00x66,00

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor

AP
YS

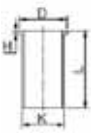
PDB

Cyl. 1/2 to be used with 2314 000

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

1,45mm +0,91/+1,00
1,53mm +1,01/+1,10
1,61mm +1,11/+1,20

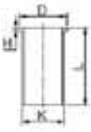
cc	kW (ps)
Ø 79,510	**31-04313-000**
Ø 79,760	**31-04313-025**
Ø 80,010	**31-04313-050**



K=82,57
L=151,80
H=4,70
D=85,40

DS

51-65303-000

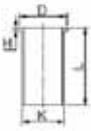


K=83,07
L=151,80
H=6,00
D=85,90

DS

+0,50

51-65303-050



K=83,57
L=151,80
H=6,00
D=86,40

DS

+1,00

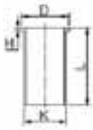
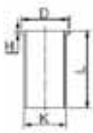
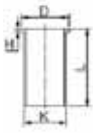
51-65303-100

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

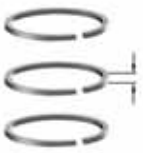
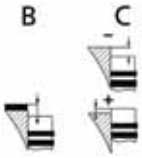
		Type		B C		

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

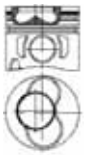
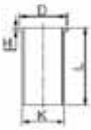
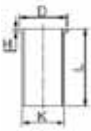
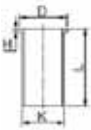
	11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 3/4 to be used with 2313 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04314-000** **31-04314-025** **31-04314-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

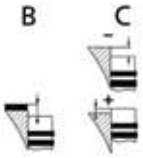
		Type		B C		
						

79,510

ANU Galaxy 1.9 TDI 04 2000 > 02 2006 (90ps)

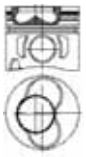
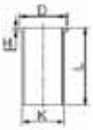
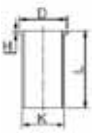
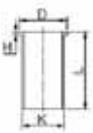
	**11-02319-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.1/2 to be used with 2320 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04319-000** **31-04319-025** **31-04319-050**
	Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	**11-02320-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.3/4 to be used with 2319 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04320-000** **31-04320-025** **31-04320-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

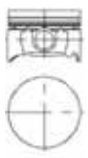
79,970

CHVLUC	Escort 1.6	00 1985 > 00 1992			(90-95ps)
CHVLUC	Fiesta XR2	00 1985 > 00 1992			(90-95ps)
CHVLUC	Orion	00 1985 > 00 1992			(90-95ps)

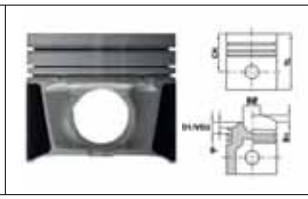
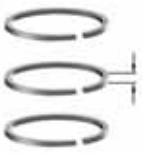
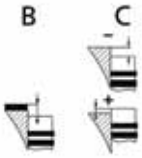
	11-02031-000 CH 36,590 B+ 7,120 BØ 75,000 TL 73,710 **20,63x66,70**	CP	**91-09031-000** 1 1,600 CrP 2 2,000 P 3 4,000 CrP	Ø 79,970 Ø 80,470 Ø 80,970	**31-04031-000** **31-04031-050** **31-04031-100**

80,600

ZH1.8ZETEC Mondeo 1.8 16v B 00 1994 > 4 Cyl **1796cc** **kW** (103-113ps)

	**11-02032-000** CH 33,050 TL 57,100 **20,63x63,50**	CP	**91-09032-000** 1 1,500 CrP 2 1,750 P 3 3,000 CrP	Ø 80,600 Ø 81,100 Ø 81,600	**31-04032-000** **31-04032-050** **31-04032-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

81,010

LTA / LTC	Escort 1.6 D	D	04	1984	>	12	1985	4 Cyl			**40kW**	(54ps)
LTA / LTC	Orion 1.6 D	D	04	1984	>	03	1986	4 Cyl			**40kW**	(54ps)
LTB	Fiesta II 1.6 D	D	08	1983	>	03	1989	4 Cyl			**40kW**	(54ps)

11-01446-000
CH 46,700
B- 3,200
TL 76,700

24,00x62,00

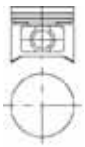
AP
CP

91-09446-000
1 2,000 CR
2 2,000 P
3 3,000 CR

Ø 81,010 **31-03446-000**
Ø 80,515 **31-03446-020**
Ø 81,015 **31-03446-040**

81,335

LCR / LCS / LCT / LSD / LSE	Series P 100 1.6	D	08	1982	>	12	1986	4 Cyl		**1598cc**	**54kW**	(75ps)
LCR / LCS / LCT / LSD / LSE	Sierra 1.6	D	08	1982	>	12	1986	4 Cyl		**1598cc**	**54kW**	(75ps)
LSE / LSF	Sierra 1.6	D	01	1987	>	02	1993	4 Cyl		**1598cc**	**55kW**	(72ps)



11-01422-000
CH 41,550
TL 71,550

24,00x68,80

CP

91-09422-000
1 1,600 CR
2 2,000 P
3 4,000 CR

Ø 81,335 **31-03422-000**
Ø 81,835 **31-03422-050**
Ø 82,335 **31-03422-100**

82,500

F9DA / F9DB	Focus 1.8 TDCi	D	05	2001	>	05	2005	4 Cyl		**1753cc**	**85kW**	(116ps)
FFDA Euro2	Focus 1.8 TDCi	D	09	2002	>	11	2004	4 Cyl		**1753cc**	**74kW**	(100ps)

11-01464-000
CH 45,650
B- 14,050
BØ 41,520
TL 70,700

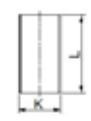
28,00x66,00

AP
YS

91-09964-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

1,36mm Conta ile +0,43/+0,68 1,42mm Conta ile +0,68/+0,74 1,52mm Conta ile +0,74/+0,86

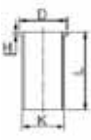
Ø 82,500 **31-03464-000**
Ø 83,000 **31-03464-050**
Ø 83,500 **31-03464-100**



K=86,05
L=140,00

DS

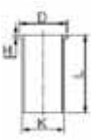
51-65433-000



K=85,50
L=146,00
H=5,00
D=87,00

DS

51-65492-000

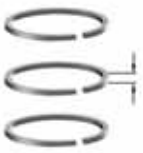
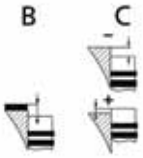


K=86,00
L=146,00
H=5,00
D=87,00

DS
+0,50

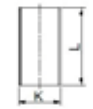
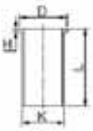
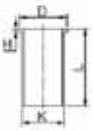
51-65492-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

82,500

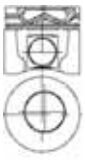
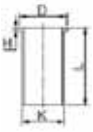
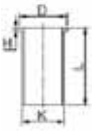
C9DA / C9DB / C9DC — Focus 1.8 DI — D — 01 1999 > 09 2001 — 4 Cyl — **1753cc** **67kW** (91ps)

	11-01465-000 CH 45,700 B- 16,100 BØ 36,750 TL 70,700 **28,00x66,00**	AP	**91-09964-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	1,36mm Conta ile +0,43/+0,68 1,42mm Conta ile +0,68/+0,74 1,52mm Conta ile +0,74/+0,86	Ø 82,500 Ø 83,000 Ø 83,500	**31-03465-000** **31-03465-050** **31-03465-100**
	K=86,05 L=140,00	DS			**51-65433-000**	
	K=85,50 L=146,00 H=5,00 D=87,00	DS			**51-65492-000**	
	K=86,00 L=146,00 H=5,00 D=87,00	DS +0,50			**51-65492-050**	

82,500

RWPA / RWPC / RWPD — Tourneo Connect 1.8 TDCi — D — 08 2006 > — 4 Cyl — **1753cc** **81kW** (110ps)

RWPA / RWPC / RWPD — Transit Connect 1.8 TDCi — D — 08 2006 > — 4 Cyl — **1753cc** **81kW** (110ps)

	**11-01477-000** CH 45,650 B- 12,470 BØ 45,290 TL 71,150 **28,00x66,00**	AP YS	**91-09477-000** 1 1,750 NT St 2 2,000 P 3 2,000 NT St	1,36mm Conta ile +0,43/+0,68 1,42mm Conta ile +0,68/+0,74 1,52mm Conta ile +0,74/+0,86	Ø 82,500 Ø 83,000	**31-03477-000** **31-03477-050**
	K=85,50 L=146,00 H=5,00 D=87,00	DS			**51-65492-000**	
	K=86,00 L=146,00 H=5,00 D=87,00	DS +0,50			**51-65492-050**	

82,500

RFA	Series P 100 1.8 TD	D	02	1989	>	12	1992	4 Cyl	**1753cc**	**55kW**	(75ps)
RFA / RFB / RFL	Sierra 1.8 TD	D	08	1988	>	02	1993	4 Cyl	**1753cc**	**55kW**	(75ps)
RFD / RFK	Orion 1.8 TD	D	03	1993	>	12	1993	4 Cyl	**1753cc**	**66kW**	(90ps)
RFD / RFK / RFS	Escort 1.8 TD	D	06	1993	>	09	2001	4 Cyl	**1753cc**	**66kW**	(90ps)
RFM / RFN	Mondeo 1.8 TD	D	06	1993	>	11	1996	4 Cyl	**1753cc**	**66kW**	(90ps)
RFN	Mondeo II 1.8 TD	D	11	1996	>	11	2000	4 Cyl	**1753cc**	**65kW**	(88ps)
RFU	Fiesta III 1.8 TD	D	03	1993	>	11	1995	4 Cyl	**1753cc**	**57kW**	(77ps)
RVA	Escort 1.8 TD	D	01	1995	>	09	2001	4 Cyl	**1753cc**	**51kW**	(70ps)

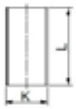
11-01777-000
CH 45,650
B- 1,500
TL 75,800

26,00x69,00

AP
CP

91-09777-000
1 2,500 CR
2 2,000 P
3 3,000 CR

Ø 82,500 **31-03777-000**
Ø 83,000 **31-03777-020**
Ø 83,500 **31-03777-040**



K=86,05
L=140,00

DS

51-65433-000

82,500

RTA / RTB	Escort 1.8 D	D	01	1989	>	07	1990	4 Cyl	**1753cc**	**44kW**	(60ps)
RTA / RTB	Orion 1.8 D	D	01	1989	>	07	1990	4 Cyl	**1753cc**	**44kW**	(60ps)
RTG / RTD / RTC	Fiesta III 1.8 D	D	03	1989	>	07	1996	4 Cyl	**1753cc**	**44kW**	(60ps)
RTJ / RTK	Fiesta IV 1.8 D	D	08	1995	>	11	2001	4 Cyl	**1753cc**	**44kW**	(60ps)

11-01778-000
CH 45,700
B- 1,600
TL 73,700

26,00x59,00

AP
CP

91-09807-000
1 2,000 CrP
2 2,000 P
3 3,000 CrP

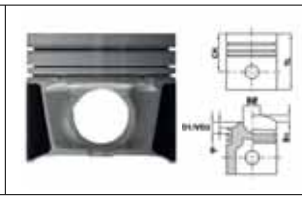
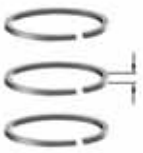
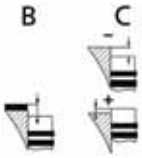
Ø 82,500 **31-03778-000**
Ø 83,000 **31-03778-020**
Ø 83,500 **31-03778-040**

K=86,05
L=140,00

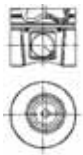
DS

51-65433-000

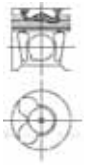
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
						

82,500

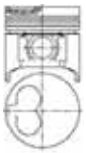
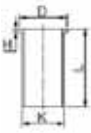
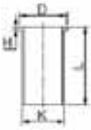
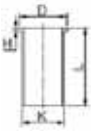
1.8 TDCi	Connect 1.8 TDCi	D	00	2007	>			4 Cyl		**1800cc**	**kW**	(70-90ps)		
	**11-02952-000** CH 45,700 B- 12,500 BØ 45,300 TL 71,200 **28,00x66,00**	AP	**91-09477-000** 1 1,750 NT St 2 2,000 P 3 2,000 NT St									Ø 82,500 Ø 83,000		**31-04952-000** **31-04952-050**

85,000

G6DA	C-MAX 2.0 TDCi	D	04	2007	>	11	2010	4 Cyl			**96-103kW**	(130-140ps)		
G6DA	Galaxy II 2.0 TDCi 16V	D	05	2006	>			4 Cyl			**96-103kW**	(130-140ps)		
G6DA	Kuga 2.0 TDCi	D	03	2008	>	12	2012	4 Cyl			**96-103kW**	(130-140ps)		
G6DA	S-Max 2.0 TDCi 16V	D	03	2006	>			4 Cyl			**96-103kW**	(130-140ps)		
G6DA / G6DB / G6DD	Focus / Focus C-Max II 2.0 TDCi 16V	D	06	2003	>	03	2007	4 Cyl			**96-103kW**	(130-140ps)		
G6DB	C-MAX 2.0 TDCi	D	04	2007	>	11	2010	4 Cyl			**100kW**	(136ps)		
G6DB	Kuga 2.0 TDCi	D	03	2008	>	12	2012	4 Cyl			**100kW**	(136ps)		
G6DD	C-MAX 2.0 TDCi	D	04	2007	>	11	2010	4 Cyl			**100kW**	(136ps)		
G6DD	Kuga 2.0 TDCi	D	03	2008	>	12	2012	4 Cyl			**100kW**	(136ps)		
	**11-02497-000** CH 46,705 VD1 0,520 B- 15,400 BØ 44,800 TL 80,705 **28,00x70,00**	AP YS	**91-09799-000** 1 3,500 CK 2 2,000 3 3,000 CR									Ø 85,000 Ø 85,600		**31-04497-000** **31-04497-060**

Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
86,000						
N8A / N8C / NES / N9A / N9B / N9C / N9E	Sierra 2.0 / 2.0i	B	02 1987 > 02 1993	4 Cyl	**1998cc**	**77-92kW** (105-125ps)
N8B / N8D / N9B / N9C / N9D / N9F	Scorpio 2.0 / 2.0i	B	05 1989 > 01 1992	4 Cyl	**1998cc**	**75-92kW** (102-125ps)
N8B / N9B / N9D / N9F	Granada 2.0 / 2.0i	B	04 1985 > 08 1989	4 Cyl	**1998cc**	**80-92kW** (109-125ps)
N9E	Transit 2.0i	B	10 1988 >	4 Cyl	**1998cc**	**85kW** (115ps)
11-01447-000 CH 32,270 VD1 1,400 VD2 1,600 TL 62,270 **20,63x63,40**		CP	**91-09447-000** 1 1,600 CrP 2 1,750 P 3 3,000 CrP		Ø 86,000 Ø 86,500 Ø 87,000	**31-03447-000** **31-03447-020** **31-03447-040**
86,000						
RF(47kW)	Escort 2.0 D	D	00 1985 > 00 1987	4 Cyl	**2184cc**	**47-55kW** (64-75ps)
RF(47kW)	Telstar 2.0 D (AUS)	D	03 1983 > 00 1987	4 Cyl	**2184cc**	**47-55kW** (64-75ps)
 **11-01530-000** CH 47,350 B- 1,600 TL 86,150 **25,00x68,00** Ford, Kia ve Mazda ile Ortak Motor		AP CP	**91-09530-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	(+0,35/+0,55) (+035/+0,65)	Ø 86,000 Ø 86,500	**31-03530-000** **31-03530-050**
 K=89,60 L=165,00 H=5,00 D=91,50		DS			**51-65530-000**	
 K=90,10 L=165,00 H=6,00 D=92,00		DS +0,50			**51-65530-050**	
 K=90,60 L=165,00 H=6,00 D=92,50		DS +1,00			**51-65530-100**	

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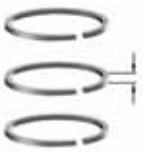
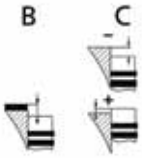
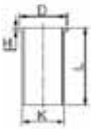
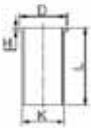
		Type		B C		
						

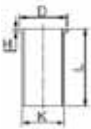
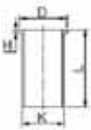
86,010

CD132 Duratorq TDCI	Mondeo 2.0 TDCI	D	00	2001	>	4 Cyl	**1998cc**	**kW** (115-130ps)
V185 Duratorq TDCI	Transit 2.0 TDCI	D	00	2000	>	4 Cyl	**1998cc**	**kW** (125ps)

	11-01459-000 CH 47,700 B- 15,200 BØ 43,300 TL 74,100 **30,00x66,85**	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,510	**31-03459-000** **31-03459-050**
	K=89,00 L=167,00 H=5,00 D=90,50	DS			**51-65494-000**	
	K=89,50 L=167,00 H=5,50 D=91,00	DS +0,50			**51-65494-050**	

86,010

QWFB V347 DURATORQ	TRANSIT 2.2 TDCI	D	01	2008	>	4 Cyl	**88kW**	(120ps)

	11-01461-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820 **30,00x66,85** Citroen, Ford ve Peugeot ile Ortak Motor	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)	Ø 86,010 Ø 86,510	**31-03461-000** **31-03461-050**
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

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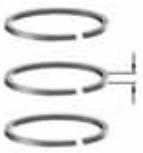
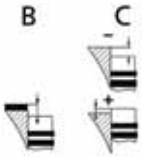
		Type		B C		
						

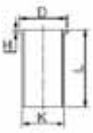
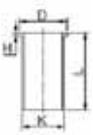
86,010

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

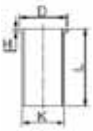
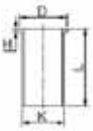
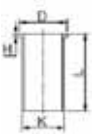
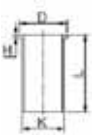
	11-01461-001 CH 43,220 B- 15,850 BØ 46,900 TL 69,620 **30,00x66,85**	AP YS CH -0,20 mm	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)	Ø 86,010 Ø 86,510	**31-03461-001** **31-03461-051**
Citroen, Ford ve Peugeot ile Ortak Motor						

86,010

CD 132 / V185 X400	MONDEO 2.0 TDCI	11 2004 > 12 2006		(125ps)
CD 132 / V185 X400	TRANSIT 300 SF Journey Deluxe	11 2004 > 12 2006		(125ps)

	11-01478-000 CH 47,700 B- 14,800 BØ 43,400 TL 74,100 **30,00x66,85**	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,260 Ø 86,510	**31-03478-000** **31-03478-025** **31-03478-050**
	K=89,00 L=167,00 H=5,00 D=90,50	DS			**51-65494-000**	
	K=89,50 L=167,00 H=5,50 D=91,00	DS +0,50			**51-65494-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
86,010						
CD132DuratorqTD I	Mondeo 2.0 TDI	D	00 2001 >	4 Cyl	**1998cc kW**	(90ps)
V185DuratorqTD I	Transit 2.0 TDI	D	00 2000 >	4 Cyl	**1998cc kW**	(75-85-100ps)
	11-02033-000 CH 47,850 B- 16,500 BØ 40,200 TL 73,980 **30,00x66,85**	AP	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,510	**31-04033-000** **31-04033-050**
	K=89,00 L=167,00 H=5,00 D=90,50	DS			**51-65494-000**	
	K=89,50 L=167,00 H=5,50 D=91,00	DS +0,50			**51-65494-050**	
86,010						
PGFA Euro4	Transit 2.2 TDCI 16V	D	10 2007 >	4 Cyl	**103kW**	(140ps)
PGFB	Transit 2.2 TDCI 16V	D	10 2007 >	4 Cyl	**103kW**	(140ps)
QVFA Euro4	Transit 2.2 TDCI 16V	D	07 2006 >	4 Cyl	**81kW**	(110ps)
QWFA Euro4	Transit 2.2 TDCI 16V	D	07 2006 >	4 Cyl	**96kW**	(130ps)
	11-02034-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820 **30,00x66,85** Citroen, Fiat / Iveco, Ford ve Peugeot ile Ortak Motor	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,510	**31-04034-000** **31-04034-050**
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

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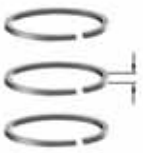
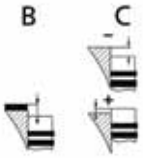
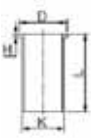
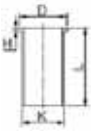
		Type		B C		
						

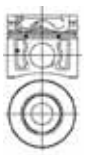
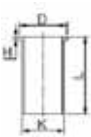
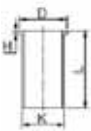
86,010

QWFB V347 DURATORQ	TRANSIT 2.2 TDCI	D	>	4 Cyl	**2200cc kW**	(100ps)

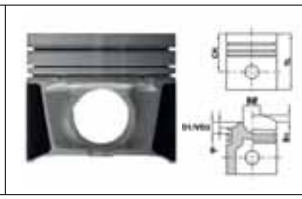
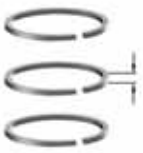
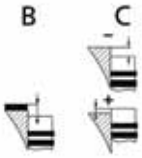
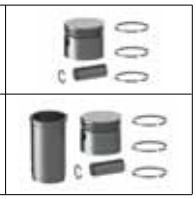
	11-02253-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820 **30,00x66,85**	AP	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,510	**31-04253-000** **31-04253-050**
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

86,010

2.2LDuratorq Euro 5	410L-460D	D	01	2006	>	12	2011	4 Cyl			**91-102kW**	(125-140ps)
2.2LDuratorq Euro 5	Transit 2.2 Tdci	D	01	2006	>	12	2011	4 Cyl			**91-102kW**	(125-140ps)
2.2LDuratorq Euro 5	Transit 330S	D	01	2006	>	12	2011	4 Cyl			**91-102kW**	(125-140ps)
2.2LDuratorq Euro 5	Transit 350M/MF	D	01	2006	>	12	2011	4 Cyl			**91-102kW**	(125-140ps)
2.2LDuratorq Euro 5	Transit 370M	D	01	2006	>	12	2011	4 Cyl			**91-102kW**	(125-140ps)

	**11-02256-000** CH 48,400 B- 15,800 BØ 46,900 TL 74,850 **30,00x66,85**	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	-0,30/-0,50	Ø 86,010 Ø 86,510	**31-04256-000** **31-04256-050**
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

86,010

2.2LDuratorq Euro5	Transit 2.2		D	00	2011	>		4 Cyl	**2200cc**	**kW**	(155ps)

11-02949-000
CH 48,420
B- 16,170
BØ 49,040
TL 74,820

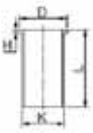
30,00x66,85

AP
YS

91-09425-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

Ø 86,010
Ø 86,260
Ø 86,510

31-04949-000
31-04949-025
31-04949-050



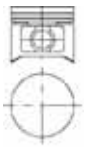
K=89,00
L=165,00
H=5,00
D=90,50

DS

51-65732-000

86,210

REC	Scorpio 1.8		B	04	1985	>	02	1992	4 Cyl	**66kW**	(90ps)



11-01423-000
CH 41,550
TL 66,550

24,00x68,80

CP

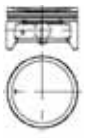
91-09423-000
1 1,600 CR
2 2,000 P
3 4,000 CR

Ø 86,210
Ø 86,710
Ø 87,210

31-03423-000
31-03423-050
31-03423-100

87,500

AODA / AODB	C-MAX 2.0i 16V		B	04	2007	>	11	2010	4 Cyl	**2000cc**	**107kW**	(145ps)
AODA / AODB	Focus II 2.0i 16V		B	11	2004	>	11	2010	4 Cyl	**2000cc**	**107kW**	(145ps)
CJBA / CJBB	Mondeo III 2.0i 16V		B	11	2000	>	08	2007	4 Cyl	**2000cc**	**107kW**	(145ps)
CJBB	Focus C-Max 2.0i 16V		B	04	2004	>	03	2007	4 Cyl	**2000cc**	**107kW**	(145ps)
CJBB	S-Max 2.0i 16V		B	03	2006	>			4 Cyl	**2000cc**	**107kW**	(145ps)
N4JB	Fiesta V ST150		B	11	2004	>	08	2008	4 Cyl	**2000cc**	**107kW**	(145ps)



11-02257-000
CH 28,400
B- 0,350
BØ 75,400
TL 51,000

21,00x60,00

99-09716-000
1 1,200 NT St
2 1,200 P
3 2,500 NtP St

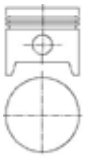
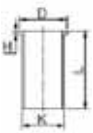
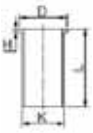
Ø 87,500
Ø 88,000

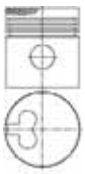
39-04257-000
39-04257-050

Ford, Mazda ve Opel ile Ortak Motor

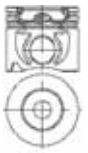
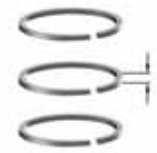
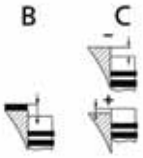
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
87,650						
HC	Capri 1600 II	B	00 1970 > 00 1981	4 Cyl	**1576cc**	**44-70kW** (60-95ps)
HC	Cortina 1600	B	00 1970 > 00 1981	4 Cyl	**1576cc**	**44-70kW** (60-95ps)
HC	Escort 1600	B	00 1970 > 00 1981	4 Cyl	**1576cc**	**44-70kW** (60-95ps)
HC	Granada 1600	B	00 1970 > 00 1981	4 Cyl	**1576cc**	**44-70kW** (60-95ps)
HC	Taunus 1600	B	00 1970 > 00 1981	4 Cyl	**1576cc**	**44-70kW** (60-95ps)

	**11-01425-000** CH 41,100 TL 72,700 **24,00x72,80**	CP	**91-09424-000** 1 2,000 CrP 2 2,500 P 3 4,000 CrP	-1,23/-1,70	Ø 87,650 Ø 88,150 Ø 88,650	**31-03425-000** **31-03425-020** **31-03425-040**
	K=91,50 L=125,00 H=5,00 D=92,50	DS			**51-65424-000**	
	K=92,50 L=125,00 H=6,00 D=93,50	DS +1,00			**51-65424-100**	

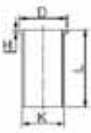
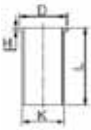
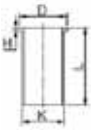
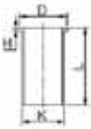
88,000						
VTA / XDP4.88	Granada 2.0 D	D	08 1977 > 06 1979	4 Cyl	**1948cc**	**37-40kW** (50-54ps)
	**11-02220-000** CH 58,700 B- 1,950 TL 95,700 **28,00x72,00** Ford ve Peugeot ile Ortak Motor		**91-09220-000** 1 2,000 CR 2 2,000 P 3 2,000 P 4 4,500 CrP		Ø 88,000	**31-04220-000**
	K=96,00 L=173,00 H=7,00 D=106,30	WF			**51-05890-000**	**71-08220-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

89,910

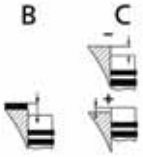
V348 TDCI | TRANSIT 3.2 | D | 01 | 2006 | > | 5 Cyl | **3200cc** | **151kW** | (200ps)

	11-01462-000 CH 48,200 B- 16,760 BØ 50,300 TL 75,250 **32,00x74,00**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50	Ø 89,910 Ø 90,410	**31-03462-000** **31-03462-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

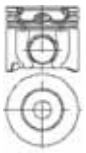
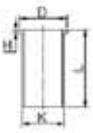
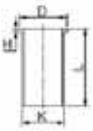
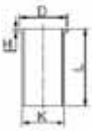
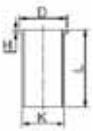
Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter | > | Cyl | **cc** | **kW** | (ps)

	11-01462-001 CH 48,000 B- 16,760 BØ 50,300 TL 75,020 **32,00x74,00**	AP YS CH -0,20 mm	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910	**31-03462-001**

		Type		B C		
						

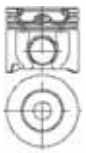
89,910

H9FA / H9FB / JXFA / JXFC Euro4 — Transit 2.4 TDCi 16V — D — 03 2004 > 03 2004 — (115-170ps)

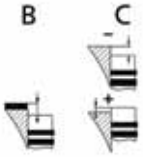
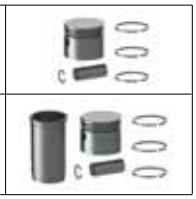
	**11-01463-000** CH 53,500 B- 16,300 BØ 49,000 TL 80,500 **32,00x71,10**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910 Ø 90,160 Ø 90,410	**31-03463-000** **31-03463-025** **31-03463-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

Strok Boyu 0,20mm Kisa Piston — / Stroke Lenght 0,20mm Shorter — > — Cyl — **cc** — **kW** — (ps)

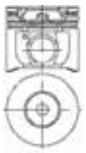
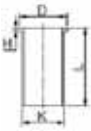
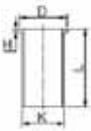
	**11-01463-001** CH 53,300 B- 16,300 BØ 49,000 TL 80,300 **32,00x71,10**	AP YS CH -0,20 mm	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910	**31-03463-001**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

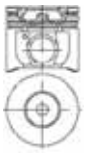
89,910

HFFA / RBFA / V184 PUMA DT24H Duratorq (Turbo Intercooled) — Transit 2.4 TDI — D — 2000 > 2003 — 88kW — (120ps)

	**11-01466-000** CH 53,500 B- 17,240 BØ 40,400 TL 80,500 **32,00x71,10**	AP YS	**91-09966-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50	Ø 89,910 Ø 90,160 Ø 90,410	**31-03466-000** **31-03466-025** **31-03466-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	

89,910

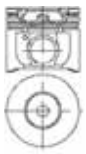
Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

	**11-01466-001** CH 53,300 B- 17,240 BØ 40,400 TL 80,300 **32,00x71,10**	AP YS	**91-09966-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP		Ø 89,910	**31-03466-001**

89,910

DT24N Duratorq (Turbo) — TRANSIT 2.4 TD — 00 1999 > — (75ps)

V184 PUMA DT24P Duratorq (Turbo Intercooled) — TRANSIT 2.4 DT24P — 00 1999 > — (90ps)

	**11-01467-000** CH 53,500 B- 17,000 BØ 41,050 TL 80,500 **32,00x66,15**	AP	**91-09966-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50	Ø 89,910 Ø 90,160 Ø 90,410	**31-03467-000** **31-03467-025** **31-03467-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	

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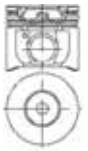
		Type		B C		

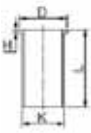
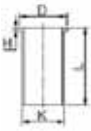
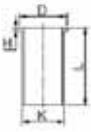
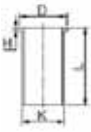
89,910

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

	**11-01467-001** CH 53,300 B- 17,000 BØ 41,050 TL 80,300 **32,00x66,15**	AP CH -0,20 mm	**91-09966-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP		Ø 89,910	**31-03467-001**

89,910

V184 PUMA Common Rail Transit 2.4 00 2003 > (130ps)

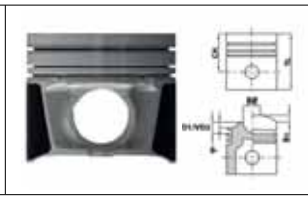
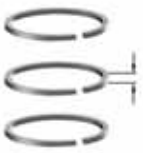
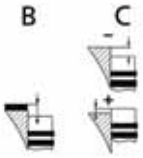
	11-01468-000 CH 53,500 B- 15,620 BØ 47,100 TL 80,500 **32,00x71,10**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50	Ø 89,910 Ø 90,160 Ø 90,410	**31-03468-000** **31-03468-025** **31-03468-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

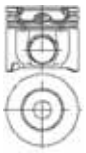
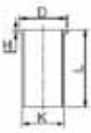
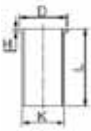
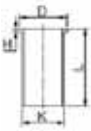
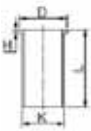
	11-01468-001 CH 53,300 B- 15,620 BØ 47,100 TL 80,300 **32,00x71,10**	AP YS CH -0,20 mm	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910	**31-03468-001**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type				

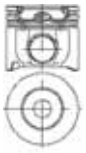
89,910

V348 Duratorq TDCI TRANSIT 2,4 TDI 00 2003 > (100ps)

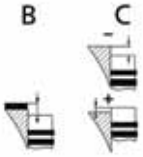
	**11-01469-000** CH 53,500 B- 16,300 BØ 49,000 TL 80,500 **32,00x66,15**	AP	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910 Ø 90,410	**31-03469-000** **31-03469-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

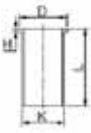
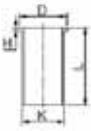
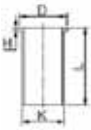
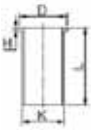
	**11-01469-001** CH 53,300 B- 16,300 BØ 49,000 TL 80,300 **32,00x66,15**	AP CH -0,20 mm	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910	**31-03469-001**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

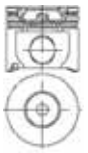
89,910

D4F A	Transit 2.4 DI 16V	01 2000	> 05 2006		(120ps)
DOFA	Transit 2.4 TDDi	01 2000	>		(116-125ps)
FXFA	Transit 2.4 TDE	04 2006	>		(115ps)

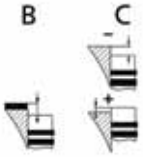
	11-01474-000 CH 53,500 B- 17,240 BØ 40,400 TL 80,500 **32,00x71,10**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50	Ø 89,910 Ø 90,160 Ø 90,410	**31-03474-000** **31-03474-025** **31-03474-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>	Cyl	**cc**	**kW**	(ps)

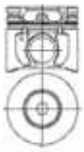
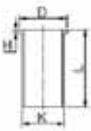
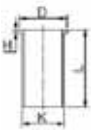
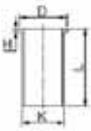
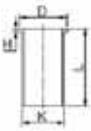
	**11-01474-001** CH 53,300 B- 17,240 BØ 40,400 TL 80,300 **32,00x71,10**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910	**31-03474-001**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

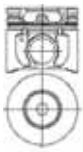
89,910

D2FA	Transit		01 2000	> 00 2005		(90ps)
F3FA	Transit		00 2000	> 00 2005		(75ps)

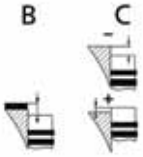
	**11-01475-000** CH 53,500 B- 17,240 BØ 41,050 TL 80,500 **32,00x66,15**	AP	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50	Ø 89,910 Ø 90,160 Ø 90,410	**31-03475-000** **31-03475-025** **31-03475-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			> Cyl	**cc**	**kW** (ps)

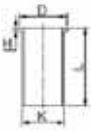
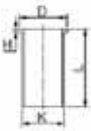
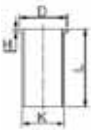
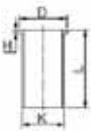
	**11-01475-001** CH 53,300 B- 17,240 BØ 41,050 TL 80,300 **32,00x66,15**	AP CH -0,20 mm	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910 Ø 90,410	**31-03475-001** **31-03475-051**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

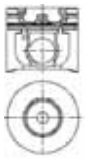
89,910

H9FA Euro4 Transit 2.4 TDCi 16V 03 2004 > 03 2004 (137ps)

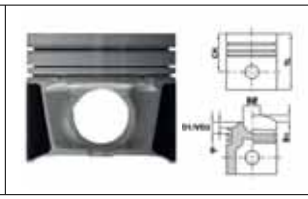
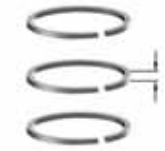
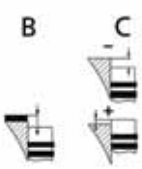
	11-01768-000 CH 53,500 B- 15,620 BØ 47,100 TL 80,500 **32,00x71,10**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910 Ø 90,160 Ø 90,410	**31-03768-000** **31-03768-025** **31-03768-050**
	K=92,50 L=165,00 H=3,10 D=95,50	DS			**51-65476-000**	
	K=93,00 L=165,00 H=3,40 D=95,50	DS +0,50			**51-65476-050**	
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

89,910

HFFA / RBFA / V184 TDI TRANSIT 2.4 TDI D 00 2003 > 4 Cyl **2400cc kW** (125ps)

	**11-02250-000** CH 53,500 B- 17,240 BØ 40,400 TL 80,500 **32,00x71,10**	AP YS	**91-09968-000** 1 2,000 CK 2 2,000 P 3 2,000 NT St		Ø 89,910 Ø 90,410	**31-04250-000** **31-04250-050**
	K=92,50 L=165,00 H=5,00 D=94,00	DS			**51-65477-000**	
	K=93,00 L=165,00 H=5,00 D=94,50	DS +0,50			**51-65477-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

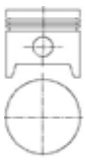
90,000

WTA	Granada 2.1 D	D	08 1977 > 08 1982	4 Cyl	**46kW**	(63ps)

	11-01891-000 CH 57,200 B- 2,000 TL 96,350 **28,00x77,00**		**91-09891-000** 1 2,000 CrP 2 2,000 P 3 2,000 P 4 4,500 CrP		Ø 90,000 Ø 90,500 Ø 91,000	**31-03891-000** **31-03891-050** **31-03891-100**
	Ford, Opel ve Peugeot ile Ortak Motor					
	K=96,00 L=173,00 H=7,00 D=106,30	WF			**51-05891-000**	**71-07891-000**

90,800

HC	CORTINA	B	00 1970 > 00 1982	4 Cyl	**1994cc**	**72-81kW**	(98-110ps)
HC	ESCORT RS	B	00 1970 > 00 1982	4 Cyl	**1994cc**	**72-81kW**	(98-110ps)
HC	GRANADA	B	00 1970 > 00 1982	4 Cyl	**1994cc**	**72-81kW**	(98-110ps)
HC	SCORPIO	B	00 1983 > 00 1993	4 Cyl	**1994cc**	**84kW**	(115ps)
HC	SIERRA	B	00 1986 > 00 1993	4 Cyl	**1994cc**	**73kW**	(100ps)
HC	TAUNUS	B	00 1970 > 00 1982	4 Cyl	**1994cc**	**72-81kW**	(98-110ps)

	**11-01443-000** CH 41,550 TL 79,550 **24,00x72,80**	CP	**91-09443-000** 1 2,000 CrP 2 2,500 P 3 4,000 CrP	+0,12/+0,25	Ø 90,800 Ø 91,300 Ø 91,800 Ø 93,050	**31-03443-000** **31-03443-020** **31-03443-040** **31-03443-225**
	K=94,05 L=137,00 H=5,00 D=95,50	DS			**51-65284-000**	
	K=94,50 L=137,00 H=6,00 D=96,00	DS +0,50			**51-65284-050**	
	K=94,05 L=137,00	DS			**51-65285-000**	

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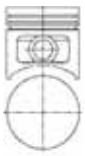
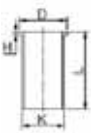
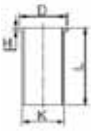
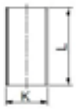
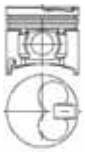
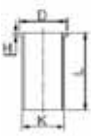
90,800

N4A / N4I / NR2 / NRB	Sierra 2.0i	B	01	1987	>	02	1993	4 Cyl	**1994cc**	**85kW**	(115ps)
NE	Escort 2.0	B	08	1975	>	08	1980	4 Cyl	**1994cc**	**77-80kW**	(105-110ps)
NE4 / NEL / NER	Scorpio 2.0	B	04	1985	>	08	1989	4 Cyl	**1994cc**	**74-77kW**	(100-105ps)
NEK / NEL / NEP	Granada 2.0	B	08	1981	>	08	1985	4 Cyl	**1994cc**	**74-77kW**	(101-105ps)
NEN	Capri 2.0	B	01	1978	>	04	1987	4 Cyl	**1994cc**	**74kW**	(101ps)
NER	Taunus 2.0	B	09	1978	>	08	1982	4 Cyl	**1994cc**	**74kW**	(100ps)
NET	Sierra 2.0	B	08	1982	>	12	1986	4 Cyl	**1994cc**	**74-77kW**	(101-105ps)
NRA	Granada 2.0i	B	04	1985	>	02	1992	4 Cyl	**1994cc**	**85kW**	(115ps)
NRA / NRI	Scorpio 2.0i	B	04	1985	>	02	1992	4 Cyl	**1994cc**	**85kW**	(115ps)
NRD	Sierra 2.0i	B	10	1985	>	12	1986	4 Cyl	**1994cc**	**74kW**	(100ps)

	**11-01444-000** CH 41,550 TL 69,550 **24,00x68,80**	CP	**91-09444-000** 1 1,600 CR 2 2,000 P 3 4,000 CrP	Ø 90,800 Ø 91,300 Ø 91,550 Ø 91,800 Ø 92,300	**31-03444-000** **31-03444-020** **31-03444-030** **31-03444-040** **31-03444-060**
	K=94,05 L=137,00 H=5,00 D=95,50	DS		**51-65284-000**	
	K=94,50 L=137,00 H=6,00 D=96,00	DS +0,50		**51-65284-050**	
	K=94,05 L=137,00	DS		**51-65285-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
93,000						
XM34TD / WL-T	B2500 TD	D	00 1998 >	4 Cyl	**2500cc** **81kW**	(110ps)
XM34TD / WL-T	RANGER PICKUP THUNDER	D	00 1998 >	4 Cyl	**2500cc** **81kW**	(110ps)
XM34TD / WL-T	RANGER PICKUP XLT	D	00 1998 >	4 Cyl	**2500cc** **81kW**	(110ps)
	**11-01977-000** CH 47,850 B- 2,100 TL 87,350	AP YS CP	**91-09985-000** 1 2,500 CrP 2 2,000 CrP 3 3,000 CrP	+0,30/+0,42	Ø 93,000 Ø 93,500	**31-03977-000** **31-03977-050**
	32,00x70,00		**99-09985-000** 1 2,500 NT St 2 2,000 CrP 3 3,000 NT St			**39-03977-000** **39-03977-050**
93,000						
XM34	RANGER PICK UP	D	>	4 Cyl	**2500cc** **kW**	(79ps)
	11-01985-000 CH 47,790 VD1 1,200 B- 2,900 TL 87,350	AP CP	**91-09985-000** 1 2,500 CrP 2 2,000 CrP 3 3,000 CrP	(+0,12/+0,25) (+0,40/+0,70)	Ø 93,000 Ø 93,500	**31-03985-000** **31-03985-050**
	32,00x70,00					
Ford ve Mazda ile Ortak Motor						
	K=96,00 L=162,00 H=5,00 D=97,50	DS			**51-65498-000**	

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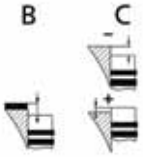
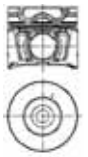
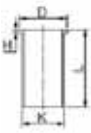
		Type		B C		
						

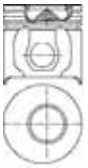
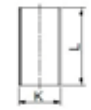
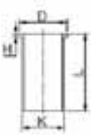
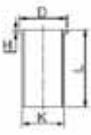
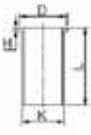
93,000

6M34 / WL-C — Ranger Pickup TDCI — D — 00 2006 > — 4 Cyl — **kW** — (143ps)

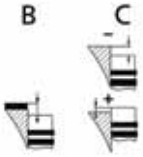
	**11-02954-000** CH 51,750 B- 15,100 BØ 48,500 TL 81,300 **34,00x70,00**	AP YS	**91-09259-000** 1 2,000 NT St 2 1,500 CR 3 2,000 NT St	STD Conta ile (+0,08/+0,15) 1 kertik conta ile (+0,13/+0,25) 2 kertik conta ile (+0,20/+0,31)	Ø 93,000 Ø 93,500	**31-04954-000** **31-04954-050**
	K=96,00 L=171,00 H=5,00 D=97,50	DS			**51-65731-000**	

93,670

4EA — Transit 2.5 TD — D — 08 1991 > 07 1994 — 4 Cyl — **74kW** — (100ps)

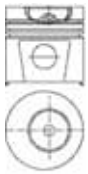
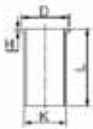
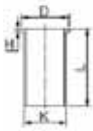
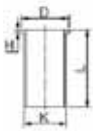
	**11-01420-000** CH 59,420 B- 18,400 BØ 44,000 TL 93,950 **29,00x79,30**	AP	**91-09426-000** 1 2,500 CrP 2 2,000 P 3 4,000 CrP	+0,35/+0,45	Ø 93,670 Ø 94,320 Ø 94,670	**31-03420-000** **31-03420-065** **31-03420-100**
	K=96,94 L=171,45	DS			**51-65286-000**	
	K=97,50 L=171,45 H=6,00 D=98,50	DS			**51-65426-000**	
	K=98,00 L=171,45 H=6,00 D=99,00	DS +0,50			**51-65426-050**	
	K=98,50 L=171,45 H=6,00 D=99,50	DS +1,00			**51-65426-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

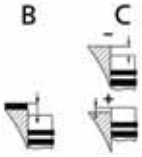
		Type		B C		
						

93,670

89 MY D1, M4 T-6110-BA Transit 2.5 D D > 4 Cyl **2496cc** **50-52kW** (68-71ps)

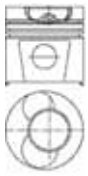
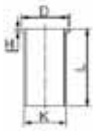
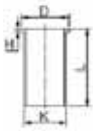
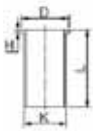
	**11-01426-000** CH 59,520 B- 18,000 BØ 40,000 TL 94,000 **29,00x77,00**	AP CP	**91-09426-000** 1 2,500 CrP 2 2,000 P 3 4,000 CrP	+0,30/+0,40	Ø 93,670 Ø 94,320 Ø 94,670	**31-03426-000** **31-03426-065** **31-03426-100**
	K=96,94 L=171,45	DS			**51-65286-000**	
	K=97,50 L=171,45 H=6,00 D=98,50	DS			**51-65426-000**	
	K=98,00 L=171,45 H=6,00 D=99,00	DS +0,50			**51-65426-050**	
	K=98,50 L=171,45 H=6,00 D=99,50	DS +1,00			**51-65426-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

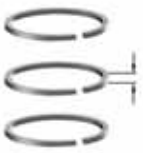
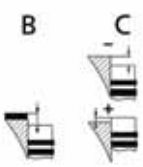
		Type		B C		
					

93,670

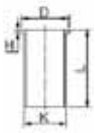
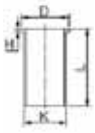
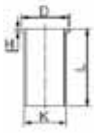
YORK D 25N/P | Transit 2.5 D | D | > | 4 Cyl | **2496cc** | **50kW** | (68ps)

	**11-01427-000** CH 59,500 VD1 0,600 VD2 0,950 B- 16,940 BØ 46,700 TL 93,500 **29,00x77,00**	AP CP	**91-09427-000** 1 2,000 CR 2 2,000 3 4,000 CR	+0,30/+0,50	Ø 93,670 Ø 94,320 Ø 94,670	**31-03427-000** **31-03427-065** **31-03427-100**
	K=96,94 L=171,45	DS			**51-65286-000**	
	K=97,50 L=171,45 H=6,00 D=98,50	DS			**51-65426-000**	
	K=98,00 L=171,45 H=6,00 D=99,00	DS +0,50			**51-65426-050**	
	K=98,50 L=171,45 H=6,00 D=99,50	DS +1,00			**51-65426-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

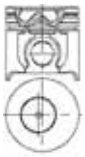
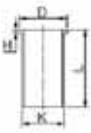
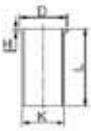
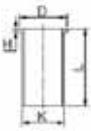
93,670

2.5DiTC	TRANSIT	D 00 1995 >	4 Cyl	**2496cc 55kW**	(76ps)
	11-02251-000 CH 59,520 B- 18,000 BØ 40,000 TL 94,000 **29,00x77,00**	AP **91-09420-000** 1 2,500 CrP 2 2,000 P 3 4,000 CrP	+0,25/+0,40	Ø 93,670 Ø 94,320 Ø 94,670	**31-04251-000** **31-04251-065** **31-04251-100**
	K=97,50 L=171,45 H=6,00 D=98,50	DS		**51-65426-000**	
	K=98,00 L=171,45 H=6,00 D=99,00	DS +0,50		**51-65426-050**	
	K=98,50 L=171,45 H=6,00 D=99,50	DS +1,00		**51-65426-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		

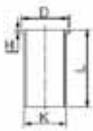
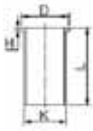
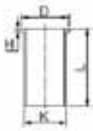
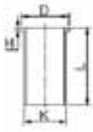
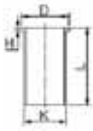
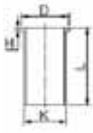
93,670

2.5DiTC		TRANSIT V5 MINIBUS			D		>		4 Cyl	**2496cc**	**74kW**	(100ps)	
	**11-02252-000** CH 59,420 B- 18,400 BØ 44,000 TL 93,950 **29,00x79,25**		AP	**91-09420-000** 1 2,500 CrP 2 2,000 P 3 4,000 CrP				+0,30/+0,40		Ø 93,670 Ø 94,320 Ø 94,670		**31-04252-000** **31-04252-065** **31-04252-100**	
	K=97,50 L=171,45 H=6,00 D=98,50		DS							**51-65426-000**			
	K=98,00 L=171,45 H=6,00 D=99,00		DS +0,50							**51-65426-050**			
	K=98,50 L=171,45 H=6,00 D=99,50		DS +1,00							**51-65426-100**			

94,000

STR	Scorpio 2.5 D			D	12	1985	>	02	1992	4 Cyl	**2304cc**	**51kW**	(69ps)
STR / STP / XD3P	Granada 2.5 D			D	08	1982	>	08	1985	4 Cyl	**2304cc**	**51-58kW**	(70-79ps)
XD3P	Sierra 2.5 D			D	00	1982	>			4 Cyl	**2304cc**	**51-58kW**	(70-79ps)
	11-01892-000 CH 57,420 B- 2,000 TL 99,920 **28,00x81,00**			**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP				0/+0,84 Conta ile 0,75/0,90		Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000		**31-03892-000** **31-03892-040** **31-03892-060** **31-03982-100**	
Daf, Ford ve Peugeot ile Ortak Motor													

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
94,000						
STP / STR / XD3P	Granada 2.5 D	D	08 1982 > 08 1985	4 Cyl	**2498cc**	**51-58kW** (70-79ps)
STR	Scorpio 2.5 D	D	12 1985 > 02 1992	4 Cyl	**2498cc**	**51kW** (69ps)
XD3P	Sierra 2.5 D	D	00 1982 >	4 Cyl	**2498cc**	**51-58kW** (70-79ps)
	11-01893-000 CH 53,920 B- 1,800 TL 96,420 **30,00x78,80** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,53mm Conta ile 0/+0,79 1,63mm Conta ile +0,79/+0,89 1,73mm Conta ile +0,89/…	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03893-000** **31-03893-040** **31-03893-060** **31-03893-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**	
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**	
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**	
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**	
	K=97,05 L=166,00 H=4,00 D=99,50	DS			**51-65915-000**	
	K=97,55 L=166,00 H=5,00 D=100,00	DS +0,50			**51-65915-050**	

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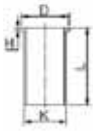
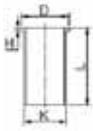
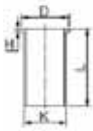
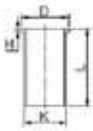
94,000

LXD2	Granada 2.3 D	D	10	1982	>	02	1985	4 Cyl	**2304cc**	**49kW**	(67ps)		
LXD2	Scorpio 2.3 D	D	10	1982	>			4 Cyl	**2304cc**	**49kW**	(67ps)		
LXD2 / YTR / YTT	Sierra 2.3 D	D	08	1982	>	12	1986	4 Cyl	**2304cc**	**49kW**	(67ps)		

	11-01894-000 CH 57,420 B- 2,000 TL 99,920 **30,00x78,80** Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP		Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03894-000** **31-03894-040** **31-03894-060** **31-03894-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**	
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**	
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**	
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**	

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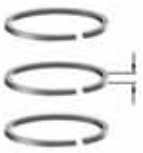
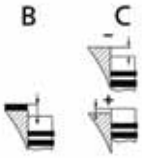
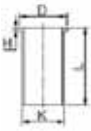
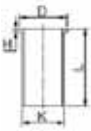
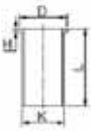
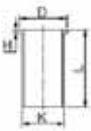
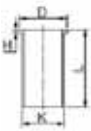
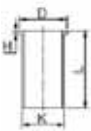
		Type		B C		
						

94,000

XD3P	Granada 2.5 D	D	08	1982	>	08	1985	4 Cyl	**2498cc**	**51-58kW** (70-79ps)
XD3P	Sierra 2.5 D	D	00	1982	>			4 Cyl	**2498cc**	**51-58kW** (70-79ps)

	11-01895-000 CH 53,920 B- 1,750 TL 91,420 **30,00x78,80** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,56mm Conta ile 0/+0,84 1,70mm Conta ile 0/+0,84	Ø 94,000 **31-03895-000** Ø 94,400 **31-03895-040** Ø 94,600 **31-03895-060** Ø 95,000 **31-03895-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**
	K=97,05 L=166,00 H=4,00 D=99,50	DS			**51-65915-000**
	K=97,55 L=166,00 H=5,00 D=100,00	DS +0,50			**51-65915-050**

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		Type		B C		

83,000

940 A5.000 Euro 5 | Renegade 2.0 CRD | D | 07 2014 > | 4 Cyl | **1956cc** | **103kW** | (140ps)

11-02197-000
CH 46,630
VD1 1,170
VD2 1,220
B- 15,800
BØ 43,500
TL 72,630

29,98x67,00

Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor

AP
YS

91-09790-000
1 1,500 CkP
2 1,500 P
3 2,000 NT St

0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)

Ø 83,000
Ø 83,400

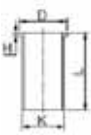
31-04197-000
31-04197-040

98-09790-000
1 1,500 CrP St
2 1,500 P
3 2,000 CR St

38-04197-000
38-04197-040

99-09790-000
1 1,500 NtPvD St
2 1,500 P
3 2,000 NT St

39-04197-000



K=86,00
L=155,00
H=5,00
D=87,50

DS

51-65778-000

83,000

OM 651.925 | Compass 2.2 CRD | D | 05 2011 > | 4 Cyl | **2143cc** | **100kW** | (136ps)

11-02676-000
CH 48,500
VD1 1,500
B- 13,250
BØ 49,400
TL 75,500

30,00x66,00

Jeep ve Mercedes-Benz ile Ortak Motor

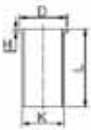
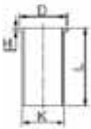
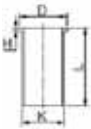
AP
YS
PDB

99-09644-000
1 2,000 CkP
2 1,750 P
3 2,000 NT St

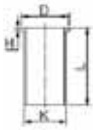
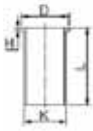
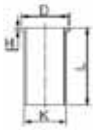
Ø 83,000
Ø 83,500
Ø 83,500

39-04676-000
39-04676-025
39-04676-050

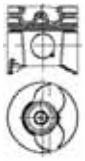
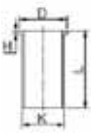
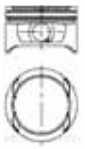
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
65,000						
100 GL.000 Oka 0.9			B 00 1999 >	4 Cyl	**843cc 33kW**	(45ps)
	11-01390-000 CH 30,750 TL 61,250 **20,00x54,00**		**91-09390-000** 1 1,750 CrP 2 2,000 P 3 3,947 CrP		Ø 65,000 **31-03390-000** Ø 65,200 **31-03390-020** Ø 65,400 **31-03390-040** Ø 65,600 **31-03390-060** Ø 65,800 **31-03390-080**	
Fiat / Iveco, Lada ve Seat ile Ortak Motor						
	K=68,04 L=115,00	DS			**51-65390-000**	
	K=69,04 L=115,00	DS +1,00			**51-65390-100**	
76,000						
VAZ 2101	1200		D 01 1970 > 06 1986	4 Cyl	**1198cc 44-46kW**	(60-62ps)
VAZ 2101	Nova 1.2		D 09 1981 >	4 Cyl	**1198cc 44-46kW**	(60-62ps)
VAZ 2103.1	1500		D 09 1972 > 10 1986	4 Cyl	**1198cc 52-57kW**	(70-77ps)
VAZ 2103.1	Toscana 1.5		D 01 1986 > 12 2000	4 Cyl	**1198cc 52-57kW**	(70-77ps)
VAZ 2103.1 / 2	Nova 1.5		D 08 1994 >	4 Cyl	**1198cc 49-57kW**	(67-77ps)
	11-01232-000 CH 38,000 TL 77,000 **22,00x67,00**	CP	**91-09231-000** 1 1,500 CR 2 2,000 P 3 3,947 CrP		Ø 76,000 **31-03232-000** Ø 76,400 **31-03232-040** Ø 76,600 **31-03232-060** Ø 76,800 **31-03232-080** Ø 77,000 **31-03232-100**	
	K=80,05 L=145,20 H=5,00 D=81,00	DS			**51-65547-000**	
	K=80,50 L=145,20 H=6,00 D=81,50	DS +0,50			**51-65547-050**	
	K=81,05 L=145,20 H=6,00 D=82,00	DS +1,00			**51-65547-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
XUD9A Niva 1.9 D	D 01 1993 >	4 Cyl	**1905cc**	**47-52kW**	(64-71ps)	
11-01879-000 CH 46,800 B- 2,200 TL 84,300 **25,00x72,00** Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor			**91-09879-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)	Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000	**31-03879-000** **31-03879-020** **31-03879-050** **31-03879-080** **31-03879-100**
 K=86,00 L=153,50 H=4,80 D=89,00		DS			**51-65820-000**	
K=86,04 L=153,50		DS			**51-65879-000**	
K=86,54 L=153,50		DS +0,50			**51-65879-050**	
 K=85,66 L=153,50 H=3,90 D=88,45		DS			**51-65885-000**	
 K=86,15 L=153,50 H=3,90 D=88,45		DS +0,50			**51-65885-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
85,000						
DW10TD 2123 2.0 TD		D	>	4 Cyl	**2000cc 66kW**	(90ps)
	**11-02495-000** CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750 **28,00x70,00** Citroen, Fiat / Iveco, Lada, Lancia, Peugeot ve Suzuki ile Ortak Motor	AP	**91-09799-000** 1 3,500 CK 2 2,000 3 3,000 CR	1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)	Ø 85,000 Ø 85,500 Ø 85,600	**31-04495-000** **31-04495-050** **31-04495-060**
	K=89,00 L=155,00 H=4,50 D=91,20	DS			**51-65167-000**	
86,000						
C20XE 110 2.0 i 16V		B 01 1996	>	4 Cyl	**1998cc 110kW**	(150ps)
	**11-02225-000** CH 30,430 VD1 1,930 B- 0,850 BØ 70,000 TL 55,430 **21,00x61,50** Lada ve Opel ile Ortak Motor		**91-09805-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 86,000 Ø 86,500 Ø 87,000	**31-04225-000** **31-04225-050** **31-04225-100**

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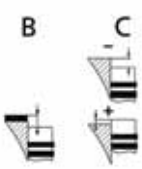
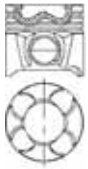
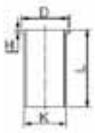
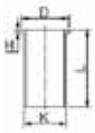
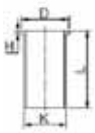
		Type		B	C		
							

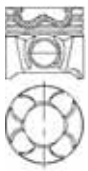
69,600

188 A9.000	Musa 1.3 JTD 16V	D	10	2004	>	4 Cyl	**1297cc**	**51kW**	(69ps)
188 A9.000	Ypsilon (843) 1.3 JTD 16V	D	06	2003	>	4 Cyl	**1297cc**	**51kW**	(69ps)
199 A2.000	Ypsilon (843) 1.3 JTD 16V	D	09	2006	>	4 Cyl	**1297cc**	**55kW**	(75ps)

	**11-02282-000** CH 40,430 VD1 1,000 B- 12,400 BØ 37,000 TL 63,430 **23,00x56,70** Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor	AP	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm Conta ile (+0,02/+0,13) 0,77/0,87mm Conta ile (+0,13/+0,23) 0,87/0,97mm Conta ile (+0,23/+0,33)	Ø 69,600 Ø 70,000 Ø 70,200 Ø 70,400 Ø 70,600	**31-04282-000** **31-04282-040** **31-04282-060** **31-04282-080** **31-04282-100**
	K=72,50 L=142,00 H=5,10 D=74,00	DS			**51-65451-000**	
	K=73,00 L=142,00 H=5,20 D=74,50	DS +0,50			**51-65451-050**	
	K=73,50 L=142,00 H=5,20 D=75,00	DS +1,00			**51-65451-100**	

69,600

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter				>	Cyl	**cc**	**kW**	(ps)

	**11-02282-001** CH 40,230 VD1 1,000 B- 12,400 BØ 37,000 TL 63,230 **23,00x56,70** Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor	AP CH -0,20 mm	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St		Ø 69,600 Ø 70,000 Ø 70,200	**31-04282-001** **31-04282-041** **31-04282-061**

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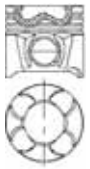
		Type		B C		

69,600

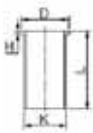
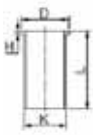
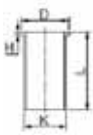
Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter >

(ps)

	**11-02282-002** CH 40,030 VD1 1,000 B- 12,400 BØ 37,000 TL 63,030 **23,00x56,70**	AP CH -0,40 mm	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St		Ø 69,600 Ø 70,000 Ø 70,200	**31-04282-002** **31-04282-042** **31-04282-062**
Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor						

69,600

199 A3.000	Musa 1.3 JTD 16V	09 2006 >	(90-105ps)
199 A3.000	Ypsilon (843) 1.3 JTD 16V	09 2006 >	(90-105ps)

	11-02289-000 CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43 **23,00x56,70**	AP YS	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm conta ile (+0,028/+0,127) 0,77/0,87mm conta ile (+0,127/+0,227) 0,87/0,97mm conta ile (+0,228/+0,327)	Ø 69,600 Ø 70,000	**31-04289-000** **31-04289-040**
Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor						
	K=72,50 L=142,00 H=5,10 D=74,00	DS			**51-65451-000**	
	K=73,00 L=142,00 H=5,20 D=74,50	DS +0,50			**51-65451-050**	
	K=73,50 L=142,00 H=5,20 D=75,00	DS +1,00			**51-65451-100**	

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LANCIA

		Type		B C		

69,600

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

11-02289-001
CH 40,230
VD1 0,904
B- 12,400
BØ 38,000
TL 62,230

23,00x56,70

AP
YS

CH -0,20 mm

91-09282-000
1 2,000 CK
2 1,500 P
3 2,000 NT St

0,67/0,77mm conta ile (+0,028/+0,127)
0,77/0,87mm conta ile (+0,127/+0,227)
0,87/0,97mm conta ile (+0,228/+0,327)

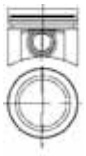
Ø 69,600
Ø 70,000

31-04289-001
31-04289-041

Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor

70,000

156 A2.000	Y 10 1.0		03	1985	>	06	1989			(45ps)
156 A3.000	Y 10 1.0		12	1986	>	10	1995			(50ps)



11-02290-000
CH 33,900
B- 0,500
BØ 55,000
TL 57,400

17,98x53,00

CP

91-09207-000
1 1,500 CR
2 1,500 P
3 3,000 CrP St

Ø 70,000
Ø 70,400
Ø 70,600

31-04290-000
31-04290-040
31-04290-060

Fiat / Iveco ve Lancia ile Ortak Motor

70,000

176 B2.000	Y 1.1 I	B	04	1997	>	09	2003	4 Cyl	**1108cc**	**40kW**	(54ps)
176 B2.000	Y 10 1.1	B	01	1995	>	12	1995	4 Cyl	**1108cc**	**40kW**	(54ps)

11-02291-000
CH 30,000
VD1 0,700
B- 1,500
BØ 60,000
TL 50,000

17,98x53,00

91-09284-000
1 1,200 CR
2 1,200 P
3 2,500 CR

Ø 70,000
Ø 70,400
Ø 70,600

31-04291-000
31-04291-040
31-04291-060

Fiat / Iveco ve Lancia ile Ortak Motor

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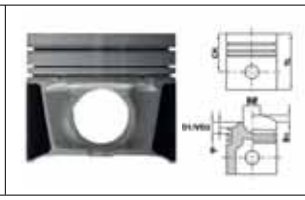
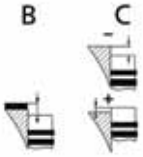
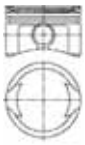
			Type		B	C		
								

70,800

188 A4.000	Y 1.2i	B	06	2000	>	06	2003	4 Cyl	**1242cc**	**44kW**	(60ps)
188 A4.000	Ypsilon 1.4i	B	06	2003	>			4 Cyl	**1242cc**	**44kW**	(60ps)



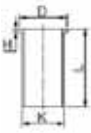
11-02285-000
CH 28,000
VD1 1,400
B- 2,100
BØ 60,000
TL 48,000

18,00x53,00

91-09285-000
1 1,200 NT St
2 1,200 P
3 2,500 NtP St

Ø 70,800 **31-04285-000**
Ø 71,200 **31-04285-040**
Ø 71,400 **31-04285-060**

Fiat / Iveco ve Lancia ile Ortak Motor



K=73,80
L=128,00
H=5,00
D=75,00

DS

51-65491-000

70,800

188 A5.000	Y 1.2i 16V	B	06	2000	>	06	2003	4 Cyl	**1242cc**	**59-63kW**	(80-86ps)
188 A5.000	Ypsilon (843) 1.2i 16V	B	06	2003	>			4 Cyl	**1242cc**	**59-63kW**	(80-86ps)

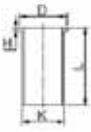
11-02287-000
CH 28,000
VD1 2,000
B- 5,100
TL 48,000

18,00x49,00

91-09285-000
1 1,200 NT St
2 1,200 P
3 2,500 NtP St

Ø 70,800 **31-04287-000**
Ø 71,200 **31-04287-040**
Ø 71,400 **31-04287-060**

Fiat / Iveco ve Lancia ile Ortak Motor



K=73,80
L=128,00
H=5,00
D=75,00

DS

51-65491-000

72,000

350 A1.000	Musa 1.4i	B	10	2004	>			4 Cyl	**1368cc**	**57kW**	(77ps)
350 A1.000	Ypsilon (843) 1.4i	B	06	2003	>			4 Cyl	**1368cc**	**57kW**	(77ps)

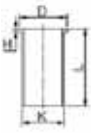
11-02266-000
CH 26,000
VD1 2,050
B- 4,750
TL 49,000

18,00x49,00

91-09263-000
1 1,000 NT St
2 1,200 P
3 2,000 CrP

Ø 72,000 **31-04266-000**
Ø 72,400 **31-04266-040**

Fiat / Iveco ve Lancia ile Ortak Motor



K=75,00
L=126,00
H=5,10
D=76,50

DS

51-65269-000

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LANCIA

		Type		B	C		

80,500

182 B6.000	Lybra 1.8i 16V	B	10	2000	>		4 Cyl	**1596cc**	**76kW**	(103ps)	

11-02267-000
CH 28,650
VD1 2,200
B- 1,200
BØ 62,000
TL 50,700

21,00x56,00

91-09262-000
1 1,200 CR St
2 1,200 P
3 2,000 CrP St

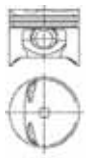
Ø 80,500
Ø 80,900

31-04267-000
31-04267-040

Fiat / Iveco ve Lancia ile Ortak Motor

80,500

160 A1.046KAT	Delta 1.4i	B	01	1993	>	04	1994	4 Cyl	**1372cc**	**51 kW**	(70 ps)
836 A4.000KAT	Delta 1.4i	B	04	1994	>	12	1999	4 Cyl	**1372cc**	**51 kW**	(70 ps)



11-02303-000
CH 33,300
B- 2,900
TL 65,300

22,00x58,00

91-09396-000
1 1,500 CrP
2 1,750 P
3 3,000 P

Ø 80,500
Ø 80,900
Ø 81,100

31-04303-000
31-04303-040
31-04303-060

Fiat / Iveco ve Lancia ile Ortak Motor

82,000

188 B2.000	Musa 1.9 JTD	D	10	2004	>		4 Cyl	**1910cc**	**74kW**	(101ps)	
839 A6.000 / 841 C.000	Lybra 2.4 JTD	D	01	2001	>		4 Cyl	**1910cc**	**103-110kW**	(140-150ps)	
841 C.000	Thesis 2.4 JTD	D	04	2002	>		4 Cyl	**1910cc**	**110kW**	(150ps)	
937 A2.000 / AR 37101	Lybra 1.9 JTD	D	06	2001	>		4 Cyl	**1910cc**	**77-85kW**	(105-115ps)	

11-02281-000
CH 46,500
VD1 0,500
B- 17,500
BØ 37,500
TL 72,500

26,00x61,00

AP
PDB
AA=22,35 mm

91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

0,77-0,87mm Conta ile (+0,014/+0,104)
0,87-0,97mm Conta ile (+0,105/+0,205)
0,97-1,07mm Conta ile (+0,236/+0,294)

Ø 82,000
Ø 82,400
Ø 82,600

31-04281-000
31-04281-040
31-04281-060

Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor

K=85,00
L=155,00
H=5,00
D=86,00

DS

51-65268-000

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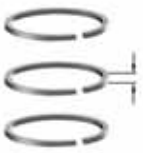
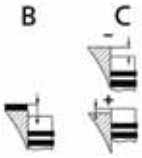
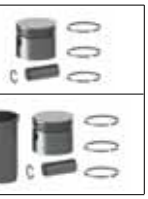
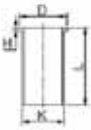
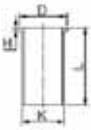
LANCIA

		Type		B C		
						

82,600

831D.000	Prisma 1.9 D	D	06	1984	>	12	1989	4 Cyl	**1698cc**	**48 kW** (65 ps)
831D1.000	Delta 1.9 TD	D	06	1986	>	06	1991	4 Cyl	**1698cc**	**59 kW** (80 ps)
831D1.000	Prisma 1.9 TD	D	05	1985	>	12	1989	4 Cyl	**1698cc**	**59 kW** (80 ps)

	11-01394-000 CH 42,600 B- 2,400 TL 84,400 **25,00x69,50** Fiat / Iveco, Lancia ile Ortak Motor	AP	**91-09394-000** 1 2,500 CrP 2 2,000 P 3 4,000 CrP		Ø 82,600 Ø 83,000 Ø 83,200	**31-03394-000** **31-03394-040** **31-03394-060**
	K=86,08 L=154,00	DS			**51-65394-000**	
	K=87,08 L=154,00	DS +1,00			**51-65394-100**	
	K=86,06 L=154,00 H=4,50 D=89,00	DS			**51-65395-000**	
	K=87,06 L=154,00 H=5,50 D=90,00	DS +1,00			**51-65395-100**	

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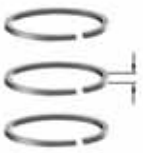
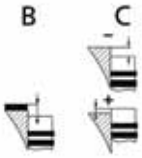
		Type		B C		
					

83,000

198 A5.000 Delta (844) 2.0 M-JTD 16V D 09 2008 > 4 Cyl **1956cc** **121kW** (165ps)

11-02197-000
CH 46,630
VD1 1,170
VD2 1,220
B- 15,800
BØ 43,500
TL 72,630

29,98x67,00

Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor

AP
YS

91-09790-000
1 1,500 CkP
2 1,500 P
3 2,000 NT St

0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)

Ø 83,000
Ø 83,400

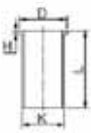
31-04197-000
31-04197-040

98-09790-000
1 1,500 CrP St
2 1,500 P
3 2,000 CR St

38-04197-000
38-04197-040

99-09790-000
1 1,500 NtPvD St
2 1,500 P
3 2,000 NT St

39-04197-000



K=86,00
L=155,00
H=5,00
D=87,50

DS

51-65778-000

84,000

132 AB000 / B1.000 / BB1A.0 Beta 1.8 B 00 1972 > 00 1976 4 Cyl **1756cc** **77-82kW** (105-112ps)

C1.000 Beta 1.8 B 00 1972 > 00 1976 4 Cyl **1756cc** **kW** (ps)

11-01757-000
CH 38,450
VD1 4,850
B- 1,600
TL 79,850

22,00x69,00

Fiat / Iveco, Lancia ve Seat ile Ortak Motor

CP

91-09397-000
1 1,500 CrP
2 2,000 P
3 3,947 CrP

Ø 84,000
Ø 84,400
Ø 84,600
Ø 84,800
Ø 85,000

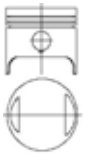
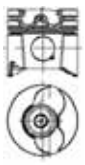
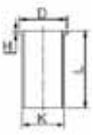
31-03757-000
31-03757-040
31-03757-060
31-03757-080
31-03757-100

K=88,02
L=145,50

DS

51-65410-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
84,000						
828 B1.000	Beta 2.0i	B	04 1976 > 05 1978	4 Cyl	**1995cc**	**80 kW** (109 ps)
828 B1.000	Prisma 2.0i	B	04 1976 > 05 1978	4 Cyl	**1995cc**	**80 kW** (109 ps)
828 B4.000	Beta 2.0i	B	04 1976 > 09 1984	4 Cyl	**1995cc**	**80 kW** (109 ps)
 **11-02270-000** CH 38,450 VD1 3,800 TL 77,950 **22,00x69,00** Fiat / Iveco, Lancia ve Seat ile Ortak Motor		CP	**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP		Ø 84,000 Ø 84,400 Ø 84,600 Ø 84,800 Ø 85,000	**31-04270-000** **31-04270-040** **31-04270-060** **31-04270-080** **31-04270-100**
85,000						
RFN	ZETA	B	07 2000 > 09 2002	4 Cyl	**1997cc**	**100kW** (136ps)
RFN (EW10J4)	PHEDRA	B	09 2002 > 11 2010	4 Cyl	**1997cc**	**100kW** (136ps)
11-02117-000 CH 29,000 B- 0,750 BØ 48,000 TL 51,000 **21,00x58,00**			**91-09145-000** 1 1,200 Mo 2 1,500 CR 3 2,500 CR		Ø 85,000 Ø 85,200 Ø 85,400 Ø 85,600 Ø 85,800	**31-04117-000** **31-04117-020** **31-04117-040** **31-04117-060** **31-04117-080**
85,000						
RHZ	Zeta 2.0 JTD	D	06 1999 > 10 2000	4 Cyl	**2000cc**	**80-81kW** (109-110ps)
 **11-02495-000** CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750 **28,00x70,00** Citroen, Fiat / Iveco, Lada, Lancia, Peugeot ve Suzuki ile Ortak Motor		AP	**91-09799-000** 1 3,500 CK 2 2,000 3 3,000 CR	1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)	Ø 85,000 Ø 85,500 Ø 85,600	**31-04495-000** **31-04495-050** **31-04495-060**
 K=89,00 L=155,00 H=4,50 D=91,20		DS			**51-65167-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

85,000

RHR (DW10BTED4) Phedra 2.0 JTD 16V D 07 2006 > 4 Cyl **1997cc** **100kW** (136ps)

11-02497-000
CH 46,705
VD1 0,520
B- 15,400
BØ 44,800
TL 80,705

28,00x70,00

AP
YS

91-09799-000
1 3,500 CK
2 2,000
3 3,000 CR

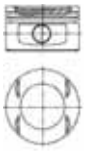
Ø 85,000
Ø 85,600

31-04497-000
31-04497-060

Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor

86,000

RFV Zeta 2.0i 16V B 06 1999 > 10 2000 4 Cyl **1998cc** **97-100kW** (132-136ps)



11-02499-000
CH 33,800
VD1 1,700
B- 4,300
BØ 52,000
TL 53,800

22,00x62,00

CP

91-09499-000
1 1,500 Mo
2 1,750
3 3,000

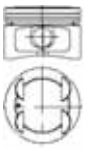
Ø 86,000
Ø 86,500

31-04499-000
31-04499-050

Citroen, Fiat / Iveco, Lancia ve Peugeot ile Ortak Motor

86,400

182 B6.000 Lybra 1.8i 16V B 10 2000 > 4 Cyl **1580cc** **76kW** (103ps)



11-02269-000
CH 34,170
VD1 2,200
TL 59,430

22,00x56,00

91-09969-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP St

Ø 86,400
Ø 86,800
Ø 87,000

31-04269-000
31-04269-040
31-04269-060

Fiat / Iveco ve Lancia ile Ortak Motor

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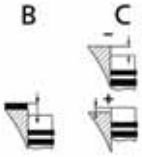
		Type		B C		
						

84,450

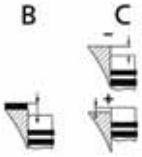
20 T2N	620 SDi	D	03	1995	> 12	1998	4 Cyl	**1994cc**	**77kW**	(105ps)
20 T2R (63 kW) / T2N	220 SD / SDi	D	09	1995	> 03	2000	4 Cyl	**1994cc**	**63-77kW**	(86-105ps)
20 T2R (63 kW) / T2N	420 SD / SDi	D	09	1995	> 03	2000	4 Cyl	**1994cc**	**63-77kW**	(86-105ps)
20 T2R (74 kW)	25 2.0 iDT	D	02	2000	> 05	2005	4 Cyl	**1994cc**	**74kW**	(101ps)
20 T2R (74 kW)	45 2.0 iDT	D	02	2000	> 05	2005	4 Cyl	**1994cc**	**74kW**	(101ps)
20 T2R (74 kW)	Streetwise 2.0 TD	D	09	2003	> 05	2005	4 Cyl	**1994cc**	**74kW**	(101ps)

	11-01548-000 CH 47,970 B- 17,000 BØ 38,000 TL 76,970 **30,00x70,00** Honda ve Land Rover ile Ortak Motor	AP	**91-09548-000** 1 3,000 CR 2 2,000 P 3 3,000 CR		Ø 84,450 Ø 84,950	**31-03548-000** **31-03548-050**
	K=88,00 L=158,50	DS			**51-66175-000**	

84,450

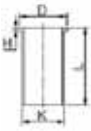
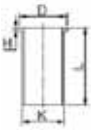
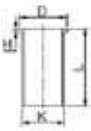
5R	Discovery 2.5 Td5	D	10	1998	> 10	2004	5 Cyl	**2496cc**	**102kW**	(138ps)

	11-01549-000 CH 47,940 B- 17,400 BØ 39,000 TL 78,940 **30,00x70,00**	AP YS	**91-09549-000** 1 3,000 CR 2 2,000 P 3 3,000 CR	Ø 84,450 Ø 84,950	**31-03549-000** **31-03549-020**
	K=88,00 L=158,50	DS		**51-66175-000**	

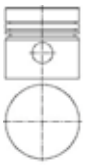
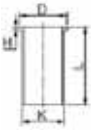
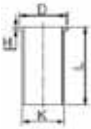
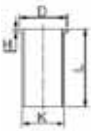
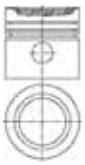
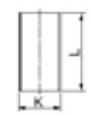
		Type		B C		
						

90,475

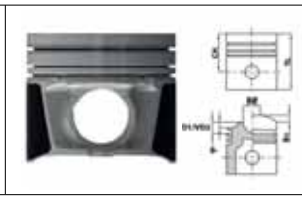
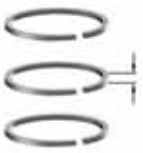
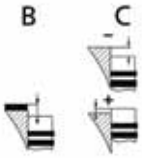
12J	90-110		D	00	1984	>	00	1990	4 Cyl	**2494cc**	**kW**	(ps)
12J	Defender 90-110-130		D	00	1990	>			4 Cyl	**2494cc**	**kW**	(ps)

	11-01551-000 CH 54,600 B- 3,600 TL 86,310 **30,16x74,50**	AP CP	**91-09551-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,10mm	Ø 90,475 Ø 90,975 Ø 91,225 Ø 91,475	**31-03551-000** **31-03551-020** **31-03551-030** **31-03551-040**
	K=94,53 L=190,36	DS			**51-65549-000**	
	K=94,53 L=191,30 H=4,76 D=99,70	DS			**51-65550-000**	
	K=95,00 L=191,30 H=4,76 D=99,70	DS +0,50			**51-65550-050**	
	K=95,50 L=191,30 H=4,76 D=99,70	DS +1,00			**51-65550-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

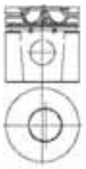
		Type		B C		
90,475						
2.3L	88 Series	B	00 1958 > 00 1985	4 Cyl		(ps)
2.3L	90 Series	B	00 1958 > 00 1985	4 Cyl		(ps)
 **11-01552-000** CH 58,522 TL 99,924 **25,40x76,20**		**91-09552-000** 1 1,778 CrP 2 1,778 P 3 4,722 CrP			Ø 90,475 Ø 90,975 Ø 91,225 Ø 91,475	**31-03552-000** **31-03552-020** **31-03552-030** **31-03552-040**
	K=94,53 L=190,36	DS			**51-65549-000**	
	K=94,53 L=191,30 H=4,76 D=99,70	DS			**51-65550-000**	
	K=95,00 L=191,30 H=4,76 D=99,70	DS +0,50			**51-65550-050**	
	K=95,50 L=191,30 H=4,76 D=99,70	DS +1,00			**51-65550-100**	
90,475						
17H	110	B	00 1985 > 00 1990	4 Cyl		(ps)
17H	90	B	00 1985 > 00 1990	4 Cyl		(ps)
17H	Defender	B	00 1990 >	4 Cyl		(ps)
 **11-01553-000** CH 54,480 B- 0,910 TL 89,230 **25,40x76,20**		**91-09552-000** 1 1,778 CrP 2 1,778 P 3 4,722 CrP			Ø 90,475 Ø 90,975 Ø 91,225 Ø 91,475	**31-03553-000** **31-03553-020** **31-03553-030** **31-03553-040**
	K=94,53 L=190,36	DS			**51-65549-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

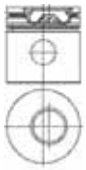
90,475

14L	Range Rover 2.5 TDi	D	10	1992	>	04	1996	4 Cyl				(113ps)
16L / 19L / 23L	Defender 90-110-130 2.5 TDi	D	09	1994	>	12	1998	4 Cyl				(113-122ps)
19L	Discovery 2.5 D / Tdi	D	07	1994	>	12	1998	4 Cyl				(113-122ps)

	**11-01554-000** CH 55,400 B- 18,450 BØ 39,080 TL 91,900 **30,16x77,00**	AP	**91-09554-000** 1 3,000 CrP 2 2,500 P 3 3,000 CrP	1. Conta ile +0,50/+0,60 2. Conta ile +0,61/+0,70 3. Conta ile +0,71/+0,80	Ø 90,475 Ø 90,725 Ø 90,975 Ø 91,225 Ø 91,475	**31-03554-000** **31-03554-010** **31-03554-020** **31-03554-030** **31-03554-040**
	K=94,53 L=190,36	DS			**51-65549-000**	

90,475

11L	Defender 90-110 2.5 TDi	D	10	1995	>	12	1998	4 Cyl	**2496cc**	**80kW**	(109ps)
11L	Landrover 90 2.5 TDi	D	07	1989	>	07	1990	4 Cyl	**2496cc**	**80kW**	(109ps)
11L / 12L / 21L	Discovery 2.5 TDi	D	09	1989	>	09	1994	4 Cyl	**2496cc**	**83kW**	(113ps)

	**11-01555-000** CH 55,400 B- 18,850 BØ 39,600 TL 91,900 **30,16x77,00**	AP CP	**91-09555-000** 1 2,500 CR 2 2,000 P 3 3,000 CR	1 Centik conta ile (0,50/0,60) 2 Centik conta ile (0,60/0,70) 3 Centik conta ile (0,71/0,80) 4 Centik conta ile (0,81/0,90)	Ø 90,475 Ø 90,975 Ø 91,225 Ø 91,475	**31-03555-000** **31-03555-020** **31-03555-030** **31-03555-040**

90,475

19J	90 / 110	D	00	1986	>	00	1990	4 Cyl	**2495cc**	**kW**	(ps)

	11-01558-000 CH 54,597 B- 3,630 TL 86,309 **30,16x74,50**	AP HA CP	**91-09558-000** 1 2,000 CR 2 2,000 P 3 3,000 CR	+0,10/+0,15	Ø 90,475 Ø 90,975 Ø 91,475	**31-03558-000** **31-03558-020** **31-03558-040**

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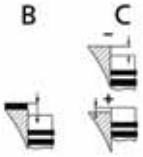
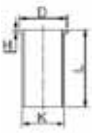
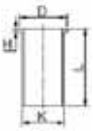
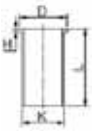
		Type				
						

90,490

2.3 (2.25 DIESEL) — GENUINE / Series 3 Defender — D — > — 4 Cyl — (61ps)

	11-01550-000 CH 58,600 B- 6,500 TL 100,000 **30,16x74,50**		**91-09550-000** 1 2,385 CR 2 2,385 P 3 2,385 P 4 4,747 CR 5 4,747 P		Ø 90,490 Ø 90,990 Ø 91,240 Ø 91,490	**31-03550-000** **31-03550-020** **31-03550-030** **31-03550-040**
	K=94,53 L=191,30 H=4,76 D=99,70	DS			**51-65550-000**	
	K=95,00 L=191,30 H=4,76 D=99,70	DS +0,50			**51-65550-050**	
	K=95,50 L=191,30 H=4,76 D=99,70	DS +1,00			**51-65550-100**	

94,000

V8 — Range Rover 4.0 V8 — D — 09 1994 — > — 8 Cyl — **3950cc** **kW** — (ps)

	11-01546-000 CH 35,900 B- 3,380 BØ 77,000 TL 66,350 **24,00x60,20**		**91-09546-000** 1 1,200 CR 2 1,500 P 3 3,000 CR		Ø 94,000	**31-03546-000**

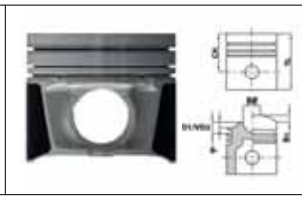
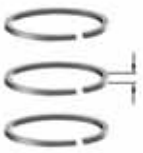
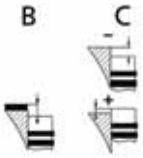
94,000

4.6LV8 — Range Rover 4.6 V8 HSE — D — 09 1994 — > — 8 Cyl — (ps)

	11-01547-000 CH 35,900 B- 5,830 BØ 77,000 TL 66,350 **24,00x60,20**		**91-09546-000** 1 1,200 CR 2 1,500 P 3 3,000 CR		Ø 94,000	**31-03547-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

LAND ROVER

		Type				

94,000

3.5 L EFI	Range Rover Vogue SE	D	00	1989	>	00	1992	8 Cyl		(ps)
3.5 L EFI	Rover Discovery	D	00	1989	>	00	1992	8 Cyl		(ps)

11-01559-000
CH 47,295
B- 3,350
BØ 77,400
TL 77,100

22,22x72,80

91-09559-000
1 1,500 CR
2 1,500 P
3 3,000 CR

Ø 94,000
Ø 94,500

31-03559-000
31-03559-020

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63,500

M 160 R3	SMART City Cabrio 600i Turbo	B	07	1998	>	01	2004	3 Cyl			(45-54ps)
M 160 R3	SMART City Coupé 600i	B	07	1998	>	01	2004	3 Cyl			(45-54ps)
M 160 R3	SMART Crossblade 600i	B	03	2002	>	01	2004	3 Cyl			(45-54ps)
M 160 R3	SMART Fortwo City Coupé 600i Turbo	B	02	2004	>			3 Cyl			(45-54ps)
M 160 R3	SMART Passion 600i Turbo	B	10	1998	>			3 Cyl			(45-54ps)
M 160 R3	SMART Pulse 600i Turbo	B	10	1998	>			3 Cyl			(45-54ps)
M 160 R3	SMART Pure 600i Turbo	B	10	1998	>			3 Cyl			(45-54ps)

11-02720-000
CH 27,000 *CH 26,750
B- 2,750 *B- 2,750
BØ 50,000 *BØ 50,000
TL 43,500 *TL 43,250

* For Oversize Piston Dimensions

16,00x48,00

AA=17,25 mm

91-09720-000
1 1,200 CrP
2 1,500 P
3 2,500 CrP St

99-09720-000
1 1,200 NT St
2 1,500 Fe
3 2,500 NtP St

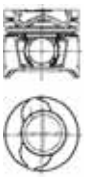
Ø 63,500
Ø 63,750
Ø 64,000

31-04720-000
31-04720-025
31-04720-050

39-04720-000
39-04720-025
39-04720-050

65,500

OM 660.914	Fortwo City Cabrio 800 CDi	D			>			3 Cyl	**799cc**	**30kW**	(41ps)
OM 660.914	Fortwo City Coupé 800 CDI	D			>			3 Cyl	**799cc**	**30kW**	(41ps)



11-02675-000
CH 36,000
VD1 0,950
B- 11,100
BØ 38,700
TL 60,000

23,00x53,00

AP

91-09688-000
1 1,500 NT St
2 1,500 P
3 2,500 NT St

Ø 65,500
Ø 66,000

31-04675-000
31-04675-050

66,500

0.7L(37kW)	SMART City Cabrio 700i Turbo	B	01	2003	>	01	2004	3 Cyl	**698cc**	**37-45kW**	(50-61ps)
0.7L(37kW)	SMART Fortwo City Cabrio 700i	B	02	2004	>	01	2007	3 Cyl	**698cc**	**37-45kW**	(50-61ps)
0.7L(37kW)	SMART Fortwo City Coupé 700i	B	02	2004	>	01	2007	3 Cyl	**698cc**	**37-45kW**	(50-61ps)
0.7L(37kW)	SMART Roadster 700i	B	04	2003	>	04	2003	3 Cyl	**698cc**	**37-45kW**	(50-61ps)

11-02698-000
CH 25,200
B- 3,300
TL 41,700

16,00x52,00

91-09698-000
1 1,200 CR St
2 1,200 P
3 2,500 CrP St

99-09698-000
1 1,200 NT St
2 1,200 NT St
3 2,500 CrP St

Ø 66,500
Ø 67,750

31-04698-000
31-04698-025

39-04698-000
39-04698-050

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82,000

M 271 E 18 / E 18 948	C200	B	00	2001	>	00	2005	4 Cyl	**1796cc**	**141kW**	(192ps)
M 271 E 18 / E 18 948	C230	B	00	2001	>	00	2005	4 Cyl	**1796cc**	**141kW**	(192ps)
M 271 E 18 / E 18 948	CLK200	B	00	2001	>	00	2005	4 Cyl	**1796cc**	**141kW**	(192ps)
M 271 E 18 / E 18 948	E200 KOMP	B	00	2001	>	00	2005	4 Cyl	**1796cc**	**141kW**	(192ps)

11-02684-000
CH 29,900
VD1 1,000
B- 4,610
BØ 71,200
TL 50,900

20,00x56,00

HA

AA=20,20 mm

99-09697-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 82,000
Ø 82,500

39-04684-000
39-04684-050

82,000

M271	C 180 KOMPRESSOR	B	01	2007	>			4 Cyl	**1597cc**	**115kW**	(156ps)

11-02687-000
CH 29,900
VD1 1,000
B- 1,000
TL 50,900

20,00x56,00

HA

99-09697-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 82,000
Ø 82,500

39-04687-000
39-04687-050

83,000

OM 651.911-912-924-960-961-980	C/CLS/E/GLK/ML/S/SLK 250 CDI	D	10	2007	>			4 Cyl	**2143cc**	**125-150kW**	(170-204ps)
OM 651.912-916-924	C / E / GLK 220 CDI	D	01	2007	>			4 Cyl	**2143cc**	**125-150kW**	(170-204ps)
OM 651.913	C 180 CDI	D	01	2011	>			4 Cyl	**2143cc**	**88-105kW**	(120-143ps)
OM 651.913-924-925	C / E / GLK 200 CDI	D	01	2011	>			4 Cyl	**2143cc**	**88-150kW**	(120-204ps)
OM 651.924	E 300 CDI BlueTEC Hybrid	D	12	2011	>			4 Cyl	**2143cc**	**125-150kW**	(170-204ps)
OM 651.924	Shooting Brake 250 CDI	D	10	2012	>			4 Cyl	**2143cc**	**125-150kW**	(170-204ps)
OM 651.940	Vito 110-113-116 CDI	D	09	2010	>			4 Cyl	**2143cc**	**100kW**	(136ps)
OM 651.940-955-957-960-961-980	ENGINE	D			>			4 Cyl	**2143cc**	**70-150kW**	(95-204ps)
OM 651.955-956-957	Sprinter 210-310-410-510 series CDI	D	03	2009	>			4 Cyl	**2143cc**	**70-120kW**	(95-163ps)

11-02676-000
CH 48,500
VD1 1,500
B- 13,250
BØ 49,400
TL 75,500

30,00x66,00

AP
YS

98-09644-000
1 2,000 CrP
2 1,750 P
3 2,000 CR

Ø 83,000
Ø 83,500

38-04676-000
38-04676-050

PDB

99-09644-000
1 2,000 CkP
2 1,750 P
3 2,000 NT St

39-04676-000
39-04676-050

Jeep ve Mercedes-Benz ile Ortak Motor

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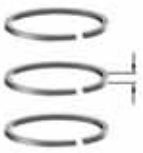
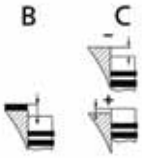

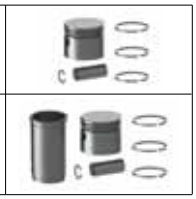

Type

83,000

OM 642.830	C 350 CDI (204)	D	00	2009	>	6 Cyl	**2987cc**	**170kW**	(231ps)	

11-02685-000
CH 45,650
VD1 1,430
B- 15,510
BØ 51,100
TL 71,650

30,00x66,00

AP
YS

CYL. 4-5-6 to be used with 2686 000

99-09642-000

1	2,000	NT	St
2	2,000	CR	
3	2,000	NT	St

Ø 83,000

39-04685-000

83,000

OM 642.830	C 350 CDI (204)	D	00	2009	>	6 Cyl	**2987cc**	**170kW**	(231ps)	

11-02686-000
CH 45,650
VD1 1,430
B- 15,510
BØ 51,100
TL 71,650

30,00x66,00

AP
YS

CYL. 1-2-3 to be used with 2685 000

99-09642-000

1	2,000	NT	St
2	2,000	CR	
3	2,000	NT	St

+0,53/+0,77

Ø 83,000

39-04686-000

83,000

OM 651.911 / 912 / 916	C / E / GLK 220 CDI	D	01	2007	>	4 Cyl	**2143cc**	**125-150kW**	(170-204ps)	
OM 651.911 / 912 / 924 / 960 / 961	C / CLS / E / GLK / ML / S 250 CDI	D	10	2000	>	4 Cyl	**2143cc**	**125-150kW**	(170-204ps)	
OM 651.911 / 924	C / E / GLK 220 CDI	D	01	2010	>	4 Cyl	**2143cc**	**125-150kW**	(170-204ps)	
OM 651.913	C / GLK 200 CDI	D	01	2011	>	4 Cyl	**2143cc**	**88-105kW**	(120-143ps)	
OM 651.913	C 180 CDI	D	01	2011	>	4 Cyl	**2143cc**	**88-105kW**	(120-143ps)	
OM 651.924	E 200 CDI	D	01	2009	>	4 Cyl	**2143cc**	**125-150kW**	(170-204ps)	
OM 651.924	E 300 CDI BlueTEC Hybrid	D	12	2010	>	4 Cyl	**2143cc**	**125-150kW**	(170-204ps)	
OM 651.924	Shooting Brake 250 CDI	D	10	2010	>	4 Cyl	**2143cc**	**125-150kW**	(170-204ps)	
OM 651.925 / 940	E 200 CDI	D	01	2009	>	4 Cyl	**2143cc**	**100kW**	(136ps)	
OM 651.925 / 940	Vito 110-113-116 CDI	D	09	2010	>	4 Cyl	**2143cc**	**100kW**	(136ps)	
OM 651.955 / 956	Sprinter 210-213-310-313-510-513 CDI	D	03	2009	>	4 Cyl	**2143cc**	**70-95kW**	(95-129ps)	
OM 651.957	Sprinter 216-316-416-516 CDI	D	06	2006	>	4 Cyl	**2143cc**	**120kW**	(163ps)	
OM 651.980	SLK 250 CDI	D	01	2012	>	4 Cyl	**2143cc**	**150kW**	(204ps)	

11-02688-000
CH 48,500
VD1 0,970
B- 13,250
BØ 49,400
TL 75,500

30,00x66,00

AP
YS

99-09644-000

1	2,000	CkP	
2	1,750	P	
3	2,000	NT	St

+0,50/+0,75

Ø 83,000
Ø 83,500

39-04688-000
39-04688-050

Chrylser ve Mercedes-Benz ile Ortak Motor

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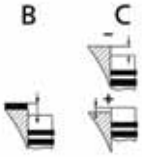
		Type		B C		
						

83,000

M 270.910	180 (172.431)	B	01	2016	>		4 Cyl	**1595cc**	**75-115kW**	(102-156ps)
M 270.910	A 160 / 180 / 200	B	07	2015	>		4 Cyl	**1595cc**	**75-115kW**	(102-156ps)
M 270.910	B 160 / 180 / 200	B	07	2015	>		4 Cyl	**1595cc**	**75-115kW**	(102-156ps)
M 270.910	C 180 (205.440)	B	06	2016	>		4 Cyl	**1595cc**	**75-115kW**	(102-156ps)
M 270.910	CLA 180 / 200	B	01	2013	>		4 Cyl	**1595cc**	**75-115kW**	(102-156ps)
M 270.910	GLA 180 / 200	B	02	2015	>		4 Cyl	**1595cc**	**75-115kW**	(102-156ps)

	11-02765-000 CH 30,850 B- 6,150 BØ 49,790 TL 50,850 **20,00x51,00**	HA	**91-09649-000** 1 1,200 NT St 2 1,500 P 3 2,000 NT St		Ø 83,000	**31-04765-000**

83,000

M 274.910	C-CLASS (W204)	B	01	2008	>	01 2014	4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	C-CLASS (W205)	B	04	2015	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	C-CLASS Cabriolet (A205)	B	06	2016	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	C-CLASS Coupe (C204)	B	01	2013	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	C-CLASS Coupe (C205)	B	10	2015	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	C-CLASS T-Model (S204)	B	02	2012	>	08 2014	4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	C-CLASS T-Model (S205)	B	04	2015	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	E-CLASS (W213)	B	01	2017	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)
M 274.910	SLC (R172)	B	01	2016	>		4 Cyl	**1595cc**	**95-115kW**	(129-156ps)

	11-02766-000 CH 30,850 B- 6,150 BØ 49,790 TL 50,850 **20,00x51,00**	HA	**91-09651-000** 1 1,200 NT St 2 1,000 CrP 3 2,000 NT St		Ø 83,000	**31-04766-000**

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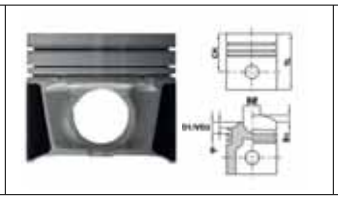

83,010

OM 642.910-920-921-930 - 932-960-961-970	C/CLK/CLS/E/G/GL/GLK/S320 CDI	D	09	2004	>	08	2007	6 Cyl	**2987cc**	**160-165kW**	(218-224ps)
OM 642.920	E 300 BLUETEC	D	09	2007	>	07	2009	6 Cyl	**2987cc**	**155-165kW**	(211-224ps)
OM 642.920	Sprinter 418 CDI	D	03	2009	>			6 Cyl	**2987cc**	**155-165kW**	(211-224ps)
OM 642.920 / 921 / 950	E / R 280 CDI	D	03	2005	>	07	2009	6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.920-930-932-940 - 960-961	C / CLS / GL / S 350 CDI	D	07	2009	>			6 Cyl	**2987cc**	**140-173kW**	(190-235ps)
OM 642.940	ML 280 / 320 CDI	D	07	2005	>	07	2009	6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.940	ML 300 / 350 CDI	D	07	2009	>	10	2011	6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.950	R 300 CDI	D	07	2009	>			6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.950	R 320 / 350 CDI	D	02	2006	>			6 Cyl	**2987cc**	**140-165kW**	(190-224ps)

11-02760-000
CH 45,650
VD1 1,330
VD2 1,490
B- 14,650
BØ 43,400
TL 71,650

30,00x66,00

AP
YS

Cly. 1-2-3 to be used with 2761 000

99-09642-000
1 2,000 NT St
2 2,000 CR
3 2,000 NT St

+0,53/+0,77

Ø 83,010 **39-04760-000**
Ø 83,260 **39-04760-025**
Ø 83,510 **39-04760-050**
Ø 83,760 **39-04760-075**

Chrylser ve Mercedes-Benz ile Ortak Motor

83,010

OM 642.910-920-921-930 - 932-960-961-970	C/CLK/CLS/E/G/GL/GLK/S 320 CDI	D	09	2004	>	08	2007	6 Cyl	**2987cc**	**160-165kW**	(218-224ps)
OM 642.920	E 300 BLUETEC	D	09	2007	>	07	2009	6 Cyl	**2987cc**	**155-165kW**	(211-224ps)
OM 642.920	Sprinter 418 CDI	D	03	2009	>			6 Cyl	**2987cc**	**155-165kW**	(211-224ps)
OM 642.920 / 921 / 950	E / R 280 CDI	D	03	2005	>	07	2009	6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.920-930-932-940 - 960-961	C / CLS / GL / S 350 CDI	D	07	2009	>			6 Cyl	**2987cc**	**140-173kW**	(190-235ps)
OM 642.940	ML 280 / 320 CDI	D	07	2005	>	07	2009	6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.940	ML 300 / 350 CDI	D	07	2009	>	10	2011	6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.950	R 300 CDI	D	07	2009	>			6 Cyl	**2987cc**	**140-165kW**	(190-224ps)
OM 642.950	R 320 / 350 CDI	D	02	2006	>			6 Cyl	**2987cc**	**140-165kW**	(190-224ps)

11-02761-000
CH 45,650
VD1 1,330
VD2 1,490
B- 14,650
BØ 43,400
TL 71,650

30,00x66,00

AP
YS

Cyl. 4-5-6 to be used with 2760 000

99-09642-000
1 2,000 NT St
2 2,000 CR
3 2,000 NT St

Ø 83,010 **39-04761-000**
Ø 83,260 **39-04761-025**
Ø 83,510 **39-04761-050**
Ø 83,760 **39-04761-075**

Chrylser ve Mercedes-Benz ile Ortak Motor

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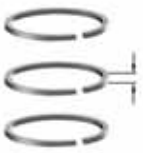
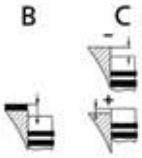



Type

87,000

OM 602A911 / 961 / 962 - 993	190 D 2.5 Turbo (201)	D	02	1988	>	08	1993	5 Cyl	**2497cc**	**93kW**	(126ps)
OM 602A911 / 961 / 962 - 993	250 D Turbo (124)	D	09	1988	>	06	1993	5 Cyl	**2497cc**	**93kW**	(126ps)
OM 602A911 / 961 / 962 - 993	300 D 2.5 Turbo (USA) (124)	D	09	1989	>	08	1992	5 Cyl	**2497cc**	**93kW**	(126ps)
OM 602A911 / 961 / 962 - 993	E 250 D Turbo	D	07	1993	>	06	1996	5 Cyl	**2497cc**	**93kW**	(126ps)
OM 602A911 / 961 / 962 / 993	E 250 D Turbo	D	07	1993	>	06	1996	5 Cyl	**2497cc**	**93kW**	(126ps)
OM 603.960 / 961 / 962 / 963	300 D Turbo (124)	D	01	1988	>	06	1993	6 Cyl	**2497cc**	**105-108kW**	(143-147ps)
OM 603.960 / 961 / 962 / 963	300 SD Turbo (USA) (126)	D	11	1985	>	12	1987	6 Cyl	**2497cc**	**105-108kW**	(143-147ps)
OM 603.960 / 961 / 962 / 963	E 300 D Turbo	D	07	1993	>	06	1996	6 Cyl	**2497cc**	**105-108kW**	(143-147ps)

11-01606-000
CH 44,850
VD1 1,050
VD2 1,250
B- 9,010
TL 74,850

28,00x70,00

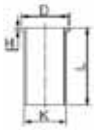
AP
YS
HA

91-09608-000
1 2,500 CR
2 2,000
3 3,000 CR

+0,73/+0,96

Ø 87,000
Ø 87,500

31-03606-000
31-03606-050



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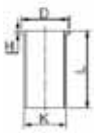
L=148,40
H=4,70
D=92,55

DS

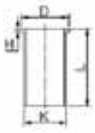
51-65632-000



K=90,50
L=148,40
H=5,00
D=93,00

DS
+0,50

51-65632-050



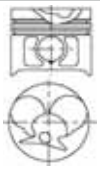
K=91,05
L=148,40
H=6,00
D=93,50

DS
+1,00

51-65632-100

87,000

OM 602A / 603A	190/250/300	D	06	1984	>	00	1995	4 Cyl	**2148cc**	**100-125kW**	(136-170ps)



11-01608-000
CH 44,300
VD1 2,300
B- 13,800
BØ 47,000
TL 74,300

30,00x70,00

AP
YS

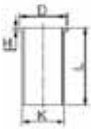
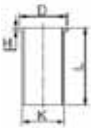
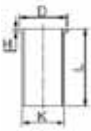
91-09608-000
1 2,500 CR
2 2,000
3 3,000 CR

Ø 88,009
Ø 88,509

31-03608-000
31-03608-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
87,000						
OM 615.943 / 944	Series 206 D 2.0	D	12 1976 > 07 1977	4 Cyl	**1988cc**	**39kW** (53ps)
OM 615.943 / 944	Series 207 D 2.0	D	08 1977 > 01 1989	4 Cyl	**1988cc**	**40kW** (55ps)
OM 615.943 / 944	Series 307 D 2.0	D	08 1977 > 10 1985	4 Cyl	**1988cc**	**40kW** (55ps)

	11-01630-000 CH 52,900 VD1 1,000 B- 8,850 TL 91,400 **26,00x72,00** Mercedes-Benz ve Seat ile Ortak Motor	AP CP	**91-09630-000** 1 3,000 CrP 2 2,000 P 3 4,000 CrP		Ø 87,000 Ø 87,500 Ø 88,000	**31-03630-000** **31-03630-050** **31-03630-100**
	K=90,06 L=158,40 H=4,70 D=91,92	DS			**51-65630-000**	
	K=90,50 L=158,40 H=5,00 D=92,40	DS +0,50			**51-65630-050**	
	K=91,06 L=158,40 H=6,00 D=92,92	DS +1,00			**51-65630-100**	

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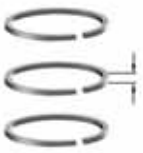
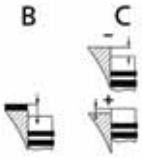
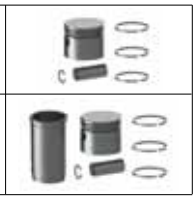
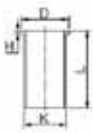
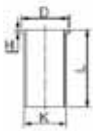
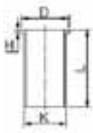
		Type		B C		
						

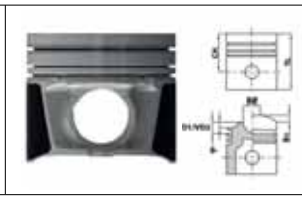
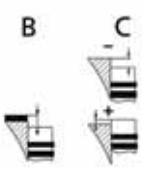
87,000

OM 615.940 / 944 / 970	200 D (123)	D	02	1976	>	11	1985	4 Cyl	**1988cc**	**40kW** (55ps)
OM 615.940 / 944 / 970	Series 207 D 2.0	D	08	1977	>	01	1989	4 Cyl	**1988cc**	**40kW** (55ps)
OM 615.940 / 944 / 970	Series 307 D 2.0	D	08	1977	>	10	1985	4 Cyl	**1988cc**	**40kW** (55ps)
OM 615.962 / 963 / 970	MB 100 2.0 D	D	12	1980	>	06	1989	4 Cyl	**1988cc**	**43kW** (58ps)
OM 615.962 / 963 / 970	MB 90 2.0 D	D	03	1985	>	12	1986	4 Cyl	**1988cc**	**43kW** (58ps)
OM 615.962 / 963 / 970	MB-Trac 100	D	12	1980	>	08	1991	4 Cyl	**1988cc**	**43kW** (58ps)
OM 615.962 / 963 / 970	MB-Trac 90	D	03	1985	>	12	1986	4 Cyl	**1988cc**	**43kW** (58ps)

11-01653-000 CH 52,900 VD1 1,200 B- 8,850 TL 91,400 **26,00x72,00**	AP CP	**91-09653-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	+0,65/+1,05	Ø 87,000 Ø 87,500 Ø 88,000	**31-03653-000** **31-03653-050** **31-03653-100**
Mercedes-Benz ve Seat ile Ortak Motor					
 K=90,06 L=158,40 H=4,70 D=91,92	DS			**51-65630-000**	
 K=90,50 L=158,40 H=5,00 D=92,40	DS +0,50			**51-65630-050**	
 K=91,06 L=158,40 H=6,00 D=92,92	DS +1,00			**51-65630-100**	

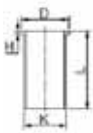
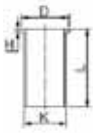
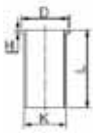
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

MERCEDES-BENZ

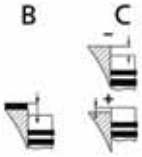
		Type				

87,000

OM 604.915(POR)	C 200 D		D	09	1996	> 05	2000	4 Cyl	**1997cc**	**83kW**	(113ps)
OM 604.917(POR)	E 200 D		D	01	1996	> 03	2002	4 Cyl	**1997cc**	**65kW**	(88ps)
OM 605.910	C 250 D		D	07	1993	> 05	2000	5 Cyl	**1997cc**	**83kW**	(113ps)
OM 605.911 / 912	E 250 D		D	07	1993	> 06	1996	5 Cyl	**1997cc**	**83kW**	(113ps)
OM 606.910 / 912	E 300 D		D	07	1993	> 08	1997	6 Cyl	**1997cc**	**100kW**	(136ps)

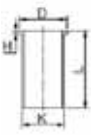
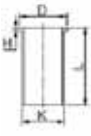
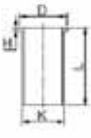
	11-02694-000 CH 44,900 VD1 2,410 B+ 1,320 TL 76,220 **26,00x55,00**	AP	**91-09608-000** 1 2,500 CR 2 2,000 3 3,000 CR	+0,74/+0,97	Ø 87,000 Ø 87,500	**31-04694-000** **31-04694-050**
	K=90,08 L=148,40 H=4,70 D=92,55	DS			**51-65632-000**	
	K=90,50 L=148,40 H=5,00 D=93,00	DS +0,50			**51-65632-050**	
	K=91,05 L=148,40 H=6,00 D=93,50	DS +1,00			**51-65632-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

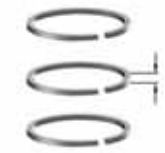
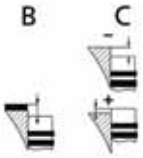
		Type		B C		
						

87,000

OM 601.911-913	190 D (201)	D	06	1984	>	05	2000	4 Cyl	**1997cc**	**53-55kW**	(72-75ps)
OM 601.911-913	200 D (124)	D	06	1984	>	05	2000	4 Cyl	**1997cc**	**53-55kW**	(72-75ps)
OM 601.911-913	C 200 D	D	06	1984	>	05	2000	4 Cyl	**1997cc**	**53-55kW**	(72-75ps)
OM 601.911-913	E 200 D	D	06	1984	>	05	2000	4 Cyl	**1997cc**	**53-55kW**	(72-75ps)
OM 602.911-912 / 930-931 / 938-939 / 990	190 D 2.5 (201)	D	04	1985	>			4 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 602.911-912 / 930-931 / 938-939 / 990	250 D (124)	D	04	1985	>			5 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 602.911-912 / 930-931 / 938-939 / 990	250 GD (460)	D	04	1985	>			5 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 602.911-912 / 930-931 / 938-939 / 990	250 GD (461)	D	04	1985	>			5 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 602.911-912 / 930-931 / 938-939 / 990	250 GD (463)	D	04	1985	>			5 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 602.911-912 / 930-931 / 938-939 / 990	G 250 D	D	04	1985	>			5 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 602.911-912 / 930-931 / 938-939 / 990	O 405 GTZ	D	04	1985	>			5 Cyl	**1997cc**	**62-69kW**	(84-94ps)
OM 603.912-913 / 931	300 D (124)	D	03	1979	>	10	1994	6 Cyl	**1997cc**	**80-83kW**	(109-113ps)
OM 603.912-913 / 931	300 GD (463)	D	03	1979	>	10	1994	6 Cyl	**1997cc**	**80-83kW**	(109-113ps)
OM 603.912-913 / 931	G 300 D	D	03	1979	>	10	1994	6 Cyl	**1997cc**	**80-83kW**	(109-113ps)

	11-02921-000 CH 44,850 VD1 1,050 B- 9,050 TL 74,850 **26,00x55,00**	AP CP	**91-09921-000** 1 2,000 CrP 2 2,000 P 3 3,000 CR	+0,735/+0,965	Ø 87,000 Ø 87,500 Ø 87,700 Ø 88,000	**31-04921-000** **31-04921-050** **31-04921-070** **31-04921-100**
	K=90,08 L=148,40 H=4,70 D=92,55	DS			**51-65632-000**	
	K=90,50 L=148,40 H=5,00 D=93,00	DS +0,50			**51-65632-050**	
	K=91,05 L=148,40 H=6,00 D=93,50	DS +1,00			**51-65632-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Type

88,000

OM 611.960	C 200 / C 220 CDI	D	06	1998	>	02	2001	4 Cyl	**2151cc**	**75-92kW**	(102-125ps)
OM 611.961	E 200 / E 220 CDI	D	07	1998	>	03	2002	4 Cyl	**2151cc**	**75-105kW**	(102-143ps)
OM 611.980	V 200 / V 220 CDI	D	06	1999	>	09	2003	4 Cyl	**2151cc**	**60-90kW**	(82-122ps)
OM 611.980	Vito 108-110-112 CDI	D	04	1999	>	07	2003	4 Cyl	**2151cc**	**60-90kW**	(82-122ps)

11-02696-000
CH 42,300
VD1 2,100
B- 13,300
BØ 43,100
TL 68,300

28,00x70,00

AP
YS

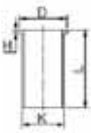
AA=22,20 mm

91-09718-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

+0,38/+0,62

Ø 88,000
Ø 88,500

31-04696-000
31-04696-050



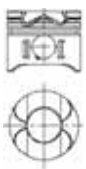
K=91,00
L=147,00
H=5,00
D=93,00

DS

51-65606-000

88,000

OM 646.951	E 200 / E 220 CDI	D	09	2002	>	07	2006	4 Cyl	**2148cc**	**90-110kW**	(122-150ps)
OM 646.961	E 200 / E 220 CDI	D	03	2002	>	07	2009	4 Cyl	**2148cc**	**90-110kW**	(122-150ps)
OM 646.962 / 963	C 200 / 220 CDI	D	03	2003	>	08	2007	4 Cyl	**2148cc**	**90-110kW**	(122-150ps)
OM 646.962 / 963	CLC 200 / 220 CDI	D	05	2008	>			4 Cyl	**2148cc**	**90-110kW**	(122-150ps)
OM 646.963 / 966 / 989 / 990	Sprinter 215/315/415/509/511/515CDI	D	06	2006	>			4 Cyl	**2148cc**	**90-110kW**	(122-150ps)
OM 646.966	CLK 220 CDI	D	01	2005	>	05	2009	4 Cyl	**2148cc**	**110kW**	(150ps)
OM 646.980 / 981 / 982 / 983	Vito 109 / 111 / 115 CDI	D	10	2003	>			4 Cyl	**2148cc**	**65-110kW**	(88-150ps)
OM 646.981 / 982 / 983	Viano 200 / 220 CDI	D	09	2003	>			4 Cyl	**2148cc**	**65-110kW**	(88-150ps)
OM 646.984 / 985	Sprinter 200-300-400-500 Series CDI	D	06	2006	>			4 Cyl	**2148cc**	**65-80kW**	(88-109ps)
OM 647.961	E 270 CDI	D	03	2002	>	07	2009	5 Cyl	**2148cc**	**130kW**	(177ps)
OM 647.981	Sprinter 300-400 Series CDI	D	04	2000	>	05	2006	5 Cyl	**2148cc**	**130kW**	(177ps)
OM 647.981	Sprinter 413 CDI	D	04	2000	>	05	2006	4 Cyl	**2148cc**	**130kW**	(177ps)
OM 648.960	S 320 CDI	D	09	2002	>	08	2005	6 Cyl	**2148cc**	**150kW**	(204ps)
OM 648.961	E 280 / 320 CDI	D	05	2004	>	07	2009	6 Cyl	**2148cc**	**150kW**	(204ps)



11-02697-000
CH 42,300
VD1 2,030
B- 14,100
BØ 46,000
TL 72,300

30,00x70,00

AP
YS

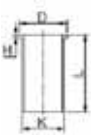
AA=22,20 mm

91-09718-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

+0,38/+0,60

Ø 88,000
Ø 88,500
Ø 89,000

31-04697-000
31-04697-050
31-04697-100



K=92,05
L=165,00
H=4,70
D=94,00

DS

51-65607-000

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88,000

OM 611.961	E 200 / 220 CDI	D	07	1998	>	03	2002	4 Cyl	**2151cc**	**75-105kW**	(102-143ps)
OM 611.962	C 200 / 220 CDI	D	10	2000	>	08	2007	4 Cyl	**2151cc**	**85-105kW**	(116-143ps)
OM 611.981	Sprinter211/213/311/313/411/413 CDI	D	04	2000	>	05	2006	4 Cyl	**2151cc**	**80kW**	(109ps)
OM 612.961 / 962 / 963 / 965 / 966	C / CLK / E / G / ML 270 CDI	D	12	2000	>	08	2007	5 Cyl	**2151cc**	**115-125kW**	(156-170ps)
OM 613.960 / 961	E / S 320 CDI	D	06	1999	>	03	2003	6 Cyl	**2151cc**	**145kW**	(197ps)

11-02699-000
CH 42,300
VD1 1,900
B- 13,800
BØ 43,500
TL 72,300

30,00x70,00

AP
YS

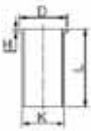
AA=22,20 mm

91-09718-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

+0,38/+0,62

Ø 88,000
Ø 88,500

31-04699-000
31-04699-050



K=91,00
L=147,00
H=5,00
D=93,00

DS

51-65606-000

88,009

OM 646.811 / 812 / 966	C 200 CDI	D	00	2007	>			4 Cyl	**2148cc**	**100-125kW**	(136-170ps)
OM 646.811 / 966	C 220 CDI	D	00	2007	>			4 Cyl	**2148cc**	**100-125kW**	(136-170ps)
OM 646.820 / 821 / 966	E 200 CDI	D	00	2007	>			4 Cyl	**2148cc**	**100-125kW**	(136-170ps)
OM 646.821 / 966	E 220 CDI	D	00	2007	>			4 Cyl	**2148cc**	**100-125kW**	(136-170ps)

11-02683-000
CH 44,300
VD1 2,300
B- 13,800
BØ 47,000
TL 74,300

30,00x70,00

AP
YS

AA=22,30 mm

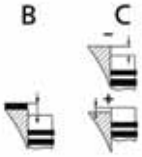
91-09718-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

+0,38/+0,62

Ø 88,009
Ø 88,509

31-04683-000
31-04683-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

88,010

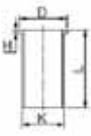
OM 646.986 Euro4	Sprinter 209-211-213-215 CDI	D	06	2006	>		4 Cyl	**2148cc**	**95-110kW**	(129-150ps)
OM 646.986 Euro4	Sprinter 309-311-313-315 CDI	D	06	2006	>		4 Cyl	**2148cc**	**95-110kW**	(129-150ps)
OM 646.986 Euro4	Sprinter 411-415 CDI	D	06	2006	>		4 Cyl	**2148cc**	**95-110kW**	(129-150ps)
OM 646.986 Euro4	Sprinter 509-511-515 CDI	D	06	2006	>		4 Cyl	**2148cc**	**95-110kW**	(129-150ps)

	11-02692-000 CH 42,400 VD1 1,780 B- 14,100 BØ 46,000 TL 72,300 **30,00x70,00**	AP YS PDB AA=22,20 mm	**91-09721-000** 1 2,500 CkP 2 2,000 CrP 3 2,000 CrP	+0,38/+0,62	Ø 88,010 Ø 88,510	**31-04692-000** **31-04692-050**

88,010

OM 611.961	E 200 / 220 CDI	D	07	1998	>	03	2002	4 Cyl	**2148cc**	**60-105kW**	(82-143ps)
OM 611.962	C 200 / 220 CDI	D	10	2000	>	08	2007	4 Cyl	**2148cc**	**60-105kW**	(82-143ps)
OM 611.980	V 200 / 220 CDI	D	06	1999	>	09	2003	4 Cyl	**2148cc**	**60-105kW**	(82-143ps)
OM 611.980	Vito 108 / 110 / 112 CDI	D	04	1999	>	07	2003	4 Cyl	**2148cc**	**60-105kW**	(82-143ps)
OM 611.981 / 983 / 987 Euro3	Sprinter 200-300-400 Series CDI	D	04	2000	>	05	2006	4 Cyl	**2148cc**	**60-95kW**	(82-129ps)
OM 612.961 / 962 / 963	C / CLK / E / G / ML 270 CDI	D	12	2000	>	08	2007	5 Cyl	**2148cc**	**120-125kW**	(163-170ps)
OM 612.981 Euro3	Sprinter 216 / 316 / 416 / 616 CDI	D	04	2000	>	05	2006	5 Cyl	**2148cc**	**110kW**	(150ps)
OM 613.960 / 961	E / S 320 CDI	D	06	1999	>	03	2003	6 Cyl	**2148cc**	**145kW**	(197ps)

	11-02718-000 CH 42,330 VD1 2,300 B- 13,900 BØ 43,700 TL 72,300 **30,00x70,00**	AP YS AA=23,50 mm	**91-09718-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	+0,38/+0,62	Ø 88,010 Ø 88,510 Ø 88,760 Ø 89,010	**31-04718-000** **31-04718-050** **31-04718-075** **31-04718-100**

	K=91,00 L=147,00 H=5,00 D=93,00	DS		**51-65606-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

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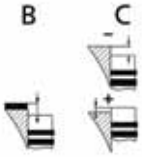
							

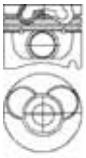
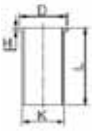
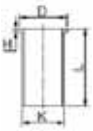
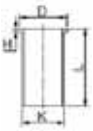
88,500

M103.980 / 981 / 983 / 985	300 E (124)	B	01	1985	>	08	1985	6 Cyl	**2962cc**	**130kW**	(177ps)
M103.980 / 981 / 983 / 985	300 SE (126)	B	09	1985	>	06	1993	6 Cyl	**2962cc**	**130kW**	(177ps)
M103.980 / 981 / 983 / 985	E 300	B	07	1993	>	06	1996	6 Cyl	**2962cc**	**130kW**	(177ps)
M103.982	300 SL (107)	B	09	1985	>	09	1989	6 Cyl	**2962cc**	**132kW**	(180ps)

	11-01646-000 CH 33,000 B- 2,700 TL 66,000 **22,00x52,00**	AA=22,40 mm	**91-09646-000** 1 1,500 CrP 2 1,750 P 3 3,000 CR		Ø 88,500 Ø 89,000 Ø 89,500	**31-03646-000** **31-03646-050** **31-03646-100**

89,000

OM 602.980 Euro 2 / 986	Sprinter 210/212/310/312/410/412D	D	01	1997	>	03	2000	5 Cyl	**2874cc**	**90kW**	(122ps)
OM 602.980OM 602DE29LA	290 GD Turbo (461)	D	04	1992	>	09	2001	5 Cyl	**2874cc**	**88kW**	(120ps)
OM 602.980OM 602DE29LA	G 290 TD	D	07	1997	>			5 Cyl	**2874cc**	**88kW**	(120ps)
OM 602.982	E 290 D Turbo	D	01	1996	>	06	1999	5 Cyl	**2874cc**	**95kW**	(129ps)
OM 602.984 / 985 Euro 2	Vario512/612/614/810/812/814/815D	D	09	1996	>	09	2013	5 Cyl	**2874cc**	**90kW**	(122ps)
OM 602.989 Euro2	Series UX 100	D	08	1996	>			5 Cyl	**2874cc**	**80kW**	(109ps)

	**11-01609-000** CH 44,750 VD1 0,300 VD2 0,600 B- 16,730 BØ 42,000 TL 71,250 **28,00x70,00**	AP YS AA=22,20 mm	**91-09617-000** 1 2,500 CrP 2 2,000 P 3 3,000 CrP	+0,83/+1,06	Ø 89,000 Ø 89,500	**31-03609-000** **31-03609-050**
	K=91,50 L=156,00 H=4,75 D=94,05	DS			**51-65645-000**	
	K=92,00 L=156,00 H=6,00 D=94,55	DS +0,50			**51-65645-050**	
	K=92,50 L=156,00 H=6,00 D=95,05	DS +1,00			**51-65645-100**	

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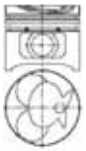
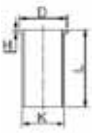
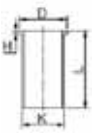
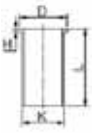
89,000

OM 601.940 / 941	Series 208/307/308/408/508 D 2.3	D	10	1988	>	06	1995	4 Cyl	**2874cc**	**58-60kW**	(79-82ps)
OM 601.940-943	Vito 108 D	D	11	1995	>	07	2003	4 Cyl	**2874cc**	**58-60kW**	(79-82ps)
OM 601.943	Sprinter 208 / 308 / 408 D	D	02	1995	>	03	2000	4 Cyl	**2874cc**	**58-60kW**	(79-82ps)
OM 602.940	Series 209/210/309/310/410 D 2.9	D	01	1994	>			5 Cyl	**2874cc**	**70-72kW**	(95-98ps)
OM 602.940 / 947 / 991 / 997	290 GD (461)	D	04	1992	>	09	1997	5 Cyl	**2874cc**	**70-72kW**	(95-98ps)
OM 602.940 / 947 / 991 / 997	City Bus 2.9	D	01	1994	>			5 Cyl	**2874cc**	**70-72kW**	(95-98ps)
OM 602.940 / 947 / 991 / 997	G 290 D	D	04	1992	>			5 Cyl	**2874cc**	**70-72kW**	(95-98ps)
OM 602.940 / 947 / 991 / 997	MB 100 2.9 D	D	01	1996	>			4 Cyl	**2874cc**	**70-72kW**	(95-98ps)
OM 661	MB 100 2.3 D	D	01	1996	>			4 Cyl	**2874cc**	**58-60kW**	(79-82ps)

	**11-01617-000** CH 44,650 VD1 1,050 VD2 1,250 B- 9,050 TL 74,650 **26,00x62,00**	AP CP	**91-09617-000** 1 2,500 CrP 2 2,000 P 3 3,000 CrP	1,80mm Conta ile +0,84/+1,06 2,00mm Conta ile +1,03/+1,06	Ø 89,000 Ø 89,500 Ø 89,700 Ø 90,000	**31-03617-000** **31-03617-050** **31-03617-070** **31-03617-100**
	K=91,50 L=156,00 H=4,75 D=94,05	DS			**51-65645-000**	
	K=92,00 L=156,00 H=6,00 D=94,55	DS +0,50			**51-65645-050**	
	K=92,50 L=156,00 H=6,00 D=95,05	DS +1,00			**51-65645-100**	

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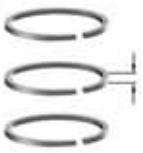
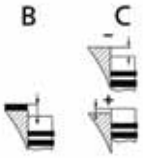
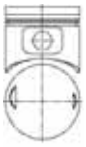



Type

89,000

M 102.920	200 (123)	B	06	1980	>	11	1985	4 Cyl	**1997cc**	**80kW**	(109ps)
M 102.921 / 924	190 2.0 (201)	B	10	1982	>	08	1986	4 Cyl	**1997cc**	**66-72kW**	(90-98ps)
M 102.922	200 (124)	B	01	1985	>	06	1993	4 Cyl	**1997cc**	**72-75kW**	(98-102ps)
M 102.961 / 962	190 E 2.0 (201)	B	10	1982	>	06	1993	4 Cyl	**1997cc**	**83-90kW**	(113-122ps)
M 102.963	200 E (124)	B	06	1985	>	06	1993	4 Cyl	**1997cc**	**87kW**	(118ps)
M 102.964(ITA))	200 GE (Italy) (460)	B	00	1985	>			4 Cyl	**1997cc**	**80kW**	(109ps)



11-01651-000

CH 43,200 *CH 42,900
VD1 1,720 *VD1 1,420
VD2 2,240 *VD2 2,240
TL 79,700 *B- 1,200
*TL 79,400

* For Oversize Piston Dimensions

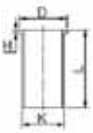
22,00x56,00

CP

91-09652-000

1 1,750 MoP
2 2,000 P
3 3,500 CrP

Ø 89,000 **31-03651-000**
Ø 89,500 **31-03651-050**
Ø 90,000 **31-03651-100**



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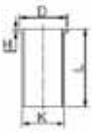
DS

51-65634-000



K=93,00
L=165,00
H=6,00
D=95,95

DS

+1,00

51-65634-100

89,000

M 102.920	200 (123)	B	06	1980	>	11	1985	4 Cyl	**1997cc**	**80kW**	(109ps)
M 102.921	190 2.0 (201)	B	10	1982	>	08	1986	4 Cyl	**1997cc**	**66kW**	(90ps)
M 102.961	190 E 2.0 (201)	B	10	1982	>	06	1993	4 Cyl	**1997cc**	**90kW**	(122ps)

11-01652-000

CH 43,200 *CH 42,900
VD1 1,000 *VD1 0,700
VD2 2,300 *VD2 2,300
BØ 69,800 *BØ 50,500
TL 83,200 *TL 82,900

* For Oversize Piston Dimensions

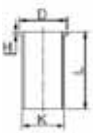
24,00x62,00

CP

91-09652-000

1 1,750 MoP
2 2,000 P
3 3,500 CrP

Ø 89,000 **31-03652-000**
Ø 89,500 **31-03652-050**
Ø 90,000 **31-03652-100**



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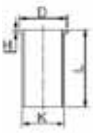
L=165,00
H=4,10
D=94,95

DS

51-65634-000



K=93,00
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H=6,00
D=95,95

DS

+1,00

51-65634-100

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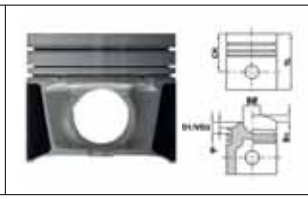
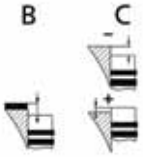
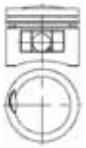
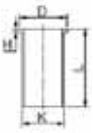
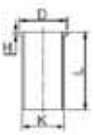
		Type		B C		
						

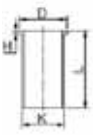
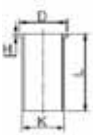
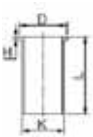
89,000

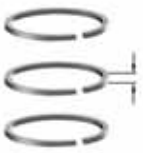
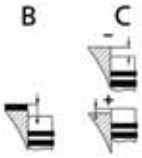
M 102.962	200 TE	B	09	1988	> 12	1989	4 Cyl	**1996cc**	**90kW**	(122ps)
M 102.963	200 E	B	09	1988	> 08	1992	4 Cyl	**1996cc**	**87kW**	(118ps)
M 102E20965	G 200 GE	B	01	1990	> 07	1993	4 Cyl	**1996cc**	**80kW**	(109ps)
M102.961 / 962	190 E 2.0	B	02	1985	> 12	1993	4 Cyl	**1996cc**	**83-90kW**	(113-122ps)

	**11-02691-000** CH 42,380 VD1 2,530 B+ 3,850 TL 74,700 **22,00x56,00**	CP AA=22,50 mm	**91-09652-000** 1 1,750 MoP 2 2,000 P 3 3,500 CrP		Ø 89,000 Ø 89,500 Ø 90,000	**31-04691-000** **31-04691-050** **31-04691-100**
	K=92,00 L=165,00 H=4,10 D=94,95	DS			**51-65634-000**	
	K=93,00 L=165,00 H=6,00 D=95,95	DS +1,00			**51-65634-100**	

89,000

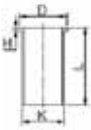
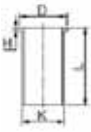
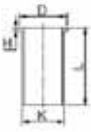
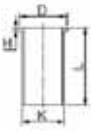
OM 604.910 / 912	C 220 D / E 220 D	D	08	1993	> 05	2002	4 Cyl	**2155cc**	**70kW**	(95ps)

	11-02693-000 CH 43,550 VD1 2,360 B- 4,550 BØ 19,000 TL 73,550 **26,00x55,00**	AP YS	**91-09617-000** 1 2,500 CrP 2 2,000 P 3 3,000 CrP	+0,73/+0,97	Ø 89,000 Ø 89,500 Ø 90,000	**31-04693-000** **31-04693-050** **31-04693-100**
	K=91,50 L=156,00 H=4,75 D=94,05	DS			**51-65645-000**	
	K=92,00 L=156,00 H=6,00 D=94,55	DS +0,50			**51-65645-050**	
	K=92,50 L=156,00 H=6,00 D=95,05	DS +1,00			**51-65645-100**	

		Type		B C		
						

89,000

OM 601.970	V 230 TD	D	04	1996	>	08	2003	4 Cyl	**3449cc**	**72kW** (98ps)
OM 601.970	Viano 110 D 2.3	D	02	1996	>			4 Cyl	**3449cc**	**72kW** (98ps)
OM 601.970	Vito 110 D	D	11	1995	>	07	2003	4 Cyl	**3449cc**	**72kW** (98ps)
OM 603.970 / 972	350 D Turbo (USA) (126)	D	03	1990	>	06	1991	6 Cyl	**3449cc**	**100kW** (136ps)
OM 603.970 / 972	350 GD Turbo (463)	D	09	1991	>	07	1993	6 Cyl	**3449cc**	**100kW** (136ps)
OM 603.970 / 972	G 350 D Turbo	D	09	1991	>			6 Cyl	**3449cc**	**100kW** (136ps)
OM 603.971	300 SD 3.5 Turbo (140)	D	07	1991	>	05	1993	6 Cyl	**3449cc**	**110kW** (150ps)
OM 603.971	S 350 D Turbo	D	06	1993	>	09	1998	6 Cyl	**3449cc**	**110kW** (150ps)

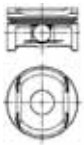
	11-02695-000 CH 44,650 VD1 1,050 B- 9,050 TL 74,650 **28,00x70,00**	AP YS HA AA=22,30 mm	**91-09617-000** 1 2,500 CrP 2 2,000 P 3 3,000 CrP	1,74mm Conta ile +0,83/+1,06 1,97mm Conta ile +1,03/+1,26	Ø 89,000 Ø 89,500 Ø 90,000	**31-04695-000** **31-04695-050** **31-04695-100**
	K=91,50 L=156,00 H=4,75 D=94,05	DS			**51-65645-000**	
	K=92,00 L=156,00 H=6,00 D=94,55	DS +0,50			**51-65645-050**	
	K=92,50 L=156,00 H=6,00 D=95,05	DS +1,00			**51-65645-100**	
	K=91,50 L=156,00 H=4,75 D=96,50	DS			**51-65745-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		

89,900

M112.912-917	C 240 / CLK 240	B	00	1995	>		6 Cyl	**3199cc**	**150kW**	(240ps)
M112.912-917	E280	B	00	1995	>		6 Cyl	**3199cc**	**150kW**	(240ps)
M112.940-949	CLK/ML/SL/G/SLK/E 430 4-matic	B	00	1997	>	00 2007	6 Cyl	**3199cc**	**158-165kW**	(215-224ps)
M113 .940-944	E 430 / CLK 430 /S 430 (W220)	B	00	1997	>	00 2007	6 Cyl	**3199cc**	**158-165kW**	(215-224ps)



11-02682-000
CH 31,300
VD1 1,820
B- 2,420
BØ 65,820
TL 53,300

22,00x52,00

HA

AA=20,30 mm

91-09616-000
1 1,500 NT St
2 1,750 P
3 3,000 NT St

Ø 89,900

31-04682-000

89,910

M 104.992	300 E 3.2 (124)	B	09	1992	>	06 1993	6 Cyl	**3199cc**	**162kW**	(220ps)
M 104.992	320 E (124)	B	09	1992	>	06 1993	6 Cyl	**3199cc**	**162kW**	(220ps)
M 104.992 / 995 / 996	E / G 320	B	07	1993	>	03 1998	6 Cyl	**3199cc**	**162-170kW**	(220-231ps)
M104.990 / 991 / 994	S 300 / S 320 / SL 320	B	03	1991	>	09 1998	6 Cyl	**3199cc**	**170kW**	(231ps)
M104.991 / 994 / 995	300 SE 3.2 (140)	B	03	1991	>	05 1993	6 Cyl	**3199cc**	**170kW**	(231ps)

11-01647-000
CH 31,100 *CH 30,800
B- 1,200 *B- 1,200
BØ 74,500 *BØ 74,500
TL 54,600 *TL 54,600

* For Oversize Piston Dimensions

22,00x56,00

AA=22,20 mm

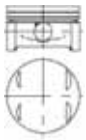
98-09647-000
1 1,500 NT St
2 1,750 P
3 3,000 CrP

Ø 89,910 **38-03647-000**
Ø 90,160 **38-03647-025**
Ø 90,410 **38-03647-050**
Ø 90,910 **38-03647-100**

Chrysler, Daewoo ve Mercedes-Benz ile Ortak Motor

89,910

M 111.940	200 E (124)	B	06	1991	>	06 1993	4 Cyl	**1998cc**	**100kW**	(136ps)
M 111.940 / 942	E 200	B	07	1993	>	03 1998	4 Cyl	**1998cc**	**100kW**	(136ps)
M 111.941	C 200	B	01	1994	>	01 2001	4 Cyl	**1998cc**	**100kW**	(136ps)
M 111.941	CLK 200	B	06	1997	>	06 2002	4 Cyl	**1998cc**	**100kW**	(136ps)
M 111.942	E 200 T	B	06	1996	>	08 2000	4 Cyl	**1998cc**	**100kW**	(136ps)



11-02690-000
CH 31,650
VD1 1,400
TL 55,150

22,00x56,00

98-09647-000
1 1,500 NT St
2 1,750 P
3 3,000 CrP

Ø 89,910
Ø 90,910

38-04690-000

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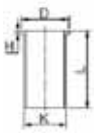
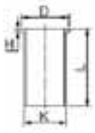
90,900

OM 616.911	240 D (115)	D	07	1973	>	01	1977	4 Cyl	**2399cc**	**38kW**	(52ps)
OM 616.911 / 912 / 936 / 940 / 961 / 963	G 240 D	D	03	1979	>	08	1987	4 Cyl	**2399cc**	**53kW**	(72ps)
OM 616.912	240 D (115 / 123)	D	07	1973	>	01	1977	4 Cyl	**2399cc**	**48-53kW**	(65-72ps)
OM 616.936 / 938 / 940	240 GD (460 / 461)	D	03	1979	>	08	1987	4 Cyl	**2399cc**	**53kW**	(72ps)
OM 616.961 (ESP) / 963	MB 100/120/130/150/160/170/180	D	09	1987	>	01	1996	4 Cyl	**2399cc**	**53-56kW**	(72-76ps)
OM 617.912 / 931 / 932 / 933 / 913	300 D (123)	D	02	1976	>	11	1985	5 Cyl	**2399cc**	**59-65kW**	(80-88ps)
OM 617.912 / 931 / 932 / 933 / 913	G 300 D	D	12	1979	>	12	1991	5 Cyl	**2399cc**	**65kW**	(88ps)
OM 617.912 / 931 / 932 / 933 / 913	Series 209 / 210 / 309 / 409 D 3.0	D	09	1982	>	01	1989	5 Cyl	**2399cc**	**65kW**	(88ps)
OM 617.931 / 932 / 933	300 GD (460 / 461)	D	12	1979	>	08	1999	5 Cyl	**2399cc**	**65kW**	(88ps)

	11-01633-000 CH 48,350 VD1 1,150 B- 8,850 TL 81,850 **26,00x74,00**	AP CP	**91-09633-000** 1 3,000 MoP 2 2,000 MoP 3 4,000 CrP	+0,50/+0,90	Ø 90,900 Ø 91,400 Ø 91,900	**31-03633-000** **31-03633-050** **31-03633-100**
	K=94,06 L=158,40 H=4,70 D=96,00	DS			**51-65633-000**	
	K=94,50 L=158,40 H=6,00 D=96,50	DS +0,50			**51-65633-050**	
	K=95,06 L=158,40 H=6,00 D=97,00	DS +1,00			**51-65633-100**	

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91,000

OM 616.911 / 912 / 916 / 919 / 934	240 D (115)	D	07	1973	>	01	1977	4 Cyl	**2399cc**	**38kW**	(52ps)
OM 616.911 / 912 / 916 / 919 / 934	240 D (123)	D	02	1976	>	11	1985	4 Cyl	**2399cc**	**48-53kW**	(65-72ps)
OM 616.911 / 912 / 916 / 919 / 934	240 D (USA) (115)	D	01	1974	>	09	1976	4 Cyl	**2399cc**	**48kW**	(65ps)
OM 616.911 / 912 / 916 / 919 / 934	O 309 D 2.4	D	01	1975	>	08	1982	4 Cyl	**2399cc**	**53kW**	(72ps)
OM 616.911 / 912 / 916 / 919 / 934	Series 207 D 2.4	D	05	1977	>	01	1989	4 Cyl	**2399cc**	**38kW**	(52ps)
OM 616.911 / 912 / 916 / 919 / 934	Series 307 D 2.4	D	05	1977	>	01	1989	4 Cyl	**2399cc**	**38kW**	(52ps)
OM 616.911 / 912 / 916 / 919 / 934	Series 308 D 2.4	D	05	1977	>	08	1982	4 Cyl	**2399cc**	**48kW**	(65ps)
OM 616.911 / 912 / 916 / 919 / 934	Series 406 D 2.4	D	01	1975	>	12	1988	4 Cyl	**2399cc**	**53kW**	(72ps)
OM 616.911 / 912 / 916 / 919 / 934	Series 407 D 2.4	D	01	1975	>	12	1988	4 Cyl	**2399cc**	**53kW**	(72ps)
OM 617.910	240 D 3.0 (115)	D	08	1974	>	11	1976	5 Cyl	**2399cc**	**59kW**	(80ps)
OM 617.910 / 912	300 D (115 / 123)	D	08	1973	>	01	1977	5 Cyl	**2399cc**	**59-65kW**	(80-88ps)

11-01634-000
CH 48,350
VD1 1,050
B- 6,270
BØ 60,000
TL 81,850

26,00x74,00

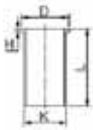
AP

CP

91-09634-000
1 3,000 CrP
2 2,000 P
3 4,000 CrP

+0,50/+0,90

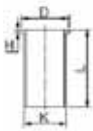
Ø 91,000 **31-03634-000**
Ø 91,500 **31-03634-050**
Ø 92,000 **31-03634-100**



K=94,06
L=158,40
H=4,70
D=96,00

DS

51-65633-000

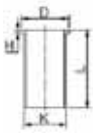


K=94,50
L=158,40
H=6,00
D=96,50

DS

+0,50

51-65633-050



K=95,06
L=158,40
H=6,00
D=97,00

DS

+1,00

51-65633-100

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92,900

M 272.966	SL 350	B	01	2006	>	01	2012	6 Cyl	**3498cc**	**232kW**	(315ps)
M 272.978	Viano 3.5	B	00	2007	>			6 Cyl	**3498cc**	**170kW**	(231ps)
M 272.978 / 979	Vito 126	B	09	2007	>			6 Cyl	**3498cc**	**170-190kW**	(231-258ps)
M 272.979	Sprinter 224 / 322 / 324 / 424 / 524	B	06	2006	>			6 Cyl	**3498cc**	**190kW**	(258ps)
M 272.988	E 350 CGI	B	01	2009	>			6 Cyl	**3498cc**	**215kW**	(292ps)
M272.960 / 964 / 970 / 972 / 977 / 991	C / CLC / CLK / E / GLK 350	B	03	2009	>			6 Cyl	**3498cc**	**200kW**	(272ps)
M273.922 / 924	S 450	B	10	2005	>	06	2013	8 Cyl	**3498cc**	**250kW**	(340ps)

11-02689-000
CH 30,430
VD1 1,550
TL 50,830

22,00x52,00

HA

91-09632-000
1 1,500 NT St
2 1,750 P
3 2,500 NtP St

Ø 92,900
Ø 93,150

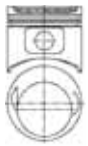
31-04689-000
31-04689-025

99-09632-000
1 1,500 NT St
2 1,750 P
3 2,500 NT St

39-04689-000

95,500

M 102.980	230 E (123)	B	04	1980	>	12	1985	4 Cyl	**2299cc**	**100kW**	(136ps)
M 102.981	230 GE (460)	B	04	1982	>	08	1993	4 Cyl	**2299cc**	**92kW**	(125ps)



11-01635-000

CH 43,200	*CH 42,900
VD1 1,500	*VD1 1,500
VD2 1,850	*VD2 1,850
B- 2,300	*B- 2,300
BØ 69,800	*BØ 69,800
TL 83,200	*TL 82,900

* For Oversize Piston Dimensions

24,00x62,00

CP

91-09635-000
1 1,750 MoP
2 2,000 P
3 3,500 CrP

+0,50/+0,90

Ø 95,500
Ø 96,000
Ø 96,500

31-03635-000
31-03635-050
31-03635-100

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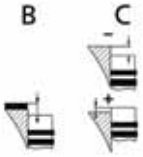
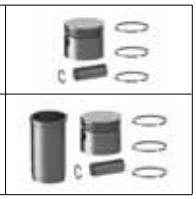
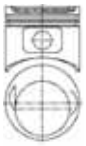




Type

95,500

M 102.979	G 230	B	02	1993	>		4 Cyl	**2299cc**	**92kW**	(125ps)
M 102.979 / 981 / 987	230 GE (460 / 461)	B	04	1982	>	08 1993	4 Cyl	**2299cc**	**92kW**	(125ps)
M 102.980 / 982	230 E (123 / 124)	B	04	1980	>	12 1985	4 Cyl	**2299cc**	**94-100kW**	(128-136ps)
M 102.985	190 E 2.3 (201)	B	09	1983	>	08 1993	4 Cyl	**2299cc**	**97-100kW**	(132-136ps)
M 102.987	G 230	B	04	1982	>	08 1992	4 Cyl	**2299cc**	**92kW**	(125ps)



11-01636-000

CH 43,200 *CH 42,900
VD1 1,750 *VD1 1,450
VD2 3,460 * VD2 3,460
B- 1,850 *B- 2,900
TL 78,700 *TL 78,400

* For Oversize Piston Dimensions

22,00x56,00

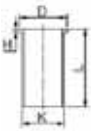
CP

AA=22,20 mm

91-09635-000

1 1,750 MoP
2 2,000 P
3 3,500 CrP

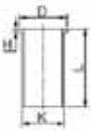
Ø 95,500 **31-03636-000**
Ø 96,000 **31-03636-050**
Ø 96,500 **31-03636-100**



K=101,00
L=215,00
H=4,50
D=103,00

DS

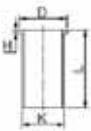
51-65614-000



K=98,50
L=148,00
H=4,70
D=100,30

DS

51-65629-000



K=99,50
L=148,00
H=5,95
D=100,54

DS

+1,00

51-65629-100

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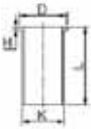
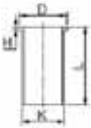
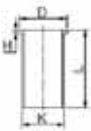
		Type		B C		
73,000						
1ND-TV (65 kW)	Mini (R50) OneD 1.4 16V	D	06 2003 >	4 Cyl	**1364cc** **65kW**	(88ps)
1ND-TV / D-4D	Mini (R50) OneD 1.4 16V	D	06 2003 > 08 2006	4 Cyl	**1364cc** **65kW**	(88ps)
11-02789-000 CH 41,940 VD1 0,900 VD2 0,900 B- 14,700 BØ 36,500 TL 64,350 **27,00x59,30** Mini (Bmw) ve Toyota ile Ortak Motor		AP YS HA	**98-09081-000** 1 1,500 NT St 2 1,500 P 3 3,000 NT St	1 kertik 0,375/0,425mm 2 kertik 0,425/0,475mm 3 kertik 0,475/0,525mm 4 kertik 0,525/0,575mm 5 kertik 0,575/0,625mm	Ø 73,000 Ø 73,500	**38-04789-000** **38-04789-050**
75,000						
9HZ	Clubman (R55) CooperD 1.6 16V	D	10 2007 >	4 Cyl	**1560cc** **80kW**	(109ps)
9HZ	Mini(R56) CooperD 1.6 16V	D	03 2007 >	4 Cyl	**1560cc** **80kW**	(109ps)
9HZ	Mini(R56) OneD 1.6 16V	D	06 2009 >	4 Cyl	**1560cc** **80kW**	(109ps)
DV6TED 4 Euro4	Clubman (R55) CooperD 1.6 16V	D	10 2007 >	4 Cyl	**1560cc** **80kW**	(109ps)
DV6TED 4 Euro4	Mini(R56) CooperD 1.6 16V	D	03 2007 >	4 Cyl	**1560cc** **80kW**	(109ps)
11-02498-000 CH 41,700 VD1 1,200 B- 13,250 BØ 41,800 TL 65,300 **26,00x61,00** Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor		AP YS	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP	1,25 Conta ile (+0,53/+0,63) 1,30 Conta ile (+0,63/+0,68) 1,35 Conta ile (+0,68/+0,73)	Ø 75,000 Ø 75,500 Ø 75,600	**31-04498-000** **31-04498-050** **31-04498-060**
	K=78,05 L=142,00 H=5,00 D=79,45	DS			**51-65826-000**	
	K=78,55 L=142,00 H=6,00 D=79,95	DS +0,50			**51-65826-050**	
	K=79,05 L=142,00 H=6,00 D=80,45	DS +1,00			**51-65826-100**	

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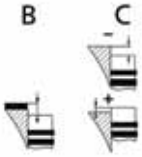
		Type		B C		
						

75,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

11-02498-001
CH 41,500
VD1 1,200
B- 13,250
BØ 41,800
TL 65,100

26,00x61,00

AP
YS

CH -0,20 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000
Ø 75,500

31-04498-001
31-04498-051

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

75,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

11-02498-002
CH 41,300
VD1 1,200
B- 13,250
BØ 41,800
TL 64,900

26,00x61,00

AP
YS

CH -0,40 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000
Ø 75,500

31-04498-002
31-04498-052

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

75,000

Strok Boyu 0,60mm Kisa Piston / Stroke Lenght 0,60mm Shorter > (ps)

11-02498-003
CH 41,100
VD1 1,200
B- 13,250
BØ 41,800
TL 64,700

26,00x61,00

AP
YS

CH -0,60 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000

31-04498-003

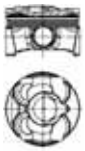
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

77,010

N18 B16 A	COOPER 1.6 / S 1.6			11	2014	>		(122-218ps)



11-02595-000
CH 28,500
VD1 3,300
B- 3,500
BØ 34,700
TL 51,200

20,00x48,00

Bmw ve Mini (Bmw) ile Ortak Motor

HA

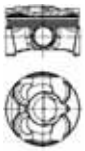
91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 77,010
Ø 77,260
Ø 77,510

31-04595-000
31-04595-025
31-04595-050

77,010

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter		B	11	2014	>	4 Cyl	**1598cc**	**90-160kW**	(122-218ps)



11-02595-001
CH 28,300
VD1 3,300
B- 3,500
BØ 34,700
TL 51,200

20,00x48,00

Bmw ve Mini (Bmw) ile Ortak Motor

HA

CH -0,20 mm

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 77,010

31-04595-001

69,600

A 13 DTE	Astra J 1,3 CDTI		D	00	2009	>	4 Cyl	**1248cc**	**70kW**	(95ps)
A 13 DTE	Corsa D 1.3 CDTI		D	00	2009	>	4 Cyl	**1248cc**	**70kW**	(95ps)
A 13 DTE	Meriva 1.3 CDTI		D	00	2009	>	4 Cyl	**1248cc**	**70kW**	(95ps)

11-02198-000
CH 40,430
VD1 0,904
B- 12,700
BØ 37,000
TL 62,430

23,00x56,70

Fiat / Iveco ve Opel ile Ortak Motor

AP
YS

91-09797-000
1 1,500 CkP
2 1,500 P
3 2,000 CrP

0,67/0,77mm conta ile (+0,028/+0,127)
0,77/0,87mm conta ile (+0,127/+0,227)
0,87/0,97mm conta ile (+0,228/+0,327)

Ø 69,600
Ø 70,000

31-04198-000
31-04198-040

69,600

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter					>	Cyl	**cc**	**kW**	(ps)

11-02198-001
CH 40,230
VD1 0,904
B- 12,700
BØ 37,000
TL 62,230

23,00x56,70

Fiat / Iveco ve Opel ile Ortak Motor

AP
YS

CH -0,20 mm

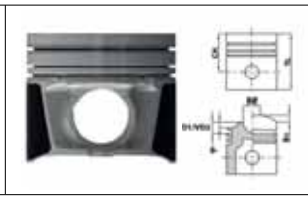
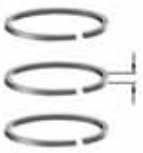
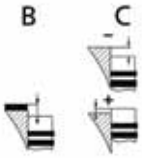
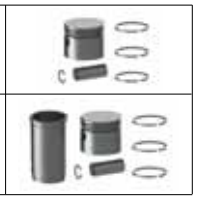
91-09797-000
1 1,500 CkP
2 1,500 P
3 2,000 CrP

0,67/0,77mm conta ile (+0,028/+0,127)
0,77/0,87mm conta ile (+0,127/+0,227)
0,87/0,97mm conta ile (+0,228/+0,327)

Ø 69,600
Ø 70,000

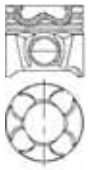
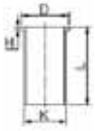
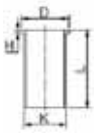
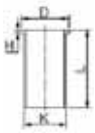
31-04198-001
31-04198-041

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

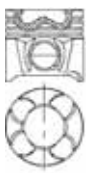
69,600

Z 13 DT Euro 4	Agila A 1.3 CDTI 16V	09 2003	> 09 2007		(69ps)
Z 13 DT Euro 4	Combo 1.3 CDTi 16V	09 2004	>		(69ps)
Z 13 DT Euro 4	Tigra B 1.3 CDTi 16V	12 2004	>		(69ps)
Z 13 DT Euro 4 / Y 13 DT	Corsa C 1.3 CDTi 16V	09 2003	>		(69ps)
Z 13 DT Euro 4 / Y 13 DT	Meriva A 1.3 CDTi 16V	09 2003	>		(69ps)

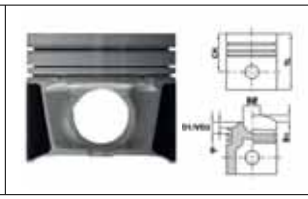
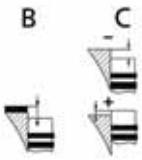
	**11-02282-000** CH 40,430 VD1 1,000 B- 12,400 BØ 37,000 TL 63,430 **23,00x56,70** Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor	AP	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm Conta ile (+0,02/+0,13) 0,77/0,87mm Conta ile (+0,13/+0,23) 0,87/0,97mm Conta ile (+0,23/+0,33)	Ø 69,600 Ø 70,000 Ø 70,200 Ø 70,400 Ø 70,600	**31-04282-000** **31-04282-040** **31-04282-060** **31-04282-080** **31-04282-100**
	K=72,50 L=142,00 H=5,10 D=74,00	DS			**51-65451-000**	
	K=73,00 L=142,00 H=5,20 D=74,50	DS +0,50			**51-65451-050**	
	K=73,50 L=142,00 H=5,20 D=75,00	DS +1,00			**51-65451-100**	

69,600

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>	Cyl	**cc**	**kW** (ps)

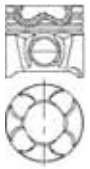
	**11-02282-001** CH 40,230 VD1 1,000 B- 12,400 BØ 37,000 TL 63,230 **23,00x56,70** Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor	AP CH -0,20 mm	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	Ø 69,600 Ø 70,000 Ø 70,200		**31-04282-001** **31-04282-041** **31-04282-061**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

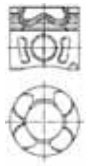
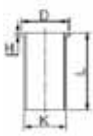
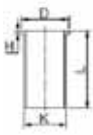
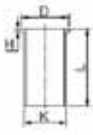
69,600

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

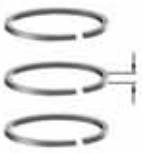
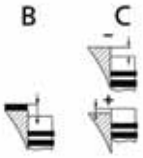
	**11-02282-002** CH 40,030 VD1 1,000 B- 12,400 BØ 37,000 TL 63,030 **23,00x56,70**	AP CH -0,40 mm	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St		Ø 69,600 Ø 70,000 Ø 70,200	**31-04282-002** **31-04282-042** **31-04282-062**
	Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor					

69,600

Z13DTH Euro4	Astra H 1.3 CDTi 16V	04 2005 >		(90ps)
Z13DTH Euro4	Corsa D 1.3 CDTI 16V	07 2006 >		(90ps)
Z13DTH Euro4	Zafira B 1.3 CDTI 16V	04 2005 >		(90ps)

	**11-02289-000** CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43 **23,00x56,70**	AP YS	**91-09282-000** 1 2,000 CK 2 1,500 P 3 2,000 NT St	0,67/0,77mm conta ile (+0,028/+0,127) 0,77/0,87mm conta ile (+0,127/+0,227) 0,87/0,97mm conta ile (+0,228/+0,327)	Ø 69,600 Ø 70,000	**31-04289-000** **31-04289-040**
	Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor					
	K=72,50 L=142,00 H=5,10 D=74,00	DS			**51-65451-000**	
	K=73,00 L=142,00 H=5,20 D=74,50	DS +0,50			**51-65451-050**	
	K=73,50 L=142,00 H=5,20 D=75,00	DS +1,00			**51-65451-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

69,600

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

11-02289-001
CH 40,230
VD1 0,904
B- 12,400
BØ 38,000
TL 62,230

23,00x56,70

AP
YS

CH -0,20 mm

91-09282-000
1 2,000 CK
2 1,500 P
3 2,000 NT St

0,67/0,77mm conta ile (+0,028/+0,127)
0,77/0,87mm conta ile (+0,127/+0,227)
0,87/0,97mm conta ile (+0,228/+0,327)

Ø 69,600
Ø 70,000

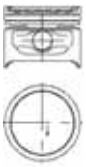
31-04289-001
31-04289-041

Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor

72,000

12 NZ / C 12 NZ — Combo 1.2i — 06 2000 > 10 2001 — (45ps)

12 NZ / C 12 NZ — Corsa A / B 1.2i — 09 1994 > 08 2000 — (45ps)



11-02212-000
CH 32,050
B- 4,100
TL 58,050

18,00x55,00

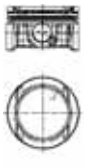
91-09812-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP

Ø 72,000
Ø 72,500
Ø 73,000

31-04212-000
31-04212-050
31-04212-100

72,500

A 14 NET TURBO ECOTEC — ASTRA J — B — 00 2011 > — 4 Cyl — **1364cc** **103kW** — (140ps)



11-02195-000
CH 25,870
VD1 2,000
B- 2,900
BØ 58,500
TL 44,180

18,00x48,00

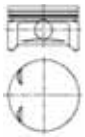
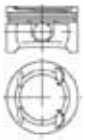
HA

91-09796-000
1 1,200 NT St
2 1,200 P
3 2,000 CrP St

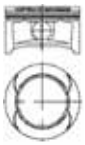
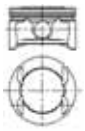
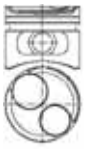
Ø 72,500
Ø 73,000

31-04195-000
31-04195-050

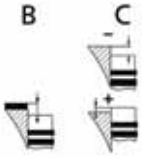
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
72,500						
X / Z 12 XE	Astra G 1.2i 16V	B	09 1997 > 09 2003	4 Cyl	**1199cc** **48-55kW**	(65-75ps)
X / Z 12 XE	Corsa B / C 1.2i 16V	B	09 1997 > 08 2000	4 Cyl	**1199cc** **48-55kW**	(65-75ps)
Z 12 XE	Agila A 1.2i 16V	B	09 1999 > 06 2004	4 Cyl	**1199cc** **55kW**	(75ps)
	**11-02213-000** CH 24,000 VD1 1,250 TL 45,000 **18,00x51,00**		**91-09223-000** 1 1,200 CR St 2 1,500 P 3 2,000 CrP St		Ø 72,500 Ø 73,000 Ø 73,500	**31-04213-000** **31-04213-050** **31-04213-100**
73,400						
A14XER	Adam 1.4 EcoFLEX	B	01 2013 >	4 Cyl	**1364cc** **74kW**	(101ps)
A14XER	Astra J 1.4i 16V	B	11 2009 >	4 Cyl	**1364cc** **74kW**	(101ps)
A14XER	Corsa D 1.4i 16V	B	01 2010 >	4 Cyl	**1364cc** **74kW**	(101ps)
A14XER	Meriva B 1.4i 16V	B	05 2010 >	4 Cyl	**1364cc** **74kW**	(101ps)
	**11-01913-000** CH 25,850 VD1 3,600 B- 1,600 BØ 52,500 TL 46,800 **18,00x53,00** Chevrolet ve Opel ile Ortak Motor	HA	**91-09222-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 73,400 Ø 73,900	**31-03913-000** **31-03913-050**
73,400						
A 12 XER Euro5	Corsa D 1.2i 16V	B	06 2010 >	4 Cyl	**1229cc** **63kW**	(86ps)
	11-02196-000 CH 26,900 VD1 1,350 VD2 3,950 B- 0,650 BØ 54,600 TL 74,900 **18,00x53,00** Chevrolet ve Opel ile Ortak Motor	HA	**91-09222-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 73,400 Ø 73,900	**31-04196-000** **31-04196-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
73,400						
Z 14 XEP Euro 4	Astra G / H 1.4i 16V	B	09 2003 > 03 2004	4 Cyl	**1364cc**	**66kW** (90ps)
Z 14 XEP Euro 4	Combo 1.4i 16V	B	07 2004 > 08 2011	4 Cyl	**1364cc**	**66kW** (90ps)
Z 14 XEP Euro 4	Corsa C / D 1.4i 16V	B	09 2003 >	4 Cyl	**1364cc**	**66kW** (90ps)
Z 14 XEP Euro 4	Meriva A 1.4i 16V	B	09 2004 >	4 Cyl	**1364cc**	**66kW** (90ps)
Z 14 XEP Euro 4	Tigra B 1.4i 16V	B	09 2004 >	4 Cyl	**1364cc**	**66kW** (90ps)
	**11-02214-000** CH 23,000 VD1 1,330 VD2 1,350 B- 1,250 BØ 53,500 TL 44,000 **18,00x51,00**		**91-09222-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 73,400 Ø 73,900 Ø 74,400	**31-04214-000** **31-04214-050** **31-04214-100**
73,400						
Z12XEP	Agila A 1.2i 16V / Twinport 16V	B	07 2004 > 09 2007	4 Cyl	**1229cc**	**59kW** (80ps)
Z12XEP	Astra H 1.2i 16V	B	03 2004 >	4 Cyl	**1229cc**	**59kW** (80ps)
Z12XEP	Corsa C / D 1.2i 16V	B	09 2000 >	4 Cyl	**1229cc**	**59kW** (80ps)
	**11-02222-000** CH 24,000 VD1 1,460 VD2 1,490 B+ 0,530 TL 45,530 **18,00x51,00**		**91-09222-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 73,400 Ø 73,900 Ø 74,400	**31-04222-000** **31-04222-050** **31-04222-100**
75,000						
13 S	Ascona B / C 1.3	B	03 1979 > 08 1981	4 Cyl	**1297cc**	**50-55kW** (68-75ps)
13 S	Manta B 1.3	B	08 1979 > 08 1986	4 Cyl	**1297cc**	**50-55kW** (68-75ps)
13 S / C13 N	Kadett D 1.3 / E 1.3 / E 1.3i	B	08 1979 > 08 1984	4 Cyl	**1297cc**	**44-55kW** (60-75ps)
13 S / SB / C13 N	Corsa A 1.3 / 1.3i	B	09 1982 > 02 1993	4 Cyl	**1297cc**	**44-55kW** (60-75ps)
	**11-01801-000** CH 35,800 *CH 35,500 VD1 5,400 *VD1 5,400 B- 3,600 *B- 3,600 BØ 63,000 *BØ 63,000 TL 62,400 *TL 62,100 * For Oversize Piston Dimensions **20,00x65,00**	CP	**91-09801-000** 1 1,500 CrP 2 1,500 P 3 4,000 CrP		Ø 75,000 Ø 75,500 Ø 75,750 Ø 76,000	**31-03801-000** **31-03801-050** **31-03801-075** **31-03801-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
						

76,020

15 TD	Corsa A / B 1.5 TD	D	03	1988	>	08	1994	4 Cyl	**1488cc**	**49-53kW**	(67-72ps)
15 TD	Kadett E 1.5 TD	D	09	1988	>	08	1991	4 Cyl	**1488cc**	**49-53kW**	(67-72ps)

11-02391-000
CH 41,700
VD1 0,350
B- 1,600
TL 71,700

25,00x60,00

AP
CP

99-09976-000
1 2,000 CrP St
2 1,500 P
3 3,000 CrP

Ø 76,020 **39-04391-000**
Ø 76,520 **39-04391-050**
Ø 77,020 **39-04391-100**

Isuzu ve Opel ile Ortak Motor

77,600

X14XE	Astra F / G 1.4i 16V	B	04	1996	>	02	1998	4 Cyl	**1389cc**	**66kW**	(90ps)
X14XE	Combo 1.4i 16V	B	08	1999	>	10	2001	4 Cyl	**1389cc**	**66kW**	(90ps)
X14XE	Corsa B 1.4i 16V	B	09	1994	>	08	1999	4 Cyl	**1389cc**	**66kW**	(90ps)
X14XE	Tigra 1.4i 16V	B	09	1994	>	08	1999	4 Cyl	**1389cc**	**66kW**	(90ps)

11-01808-000
CH 32,050
B+ 1,000
B- 0,570
TL 57,050

18,00x55,00

CP

91-09808-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP

Ø 77,600 **31-03808-000**
Ø 78,100 **31-03808-050**
Ø 78,600 **31-03808-100**

77,600

14 NV	Corsa A 1.4	B	01	1990	>	08	1994	4 Cyl	**1398cc**	**53-55kW**	(72-75ps)
14 NV	Vectra A 1.4	B	09	1988	>	09	1992	4 Cyl	**1398cc**	**53-55kW**	(72-75ps)
C / X 14 NZ / 14 NV	Astra F 1.4 / F 1.4i	B	09	1991	>	09	1993	4 Cyl	**1398cc**	**40-55kW**	(54-75ps)
C 14 NZ	Combo 1.4i	B	09	1994	>	10	2001	4 Cyl	**1398cc**	**40-44kW**	(54-60ps)
C 14 NZ / 14 NV	Kadett E 1.4 / E 1.4i	B	01	1990	>	08	1991	4 Cyl	**1398cc**	**40-55kW**	(54-75ps)
C 14 NZ / X 14 NZ / X 14 SZ	Corsa A / B 1.4i	B	01	1990	>	08	1994	4 Cyl	**1398cc**	**40-44kW**	(54-60ps)
X 14 NZ	Astra Classic 1.4i	B	09	1997	>	08	2000	4 Cyl	**1398cc**	**44kW**	(60ps)
X 14 NZ	Combo 1.4i	B	09	1994	>	10	2001	4 Cyl	**1398cc**	**44kW**	(60ps)
X 14 SZ	Combo 1.4i	B	09	1996	>	10	2001	4 Cyl	**1398cc**	**44kW**	(60ps)

11-01819-000
CH 32,050
B- 3,300
TL 52,500

18,00x55,00

91-09808-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP

Ø 77,600 **31-03819-000**
Ø 78,100 **31-03819-050**
Ø 78,600 **31-03819-100**

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77,600

Z14XE	Astra G 1.4i 16V	B	09	2000	>	09	2004	4 Cyl	**1389cc**	**66kW**	(90ps)
Z14XE	Corsa C 1.4i 16V	B	09	2000	>	08	2003	4 Cyl	**1389cc**	**66kW**	(90ps)

11-02230-000
CH 31,300
B- 2,450
TL 55,750

18,00x55,00

91-09230-000

1	1,200	CR	St
2	1,500	P	
3	2,000	CrP	St

Ø 77,600 — **31-04230-000**
Ø 78,100 — **31-04230-050**
Ø 78,600 — **31-04230-100**

99-09230-000

1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

39-04230-000
39-04230-050
39-04230-100

77,800

1.2 S / NV / ST	Corsa A 1.2	B	09	1982	>	08	1994	4 Cyl	**1196cc**	**37-43kW**	(50-58ps)
1.2 S / NV / ST	Kadett D 1.2	B	08	1982	>	08	1984	4 Cyl	**1196cc**	**37-43kW**	(50-58ps)
1.2 S / NV / ST	Kadett E 1.2	B	09	1984	>	08	1988	4 Cyl	**1196cc**	**37-43kW**	(50-58ps)

11-02203-000
CH 35,800 *CH 35,500
VD1 4,200 *VD1 4,200
B- 4,400 *B- 4,400
TL 65,000 *TL 64,700

* For Oversize Piston Dimensions

20,00x65,00

CP

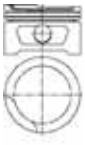
91-09203-000

1	1,500	CR	
2	1,500	P	
3	4,000	CrP	St

Ø 77,800 — **31-04203-000**
Ø 78,300 — **31-04203-050**
Ø 78,800 — **31-04203-100**

79,000

C / E 16 NZ	Kadett E 1.6i	B	09	1986	>	08	1991	4 Cyl	**1598cc**	**55-60kW**	(75-82ps)
C 16 NZ	Corsa A 1.6i	B	04	1989	>	03	1993	4 Cyl	**1598cc**	**55kW**	(75ps)
C 16 NZ / E 16 NZ	Ascona C 1.6i	B	09	1986	>	08	1988	4 Cyl	**1598cc**	**55-60kW**	(75-82ps)
C 16 NZ / E 16 NZ / X 16 SZ / X 16 SZR	Vectra A / B 1.6i	B	09	1988	>	08	1995	4 Cyl	**1598cc**	**52-60kW**	(71-82ps)
C 16 NZ / X 16 SZ / X 16 SZR	Astra F / G 1.6i	B	09	1991	>	08	1994	4 Cyl	**1598cc**	**55kW**	(75ps)
X 16 SZR	Astra Classic 1.6i	B	09	1997	>	08	2000	4 Cyl	**1598cc**	**55kW**	(75ps)



11-01803-000
CH 28,000 *CH 27,700
B+ 0,400 *B+ 0,400
B- 2,700 *B- 2,700
BØ 64,000 *TL 48,100
TL 48,400 BØ 64,000

* For Oversize Piston Dimensions

18,00x55,00

CP

91-09803-000

1	1,200	CrP	
2	1,500	P	
3	3,000	CrP	

Ø 79,000 — **31-03803-000**
Ø 79,500 — **31-03803-050**
Ø 80,000 — **31-03803-100**

98-09803-000

1	1,200	CrP	St
2	1,500	P	
3	3,000	CrP	St

38-03803-000
38-03803-050
38-03803-100

99-09803-000

1	1,200	CrP	St
2	1,500	P	
3	3,000	CrP	St

39-03803-000
39-03803-050
39-03803-100

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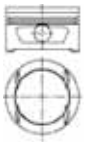
		Type		B C		
79,000						
X16XE	Corsa B 1.6i 16V	B	09 1994 > 08 1999	4 Cyl	**1598cc**	**78kW** (106ps)
X16XE	Tigra 1.6i 16V	B	09 1994 > 08 1999	4 Cyl	**1598cc**	**78kW** (106ps)
X16XEL	Astra Classic 1.6i 16V	B	09 1997 > 08 2000	4 Cyl	**1598cc**	**74kW** (100ps)
X16XEL	Astra F / G 1.6i 16V	B	08 1994 > 09 1998	4 Cyl	**1598cc**	**74kW** (100ps)
X16XEL	Vectra B 1.6i 16V	B	09 1995 > 08 2000	4 Cyl	**1598cc**	**74kW** (100ps)
X16XEL	Zafira A 1.6i 16V	B	03 1999 > 08 1999	4 Cyl	**1598cc**	**74kW** (100ps)



11-01817-000

CH 28,000	*CH 27,700
VD1 1,900	*VD1 1,900
VD2 2,150	*VD2 2,150
B- 0,800	*B- 0,800
BØ 60,000	*BØ 60,000
TL 48,000	*TL 47,700

* For Oversize Piston Dimensions

18,00x55,00

CP

91-09817-000

1	1,200	CrP	
2	1,500	P	
3	2,500	CrP	St

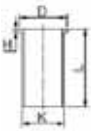
Ø 79,000
Ø 79,500
Ø 80,000

31-03817-000
31-03817-050
31-03817-100

98-09817-000

1	1,200	CrP	St
2	1,500	P	
3	2,500	CrP	St

38-03817-000
38-03817-050
38-03817-100

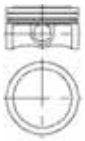


K=82,00
L=130,00
H=5,00
D=83,50

DS

51-65776-000

79,000						
A16 / Z16 LER / LEL Euro 5	Corsa D 1.6i Turbo 16V	B	12 2009 >	4 Cyl	**1598cc**	**110-141kW** (150-192ps)
A16 LET Euro 5	Astra H / J 1.6i Turbo 16V	B	02 2007 > 11 2010	4 Cyl	**1598cc**	**132kW** (180ps)
A16 LET Euro 5	Insignia 1.6i Turbo 16V	B	11 2008 >	4 Cyl	**1598cc**	**132kW** (180ps)



11-01912-000
CH 27,500
B+ 1,750
BØ 66,500
TL 44,500

19,00x53,00

Opel ve Saab ile Ortak Motor

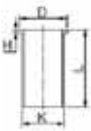
HA

91-09216-000

1	1,200	NT	St
2	1,200	P	
3	2,000	NtP	St

Ø 79,000
Ø 79,500

31-03912-000
31-03912-050



K=82,00
L=125,00
H=5,00
D=83,50

DS

51-65777-000

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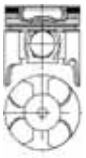
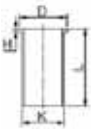
		Type		B C		
79,000						
1.2S	Ascona B 1.2	B	09 1975 > 02 1979	4 Cyl	**1196cc**	**40-44kW** (54-60ps)
1.2S	Kadett D 1.2	B	08 1979 > 08 1984	4 Cyl	**1196cc**	**40-44kW** (54-60ps)
1.2S	Kadett E 1.2	B	09 1984 > 08 1988	4 Cyl	**1196cc**	**40-44kW** (54-60ps)
1.2S	Manta B 1.2	B	09 1975 > 08 1981	4 Cyl	**1196cc**	**40-44kW** (54-60ps)
	11-02204-000 CH 38,000 VD1 2,000 TL 76,000 **20,00x65,00**	CP	**91-09813-000** 1 2,000 CrP 2 2,000 P 3 5,000 P		Ø 79,000 Ø 79,500 Ø 80,000	**31-04204-000** **31-04204-050** **31-04204-100**
79,000						
Y 17 DT	Astra G 1.7 DTI 16V	D	09 2000 > 01 2004	4 Cyl	**1686cc**	**55kW** (75ps)
Y 17 DT	Combo 1.7 DTI 16V	D	10 2001 > 08 2004	4 Cyl	**1686cc**	**55kW** (75ps)
Y 17 DT	Corsa C 1.7 DTI 16V	D	09 2000 >	4 Cyl	**1686cc**	**55kW** (75ps)
Y 17 DT	Meriva A 1.7 DTI 16V	D	03 2003 >	4 Cyl	**1686cc**	**55kW** (75ps)
Y 17 DTL	Combo 1.7 DI 16V	D	10 2001 > 08 2004	4 Cyl	**1686cc**	**48kW** (65ps)
Y 17 DTL	Corsa C 1.7 DI 16V	D	09 2000 > 09 2003	4 Cyl	**1686cc**	**48kW** (65ps)
	**11-02210-000** CH 39,750 VD1 1,100 B- 14,000 BØ 38,700 TL 84,000 **27,00x64,00** Honda ve Opel ile Ortak Motor	AP	**91-09419-000** 1 2,000 CR 2 1,500 P 3 3,000 CrP	1,45mm Conta ile (+0,63/+0,70) 1,50mm Conta ile (+0,70/+0,76) 1,55mm Conta ile (+0,76/+0,83)	Ø 79,000 Ø 79,500	**31-04210-000** **31-04210-050**
	K=82,00 L=137,00 H=5,00 D=83,50	DS			**51-65814-000**	

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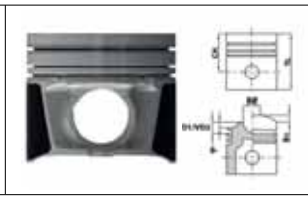
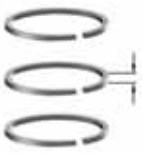
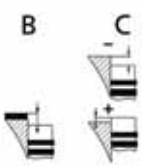
OPEL

		Type				

79,000

Y / Z 16 XE	Vectra B / C 1.6i 16V	B	09	1999	>	09	2002	4 Cyl	**1598cc**	**74kW**	(101ps)
Z 16 SE	Astra G 1.6i / 1.6i 16V	B	09	2000	>	06	2004	4 Cyl	**1598cc**	**62-74kW**	(84-100ps)
Z 16 SE	Combo 1.6i	B	10	2001	>	08	2004	4 Cyl	**1598cc**	**62kW**	(84ps)
Z 16 SE	Corsa C 1.6i	B	09	2001	>	11	2006	4 Cyl	**1598cc**	**62kW**	(84ps)
Z 16 SE / XE	Astra G 1.6i / 1.6i 16V	B	09	2000	>	06	2004	4 Cyl	**1598cc**	**62-74kW**	(84-100ps)
Z 16 SE / XE	Meriva A 1.6i / 1.6i 16V	B	03	2003	>			4 Cyl	**1598cc**	**62-74kW**	(84-100ps)
Z 16 XE	Astra G 1.6i / 1.6i 16V	B	09	2000	>	06	2004	4 Cyl	**1598cc**	**62-74kW**	(84-100ps)
Z 16 XE	Zafira A 1.6i 16V	B	09	1999	>	07	2005	4 Cyl	**1598cc**	**74kW**	(100ps)

11-02215-000
CH 27,200
TL 50,200

91-09817-000
1 1,200 CrP
2 1,500 P
3 2,500 CrP St

Ø 79,000
Ø 79,500
Ø 80,000

31-04215-000
31-04215-050
31-04215-100

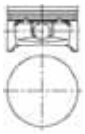
18,00x55,00

98-09817-000
1 1,200 CrP St
2 1,500 P
3 2,500 CrP St

38-04215-000
38-04215-050
38-04215-100

79,000

Z 16 XEP	Astra G / H 1.6i 16V	B	03	2003	>	06	2004	4 Cyl	**1598cc**	**76kW**	(104ps)
Z 16 XEP	Meriva A 1.6i 16V	B	02	2006	>			4 Cyl	**1598cc**	**76kW**	(104ps)
Z 16 XEP	Vectra C 1.6i 16V	B	09	2001	>			4 Cyl	**1598cc**	**76kW**	(104ps)
Z 16 XEP	Zafira B 1.6i 16V	B	07	2005	>			4 Cyl	**1598cc**	**76kW**	(104ps)



11-02216-000
CH 26,730
TL 48,730

91-09216-000
1 1,200 NT St
2 1,200 P
3 2,000 NtP St

Ø 79,000
Ø 79,500
Ø 80,000

31-04216-000
31-04216-050
31-04216-100

18,00x52,00

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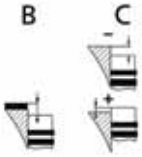
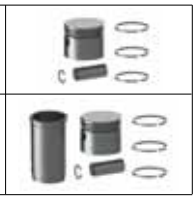
		Type		B C		
						

79,000

X17TD 1.7TD	Vectra B 1.7 TD		D	09	1995	>	09	1996	4 Cyl	**1686cc**	**60kW** (82ps)

11-02227-000
CH 39,700
VD1 0,400
B- 1,200
TL 79,800

25,00x60,00

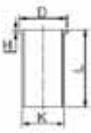
AP
CP

91-09419-000
1 2,000 CR
2 1,500 P
3 3,000 CrP

STD Conta ile (+0,58/+0,64) 1 Delik
Conta ile (+0,65/+0,70) 2 Delik Conta ile (+0,70/+0,78)

Ø 79,000
Ø 79,500
Ø 80,000

31-04227-000
31-04227-050
31-04227-100



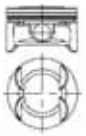
K=82,00
L=151,00
H=5,00
D=83,50

DS

51-65775-000

79,000

A16XER / Z16XER	Astra J 1.6i 16V		B	11	2009	>			4 Cyl	**1598cc**	**85kW** (115ps)
A16XER / Z16XER	Insignia 1.6i 16V		B	11	2008	>			4 Cyl	**1598cc**	**85kW** (115ps)
A16XER / Z16XER	Zafira B 1.6i 16V		B	12	2007	>			4 Cyl	**1598cc**	**85kW** (115ps)



11-02231-000
CH 26,800
B+ 1,250
TL 48,750

19,00x46,00

HA

91-09216-000
1 1,200 NT St
2 1,200 P
3 2,000 NtP St

Ø 79,000
Ø 79,500
Ø 80,000

31-04231-000
31-04231-050
31-04231-100

79,000

Z17DTH	Astra H 1.7 CDTI 16V		D	03	2004	>	03	2004	4 Cyl	**1686cc**	**74kW** (100ps)
Z17DTH	Combo 1.7 CDTi 16V		D	09	2004	>	09	2004	4 Cyl	**1686cc**	**74kW** (100ps)
Z17DTH	Corsa C 1.7 CDTi 16V		D	06	2003	>	06	2003	4 Cyl	**1686cc**	**74kW** (100ps)
Z17DTH	Meriva A 1.7 CDTI 16V		D	03	2003	>	03	2003	4 Cyl	**1686cc**	**74kW** (100ps)

11-02233-000
CH 39,750
VD1 1,300
B- 14,000
BØ 41,800
TL 64,750

27,00x64,00

AP
YS

91-09822-000
1 2,000 CrP St
2 1,500 P
3 3,000 CrP

Ø 79,000
Ø 79,500
Ø 80,000

31-04233-000
31-04233-025

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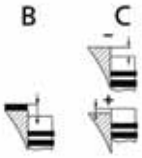
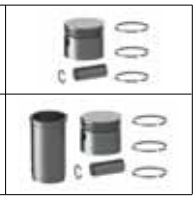
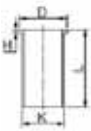
		Type		B C		
					

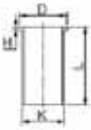
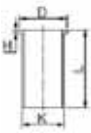
79,000

17TD	Astra F 1.7 TD	D	12	1991	>	02	1998	4 Cyl	**1700cc**	**60kW**	(82ps)
17TD	Kadett E 1.7 TD	D	02	1990	>	08	1991	4 Cyl	**1700cc**	**60kW**	(82ps)
17TD	Vectra A 1.7 TD	D	03	1990	>	08	1995	4 Cyl	**1700cc**	**60kW**	(82ps)

	11-02419-000 CH 39,700 VD1 1,200 B- 1,900 TL 69,600 **27,00x63,50** Isuzu, Mazda ve Opel ile Ortak Motor	AP CP	**91-09419-000** 1 2,000 CR 2 1,500 P 3 3,000 CrP		Ø 79,000 Ø 79,500 Ø 80,000	**31-04419-000** **31-04419-050** **31-04419-100**
	K=82,00 L=137,00 H=5,00 D=83,50	DS			**51-65814-000**	

80,000

16 D	Kadett D 1.6 D	D	03	1982	>	08	1984	4 Cyl	**1598cc**	**40kW**	(54ps)
16 D / DA	Ascona C 1.6 D	D	03	1982	>	08	1988	4 Cyl	**1598cc**	**40kW**	(54ps)
16 D / DA	Kadett E 1.6 D	D	09	1984	>	01	1989	4 Cyl	**1598cc**	**40kW**	(54ps)

	11-01800-000 CH 44,950 B- 1,500 TL 76,950 **26,00x65,00**	AP CP	**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP	1,30mm Conta ile 0/+0,75 1,40mm Conta ile +0,75/+0,85 1,50mm Conta ile +0,85/+1,05	Ø 80,000 Ø 80,500 Ø 81,000	**31-03800-000** **31-03800-050** **31-03800-100**
	K=83,05 L=143,50 H=4,50 D=84,95	DS			**51-65800-000**	
	K=84,05 L=143,50 H=5,00 D=85,95	DS +1,00			**51-65800-100**	

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		Type		B	C		

80,000

1.6 S	Ascona A / B / C 1.6	B	10	1970	>	08	1975	4 Cyl	**1598cc**	**55-60kW**	(75-82ps)
1.6 S	Kadett C / E 1.6	B	08	1973	>	07	1979	4 Cyl	**1598cc**	**55-60kW**	(75-82ps)
1.6 S	Manta A / B 1.6	B	09	1970	>	08	1975	4 Cyl	**1598cc**	**55-60kW**	(75-82ps)
1.6 SH	Ascona C 1.6	B	09	1981	>	08	1986	4 Cyl	**1598cc**	**66kW**	(90ps)
1.6 SH	Kadett D 1.6	B	09	1981	>	08	1984	4 Cyl	**1598cc**	**66kW**	(90ps)

11-01810-000
CH 40,000 *CH 39,700
B- 3,200 *B- 3,200
BØ 65,200 *BØ 65,200
TL 72,000 *TL 71,700

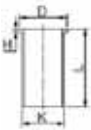
* For Oversize Piston Dimensions

23,00x70,00

CP

91-09810-000
1 1,500 CrP
2 1,750 P
3 4,000 CrP

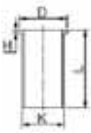
Ø 80,000 **31-03810-000**
Ø 80,500 **31-03810-050**
Ø 80,750 **31-03810-075**
Ø 81,000 **31-03810-100**



K=83,05
L=143,50
H=4,50
D=84,95

DS

51-65800-000



K=84,05
L=143,50
H=5,00
D=85,95

DS
+1,00

51-65800-100

80,000

F9Q 760 / 762	Vivaro 1.9 DTI	D	03	2001	>			4 Cyl	**1900cc**	**74kW**	(101ps)
F9Q 762	Vivaro 1.9 DI	D	03	2001	>			4 Cyl	**1900cc**	**60kW**	(82ps)
F9Q 770 / 772 / 774	Movano 1.9 DTI	D	01	1999	>	10	2001	4 Cyl	**1900cc**	**58-60kW**	(79-82ps)

11-02165-000
CH 47,100
VD1 0,750
B- 17,700
BØ 38,000
TL 77,000

28,00x60,00

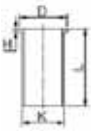
AP

91-09165-000
1 2,500 Mo
2 2,000
3 3,000 CR

(+0,60/+0,80)

Ø 80,000 **31-04165-000**
Ø 80,250 **31-04165-025**
Ø 80,500 **31-04165-050**

Nissan, Opel ve Renault ile Ortak Motor



K=83,05
L=154,00
H=5,00
D=85,00

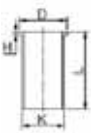
DS

51-65903-000

K=83,50
L=154,00
H=5,50
D=85,50

DS
+0,50

51-65903-050

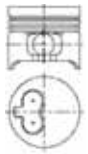
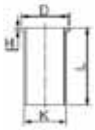
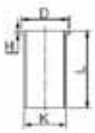


K=84,05
L=154,00
H=6,00
D=86,00

DS
+1,00

51-65903-100

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
80,000						
F8Q 606 Arena 1.9 D		D 03 1998 >		4 Cyl	**1870cc 44-48 kW**	(60-65 ps)
	**11-02170-000** CH 42,500 B- 0,700 TL 70,500 **24,00x63,00**	AP CP	**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP		Ø 80,000 Ø 80,500 Ø 80,800	**31-04170-000** **31-04170-050** **31-04170-080**
Dacia, Opel ve Renault ile Ortak Motor						
	K=83,05 L=154,00 H=5,00 D=85,00	DS			**51-65903-000**	
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50			**51-65903-050**	
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00			**51-65903-100**	
80,000						
X25TD Omega B 2.5 TD		D 08 1996 > 02 2001		6 Cyl	**2497cc 96kW**	(131ps)
	11-02613-000 CH 39,450 VD1 2,500 TL 62,450 **27,00x63,00**	AP YS CP	**91-09613-000** 1 3,000 CrP 2 1,750 P 3 3,000 CrP	1. Conta ile 1,55mm +0,64/+0,78 2. Conta ile 1,68mm +0,79/+0,91 3. Conta ile 1,87mm +0,92/+1,08	Ø 80,000 Ø 80,250 Ø 80,500	**31-04613-000** **31-04613-025** **31-04613-050**
Bmw, Opel ve Rover ile Ortak Motor						

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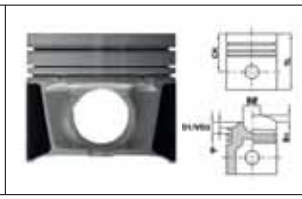
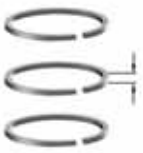
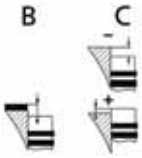
		Type		B	C		
							

80,500

X 18 XE1 / Z 18 XE	Zafira A 1.8i 16V	B	03	1999	>	08	2000	4 Cyl	**1796cc**	**85-92kW**	(116-125ps)
X 18 XE1 / Z 18 XE-XEL	Vectra B 1.8i 16V	B	09	1998	>	08	2000	4 Cyl	**1796cc**	**81-92kW**	(110-125ps)
X 18 XE1 / Z 18 XEL	Astra G 1.8i 16V	B	09	1997	>	08	2000	4 Cyl	**1796cc**	**81-85kW**	(110-116ps)
Z 18 XE	Astra G / H 1.8i 16V	B	09	2000	>	06	2004	4 Cyl	**1796cc**	**90-92kW**	(122-125ps)
Z 18 XE	Corsa C 1.8i 16V	B	09	2001	>			4 Cyl	**1796cc**	**90-92kW**	(122-125ps)
Z 18 XE	Meriva A 1.8i 16V	B	03	2003	>			4 Cyl	**1796cc**	**90-92kW**	(122-125ps)
Z 18 XE	Signum 1.8i 16V	B	05	2003	>			4 Cyl	**1796cc**	**90-92kW**	(122-125ps)
Z 18 XE	Tigra B 1.8i 16V	B	09	2004	>			4 Cyl	**1796cc**	**90-92kW**	(122-125ps)
Z 18 XE-XEL	Vectra C 1.8i 16V	B	09	2001	>			4 Cyl	**1796cc**	**81-92kW**	(110-125ps)

11-02219-000
CH 24,100
TL 44,700

18,00x55,00

Opel ve Saab ile Ortak Motor

91-09219-000

1	1,200	CR	St
2	1,200	P	
3	2,000	CrP	St

Ø 80,500	**31-04219-000**
Ø 81,000	**31-04219-050**
Ø 81,500	**31-04219-100**

80,500

Z18XER	Astra H 1.8i 16V	B	03	2004	>	03	2004	4 Cyl	**1796cc**	**103kW**	(140ps)
Z18XER	Signum 1.8i 16V	B	10	2005	>	10	2005	4 Cyl	**1796cc**	**103kW**	(140ps)
Z18XER	Vectra C 1.8i 16V	B	01	2006	>	01	2006	4 Cyl	**1796cc**	**103kW**	(140ps)
Z18XER	Zafira B 1.8i 16V	B	03	2005	>	03	2005	4 Cyl	**1796cc**	**103kW**	(140ps)

11-02229-000
CH 26,100
VD1 2,150
B- 0,700
TL 45,100

19,00x49,84

HA

91-09219-000

1	1,200	CR	St
2	1,200	P	
3	2,000	CrP	St

Ø 80,500	**31-04229-000**
Ø 81,000	**31-04229-050**
Ø 81,500	**31-04229-100**

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		Type		B	C		

81,600

X25XE	Calibra 2.5i 24V	B	04	1993	> 03	1997	6 Cyl	**2498 cc**	**125kW**	(170ps)
X25XE	Omega B 2.5i 24V	B	04	1994	> 11	2000	6 Cyl	**2498 cc**	**125kW**	(170ps)
X25XE	Vectra B 2.5i 24V	B	09	1995	> 09	2000	6 Cyl	**2498 cc**	**125kW**	(170ps)
X25XE	Vectra B 500 2.5i 24V	B	05	1998	> 09	2000	6 Cyl	**2498 cc**	**125kW**	(170ps)

11-02218-000
CH 30,450
VD1 0,630
B+ 2,000
TL 51,050

21,00x56,00

91-09218-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP St

Ø 81,600
Ø 82,100
Ø 82,600

31-04218-000
31-04218-050
31-04218-100

Opel ve Saab ile Ortak Motor

81,600

C 18 XE	Astra F 1.8i 16V	B	09	1993	> 02	1998	4 Cyl	**1796cc**	**92kW**	(125ps)
C 18 XEL / X 18 XE	Astra F 1.8i 16V	B	09	1994	> 02	1998	4 Cyl	**1796cc**	**85kW**	(116ps)
X 18 XE	Vectra B 1.8i 16V	B	09	1995	> 08	2000	4 Cyl	**1796cc**	**85kW**	(116ps)

11-02223-000
CH 30,400
VD1 1,790
B- 1,840
BØ 50,800
TL 50,400

21,00x56,00

91-09218-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP St

Ø 81,600
Ø 82,100
Ø 82,600

31-04223-000
31-04223-050
31-04223-100

82,000

Z 19 DT / DTL	Astra H 1.9 CDTi	D	04	2004	>		4 Cyl	**1910cc**	**74-88kW**	(100-120ps)
Z 19 DT / DTL	Signum 1.9 CDTi	D	03	2004	>		4 Cyl	**1910cc**	**74-88kW**	(100-120ps)
Z 19 DT / DTL	Vectra C 1.9 CDTi	D	03	2004	>		4 Cyl	**1910cc**	**74-88kW**	(100-120ps)
Z 19 DT / DTL	Zafira B 1.9 CDTI	D	03	2005	>		4 Cyl	**1910cc**	**74-88kW**	(100-120ps)

11-02281-000
CH 46,500
VD1 0,500
B- 17,500
BØ 37,500
TL 72,500

26,00x61,00

AP
PDB
AA=22,35 mm

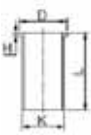
91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

0,77-0,87mm Conta ile (+0,014/+0,104)
0,87-0,97mm Conta ile (+0,105/+0,205)
0,97-1,07mm Conta ile (+0,236/+0,294)

Ø 82,000
Ø 82,400
Ø 82,600

31-04281-000
31-04281-040
31-04281-060

Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor



K=85,00
L=155,00
H=5,00
D=86,00

DS

51-65268-000

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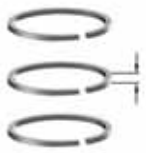
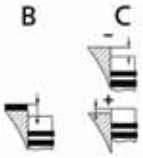



Type

82,000

Z 19 DTH Euro4	Astra H / Vectra C 1.9 CDTI		04	2004	>			(150ps)
Z 19 DTJ	Astra H		06	2003	>	10	2010	(120ps)

11-02293-000
CH 46,500
VD1 0,400
VD2 0,600
B- 15,400
BØ 41,500
TL 73,500

26,00x61,00

AP
YS

PDB

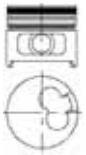
91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

Ø 82,000 **31-04293-000**
Ø 82,400 **31-04293-040**
Ø 82,600 **31-04293-060**

Alfa Romeo ve Opel ile Ortak Motor

82,500

17 D / DR	Astra F 1.7 D	D	12	1991	>	08	1994	4 Cyl	**1700cc**	**42-44kW**	(57-60ps)
17 D / DR	Kadett E 1.7 D	D	02	1989	>	08	1991	4 Cyl	**1700cc**	**42-44kW**	(57-60ps)
17 D / DR	Vectra A 1.7 D	D	10	1988	>	08	1995	4 Cyl	**1700cc**	**42-44kW**	(57-60ps)
X 17 DTL	Astra F 1.7 TD	D	09	1994	>	02	1998	4 Cyl	**1700cc**	**50kW**	(68ps)
X 17 DTL	Astra G 1.7 TD	D	03	1998	>	08	2000	4 Cyl	**1700cc**	**50kW**	(68ps)



11-01799-000
CH 44,950
B- 1,600
TL 72,950

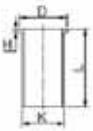
26,00x65,00

AP
HA
CP

91-09807-000
1 2,000 CrP
2 2,000 P
3 3,000 CrP

1,30mm conta ile (0/+0,75) 1,40mm conta ile (+0,75/+0,85) 1,50mm conta ile (+0,85/+1,05)

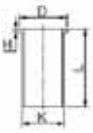
Ø 82,500 **31-03799-000**
Ø 83,000 **31-03799-050**
Ø 83,500 **31-03799-100**



K=85,58
L=143,50
H=4,55
D=87,40

DS

51-65802-000



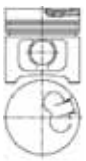
K=86,08
L=143,50
H=5,00
D=87,90

DS
+0,50

51-65802-050

82,500

3799 000 Hardanodized Kaplamasiz Olani	/ 3799 000 Uncoated Hardanodized				>			Cyl	**cc**	**kW**	(ps)



11-01807-000
CH 44,950
B- 1,600
TL 72,950

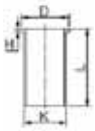
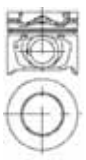
26,00x65,00

AP
CP

91-09807-000
1 2,000 CrP
2 2,000 P
3 3,000 CrP

Ø 82,500 **31-03807-000**
Ø 83,000 **31-03807-050**
Ø 83,500 **31-03807-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
A 20 DT Euro 5 / A 20 DTJ	Insignia 2.0 CDTI 16V	07 2010 >				(131ps)
A 20 DT Euro 5 / A 20 DTJ	Zafira C 2.0 CDTI	10 2011 >				(131ps)
A 20 DTH	Cascada 2.0 CDTi	04 2013 >				(160ps)
A 20 DTH	Insignia 2.0 CDTI 16V	11 2008 >				(160ps)
A 20 DTH	Zafira C 2.0 CDTI	10 2011 >				(160ps)
A 20 DTL Euro 5	Zafira C 2.0 CDTI	10 2011 >				(110ps)
A 20 DTL Euro 5 / A 20 DTC	Insignia 2.0 CDTI 16V	07 2010 >				(110ps)
Z 20 DTJ / A 20 DTH	Astra J 2.0 CDTi 16V	11 2009 >				(131-160ps)
	11-02197-000 CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630 **29,98x67,00** Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor	AP YS	**91-09790-000** 1 1,500 CkP 2 1,500 P 3 2,000 NT St	0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)	Ø 83,000 Ø 83,400	**31-04197-000** **31-04197-040**
			98-09790-000 1 1,500 CrP St 2 1,500 P 3 2,000 CR St			**38-04197-000** **38-04197-040**
			99-09790-000 1 1,500 NtPvD St 2 1,500 P 3 2,000 NT St			**39-04197-000**
	K=86,00 L=155,00 H=5,00 D=87,50	DS			**51-65778-000**	
83,000						
Z20DMH	Antara 2.0 CDTI 16V	D 00 2006 >		4 Cyl	**1998cc** **110kW**	(150ps)
	**11-02200-000** CH 46,350 B- 13,950 BØ 51,900 TL 72,350 **28,00x66,80** Chevrolet ve Opel ile Ortak Motor	AP YS	**91-09880-000** 1 2,000 CkP 2 2,000 CrP 3 3,000 NT St	1 Kertik 0,11/0,23 2 Kertik 0,24/0,33 3 Kertik 0,34/0,42	Ø 83,000 Ø 83,500	**31-04200-000** **31-04200-050**
			99-09880-000 1 2,000 NT St 2 2,000 CrP 3 3,000 CR			**39-04200-000** **39-04200-050**

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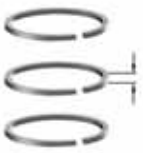
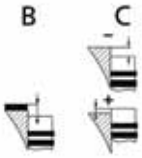
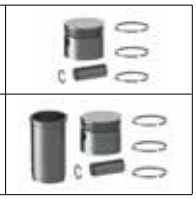
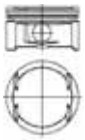
		Type		B C		
						

83,200

Y26SE	Omega B 2.6i 24V	B	09	2000	>	09	2003	6 Cyl	**2597cc**	**125kW**	(170ps)
Y26SE	Vectra B 2.6i 24V	B	09	2000	>	09	2002	6 Cyl	**2597cc**	**125kW**	(170ps)



11-01797-000
CH 29,650
VD1 1,280
B- 0,150
BØ 68,000
TL 49,650

21,00x56,00

91-09225-000
1 1,200 CR St
2 1,500
3 3,000 CrP St

Ø 83,200 **31-03797-000**
Ø 83,700 **31-03797-050**

83,975

X / Y 20 DTL	Astra G 2.0 DI 16V	D	03	1998	>	01	2004	4 Cyl	**1998cc**	**60kW**	(82ps)
X 20 DTL	Vectra B 2.0 DI 16V	D	09	1996	>	08	2000	4 Cyl	**1998cc**	**60kW**	(82ps)
X 20 DTL	Zafira A 2.0 DI 16V	D	03	1999	>	08	2000	4 Cyl	**1998cc**	**60kW**	(82ps)

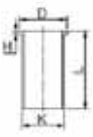
11-02201-000
CH 45,800
VD1 1,000
B- 14,840
BØ 41,000
TL 70,800

29,00x68,00

AP

91-09820-000
1 2,000 CkP
2 1,750 P
3 3,000 CrP

Ø 83,975 **31-04201-000**
Ø 84,475 **31-04201-050**
Ø 84,975 **31-04201-100**



K=87,00
L=160,00
H=4,50
D=90,00

DS

51-65808-000

83,975

X20DTH	Omega B 2.0 DTI 16V	D	09	1997	>	08	2000	4 Cyl	**1998cc**	**74kW**	(101ps)
X20DTH	Vectra B 2.0 DTI 16V	D	09	1997	>	08	2000	4 Cyl	**1998cc**	**kW**	(ps)

11-02217-000
CH 45,800
VD1 1,000
B- 14,610
BØ 41,000
TL 70,800

29,00x68,00

AP

91-09217-000
1 2,500 CkP
2 1,750 P
3 3,000 CrP

STD conta ile (+0,40/+0,50) 1 centik conta ile (+0,51/+0,60) 2 centik conta ile (+0,61/+0,70)

Ø 83,975 **31-04217-000**
Ø 84,475 **31-04217-050**
Ø 84,975 **31-04217-100**

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		Type		B C		

84,000

M9R 780 Euro 4	Vivaro 2.5 CDTI 16V	D	09	2006	>		4 Cyl	**2000cc**	**66-84kW**	(90-114ps)
M9R 780 Euro 4 / 782 / 786 Euro 2/3	Vivaro 2.0 CDTI 16V	D	07	2006	>		4 Cyl	**2000cc**	**66-84kW**	(90-114ps)

11-02182-000
CH 47,916
VD1 0,420
VD2 0,460
B- 14,900
BØ 49,070
TL 76,000

32,00x65,00

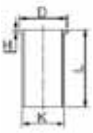
AP
YS

91-09171-000
1 2,500 CK
2 2,000 P
3 2,000 CR

Ø 84,000
Ø 84,500

31-04182-000
31-04182-050

Nissan, Opel ve Renault ile Ortak Motor



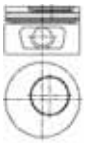
K=88,00
L=169,50
H=5,00
D=91,00

DS

51-65782-000

84,800

18E	Ascona C 1.8i	B	09	1982	>	08	1986	4 Cyl	**1796cc**	**85kW**	(115ps)
18E	Kadett D 1.8i	B	02	1983	>	08	1984	4 Cyl	**1796cc**	**85kW**	(115ps)
18E	Kadett E 1.8i	B	09	1984	>	08	1986	4 Cyl	**1796cc**	**85kW**	(115ps)
C18SEL	Astra F 1.8i 16V	B	09	1995	>	08	1997	4 Cyl	**1796cc**	**85kW**	(116ps)



11-01804-000
CH 33,650 *CH 33,350
B- 4,000 *B- 4,000
BØ 41,800 *BØ 41,800
TL 53,650 *TL 53,350

* For Oversize Piston Dimensions

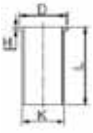
21,00x61,50

CP

91-09804-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP

Ø 84,800
Ø 85,300
Ø 85,800

31-03804-000
31-03804-050
31-03804-100



K=89,00
L=154,50
H=5,50
D=90,00

DS

51-65804-000

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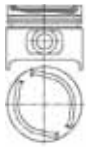
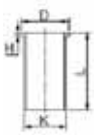
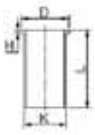
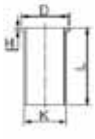
		Type		B C		
84,800						
18S	Manta B 1.8	B	07 1982 > 08 1987	4 Cyl	**1795cc**	**66kW** (90ps)
18S	Rekord E 1.8	B	03 1984 > 08 1986	4 Cyl	**1795cc**	**66kW** (90ps)
	**11-01811-000** CH 40,000 *CH 39,700 B- 2,800 *B- 2,800 BØ 69,000 *BØ 69,000 TL 72,000 *TL 71,700 * For Oversize Piston Dimensions **23,00x70,00**	CP	**91-09811-000** 1 1,500 CrP 2 1,750 P 3 4,000 CrP		Ø 84,800 Ø 85,300 Ø 85,800	**31-03811-000** **31-03811-050** **31-03811-100**
	K=89,00 L=154,50 H=5,50 D=90,00	DS			**51-65804-000**	
84,800						
18E	Ascona C 1.8i	B	09 1982 > 08 1986	4 Cyl	**1796cc**	**85kW** (115ps)
18E	Kadett D 1.8i	B	02 1983 > 08 1984	4 Cyl	**1796cc**	**85kW** (115ps)
18E	Kadett E 1.8i	B	09 1984 > 08 1986	4 Cyl	**1796cc**	**85kW** (115ps)
	11-02209-000 CH 33,650 *CH 33,350 B- 5,000 *B- 5,000 BØ 55,700 *BØ 55,700 TL 53,650 *TL 53,350 * For Oversize Piston Dimensions **21,00x61,50**	CP	**91-09804-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 84,800 Ø 85,300 Ø 85,800	**31-04209-000** **31-04209-050** **31-04209-100**
	K=88,00 L=139,00 H=5,00 D=89,50	DS			**51-65773-000**	
85,010						
M9T 670 / 678 / 690 Euro 4 - 5	Movano B 2.3 CDTI	D	01 2011 >	4 Cyl	**2298cc**	**74-107kW** (101-146ps)
	11-02187-000 CH 48,000 VD1 0,450 B- 16,200 BØ 50,000 TL 76,000 **32,00x65,00** Nissan, Opel ve Renault ile Ortak Motor	AP YS	**91-09173-000** 1 2,500 CkP 2 2,000 CrP 3 2,000 CrP		Ø 85,010 Ø 85,510	**31-04187-000** **31-04187-050**
	K=88,00 L=168,00 H=5,00 D=89,50	DS			**51-65779-000**	

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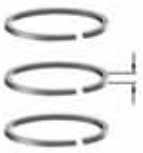
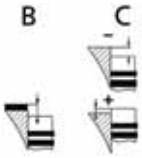
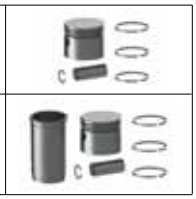
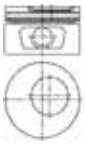
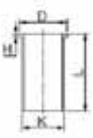
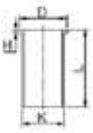
		Type		B C		
						

86,000

C 20 NE	Ascona C 2.0i	B	09	1986	>	08	1988	4 Cyl	**1998cc**	**85kW**	(116ps)
C 20 NE	Astra F 2.0i	B	09	1991	>	09	1998	4 Cyl	**1998cc**	**85kW**	(116ps)
C 20 NE	Calibra 2.0i	B	06	1990	>	03	1997	4 Cyl	**1998cc**	**85kW**	(116ps)
C 20 NE	Frontera A 2.0i	B	09	1991	>	08	1995	4 Cyl	**1998cc**	**85kW**	(116ps)
C 20 NE	Kadett E 2.0i	B	09	1986	>	08	1991	4 Cyl	**1998cc**	**85kW**	(116ps)
C 20 NE	Omega A 2.0i	B	09	1986	>	03	1994	4 Cyl	**1998cc**	**85kW**	(116ps)
C 20 NE	Vectra A 2.0i	B	09	1988	>	08	1995	4 Cyl	**1998cc**	**85kW**	(116ps)

	**11-01805-000** CH 30,400 *CH 30,100 B- 5,000 *B- 5,000 BØ 55,700 *BØ 55,700 TL 50,400 *TL 50,100 * For Oversize Piston Dimensions **21,00x61,50**	CP	**91-09805-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 86,000 **31-03805-000** Ø 86,500 **31-03805-050** Ø 87,000 **31-03805-100**
	Daewoo ve Opel ile Ortak Motor				
	K=90,00 L=138,00 H=5,50 D=91,00	DS			**51-65806-000**
	K=91,00 L=138,00 H=6,00 D=92,00	DS +1,00			**51-65806-100**

86,000

X30XE	Omega B 3.0i 24V	B	04	1994	>	02	2001	6 Cyl	**2962cc**	**148kW**	(201ps)
X30XE	Sintra 3.0i 24V	B	09	1996	>	09	1999	6 Cyl	**2962cc**	**148kW**	(201ps)

	11-01812-000 CH 30,450 *CH 30,150 B- 1,970 *B- 1,970 TL 50,450 *TL 50,150 * For Oversize Piston Dimensions **21,00x61,50**	**91-09805-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 86,000 **31-03812-000** Ø 86,500 **31-03812-050** Ø 87,000 **31-03812-100**

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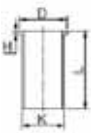
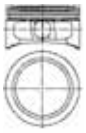
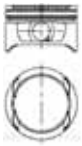
		Type		B C		
86,000						
X20XEV	Astra F / G 2.0i 16V	B	01 1995 > 02 1998	4 Cyl	**1998cc**	**100kW** (136ps)
X20XEV	Calibra 2.0i 16V	B	09 1993 > 08 1999	4 Cyl	**1998cc**	**100kW** (136ps)
X20XEV	Omega B 2.0i 16V	B	09 1993 > 08 1999	4 Cyl	**1998cc**	**100kW** (136ps)
X20XEV	Vectra A / B 2.0i 16V	B	11 1993 > 08 1995	4 Cyl	**1998cc**	**100kW** (136ps)
X20XEV	Zafira A 2.0i 16V	B	02 1999 > 07 2005	4 Cyl	**1998cc**	**100kW** (136ps)
	11-01818-000 CH 30,400 VD1 2,000 B- 3,160 BØ 60,000 TL 55,400 **21,00x61,50**		**91-09805-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP	+0,25/+0,30	Ø 86,000 Ø 86,500 Ø 87,000	**31-03818-000** **31-03818-050** **31-03818-100**
	K=89,00 L=135,00 H=5,00 D=90,00	DS			**51-65774-000**	
86,000						
Z22SE	Astra G 2.2i 16V	B	09 2000 > 06 2004	4 Cyl	**2198cc**	**108kW** (147ps)
Z22SE	Vectra B / C 2.2i 16V	B	09 2000 > 09 2002	4 Cyl	**2198cc**	**108kW** (147ps)
Z22SE	Zafira A 2.2i 16V	B	09 2000 >	4 Cyl	**2198cc**	**108kW** (147ps)
	**11-02221-000** CH 26,750 B- 0,610 BØ 70,000 TL 48,900 **20,00x62,84**	HA	**91-09221-000** 1 1,200 CR St 2 1,500 P 3 2,500 CrP St		Ø 86,000 Ø 86,500 Ø 87,000	**31-04221-000** **31-04221-050** **31-04221-100**
Chevrolet ve Opel ile Ortak Motor						

		Type		B C		
86,000						
C20XE	Astra F 2.0i 16V	B	09 1991 > 02 1998	4 Cyl	**1998cc**	**110kW** (150ps)
C20XE	Calibra 2.0i 16V	B	06 1990 > 03 1997	4 Cyl	**1998cc**	**110kW** (150ps)
C20XE	Kadett E 2.0i 16V	B	03 1988 > 08 1991	4 Cyl	**1998cc**	**110kW** (150ps)
C20XE	Vectra A 2.0i 16V	B	09 1989 > 08 1995	4 Cyl	**1998cc**	**110kW** (150ps)
	**11-02225-000** CH 30,430 VD1 1,930 B- 0,850 BØ 70,000 TL 55,430 **21,00x61,50**		**91-09805-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 86,000 Ø 86,500 Ø 87,000	**31-04225-000** **31-04225-050** **31-04225-100**
Lada ve Opel ile Ortak Motor						
86,000						
C20SEL	Vectra B 2.0i 16V	B	05 1997 > 09 2002	4 Cyl	**2198cc**	**100kW** (136ps)
C22SEL	Vectra B 2.2i 16V	B	06 2000 > 09 2002	4 Cyl	**2198cc**	**106kW** (144ps)
X22SE	Sintra 2.2i 16V	B	09 1996 > 09 1999	4 Cyl	**2198cc**	**100-104kW** (136-141ps)
X22SE / XE	Frontera A / B 2.2i 16V	B	02 1995 > 08 1998	4 Cyl	**2198cc**	**100-104kW** (136-141ps)
X22XE	Sintra 2.2i 16V	B	09 1996 > 09 1999	4 Cyl	**2198cc**	**104kW** (141ps)
	11-02226-000 CH 30,400 VD1 2,680 B- 6,500 BØ 63,180 TL 55,400 **21,00x61,50**		**91-09805-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 86,000 Ø 86,500 Ø 87,000	**31-04226-000** **31-04226-050** **31-04226-100**
Daewoo ve Opel ile Ortak Motor						

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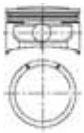
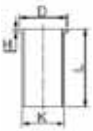
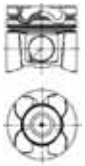
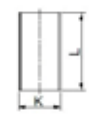
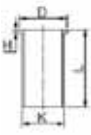
		Type		B C		
86,000						
Y22XE	Omega B 2.2i 16V	B	09 1999 > 09 2003	4 Cyl	**2198cc** **106kW**	(144ps)
Z22XE	Omega B 2.2i 16V	B	09 2000 > 09 2003	4 Cyl	**2198cc** **106kW**	(144ps)
	**11-02228-000** CH 27,600 B- 2,400 TL 55,000 **21,00x61,50**		**91-09221-000** 1 1,200 CR St 2 1,500 P 3 2,500 CrP St		Ø 86,000 Ø 86,100 Ø 86,250 Ø 86,500 Ø 87,000	**31-04228-000** **31-04228-010** **31-04228-025** **31-04228-050** **31-04228-100**
86,000						
A20NHT	Insignia 2.0i Turbo 16V	B	11 2008 >	4 Cyl	**1998cc** **162kW**	(220ps)
	11-02234-000 CH 31,000 VD1 1,750 VD2 2,500 B+ 5,700 B- 8,850 BØ 34,000 TL 59,250 **23,00x54,70**	YS HA	**99-09823-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 86,000 Ø 86,500	**39-04234-000** **39-04234-050**
Opel ve Saab ile Ortak Motor						
87,000						
G9T 720 / 722 / 750	Movano 2.2 DTI 16V	D	09 2000 >	4 Cyl	**2188cc** **66kW**	(90ps)
	11-02180-000 CH 54,530 VD1 1,600 VD2 2,000 B- 17,500 BØ 40,400 TL 84,200 **31,00x65,00**	AP	**91-09170-000** 1 3,000 MoP 2 1,750 P 3 2,500 P	0,06/0,040mm	Ø 87,000 Ø 87,500	**31-04180-000** **31-04180-050**
Nissan, Opel ve Renault ile Ortak Motor						
	K=90,00 L=167,00 H=5,00 D=91,50	DS			**51-65955-000**	

		Type		B C		
87,500						
Z24XE	Antara 2.4i 16V	B	11 2006 >	4 Cyl	**2405cc** **100-103kW**	(136-140ps)
11-02232-000 CH 26,700 B- 6,000 BØ 74,500 TL 50,000 **21,00x61,70** Chevrolet ve Opel ile Ortak Motor			**91-09814-000** 1 1,200 NT St 2 1,500 P 3 2,500 NtP St		Ø 87,500 Ø 88,000	**31-04232-000** **31-04232-050**
88,800						
C26NE	Omega A 2.6i	B	09 1990 > 03 1994	6 Cyl	**2594cc** **110kW**	(150ps)
C26NE	Senator B 2.6i	B	09 1990 > 09 1993	6 Cyl	**2594cc** **110kW**	(150ps)
11-01816-000 CH 39,150 VD1 3,520 TL 69,000 **22,00x65,00**		CP	**91-09816-000** 1 1,500 CR 2 1,500 P 3 3,000 CrP		Ø 88,800 Ø 89,300	**31-03816-000** **31-03816-050**
89,000						
G9U 632 Euro 4	Movano 2.5 CDTI 16V	D	00 2007 >	4 Cyl	**2463cc** **88-107kW**	(120-145ps)
G9U 650 Euro 4	Movano 2.5 CDTI 16V	D	10 2003 >	4 Cyl	**2463cc** **74-88kW**	(101-120ps)
 **11-02153-000** CH 53,075 VD1 1,500 VD2 2,000 B- 16,130 BØ 48,000 TL 83,090 **31,00x65,00** Nissan, Opel ve Renault ile Ortak Motor		AP	**91-09149-000** 1 3,000 CrP 2 1,750 P 3 2,500 CrP		Ø 89,000 Ø 89,500	**31-04153-000** **31-04153-050**
 K=92,50 L=164,00		DS			**51-65152-000**	
 K=92,00 L=168,00 H=5,00 D=93,50		DS			**51-65807-000**	

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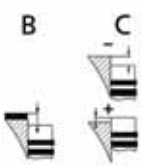
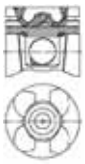
		Type		B C		
					

89,000

G9U 720 / 724 / 750 / 754 Euro 3 — Movano 2.5 CDTI 16V — D 11 2003 > — 4 Cyl — **2463cc** **73-84kW** (99-115ps)

G9U 730 Euro 3 — Vivaro 2.5 CDTI 16V — D 09 2002 > — 4 Cyl — **2463cc** **99kW** (135ps)



11-02159-000
CH 53,030
VD1 1,650
VD2 1,900
B- 17,850
BØ 43,200
TL 83,090

31,00x65,00

AP

91-09159-000
1 2,500 MoP
2 1,750 P
3 2,500 CrP

(+0,35/+0,60)

Ø 89,000
Ø 89,500

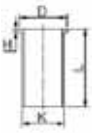
31-04159-000
31-04159-050

Nissan, Opel ve Renault ile Ortak Motor

K=92,50
L=164,00

DS

51-65152-000



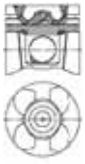
K=92,00
L=168,00
H=5,00
D=93,50

DS

51-65807-000

89,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter — D 09 2002 > — 4 Cyl — **2463cc** **99kW** (135ps)



11-02159-001
CH 52,830
VD1 1,650
VD2 1,900
B- 17,850
BØ 43,200
TL 83,090

31,00x65,00

AP

CH -0,20 mm

91-09159-000
1 2,500 MoP
2 1,750 P
3 2,500 CrP

(+0,35/+0,60)

Ø 89,000
Ø 89,500

31-04159-001
31-04159-051

Nissan, Opel ve Renault ile Ortak Motor

90,000

XD4.90 — Blitz 2.1 D — D 01 1969 > 02 1972 — 4 Cyl — **2112cc** **43-48kW** (59-65ps)

11-01891-000
CH 57,200
B- 2,000
TL 96,350

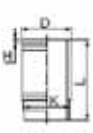
28,00x77,00

91-09891-000
1 2,000 CrP
2 2,000 P
3 2,000 P
4 4,500 CrP

Ø 90,000
Ø 90,500
Ø 91,000

31-03891-000
31-03891-050
31-03891-100

Ford, Opel ve Peugeot ile Ortak Motor



K=96,00
L=173,00
H=7,00
D=106,30

WF

51-05891-000

71-07891-000

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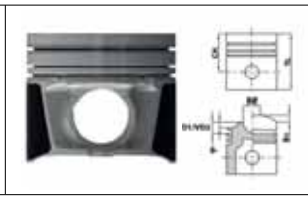
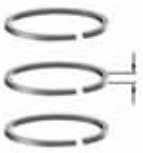
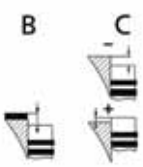
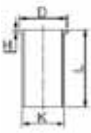
		Type				

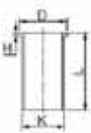
92,000

2.3 D	Omega D 2.3 D	D	01	1974	>	12	1984	4 Cyl	**2260cc**	**48-54kW**	(65-75ps)
2.3 D	Rekord E 2.3 D	D	01	1974	>	12	1984	4 Cyl	**2260cc**	**48-54kW**	(65-75ps)

	11-01798-000 CH 53,650 B- 1,800 TL 86,650 **30,00x74,00**	AP HA CP	**91-09802-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,30mm Conta ile 0/+0,60 1,40mm Conta ile +0,60/+0,70 1,50mm Conta ile +0,70/+0,85	Ø 92,000 Ø 92,500 Ø 93,000	**31-03798-000** **31-03798-050** **31-03798-100**
	K=95,00 L=172,00 H=4,55 D=97,00	DS			**51-65803-000**	

92,000

3798 000 Hardanodized Kaplamasiz Olani	/ 3798 000 Uncoated Hardanodized				>			Cyl	**cc**	**kW**	(ps)

	11-01802-000 CH 53,650 B- 1,800 TL 86,650 **30,00x74,00**	AP CP	**91-09802-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP		Ø 92,000 Ø 92,500 Ø 93,000	**31-03802-000** **31-03802-050** **31-03802-100**
	K=95,00 L=172,00 H=4,55 D=97,00	DS			**51-65803-000**	

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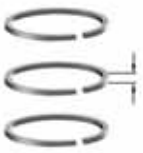
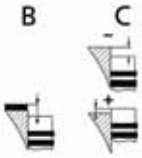
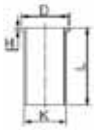
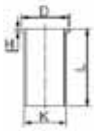
		Type		B C		
						

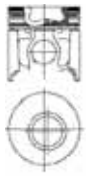
93,000

4JA1 Campo 2.5 D 02 1989 > 08 1997 (73-76ps)

	11-02386-000 CH 47,800 VD1 0,500 B- 14,600 BØ 44,300 TL 87,800 **31,00x76,00**	AP CP	**91-09389-000** 1 2,000 P 2 2,000 P 3 4,000 CrP	1,60mm Conta ile (+0,718/+0,773) 1,65mm Conta ile (+0,773/+0,819) 1,70mm Conta ile (+0,819/+0,874)	Ø 93,000	**31-04386-000**
			99-09389-000 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF			**39-04386-000**
Isuzu ve Opel ile Ortak Motor						
	K=95,00 L=156,30 H=0,90 D=101,00	DF-CR-ST			**51-35720-000**	**71-08386-000** 71-98386-000
	K=95,00 L=181,00 H=0,90 D=101,00	DF-CR-ST			**51-35721-000**	**71-08387-000** 71-98387-000

94,400

S9W 700 / 702 Euro2 Movano 2.8 DTI D 06 1998 > 09 2002 4 Cyl **2798cc 84kW** (114ps)

	**11-01690-000** CH 58,750 B- 19,450 BØ 39,300 TL 96,750 **32,00x78,00**	AP YS	**91-09690-000** 1 3,000 CR 2 2,000 P 3 3,000 CR	1,20mm conta ile (+0,40/+0,50) 1,30mm conta ile (+0,51/+0,60) 1,40mm conta ile (+0,61/+0,70) 1,50mm conta ile (+0,71/+0,80)	Ø 94,400 Ø 94,800 Ø 95,000	**31-03690-000** **31-03690-040** **31-03690-060**
Fiat / Iveco, Opel ve Renault ile Ortak Motor						
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	

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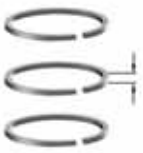
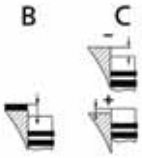
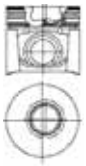
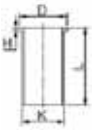
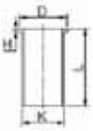
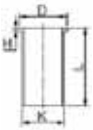
		Type		B C		
					

94,400

S9W 700 / 702 Euro2	Movano 2.8 DTI			D	06	1998	>	09	2002	4 Cyl	**2798cc**	**84kW**	(114ps)		
	**11-01691-000** CH 58,750 B- 19,450 BØ 39,300 TL 87,600 **32,00x72,00**	AP YS	**91-09691-000** 1 2,500 CR 2 2,000 P 3 2,500 CrP								1,20mm Conta ile +0,40/+0,50 1,30mm Conta ile +0,51/+0,60 1,40mm Conta ile +0,61/+0,70		Ø 94,400 Ø 94,800 Ø 95,000		**31-03691-000** **31-03691-040** **31-03691-060**
Fiat / Iveco, Opel ve Renault ile Ortak Motor															
	K=97,50 L=167,00 H=5,10 D=100,90	DS											**51-65453-000**		
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50											**51-65453-050**		

95,000

20 E	Kadett C 2.0i			B	08	1973	>	07	1979	4 Cyl	**1979cc**	**81kW**	(110ps)		
20 S	Manta B 2.0			B	09	1975	>	08	1985	4 Cyl	**1979cc**	**74kW**	(101ps)		
20 S	Rekord D 2.0 / E 2.0			B	09	1975	>	08	1977	4 Cyl	**1979cc**	**74kW**	(101ps)		
20 S / 20 E	Ascona B 2.0 / B 2.0i			B	09	1975	>	08	1981	4 Cyl	**1979cc**	**74-81kW**	(101-110ps)		
	11-01806-000 CH 45,000 B- 3,500 TL 87,000 **23,00x76,00**	CP	**91-09806-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP										Ø 95,000 Ø 95,500 Ø 96,000		**31-03806-000** **31-03806-050** **31-03806-100**
	K=99,05 L=139,00 H=5,00 D=100,00	DS											**51-65805-000**		

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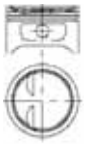
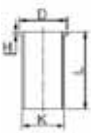
		Type		B C		
95,000						
C24NE	Frontera A 2.4i	B 09 1991 > 08 1995 4 Cyl	**2410cc**	**92kW**	(125ps)	
C24NE	Omega A 2.4i	B 09 1988 > 03 1994 4 Cyl	**2410cc**	**92kW**	(125ps)	
	**11-01815-000** CH 31,500 VD1 4,000 B- 2,250 BØ 81,000 TL 61,000 **22,00x65,00**	CP	**91-09815-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP		Ø 95,000 Ø 95,500 Ø 96,000	**31-03815-000** **31-03815-050** **31-03815-100**
	K=99,05 L=139,00 H=5,00 D=100,00	DS			**51-65805-000**	

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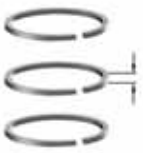
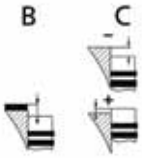
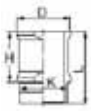
PEUGEOT

		Type		B C		
						

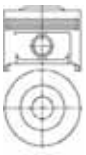
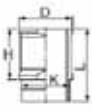
70,000

TU9M	106 1.0i	B	07	1992	>	05	2005	4 Cyl				(45-50ps)
TU9M	205 1.0i	B	07	1992	>	09	1998	4 Cyl				(45-50ps)
TU9M / Z	205 1.0	B	10	1987	>	09	1998	4 Cyl				(42-45ps)

	11-02907-000 CH 33,900 B+ 0,800 TL 58,000 **18,00x53,00**		**91-09207-000** 1 1,500 CR 2 1,500 P 3 3,000 CrP St		Ø 70,000	**31-04907-000**
	K=79,50 L=122,00 H=85,00 D=89,20	WF			**51-05871-000**	**71-08907-000**

72,000

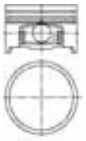
TU1M / Z	205 1.1i	B	07	1989	>	09	1998	4 Cyl	**1124cc**	**40-44kW**	(54-60ps)
TU1M / Z	309 1.1i	B	10	1990	>	12	1993	4 Cyl	**1124cc**	**40-44kW**	(54-60ps)

	**11-02100-000** CH 40,000 B- 2,970 TL 67,000 **19,50x62,00**		**91-09100-000** 1 1,500 CR 2 2,000 3 3,000		Ø 72,000	**31-04100-000**
	K=79,45 L=122,50 H=85,00 D=89,20	WF			**51-05872-000**	**71-08100-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

72,000

TU1 / JP	106 1.1i	B	03	2000	>	05	2005	4 Cyl	**1124cc**	**44kW**	(60ps)	
TU1 / JP	206 1.1i	B	06	1998	>			4 Cyl	**1124cc**	**44kW**	(60ps)	
TU1 / JP	206+ 1.1i	B	03	2009	>			4 Cyl	**1124cc**	**44kW**	(60ps)	
TU1 / JP	Partner 1.1i	B	07	1996	>			4 Cyl	**1124cc**	**44kW**	(60ps)	



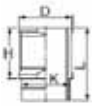
11-02927-000
CH 27,700
B+ 7,120
B- 0,100
TL 47,500

18,00x54,80

91-09927-000
1 1,500 CR
2 1,500 P
3 2,500 NtP St

Ø 72,000
Ø 72,500

31-04927-000
31-04927-050



K=79,45
L=122,50
H=85,00
D=89,20

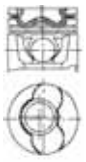
WF

51-05872-000

71-08926-000

73,700

DV4TD	1007 1.4 HDI	D	10	2004	>	03	2008	4 Cyl	**1399cc**	**40-50kW**	(54-68ps)	
DV4TD	107 1.4 HDI	D	06	2005	>	03	2008	4 Cyl	**1399cc**	**40-50kW**	(54-68ps)	
DV4TD	207 1.4 HDi	D	02	2006	>			4 Cyl	**1399cc**	**40-50kW**	(54-68ps)	
DV4TD	307 1.4 HDI	D	01	2002	>	02	2005	4 Cyl	**1399cc**	**40-50kW**	(54-68ps)	
DV4TD / 8 HX	206 1.4 HDi	D	09	2001	>			4 Cyl	**1399cc**	**40-50kW**	(54-68ps)	
DV4TD / DV4TED	Bipper 1.4 HDI	D	02	2008	>			4 Cyl	**1399cc**	**40-50kW**	(54-68ps)	



11-01460-000
CH 42,940
VD1 1,650
B- 14,700
BØ 37,150
TL 65,440

25,00x60,00

Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor

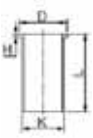
AP

91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

1. Conta ile 1,252mm (+0,618/+0,725) 2. Conta ile 1,303mm (+0,726/+0,775) 3. Conta ile 1,351mm (+0,776/+0,825) 4. Conta ile 1,400mm (+0,83/+0,88) 5. Conta ile 1,450mm (+0,88/+0,98)

Ø 73,700
Ø 74,200

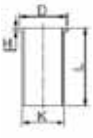
31-03460-000
31-03460-050



K=76,75
L=136,00
H=5,10
D=78,15

DS

51-65819-000



K=77,25
L=136,00
H=6,00
D=78,65

DS

+0,50

51-65819-050

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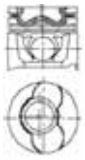
		Type		B C		

73,700

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)



11-01460-001
CH 42,740
VD1 1,650
B- 14,700
BØ 37,150
TL 65,240

25,00x60,00

AP

CH -0,20 mm

91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

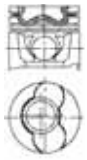
Ø 73,700
Ø 74,200

31-03460-001
31-03460-051

Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor

73,700

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)



11-01460-002
CH 42,540
VD1 1,650
B- 14,700
BØ 37,150
TL 65,040

25,00x60,00

AP

CH -0,40 mm

91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

Ø 73,700
Ø 74,200

31-03460-002
31-03460-052

Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor

73,700

9HV (DV6ATED4),9HV (DV6TED4),9HX (DV6ATED4)	307 1.6 HDI	04 2005	>	(90ps)
9HV (DV6TED4),9HX (DV6ATED4)	PARTNER 1.6 HDI	04 2008	>	(90ps)
9HX (DV6ATED4)	207 1.6 HDI	02 2006	>	(90ps)

11-02112-000
CH 42,944
VD1 1,179
B- 14,390
BØ 37,160
TL 65,444

25,00x60,00

AP
YS

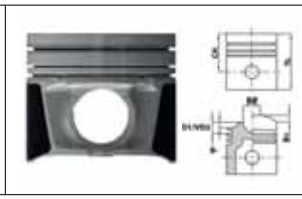
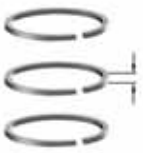
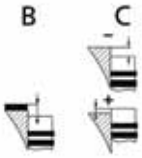
91-09460-000
1 2,500 CkP
2 1,950 P
3 2,500 CrP

Ø 73,700
Ø 73,950
Ø 74,200

31-04112-000
31-04112-025
31-04112-050

Citroen ve Peugeot ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

73,700

DV4C	2008 1.4 HDi 70	D	03	2013	>	4 Cyl	**1398cc**	**50kW**	(68ps)
DV4C	206+ 1.4 HDi	D	03	2009	>	4 Cyl	**1398cc**	**50kW**	(68ps)
DV4C	207 1.4 HDi	D	02	2006	>	4 Cyl	**1398cc**	**50kW**	(68ps)
DV4C	208 1.4 HDi	D	03	2012	>	4 Cyl	**1398cc**	**50kW**	(68ps)

11-02494-000
CH 42,944
B- 12,500
BØ 45,000
TL 65,440

25,00x60,00

AP

91-09882-000
1 2,500 CK
2 1,950
3 2,000 CR

1. Conta ile 1,252mm (+0,618/+0,725) 2. Conta ile 1,303mm (+0,726/+0,775) 3. Conta ile 1,351mm (+0,776/+0,825) 4. Conta ile 1,400mm (+0,83/+0,88) 5. Conta ile 1,450mm (+0,88/+0,98)

Ø 73,700
Ø 74,200

31-04494-000
31-04494-050

Citroen ve Peugeot ile Ortak Motor

73,700

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

11-02494-001
CH 42,744
B- 12,500
BØ 45,000
TL 65,240

25,00x60,00

AP

CH -0,20 mm

91-09882-000
1 2,500 CK
2 1,950
3 2,000 CR

Ø 73,700
Ø 74,200

31-04494-001
31-04494-051

Citroen ve Peugeot ile Ortak Motor

73,700

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

11-02494-002
CH 42,544
B- 12,500
BØ 45,000
TL 65,040

25,00x60,00

AP

CH -0,40 mm

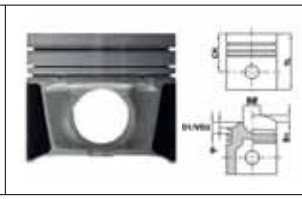
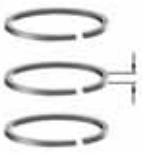
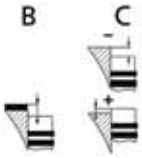
91-09882-000
1 2,500 CK
2 1,950
3 2,000 CR

Ø 73,700
Ø 74,200

31-04494-002
31-04494-052

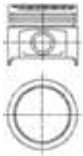
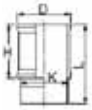
Citroen ve Peugeot ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

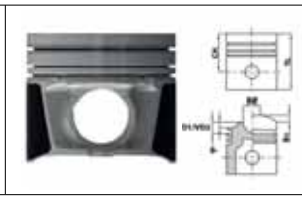
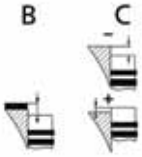
		Type		B C		
					

75,000

K5A (TU3) / KDX (TU3MC)	405 I / II 1.4	01	1987	> 07	1992	(64-75ps)
KAY TU3CP) / K1D (TU3A) / KDY/KDZ (TU3M)	205 I 1.4 / 1.4 CJ	01	1989	> 09	1993	(60-75ps)
KDX / KDY (TU3M/C) / KFZ (TU3J2/Z)	106 I 1.4	09	1991	> 04	1996	(75-94ps)
KDY / KDZ (TU3M) / K1D (TU3A)	309 I / II 1.4	03	1989	> 07	1989	(67-75ps)
KDZ / TU3M / TU3JP / TU3CP / TU3A / TU3MC / TU32	205 II 1.4	08	1987	> 09	1993	(60-75ps)
KFT / KFV (TU3A)	206+ 1.4 I	09	2010	>		(73ps)
KFV (TU3A)	207 1,4	02	2006	>		(72ps)
KFV (TU3A)	BIPPER 1.4	02	2008	>		(73ps)
KFW (TU3JP) / KFV (TU3A)	206 1,4	07	2002	>		(75ps)
KFX (TU3JP) / KFW (TU3JP) / KDX (TU3MC)	306 1,4 / 1.4 SL	05	1993	> 05	2001	(75ps)
KFX (TU3JP) / KFW (TU3JP) / TU32 / KFV (TU3A)	PARTNER 1.4	11	2002	> 10	2006	(73ps)

	**11-01888-000** CH 40,500 B- 1,100 TL 64,500 **19,50x62,00**		**91-09299-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	Ø 75,000	**31-03888-000**
Citroen ve Peugeot ile Ortak Motor					
	K=79,45 L=134,50 H=90,00 D=89,20	WF		**51-05873-000**	**71-07888-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

75,000

TU3JP	1007 1.4i	B	10	2004	>	03	2008	4 Cyl	**1361cc**	**54-55kW** (73-75ps)
TU3JP	106 1.4i	B	05	1996	>	05	2005	4 Cyl	**1361cc**	**54-55kW** (73-75ps)
TU3JP	206 1.4i	B	06	1998	>	12	2005	4 Cyl	**1361cc**	**54-55kW** (73-75ps)
TU3JP	306 1.4i	B	09	1996	>	10	2003	4 Cyl	**1361cc**	**54-55kW** (73-75ps)
TU3JP	307 1.4i	B	01	2002	>	02	2005	4 Cyl	**1361cc**	**54-55kW** (73-75ps)
TU3JP	Partner 1.4i	B	07	1996	>			4 Cyl	**1361cc**	**54-55kW** (73-75ps)
TU3JP	Ranch 1.4i	B	07	1997	>			4 Cyl	**1361cc**	**54-55kW** (73-75ps)

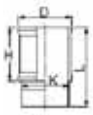
11-01889-000
CH 27,900
B- 1,250
BØ 64,750
TL 49,700

18,00x55,00

91-09889-000
1 1,500 CR
2 1,500
3 2,500 P

Ø 75,000

31-03889-000



K=79,45
L=134,50
H=90,00
D=89,20

WF

51-05873-000

71-07889-000

75,000

1.2 VTi Euro 5	301 1.2 VTI	B	11	2012	>			3 Cyl	**1199cc**	**53kW** (72ps)

11-02105-000
CH 28,810
VD1 1,200
B- 8,000
BØ 64,500
TL 46,820

17,00x51,00

Citroen, Peugeot ve Toyota ile Ortak Motor

HA

91-09873-000
1 1,000 NT St
2 1,000 P
3 2,000 NT St

Ø 75,000
Ø 75,500

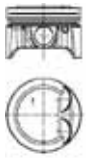
31-04105-000
31-04105-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

75,000

KFU (ET3J4)	1007, 206, 207, 307		D	10	2003	>	4 Cyl	**1360cc**	**65kW**	(88ps)



11-02127-000
CH 28,250
VD1 3,100
B+ 1,300
TL 52,330

17,98x44,50

91-09963-000
1 1,200 MoP
2 1,500 P
3 2,500 P

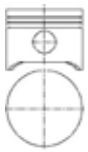
Ø 75,000

31-04127-000

Citroen ve Peugeot ile Ortak Motor

75,000

XY6B / XY7 / XY8	104		B		>	00	1978	4 Cyl	**1360cc**	**44-49kW**	(60-67ps)
XY6B / XY7 / XY8	205		B		>	00	1980	4 Cyl	**1360cc**	**44-49kW**	(60-67ps)
XZ5	104		B		>	00	1978	4 Cyl	**1360cc**	**42kW**	(57ps)



11-02154-000
CH 40,500
TL 65,500

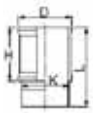
19,50x65,00

91-09154-000
1 1,750 CR
2 2,000 P
3 4,000 CR

Ø 75,000

31-04154-000

Citroen, Peugeot ve Renault ile Ortak Motor



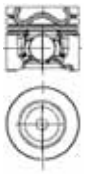
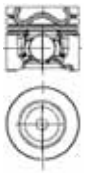
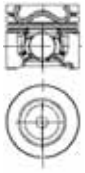
K=79,45
L=134,50
H=90,00
D=89,20

WF

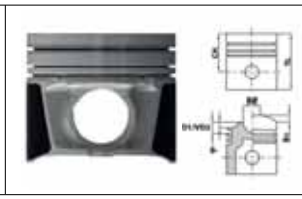
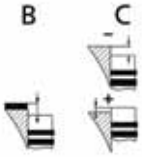
51-05873-000

71-08154-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

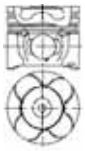
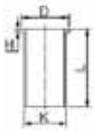
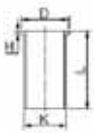
		Type		B C		
75,000						
1.6HDi (9HR / DV6C)	3008	D	00 2011 >	4 Cyl	**1560cc**	**kW** (110-115ps)
1.6HDi (9HR / DV6C)	308	D	00 2011 >	4 Cyl	**1560cc**	**kW** (110-115ps)
1.6HDi (9HR / DV6C)	5008	D	00 2011 >	4 Cyl	**1560cc**	**kW** (110-115ps)
1.6HDi (9HR / DV6C)	508	D	00 2011 >	4 Cyl	**1560cc**	**kW** (110-115ps)
 **11-02496-000** CH 41,750 B- 13,850 BØ 45,000 TL 65,200 **26,00x61,00**		AP YS	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR	1 Kertik 0,50/0,63 2 Kertik 0,63/0,68 3 Kertik 0,68/0,73 4 Kertik 0,73/0,78 5 Kertik 0,78/0,88	Ø 75,000 Ø 75,500	**31-04496-000** **31-04496-050**
Citroen, Ford ve Peugeot ile Ortak Motor						
75,000						
Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			>	Cyl	**kW** (ps)
 **11-02496-001** CH 41,550 B- 13,850 BØ 45,000 TL 65,000 **26,00x61,00**		AP YS CH -0,20 mm	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR		Ø 75,000 Ø 75,500	**31-04496-001** **31-04496-051**
Citroen, Ford ve Peugeot ile Ortak Motor						
75,000						
Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter			>		(ps)
 **11-02496-002** CH 41,350 B- 13,850 BØ 45,000 TL 64,800 **26,00x61,00**		AP YS CH -0,40 mm	**91-09898-000** 1 2,500 CK 2 1,950 P 3 2,000 CR		Ø 75,000 Ø 75,500	**31-04496-002** **31-04496-052**
Citroen, Ford ve Peugeot ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

75,000

DV6 / DV6A / DV6U TED4 Euro 4	Partner 1.6 HDi 16V	10 2005	>		(92-109ps)
DV6 / DV6A TED4 Euro 4	207 1.6 HDi 16V	12 2005	>	03 2008	(92-109ps)
DV6 / DV6A TED4 Euro 4	307 1.6 HDi 16V	03 2005	>	12 2008	(92-109ps)
DV6 / DV6A TED4 Euro 4	308 1.6 HDI 16V	09 2007	>		(92-109ps)
DV6 TED4 Euro 4	1007 1.6 HDi 16V	01 2007	>	03 2008	(109ps)
DV6 TED4 Euro 4	206 1.6 HDi 16V	05 2004	>		(109ps)
DV6 TED4 Euro 4	206 CC 1.6 HDI 16V	05 2004	>		(109ps)
DV6 TED4 Euro 4	207 CC 1.6 HDi 16V	09 2006	>		(109ps)
DV6 TED4 Euro 4	3008 1.6 HDi 16V	06 2009	>		(109ps)
DV6 TED4 Euro 4	407 1.6 HDi 16V	05 2004	>		(109ps)
DV6 TED4 Euro 4	5008 1.6 HDi 16V	09 2009	>		(109ps)
DV6U TED4 Euro 4	Expert 1.6 HDi 16V	01 2007	>		(92ps)
DV6U TED4 Euro 4	Expert Tepee 1.6 HDi 16V	01 2007	>		(92ps)
DV6U TED4 Euro 4	Partner Tepee 1.6 HDi 16V	05 2008	>		(92ps)

	**11-02498-000** CH 41,700 VD1 1,200 B- 13,250 BØ 41,800 TL 65,300 **26,00x61,00**	AP YS	**91-09168-000** 1 3,000 CkP 2 1,950 P 3 2,500 CrP	1,25 Conta ile (+0,53/+0,63) 1,30 Conta ile (+0,63/+0,68) 1,35 Conta ile (+0,68/+0,73)	Ø 75,000 Ø 75,500 Ø 75,600	**31-04498-000** **31-04498-050** **31-04498-060**
	Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor					
	K=78,05 L=142,00 H=5,00 D=79,45	DS			**51-65826-000**	
	K=78,55 L=142,00 H=6,00 D=79,95	DS +0,50			**51-65826-050**	
	K=79,05 L=142,00 H=6,00 D=80,45	DS +1,00			**51-65826-100**	

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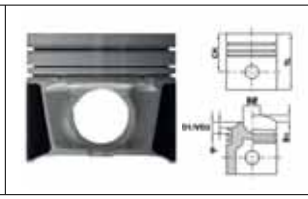
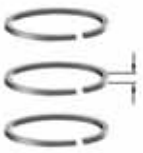
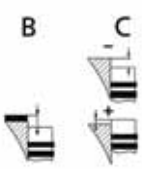
		Type		B C		
					

75,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

11-02498-001
CH 41,500
VD1 1,200
B- 13,250
BØ 41,800
TL 65,100

26,00x61,00

AP
YS

CH -0,20 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000
Ø 75,500

31-04498-001
31-04498-051

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

75,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

11-02498-002
CH 41,300
VD1 1,200
B- 13,250
BØ 41,800
TL 64,900

26,00x61,00

AP
YS

CH -0,40 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000
Ø 75,500

31-04498-002
31-04498-052

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

75,000

Strok Boyu 0,60mm Kisa Piston / Stroke Lenght 0,60mm Shorter > (ps)

11-02498-003
CH 41,100
VD1 1,200
B- 13,250
BØ 41,800
TL 64,700

26,00x61,00

AP
YS

CH -0,60 mm

91-09168-000
1 3,000 CkP
2 1,950 P
3 2,500 CrP

Ø 75,000

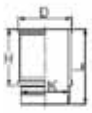
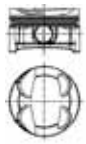
31-04498-003

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
75,000						
KDZ / KDY(TU3M) / KFX(TU3JP)	205 II 1.4	07 1988 > 09 1998				(75ps)
KFW / KFX(TU3JP)	106 II 1.4 I	05 1996 >				(75ps)
KFW(TU3JP)	307 1.4	08 2000 >				(75ps)
KFW(TU3JP)	PARTNER 1.4 BIFUEL	04 2003 >				(75ps)
KFW(TU3JP) / KFV(TU3A)	206 1.4	07 2002 >				(75ps)
KFX(TU3JP) / KFW(TU3JP)	206 1.4 i	09 1998 >				(75ps)
KFX(TU3JP) / KFW(TU3JP) / KDX(TU3MC)	306 1.4	05 1993 > 05 2001				(75ps)
KFX(TU3JP) / KFW(TU3JP) / KDX(TU3MC)	306 1.4 SL	06 1994 > 05 2001				(75ps)
KFX(TU3JP) / KFW(TU3JP) / TU32	PARTNER 1.4	11 2002 > 10 2006				(73ps)
	11-02500-000 CH 27,800 B+ 0,180 TL 49,800 **18,00x55,00**		**91-09889-000** 1 1,500 CR 2 1,500 3 2,500 P		Ø 75,000	**31-04500-000**
Citroen ve Peugeot ile Ortak Motor						
	K=79,45 L=134,50 H=90,00 D=89,20	WF			**51-05873-000**	**71-08500-000**
75,000						
TU3JP	106 / 206 / 306 1.4	B	>	4 Cyl	**1361cc kW**	(ps)
	11-02501-000 CH 27,800 TL 49,800 **18,00x55,00**		**91-09889-000** 1 1,500 CR 2 1,500 3 2,500 P		Ø 75,000	**31-04501-000**

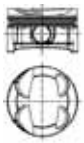
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
76,000						
XL3	304 1,3	B	10 1969 > 09 1975	4 Cyl		(58ps)
XL3S	304 1,3	B	03 1972 > 07 1976	4 Cyl		(75ps)
11-01874-000 CH 40,300 B- 0,900 TL 73,500 **20,50x63,40**		CP	**91-09904-000** 1 1,750 CR 2 2,000 P 3 4,000 CrP St		Ø 76,000	**31-03874-000**
 K=81,00 L=128,30 H=87,96 D=89,20		WF			**51-05875-000**	**71-07874-000**
77,000						
5FS	2008 1.6 VTI	B	03 2013 >	4 Cyl	**1598cc 88kW**	(120ps)
5FS (EP6C)	2008 1.6 VTI	B	03 2013 >	4 Cyl	**1598cc 88kW**	(120ps)
5FS (EP6C)	208 1.6	B	03 2012 >	4 Cyl	**1598cc 88kW**	(120ps)
5FS (EP6C)	508 1.6 VTi	B	11 2010 >	4 Cyl	**1598cc 88kW**	(120ps)
5FS (EP6C)	PARTNER 1.6	B	04 2010 >	4 Cyl	**1598cc 88kW**	(120ps)
EP6	3008 1.6 VTI	B	06 2009 >	4 Cyl	**1598cc 88kW**	(120ps)
EP6	308 1.6	B	09 2007 >	4 Cyl	**1598cc 88kW**	(120ps)
EP6 / 5FS (EP6C)	207 1.6 / 1.6 VTI	B	02 2007 >	4 Cyl	**1598cc 88kW**	(120ps)
 **11-02104-000** CH 27,500 VD1 5,700 B- 2,000 BØ 56,600 TL 47,500 **18,00x43,00**			**91-09874-000** 1 1,200 NT St 2 1,500 P 3 2,000 CrP St		Ø 77,000 Ø 77,500	**31-04104-000** **31-04104-050**
Citroen ve Peugeot ile Ortak Motor						

		Type		B C		

77,000

Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter	B	03	2013	>	4 Cyl	**1598cc**	**88kW**	(120ps)	



11-02104-002
CH 27,100
VD1 5,700
B- 2,000
BØ 56,600
TL 47,500

18,00x43,00

CH -0,40 mm

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

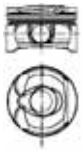
Ø 77,000

31-04104-002

Citroen ve Peugeot ile Ortak Motor

77,000

5FV (EP6CDT) Euro 5	207/207CC/308/308CC/RCZ	B	05	2010	>	4 Cyl	**1598cc**	**115kW**	(156ps)	
5FV (EP6CDT) Euro 5	208 1.6 THP 155	B	03	2012	>	4 Cyl	**1598cc**	**115kW**	(156ps)	
5FV (EP6CDT) Euro 5	3008 / 5008 1.6i THP 16V	B	06	2009	>	4 Cyl	**1598cc**	**115kW**	(156ps)	
5FV (EP6CDT) Euro 5	508 1.6i 16V THP 155	B	03	2011	>	4 Cyl	**1598cc**	**115kW**	(156ps)	



11-02106-000
CH 30,200
VD1 1,900
B- 3,630
BØ 31,000
TL 48,450

20,00x47,90

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

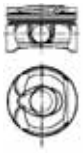
Ø 77,000
Ø 77,500

31-04106-000
31-04106-050

Citroen ve Peugeot ile Ortak Motor

77,000

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	B	05	2010	>	4 Cyl	**1598cc**	**115kW**	(156ps)	



11-02106-001
CH 30,000
VD1 1,900
B- 3,630
BØ 31,000
TL 48,450

20,00x47,90

CH -0,20 mm

91-09874-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 77,000

31-04106-001

Citroen ve Peugeot ile Ortak Motor

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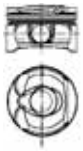
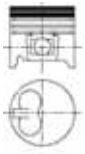
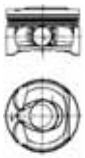
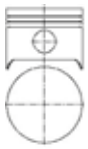
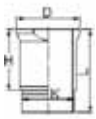
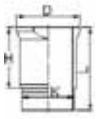
		Type		B C		
77,000						
Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter	B	05 2010 >	4 Cyl	**1598cc** **115kW**	(156ps)	
 **11-02106-002** CH 29,800 VD1 1,900 B- 3,630 BØ 31,000 TL 48,450 **20,00x47,90** Citroen ve Peugeot ile Ortak Motor		CH -0,40 mm	**91-09874-000** 1 1,200 NT St 2 1,500 P 3 2,000 CrP St		Ø 77,000	**31-04106-002**
77,000						
TUD5 (VJX)	106 II 1.5D / 106 Van 1.5D	D 10 2000 >	4 Cyl	**1527cc** **42kW**	(57ps)	
TUD5 (VJY)	106 I 1.5D / 106 II 1.5D / 106 Van 1.5D	D 06 1994 >	4 Cyl	**1527cc** **42kW**	(57ps)	
 **11-02107-000** CH 40,370 *CH 40,100 B- 1,650 *B- 1,650 TL 66,320 *TL 66,320 * For Oversize Piston Dimensions **23,00x60,00** Citroen, Nissan ve Peugeot ile Ortak Motor			**91-09896-000** 1 2,000 MoP 2 1,750 P 3 3,000 CrP		Ø 77,000 Ø 77,400	**31-04107-000** **31-04107-040**
77,000						
EP6	207, 208, 308, 508, 3008, 5008	B >	4 Cyl	**1360cc** **kW**	(ps)	
 **11-02129-000** CH 30,150 VD1 2,010 VD2 2,020 B- 3,580 BØ 31,000 TL 48,450 **20,00x47,90** Citroen ve Peugeot ile Ortak Motor		HA	**91-09967-000** 1 1,200 MoP St 2 1,200 P 3 2,000 CR		Ø 77,000	**31-04129-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
78,000						
XL 5 / XL 5TR	304 / 305 1.3		B 09 1970 > 10 1980 4 Cyl			(60-65ps)
XL 5S	304 1.3		B 08 1972 > 09 1975 4 Cyl			(75ps)
	**11-01875-000** CH 36,050 TL 72,050 **20,50x68,00**		**91-09875-000** 1 1,750 CR 2 2,000 P 3 4,000 CrP St		Ø 78,000 Ø 78,500	**31-03875-000** **31-03875-050**
	K=83,00 L=133,00 H=97,40 D=100,00	WF			**51-05877-000**	**71-07875-000**
78,000						
XR5 / XR5S	305 1,5		B 11 1977 > 10 1983 4 Cyl		**1472cc** **50-64kW**	(68-86ps)
XR5 / XR5S	305 1.5		B 11 1977 > 07 1990 4 Cyl		**1472cc** **50-64kW**	(68-86ps)
	11-01886-000 CH 36,100 B- 0,750 TL 72,800 **20,50x68,00**		**91-09875-000** 1 1,750 CR 2 2,000 P 3 4,000 CrP St		Ø 78,000	**31-03886-000**
	K=83,00 L=133,00 H=97,40 D=100,00	WF			**51-05877-000**	**71-07886-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
78,500						
TU 5JP4	1007 1.6i 16V	B	10 2004 > 03 2008	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	206 1.6i 16V	B	03 2000 >	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	207 1.6i 16V	B	12 2005 > 03 2008	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	307 1.6i 16V	B	01 2002 > 12 2008	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	307 CC 1.6i 16V	B	06 2003 > 12 2008	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	308 1.6i 16V	B	09 2007 >	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	Partner 1.6i 16V	B	09 2000 >	4 Cyl	**1587cc**	**80kW** (109ps)
TU 5JP4	Partner Tepee 1.6i 16V	B	05 2008 >	4 Cyl	**1587cc**	**80kW** (109ps)

11-02101-000
CH 32,350
B+ 0,150
TL 50,000

19,50x57,00

91-09929-000
1 1,200 MoP
2 1,500 P
3 2,500 NtP

Ø 78,500
Ø 78,750
Ø 79,000

31-04101-000
31-04101-025
31-04101-050

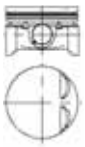
99-09929-000
1 1,200 NT St
2 1,500 P
3 2,500 CrP St

39-04101-000
39-04101-025
39-04101-050
39-04101-100

Citroen ve Peugeot ile Ortak Motor

78,500

SamandLX	Samand LX	B	>	4 Cyl	**1600cc**	**kW** (ps)



11-02102-000
CH 29,770
VD1 3,670
TL 51,730

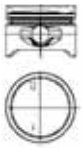
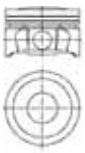
21,00x58,00

91-09929-000
1 1,200 MoP
2 1,500 P
3 2,500 NtP

Ø 78,500
Ø 78,750
Ø 79,000

31-04102-000
31-04102-025
31-04102-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
78,500						
NFZ (TU5JP)	106	B	06 1993 > 10 2000	4 Cyl		(88ps)
NFZ (TU5JP)	206	B	06 1993 > 10 2000	4 Cyl		(88ps)
NFZ (TU5JP)	306	B	06 1993 > 10 2000	4 Cyl		(88ps)
 **11-02109-000** CH 32,250 B- 1,500 BØ 68,500 TL 57,500 **19,50x62,91**		**91-09362-000** 1 1,500 CkP 2 1,500 P 3 3,000 CrP			Ø 78,500 Ø 78,900	**31-04109-000** **31-04109-040**
Citroen ve Peugeot ile Ortak Motor						
78,500						
TU5 JP4	1007 1.6i 16V	B	10 2004 > 03 2008	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	206 1.6i 16V	B	03 2000 >	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	207 1.6i 16V	B	12 2005 > 03 2008	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	307 1.6i 16V	B	01 2002 > 12 2008	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	307 CC 1.6i 16V	B	06 2003 > 12 2008	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	308 1.6i 16V	B	09 2007 >	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	Partner 1.6i 16V	B	09 2000 >	4 Cyl	**1587cc** **80kW**	(109ps)
TU5 JP4	Partner Tepee 1.6i 16V	B	05 2008 >	4 Cyl	**1587cc** **80kW**	(109ps)
 **11-02929-000** CH 32,350 B+ 1,300 TL 51,300 **19,50x57,00**		**91-09929-000** 1 1,200 MoP 2 1,500 P 3 2,500 NtP			Ø 78,500 Ø 78,900 Ø 79,000	**31-04929-000** **31-04929-040** **31-04929-050**
Citroen ve Peugeot ile Ortak Motor						

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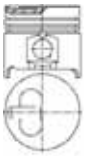
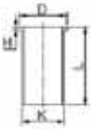
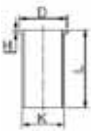
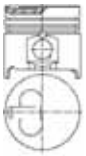
		Type		B C		
80,000						
XUD 7	205 1.8 D	D	10 1983 > 09 1998	4 Cyl	**1768cc**	**44kW** (60ps)
XUD 7	305 1.8 D	D	10 1982 > 06 1988	4 Cyl	**1768cc**	**44kW** (60ps)
XUD 7	306 1.8 D	D	05 1993 > 10 2003	4 Cyl	**1768cc**	**44kW** (60ps)
XUD 7	309 1.8 D	D	07 1989 > 12 1993	4 Cyl	**1768cc**	**44kW** (60ps)
XUD 7	405 1.8 D	D	10 1990 > 12 1992	4 Cyl	**1768cc**	**44kW** (60ps)
XUD 7	Partner 1.8 D	D	07 1996 > 08 2002	4 Cyl	**1768cc**	**44kW** (60ps)
	11-01876-000 CH 46,800 B- 2,000 TL 84,300 **25,00x69,80** Citroen ve Peugeot ile Ortak Motor		**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP	1,61mm Conta ile +0,54/+0,77 1,73mm Conta ile +0,77/+0,82	Ø 80,000 Ø 80,200 Ø 80,500 Ø 80,800	**31-03876-000** **31-03876-020** **31-03876-050** **31-03876-080**
	K=83,05 L=154,00 H=4,50 D=86,00	DS			**51-65876-000**	
80,000						
40318	403/8	B	00 1967 >	4 Cyl	**1468cc**	**kW** (ps)
	11-02110-000 CH 41,500 TL 72,000 **22,00x67,20**	CP	**91-09110-000** 1 2,000 CR 2 2,000 P 3 4,500 CrP		Ø 80,000	**31-04110-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
82,200						
DW8 / DW8 B	206 1.9 D	D	06 1998 >	4 Cyl		(69ps)
DW8 / DW8 B	306 1.9 D	D	09 1998 > 10 2003	4 Cyl		(69ps)
DW8 / DW8 B	Expert 1.9 D	D	06 1998 >	4 Cyl		(69ps)
DW8 / DW8 B	Ranch 1.9 D	D	11 1998 >	4 Cyl		(69ps)
DW8 / DW8 B / XUD 9AY	Partner 1.9 D	D	11 1998 > 08 2002	4 Cyl		(69ps)
	**11-01878-000** CH 46,700 B- 1,200 TL 78,000 **25,00x65,50**		**91-09878-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,26mm Conta ile +0,51/+0,55 1,30mm Conta ile +0,55/+0,59 1,34mm Conta ile +0,59/+0,63	Ø 82,200 Ø 82,700 Ø 82,800 Ø 83,000	**31-03878-000** **31-03878-050** **31-03878-060** **31-03878-080**
Fiat / Iveco ve Peugeot ile Ortak Motor						
	K=85,05 L=154,00 H=5,10 D=86,95	DS			**51-65866-000**	
	K=85,55 L=154,00 H=6,00 D=87,45	DS +0,50			**51-65866-050**	
82,200						
Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	D	06 1998 >	4 Cyl	**1868cc 51kW**	(69ps)
	**11-01878-001** CH 46,500 B- 1,200 TL 78,000 **25,00x65,50**	CH -0,20 mm	**91-09878-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,26mm Conta ile +0,51/+0,55 1,30mm Conta ile +0,55/+0,59 1,34mm Conta ile +0,59/+0,63	Ø 82,200	**31-03878-001**
Fiat / Iveco ve Peugeot ile Ortak Motor						

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		Type		B C		
83,000						
XU5S 305 1.6 B 10 1982 > 07 1990 4 Cyl **1560cc** **66-71kW** (90-97ps)						
	11-01877-000 CH 37,500 B- 2,100 TL 67,500 **22,00x66,20** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor		**91-09877-000** 1 1,750 CR 2 1,750 3 4,000 CrP St		Ø 83,000	**31-03877-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07877-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05882-000**	**71-07878-000**

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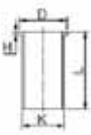
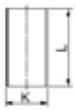
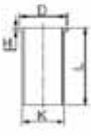
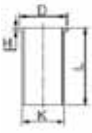
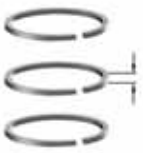
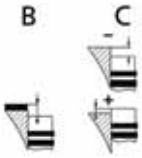
		Type		B C		
83,000						
XUD 9	305 1.9 D	D	10 1982	> 07 1990	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9 / 9B / 9K / 9Y	309 1.9 D	D	06 1986	> 12 1993	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9 / 9Y	205 1.9 D	D	10 1987	> 09 1998	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9A	Ranch 1.9 D	D	07 1997	> 10 1998	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9A / 9B	J5 1.9 D	D	11 1987	> 12 1993	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9A / 9B	Partner 1.9 D	D	07 1996	> 08 2002	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9A / 9B / 9K / 9Y	405 1.9 D	D	03 1988	> 04 1997	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9A / 9B / 9Y	306 1.9 D	D	05 1993	> 10 2003	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9AU Euro 2 / XUD 9A / 9B	Boxer 1.9 D	D	02 1994	> 02 2002	4 Cyl	**1905cc** **47-52kW** (64-71ps)
XUD 9AU Euro 2 / XUD 9A / 9B	Expert 1.9 D	D	04 1998	>	4 Cyl	**1905cc** **47-52kW** (64-71ps)

	11-01879-000 CH 46,800 B- 2,200 TL 84,300 **25,00x72,00**		**91-09879-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)	Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000	**31-03879-000** **31-03879-020** **31-03879-050** **31-03879-080** **31-03879-100**
Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor						
	K=86,00 L=153,50 H=4,80 D=89,00	DS			**51-65820-000**	
	K=86,04 L=153,50	DS			**51-65879-000**	
	K=86,54 L=153,50	DS +0,50			**51-65879-050**	
	K=85,66 L=153,50 H=3,90 D=88,45	DS			**51-65885-000**	
	K=86,15 L=153,50 H=3,90 D=88,45	DS +0,50			**51-65885-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
XU 9C	305 1.9i	B	10 1982 > 07 1990	4 Cyl	**1905cc**	**73-95kW** (100-129ps)
XU 9C	405 1.9i	B	07 1987 > 04 1997	4 Cyl	**1905cc**	**73-95kW** (100-129ps)
XU 9JA/K / 9C	205 1.9i	B	10 1986 > 09 1998	4 Cyl	**1905cc**	**73-95kW** (100-129ps)
XU 9JA/K / 9C	309 1.9i	B	10 1985 > 12 1993	4 Cyl	**1905cc**	**73-95kW** (100-129ps)
	11-01885-000 CH 37,500 B- 9,000 TL 67,500 **22,00x66,20** Citroen ve Peugeot ile Ortak Motor	CP	**91-09885-000** 1 1,500 CR 2 1,500 3 4,000 CR		Ø 83,000	**31-03885-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05878-000**	**71-07885-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07890-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

83,000

XU 7JB	Partner 1.8i	B	03	1997	>	08	2002	4 Cyl	**1782cc**	**66kW**	(90ps)
XU 7JB / 7JP	406 1.8i	B	09	1997	>	06	2004	4 Cyl	**1782cc**	**73-76kW**	(99-103ps)
XU 7JP	Expert 1.8i	B	09	1996	>			4 Cyl	**1782cc**	**73-76kW**	(99-103ps)
XU 7JP / 7JPZ	306 1.8i	B	01	1993	>	10	2003	4 Cyl	**1782cc**	**73-76kW**	(99-103ps)
XU 7JP / 7JPZ	405 1.8i	B	06	1992	>	04	1997	4 Cyl	**1782cc**	**73-76kW**	(99-103ps)
XU 7JP / 7JPZ	806 1.8i	B	07	1995	>	08	2002	4 Cyl	**1782cc**	**73-76kW**	(99-103ps)

	11-01887-000 CH 33,300 B- 6,380 BØ 66,500 TL 53,300 **22,00x62,00** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor	CP	**91-09887-000** 1 1,500 Mo 2 1,500 3 3,000 CR		Ø 83,000	**31-03887-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05868-000**	**71-07887-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05878-000**	**71-07892-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-07882-000**

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		Type		B	C		

83,000

XU7-JPL3	Khodro Samand / Soren	B	01	1995	>		4 Cyl	**1762cc**	**73kW**	(100ps)
XU7-JPL3	Peugeot Persia / 405	B	01	1993	>		4 Cyl	**1762cc**	**73kW**	(100ps)

11-02103-000
CH 33,300
B- 4,120
BØ 66,500
TL 53,300

22,00x62,00

CP

91-09887-000
1 1,500 Mo
2 1,500
3 3,000 CR

Ø 83,000

31-04103-000

K=88,60
L=141,00
H=95,19
D=97,00

WF

51-05881-000

71-08117-000

83,000

XU 52C	309 1,6	B	07	1988	>	12	1993	4 Cyl	**1580cc**	**53-55kW**	(72-75ps)
XU 52C / 52C B2A	309 1.6i	B	07	1988	>	12	1993	4 Cyl	**1580cc**	**59-69kW**	(80-94ps)
XU 52C / 52C B2A	405 1.6i	B	07	1987	>	04	1997	4 Cyl	**1580cc**	**59-69kW**	(80-94ps)

11-02116-000
CH 37,500
B- 2,600
TL 67,000

22,00x66,20

Citroen ve Peugeot ile Ortak Motor

91-09877-000
1 1,750 CR
2 1,750
3 4,000 CrP St

Ø 83,000

31-04116-000

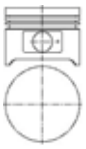
K=88,60
L=141,00
H=95,19
D=97,00

WF

51-05881-000

71-08116-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
83,000						
XU51C	205 1,6	B	02 1983 > 09 1998	4 Cyl	**1580cc**	**53-59kW** (72-80ps)
XU51C	305 1,6	B	10 1982 > 07 1990	4 Cyl	**1580cc**	**53-59kW** (72-80ps)
XU51C	309 1,6	B	10 1985 > 12 1990	4 Cyl	**1580cc**	**53-59kW** (72-80ps)
XU51C	405 1,6	B	07 1987 > 12 1992	4 Cyl	**1580cc**	**53-59kW** (72-80ps)
	11-02118-000 CH 37,500 B- 3,000 TL 67,000 **22,00x66,20**		**91-09877-000** 1 1,750 CR 2 1,750 3 4,000 CrP St		Ø 83,000	**31-04118-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05878-000**	**71-08118-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-08119-000**
83,000						
XU9J2	205 1.9i	B	00 1988 > 07 1995	4 Cyl	**1905cc**	**89-92kW** (121-125ps)
XU9J2	405 1.9i	B	07 1987 > 04 1997	4 Cyl	**1905cc**	**89-92kW** (121-125ps)
XU9S	305 1.9i	B	10 1982 > 07 1990	4 Cyl	**1905cc**	**75-77kW** (102-105ps)
XU9S	309 1.9i	B	10 1985 > 07 1989	4 Cyl	**1905cc**	**75-77kW** (102-105ps)
	**11-02120-000** CH 37,500 B+ 0,600 TL 67,000 **22,00x66,20** Citroen ve Peugeot ile Ortak Motor	CP	**91-09885-000** 1 1,500 CR 2 1,500 3 4,000 CR		Ø 83,000	**31-04120-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-08120-000**

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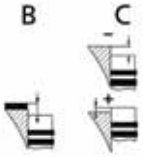
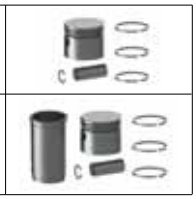
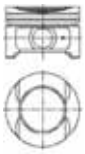
		Type		B	C		
							

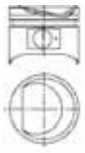
83,000

XU7JP4	306 1.8i 16V		B	05	1997	>	10	2003	4 Cyl	**1761cc**	**82kW**	(111ps)
XU7JP4	406 1.8i 16V		B	10	1995	>	06	2004	4 Cyl	**1761cc**	**81kW**	(110ps)

	**11-02924-000** CH 33,300 VD1 1,950 B+ 7,120 B- 1,000 BØ 52,000 TL 56,300 **22,00x62,00**	CP	**91-09887-000** 1 1,500 Mo 2 1,500 3 3,000 CR		Ø 83,000	**31-04924-000**
	Citroen ve Peugeot ile Ortak Motor					
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-08924-000** 71-98924-000

83,000

XU5J	205		B	00	1988	>			4 Cyl	**1905cc**	**83-85kW**	(113-115ps)
XU9JA / XU92C	205		B	00	1986	>	00	1989	4 Cyl	**1905cc**	**77-76kW**	(105-130ps)
XU9JA / XU92C	309		B	00	1986	>	00	1989	4 Cyl	**1905cc**	**77-76kW**	(105-130ps)
XU9JA / XU92C	405		B	00	1986	>	00	1989	4 Cyl	**1905cc**	**77-76kW**	(105-130ps)
XU9JA / XU92C	605		B	00	1986	>	00	1989	4 Cyl	**1905cc**	**77-76kW**	(105-130ps)

	**11-02925-000** CH 37,500 B- 9,000 TL 67,000 **22,00x66,20**	CP	**91-09885-000** 1 1,500 CR 2 1,500 3 4,000 CR		Ø 83,000	**31-04925-000**
	K=88,60 L=141,00 H=95,14 D=97,00	WF			**51-05878-000**	**71-07098-000**
	K=88,60 L=141,00 H=95,19 D=97,00	WF			**51-05881-000**	**71-08925-000**

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		Type		B C		

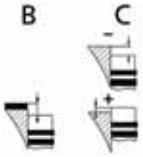
84,000

XM	504 1,8			B	07	1968	>	02	1971	4 Cyl	**1796cc**	**56kW**	(76ps)	
	11-01880-000 CH 38,250 B+ 1,430 TL 71,680 **23,00x70,00**	CP	**91-09881-000** 1 1,500 CrP 2 2,000 P 3 4,000 CrP St								Ø 84,000		**31-03880-000**	
	K=92,95 L=136,20 H=90,00 D=99,20	WF									**51-05880-000**		**71-07880-000**	
	K=89,00 L=135,70 H=6,50 D=99,20	WF									**51-05883-000**		**71-07141-000**	

84,000

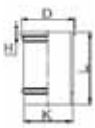
XM 7 / 7P	504 1.8			B	01	1971	>	12	1989	4 Cyl	**1796cc**	**48-59kW**	(65-80ps)	
XM 7 / 7P	J 7 1.8			B	00	1971	>	00	1981	4 Cyl	**1796cc**	**48-59kW**	(65-80ps)	
XM 7 / 7T	505 1.8			B	05	1979	>	10	1985	4 Cyl	**1796cc**	**44-59kW**	(60-80ps)	
XM 7T	J5 1.8			B	09	1981	>	12	1993	4 Cyl	**1796cc**	**44-51kW**	(60-69ps)	
	11-01881-000 CH 37,800 TL 69,300 **23,00x70,00** Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor	CP	**91-09881-000** 1 1,500 CrP 2 2,000 P 3 4,000 CrP St								Ø 84,000		**31-03881-000**	
	K=92,95 L=136,20 H=90,00 D=99,20	WF									**51-05880-000**		**71-07881-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

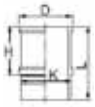
84,000

XC 5 A	404 1,6		B	00	1962	>	09	1972	4 Cyl	**1618cc**	**53kW** (72ps)
XC 5 A / 5 P	J 7 1.6		B	00	1965	>	09	1972	4 Cyl	**1618cc**	**50-53kW** (68-72ps)

	11-01883-000 CH 41,500 B+ 3,800 TL 81,250 **22,00x70,00**	CP	**91-09128-000** 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	**31-03883-000**
	K=89,00 L=135,70 H=6,50 D=99,20	WF			**51-05883-000**	**71-07883-000**

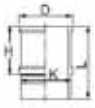
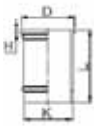
84,000

XC5A	404 1,6		B	00	1962	>	09	1972	4 Cyl	**1618cc**	**53kW** (72ps)
XC5A	J 7 1.6		B	00	1965	>	09	1972	4 Cyl	**1618cc**	**53kW** (72ps)
XC5P	J 7 1.6		B	08	1968	>	03	1980	4 Cyl	**1618cc**	**50kW** (68ps)

	11-01884-000 CH 41,500 B+ 3,550 TL 79,150 **23,00x70,00**	CP	**91-09128-000** 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	**31-03884-000**
	K=92,95 L=136,20 H=90,00 D=99,20	WF			**51-05880-000**	**71-07884-000**

84,000

XC 5 A	404 / J 7		B			>			4 Cyl	**1618cc**	**kW** (ps)

	11-02128-000 CH 41,500 B- 3,400 TL 80,850 **23,00x70,00**	CP	**91-09128-000** 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	**31-04128-000**
	K=92,95 L=136,20 H=90,00 D=99,20	WF			**51-05880-000**	**71-08128-000**
	K=89,00 L=135,70 H=6,50 D=99,20	WF			**51-05883-000**	**71-08129-000**

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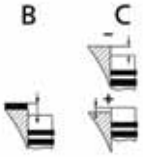
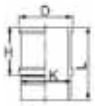
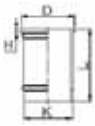
		Type		B C		
						

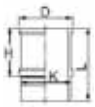
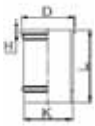
84,000

XC6 404 1,6 B 11 1967 > 12 1971 4 Cyl **1616cc** **51kW** (69ps)

	11-02132-000 CH 45,550 B+ 3,400 TL 81,900 **23,00x70,00**	CP	**91-09128-000** 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	**31-04132-000**
	K=92,95 L=136,20 H=90,00 D=99,20	WF			**51-05880-000**	**71-08133-000**
	K=89,00 L=135,70 H=6,50 D=99,20	WF			**51-05883-000**	**71-08132-000**

84,000

XM / KFS / KP6 504 B > 4 Cyl **1796cc** **56kW** (76ps)

	11-02923-000 CH 38,800 B+ 1,450 TL 71,750 **23,00x70,00**	CP	**91-09881-000** 1 1,500 CrP 2 2,000 P 3 4,000 CrP St		Ø 84,000	**31-04923-000**
	K=92,95 L=136,20 H=90,00 D=99,20	WF			**51-05880-000**	**71-07079-000**
	K=89,00 L=135,70 H=6,50 D=99,20	WF			**51-05883-000**	**71-08923-000**

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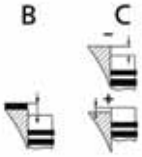
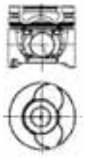
		Type		B C		
						

85,000

DW12 TD/TED	290C 2.2 HD		D	00	2002	>		4 Cyl	**2178cc**	**kW**	(ps)
DW12 TD/TED	330C		D	00	2002	>		4 Cyl	**2178cc**	**kW**	(ps)
DW12 TD/TED	406 HDI		D	00	2002	>		4 Cyl	**2178cc**	**kW**	(ps)
DW12 TD/TED	607 HDI		D	00	2002	>		4 Cyl	**2178cc**	**kW**	(ps)
DW12 TD/TED	BOXER 330M		D	00	2002	>		4 Cyl	**2178cc**	**kW**	(ps)



11-02115-000
CH 48,700
VD1 1,200
B- 17,700
BØ 42,000
TL 77,700

30,00x68,00

AP

91-09799-000
1 3,500 CK
2 2,000
3 3,000 CR

Ø 85,000 **31-04115-000**
Ø 85,600 **31-04115-060**

K=88,60
L=163,00

DS

51-65164-000

85,000

RFN (EW10J4)	206		B	07	2002	>		4 Cyl			(136-143ps)
RFN (EW10J4)	307		B	08	2008	>		4 Cyl			(136-143ps)
RFN (EW10J4)	406		B	08	2000	>	06 2004	4 Cyl			(136-143ps)
RFN (EW10J4)	407		B	05	2004	>		4 Cyl			(136-143ps)
RFN (EW10J4)	607		B	02	2000	>		4 Cyl			(136-143ps)
RFN (EW10J4)	806		B	09	2000	>	08 2002	4 Cyl			(136-143ps)
RFN (EW10J4)	807		B	06	2002	>		4 Cyl			(136-143ps)
RFN (EW10J4)	EXPERT		B	07	2000	>	12 2006	4 Cyl			(136-143ps)
RFR (DEW10J4)	206		B	04	1999	>	10 2000	4 Cyl			(135-138ps)
RFR (DEW10J4)	406		B	01	1999	>	08 2000	4 Cyl			(135-138ps)

11-02117-000
CH 29,000
B- 0,750
BØ 48,000
TL 51,000

21,00x58,00

91-09145-000
1 1,200 Mo
2 1,500 CR
3 2,500 CR

Ø 85,000 **31-04117-000**
Ø 85,200 **31-04117-020**
Ø 85,400 **31-04117-040**
Ø 85,600 **31-04117-060**
Ø 85,800 **31-04117-080**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

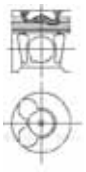
		Type		B C		
85,000						
XUD 11ATE	605 2.1 TD 12V	D	06 1989	> 10 1996	4 Cyl	**2088cc** **80kW** (109ps)
11-02145-000 CH 44,800 B- 2,700 BØ 26,000 TL 74,800 **30,00x71,50**		AP YS HA	**91-09143-000** 1 3,000 Mo 2 2,000 Mo 3 3,000 CrP			Ø 85,000 Ø 85,250 Ø 85,600 — **31-04145-000** **31-04145-025** **31-04145-060**
Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor						
85,000						
DW10 ATED3	607 2.0 HDi	D	03 2000	>	4 Cyl	**2000cc** **80kW** (109ps)
DW10 ATED3	806 2.0 HDI	D	08 1999	> 08 2002	4 Cyl	**2000cc** **80kW** (109ps)
DW10 ATED3 / BTED	Expert 2.0 HDi	D	10 1999	>	4 Cyl	**2000cc** **70-80kW** (95-109ps)
DW10 ATED3 / TD	307 2.0 HDi	D	01 2002	> 02 2005	4 Cyl	**2000cc** **66-80kW** (90-109ps)
DW10 ATED3 / TD	406 2.0 HDi	D	10 1998	> 06 2004	4 Cyl	**2000cc** **66-80kW** (90-109ps)
DW10 TD	306 2.0 HDi	D	06 1999	> 10 2003	4 Cyl	**2000cc** **66kW** (90ps)
DW10 TD	Boxer II 2.0 HDI	D	02 2002	>	4 Cyl	**2000cc** **66kW** (90ps)
DW10 TD	Partner 2.0 HDi	D	12 1999	> 08 2005	4 Cyl	**2000cc** **66kW** (90ps)
DW10 TD / RHY	206 2.0 HDi	D	04 1999	>	4 Cyl	**2000cc** **66kW** (90ps)
11-02495-000 CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750 **28,00x70,00**		AP	**91-09799-000** 1 3,500 CK 2 2,000 3 3,000 CR	1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)		Ø 85,000 Ø 85,500 Ø 85,600 — **31-04495-000** **31-04495-050** **31-04495-060**
Citroen, Fiat / Iveco, Lada, Lancia, Peugeot ve Suzuki ile Ortak Motor						
K=89,00 L=155,00 H=4,50 D=91,20		DS				**51-65167-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

85,000

RHR (DW10BTED4)	307 / 307 CC 2.0 HDi 16V	D	10	2003	> 12	2008	4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	308 2.0 HDI 16V	D	09	2007	>		4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	407 2.0 HDi 16V	D	05	2004	>		4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	508 2.0 Hdi	D	11	2010	>		4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	607 2.0 HDi 16V	D	12	2005	>		4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	807 2.0 HDi 16V	D	12	2005	>		4 Cyl	**1997cc**	**100kW**	(136ps)
RHR (DW10BTED4)	Expert Tepee 2.0 HDI 16V	D	01	2007	>		4 Cyl	**1997cc**	**100kW**	(136ps)



11-02497-000
CH 46,705
VD1 0,520
B- 15,400
BØ 44,800
TL 80,705

28,00x70,00

AP
YS

91-09799-000
1 3,500 CK
2 2,000
3 3,000 CR

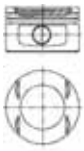
Ø 85,000
Ø 85,600

31-04497-000
31-04497-060

Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor

86,000

XU 10J4R	406 2.0i 16V	B	10	1995	> 09	1999	4 Cyl	**1998cc**	**97-99kW**	(132-135ps)
XU 10J4R	605 2.0i 16V	B	07	1994	> 05	1999	4 Cyl	**1998cc**	**97-99kW**	(132-135ps)
XU 10J4R	806 2.0i 16V	B	05	1998	> 09	2000	4 Cyl	**1998cc**	**97-99kW**	(132-135ps)
XU 10J4R / 10J4RZ	306 2.0i 16V	B	05	1997	> 10	2003	4 Cyl	**1998cc**	**97-99kW**	(132-135ps)



11-02499-000
CH 33,800
VD1 1,700
B- 4,300
BØ 52,000
TL 53,800

22,00x62,00

CP

91-09499-000
1 1,500 Mo
2 1,750
3 3,000

Ø 86,000
Ø 86,500

31-04499-000
31-04499-050

Citroen, Fiat / Iveco, Lancia ve Peugeot ile Ortak Motor

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		Type		B C		

86,010

QWFB V347 DURATORQ	YENI BOXER HDI	D	01	2008	>	4 Cyl	**2200cc**	**88kW**	(120ps)

11-01461-000
CH 43,420
B- 15,850
BØ 46,900
TL 69,820

30,00x66,85

Citroen, Ford ve Peugeot ile Ortak Motor

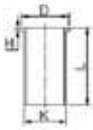
AP
YS

91-09425-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)

Ø 86,010
Ø 86,510

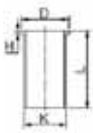
31-03461-000
31-03461-050



K=89,00
L=156,00
H=5,00
D=90,50

DS

51-65496-000



K=89,50
L=156,00
H=5,50
D=91,00

DS

+0,50

51-65496-050

86,010

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>	Cyl	**cc**	**kW**	(ps)

11-01461-001
CH 43,220
B- 15,850
BØ 46,900
TL 69,620

30,00x66,85

Citroen, Ford ve Peugeot ile Ortak Motor

AP
YS

CH -0,20 mm

91-09425-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)

Ø 86,010
Ø 86,510

31-03461-001
31-03461-051

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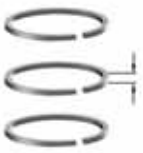
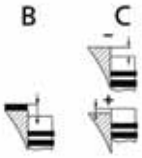
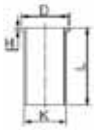
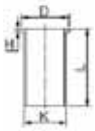
		Type		B C		
						

86,010

4HU / 4HV (P22DTE) Euro4 Boxer III 2.2 HDi 07 2006 > (101-140ps)

	11-02034-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820 **30,00x66,85**	AP YS	**91-09425-000** 1 2,000 CkP 2 2,000 P 3 2,000 NT St	1,10mm Conta ile +0,43/+0,52 1,15mm Conta ile +0,52/+0,57 1,20mm Conta ile +0,57/+0,62	Ø 86,010 Ø 86,510	**31-04034-000** **31-04034-050**
Citroen, Fiat / Iveco, Ford ve Peugeot ile Ortak Motor						
	K=89,00 L=156,00 H=5,00 D=90,50	DS			**51-65496-000**	
	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			**51-65496-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

86,400

220 A2.000	Expert 1.6i	B	09 1995 >	4 Cyl	**1580cc**	**58kW**	(79ps)

11-01395-000
CH 33,300
VD1 3,000
B- 2,500
TL 72,800

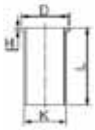
22,00x63,00

CP

91-09395-000
1 1,500 CrP
2 1,750 P
3 3,000 CrP

Ø 86,400 **31-03395-000**
Ø 86,800 **31-03395-040**
Ø 87,000 **31-03395-060**
Ø 87,200 **31-03395-080**
Ø 87,400 **31-03395-100**

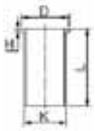
Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor



K=90,05
L=127,00
H=5,00
D=91,00

DS

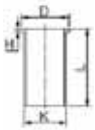
51-65270-000



K=90,50
L=127,00
H=6,00
D=91,50

DS
+0,50

51-65270-050



K=91,05
L=127,00
H=6,00
D=92,00

DS
+1,00

51-65270-100

88,000

XN1	504 2,0	B	01 1971 > 12 1989	4 Cyl	**1971cc**	**60-71kW**	(82-97ps)
XN1	505 2,0	B	05 1979 > 12 1993	4 Cyl	**1971cc**	**60-71kW**	(82-97ps)
XN2	504 2.0i	B	01 1971 > 08 1984	4 Cyl	**1971cc**	**74-78kW**	(101-106ps)

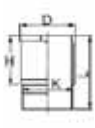
11-02140-000
CH 37,900
B+ 2,550
TL 73,600

23,00x74,00

CP

91-09140-000
1 1,500 CR
2 2,000
3 4,000 CR

Ø 88,000 **31-04140-000**



K=93,00
L=136,20
H=90,00
D=101,90

WF

51-05889-000 **71-08140-000**

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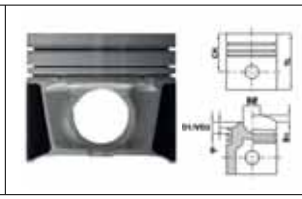
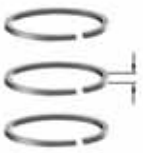
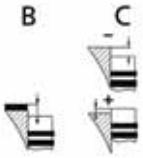
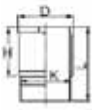
		Type				

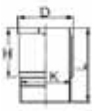
88,000

XN1	504 2,0	B	01	1971	>	12	1989	4 Cyl	**1971cc**	**60-71kW**	(82-97ps)
XN1	505 2,0	B	05	1979	>	12	1993	4 Cyl	**1971cc**	**60-71kW**	(82-97ps)
XN1P / XN1T	J9 2.0	B	03	1980	>	06	1987	4 Cyl	**1971cc**	**55-63kW**	(75-86ps)
XN1T	J5 2.0	B	09	1981	>	12	1993	4 Cyl	**1971cc**	**55-63kW**	(75-86ps)

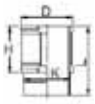
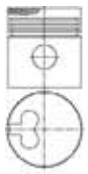
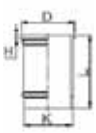
	11-02142-000 CH 38,500 B+ 0,500 TL 71,950 **23,00x74,00**		**91-09140-000** 1 1,500 CR 2 2,000 3 4,000 CR		Ø 88,000	**31-04142-000**
	K=93,00 L=136,20 H=90,00 D=101,90	WF			**51-05889-000**	**71-08142-000**

88,000

XN2	504 2.0i	B	01	1971	>	08	1984	4 Cyl	**1971cc**	**74-78kW**	(101-106ps)

	11-02148-000 CH 37,900 B+ 2,550 TL 73,400 **23,00x74,00**		**91-09140-000** 1 1,500 CR 2 2,000 3 4,000 CR		Ø 88,000 Ø 88,500 Ø 88,750	**31-04148-000** **31-04148-050** **31-04148-075**
	K=93,00 L=136,20 H=90,00 D=101,90	WF			**51-05889-000**	**71-08148-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
88,000						
ZDJL	505 2.2i	B	08 1983 > 12 1993	4 Cyl	**1995cc**	**84-96kW** (114-131ps)
ZEJ	505 2.0i	B	08 1979 > 12 1989	4 Cyl	**1995cc**	**81-83kW** (110-113ps)
11-02160-000 CH 40,500 B+ 1,500 TL 67,000 **23,00x75,00** Citroen, Peugeot ve Renault ile Ortak Motor			**91-09160-000** 1 1,750 CR 2 2,000 3 4,000 CrP St		Ø 88,000	**31-04160-000**
	K=93,60 L=148,50 H=93,06 D=104,00	WF			**51-05888-000**	**71-07097-000**
	K=93,53 L=140,50 H=93,10 D=104,00	WF			**51-05909-000**	**71-08160-000**
88,000						
XD 4.88	504 1.9 D	D	04 1971 > 06 1987	4 Cyl	**1948cc**	**36-42kW** (49-57ps)
XD 88	404 1.9 D	D	00 1963 > 00 1975	4 Cyl	**1948cc**	**44kW** (60ps)
XD P 4.88	404 2.0 D	D	00 1971 > 10 1975	4 Cyl	**1948cc**	**40kW** (54ps)
XD P 4.88	504 2.0 D	D	00 1971 > 12 1990	4 Cyl	**1948cc**	**40kW** (54ps)
XD P 4.88 / 4.88 / 88	J 7 1.9 D	D	04 1971 >	4 Cyl	**1948cc**	**36-44kW** (49-60ps)
 **11-02220-000** CH 58,700 B- 1,950 TL 95,700 **28,00x72,00** Ford ve Peugeot ile Ortak Motor			**91-09220-000** 1 2,000 CR 2 2,000 P 3 2,000 P 4 4,500 CrP		Ø 88,000	**31-04220-000**
	K=96,00 L=173,00 H=7,00 D=106,30	WF			**51-05890-000**	**71-08220-000**

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90,000

XD4.90	504 2.1 D		D	10	1970	> 12	1990	4 Cyl	**2112cc**	**43-48kW**	(59-65ps)
XD4.90	J 7 2.1 D		D	10	1970	> 10	1978	4 Cyl	**2112cc**	**43-48kW**	(59-65ps)
XD4.90	J9 2.1 D		D	10	1980	> 06	1987	4 Cyl	**2112cc**	**43-48kW**	(59-65ps)
XDP4.90	J 7 2.1 D		D	08	1968	> 07	1977	4 Cyl	**2112cc**	**55kW**	(75ps)
XDP6.90	ENGINE		D			>		6 Cyl	**2112cc**	**78kW**	(106ps)

11-01891-000
CH 57,200
B- 2,000
TL 96,350

28,00x77,00

91-09891-000
1 2,000 CrP
2 2,000 P
3 2,000 P
4 4,500 CrP

Ø 90,000
Ø 90,500
Ø 91,000

31-03891-000
31-03891-050
31-03891-100

Ford, Opel ve Peugeot ile Ortak Motor

K=96,00
L=173,00
H=7,00
D=106,30

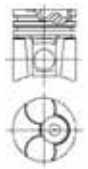
WF

51-05891-000

71-07891-000

92,000

DJ5TDI/TED (THX)	Boxer 2.5 TD		D	01	1997	> 04	2002	4 Cyl	**2446cc**	**79kW**	(107ps)
DJ5TDI/TED (THX)	Boxer Box 2.5 TDI 4x4		D	01	1997	> 04	2002	4 Cyl	**2446cc**	**79kW**	(107ps)



11-02113-000
CH 57,000
VD1 1,400
B- 18,250
BØ 41,000
TL 89,000

34,00x68,00

AP
YS

99-09096-000
1 3,500 CrP
2 2,000 P
3 3,500 CrP

1,30mm conta ile
+0,50/+0,60

Ø 92,000
Ø 92,500

39-04113-000
39-04113-050

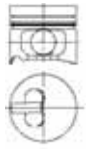
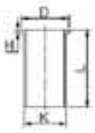
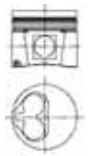
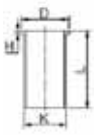
Citroen ve Peugeot ile Ortak Motor

K=96,00
L=160,00
H=5,00
D=97,00

DS

51-65886-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
92,000						
DJ5 Boxer 2.5 D		D	02 1994 > 02 2002	4 Cyl	**2446cc 63kW**	(86ps)
	**11-02131-000** CH 49,740 B- 2,800 TL 79,900 **34,00x58,00**		**91-09131-000** 1 2,250 CrP 2 2,000 P 3 3,000 CrP	+0,40/+0,60	Ø 92,000 Ø 92,500 Ø 92,750 Ø 93,000	**31-04131-000** **31-04131-050** **31-04131-075** **31-04131-100**
	K=96,00 L=160,00 H=5,00 D=97,00	DS			**51-65886-000**	
92,010						
DJ5 T	Boxer 2.5 T	D	00 1997 >	4 Cyl	**2446cc 76-96kW**	(103-130ps)
DJ5 T	Citroen Jumper 2.5 T	D	00 1997 >	4 Cyl	**2446cc 76-96kW**	(103-130ps)
	**11-02114-000** CH 49,840 B- 2,300 TL 82,000 **34,00x68,00**	AP YS HA	**99-09097-000** 1 3,000 CrP 2 1,750 P 3 3,500 CrP	+0,64/+0,74	Ø 92,010 Ø 92,510	**39-04114-000** **39-04114-050**
93,000						
4JB1	J9 Karsan	D	00 2005 >	4 Cyl	**2771cc 57kW**	(78ps)
	11-02385-000 CH 51,850 VD1 0,550 B- 19,500 BØ 43,900 TL 91,850 **31,00x76,00**	AP CP	**91-09389-000** 1 2,000 P 2 2,000 P 3 4,000 CrP	1. Conta ile 1,50mm (+0,71/+0,77) 2. Conta ile 1,55mm (+0,77/+0,81) 3. Conta ile 1,60mm (+0,81/+0,87)	Ø 93,000	**31-04385-000**
Isuzu ve Opel ile Ortak Motor			**99-09389-000** 1 2,000 FeP 2 2,000 FeP 3 4,000 TeF			**39-04385-000**
	K=95,00 L=181,00 H=0,90 D=101,00	DF-CR-ST			**51-35721-000**	**71-08385-000** 71-98385-000

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PEUGEOT

		Type		B C		

94,000

XD 2	504 2.3 D	D	08	1976	>	12	1989	4 Cyl	**2304cc**	**44-51kW**	(60-69ps)
XD 2	505 2.3 D	D	09	1979	>	09	1986	4 Cyl	**2304cc**	**44-51kW**	(60-69ps)
XD 2 / 2P / 94	J9 2.3 D	D	10	1980	>	09	1987	4 Cyl	**2304cc**	**44-53kW**	(60-72ps)
XD 3P	505 2.5 D	D	06	1981	>	12	1993	4 Cyl	**2304cc**	**51-58kW**	(70-79ps)
XD 3P	J9 2.5 D	D	07	1982	>	06	1987	4 Cyl	**2304cc**	**51-58kW**	(70-79ps)

11-01892-000
CH 57,420
B- 2,000
TL 99,920

28,00x81,00

91-09895-000
1 2,000 CrP
2 2,000 P
3 4,000 CrP

0/+0,84 Conta ile
0,75/0,90

Ø 94,000 **31-03892-000**
Ø 94,400 **31-03892-040**
Ø 94,600 **31-03892-060**
Ø 95,000 **31-03982-100**

Daf, Ford ve Peugeot ile Ortak Motor

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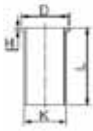
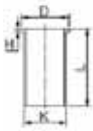
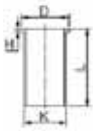
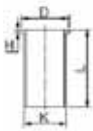
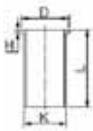
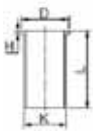
		Type		B C		
94,000						
XD3P	505 2.5 D	D	06 1981 > 12 1993	4 Cyl	**2498cc**	**51-58kW** (70-79ps)
XD3P	J9 2.5 D	D	07 1982 > 06 1987	4 Cyl	**2498cc**	**51-58kW** (70-79ps)
	11-01893-000 CH 53,920 B- 1,800 TL 96,420 **30,00x78,80** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,53mm Conta ile 0/+0,79 1,63mm Conta ile +0,79/+0,89 1,73mm Conta ile +0,89/…	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03893-000** **31-03893-040** **31-03893-060** **31-03893-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**	
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**	
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**	
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**	
	K=97,05 L=166,00 H=4,00 D=99,50	DS			**51-65915-000**	
	K=97,55 L=166,00 H=5,00 D=100,00	DS +0,50			**51-65915-050**	

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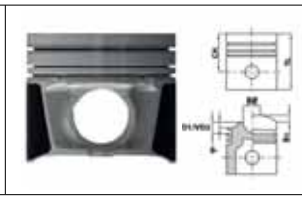
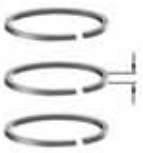
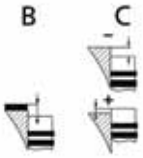
PEUGEOT

		Type				

94,000

XD 2	504 2.3 D	D	08	1976	>	12	1989	4 Cyl	**2304cc**	**44-51kW** (60-69ps)
XD 2	505 2.3 D	D	09	1979	>	09	1986	4 Cyl	**2304cc**	**44-51kW** (60-69ps)
XD 2 / 2P / 94	J9 2.3 D	D	10	1980	>	09	1987	4 Cyl	**2304cc**	**44-53kW** (60-72ps)

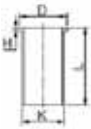
11-01894-000
CH 57,420
B- 2,000
TL 99,920

30,00x78,80

Ford ve Peugeot ile Ortak Motor

91-09895-000
1 2,000 CrP
2 2,000 P
3 4,000 CrP

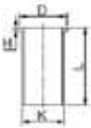
Ø 94,000	**31-03894-000**
Ø 94,400	**31-03894-040**
Ø 94,600	**31-03894-060**
Ø 95,000	**31-03894-100**



K=97,05
L=170,60
H=3,90
D=99,50

DS

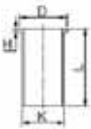
51-65892-000



K=98,05
L=170,60
H=5,00
D=100,50

DS
+1,00

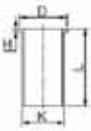
51-65892-100



K=97,05
L=170,60
H=5,00
D=99,50

DS

51-65893-000



K=97,50
L=170,60
H=6,00
D=100,00

DS
+0,50

51-65893-050

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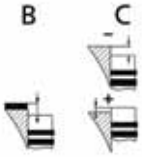
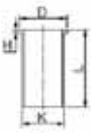
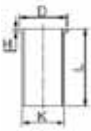
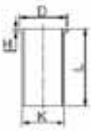
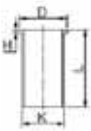
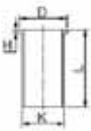
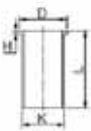
		Type		B C		
						

94,000

XD3P	505 2.5 D		D	06	1981	> 12	1993	4 Cyl	**2498cc** **51-58kW** (70-79ps)
XD3P	J9 2.5 D		D	07	1982	> 06	1987	4 Cyl	**2498cc** **51-58kW** (70-79ps)

	11-01895-000 CH 53,920 B- 1,750 TL 91,420 **30,00x78,80** Daf, Ford ve Peugeot ile Ortak Motor		**91-09895-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	1,56mm Conta ile 0/+0,84 1,70mm Conta ile 0/+0,84	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	**31-03895-000** **31-03895-040** **31-03895-060** **31-03895-100**
	K=97,05 L=170,60 H=3,90 D=99,50	DS			**51-65892-000**	
	K=98,05 L=170,60 H=5,00 D=100,50	DS +1,00			**51-65892-100**	
	K=97,05 L=170,60 H=5,00 D=99,50	DS			**51-65893-000**	
	K=97,50 L=170,60 H=6,00 D=100,00	DS +0,50			**51-65893-050**	
	K=97,05 L=166,00 H=4,00 D=99,50	DS			**51-65915-000**	
	K=97,55 L=166,00 H=5,00 D=100,00	DS +0,50			**51-65915-050**	

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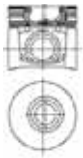
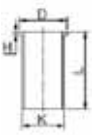
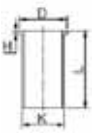
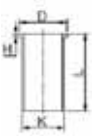
		Type		B C		
94,400						
8140.43S.4030 Euro3	Boxer 2.8 HDi	D 09 2000 > 02 2002 4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)	
8140.43S.4030 Euro3	Boxer II 2.8 HDi	D 02 2002 > 4 Cyl	**2798cc**	**92-94 kW**	(125-128 ps)	
	**11-01692-000** CH 58,750 B- 21,350 BØ 39,300 TL 87,600 **32,00x72,00** Citroen, Fiat / Iveco, Peugeot ve Renault ile Ortak Motor	AP YS	**91-09691-000** 1 2,500 CR 2 2,000 P 3 2,500 CrP	1,20 Conta ile +0,40/+0,50 1,30 Conta ile +0,51/+0,60 1,40 Conta ile +0,61/+0,70 1,50 Conta ile +0,71/+0,80	Ø 94,400 Ø 94,800 Ø 95,000	**31-03692-000** **31-03692-040** **31-03692-060**
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	
95,800						
F1CE0481D Euro4	Boxer III 3.0 HDi	D 07 2006 > 4 Cyl	**2998cc**	**116kW**	(158ps)	
F30DT Euro4	Boxer III 3.0 HDi	D 07 2006 > 4 Cyl	**2998cc**	**115kW**	(157ps)	
	11-02836-000 CH 63,000 B- 16,000 BØ 50,500 TL 93,400 **36,00x81,00** Citroen, Fiat / Iveco, Mitsubishi ve Peugeot ile Ortak Motor	AP YS	**91-09839-000** 1 2,500 CrP 2 2,000 P 3 2,500 CrP	1,60mm conta ile (+0,718/+0,773) 1,65mm conta ile (+0,773/+0,819) 1,70mm conta ile (+0,819/+0,874)	Ø 95,800 Ø 96,200 Ø 96,400	**31-04836-000** **31-04836-040** **31-04836-060**
	K=99,00 L=175,00 H=4,80 D=102,00	DS			**51-65754-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

RANGE ROVER

		Type		B C		

88,860

3.5LEFI	Discovery D 8 I	B	00	1990	>	00	1993	8 Cyl	**3528cc**	**kW**	(ps)
3.5LEFI	Discovery DV 8 IS	B	00	1990	>	00	1993	8 Cyl	**3528cc**	**kW**	(ps)
3.5LEFI	Range Rover V8	B	00	1986	>	00	1988	8 Cyl	**3528cc**	**kW**	(ps)
3.5LEFI	Range Rover VOGUE EFI	B	00	1985	>	00	1989	8 Cyl	**3528cc**	**kW**	(ps)
3.5LEFI	Range Rover VOGUE SE	B	00	1988	>	00	1989	8 Cyl	**3528cc**	**kW**	(ps)

11-01556-000
CH 47,371
B- 2,362
TL 77,089

22,22x72,80

91-09556-000
1 1,550 CrP
2 1,588 P
3 4,762 CrP

Ø 88,860 **31-03556-000**
Ø 89,360 **31-03556-020**
Ø 89,860 **31-03556-040**

88,860

3.5LEFI	Discovery V 8I	B	00	1990	>	00	1993	8 Cyl			(ps)
3.5LEFI	Discovery V 8IS	B	00	1990	>	00	1993	8 Cyl			(ps)
3.5LEFI	Range Rover	B	00	1986	>	00	1988	8 Cyl			(ps)
3.5LEFI	Range Rover VOGUE EFI	B	00	1985	>	00	1989	8 Cyl			(ps)
3.5LEFI	Range Rover VOGUE SE	B	00	1988	>	00	1989	8 Cyl			(ps)

11-01557-000
CH 47,371
B- 5,207
TL 77,089

22,22x72,80

91-09556-000
1 1,550 CrP
2 1,588 P
3 4,762 CrP

Ø 88,860 **31-03557-000**
Ø 89,360 **31-03557-020**
Ø 89,860 **31-03557-040**

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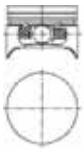
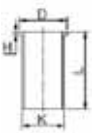
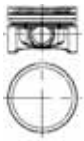
		Type		B	C		
69,000							
D7F 700 / 710 / 720 / 722 / 726 / 746 / 766	Clio II 1.2i	B	03 1996 >		4 Cyl		(58-60 ps)
D7F 700-704	Twingo 1.2i	B	09 1996 >		4 Cyl		(58-60 ps)
D7F 701 / 710 / 720 / 722 / 726 / 746 / 766	Kangoo 1.2i	B	04 1998 >		4 Cyl		(58-60 ps)
D7F 730	Clio I 1.2i	B	04 1996 >	02 1998	4 Cyl		(54-58 ps)
 **11-02155-000** CH 27,150 TL 50,500 **17,50x53,70**			**91-09150-000** 1 1,500 CrP 2 1,500 P 3 2,500 CrP			Ø 69,000 Ø 69,250 Ø 69,500 Ø 70,000	**31-04155-000** **31-04155-025** **31-04155-050** **31-04155-100**
Nissan ve Renault ile Ortak Motor							
 K=72,00 L=120,00 H=4,00 D=74,00		DS				**51-65934-000**	
69,000							
D4F 740	Clio II	D	00 2000 >		4 Cyl	**1200cc kW**	(75ps)
D4F 740	Clio III	D	00 2000 >		4 Cyl	**1200cc kW**	(75ps)
D4F 740	Modus	D	00 2000 >		4 Cyl	**1200cc kW**	(75ps)
D4F 740	Twingo	D	00 2000 >		4 Cyl	**1200cc kW**	(75ps)
 **11-02184-000** CH 26,700 B- 1,100 BØ 60,300 TL 44,700 **17,50x53,90**			**91-09151-000** 1 1,200 CrP St 2 1,500 P 3 2,500 CrP St			Ø 69,000 Ø 69,500	**31-04184-000** **31-04184-050**

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70,000

688.01	Estafette 1.1	B	02	1962	>	12	1981	4 Cyl	**25kW**	(34ps)
688.01 / 11 / 12	R 4 1.1	B	00	1965	>			4 Cyl	**25kW**	(34ps)
688.10	Rodeo 5 1.1	B	07	1971	>	04	1980	4 Cyl	**26kW**	(35ps)
688.10 / 12 / 13	R 6 1.1	B	09	1971	>	08	1980	4 Cyl	**26-33kW**	(35-45ps)
688.13	R 5 1.1	B	10	1979	>	03	1985	4 Cyl	**33kW**	(45ps)
688.13	R 7 1.1	B	09	1980	>	12	1982	4 Cyl	**33kW**	(45ps)
804.00 / 688.02 / 06 / 09	R 8 1.1	B	02	1969	>	07	1976	4 Cyl	**26-39kW**	(35-53ps)
C1E 715 / 720	R 11 1.1	B	03	1983	>	03	1991	4 Cyl	**35kW**	(48ps)
C1E 715 / 720	R 9 1.1	B	09	1981	>	10	1987	4 Cyl	**35kW**	(48ps)

11-01901-000
CH 40,000
TL 68,000

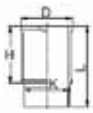
18,00x62,00

Daf, Renault ve Volvo ile Ortak Motor

91-09901-000
1 1,750 CR
2 2,000 P
3 3,500 CrP St

Ø 70,000

31-03901-000



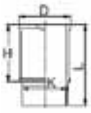
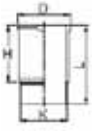
K=75,50
L=135,00
H=94,85
D=86,00

WF

51-05901-000

71-07901-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

			Type		B	C		
71,500								
C1G / C1G 702 / 710 / 730	R 9	B		> 00 1986	4 Cyl	**1237cc**	**40kW**	(54ps)
C1G / C1G 702 / 710 / 730	R 11	B	11 1985	>	4 Cyl	**1237cc**	**40kW**	(54ps)
C1G / C1G 702 / 710 / 730	R 5	B		> 00 1987	4 Cyl	**1237cc**	**40kW**	(54ps)
C1G 726	Express	B		> 00 1992	4 Cyl	**1237cc**	**40kW**	(54ps)
11-02152-000 CH 37,500 TL 62,500 **20,00x64,00**			**91-09152-000** 1 1,750 CR 2 2,000 P 3 4,000 CR			Ø 71,500		**31-04152-000**
 K=78,00 L=134,00 H=94,85 D=87,57	WF					**51-05895-000**		**71-08152-000**
73,000								
810.01	Estafette 1.3	B	10 1968	> 09 1989	4 Cyl	**1289cc**	**26kW**	(35ps)
810.01 / 02 / 05 / 99	R12 1.3	B	10 1969	> 12 1989	4 Cyl	**1289cc**	**26-44kW**	(36-60ps)
810.03	R10 1.3	B	07 1969	> 10 1989	4 Cyl	**1289cc**	**29kW**	(40ps)
810.10	R11 1.3	B	00 1974	> 00 1989	4 Cyl	**1289cc**	**44kW**	(60ps)
810.10	R14 1.3	B	00 1972	>	4 Cyl	**1289cc**	**44kW**	(60ps)
810.19	Rodeo 6 1.3	B	10 1980	> 08 1989	4 Cyl	**1289cc**	**33kW**	(45ps)
810.19 / 25 / 26 / 29	R5 1.3	B	10 1979	> 09 1989	4 Cyl	**1289cc**	**31-47kW**	(42-64ps)
11-01902-000 CH 37,500 B- 1,600 BØ 50,000 TL 62,500 **20,00x62,00** Dacia, Daf, Renault ve Volvo ile Ortak Motor			**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St			Ø 73,000		**31-03902-000**
 K=78,50 L=134,00 H=94,85 D=87,65	WF					**51-05902-000**		**71-07902-000**

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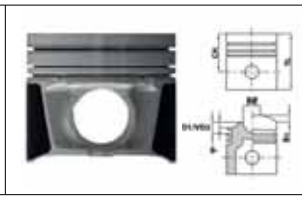
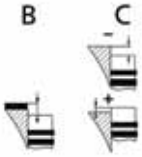
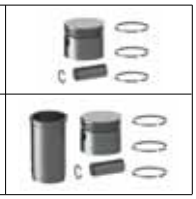
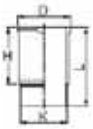
		Type		B C		
						

73,000

B 7 / F 7 / 810 01 / 02 / 03 / 10	R 1170	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 1171	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 1192	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 12	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 1337	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 2126	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 2136	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 2137	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 5	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B 7 / F 7 / 810 01 / 02 / 03 / 10	R 6	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
B7 / F 7 / 810 01 / 02 / 03 / 10	R 10	B		>	00	1970	4 Cyl	**1289cc**	**27-44kW**	(37-60ps)
C 7 / 810 05 / 06 / 25 / 26	R 12	B	01 1971	>			4 Cyl	**1289cc**	**31-50kW**	(42-68ps)
C 7 / 810 05 / 06 / 25 / 26	R 1224	B	01 1971	>			4 Cyl	**1289cc**	**31-50kW**	(42-68ps)
C 7 / 810 05 / 06 / 25 / 26	R 1330	B	01 1971	>			4 Cyl	**1289cc**	**31-50kW**	(42-68ps)
C 7 / 810 05 / 06 / 25 / 26	R 1337	B	01 1971	>			4 Cyl	**1289cc**	**31-50kW**	(42-68ps)
C 7 / 810 05 / 06 / 25 / 26	R 15	B	01 1971	>			4 Cyl	**1289cc**	**31-50kW**	(42-68ps)
C 7 / 810 05 / 06 / 25 / 26	R 5	B	01 1971	>			4 Cyl	**1289cc**	**31-50kW**	(42-68ps)

	11-01903-000 CH 37,500 TL 62,500 **20,00x62,00**	**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St		Ø 73,000	**31-03903-000**
Dacia, Daf, Renault ve Volvo ile Ortak Motor					
	K=78,50 L=134,00 H=94,85 D=87,65	WF		**51-05902-000**	**71-07903-000**

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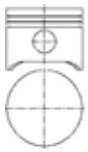
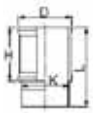
		Type		B C		
75,000						
129 A 700 129 00 / 145 00 / 150 00-XX 5J	R 14 GTL	B	>	4 Cyl	**1360cc**	**kW** (ps)
129 A 700 129 00 / 145 00 / 150 00-XX 5J	R 14 L	B	>	4 Cyl	**1360cc**	**kW** (ps)
129 A 700 129 00 / 145 00 / 150 00-XX 5J	R 14 TL	B	>	4 Cyl	**1360cc**	**kW** (ps)
129 A 700 129 00 / 145 00 / 150 00-XX 5J	R 14 TS	B	>	4 Cyl	**1360cc**	**kW** (ps)
129 A 700/ XV 6 B	R 1170	B	> 00 1976	4 Cyl	**1360cc**	**42-51kW** (57-71ps)
129 A 700/ XV 6 B	R 1210	B	> 00 1976	4 Cyl	**1360cc**	**42-51kW** (57-71ps)
129 A 700/ XV 6 B	R 1212	B	> 00 1976	4 Cyl	**1360cc**	**42-51kW** (57-71ps)
129 A 700/ XV 6 B	R 1330	B	> 00 1976	4 Cyl	**1360cc**	**42-51kW** (57-71ps)
129 A 700/ XV 6 B	R 14	B	> 00 1976	4 Cyl	**1360cc**	**42-53kW** (57-71ps)
 **11-02154-000** CH 40,500 TL 65,500 **19,50x65,00** Citroen, Peugeot ve Renault ile Ortak Motor			**91-09154-000** 1 1,750 CR 2 2,000 P 3 4,000 CR		Ø 75,000	**31-04154-000**
 K=79,45 L=134,50 H=90,00 D=89,20		WF			**51-05873-000**	**71-08154-000**

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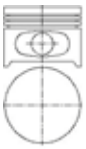
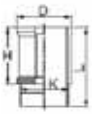
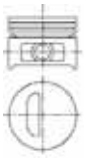
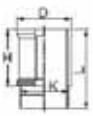
		Type		B	C		
75,800							
E6J 700 / 701 / 706 / 734KAT	R 19 1.4i		B	09 1988	>	4 Cyl	(55-80ps)
E6J 700KAT	R 19 1.4		B	09 1988	>	4 Cyl	(80ps)
E6J 700KAT / 712	Clio I 1.4i		B	06 1990	>	4 Cyl	(58-80ps)
E6J 734KAT / 738KAT	Rapid 1.4i		B	09 1991	>	4 Cyl	(55-60 ps)
E6J 734KAT / 738KAT / 712	Express 1.4i		B	03 1986	>	4 Cyl	(55-77ps)
E6J 760KAT / 713 / 718	Clio I 1.4		B	06 1990	>	4 Cyl	(75-77 ps)
E7J 720 / 724 / 728 KAT / 726 / 773	Express 1.4i		B	09 1991	>	4 Cyl	(75-80 ps)
E7J 720 / 724 / 728 KAT / 726 / 773	Rapid 1.4i		B	09 1991	>	4 Cyl	(75-80 ps)

	**11-01909-000** CH 31,700 TL 52,600 **19,00x60,00**	CP	**91-09909-000** 1 1,500 CR 2 1,750 3 3,000 CrP St		Ø 75,800	**31-03909-000**
	K=80,50 L=130,00 H=91,50 D=90,20	WF			**51-05910-000**	**71-07909-000**

75,800										
E5F A 710 / 708	Clio 1.2 RL		B	00 1991	>	00 1998	4 Cyl	**1171cc**	**44kW**	(60ps)
E5F A 710 / 708	Clio 1.2 RN		B	00 1991	>	00 1998	4 Cyl	**1171cc**	**44kW**	(60ps)
E5F A 710 / 708	Clio 1.2 RT		B	00 1991	>	00 1998	4 Cyl	**1171cc**	**44kW**	(60ps)

	**11-01914-000** CH 35,080 B- 1,200 TL 56,400 **19,00x60,00**	CP	**91-09909-000** 1 1,500 CR 2 1,750 3 3,000 CrP St		Ø 75,800	**31-03914-000**
	K=80,50 L=130,00 H=91,50 D=90,20	WF			**51-05910-000**	

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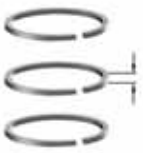
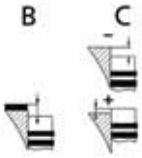
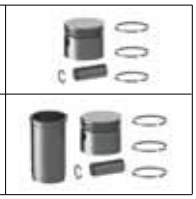
Type







76,000

847 700 / 720 / .2	R 18 1.4	B	04	1978	>	02	1986	4 Cyl	**1397cc**	**34-50kW**	(48-67ps)
847 700 / C2J 713	R 5 1.4	B	05	1976	>	08	1983	4 Cyl	**1397cc**	**34-36kW**	(48-49ps)
847 720 / 847.2	Fuego 1.4	B	03	1980	>	10	1985	4 Cyl	**1397cc**	**40-50kW**	(54-67ps)
847.2	R 5 1.4	B	00	1978	>	00	1987	4 Cyl	**1397cc**	**40kW**	(54ps)
847.2 / C1J 715	R 14 1.4	B	09	1979	>	12	1988	4 Cyl	**1397cc**	**40-44kW**	(54-60ps)
847.2 / C1J 715 / C2J 717	R 11 1.4	B	03	1983	>	03	1995	4 Cyl	**1397cc**	**40-53kW**	(54-72ps)
847.2 / C1J 742 / 768	R 19 1.4	B	10	1988	>	06	1993	4 Cyl	**1397cc**	**40-44kW**	(54-60ps)
C1J 715 / 768 / C2J 717 / 784	R 5 1.4	B	10	1984	>	12	1996	4 Cyl	**1397cc**	**44-53kW**	(60-72ps)
C1J 715 / 768 / C2J 717 / 847.2	R 9 1.4	B	09	1981	>	12	1988	4 Cyl	**1397cc**	**40-53kW**	(54-72ps)
C1J 715 / 768 / C2J 784 / 847 .2	Rapid 1.4	B	03	1986	>	06	1989	4 Cyl	**1397cc**	**40-44kW**	(54-60ps)
C1J 768 / 715 / C2J 784 / 847.2	Express 1.4	B	03	1986	>	06	1989	4 Cyl	**1397cc**	**44kW**	(60ps)
C1J 768 / 847 700 / .2	Trafic 1.4	B	09	1980	>	02	1989	4 Cyl	**1397cc**	**34-44kW**	(48-60ps)
C2J 717	R 21 1.4	B	06	1988	>	03	1993	4 Cyl	**1397cc**	**44-53kW**	(60-72ps)

11-01904-000
CH 37,500
TL 64,000

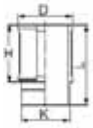
20,00x64,00

91-09904-000
1 1,750 CR
2 2,000 P
3 4,000 CrP St

Ø 76,000

31-03904-000

Renault ve Volvo ile Ortak Motor



K=80,55
L=134,00
H=95,00
D=90,20

WF

51-05904-000

71-07904-000

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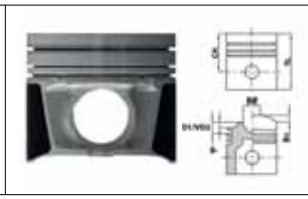
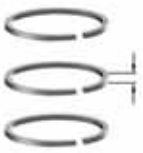
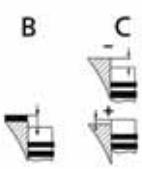
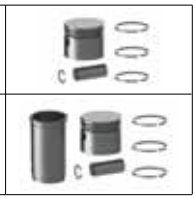
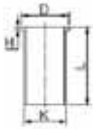
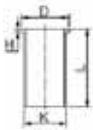
		Type		B C								
76,000												
K9K 700 / 702 / 704 / 706 / 710 / 712 / 714	Clio II 1.5 dCi	D	06	2000	>	10	2007	4 Cyl	**1461cc**	**42-74kW**	(57-100ps)	
K9K 700 / 702 / 704 / 706 / 710 / 714 / 716	Kangoo 1.5 dCi	D	05	2000	>			4 Cyl	**1461cc**	**42-62kW**	(57-85ps)	
K9K 700 / 702 / 706	ThAlia II 1.5 dCi	D	09	2001	>			4 Cyl	**1461cc**	**48-62kW**	(65-85ps)	
K9K 700 / 706	Symbol 1.5 dCI	D			>			4 Cyl	**1461cc**	**48-50 kW**	(65-68 ps)	
K9K 722 / 724	Mégane Grandtour II 1.5 dCi	D	08	2003	>	05	2009	4 Cyl	**1461cc**	**60-63 kW**	(82-86 ps)	
K9K 722 / 724	Mégane II 1.5 dCi	D	11	2002	>	11	2008	4 Cyl	**1461cc**	**60-63 kW**	(82-86 ps)	
K9K 722 / 724	Scénic II 1.5 dCi	D	05	2003	>			4 Cyl	**1461cc**	**60-63 kW**	(82-86 ps)	
K9K 724	GrandScénic II 1.5 dCi	D	05	2005	>			4 Cyl	**1461cc**	**63kW**	(86ps)	
K9K 724 / 750 / 752 / 760 / 762 / 768	Modus 1.5 dCi	D	12	2004	>			4 Cyl	**1461cc**	**48-65kW**	(65-88ps)	
K9K 750 / 752 / 760 / 762 / 768	Clio III 1.5 dCi	D	06	2005	>			4 Cyl	**1461cc**	**48-65kW**	(65-88ps)	
K9K 752 / 768	Grand Modus 1.5dCI	D	12	2004	>			4 Cyl	**1461cc**	**48-50kW**	(65-68ps)	
K9K 790 / 792 / 794 / 796	Logan 1.5 dCi	D	06	2005	>			4 Cyl	**1461cc**	**48-63kW**	(65-86ps)	
K9K 790 / 792 / 794 / 796	Sandero 1.5 dCi	D	01	2009	>			4 Cyl	**1461cc**	**48-63kW**	(65-86ps)	

	11-02162-000 CH 41,750 VD1 0,250 VD2 0,400 B- 14,000 BØ 39,700 TL 66,000 **25,00x60,00**	AP	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 Ø 76,500 Ø 77,000	**31-04162-000** **31-04162-050** **31-04162-100**
	Dacia, Nissan, Renault, Suzuki ile Ortak Motor					
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

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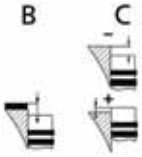
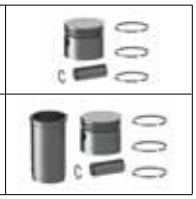
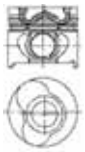
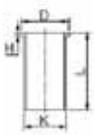
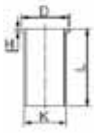
							

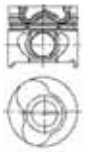
76,000

K9K 700 / 702 / 704 / 706 / 710 / 712 / 714	Clio II 1.5 dCi	D	06	2001	>	4 Cyl	**1496cc**	**48-74kW**	(65-100ps)
K9K 700 / 702 / 704 / 708 / 710 / 714	Kangoo 1.5 dCi	D	05	2000	>	4 Cyl	**1496cc**	**48-62kW**	(65-85ps)
K9K 700 / 702 / 706	ThAlia II 1.5 dCi	D	09	2001	>	4 Cyl	**1496cc**	**48-62kW**	(65-85ps)
K9K 700 / 706	Symbol 1.5 dCI	D			>	4 Cyl	**1496cc**	**48-50 kW**	(65-68 ps)
K9K 722 / 724	Mégane II 1.5 dCi	D	11	2002	>	4 Cyl	**1496cc**	**60-63 kW**	(82-86 ps)
K9K 722 / 724	Scénic II 1.5 dCi	D	05	2003	>	4 Cyl	**1496cc**	**60-63 kW**	(82-86 ps)
K9K 724 / 750 / 752 / 760 / 762 / 768	Modus 1.5 dCi	D	12	2004	>	4 Cyl	**1496cc**	**48-65kW**	(65-88ps)
K9K 750 / 752 / 760 / 762 / 768	Clio III 1.5 dCi	D	06	2005	>	4 Cyl	**1496cc**	**48-65kW**	(65-82ps)

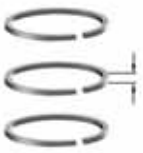
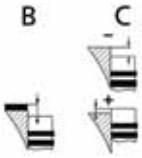
	**11-02164-000** CH 41,700 VD1 0,200 B- 13,950 BØ 39,700 TL 66,000 **26,00x60,00**	AP	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP	(+0,25/+0,30)	Ø 76,000 Ø 76,500 Ø 77,000	**31-04164-000** **31-04164-050** **31-04164-100**
Dacia, Nissan, Renault, Suzuki ile Ortak Motor						
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**	

76,000

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter				>	Cyl	**cc**	**kW**	(ps)

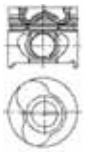
	**11-02164-001** CH 41,500 VD1 0,200 B- 13,950 BØ 39,700 TL 65,800 **26,00x60,00**	AP CH -0,20 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP	Ø 76,000 Ø 76,500 Ø 77,000	**31-04164-001** **31-04164-051** **31-04164-101**
Dacia, Nissan, Renault, Suzuki ile Ortak Motor					

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

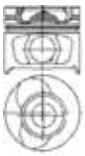
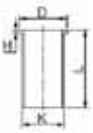
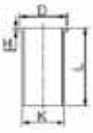
76,000

Strok Boyu 0,40mm Kisa Piston / Stroke Lenght 0,40mm Shorter > (ps)

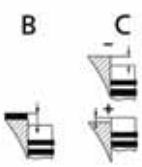
	**11-02164-002** CH 41,300 VD1 0,200 B- 13,950 BØ 39,700 TL 65,600 **26,00x60,00**	AP CH -0,40 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 Ø 76,500 Ø 77,000	**31-04164-002** **31-04164-052** **31-04164-102**
	Dacia, Nissan, Renault, Suzuki ile Ortak Motor					

76,000

K9K 728 Euro3	Clio II 1.5 DCI	00 2004 >		(100ps)
K9K 728 Euro3	Kango II 1.5 DCI	00 2004 >		(100ps)
K9K 728 Euro3	Megane II 1.5 DCI	00 2004 >		(100ps)
K9K 728 Euro3	Scenic 1.5 DCI	00 2004 >		(100ps)

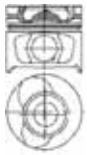
	**11-02175-000** CH 41,700 VD1 0,250 VD2 0,430 B- 14,000 BØ 39,700 TL 66,000 **26,00x60,00**	AP YS	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP	+0,25/+0,30	Ø 76,000 Ø 76,500	**31-04175-000** **31-04175-050**
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

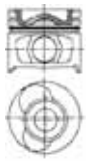
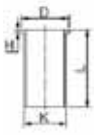
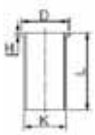
76,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

	**11-02175-001** CH 41,500 VD1 0,250 VD2 0,430 B- 14,000 BØ 39,700 TL 65,800 **26,00x60,00**	AP YS CH -0,20 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP			Ø 76,000 Ø 76,500	**31-04175-001** **31-04175-051**

76,000

K9K 732 Euro4	Megane II 1.5 dCi	00	2005	>			(106ps)
K9K 732 Euro4	Scenic 1.5 dCi	00	2005	>			(106ps)
K9K 764 Euro4	Clio Grandtour 1.5 dCi	00	2005	>			(106ps)
K9K 764 Euro4	Clio III 1.5 dCi	00	2005	>			(106ps)
K9K 764 Euro4	Modus 1.5 dCi	00	2005	>			(106ps)
K9K 780 Euro4	Laguna III 1.5 dCi	00	2007	>			(106ps)
K9K 804 Euro4	Kangoo 1.5 dCi	00	2008	>			(106ps)
K9K 806 Euro4	Kangoo Be Bop 1.5 dCi	00	2008	>			(106ps)
K9K 806 Euro4	Kangoo Express 1.5 dCi	00	2008	>			(106ps)

	**11-02181-000** CH 41,700 VD1 0,250 VD2 0,430 B- 12,800 BØ 49,000 TL 66,000 **26,00x60,00**	AP YS	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		+0,25/+0,30	Ø 76,000 Ø 76,500	**31-04181-000** **31-04181-050**
	K=79,10 L=142,00 H=5,00 D=81,00	DS				**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50				**51-65936-050**	

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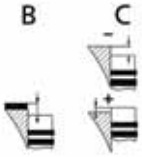
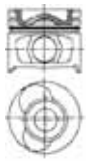
		Type		B C		
					

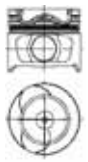
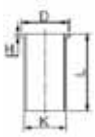
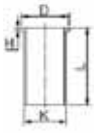
76,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

	**11-02181-001** CH 41,500 VD1 0,250 VD2 0,430 B- 12,800 BØ 49,000 TL 66,000 **26,00x60,00**	AP YS CH -0,20 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP	+0,25/+0,30	Ø 76,000	**31-04181-001**

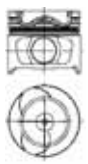
76,000

K9K 837 / 846 Euro5	GrandSecnic III 1.5 DCI 16V	00 2010 >		(110ps)
K9K 837 / 846 Euro5	Megane Grandtour III 1.5 dCi	00 2010 >		(110ps)
K9K 837 / 846 Euro5	Megane III 1.5 dCi	00 2010 >		(110ps)

	**11-02185-000** CH 41,667 VD1 0,250 VD2 0,430 B- 13,500 BØ 47,000 TL 66,000 **26,00x60,00**	AP YS	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 Ø 76,500 Ø 77,000	**31-04185-000** **31-04185-050** **31-04185-100**
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**	

76,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter > Cyl **cc** **kW** (ps)

	**11-02185-001** CH 41,467 VD1 0,250 VD2 0,430 B- 13,500 BØ 47,000 TL 66,000 **26,00x60,00**	AP YS CH -0,20 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000	**31-04185-001**

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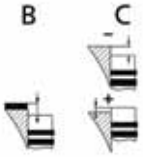
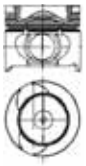
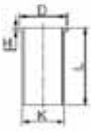
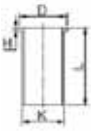
		Type		B C		
					

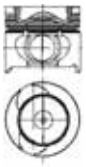
76,000

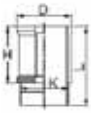
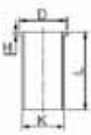
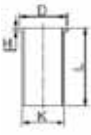
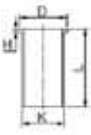
K9K 837 / 846 Euro5	GrandSecnic III 1.5 DCI 16V	00 2010 >		(90ps)
K9K 837 / 846 Euro5	Megane Grandtour III 1.5 dCi	00 2010 >		(90ps)
K9K 837 / 846 Euro5	Megane III 1.5 dCi	00 2010 >		(90ps)

	**11-02186-000** CH 41,667 VD1 0,250 VD2 0,430 B- 13,500 BØ 47,000 TL 66,000 **26,00x60,00**	AP	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000 Ø 76,500	**31-04186-000** **31-04186-050**
	K=79,10 L=142,00 H=5,00 D=81,00	DS			**51-65936-000**	
	K=79,60 L=142,00 H=5,00 D=81,00	DS +0,50			**51-65936-050**	

76,000

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter			>	Cyl	**cc**	**kW**	(ps)

	**11-02186-001** CH 41,467 VD1 0,250 VD2 0,430 B- 13,500 BØ 47,000 TL 66,000 **26,00x60,00**	AP CH -0,20 mm	**91-09148-000** 1 2,000 CkP 2 2,000 P 3 2,500 CrP		Ø 76,000	**31-04186-001**

		Type		B C		
77,000						
C2L	R 11 Rainbow	00 1985 > 00 1995				(94ps)
C2L	R 21 Optima	00 1985 > 00 1995				(94ps)
	11-02202-000 CH 34,000 B- 1,950 BØ 65,000 TL 60,500 **20,00x64,00**		**91-09202-000** 1 1,750 CR 2 2,000 P 3 4,000 CrP St		Ø 77,000	**31-04202-000**
	K=80,90 L=134,00 H=95,00 D=90,20	WF			**51-05897-000**	**71-08202-000**
78,000						
F8M 700	R 11 1.6 D	D 03 1983 >		4 Cyl	**1596cc** **40kW**	(54ps)
F8M 700	R 5 1.6 D	D >		4 Cyl	**1596cc** **40kW**	(55ps)
F8M 700	R 9 1.6 D	D 09 1982 >		4 Cyl	**1596cc** **40kW**	(54ps)
	11-01905-000 CH 47,250 B- 1,500 TL 74,500 **24,00x66,50** Renault ve Volvo ile Ortak Motor		**91-09906-000** 1 2,000 CR 2 2,000 P 3 3,000 CR	1,65mm Conta ile 0/+0,885 1,75mm Conta ile +0,885/+0,985 1,85mm Conta ile +0,985/+1,085	Ø 78,000 Ø 78,250 Ø 78,500 Ø 79,000	**31-03905-000** **31-03905-025** **31-03905-050** **31-03905-100**
	K=81,00 L=149,00 H=4,50 D=83,50	DS			**51-65905-000**	
	K=81,50 L=149,00 H=5,00 D=84,00	DS +0,50			**51-65905-050**	
	K=82,00 L=149,00 H=6,00 D=84,50	DS +1,00			**51-65905-100**	

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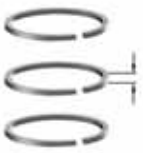
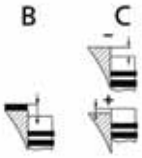
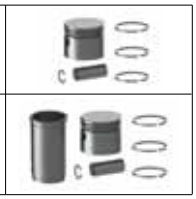
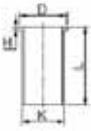
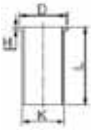
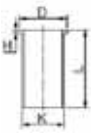
		Type		B C		
						

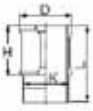
78,000

F8M 730	R 11 1.6 D	D	00	1985	>	00	1995	4 Cyl	**1596cc**	**40kW**	(55ps)
F8M 730	R 5 1.6 D	D	10	1987	>	12	1996	4 Cyl	**1596cc**	**40kW**	(55ps)
F8M 730	R 9 1.6 D	D	00	1985	>	00	1995	4 Cyl	**1596cc**	**40kW**	(55ps)
F8M 730 / 736	Express 1.6 D	D	10	1987	>	03	1997	4 Cyl	**1596cc**	**40kW**	(55ps)
F8M 736 / 760	Rapid 1.6 D	D	09	1991	>	03	1997	4 Cyl	**1596cc**	**40kW**	(54ps)

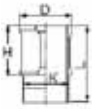
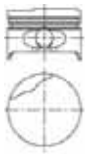
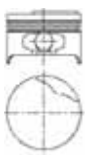
	11-01906-000 CH 47,250 B- 1,500 TL 74,500 **24,00x66,50** Renault ve Volvo ile Ortak Motor		**91-09906-000** 1 2,000 CR 2 2,000 P 3 3,000 CR	1,65mm Conta ile 0/+0,885 1,75mm Conta ile +0,885/+0,985 1,85mm Conta ile +0,985/+1,085	Ø 78,000 Ø 78,250 Ø 78,500 Ø 79,000	**31-03906-000** **31-03906-025** **31-03906-050** **31-03906-100**
	K=81,00 L=149,00 H=4,50 D=83,50	DS			**51-65905-000**	
	K=81,50 L=149,00 H=5,00 D=84,00	DS +0,50			**51-65905-050**	
	K=82,00 L=149,00 H=6,00 D=84,50	DS +1,00			**51-65905-100**	

79,000

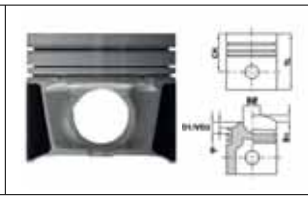
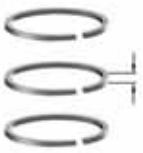
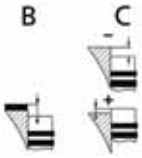
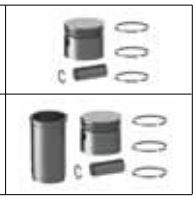
841.25 / 26 / 725 / A2M 723	R 18 1.6	B	04	1978	>	09	1986	4 Cyl	**1647cc**	**53-70kW**	(72-96ps)
A1M 707	Trafic 1.6	B	09	1980	>	02	1986	4 Cyl	**1647cc**	**44-49 kW**	(65-67 ps)
A2M 723	Fuego 1.6	B	10	1982	>	10	1986	4 Cyl	**1647cc**	**53-57 kW**	(72-77 ps)

	11-02156-000 CH 40,500 TL 66,000 **21,00x69,00**		**91-09156-000** 1 1,750 CR 2 2,000 P 3 4,000 CR	Ø 79,000	**31-04156-000**
	K=83,95 L=144,00 H=92,60 D=95,90	WF		**51-05899-000**	**71-08156-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

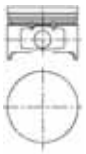
		Type		B C		
79,000						
A1M-841 / 05 / 07	P3 1.6	B	>	4 Cyl	**1647cc**	**kW** (ps)
A1M-841 / 05 / 07	P5 1.6	B	>	4 Cyl	**1647cc**	**kW** (ps)
A1M-841 / 05 / 07	P6 1.6	B	>	4 Cyl	**1647cc**	**kW** (ps)
A1M-841 / 05 / 07	PA 1.6	B	>	4 Cyl	**1647cc**	**kW** (ps)
11-02224-000 CH 41,100 B- 4,800 TL 66,500 **21,00x69,00**		**91-09156-000** 1 1,750 CR 2 2,000 P 3 4,000 CR			Ø 79,000	**31-04224-000**
 K=83,95 L=144,00 H=92,60 D=95,90		WF			**51-05899-000**	**71-08224-000**
79,500						
K7M 720 / 790KAT / 702/ 703	Mégane 1.6i	B	01 1996 > 03 1999	4 Cyl		(75-90ps)
K7M 720 / 790KAT / 702/ 703	Mégane Grandtour 1.6i	B	03 1999 > 08 2003	4 Cyl		(75-90ps)
K7M 720 / 790KAT / 702/ 703	MéganeClassic 1.6i	B	09 1996 > 03 1999	4 Cyl		(75-90ps)
K7M 720KAT / 702 / 703	Scénic 1.6i	B	04 1997 >	4 Cyl		(75-90ps)
K7M 744-746KAT / 703	Clio II 1.6i	B	03 1998 >	4 Cyl		(90ps)
K7M 746KAT	Kangoo 1.6i	B	09 1999 >	4 Cyl		(90ps)
 **11-02166-000** CH 29,250 B- 2,550 TL 53,700 **19,00x62,00**		CP Cyl.3/4 to be used with 2167 000	**91-09166-000** 1 1,500 Mo 2 1,500 3 2,500		Ø 79,500 Ø 80,000	**31-04166-000** **31-04166-050**
79,500						
Silindir 1 / 2 de Kullanilacak	/ To Cylinder 1 / 2		>	Cyl	**cc**	**kW** (ps)
 **11-02167-000** CH 29,250 B- 2,550 TL 53,700 **19,00x62,00**		CP Cyl.1/2 to be used with 2166 000	**91-09166-000** 1 1,500 Mo 2 1,500 3 2,500		Ø 79,500 Ø 80,000	**31-04167-000** **31-04167-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,500

K7J	CLIO SYMBOL 1.4i 8V		00	1996	>						(75ps)
K7J 710	Logan 1.4i		07	2004	>						(75ps)
K7J 714	Logan 1.4i		07	2004	>						(75ps)



11-02169-000
CH 35,830
TL 58,000

19,00x62,00

91-09166-000
1 1,500 Mo
2 1,500
3 2,500

Ø 79,500 **31-04169-000**
Ø 80,000 **31-04169-050**

Dacia ve Renault ile Ortak Motor

79,500

K4M 700 / 701 / 704 / 706 / 708 / 709 / 712	Mégane Grandtour 1.6i 16V	B	03	1999	>			4 Cyl	**1598cc**	**70-79 kW**	(95-107 ps)
K4M 700 / 701 / 704 / 706 / 708 / 709 / 712	MéganeClassic 1.6i 16V	B	01	2001	>	08	2003	4 Cyl	**1598cc**	**70-79 kW**	(95-107 ps)
K4M 700 / 701 / 704 / 706 / 708 / 709 / 712	Scénic 1.6i 16V	B	03	1999	>			4 Cyl	**1598cc**	**70-79 kW**	(95-107 ps)
K4M 708 / 730 / 732 / 752	Kangoo 1.6i 16V	B	06	2000	>			4 Cyl	**1598cc**	**70-79 kW**	(95-107 ps)
K4M 710 / 711 / 714 / 716	Laguna Grandtour II 1.6i 16V	B	03	2001	>	10	2007	4 Cyl	**1598cc**	**79kW**	(107ps)
K4M 710 / 711 / 714 / 716	Laguna II 1.6i 16V	B	03	2001	>			4 Cyl	**1598cc**	**79kW**	(107ps)
K4M 720 / 724KAT	Laguna Grandtour 1.6i 16V	B	05	1998	>	02	2001	4 Cyl	**1598cc**	**75-79kW**	(102-107ps)
K4M 720 / 724KAT	Laguna I 1.6i 16V	B	05	1998	>	02	2001	4 Cyl	**1598cc**	**75-79kW**	(102-107ps)
K4M 720KAT / 700 / 701 / 704 / 706 / 708 / 709 / 712	Mégane 1.6i 16V	B	06	1998	>	09	2003	4 Cyl	**1598cc**	**70-79 kW**	(95-107 ps)
K4M 720KAT / 708 / 732 / 734 / 736 / 740 / 742-745 / 748	Clio II 1.6i / 1.6I 16V	B	11	2001	>			4 Cyl	**1598cc**	**66-79kW**	(90-107ps)
K4M 734	Symbol 1.6i	B	11	2001	>			4 Cyl	**1598cc**	**66kW**	(90ps)
K4M 734 / 735	Thalia II 1.6i / 1.6i 16V	B	11	2001	>			4 Cyl	**1598cc**	**66-79kW**	(90-107ps)
K4M 745	Symbol 1.6i 16V	B			>			4 Cyl	**1598cc**	**79kW**	(107ps)
K4M 760	Mégane II 1.6i 16V	B	11	2002	>			4 Cyl	**1598cc**	**82-85 kW**	(110-116 ps)
K4M 760	Scénic II 1.6i 16V	B	05	2003	>			4 Cyl	**1598cc**	**82-85 kW**	(110-116 ps)
K4M 790	Modus 1.6i 16V	B	09	2004	>			4 Cyl	**1598cc**	**82kW**	(112ps)

11-02171-000
CH 31,700
VD1 1,900
B- 1,300
TL 55,000

20,00x62,00

91-09166-000
1 1,500 Mo
2 1,500
3 2,500

Ø 79,500 **31-04171-000**
Ø 79,750 **31-04171-025**
Ø 80,000 **31-04171-050**
Ø 80,500 **31-04171-100**

Dacia, Nissan ve Renault ile Ortak Motor

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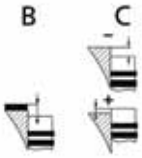


Type

79,500

K4M 760	Mégane Grandtour II 1.6i 16V	B	08	2003	>	4 Cyl	**1598cc**	**82-85kW**	(110-116ps)
K4M 760	Mégane II 1.6i 16V	B	11	2002	>	4 Cyl	**1598cc**	**82-85kW**	(110-116ps)
K4M 760	Scénic II 1.6i 16V	B	05	2003	>	4 Cyl	**1598cc**	**82-85kW**	(110-116ps)

11-02174-000
CH 31,700
VD1 4,000
B- 1,500
TL 55,000

20,00x62,00

HA

91-09174-000

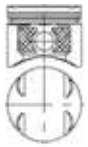
1	1,200	CrP	
2	1,500	P	
3	2,500	CrP	St

Ø 79,500
Ø 80,000

31-04174-000
31-04174-050

79,500

K4J 713	Symbol 1.4i 16V	B	06	2001	>	4 Cyl	**1390cc**	**70kW**	(95ps)
K4J 713	Thalia II 1.4i 16V	B	06	2001	>	4 Cyl	**1390cc**	**70kW**	(95ps)
K4J 713 / 750 / 780	Clio II-III 1.4i 16V	B	10	1999	>	4 Cyl	**1390cc**	**70-72kW**	(95-98ps)
K4J 730 / 740	Mégane Grandtour II 1.4i 16V	B	08	2003	>	4 Cyl	**1390cc**	**72kW**	(98ps)
K4J 730 / 740	Mégane II 1.4i 16V	B	11	2002	>	4 Cyl	**1390cc**	**72kW**	(98ps)
K4J 730 / 740 / 750	Scénic II 1.4i 16V	B	05	2003	>	4 Cyl	**1390cc**	**70-72kW**	(95-98ps)
K4J 750	Mégane 1.4i 16V	B	06	1998	>	4 Cyl	**1390cc**	**70-72kW**	(95-98ps)
K4J 750	Mégane Grandtour 1.4i 16V	B	03	1999	>	4 Cyl	**1390cc**	**70-72kW**	(95-98ps)
K4J 750	MéganeClassic 1.4i 16V	B	01	2001	>	4 Cyl	**1390cc**	**70-72kW**	(95-98ps)
K4J 750	Scénic 1.4i 16V	B	08	1998	>	4 Cyl	**1390cc**	**70-72kW**	(95-98ps)
K4J 770	Grand Modus 1.4i 16V	B	12	2004	>	4 Cyl	**1390cc**	**72kW**	(98ps)
K4J 770 / 780	Modus 1.4i 16V	B	06	2004	>	4 Cyl	**1390cc**	**72kW**	(98ps)



11-02177-000
CH 37,200
VD1 1,300
VD2 2,100
TL 64,500

20,00x62,00

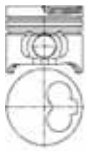
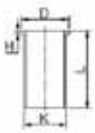
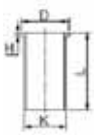
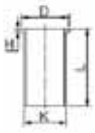
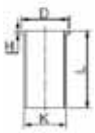
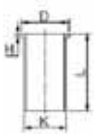
91-09175-000

1	1,500	Mo	
2	1,500	P	
3	2,500	CrP	St

Ø 79,500
Ø 80,000

31-04177-000
31-04177-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
80,000						
F8Q 706	Clio I 1.9 D	D	01 1990	> 12 1996	4 Cyl	**1870cc** **48kW** (64ps)
F8Q 706	Megane 1.9 D	D	01 1990	> 12 1996	4 Cyl	**1870cc** **48kW** (64ps)
F8Q 706	R 19 D	D	01 1990	> 12 1996	4 Cyl	**1870cc** **48kW** (64ps)
	**11-02161-000** CH 42,350 B- 0,700 TL 70,500 **24,00x63,00**	AP	**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP	1,65mm Conta ile 0/+0,87 1,75mm Conta ile +0,87/+1,00 1,85mm Conta ile +1,00/…	Ø 80,000 Ø 80,500	**31-04161-000** **31-04161-050**
	K=83,05 L=154,00 H=5,00 D=85,00	DS			**51-65903-000**	
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50			**51-65903-050**	
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00			**51-65903-100**	
80,000						
F8Q 630 / 632	Clio II 1.9 D	D	03 1998	> 10 2007	4 Cyl	**1870cc** **40-48 kW** (54-65 ps)
F8Q 630 / 632	Kangoo 1.9 D	D	10 1997	>	4 Cyl	**1870cc** **40-48 kW** (54-65 ps)
	11-02163-000 CH 42,250 B- 4,300 TL 75,250 **24,00x63,00**		**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP	1,40mm Conta ile +0,55/+0,65 1,50mm Conta ile +0,65/+0,75 1,60mm Conta ile +0,75/+0,85	Ø 80,000 Ø 80,500 Ø 81,000	**31-04163-000** **31-04163-050** **31-04163-100**
	K=83,05 L=154,00 H=5,00 D=85,00	DS			**51-65903-000**	
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50			**51-65903-050**	
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00			**51-65903-100**	

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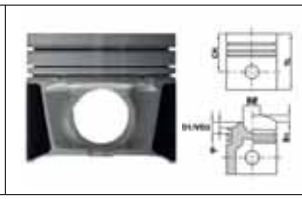
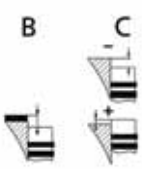
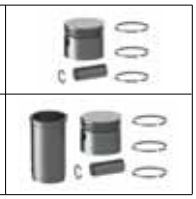
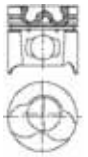
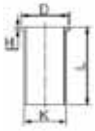
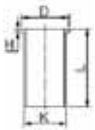
		Type		B C		
						

80,000

F9Q 710 / 717 / 718	Laguna Grandtour 1.9 dCi / dTi	D	09	1999	>	02	2001	4 Cyl	**1900cc**	**72-79kW**	(98-110ps)
F9Q 710 / 717 / 718	Laguna I 1.9 dCi / dTi	D	09	1999	>	03	2001	4 Cyl	**1900cc**	**72-79kW**	(98-110ps)
F9Q 717 / 770 / 772 / 774	Master II 1.9 dCi / dTi	D	05	2000	>	09	2003	4 Cyl	**1900cc**	**58-72kW**	(79-98ps)
F9Q 731-733 / 736 / 738-740 / 744	Mégane 1.9 dCi / dTi / tDi	D	06	1997	>	09	2003	4 Cyl	**1900cc**	**72-79kW**	(98-107ps)
F9Q 732 / 733 / 736 / 738 / 740 / 744 / 748 / 796	Scénic 1.9 dCi / TDi	D	03	1999	>	08	2003	4 Cyl	**1900cc**	**72-79kW**	(98-107ps)
F9Q 732 / 733 / 736 / 738 / 744	Mégane Classic 1.9 dCi / dTi	D	02	2001	>	08	2003	4 Cyl	**1900cc**	**72-79kW**	(98-107ps)
F9Q 732 / 733 / 736 / 738 / 744	Mégane Grandtour 1.9 dCi / dTi	D	03	1999	>	02	2001	4 Cyl	**1900cc**	**72-79kW**	(98-107ps)
F9Q 752 / 754	Laguna Grandtour II 1.9 dCi	D	03	2001	>	10	2007	4 Cyl	**1900cc**	**74-79kW**	(101-107ps)
F9Q 752 / 754	Laguna II 1.9 dCi	D	03	2001	>	10	2007	4 Cyl	**1900cc**	**74-79kW**	(101-107ps)
F9Q 760 / 762	Trafic 1.9 dCi 80 / 100	D	05	2001	>			4 Cyl	**1900cc**	**60-71kW**	(82-101ps)
F9Q 780 / 782	Clio II 1.9 DTi	D	03	1999	>	10	2007	4 Cyl	**1900cc**	**59kW**	(80ps)
F9Q 780 / 782 / 789	Kangoo 1.9 TDI	D			>	00	2000	4 Cyl	**1900cc**	**72kW**	(98ps)
F9Q 780 / 782 / 790	Kangoo 1.9 dCi / dTi	D	05	2000	>			4 Cyl	**1900cc**	**59-62kW**	(80-84ps)

	**11-02165-000** CH 47,100 VD1 0,750 B- 17,700 BØ 38,000 TL 77,000 **28,00x60,00**	AP	**91-09165-000** 1 2,500 Mo 2 2,000 3 3,000 CR	(+0,60/+0,80)	Ø 80,000 Ø 80,500 Ø 81,000	**31-04165-000** **31-04165-050** **31-04165-100**
Nissan, Opel ve Renault ile Ortak Motor						
	K=83,05 L=154,00 H=5,00 D=85,00	DS			**51-65903-000**	
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50			**51-65903-050**	
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00			**51-65903-100**	

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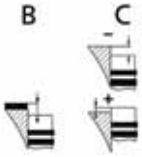
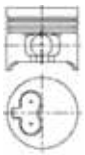
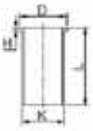
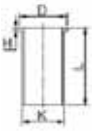
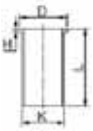
		Type		B	C		
						

80,000

F8Q 606	Trafic 1.9 D	D	11	1997	>	4 Cyl	**1870cc**	**44-48 kW**	(60-65 ps)
F8Q 620	Mégane 1.9 D	D	01	1996	>	4 Cyl	**1870cc**	**47kW**	(64ps)
F8Q 620	Mégane Classic 1.9 D	D	09	1996	>	4 Cyl	**1870cc**	**47kW**	(64ps)
F8Q 620	Mégane Grandtour 1.9 D	D	03	1999	>	4 Cyl	**1870cc**	**47kW**	(64ps)
F8Q 672 / 676 / 678 / 692 / 696 / 714 / 730 / 732	Clio I 1.9 D	D	09	1996	>	4 Cyl	**1870cc**	**47-48 kW**	(64-64 ps)
F8Q 704	R 20 1.9 D	D	10	1980	>	4 Cyl	**1870cc**	**48kW**	(65ps)
F8Q 704 / 710	R 21 1.9 D	D	05	1989	>	4 Cyl	**1870cc**	**48kW**	(65ps)
F8Q 706 / 742 / 764	R 19 1.9 D	D	09	1988	>	4 Cyl	**1870cc**	**47-48 kW**	(64-65 ps)
F8Q 722 / 724 / 730 / 732 / 774 / 776	Express 1.9 D	D	09	1991	>	4 Cyl	**1870cc**	**47-48 kW**	(64-65 ps)
F8Q 744	R 19 1.9 TD	D	05	1992	>	4 Cyl	**1870cc**	**66kW**	(90ps)
F8Q640/644/646/648/682/722 /724/730/732/774/776	Rapid 1.9 D	D	09	1994	>	4 Cyl	**1870cc**	**40-48kW**	(54-65ps)

	**11-02170-000** CH 42,500 B- 0,700 TL 70,500 **24,00x63,00**	AP CP	**91-09800-000** 1 2,000 MoP 2 2,000 P 3 3,000 CrP	Ø 80,000 Ø 80,500 Ø 80,800	**31-04170-000** **31-04170-050** **31-04170-080**
Dacia, Opel ve Renault ile Ortak Motor					
	K=83,05 L=154,00 H=5,00 D=85,00	DS		**51-65903-000**	
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50		**51-65903-050**	
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00		**51-65903-100**	

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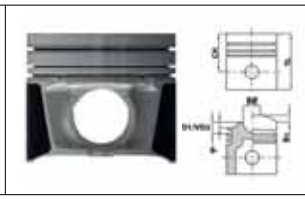
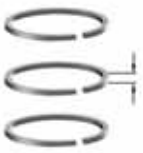
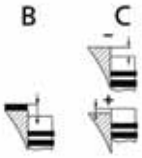
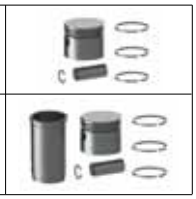
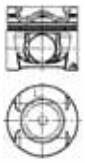
		Type		B	C		
							

80,000

R9M 402 Euro5	Scenic III 1.6 dCi 16V	D	01	2011	>		4 Cyl	**1598cc**	**96kW**	(130ps)
R9M 402 Euro5	Megane III 1.6 dCi	D	01	2011	>		4 Cyl	**1598cc**	**96kW**	(130ps)
R9M 402 Euro5	Qashqai 1.6 dCi 16V	D	01	2011	>		4 Cyl	**1598cc**	**96kW**	(130ps)



11-02189-000
CH 46,000
VD1 0,300
VD2 1,160
B- 12,430
BØ 46,400
TL 70,500

30,00x60,00

AP
YS

91-09147-000
1 2,000 PvD
2 1,750
3 2,000 Nt St

Ø 80,000
Ø 80,500

31-04189-000
31-04189-050

80,000

F9Q 803-804 EURO4	Megane / Laguna / Scenic 1.9 dci	D	00	1999	>	00	2009	**4 Cyl**	**1870cc**	**81- 96kW**	(110-130ps)

11-02190-000
CH 47,040
VD1 0,750
VD2 0,750
B- 17,800
BØ 40,000
TL 77,000

28,00x64,00

AP
YS

91-09165-000
1 2,500 Mo
2 2,000
3 3,000 CR

Ø 80,000
Ø 80,500

31-04190-000
31-04190-050

80,010

F9Q 650 / 664 / 670 / 674 / 750 / 756 / 758	Laguna II 1.9 dCi	D	03	2001	>	10	2007	4 Cyl	**1870cc**	**81kW**	(110ps)
F9Q 674 / 670	Clio III 1.9 dCi	D	06	2005	>			4 Cyl	**1870cc**	**81kW**	(110ps)
F9Q 756 / 812 / 816 / 818	Scénic II 1.9 dCi	D	05	2003	>			4 Cyl	**1870cc**	**88kW**	(120ps)
F9Q 800 / 808 / 816 / 818	Mégane Grandtour 1.9 dCi	D	03	1999	>	02	2001	4 Cyl	**1870cc**	**66-88kW**	(95-120ps)
F9Q 800 / 808 / 816 / 818	Mégane II 1.9 dCi	D	11	2002	>	11	2008	4 Cyl	**1870cc**	**66-88kW**	(95-120ps)
F9Q 800 / 808 / 818	Mégane Grandtour II 1.9 dCi	D	03	2004	>	05	2009	4 Cyl	**1870cc**	**66-88kW**	(95-120ps)
F9Q 812 / 816 / 818	Grand Scénic II 1.9 dCi	D	04	2004	>			4 Cyl	**1870cc**	**88kW**	(120ps)
F9Q 820 / 826	Espace IV 1.9 dCi	D	11	2002	>	12	2006	4 Cyl	**1870cc**	**88kW**	(120ps)

11-02183-000
CH 47,040
VD1 0,750
B- 17,800
BØ 38,000
TL 77,000

28,00x60,00

AP
YS

91-09165-000
1 2,500 Mo
2 2,000
3 3,000 CR

Ø 80,010
Ø 80,510
Ø 80,760

31-04183-000
31-04183-050
31-04183-075

Nissan ve Renault ile Ortak Motor

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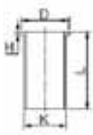
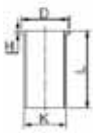
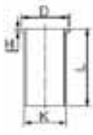
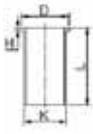
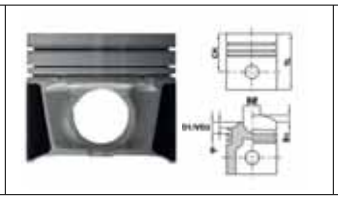
		Type		B	C		
81,000							
F2N 732 / 742 / 753 / C 710 / F3N C 722 / J 702	R 19 1.7i	B	> 00 1989	4 Cyl	**1721cc**	**60-66kW**	(82-90ps)
F2N 732 / 742 / 753 / C 710 / F3N C 722 / J 702	R 21 (Electronic) 1.7i	B	> 00 1989	4 Cyl	**1721cc**	**60-66kW**	(82-90ps)
11-02158-000 CH 44,200 B- 14,260 BØ 60,000 TL 70,200 **21,00x65,00** Renault ve Volvo ile Ortak Motor			**91-09158-000** 1 1,750 CrP 2 2,000 P 3 3,000			Ø 81,000 Ø 81,250 Ø 81,500	**31-04158-000** **31-04158-025** **31-04158-050**
	K=85,05 L=151,00 H=5,00 D=86,05	DS				**51-65906-000**	
	K=85,50 L=151,00 H=5,50 D=86,50	DS +0,50				**51-65906-050**	
81,000							
F2N 742 / 752	R 11 1.7i	B	06 1987	> 12 1988	4 Cyl	**1721cc**	**64kW** (87ps)
F2N 742 / 752	R 19 1.7i	B	06 1987	> 12 1988	4 Cyl	**1721cc**	**64kW** (87ps)
F2N 742 / 752	R 21 1.7i	B	06 1987	> 04 1989	4 Cyl	**1721cc**	**64kW** (87ps)
F2N 742 / 752	R 5 1.7i	B	06 1987	> 03 1995	4 Cyl	**1721cc**	**64kW** (87ps)
F2N 742 / 752	R 9 1.7i	B	06 1987	> 12 1988	4 Cyl	**1721cc**	**64kW** (87ps)
F3N 702	R 5 1.7i	B	10 1986	> 08 1991	4 Cyl	**1721cc**	**69kW** (94ps)
11-02246-000 CH 44,200 B- 14,260 TL 70,200 **21,00x65,00**			**91-09158-000** 1 1,750 CrP 2 2,000 P 3 3,000			Ø 81,000 Ø 81,250 Ø 81,500	**31-04246-000** **31-04246-025** **31-04246-050**
	K=85,05 L=151,00 H=5,00 D=86,05	DS				**51-65906-000**	
	K=85,50 L=151,00 H=5,50 D=86,50	DS +0,50				**51-65906-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



82,700

F3R 611 KAT / 722 / 723	Laguna Grandtour 2.0i	B	05	1998	>	02	2001	4 Cyl	**1998cc**	**83kW**	(113ps)
F3R 722 / 723	Laguna I 2.0i	B	01	1994	>	02	2001	4 Cyl	**1998cc**	**83kW**	(113ps)
F3R 791 / 796 / 797 / 798	Mégane 2.0i	B	03	1999	>			4 Cyl	**1998cc**	**80-84kW**	(109-114ps)
F3R 791 / 796 / 797 / 798	Mégane Classic 2.0i	B	03	1999	>			4 Cyl	**1998cc**	**80-84kW**	(109-114ps)
F3R 791 / 796 / 797 / 798	Mégane Grandtour 2.0i	B	00	1999	>			4 Cyl	**1998cc**	**80-84kW**	(109-114ps)
F3R 796	Scénic 2.0i	B	01	1999	>	09	2003	4 Cyl	**1998cc**	**80kW**	(109ps)

11-02176-000
CH 36,120
B- 9,080
BØ 67,000
TL 60,000

21,00x57,00

CP

91-09176-000
1 1,500 CrP
2 1,750 P
3 3,000 CrP

Ø 82,700
Ø 82,950
Ø 83,200

31-04176-000
31-04176-025
31-04176-050

Renault ve Volvo ile Ortak Motor

82,700

F4R 712 / 713	Laguna Grandtour II 2.0i 16V	B	03	2001	>			4 Cyl	**1998cc**	**99-103kW**	(135-140ps)
F4R 712 / 713	Laguna II 2.0i 16V	B	03	2001	>			4 Cyl	**1998cc**	**103kW**	(140ps)
F4R 740 / 741	Mégane 2.0i 16V	B	05	2000	>			4 Cyl	**1998cc**	**102kW**	(139ps)
F4R 740 / 741	Mégane Grandtour 2.0i 16V	B	09	2001	>			4 Cyl	**1998cc**	**102kW**	(139ps)
F4R 740 / 741	MéganeClassic 2.0i 16V	B	09	2001	>			4 Cyl	**1998cc**	**102kW**	(139ps)
F4R 740 / 741 / 744	Scénic 2.0i 16V	B	03	1999	>			4 Cyl	**1998cc**	**99-103kW**	(135-140ps)
F4R 780	Laguna Grandtour 2.0i 16V	B	09	1999	>			4 Cyl	**1998cc**	**100-102kW**	(136-140ps)
F4R 780	Laguna I 2.0i 16V	B	09	1999	>			4 Cyl	**1998cc**	**100-102kW**	(136-140ps)
F4R 787	Laguna Grandtour II 2.0i Turbo	B	04	2004	>			4 Cyl	**1998cc**	**150kW**	(204ps)
F4R 787	Laguna II 2.0iTurbo 16V	B	04	2004	>			4 Cyl	**1998cc**	**150kW**	(204ps)

11-02178-000
CH 30,300
VD1 1,600
VD2 2,000
B- 2,600
TL 56,800

21,00x61,00

91-09102-000
1 1,200 CR St
2 1,500 P
3 2,000 CrP St

Ø 82,700
Ø 83,200

31-04178-000
31-04178-050

99-09102-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

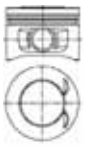
39-04178-000
39-04178-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		

83,000

N7Q704	Laguna Grandtour 2.0i 16V	B	09	1995	>	02	2001	4 Cyl	**1998cc**	**102-103kW**	(136-140ps)
N7Q704	Laguna I 2.0i 16V	B	09	1995	>	02	2001	4 Cyl	**1998cc**	**102-103kW**	(136-140ps)



11-02179-000
CH 35,900
VD1 1,300
B- 0,750
TL 60,650

23,00x61,00

CP

99-09161-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 83,000 **39-04179-000**
Ø 83,500 **39-04179-050**

Renault ve Volvo ile Ortak Motor

84,000

M9R 700 / 721 / 722	Grand Scénic II 2.0 dCi 16V	D	09	2005	>			4 Cyl	**2000cc**	**110kW**	(150ps)
M9R 700 / 721 / 722	Scénic II 2.0 dCi 16V	D	09	2005	>			4 Cyl	**2000cc**	**110kW**	(150ps)
M9R 700 / 722 / 724	Mégane Grandtour II 2.0 dCi	D	09	2005	>	05	2009	4 Cyl	**2000cc**	**110kW**	(150ps)
M9R 700 / 722 / 724 / 740	Mégane II 2.0i dCi 16V	D	09	2005	>	11	2008	4 Cyl	**2000cc**	**110kW**	(150ps)
M9R 740 / 750	Espace IV 2.0 dCi 16V	D	01	2006	>			4 Cyl	**2000cc**	**110kW**	(150ps)
M9R 740 / 760	Laguna Grandtour II 2.0 dCi	D	01	2006	>			4 Cyl	**2000cc**	**110-127kW**	(150-175ps)
M9R 740 / 760	Laguna II 2.0 dCi 16V	D	01	2006	>	10	2007	4 Cyl	**2000cc**	**110-127kW**	(150-175ps)
M9R 742 / 744 / 746 / 748 / 800 / 802 / 809 / 816	Laguna III 2.0 dCi 16V	D	10	2007	>			4 Cyl	**2000cc**	**96-132kW**	(130-180ps)
M9R 742 / 744 / 746 / 748 / 800 / 809 / 816	Laguna Grandtour III 2.0 dCi	D	10	2007	>			4 Cyl	**2000cc**	**96-132kW**	(130-180ps)
M9R 760 / 762 / 763	Vel Satis 2.0 dCi 16V	D	08	2005	>	11	2009	4 Cyl	**2000cc**	**127kW**	(175ps)
M9R 760-763	Espace IV 2.0 dCi 16V	D	01	2006	>			4 Cyl	**2000cc**	**127kW**	(175ps)
M9R 780 Euro 4	Trafic 2.0 dCi 16V	D	09	2006	>			4 Cyl	**2000cc**	**66-84kW**	(90-114ps)
M9R 782	Trafic II 2.0 dCi 16V	D	09	2001	>			4 Cyl	**2000cc**	**66kW**	(90ps)
M9R 786 Euro 2/3 / 780 Euro4	Trafic II 2.0 dCi 16V	D	09	2001	>			4 Cyl	**2000cc**	**66-84kW**	(90-114ps)
M9R 830	Koleos 2.0 dCi 16V	D	09	2008	>			4 Cyl	**2000cc**	**127-130kW**	(173-177ps)

11-02182-000
CH 47,916
VD1 0,420
VD2 0,460
B- 14,900
BØ 49,070
TL 76,000

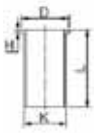
32,00x65,00

AP
YS

91-09171-000
1 2,500 CK
2 2,000 P
3 2,000 CR

Ø 84,000 **31-04182-000**
Ø 84,500 **31-04182-050**

Nissan, Opel ve Renault ile Ortak Motor



K=88,00
L=169,50
H=5,00
D=91,00

DS

51-65782-000

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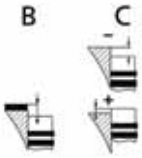
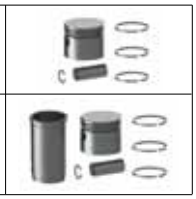
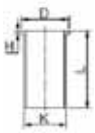
		Type		B C		
						

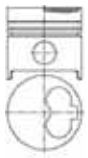
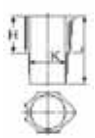
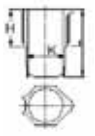
85,010

M9T 670 / 678 / 690 Euro 4-5	Master III 2.3 dCi		D	01	2011	>		4 Cyl	**2298cc**	**74-107kW**	(101-146ps)

	11-02187-000 CH 48,000 VD1 0,450 B- 16,200 BØ 50,000 TL 76,000 **32,00x65,00** Nissan, Opel ve Renault ile Ortak Motor	AP YS	**91-09173-000** 1 2,500 CkP 2 2,000 CrP 3 2,000 CrP		Ø 85,010 Ø 85,510	**31-04187-000** **31-04187-050**
	K=88,00 L=168,00 H=5,00 D=89,50	DS			**51-65779-000**	

86,000

852 700	R 20 2.1 D		D	12	1979	>	12	1983	4 Cyl	**2068cc**	**46kW**	(63ps)
J8S 330 / 800	Master T28 2.1 D		D	09	1980	>	09	1997	4 Cyl	**2068cc**	**44kW**	(60ps)
J8S 600 / 704 / 784	R 21 2.1 D		D	04	1992	>	12	1994	4 Cyl	**2068cc**	**46-56kW**	(63-76ps)
J8S 604	R 21 2.1 TD		D	04	1992	>	12	1995	4 Cyl	**2068cc**	**65-68kW**	(88-92ps)
J8S 620	Trafic 2.1 D		D	09	1994	>	10	1997	4 Cyl	**2068cc**	**47kW**	(64ps)
J8S 704 / 711	R 18 2.1 D		D	10	1980	>	02	1986	4 Cyl	**2068cc**	**49kW**	(67ps)
J8S 706 / 736	R 25 2.1 D		D	04	1988	>	12	1992	4 Cyl	**2068cc**	**51kW**	(70ps)
J8S 712	Fuego 2.1 TD		D	10	1982	>	07	1984	4 Cyl	**2068cc**	**65kW**	(88ps)
J8S 712	R 18 2.1 TD		D	04	1984	>	02	1986	4 Cyl	**2068cc**	**65kW**	(88ps)

	**11-01907-000** CH 51,000 B- 4,200 TL 92,900 **28,00x75,00** Chrysler ve Renault ile Ortak Motor		**91-09907-000** 1 2,000 MoP 2 2,000 3 4,000 CR		Ø 86,000	**31-03907-000**
	K=93,55 L=166,00 H=93,05	WS			**51-95907-000**	**71-07907-000**
	K=93,55 L=166,00 H=93,05	WS			**51-95908-000**	**71-07911-000**

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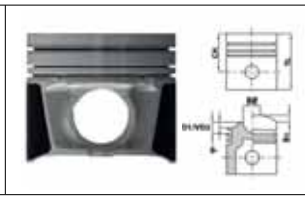
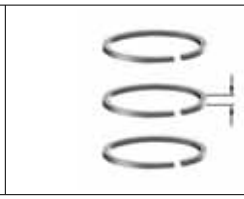
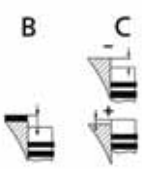
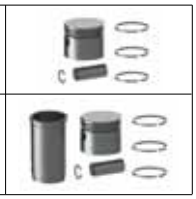
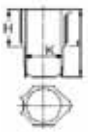
		Type		B C		
				

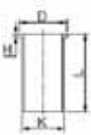
86,000

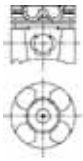
J8S 174	R 18 2.1 TD	D	03	1986	>	03	1992	4 Cyl	**2068cc**	**65kW** (88ps)
J8S 240	R 20 2.1 TD	D	10	1982	>	12	1983	4 Cyl	**2068cc**	**63-65kW** (86-88ps)
J8S 240 / 708 / 774 / 814	Espace I 2.1 TD	D	10	1984	>	12	1990	4 Cyl	**2068cc**	**65kW** (88ps)
J8S 610 / 612 / 772 / 776 / 778	Espace II 2.1 TD	D	01	1991	>	09	1996	4 Cyl	**2068cc**	**65-68kW** (88-92ps)
J8S 702	R 30 2.1 TD	D	10	1981	>	12	1983	4 Cyl	**2068cc**	**63kW** (86ps)
J8S 708 / 738	R 25 2.1 TD	D	06	1989	>	12	1992	4 Cyl	**2068cc**	**63kW** (86ps)
J8S 714 / 742 / 746 / 786 / 788 / 814	R 21 2.1 TD	D	06	1990	>	12	1995	4 Cyl	**2068cc**	**63-65kW** (86-88ps)
J8S 758	Trafic 2.1 D	D	09	1994	>	10	1997	4 Cyl	**2068cc**	**47kW** (64ps)
J8S 760	Safrane 2.1 TD	D	04	1992	>	09	1996	4 Cyl	**2068cc**	**66kW** (90ps)

	11-01908-000 CH 50,990 B- 4,000 TL 93,000 **28,00x75,00** Chrysler ve Renault ile Ortak Motor	AP	**91-09908-000** 1 2,500 Mo 2 2,500 3 4,000 CR		Ø 86,000	**31-03908-000**
	K=93,55 L=166,00 H=93,05	WS			**51-95908-000**	**71-07908-000**

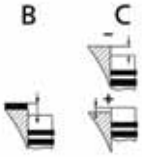
87,000

G9T 710	Avantime 2.2 dCi 16V	D	12	2001	>	12	2003	4 Cyl	**2188cc**	**85kW** (115ps)
G9T 710	Espace III 2.2 dCi 16V	D	07	2000	>	10	2002	4 Cyl	**2188cc**	**85kW** (115ps)
G9T 720 / 722 / 750	Master II 2.2 dCi 16V	D	05	2000	>	10	2006	4 Cyl	**2188cc**	**66kW** (90ps)

	11-02180-000 CH 54,530 VD1 1,600 VD2 2,000 B- 17,500 BØ 40,400 TL 84,200 **31,00x65,00** Nissan, Opel ve Renault ile Ortak Motor	AP	**91-09170-000** 1 3,000 MoP 2 1,750 P 3 2,500 P	0,06/0,040mm	Ø 87,000 Ø 87,500	**31-04180-000** **31-04180-050**
	K=90,00 L=167,00 H=5,00 D=91,50	DS			**51-65955-000**	

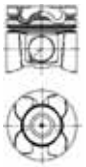
		Type		B	C		
87,010							
G9T 605 / 700 / 702 / 703 / 706 / 707	Laguna Grandtour II 2.2 dCi	D	03 2001 >		4 Cyl	**2188cc**	**110kW** (150ps)
G9T 605 / 700 / 702 / 703 / 706 / 707	Laguna II 2.2 dCi	D	03 2001 >	10 2007	4 Cyl	**2188cc**	**110kW** (150ps)
G9T 606 / 607 / 700 / 702 / 703	Vel Satis 2.2 dCi	D	03 2002 >		4 Cyl	**2188cc**	**110kW** (150ps)
G9T 642 / 643 / 645 / 742 / 743	Espace IV 2.2 dCi 16V	D	11 2002 >		4 Cyl	**2188cc**	**110kW** (150ps)
	**11-02188-000** CH 54,530 VD1 1,600 VD2 2,000 B- 17,500 BØ 40,400 TL 84,200 **31,00x65,00**	AP YS	**91-09170-000** 1 3,000 MoP 2 1,750 P 3 2,500 P	0.06 to 0.4mm		Ø 87,010 Ø 87,510	**31-04188-000** **31-04188-050**
88,000							
829.00 / 01	R 18 2.0	B	11 1979 >	00 1985	4 Cyl	**1995cc**	**76kW** (103ps)
J5R A7	Trafic P 862	B	00 1983 >		4 Cyl	**1995cc**	**61kW** (83ps)
J6R 234	Espace I 2.0	B	07 1984 >	12 1990	4 Cyl	**1995cc**	**76-81kW** (103-110ps)
J6R 706 / 707	R 25 2.0	B	01 1984 >	01 1992	4 Cyl	**1995cc**	**74-79kW** (101-108ps)
J7T 770	Espace I 2.2i	B	07 1986 >	12 1990	4 Cyl	**1995cc**	**79-81kW** (107-110ps)
J7T 772	Espace II 2.2i	B	01 1991 >	09 1996	4 Cyl	**1995cc**	**81kW** (110ps)
	11-02160-000 CH 40,500 B+ 1,500 TL 67,000 **23,00x75,00**		**91-09160-000** 1 1,750 CR 2 2,000 3 4,000 CrP St			Ø 88,000	**31-04160-000**
Citroen, Peugeot ve Renault ile Ortak Motor							
	K=93,60 L=148,50 H=93,06 D=104,00	WF				**51-05888-000**	**71-07097-000**
	K=93,53 L=140,50 H=93,10 D=104,00	WF				**51-05909-000**	**71-08160-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

89,000

G9U 632 Euro 4	Master II 2.5 dCi	D	08	2006	>	03	2010	4 Cyl	**2463cc**	**88-107kW**	(120-145ps)
G9U 650 Euro 4	Master II 2.5 dCi 16V	D	10	2003	>	03	2010	4 Cyl	**2463cc**	**74-88kW**	(101-120ps)



11-02153-000
CH 53,075
VD1 1,500
VD2 2,000
B- 16,130
BØ 48,000
TL 83,090

31,00x65,00

Nissan, Opel ve Renault ile Ortak Motor

AP

91-09149-000
1 3,000 CrP
2 1,750 P
3 2,500 CrP

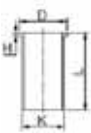
Ø 89,000
Ø 89,500

31-04153-000
31-04153-050

K=92,50
L=164,00

DS

51-65152-000



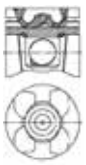
K=92,00
L=168,00
H=5,00
D=93,50

DS

51-65807-000

89,000

G9U 720 / 724 / 750 / 754 Euro 3	Master II 2.5 dCi 16V	D	10	2003	>	10	2006	4 Cyl	**2463cc**	**73-84kW**	(99-115ps)
G9U 730 Euro 3	Trafic II 2.5 dCi 16V	D	06	2002	>			4 Cyl	**2463cc**	**99kW**	(135ps)



11-02159-000
CH 53,030
VD1 1,650
VD2 1,900
B- 17,850
BØ 43,200
TL 83,090

31,00x65,00

Nissan, Opel ve Renault ile Ortak Motor

AP

91-09159-000
1 2,500 MoP
2 1,750 P
3 2,500 CrP

(+0,35/+0,60)

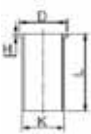
Ø 89,000
Ø 89,500

31-04159-000
31-04159-050

K=92,50
L=164,00

DS

51-65152-000

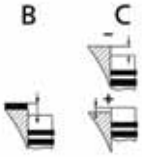


K=92,00
L=168,00
H=5,00
D=93,50

DS

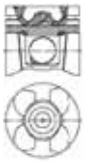
51-65807-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

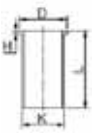
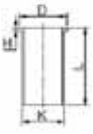
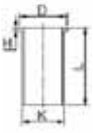
89,000

Strok Boyu 0,20mm Kisa Piston / Stroke Lenght 0,20mm Shorter D 06 2002 > 4 Cyl **2463cc** **99kW** (135ps)

	**11-02159-001** CH 52,830 VD1 1,650 VD2 1,900 B- 17,850 BØ 43,200 TL 83,090 **31,00x65,00**	AP CH -0,20 mm	**91-09159-000** 1 2,500 MoP 2 1,750 P 3 2,500 CrP	(+0,35/+0,60)	Ø 89,000 Ø 89,500	**31-04159-001** **31-04159-051**
	Nissan, Opel ve Renault ile Ortak Motor					

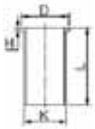
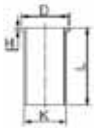
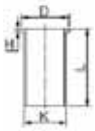
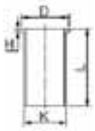
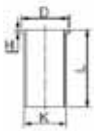
93,000

Sofim 2.5 Duz Dogal Emisli Master 2.5D D > 4 Cyl **2499cc** **62kW** (85ps)

	11-01684-000 CH 54,000 B- 2,200 TL 89,000 **32,00x68,00**	AP HA	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP	1,20mm conta ile (+0,40/+0,50) 1,30mm conta ile (+0,51/+0,60) 1,40mm conta ile (+0,61/+0,70)	Ø 93,000 Ø 93,400 Ø 93,600	**31-03684-000** **31-03684-040** **31-03684-060**
	Fiat / Iveco ve Renault ile Ortak Motor					
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
93,000						
8140.27.2582	B 90	D	01 1986 > 07 1996	4 Cyl	**2499cc**	**68-78 kW** (92-106 ps)
8140.27.2582	Master 2.5 TD	D	01 1986 > 07 1996	4 Cyl	**2499cc**	**68-78 kW** (92-106ps)
8140.27.2700	Master 2.5 TD	D	09 1980 > 00 1993	4 Cyl	**2499cc**	**69-76 kW** (94-103 ps)

	11-01685-000 CH 58,750 B- 18,000 BØ 38,000 TL 96,750 **32,00x78,00** Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor	AP PDB	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03685-000** **31-03685-040** **31-03685-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

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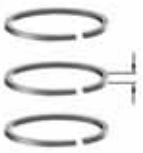
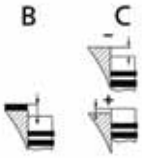
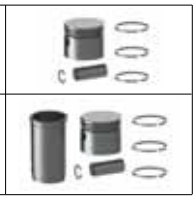
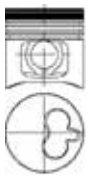
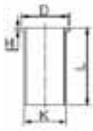
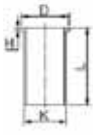
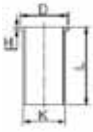
		Type		B	C		
							

93,000

8140.58 U / 68 U	Master T30 2.4 D	D	07	1980	>			4 Cyl	**2445cc**	**49-53kW**	(67-72ps)
8140.61.200	Master T35 2.4 D	D	08	1980	>			4 Cyl	**2445cc**	**53-60kW**	(72-82ps)
8140.61.2300	Master P28 2.4 D	D	09	1980	>	11	1990	4 Cyl	**2445cc**	**52-55kW**	(71-75ps)
8140.61.2300	Master T30 2.4 D	D	01	1985	>	09	1997	4 Cyl	**2445cc**	**49-55kW**	(71-75ps)
8140.61.2300	Master T35 2.4 D	D	08	1980	>	08	1989	4 Cyl	**2445cc**	**52-55kW**	(71-75ps)
8140.61.2300 / S8U 731	Master T28 2.4 D	D	09	1980	>	09	1997	4 Cyl	**2445cc**	**52-55kW**	(71-75ps)
8140.61.235	B 70	D	01	1983	>	12	1990	4 Cyl	**2445cc**	**53kW**	(72ps)
8140.61.235	Master 2.4 D	D	01	1983	>	12	1990	4 Cyl	**2445cc**	**53kW**	(72ps)
8140.61.240 / S8U 730	Trafic 2.4 D	D	10	1981	>	01	1989	4 Cyl	**2445cc**	**50-55kW**	(68-75ps)
S8U 720 / 722	Trafic 2.5 D	D	09	1980	>	02	1989	4 Cyl	**2445cc**	**51-55kW**	(69-75ps)
S8U 730 / 731	Master T35 2.4 D	D	08	1980	>	08	1989	4 Cyl	**2445cc**	**50-55kW**	(68-75ps)
S8U 731	Master T30 2.4 D	D	08	1980	>	08	1989	4 Cyl	**2445cc**	**52-55kW**	(71-75ps)

	**11-01686-000** CH 55,000 B- 2,200 TL 90,000 **32,00x75,00** Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor	AP HA CP	**91-09686-000** 1 3,000 CR 2 2,000 P 3 4,000 CR		Ø 93,000 Ø 93,400 Ø 93,600	**31-03686-000** **31-03686-040** **31-03686-060**
			98-09686-000 1 3,000 CrP 2 2,000 P 3 4,000 CrP			**38-03686-000** **38-03686-040** **38-03686-060**
			99-09686-000 1 3,000 CR St 2 2,000 Fe 3 4,000 CR			**39-03686-000** **39-03686-040** **39-03686-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=167,30	DS			**51-65452-000**	

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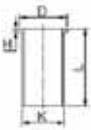
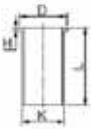
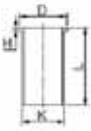
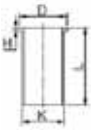
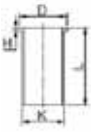
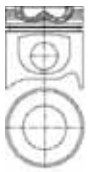
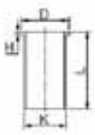
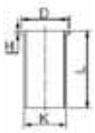
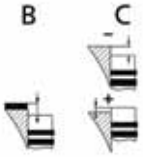
		Type		B C		
93,000						
8140.27.2560 / S9U 714	Master T28 2.5 TD	D	01 1994 > 09 1997	4 Cyl	2499cc	69kW (94ps)
8140.47.2530 / 2585 / 2590 Euro1	B 120	D	07 1994 > 07 1996	4 Cyl	2499cc	85kW (116ps)
8140.47.2530/2700/2711 / 2721/2785Euro1	Master 2.5 TD	D	10 1991 > 07 1996	4 Cyl	2499cc	85kW (116ps)
S9U 714	Master T35 2.5 TD	D	08 1989 > 07 1998	4 Cyl	2499cc	69kW (94ps)

	11-01687-000 CH 58,750 B- 18,400 BØ 38,000 TL 96,750 **32,00x78,00**	AP YS PDB	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03687-000** **31-03687-040** **31-03687-060**
Fiat / Iveco ve Renault ile Ortak Motor						
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

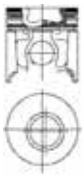
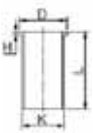
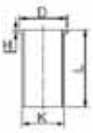
		Type		B C		
93,000						
8140.21.200 / 235	B 90	D	01 1986 > 07 1996	4 Cyl	**2445cc** **68kW**	(92ps)
8140.21.235	Master 2.4 TD	D	01 1986 > 06 1994	4 Cyl	**2445cc** **68kW**	(92ps)
	**11-01688-000** CH 59,650 B- 14,800 BØ 52,000 TL 97,650 **32,00x75,20** Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor	AP CP	**91-09689-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP		Ø 93,000 Ø 93,400 Ø 93,600	**31-03688-000** **31-03688-040** **31-03688-060**
	K=96,06 L=171,00 H=5,00 D=98,90	DS			**51-65401-000**	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			**51-65401-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

94,400

8140.23.2585 Euro 2	B 110	D	06	1996	>	06	1999	4 Cyl	**2798cc**	**76kW**	(103ps)
8140.43.2585 Euro 2	B 120	D	10	1991	>	06	2001	4 Cyl	**2798cc**	**90kW**	(122ps)
8140.43.3700 / S9W 702 Euro 2	Master 2.8 dTi	D	10	1997	>	09	2003	4 Cyl	**2798cc**	**84-90kW**	(114-122ps)
S9W 700 Euro 2	Master T28 2.8 dTi	D	10	1997	>			4 Cyl	**2798cc**	**84kW**	(114ps)

	**11-01690-000** CH 58,750 B- 19,450 BØ 39,300 TL 96,750 **32,00x78,00** Fiat / Iveco, Opel ve Renault ile Ortak Motor	AP YS	**91-09690-000** 1 3,000 CR 2 2,000 P 3 3,000 CR	1,20mm conta ile (+0,40/+0,50) 1,30mm conta ile (+0,51/+0,60) 1,40mm conta ile (+0,61/+0,70) 1,50mm conta ile (+0,71/+0,80)	Ø 94,400 Ø 94,800 Ø 95,000	**31-03690-000** **31-03690-040** **31-03690-060**
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	

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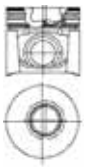
		Type		B C		
94,400						
8140.23.2585 Euro 2	B 110	D	06 1996 > 06 1999	4 Cyl	**2798cc**	**76kW** (103ps)
8140.43.2585 Euro 2	B 120	D	10 1991 > 06 2001	4 Cyl	**2798cc**	**90kW** (122ps)
8140.43.3700 / S9W 702 Euro 2	Master 2.8 dTi	D	10 1997 > 09 2003	4 Cyl	**2798cc**	**84-90kW** (114-122ps)
S9W 700 Euro 2	Master T28 2.8 dTi	D	10 1997 >	4 Cyl	**2798cc**	**84kW** (114ps)



11-01691-000
CH 58,750
B- 19,450
BØ 39,300
TL 87,600

32,00x72,00

AP
YS

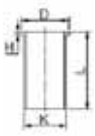
91-09691-000
1 2,500 CR
2 2,000 P
3 2,500 CrP

1,20mm Conta ile +0,40/+0,50 1,30mm Conta ile +0,51/+0,60 1,40mm Conta ile +0,61/+0,70

Ø 94,400
Ø 94,800
Ø 95,000

31-03691-000
31-03691-040
31-03691-060

Fiat / Iveco, Opel ve Renault ile Ortak Motor



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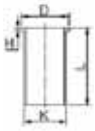
L=167,00
H=5,10
D=100,90

DS

51-65453-000



K=98,00
L=167,00
H=6,00
D=101,35

DS
+0,50

51-65453-050

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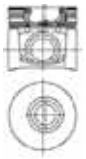
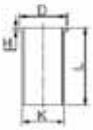
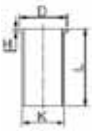
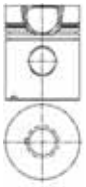
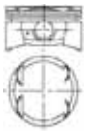
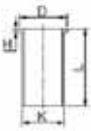
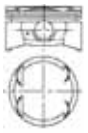
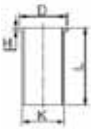
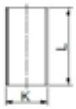
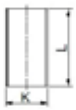
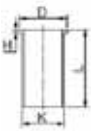
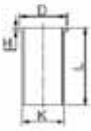
		Type		B C		
94,400						
8140.43S.2585 Euro2 Mascott 130	D 10 2001 > 07 2004 4 Cyl **2798cc** **92 kW** (125 ps)					
	**11-01692-000** CH 58,750 B- 21,350 BØ 39,300 TL 87,600 **32,00x72,00** Citroen, Fiat / Iveco, Peugeot ve Renault ile Ortak Motor	AP YS	**91-09691-000** 1 2,500 CR 2 2,000 P 3 2,500 CrP	1,20 Conta ile +0,40/+0,50 1,30 Conta ile +0,51/+0,60 1,40 Conta ile +0,61/+0,70 1,50 Conta ile +0,71/+0,80	Ø 94,400 Ø 94,800 Ø 95,000	**31-03692-000** **31-03692-040** **31-03692-060**
	K=97,50 L=167,00 H=5,10 D=100,90	DS			**51-65453-000**	
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			**51-65453-050**	
102,000						
797.20 Trafic 75.130	D 06 1980 > 05 1991 6 Cyl **5496cc** **89-113kW** (121-154ps)					
797.20 Trafic 95.130	D 06 1980 > 05 1991 6 Cyl **5496cc** **89-113kW** (121-154ps)					
	**11-01943-000** CH 77,820 B- 38,200 BØ 38,400 TL 123,820 **36,00x86,00** Man, Renault, Renault Trucks (RVI) ve Saviem ile Ortak Motor	AP	**91-09942-000** 1 3,000 MoP 2 2,500 P 3 5,000 CrP		Ø 102,000	**31-03943-000**
	K=114,00 L=235,50 H+F=8,00+0,80 D=121,00	WF			**51-05943-000**	**71-07943-000**
	K=114,00 L=234,00 H+F=8,00+0,80 D=122,50	WF			**51-05944-000**	**71-07325-000**

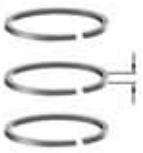
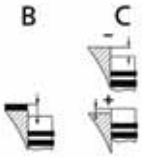
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
80,000						
K16 / 18K16	216 SI	B	>	4 Cyl	**1589cc**	**kW** (ps)
K16 / 18K16	216 SLI	B	>	4 Cyl	**1589cc**	**kW** (ps)
K16 / 18K16	218 16 vl IS	B	>	4 Cyl	**1589cc**	**kW** (ps)
K16 / 18K16	220 VI	B	>	4 Cyl	**1589cc**	**kW** (ps)
K16 / 18K16	420 I	B	>	4 Cyl	**1589cc**	**kW** (ps)
K16 / 18K16	420 SI	B	>	4 Cyl	**1589cc**	**kW** (ps)
K16 / 18K16	420 SLI	B	>	4 Cyl	**1589cc**	**kW** (ps)
	**11-01544-000** CH 22,700 VD1 2,300 VD2 2,500 B- 0,525 BØ 68,000 TL 45,650 **18,00x52,60**		**91-09544-000** 1 1,000 CrP St 2 1,200 P 3 2,000 CrP St		Ø 80,000 Ø 80,500	**31-03544-000** **31-03544-050**
	K=84,10 L=129,50 H=50,03 D=87,50	DF			**51-35497-000**	**71-07544-000**
80,000						
Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter		>	Cyl		(ps)
	**11-01544-001** CH 22,400 VD1 2,300 VD2 2,500 B- 0,525 BØ 68,000 TL 45,350 **18,00x52,60**	CH -0,20 mm	**91-09544-000** 1 1,000 CrP St 2 1,200 P 3 2,000 CrP St		Ø 80,000	**31-03544-001**
80,000						
256T	Range Rover II 2.5 TD		09 1994	> 09 2002		(136-139ps)
	11-02613-000 CH 39,450 VD1 2,500 TL 62,450 **27,00x63,00**	AP YS CP	**91-09613-000** 1 3,000 CrP 2 1,750 P 3 3,000 CrP	1. Conta ile 1,55mm +0,64/+0,78 2. Conta ile 1,68mm +0,79/+0,91 3. Conta ile 1,87mm +0,92/+1,08	Ø 80,000 Ø 80,250 Ø 80,500	**31-04613-000** **31-04613-025** **31-04613-050**
Bmw, Opel ve Rover ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

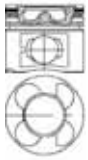
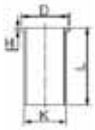
		Type		B C		
83,000						
XUD9 218 D	D 10 1992 > 12 1994 4 Cyl	**1905cc**	**47-52kW**	(64-71ps)		
XUD9 418 D	D 09 1991 > 04 1995 4 Cyl	**1905cc**	**47-52kW**	(64-71ps)		
	11-01879-000 CH 46,800 B- 2,200 TL 84,300 **25,00x72,00** Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor		**91-09879-000** 1 2,000 CR 2 2,000 3 3,000 CR	1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)	Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000	**31-03879-000** **31-03879-020** **31-03879-050** **31-03879-080** **31-03879-100**
	K=86,00 L=153,50 H=4,80 D=89,00	DS			**51-65820-000**	
	K=86,04 L=153,50	DS			**51-65879-000**	
	K=86,54 L=153,50	DS +0,50			**51-65879-050**	
	K=85,66 L=153,50 H=3,90 D=88,45	DS			**51-65885-000**	
	K=86,15 L=153,50 H=3,90 D=88,45	DS +0,50			**51-65885-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

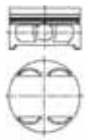
84,000

M57D30	Range Rover III 3.0 Td6	D	03 2002 >	6 Cyl	**2926cc**	**135kW**	(184ps)

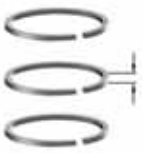
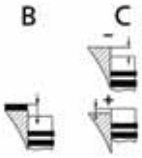
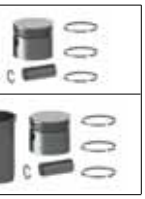
	**11-02615-000** CH 47,000 VD1 1,360 B- 16,500 BØ 41,550 TL 71,000 **30,00x68,00** Bmw ve Rover ile Ortak Motor	AP YS	**91-09606-000** 1 3,000 CrP 2 2,000 P 3 3,000 CrP	1. Kertik conta ile +0,80/+0,90 2. Kertik conta ile +0,90/+1,00	Ø 84,000 Ø 84,250 Ø 84,500	**31-04615-000** **31-04615-025** **31-04615-050**
	K=87,00 L=149,00 H=6,00 D=88,50	DS			**51-65158-000**	

92,000

M62 B44	Range Rover III 4.4i	B	09 2002 >	8 Cyl	**4395cc**	**210kW**	(286ps)

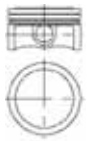
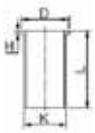
	**11-02611-000** CH 31,300 VD1 2,700 TL 53,300 **22,00x60,00** Bmw ve Rover ile Ortak Motor	HA	**91-09611-000** 1 1,500 CR 2 1,500 P 3 2,000 CR		Ø 92,000 Ø 92,250 Ø 92,500	**31-04611-000** **31-04611-025** **31-04611-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,000

A16 LET Euro 5 | 9-5 II 1.6 Turbo 16V | B | 09 2010 > | 4 Cyl | **1598cc** | **132kW** | (180ps)

	**11-01912-000** CH 27,500 B+ 1,750 BØ 66,500 TL 44,500 **19,00x53,00** Opel ve Saab ile Ortak Motor	HA	**91-09216-000** 1 1,200 NT St 2 1,200 P 3 2,000 NtP St		Ø 79,000 Ø 79,500	**31-03912-000** **31-03912-050**
	K=82,00 L=125,00 H=5,00 D=83,50	DS			**51-65777-000**	

80,500

Z18XE | 9-3 1.8i 16V | B | 09 2004 > | 4 Cyl | **1796cc** | **90-92kW** | (122-125ps)

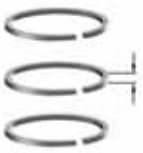
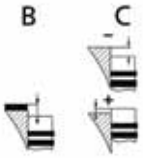
	11-02219-000 CH 24,100 TL 44,700 **18,00x55,00** Opel ve Saab ile Ortak Motor		**91-09219-000** 1 1,200 CR St 2 1,200 P 3 2,000 CrP St		Ø 80,500 Ø 81,000 Ø 81,500	**31-04219-000** **31-04219-050** **31-04219-100**

81,600

B258I | 900 II 2.5i 24V | B | 09 1993 > 10 1998 | 6 Cyl | **2498 cc** | **125kW** | (170ps)

	11-02218-000 CH 30,450 VD1 0,630 B+ 2,000 TL 51,050 **21,00x56,00** Opel ve Saab ile Ortak Motor		**91-09218-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP St		Ø 81,600 Ø 82,100 Ø 82,600	**31-04218-000** **31-04218-050** **31-04218-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

82,000

Z19 DT	9-3 1.9 TiD 16V	D	09	2004	>	4 Cyl	1910cc	88kW	(120ps)

11-02281-000
CH 46,500
VD1 0,500
B- 17,500
BØ 37,500
TL 72,500

26,00x61,00

AP
PDB
AA=22,35 mm

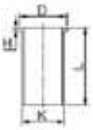
91-09399-000
1 2,000 CkP
2 2,000 P
3 2,000 NT St

0,77-0,87mm Conta ile (+0,014/+0,104)
0,87-0,97mm Conta ile (+0,105/+0,205)
0,97-1,07mm Conta ile (+0,236/+0,294)

Ø 82,000
Ø 82,400
Ø 82,600

31-04281-000
31-04281-040
31-04281-060

Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor



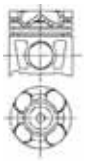
K=85,00
L=155,00
H=5,00
D=86,00

DS

51-65268-000

83,000

A 20 DTH	9-5 II 2.0 TiD 16V	D	09	2010	>	4 Cyl	1956cc	118kW	(160ps)



11-02197-000
CH 46,630
VD1 1,170
VD2 1,220
B- 15,800
BØ 43,500
TL 72,630

29,98x67,00

AP
YS

91-09790-000
1 1,500 CkP
2 1,500 P
3 2,000 NT St

0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)

Ø 83,000
Ø 83,400

31-04197-000
31-04197-040

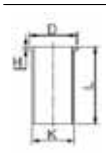
98-09790-000
1 1,500 CrP St
2 1,500 P
3 2,000 CR St

38-04197-000
38-04197-040

99-09790-000
1 1,500 NtPvD St
2 1,500 P
3 2,000 NT St

39-04197-000

Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor

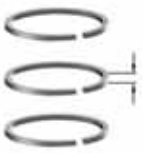
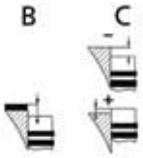


K=86,00
L=155,00
H=5,00
D=87,50

DS

51-65778-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

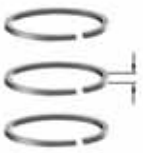
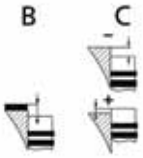
		Type		B C		
						

86,000

A20NHT 9-5 II 2.0 Turbo 16V B 09 2010 > 4 Cyl **1998cc** **162kW** (220ps)

	11-02234-000 CH 31,000 VD1 1,750 VD2 2,500 B+ 5,700 B- 8,850 BØ 34,000 TL 59,250 **23,00x54,70**	YS HA	**99-09823-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 86,000 Ø 86,500	**39-04234-000** **39-04234-050**
Opel ve Saab ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Type

65,000

100 GL.3C.0	Ibiza 0.9 Junior	B	06	1984	>	05	1993	4 Cyl	**843cc**	**33kW**	(45ps)
100 GL.3C.0	Marbella 0.8	B	00	1982	>			4 Cyl	**843cc**	**33kW**	(45ps)
100 GL.3C.0 / 1000 GL7.000	Fura 0.9	B	00	1984	>			4 Cyl	**843cc**	**33kW**	(45ps)
1000 GL7.000	Ibiza 0.9	B	06	1984	>	05	1993	4 Cyl	**843cc**	**32kW**	(44ps)
100GL.000 / 064 / 0N.0 / 9N.0	127	B	05	1972	>	12	1980	4 Cyl	**843cc**	**33kW**	(45ps)

11-01390-000
CH 30,750
TL 61,250

20,00x54,00

91-09390-000
1 1,750 CrP
2 2,000 P
3 3,947 CrP

Ø 65,000 **31-03390-000**
Ø 65,200 **31-03390-020**
Ø 65,400 **31-03390-040**
Ø 65,600 **31-03390-060**
Ø 65,800 **31-03390-080**

Fiat / Iveco, Lada ve Seat ile Ortak Motor

K=68,04
L=115,00

DS

51-65390-000

K=69,04
L=115,00

DS

+1,00

51-65390-100

67,100

AER	Cordoba 1.0i	B	06	1997	>	06	1999	4 Cyl	**999cc**	**37kW**	(50ps)
AER	Ibiza 1.0i	B	09	1996	>	06	1999	4 Cyl	**999cc**	**37kW**	(50ps)
AER / ALL	Arosa 1.0i	B	02	1997	>	09	1999	4 Cyl	**999cc**	**37kW**	(50ps)

11-02322-000
CH 31,250
B- 5,650
BØ 51,500
TL 56,270

17,00x48,00

AA=20,25 mm

91-09312-000
1 1,000 CR St
2 1,200 P
3 2,000 CR

Ø 67,100 **31-04322-000**
Ø 67,600 **31-04322-050**

Seat ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

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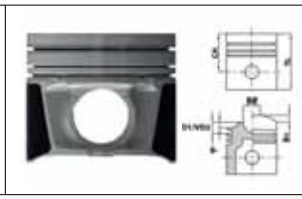
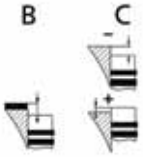
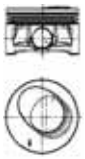
					

71,010

CBZA	Ibiza	B	09	2010	>		Cyl	**1197cc**	**63kW**	(86ps)
CBZA / CBZB	Toledo	B	07	2012	>		Cyl	**1197cc**	**63-77kW**	(86-105ps)
CBZB	Leon	B	02	2010	>		Cyl	**1197cc**	**77kW**	(105ps)



11-01959-000
CH 28,940
VD1 2,000
B- 4,350
TL 46,940

19,00x42,00

HA

91-09106-000
1 1,200 Nt St
2 1,200 CrP
3 2,000 NtP St

Ø 71,010 **31-03959-000**
Ø 71,260 **31-03959-025**
Ø 71,510 **31-03959-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

75,010

2G	Cordoba 1.3		02	1993	>	07	1994	4 Cyl	**1272cc**	**40kW**	(54ps)
2G / AAV	Ibiza 1.3		02	1993	>	08	1994	4 Cyl	**1272cc**	**40kW**	(54ps)

11-01299-000
CH 42,870
VD1 1,500
VD2 1,650
B- 16,600
TL 69,870

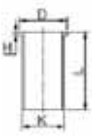
20,00x54,00

CP

91-09299-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

Ø 75,010 **31-03299-000**
Ø 75,260 **31-03299-025**
Ø 75,510 **31-03299-050**
Ø 75,760 **31-03299-075**

Seat ve Volkswagen ile Ortak Motor



K=78,00
L=133,00
H=4,50
D=81,00

DS

51-65277-000

76,500

CFNA	Toledo 1.6 MPI	B	07	2012	>		4 Cyl	**1598cc**	**77kW**	(105ps)

11-02339-000
CH 29,300
VD1 2,760
B- 4,130
BØ 64,350
TL 47,200

17,00x45,80

HA

99-09313-000
1 1,200 NT St
2 1,200
3 2,000 NtP St

Ø 76,500 **39-04339-000**

Seat, Skoda ve Volkswagen ile Ortak Motor

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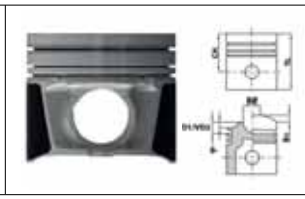
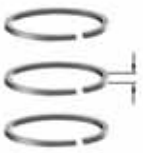
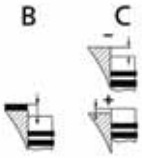
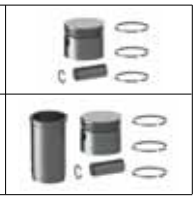
		Type		B C		
						

76,510

BXW	Cordoba 1.4 SRE 16V	B	05	2006	>	11	2009	4 Cyl	**1390cc**	**63kW**	(86ps)
BXW	Toledo 1.4 SRE 16V	B	05	2006	>	05	2009	4 Cyl	**1390cc**	**63kW**	(86ps)
CGGB Euro 5 / BXW	Altea 1.4 SRE 16V	B	05	2006	>	06	2013	4 Cyl	**1390cc**	**63kW**	(85ps)
CGGB Euro 5 / BXW	Ibiza 1.4 SRE 16V	B	05	2006	>	11	2009	4 Cyl	**1390cc**	**63kW**	(86ps)
CGGB Euro 5 / BXW	Leon 1.4 SRE 16V	B	05	2010	>	12	2012	4 Cyl	**1390cc**	**63kW**	(85ps)

11-01282-000
CH 28,920
B- 2,280
TL 47,920

17,00x46,00

HA

99-09313-000
1 1,200 NT St
2 1,200
3 2,000 NtP St

Ø 76,510
Ø 77,010

39-03282-000
39-03282-050

Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

CAXA	Toledo 1.4 TSI	B	07	2012	>			4 Cyl	**1390cc**	**90kW**	(122ps)
CAXC	Altea 1.4i TFSI 16V	B	11	2007	>			4 Cyl	**1390cc**	**92kW**	(125ps)
CAXC	Leon 1.4 TFSI 16V	B	11	2007	>	12	2012	4 Cyl	**1390cc**	**92kW**	(125ps)
CAXC	Toledo 1.4 TFSI 16V	B	11	2007	>	05	2009	4 Cyl	**1390cc**	**92kW**	(125ps)

11-01284-000
CH 29,200
VD1 0,800
VD2 3,580
B+ 2,000
B- 4,600
TL 50,210

19,00x52,00

HA

91-09313-000
1 1,200 NT St
2 1,200
3 2,000 NtP St

Ø 76,510
Ø 77,010

31-03284-000
31-03284-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

CAVE	Ibiza 1.4 FSI 16V	B	01	2009	>			4 Cyl	**1390cc**	**132kW**	(180ps)
CTHA / CAVA	Alhambra 1.4 TSI	B	06	2010	>			4 Cyl	**1390cc**	**110kW**	(150ps)
CTHE / CAVE	Ibiza 1.4 TSI 16V Cupra	B	01	2009	>			4 Cyl	**1390cc**	**132kW**	(180ps)

11-01287-000
CH 28,970
B+ 2,000
B- 4,570
TL 49,970

19,00x54,00

AP

99-09326-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 76,510
Ø 77,010

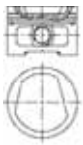
39-03287-000
39-03287-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

76,510

ABU	Cordoba 1.6i	B	09	1993	>	08	1994	4 Cyl	**1598cc**	**55kW**	(75ps)	
ABU	Ibiza 1.6i	B	02	1993	>	08	1994	4 Cyl	**1598cc**	**55kW**	(75ps)	



11-01300-000
CH 32,000
B- 8,700
TL 54,000

17,00x52,00

Type: CP

91-09300-000

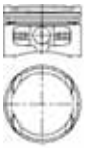
1	1,500	CR	St
2	1,500	P	
3	2,500	CrP	St

Ø 76,510	**31-03300-000**
Ø 76,760	**31-03300-025**
Ø 77,010	**31-03300-050**
Ø 77,260	**31-03300-075**
Ø 77,510	**31-03300-100**

Seat ve Volkswagen ile Ortak Motor

76,510

AFH / AQQ / AUB / BBZ	Cordoba 1.4i 16V	B	06	1997	>	06	1999	4 Cyl	**1390cc**	**74kW**	(101ps)	
AFH / AQQ / AUB / BBZ	Ibiza 1.4i 16V	B	06	1997	>	06	1999	4 Cyl	**1390cc**	**74kW**	(101ps)	
AFK / AQQ / AUB	Arosa 1.4i 16V	B	02	2000	>	09	2000	4 Cyl	**1390cc**	**74kW**	(101ps)	
AHW / APE / AUA / AXP / BCA	Leon 1.4i 16V	B	01	2000	>	06	2006	4 Cyl	**1390cc**	**55kW**	(75ps)	
AHW / AXP	Toledo 1.4i 16V	B	01	2000	>	05	2002	4 Cyl	**1390cc**	**55kW**	(75ps)	
APE / AUA / BBY	Cordoba 1.4i 16V	B	09	1999	>	06	2000	4 Cyl	**1390cc**	**55kW**	(75ps)	
APE / AUA / BBY	Ibiza 1.4i 16V	B	09	1999	>	06	2000	4 Cyl	**1390cc**	**55kW**	(75ps)	
AUA	Inca 1.4i 16V	B	09	2000	>	06	2003	4 Cyl	**1390cc**	**55kW**	(75ps)	



11-02304-000
CH 28,920
VD1 2,323
B- 1,980
BØ 61,900
TL 49,920

17,00x54,00

AA=20,40 mm

91-09306-000

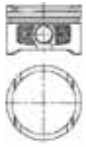
1	1,200	CR	St
2	1,500	P	
3	2,500	CrP	St

Ø 76,510	**31-04304-000**
Ø 77,010	**31-04304-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

ATN / AUS / AZD	Leon 1.6i 16V	B	06	2000	>	06	2006	4 Cyl	**1600cc**	**77kW**	(105ps)	
AUS / AZD	Toledo 1.6i 16V	B	06	2000	>	04	2001	4 Cyl	**1600cc**	**77kW**	(105ps)	



11-02315-000
CH 29,270
B- 2,350
BØ 64,600
TL 50,270

17,00x54,00

AA=20,40 mm

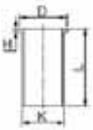
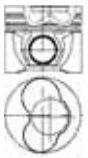
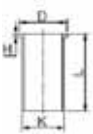
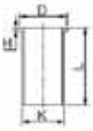
91-09306-000

1	1,200	CR	St
2	1,500	P	
3	2,500	CrP	St

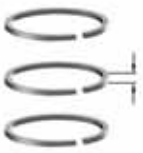
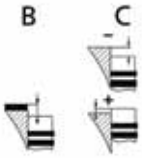
Ø 76,510	**31-04315-000**
Ø 77,010	**31-04315-050**

Seat ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

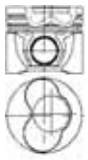
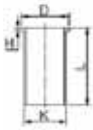
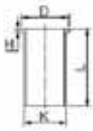
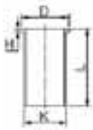
		Type		B C		
76,510						
AEE	Inca 1.6i	B	06 1997 > 09 2000	4 Cyl	**1598cc**	**55kW** (75ps)
AEE / ALM	Cordoba 1.6i	B	05 1997 > 12 1998	4 Cyl	**1598cc**	**55kW** (75ps)
AEE / ALM	Ibiza 1.6i	B	09 1997 > 12 1998	4 Cyl	**1598cc**	**55kW** (75ps)
	11-02321-000 CH 30,850 B- 8,000 TL 60,400 **17,00x51,85** Seat, Skoda ve Volkswagen ile Ortak Motor	AA=20,40 mm	**91-09302-000** 1 1,200 NT 2 1,500 P 3 2,500 CrP St		Ø 76,510 Ø 77,010	**31-04321-000** **31-04321-050**
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	
79,500						
AMF	Arosa 1.4 TDI	D	10 1999 > 06 2004	3 Cyl	**1422cc**	**55kW** (75ps)
AMF	Cordoba 1.4 TDI	D	10 2002 >	3 Cyl	**1422cc**	**55kW** (75ps)
AMF	Ibiza 1.4 TDI	D	05 2002 > 12 2005	3 Cyl	**1422cc**	**55kW** (75ps)
	**11-02311-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00** Audi, Seat, Skoda ve Volkswagen ile Ortak Motor	AP PDB Cyl.1/2 to be used with 2312 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04311-000** **31-04311-050**
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,500

Silindir 3 de Kullanilacak / To Cylinder 3 > Cyl **cc** **kW** (ps)

	**11-02312-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00**	AP PDB Cyl.3 to be used with 2311 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04312-000** **31-04312-050**
	Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Type

79,510

CAYA / CFWA	IBIZA V SPORTCOUPE 1.2 TDI	05 2010	>		(75ps)
CAYA / CFWA	IBIZA V ST 1.2 TDI	04 2010	>		(75ps)
CAYA / CFWA	IBIZA V 1.2 TDI	05 2010	>		(75ps)
CAYB	ALTEA 1.6 TDI	11 2010	>		(90ps)
CAYB	LEON 1.6 TDI	11 2010	>		(90ps)
CAYB	TOLEDO IV 1.6 TDI	06 2013	>		(90ps)
CAYB / CAYC / CLHA / CLNA	ALTEA XL 1.6 TDI	11 2010	>		(90-105ps)
CAYB / CAYC / CLHA / CLNA	IBIZA V SPORTCOUPE 1.6 TDI	05 2009	>		(90-105ps)
CAYB / CAYC / CLHA / CLNA	IBIZA V ST 1.6 TDI	03 2010	>		(90-105ps)
CAYB / CAYC / CLHA / CLNA	IBIZA V 1.6 TDI	05 2009	>		(90-105ps)
CAYC / CLHA / CLNA	ALTEA 1.6 TDI	10 2009	>		(105ps)
CAYC / CLHA / CLNA	LEON SC 1.6 TDI	02 2013	>		(105ps)
CAYC / CLHA / CLNA	LEON ST 1.6 TDI	10 2013	>		(105ps)
CAYC / CLHA / CLNA	LEON ST 1.6 TDI 4Drive	04 2014	>		(105ps)
CAYC / CLHA / CLNA	LEON 1.6 TDI	02 2010	>		(105ps)
CAYC / CLHA / CLNA	TOLEDO IV 1.6 TDI	07 2012	>		(105ps)

11-01286-000
CH 45,300
B- 11,000
BØ 49,000
TL 68,130

26,00x66,00

AP
YS

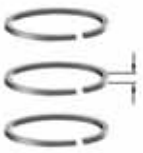
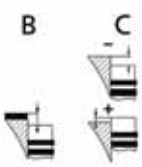
91-09627-000
1 1,750 CkP
2 2,000 P
3 2,000 CrP

Ø 79,510
Ø 80,010

31-03286-000
31-03286-050

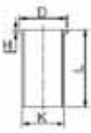
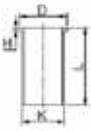
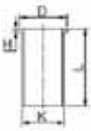
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

79,510

AAZ	Cordoba 1.9 TD	D	09	1993	>	08	1997	4 Cyl	**1896cc**	**55kW** (75ps)
AAZ	Ibiza 1.9 TD	D	02	1993	>	08	1997	4 Cyl	**1896cc**	**55kW** (75ps)
AAZ	Toledo 1.9 TD	D	05	1991	>	04	1997	4 Cyl	**1896cc**	**55kW** (75ps)

	11-01302-000 CH 45,650 B- 1,900 TL 71,700 **26,00x66,00** Audi, Seat ve Volkswagen ile Ortak Motor	AP HA CP	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. Centik 1,53mm (+0,66/+0,86) 2. Centik (1,57mm +0,87/+0,90) 3. Centik 1,61mm (+0,91/+1,02)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-03302-000** **31-03302-025** **31-03302-050** **31-03302-100**
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
79,510						
1Y	Cordoba 1.9 D	D	09 1993 > 06 1999	4 Cyl	**1896cc**	**47kW** (64ps)
1Y	Ibiza 1.9 D	D	02 1993 > 06 1999	4 Cyl	**1896cc**	**47kW** (64ps)
1Y	Inca 1.9 D	D	11 1995 > 06 2003	4 Cyl	**1896cc**	**47kW** (64ps)
1Y	Toledo 1.9 D	D	05 1991 > 03 1999	4 Cyl	**1896cc**	**47kW** (64ps)

11-01309-000
CH 39,650
B- 1,900
TL 65,650

24,00x64,00

AP
CP

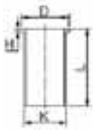
91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

1. centik 1,53mm conta ile (+0,66/+0,86) 2. centik 1,57mm conta ile (+0,87/+0,90) 3. centik 1,61mm conta ile (+0,91/+1,02)

Ø 79,510
Ø 79,760
Ø 80,010
Ø 80,510

31-03309-000
31-03309-025
31-03309-050
31-03309-100

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor



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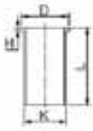
L=155,00
H=5,10
D=85,60

DS

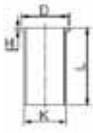
51-65157-000



K=82,57
L=151,80
H=4,70
D=85,40

DS

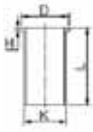
51-65303-000



K=83,07
L=151,80
H=6,00
D=85,90

DS
+0,50

51-65303-050

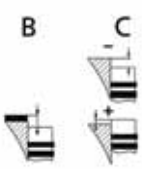


K=83,57
L=151,80
H=6,00
D=86,40

DS
+1,00

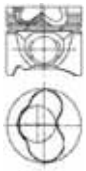
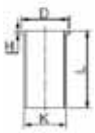
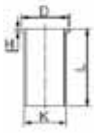
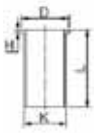
51-65303-100

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,510

1Z / AGR / AHU / ALH / AFN / ASV	Cordoba 1.9 TDI	D	07	1996	>	12	1996	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)
1Z / AGR / AHU / ALH / AFN / ASV	Ibiza 1.9 TDI	D	07	1996	>	12	1996	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)
1Z / AGR / AHU / ALH / AFN / ASV / AHF	Toledo 1.9 TDI	D	04	1995	>	12	1996	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)
1Z / AHU / AFN / AVG	Alhambra 1.9 TDI	D	03	1996	>	07	1996	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)
AEY	Cordoba 1.9 SDI	D	09	1995	>	06	1999	4 Cyl	**1896cc**	**47kW**	(64ps)
AEY	Ibiza 1.9 SDI	D	09	1995	>	06	1999	4 Cyl	**1896cc**	**47kW**	(64ps)
AEY	Inca 1.9 SDI	D	11	1995	>	09	2000	4 Cyl	**1896cc**	**47kW**	(64ps)
AGR / ALH / AHV / ASV	Leon 1.9 TDI	D	11	1999	>	09	2002	4 Cyl	**1896cc**	**66-81kW**	(90-110ps)

	**11-02301-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.1/2 to be used with 2302 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04301-000** **31-04301-025** **31-04301-050** **31-04301-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

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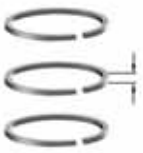
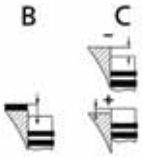
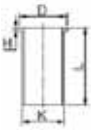
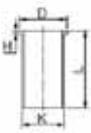
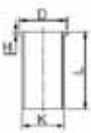
		Type		B C		
						

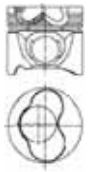
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

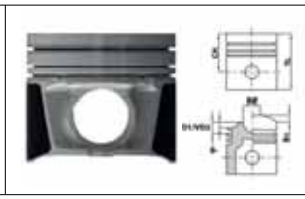
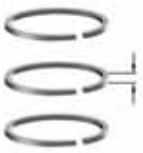
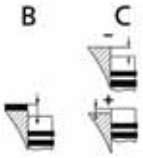
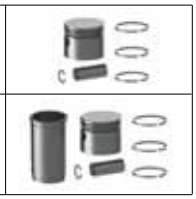
	11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.3/4 to be used with 2301 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04302-000** **31-04302-025** **31-04302-050** **31-04302-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

79,510

1Z / AGR / AHU / ALH / AFN / ASV	Cordoba 1.9 TDI	07 1996	> 12 1996		(90-110ps)
1Z / AGR / AHU / ALH / AFN / ASV	Ibiza 1.9 TDI	07 1996	> 12 1996		(90-110ps)
1Z / AGR / AHU / ALH / AFN / ASV / AHF	Toledo 1.9 TDI	04 1995	> 12 1996		(90-110ps)
1Z / AHU / AFN / AVG	Alhambra 1.9 TDI	03 1996	> 07 1996		(90-110ps)
AEY	Cordoba 1.9 SDI	09 1995	> 06 1999		(64ps)
AEY	Ibiza 1.9 SDI	09 1995	> 06 1999		(64ps)
AEY	Inca 1.9 SDI	11 1995	> 09 2000		(64ps)
AGR / ALH / AHV / ASV	Leon 1.9 TDI	11 1999	> 09 2002		(90-110ps)

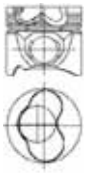
	**11-02305-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.1/2 to be used with 2306 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04305-000** **31-04305-025** **31-04305-050** **31-04305-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

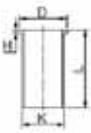
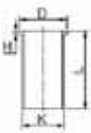
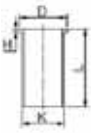
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

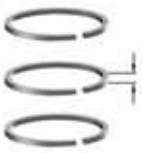
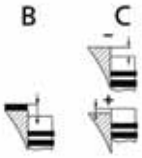
	**11-02306-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.3/4 to be used with 2305 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04306-000** **31-04306-025** **31-04306-050** **31-04306-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						

79,510

ARL / ASZ	Leon 1.9 TDI	09 2000	> 12 2005		(130-150ps)
ARL / ASZ	Toledo 1.9 TDI	10 2000	> 07 2004		(130-150ps)
ASZ	Alhambra 1.9 TDI	11 2002	> 11 2008		(130ps)
ASZ / BLT	Cordoba 1.9 TDI	10 2002	>		(130ps)
ASZ / BLT / BUK	Ibiza 1.9 TDI	11 2001	>		(130-160ps)

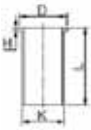
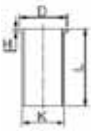
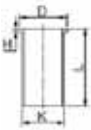
	11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 1/2 to be used with 2314 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04313-000** **31-04313-025** **31-04313-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

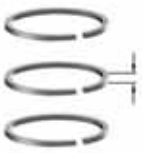
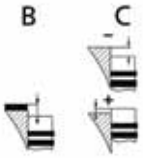
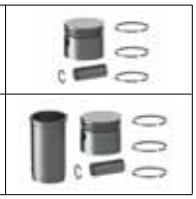
		Type		B C		
						

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

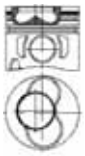
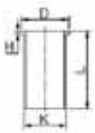
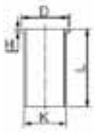
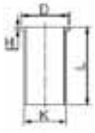
	11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 3/4 to be used with 2313 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04314-000** **31-04314-025** **31-04314-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

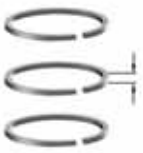
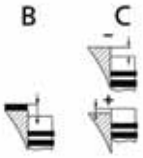
		Type		B C		
						

79,510

ANU	Alhambra 1.9 TDI	06 2000	> 03 2010		(90ps)
ATD / AXR	Cordoba 1.9 TDI	09 2002	>		(101ps)
ATD / AXR / BXJ	Ibiza 1.9 TDI	09 2001	>		(90-101ps)
AXR / BKC / BXE / BXF	Leon 1.9 TDI	10 2005	> 06 2006		(90-105ps)
BJB / BKC / BXE	Toledo 1.9 TDI	09 2004	> 09 2005		(105ps)
BJB / BKC / BXE / BXF	Altea 1.9 TDI	04 2004	> 09 2005		(90-105ps)

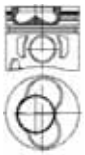
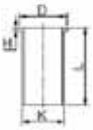
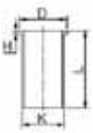
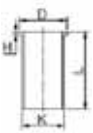
	**11-02319-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.1/2 to be used with 2320 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04319-000** **31-04319-025** **31-04319-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

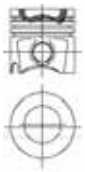
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

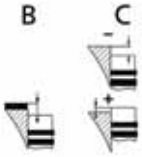
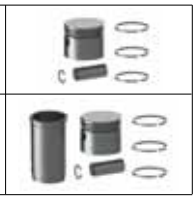
	**11-02320-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.3/4 to be used with 2319 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04320-000** **31-04320-025** **31-04320-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

81,000

CRLB Leon 2.0 TDI 12 2013 > (150ps)

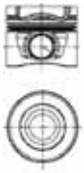
	**11-01283-000** CH 45,810 B- 12,900 BØ 50,900 TL 68,800 **26,00x66,00**	AP YS PDB	**91-09628-000** 1 1,750 CK 2 2,000 P 3 2,000 CR		Ø 81,000	**31-03283-000**
Audi, Seat ve Volkswagen ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
				

81,000

CFFA / CFFB / CFGB / CFGC / CFFE	Alhambra 2.0 TDI	D	05	2011	>		4 Cyl	**1968cc**	**85-130kW**	(116-177ps)
CFHC	Altea 2.0 TDI 16V	D	09	2010	>		4 Cyl	**1968cc**	**103kW**	(140ps)
CFHD	Ibiza 2.0 TDI 16V	D	01	2010	>		4 Cyl	**1968cc**	**105kW**	(143ps)
CFJA	Altea 2.0 TDI 16V	D	09	2010	>	06 2013	4 Cyl	**1968cc**	**125kW**	(170ps)
CFJA	Leon 2.0 TDI 16V	D	05	2010	>	12 2012	4 Cyl	**1968cc**	**125kW**	(170ps)
CGLB	Exeo 2.0 TDI 16V	D	11	2011	>		4 Cyl	**1968cc**	**125kW**	(170ps)
CJCA	Exeo 2.0 TDI 16V	D	11	2011	>		4 Cyl	**1968cc**	**105kW**	(143ps)
CLCB / CFHC	Leon 2.0 TDI 16V	D	05	2010	>	12 2012	4 Cyl	**1968cc**	**103kW**	(140ps)



11-02344-000
CH 45,800
B- 13,100
BØ 50,880
TL 68,800

26,00x66,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP YS	**91-09298-000** 1 1,750 CkP 2 2,000 P 3 3,000 CrP	1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)	Ø 81,000 Ø 81,500	**31-04344-000** **31-04344-050**
PDB	**98-09298-000** 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**38-04344-000** **38-04344-050**
	99-09298-000 1 1,750 CrP St 2 2,000 Fe 3 3,000 CR			**39-04344-000** **39-04344-050**

81,010

AJH / AWC	Alhambra 1.8i Turbo 20V	B	05	1998	>	02 2000	4 Cyl	**1751cc**	**110kW**	(150ps)

11-01296-000

CH 32,700	*CH 32,400
B- 2,050	*B- 2,050
BØ 70,000	*BØ 70,000
TL 53,700	*TL 53,400

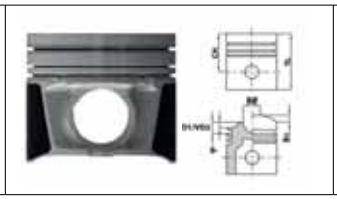
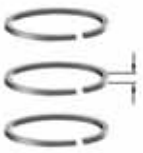
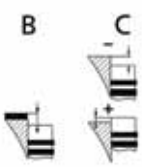
* For Oversize Piston Dimensions

20,00x59,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

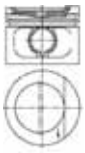
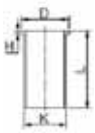
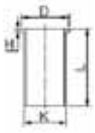
	91-09296-000 1 1,500 MoP 2 1,750 P 3 2,000 CR		Ø 81,010 Ø 81,260 Ø 81,510	**31-03296-000** **31-03296-025** **31-03296-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type				

81,010

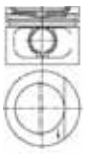
1.8 / ABS	Ibiza	B	03	1993	>			4 Cyl	**1781cc**	**66kW**	(90ps)
ABS / PF	Cordoba	B	09	1993	>	07	1994	4 Cyl	**1781cc**	**66-75kW**	(90-105ps)
ABS / PF	Toledo	B	03	1993	>			4 Cyl	**1781cc**	**66kW**	(90ps)
KT / PB	Cordoba	B	00	1991	>			4 Cyl	**1781cc**	**82kW**	(112ps)
KT / PB	Ibiza	B	00	1991	>			4 Cyl	**1781cc**	**82kW**	(112ps)
KT / PB	Toledo	B	00	1991	>			4 Cyl	**1781cc**	**82kW**	(112ps)
PF	Ibiza	B	00	1991	>			4 Cyl	**1781cc**	**75kW**	(105ps)
PF	Toledo	B	00	1991	>			4 Cyl	**1781cc**	**75kW**	(105ps)

	**11-01307-000** CH 32,200 *CH 31,900 B+ 1,300 *B+ 1,300 B- 4,400 *B- 4,400 BØ 56,000 *BØ 56,000 TL 62,500 *TL 62,200 * For Oversize Piston Dimensions **20,00x57,00**	CP	**91-09307-000** 1 1,500 CrP 2 1,750 P 3 3,000 CrP	Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010	**31-03307-000** **31-03307-025** **31-03307-050** **31-03307-100**
	Audi, Seat ve Volkswagen ile Ortak Motor				
	K=84,00 L=146,00 H=4,70 D=86,00	DS		**51-65307-000**	
	K=84,50 L=146,00 H=6,00 D=86,50	DS +0,50		**51-65307-050**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

81,010

1.6		Ibiza		B	03	1991	>		4 Cyl	**1595cc**	**53-55kW** (72-75ps)
1.6		Toledo		B	03	1991	>		4 Cyl	**1595cc**	**53-55kW** (72-75ps)



11-01308-000

CH 35,600	*CH 35,300
B+ 2,200	*B+ 2,200
B- 2,300	*B- 2,300
BØ 62,600	*BØ 62,600
TL 66,800	*TL 66,500

* For Oversize Piston Dimensions

20,00x57,00

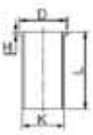
Audi ve Seat ile Ortak Motor

Type: CP

91-09307-000

1	1,500	CrP
2	1,750	P
3	3,000	CrP

Ø 81,010	**31-03308-000**
Ø 81,260	**31-03308-025**
Ø 81,510	**31-03308-050**
Ø 81,760	**31-03308-075**
Ø 82,010	**31-03308-100**



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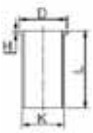
L=146,00
H=4,70
D=86,00

Type: DS

51-65307-000



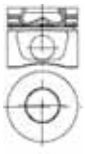
K=84,50
L=146,00
H=6,00
D=86,50

Type: DS +0,50

51-65307-050

81,010

AZV / BKD		Altea 2.0 TDI 16V		D	04	2004	>	03	2009	4 Cyl	**1968cc** **100-103kW** (136-140ps)
AZV / BKD		Leon 2.0 TDI 16V		D	07	2005	>	05	2010	4 Cyl	**1968cc** **100-103kW** (136-140ps)
AZV / BKD		Toledo 2.0 TDI 16V		D	09	2004	>	05	2009	4 Cyl	**1968cc** **100-103kW** (136-140ps)
BMN		Altea 2.0 TDI 16V		D	02	2006	>	05	2010	4 Cyl	**1968cc** **125kW** (170ps)
BMN		Leon 2.0 TDI 16V		D	02	2006	>	03	2009	4 Cyl	**1968cc** **125kW** (170ps)
BMN		Toledo 2.0 TDI 16V		D	01	2006	>	05	2009	4 Cyl	**1968cc** **125kW** (170ps)



11-02298-000

CH 45,800	
B- 17,800	
BØ 38,000	
TL 68,800	

26,00x66,00

Audi, Mitsubishi, Seat, Skoda ve Volkswagen ile Ortak Motor

Type: AP YS PDB

91-09298-000

1	1,750	CkP
2	2,000	P
3	3,000	CrP

1,55mm conta ile (0,91/1,00) 1,63mm conta ile (1,01/1,10) 1,71mm conta ile (1,11/1,20)

Ø 81,010	**31-04298-000**
Ø 81,510	**31-04298-050**

98-09298-000

1	1,750	CrP	St
2	2,000	P	
3	3,000	CrP	

38-04298-000
38-04298-050

99-09298-000

1	1,750	CrP	St
2	2,000	Fe	
3	3,000	CR	

39-04298-000
39-04298-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		

81,010

ARY / AUQ	Leon 1.8i Turbo 20V	B	09	2000	>	04	2004	4 Cyl	**1781cc**	**132kW**	(180ps)
AUQ	Toledo 1.8i Turbo 20V	B	05	2001	>	07	2004	4 Cyl	**1781cc**	**132kW**	(180ps)
BJX	Ibiza 1.8i Turbo 20V	B	12	2003	>			4 Cyl	**1781cc**	**110kW**	(150ps)

11-02299-000
CH 32,700
B- 1,900
BØ 68,000
TL 53,700

19,00x50,00

HA

91-09296-000
1 1,500 MoP
2 1,750 P
3 2,000 CR

Ø 81,010
Ø 81,260
Ø 81,510

31-04299-000
31-04299-025
31-04299-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

81,010

AEH / AFT / AKL	Toledo 1.6i	B	11	1998	>	07	2004	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AFT / AKL / APF / AUR	Cordoba 1.6i	B	01	2000	>	08	2002	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AFT / AKL / APF / AUR	Ibiza 1.6i	B	01	2000	>	05	2002	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AKL	Leon 1.6i	B	11	1999	>	10	2005	4 Cyl	**1595cc**	**74kW**	(101ps)

11-02307-000
CH 32,700 *CH 32,400
VD1 0,700 *VD1 0,700
B- 2,300 *B- 2,300
BØ 61,400 *BØ 61,400
TL 53,700 *TL 53,400

* For Oversize Piston Dimensions

20,00x57,00

91-09107-000
1 1,200 CR St
2 1,500 P
3 2,000 CrP St

+0,700/+0,900

Ø 81,010
Ø 81,260
Ø 81,510
Ø 82,010

31-04307-000
31-04307-025
31-04307-050
31-04307-100

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

81,010

ALZ	Exeo 1.4i	B	03	2009	>	09	2010	4 Cyl	**1600cc**	**75kW**	(102ps)
ALZ	Exeo 1.6i	B	03	2009	>	09	2010	4 Cyl	**1600cc**	**75kW**	(102ps)
BFQ / BGU	Leon 1.6i	B	10	2005	>	06	2006	4 Cyl	**1600cc**	**75kW**	(102ps)
BGU / BSE / BSF	Altea 1.6 SRE	B	03	2004	>	05	2005	4 Cyl	**1600cc**	**75kW**	(102ps)
BGU / BSE / BSF	Toledo 1.6 SRE	B	02	2004	>	03	2006	4 Cyl	**1600cc**	**75kW**	(102ps)
BSE / BSF	Leon 1.6 SRE	B	07	2005	>	11	2010	4 Cyl	**1600cc**	**75kW**	(102ps)

11-02316-000
CH 29,780
VD1 0,700
B- 2,700
BØ 62,300
TL 50,700

19,00x42,00

91-09303-000
1 1,000 CR
2 1,200 P
3 2,000 CrP St

+0,60/+0,65

Ø 81,010
Ø 81,510
Ø 82,010

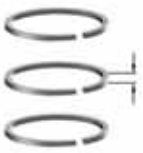
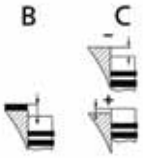
31-04316-000
31-04316-050
31-04316-100

99-09303-000
1 1,000 CR
2 1,200 P
3 2,000 CrP St

39-04316-000
39-04316-050
39-04316-100

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

81,010

AMK	Leon 1.8i Cupra R 20V		B	05	2002	>	05	2003	4 Cyl	**1781cc**	**154kW**	(210ps)

11-02329-000
CH 32,700
B- 2,100
BØ 70,300
TL 53,700

20,00x62,00

HA

91-09294-000

1	1,500	CR	
2	1,750	P	
3	2,000	CR	St

Ø 81,010
Ø 81,510

31-04329-000
31-04329-050

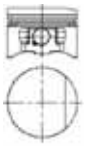
99-09294-000

1	1,500	CrP	St
2	1,750	Fe	
3	2,000	NtP	St

39-04329-000

81,010

AGN	Leon 1.8i 20V		B	11	1999	>	12	2003	4 Cyl	**1781cc**	**92kW**	(125ps)
AGN	Toledo 1.8i 20V		B	10	1998	>	12	2003	4 Cyl	**1781cc**	**92kW**	(125ps)



11-02336-000
CH 32,550 *CH 32,250
VD1 3,600 *VD1 3,600
TL 56,550 *TL 56,250

* For Oversize Piston Dimensions

20,00x59,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

91-09296-000

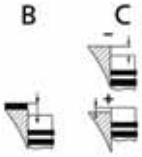
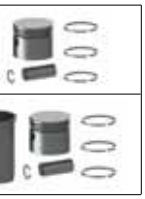
1	1,500	MoP	
2	1,750	P	
3	2,000	CR	

1.Conta ile +0.80/+0.90
2.Conta ile +0.90/+1.00
3.Conta İle +1.00/+1.10

Ø 81,010
Ø 81,510

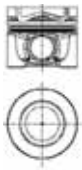
31-04336-000
31-04336-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

81,010

BMN / CEGA	Altea 2.0 Tdi	D	03	2006	>		4 Cyl	**1998cc**	**125kW**	(170ps)
BMN / CEGA	Toledo III 2.0 Tdi	D	01	2006	>	05 2009	4 Cyl	**1998cc**	**125kW**	(170ps)
BMN / CEGA / CFJA	Leon 2.0 Tdi	D	05	2006	>		4 Cyl	**1998cc**	**125kW**	(170ps)
CAGA / CJCA	Axeo 2.0 Tdi	D	12	2008	>		4 Cyl	**1998cc**	**105kW**	(143ps)
CAGC / CJCC	Axeo 2.0 Tdi	D	12	2008	>		4 Cyl	**1998cc**	**88kW**	(120ps)
CAHA / CGLB	Axeo 2.0 Tdi	D	02	2009	>		4 Cyl	**1998cc**	**125kW**	(170ps)



11-02341-000
CH 45,800
B- 12,700
BØ 50,900
TL 68,800

26,00x66,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP YS PDB	**91-09298-000** 1 1,750 CkP 2 2,000 P 3 3,000 CrP		Ø 81,010 Ø 81,510	**31-04341-000** **31-04341-050**
	98-09298-000 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**38-04341-000** **38-04341-050**
	99-09298-000 1 1,750 CrP St 2 2,000 Fe 3 3,000 CR			**39-04341-000** **39-04341-050**

82,510

BLR / BLY / BVY / BVZ	Altea 2.0 FSI 16V	B	05	2004	>	05 2006	4 Cyl	**1984cc**	**110kW**	(150ps)
BLR / BLY / BVY / BVZ	Leon 2.0 FSI 16V	B	07	2005	>	05 2010	4 Cyl	**1984cc**	**110kW**	(150ps)
BLR / BLY / BVY / BVZ	Toledo 2.0 FSI 16V	B	09	2004	>	03 2009	4 Cyl	**1984cc**	**110kW**	(150ps)

11-01285-000
CH 29,400
VD1 1,980
B+ 12,460
B- 7,360
TL 47,400

19,00x44,00

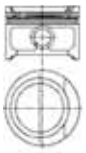
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA	**91-09311-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 82,510 Ø 83,010	**31-03285-000** **31-03285-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

82,510

2.0	Toledo	B	01	1991	>		4 Cyl	**1994cc**	**85kW**	(115ps)	
2.0 / 2E	Ibiza	B	01	1991	>		4 Cyl	**1994cc**	**85kW**	(115ps)	
2E	Cordoba	B	00	1991	>		4 Cyl	**1994cc**	**85kW**	(115ps)	



11-01303-000
CH 30,900
B+ 0,890
B- 5,000
BØ 64,000
TL 51,790

21,00x56,00

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510 **31-03303-000**
Ø 83,010 **31-03303-050**
Ø 83,510 **31-03303-100**

Audi ve Seat ile Ortak Motor

82,510

2E / AGG	Cordoba 2.0i	B	09	1993	>	06	1996	4 Cyl	**1984cc**	**85kW**	(116ps)
2E / AGG	Ibiza 2.0i	B	02	1993	>	06	1996	4 Cyl	**1984cc**	**85kW**	(116ps)
2E / AGG	Toledo 2.0i	B	05	1991	>	07	1996	4 Cyl	**1984cc**	**85kW**	(116ps)
ADY	Alhambra 2.0i	B	03	1996	>	02	2000	4 Cyl	**1984cc**	**85kW**	(116ps)

11-01311-000
CH 30,900
B+ 0,890
B- 5,000
BØ 63,500
TL 63,800

21,00x59,00

CP

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510 **31-03311-000**
Ø 83,010 **31-03311-050**
Ø 83,510 **31-03311-100**

Audi, Seat ve Volkswagen ile Ortak Motor

82,510

CDAA	Alhambra 1.8i TFSI	B	11	2012	>			4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA	Altea 1.8 TSFI 16V	B	03	2009	>			4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA	Leon 1.8 TFSI 16V	B	05	2008	>	07	2012	4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA	Toledo 1.8 TSFI 16V	B	03	2009	>	05	2009	4 Cyl	**1798cc**	**118kW**	(160ps)
CDHA / CDHB	Exeo 1.8 TFSI	B	05	2010	>			4 Cyl	**1798cc**	**88-118kW**	(120-160ps)

11-02295-000
CH 29,800
B+ 5,680
B- 4,750
TL 55,980

23,00x51,00

AP

Trapezoidal Connecting Rod

99-09327-000
1 1,200 NT St
2 1,200 St
3 2,000 CR

Ø 82,510 **39-04295-000**
Ø 83,010 **39-04295-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

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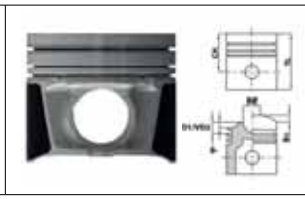
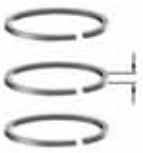
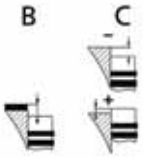
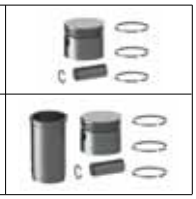
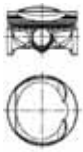
		Type		B C		
						

82,510

BZB	Leon 1.8 TFSI 16V	B	05	2007	>	05	2010	4 Cyl	**1798cc**	**118kW**	(160ps)
BZB / BYT	Altea 1.8 TSFI 16V	B	01	2007	>	03	2009	4 Cyl	**1798cc**	**118kW**	(160ps)
BZB / BYT	Toledo 1.8 TSFI 16V	B	01	2007	>	03	2009	4 Cyl	**1798cc**	**118kW**	(160ps)



11-02342-000
CH 29,800
B+ 4,750
B- 6,000
BØ 67,000
TL 55,980

21,00x53,00

AP

91-09329-000
1 1,200 CrP St
2 1,500 P
3 2,000 CR St

Ø 82,510 **31-04342-000**
Ø 82,765 **31-04342-025**
Ø 83,015 **31-04342-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

CCZA	Alhambra 2.0 TFSI	B	11	2010	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CCZB	Altea 2.0 TFSI 16V	B	05	2009	>			4 Cyl	**1984cc**	**155kW**	(211ps)
CCZB	Leon 2.0 TFSI 16V	B	06	2009	>	12	2012	4 Cyl	**1984cc**	**155kW**	(211ps)

11-02343-000
CH 29,600
VD1 3,000
B- 6,200
BØ 50,000
TL 50,100

21,00x56,00

AP

91-09329-000
1 1,200 CrP St
2 1,500 P
3 2,000 CR St

Ø 82,510 **31-04343-000**
Ø 82,760 **31-04343-025**
Ø 83,010 **31-04343-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

CCZB	LEON 2.0 TFSI	B	06	2009	>	12	2012	4 Cyl	**1984cc**	**155kW**	(211ps)
CCZB	ALTEA 2.0 TFSI	B	05	2009	>			4 Cyl	**1984cc**	**155kW**	(211ps)

11-02587-000
CH 29,600
VD1 3,500
B- 6,200
TL 50,100

23,00x53,00

AP

99-09327-000
1 1,200 NT St
2 1,200 St
3 2,000 CR

Ø 82,510 **31-04587-000**
Ø 83,010 **31-04587-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

84,000

132 AB 000 / B 1.000 / BB 1 A.O — Stationary engine — B — > — 4 Cyl — **1756cc** — **77-82kW** — (105-112ps)

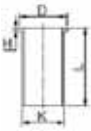
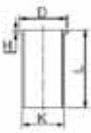
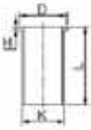
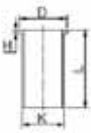
	11-01757-000 CH 38,450 VD1 4,850 B- 1,600 TL 79,850 **22,00x69,00**	CP	**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP		Ø 84,000 Ø 84,400 Ø 84,600 Ø 84,800 Ø 85,000	**31-03757-000** **31-03757-040** **31-03757-060** **31-03757-080** **31-03757-100**
Fiat / Iveco, Lancia ve Seat ile Ortak Motor						
	K=88,02 L=145,50	DS			**51-65410-000**	

84,000

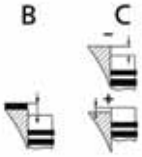
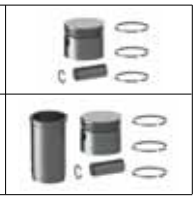
131C4.000 — 131 2.0 — B — 00 1982 — > — 12 1984 — 4 Cyl — **1995cc** — **83 kW** — (113 ps)

	11-02270-000 CH 38,450 VD1 3,800 TL 77,950 **22,00x69,00**	CP	**91-09397-000** 1 1,500 CrP 2 2,000 P 3 3,947 CrP		Ø 84,000 Ø 84,400 Ø 84,600 Ø 84,800 Ø 85,000	**31-04270-000** **31-04270-040** **31-04270-060** **31-04270-080** **31-04270-100**
Fiat / Iveco, Lancia ve Seat ile Ortak Motor						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

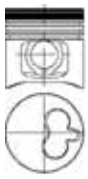
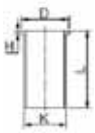
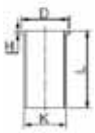
		Type		B C		
87,000						
OM 615.969 / 966	132 2.0 D	D 05 1973 > 02 1979 4 Cyl	**1988cc**	**40kW**	(55ps)	
OM 615.969 / 966	2000 D	D 05 1973 > 02 1979 4 Cyl	**1988cc**	**40kW**	(55ps)	
11-01630-000 CH 52,900 VD1 1,000 B- 8,850 TL 91,400 **26,00x72,00** Mercedes-Benz ve Seat ile Ortak Motor		AP CP	**91-09630-000** 1 3,000 CrP 2 2,000 P 3 4,000 CrP		Ø 87,000 Ø 87,500 Ø 88,000	**31-03630-000** **31-03630-050** **31-03630-100**
	K=90,06 L=158,40 H=4,70 D=91,92	DS			**51-65630-000**	
	K=90,50 L=158,40 H=5,00 D=92,40	DS +0,50			**51-65630-050**	
	K=91,06 L=158,40 H=6,00 D=92,92	DS +1,00			**51-65630-100**	
87,000						
OM 615.940	2000 D	D 05 1973 > 02 1979 4 Cyl	**1988cc**	**40kW**	(55ps)	
OM 615.940 / 961 (ESP)	132 2.0 D	D 05 1973 > 02 1979 4 Cyl	**1988cc**	**40-44kW**	(55-60ps)	
11-01653-000 CH 52,900 VD1 1,200 B- 8,850 TL 91,400 **26,00x72,00** Mercedes-Benz ve Seat ile Ortak Motor		AP CP	**91-09653-000** 1 2,000 CrP 2 2,000 P 3 4,000 CrP	+0,65/+1,05	Ø 87,000 Ø 87,500 Ø 88,000	**31-03653-000** **31-03653-050** **31-03653-100**
	K=90,06 L=158,40 H=4,70 D=91,92	DS			**51-65630-000**	
	K=90,50 L=158,40 H=5,00 D=92,40	DS +0,50			**51-65630-050**	
	K=91,06 L=158,40 H=6,00 D=92,92	DS +1,00			**51-65630-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

93,000

8144.61.200 131 2.4 D D 00 1981 > 00 1985 4 Cyl **2445cc** **53kW** (72ps)

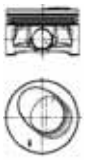
	**11-01686-000** CH 55,000 B- 2,200 TL 90,000 **32,00x75,00** Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor	AP HA CP	**91-09686-000** 1 3,000 CR 2 2,000 P 3 4,000 CR		Ø 93,000 Ø 93,400 Ø 93,600	**31-03686-000** **31-03686-040** **31-03686-060**
			98-09686-000 1 3,000 CrP 2 2,000 P 3 4,000 CrP			**38-03686-000** **38-03686-040** **38-03686-060**
			99-09686-000 1 3,000 CR St 2 2,000 Fe 3 4,000 CR			**39-03686-000** **39-03686-040** **39-03686-060**
	K=96,00 L=167,00 H=5,00 D=98,90	DS			**51-65400-000**	
	K=96,10 L=167,00 H=5,00 D=98,90	DS +0,10			**51-65400-010**	
	K=96,20 L=167,00 H=5,00 D=98,90	DS +0,20			**51-65400-020**	
	K=96,06 L=167,30	DS			**51-65452-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		

71,010

CBZA / CBZB	Fabia	B	03	2010	>	Cyl	**1197cc**	**63-77kW**	(86-105ps)
CBZA / CBZB	Rapid	B	07	2012	>	Cyl	**1197cc**	**63-77kW**	(86-105ps)
CBZA / CBZB	Roomster	B	03	2010	>	Cyl	**1197cc**	**63-77kW**	(86-105ps)
CBZB	Octavia	B	02	2010	>	Cyl	**1197cc**	**77kW**	(105ps)
CBZB	Yeti	B	09	2009	>	Cyl	**1197cc**	**77kW**	(105ps)



11-01959-000
CH 28,940
VD1 2,000
B- 4,350
TL 46,940

19,00x42,00

HA

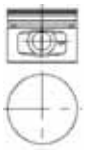
91-09106-000
1 1,200 Nt St
2 1,200 CrP
3 2,000 NtP St

Ø 71,010 **31-03959-000**
Ø 71,260 **31-03959-025**
Ø 71,510 **31-03959-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

75,500

742.135 / 781.135	Favorit		00	1989	> 00	1995	4 Cyl	**1289cc**	**43kW**	(59ps)
742.135 / 781.135	Felicia 135		00	1989	> 00	1995	4 Cyl	**1289cc**	**43kW**	(59ps)



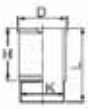
11-01952-000
CH 34,350
TL 57,350

20,00x54,00

CP

91-09953-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP St

Ø 75,500 **31-03952-000**



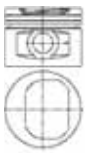
K=79,95
L=135,00
H=95,10
D=87,95

WF

51-05952-000 **71-07952-000**

75,500

742.135 / 781.135	Favorit 135	B			>		4 Cyl	**1289cc**	**kW**	(ps)
742.135 / 781.135	Felicia	B			>		4 Cyl	**1289cc**	**kW**	(ps)



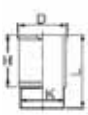
11-01953-000
CH 34,350
B- 3,500
TL 57,350

20,00x54,00

CP

91-09953-000
1 1,500 CrP
2 1,500 P
3 3,000 CrP St

Ø 75,500 **31-03953-000**

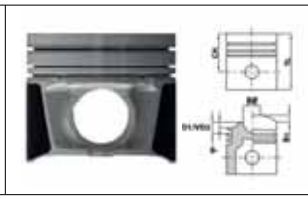
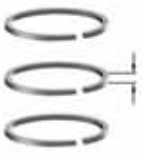
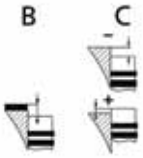


K=79,95
L=135,00
H=95,10
D=87,95

WF

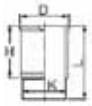
51-05952-000 **71-07953-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

75,500

ATZ / AQW / AME	Fabia 1.4i	B	08	1999	>	01	2001	4 Cyl		(68ps)
AZE	Fabia 1.4i	B	04	2000	>	03	2003	4 Cyl		(60ps)

	11-01955-000 CH 31,550 B- 1,210 TL 53,000 **17,00x52,00**	**91-09953-000** 1 1,500 CrP 2 1,500 P 3 3,000 CrP St		Ø 75,500	**31-03955-000**
	K=79,95 L=125,00 H=95,10 D=87,95	WF		**51-05953-000**	**71-07955-000**

76,500

CFNA	Fabia 1.6i 16V	B	04	2007	>			4 Cyl	**1598cc**	**77kW**	(105ps)
CFNA	Rapid 1.6 MPI	B	10	2012	>			4 Cyl	**1598cc**	**77kW**	(105ps)
CFNA	Roomster 1.6i 16V	B	05	2006	>			4 Cyl	**1598cc**	**77kW**	(105ps)

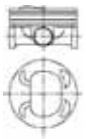
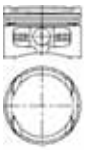
	11-02339-000 CH 29,300 VD1 2,760 B- 4,130 BØ 64,350 TL 47,200 **17,00x45,80**	HA	**99-09313-000**	Ø 76,500	**39-04339-000**
Seat, Skoda ve Volkswagen ile Ortak Motor					

76,510

BUD / BXW / CGGB Euro5	Fabia 1.4 / 1.4i 16V	B	03	2010	>			4 Cyl	**1390cc**	**59-63kW**	(80-86ps)
BXW	Praktik 1.4 16V	B	08	2007	>			4 Cyl	**1390cc**	**63kW**	(86ps)
CGGA / BUD	Octavia 1.4 16V	B	11	2010	>	02	2013	4 Cyl	**1390cc**	**59kW**	(80ps)
CGGB Euro 5 / BXW	Fabia Scout 1.4i 16V	B	03	2010	>			4 Cyl	**1390cc**	**63kW**	(85ps)
CGGB Euro 5 / BXW	Roomster 1.4i 16V	B	03	2010	>			4 Cyl	**1390cc**	**63kW**	(85ps)

	11-01282-000 CH 28,920 B- 2,280 TL 47,920 **17,00x46,00**	HA	**99-09313-000**	Ø 76,510 Ø 77,010	**39-03282-000** **39-03282-050**
Seat, Skoda ve Volkswagen ile Ortak Motor					

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
76,510						
CAXA	Octavia 1.4 TSI	B	11 2008 > 02 2013	4 Cyl	**1390cc**	**90kW** (122ps)
CAXA	Rapid 1.4 TSI	B	10 2012 >	4 Cyl	**1390cc**	**90kW** (122ps)
CAXA	Yeti 1.4i 16V	B	06 2010 >	4 Cyl	**1390cc**	**90kW** (122ps)
CAXC	Superb 1.4 TSI 16V	B	08 2008 >	4 Cyl	**1390cc**	**92kW** (125ps)
11-01284-000 CH 29,200 VD1 0,800 VD2 3,580 B+ 2,000 B- 4,600 TL 50,210 **19,00x52,00**		HA	**91-09313-000** 1 1,200 NT St 2 1,200 3 2,000 NtP St		Ø 76,510 Ø 77,010	**31-03284-000** **31-03284-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
76,510						
CTHE / CAVE	Fabia 1.4 TSI RS 16V	B	03 2010 >	4 Cyl	**1390cc**	**132kW** (180ps)
 **11-01287-000** CH 28,970 B+ 2,000 B- 4,570 TL 49,970 **19,00x54,00**		AP	**99-09326-000** 1 1,200 NT St 2 1,500 P 3 2,000 NtP St		Ø 76,510 Ø 77,010	**39-03287-000** **39-03287-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
76,510						
AUA / BBY / AUB / BBZ	Fabia 1.4i 16V	B	10 1999 > 08 2003	4 Cyl	**1390cc**	**55-74kW** (75-101ps)
AXP / BCA	Octavia 1.4 / 1.4i 16V	B	05 2004 > 02 2013	4 Cyl	**1390cc**	**55kW** (75ps)
 **11-02304-000** CH 28,920 VD1 2,323 B- 1,980 BØ 61,900 TL 49,920 **17,00x54,00**		AA=20,40 mm	**91-09306-000** 1 1,200 CR St 2 1,500 P 3 2,500 CrP St		Ø 76,510 Ø 77,010	**31-04304-000** **31-04304-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						

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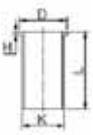
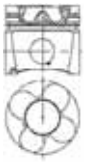
		Type		B C		
76,510						
AEE	Felicia 1.6i	B	05 1995 > 08 2001	4 Cyl	**1598cc**	**55kW** (75ps)
AEE	Octavia 1.6i	B	10 1996 > 09 2004	4 Cyl	**1598cc**	**55kW** (75ps)
	11-02321-000 CH 30,850 B- 8,000 TL 60,400 **17,00x51,85** Seat, Skoda ve Volkswagen ile Ortak Motor	AA=20,40 mm	**91-09302-000** 1 1,200 NT 2 1,500 P 3 2,500 CrP St		Ø 76,510 Ø 77,010	**31-04321-000** **31-04321-050**
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	
78,310						
AYM	Superb 2.5 TDI 24V	D	12 2001 > 08 2003	6 Cyl	**2499cc**	**114kW** (155ps)
	11-02331-000 CH 47,830 *CH 47,580 VD1 1,380 *VD1 1,380 B- 17,250 *B- 17,250 BØ 36,000 *BØ 36,000 TL 71,830 *TL 71,580 * For Oversize Piston Dimensions **26,00x58,00** Audi, Skoda ve Volkswagen ile Ortak Motor	AP YS	**91-09331-000** 1 1,750 CK 2 2,000 P 3 3,000 CR		Ø 78,310 Ø 78,810	**31-04331-000** **31-04331-050**
		Cyl.1/2/3 to be used with 2332 000	**98-09331-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP			**38-04331-000** **38-04331-050**
			99-09331-000 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**39-04331-000** **39-04331-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl **cc** **kW** (ps)



11-02332-000
CH 47,830 *CH 47,580
VD1 1,380 *VD1 1,380
B- 17,250 *B- 17,250
BØ 36,000 *BØ 36,000
TL 71,830 *TL 71,580

* For Oversize Piston Dimensions

26,00x58,00

Audi, Skoda ve Volkswagen ile Ortak Motor

AP
YS

Cyl.4/5/6 to be used with 2331 000

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04332-000
31-04332-050

98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

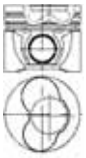
38-04332-000
38-04332-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

39-04332-000
39-04332-050

79,500

AMF Fabia 1.4 TDI 04 2003 > 10 2005 (75ps)



11-02311-000
CH 45,800
VD1 1,100
B- 17,650
BØ 37,900
TL 69,800

26,00x63,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP

PDB

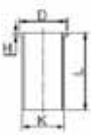
Cyl.1/2 to be used with 2312 000

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

1,53mm +0,81/+0,96
1,57mm +0,96/+1,01
1,61mm +1,01/+1,03

Ø 79,500
Ø 80,000

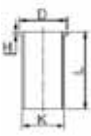
31-04311-000
31-04311-050



K=82,57
L=151,80
H=4,70
D=85,40

DS

51-65303-000

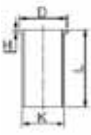


K=83,07
L=151,80
H=6,00
D=85,90

DS

+0,50

51-65303-050



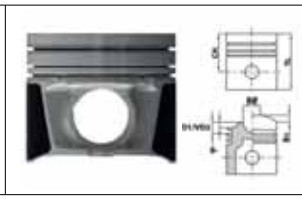
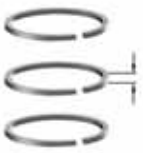
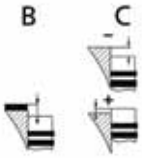
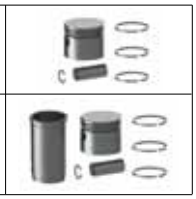
K=83,57
L=151,80
H=6,00
D=86,40

DS

+1,00

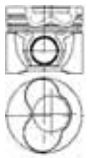
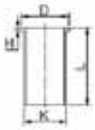
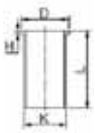
51-65303-100

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,500

Silindir 3 de Kullanilacak / To Cylinder 3 > Cyl **cc** **kW** (ps)

	**11-02312-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00**	AP PDB Cyl.3 to be used with 2311 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04312-000** **31-04312-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

79,510

CAYA / CAYB / CFWA / CAYC / CLHA / CLNA	FABIA 1.6 TDI	04 2010	> 12 2014		(75-105ps)
CAYA / CFWA	FABIA: 1.2 TDI	05 2010	> 12 2014		(75ps)
CAYA / CFWA	ROOMSTER 1.2 TDI	03 2010	>		(75ps)
CAYB / CAYC / CLHA / CLNA	RAPID 1.6 TDI	08 2013	>		(90-105ps)
CAYC / CLHA / CLNA	SUPERB 1.6 TDI	09 2010	>		(105ps)
CAYC / CLHA / CLNA	YETI 1.6 TDI	11 2010	>		(105ps)
CAYC / CLHA / CLNA / CAYB	OCTAVIA 1.6 TDI	03 2010	>		(90-105ps)

	11-01286-000 CH 45,300 B- 11,000 BØ 49,000 TL 68,130 **26,00x66,00**	AP YS	**91-09627-000** 1 1,750 CkP 2 2,000 P 3 2,000 CrP		Ø 79,510 Ø 80,010	**31-03286-000** **31-03286-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						

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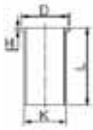
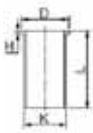
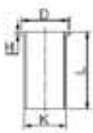
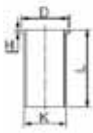
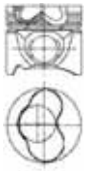
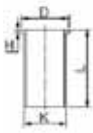
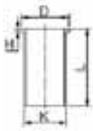
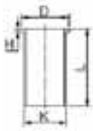
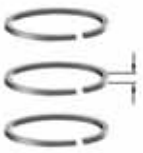
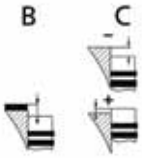
		Type		B C		
79,510						
AEF Felicia 1.9 D		D 10 1995 > 08 2001 4 Cyl			**1896cc 47kW**	(64ps)
	11-01309-000 CH 39,650 B- 1,900 TL 65,650 **24,00x64,00** Audi, Seat, Skoda ve Volkswagen ile Ortak Motor	AP CP	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,53mm conta ile (+0,66/+0,86) 2. centik 1,57mm conta ile (+0,87/+0,90) 3. centik 1,61mm conta ile (+0,91/+1,02)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-03309-000** **31-03309-025** **31-03309-050** **31-03309-100**
	K=82,50 L=155,00 H=5,10 D=85,60	DS			**51-65157-000**	
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
79,510						
AGR / ALH	Octavia 1.9 TDI	D	10 1996	> 03 2010	4 Cyl	**1896cc** **66kW** (90ps)
AHF / ASV	Octavia 1.9 TDI	D	08 1997	> 01 2006	4 Cyl	**1896cc** **81kW** (110ps)

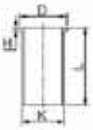
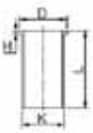
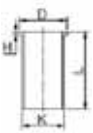
	**11-02301-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.1/2 to be used with 2302 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04301-000** **31-04301-025** **31-04301-050** **31-04301-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					

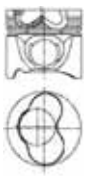
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

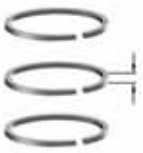
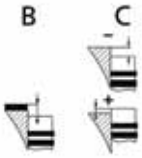
	11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.3/4 to be used with 2301 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04302-000** **31-04302-025** **31-04302-050** **31-04302-100**
	Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

79,510

AGR / ALH	Octavia 1.9 TDI	10 1996	> 03 2010		(90ps)
AHF / ASV	Octavia 1.9 TDI	08 1997	> 01 2006		(110ps)

	**11-02305-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.1/2 to be used with 2306 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04305-000** **31-04305-025** **31-04305-050** **31-04305-100**
	Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

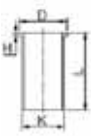
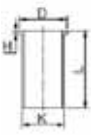
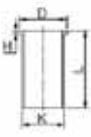
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02306-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.3/4 to be used with 2305 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04306-000** **31-04306-025** **31-04306-050** **31-04306-100**
	Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					

79,510

ASZ	Octavia 1.9 TDI	09 2002	> 09 2004		(130ps)
ASZ / BLT	Fabia 1.9 TDI	06 2003	> 10 2005		(130ps)
AVF / AWX	Superb 1.9 TDI	01 2004	> 03 2008		(130ps)

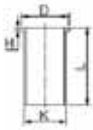
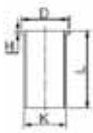
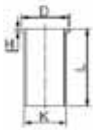
	11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 1/2 to be used with 2314 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04313-000** **31-04313-025** **31-04313-050**
	Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

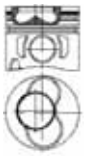
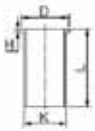
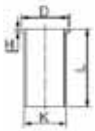
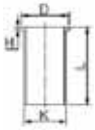
		Type		B C		

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 3/4 to be used with 2313 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04314-000** **31-04314-025** **31-04314-050**
	Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

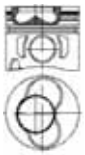
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
79,510						
ATD / AXR	Octavia 1.9 TDI	08 2000 > 01 2006				(101ps)
ATD / AXR / BSW	Fabia 1.9 TDI	01 2000 > 10 2005				(101-105ps)
AVB / BXE	Superb 1.9 TDI	06 2002 > 10 2005				(101-105ps)
AXR / BSW	Roomster 1.9 TDI	03 2006 > 05 2006				(101-105ps)
BJB / BKC / BXE	Octavia 1.9 TDI 16V	06 2004 > 02 2013				(105ps)
BSW	Fabia Scout 1.9 TDI	05 2009 > 03 2010				(105ps)
	**11-02319-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.1/2 to be used with 2320 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04319-000** **31-04319-025** **31-04319-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

		Type		B C		

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)



11-02320-000
CH 45,800
VD1 0,650
B- 17,100
BØ 38,000
TL 68,800

26,00x66,00

AP
YS

PDB

Cyl.3/4 to be used with 2319 000

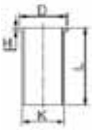
91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

1,45mm +0,91/+1,00
1,53mm +1,01/+1,10
1,61mm +1,11/+1,20

Ø 79,510
Ø 79,760
Ø 80,010

31-04320-000
31-04320-025
31-04320-050

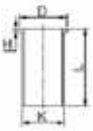
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor



K=82,57
L=151,80
H=4,70
D=85,40

DS

51-65303-000

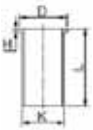


K=83,07
L=151,80
H=6,00
D=85,90

DS

+0,50

51-65303-050



K=83,57
L=151,80
H=6,00
D=86,40

DS

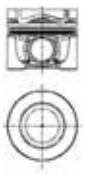
+1,00

51-65303-100

79,510

CAYC Fabia / Fabia Scout / Roomster 1.6 TDI 16V 03 2010 > (105ps)

CAYC Superb 1.6 TDI 16V 09 2010 > (105ps)



11-02340-000
CH 45,300
B- 10,700
BØ 49,000
TL 67,900

26,00x66,00

AP
YS

91-09625-000
1 1,750 CR
2 2,000 P
3 3,000 CR

1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)

Ø 79,510
Ø 80,010

31-04340-000
31-04340-050

Audi, Skoda ve Volkswagen ile Ortak Motor

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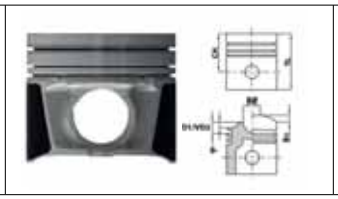
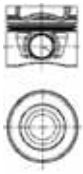


81,000

CFGB	Superb 2.0 TDI 16V	D	05	2010	>			4 Cyl	**1968cc**	**125kW**	(170ps)
CLCA / CFHA / CFHF / CLCB / CFHC / CFJA	Yeti 2.0 TDi 16V	D	09	2011	>			4 Cyl	**1968cc**	**81-125kW**	(110-170ps)
CLCA / CFHF	Octavia 2.0 TDI 16V	D	05	2010	>	02	2013	4 Cyl	**1968cc**	**81kW**	(110ps)
CLCB / CFHC	Octavia 2.0 TDI 16V	D	05	2010	>	02	2013	4 Cyl	**1968cc**	**103kW**	(140ps)
CLJA / CFFB	Superb 2.0 TDI 16V	D	02	2010	>			4 Cyl	**1968cc**	**103kW**	(140ps)



11-02344-000
CH 45,800
B- 13,100
BØ 50,880
TL 68,800

26,00x66,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)

Ø 81,000
Ø 81,500

31-04344-000
31-04344-050

98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

38-04344-000
38-04344-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

39-04344-000
39-04344-050

81,010

AGU / ARZ	Octavia 1.8i Turbo 20V	B	05	1998	>	12	2010	4 Cyl	**1751cc**	**110kW**	(150ps)

11-01296-000
CH 32,700 *CH 32,400
B- 2,050 *B- 2,050
BØ 70,000 *BØ 70,000
TL 53,700 *TL 53,400

* For Oversize Piston Dimensions

20,00x59,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

91-09296-000
1 1,500 MoP
2 1,750 P
3 2,000 CR

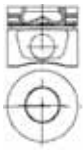
Ø 81,010
Ø 81,260
Ø 81,510

31-03296-000
31-03296-025
31-03296-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

81,010

AZV / BKD	Octavia 2.0 TDI 16V	D	02	2004	>	05	2010	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BKD	Superb 2.0 TDI 16V	D	01	2009	>	03	2010	4 Cyl	**1968cc**	**103kW**	(140ps)
BMN	Octavia 2.0 TDI RS	D	05	2008	>	02	2013	4 Cyl	**1968cc**	**125kW**	(170ps)



11-02298-000
CH 45,800
B- 17,800
BØ 38,000
TL 68,800

26,00x66,00

Audi, Mitsubishi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP YS PDB	**91-09298-000** 1 1,750 CkP 2 2,000 P 3 3,000 CrP	1,55mm conta ile (0,91/1,00) 1,63mm conta ile (1,01/1,10) 1,71mm conta ile (1,11/1,20)	Ø 81,010 Ø 81,510	**31-04298-000** **31-04298-050**
	98-09298-000 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**38-04298-000** **38-04298-050**
	99-09298-000 1 1,750 CrP St 2 2,000 Fe 3 3,000 CR			**39-04298-000** **39-04298-050**

81,010

ARX / AUM / AUQ	Octavia 1.8i Turbo 20V	B	08	2000	>	05	2006	4 Cyl	**1781cc**	**110-132kW**	(150-180ps)
AUQ	Octavia RS 1.8T	B	08	2002	>	01	2006	4 Cyl	**1781cc**	**132kW**	(180ps)
AWT	Superb 1.8i Turbo 20V	B	10	2001	>	03	2008	4 Cyl	**1781cc**	**110kW**	(150ps)

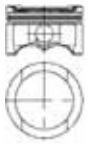
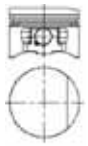
11-02299-000
CH 32,700
B- 1,900
BØ 68,000
TL 53,700

19,00x50,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA	**91-09296-000** 1 1,500 MoP 2 1,750 P 3 2,000 CR		Ø 81,010 Ø 81,260 Ø 81,510	**31-04299-000** **31-04299-025** **31-04299-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
81,010						
AEH / AKL	Octavia 1.6i	B	02 1997 > 12 2007	4 Cyl	**1595cc**	**74kW** (101ps)
11-02307-000 CH 32,700 *CH 32,400 VD1 0,700 *VD1 0,700 B- 2,300 *B- 2,300 BØ 61,400 *BØ 61,400 TL 53,700 *TL 53,400 * For Oversize Piston Dimensions **20,00x57,00**		**91-09107-000** 1 1,200 CR St 2 1,500 P 3 2,000 CrP St	+0,700/+0,900		Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010	**31-04307-000** **31-04307-025** **31-04307-050** **31-04307-100**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
81,010						
BFQ / AVU	Octavia 1.6i	B	04 2002 > 12 2010	4 Cyl	**1600cc**	**75kW** (102ps)
BGU / BSE / BSF	Octavia 1.6 16V	B	01 2008 > 02 2013	4 Cyl	**1600cc**	**75kW** (102ps)
 **11-02316-000** CH 29,780 VD1 0,700 B- 2,700 BØ 62,300 TL 50,700 **19,00x42,00**		**91-09303-000** 1 1,000 CR 2 1,200 P 3 2,000 CrP St	+0,60/+0,65		Ø 81,010 Ø 81,510 Ø 82,010	**31-04316-000** **31-04316-050** **31-04316-100**
		99-09303-000 1 1,000 CR 2 1,200 P 3 2,000 CrP St				**39-04316-000** **39-04316-050** **39-04316-100**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
81,010						
AGN	Octavia 1.8i 20V	B	10 1996 > 07 2000	4 Cyl	**1781cc**	**92kW** (125ps)
 **11-02336-000** CH 32,550 *CH 32,250 VD1 3,600 *VD1 3,600 TL 56,550 *TL 56,250 * For Oversize Piston Dimensions **20,00x59,00**		**91-09296-000** 1 1,500 MoP 2 1,750 P 3 2,000 CR	1.Conta ile +0.80/+0.90 2.Conta ile +0.90/+1.00 3.Conta İle +1.00/+1.10		Ø 81,010 Ø 81,510	**31-04336-000** **31-04336-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						

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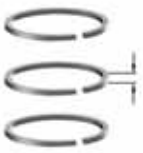
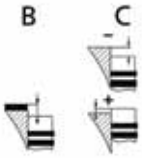
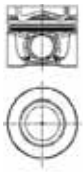



Type

81,010

BMN / CEGA	Octavia 2.0 TDi RS	D	04	2006	>		4 Cyl	**1998cc**	**125kW**	(170ps)
CBBB / CFGB	SuperB II 2.0 Tdi	D	07	2008	>		4 Cyl	**1998cc**	**125kW**	(170ps)
CLCB / CFHC / CBDB / CEGA / CFJA	Yeti 2.0 Tdi	D	05	2009	>		4 Cyl	**1998cc**	**103-125kW**	(140-170ps)



11-02341-000
CH 45,800
B- 12,700
BØ 50,900
TL 68,800

26,00x66,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

Ø 81,010
Ø 81,510

31-04341-000
31-04341-050

98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

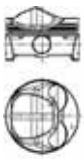
38-04341-000
38-04341-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

39-04341-000
39-04341-050

82,510

BLR / BLX / BLY / BVY / BVZ	Octavia 2.0 FSI 16V	B	11	2004	>	02	2013	4 Cyl	**1984cc**	**110kW**	(150ps)



11-01285-000
CH 29,400
VD1 1,980
B+ 12,460
B- 7,360
TL 47,400

19,00x44,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510
Ø 83,010

31-03285-000
31-03285-050

82,510

CDAA / CDAB	Octavia 1.8 TSI 16V	B	11	2008	>	02	2013	4 Cyl	**1798cc**	**112-118kW**	(152-160ps)
CDAA / CDAB	Superb 1.8 TSI 16V	B	09	2008	>			4 Cyl	**1798cc**	**112-118kW**	(152-160ps)
CDAA / CDAB	Yeti 1.8 TSI 16V	B	05	2009	>			4 Cyl	**1798cc**	**112-118kW**	(152-160ps)

11-02295-000
CH 29,800
B+ 5,680
B- 4,750
TL 55,980

23,00x51,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP

Trapezoidal Connecting Rod

99-09327-000
1 1,200 NT St
2 1,200 St
3 2,000 CR

Ø 82,510
Ø 83,010

39-04295-000
39-04295-050

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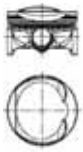
82,510

BYJ / BZB	Octavia 1.8 TSI 16V	B	04	2007	>	02	2013	4 Cyl	**1798cc**	**118kW**	(160ps)	
BZB	Superb 1.8 TSI 16V	B	03	2008	>	05	2009	4 Cyl	**1798cc**	**118kW**	(160ps)	



11-02342-000
CH 29,800
B+ 4,750
B- 6,000
BØ 67,000
TL 55,980

21,00x53,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP

91-09329-000
1 1,200 CrP St
2 1,500 P
3 2,000 CR St

Ø 82,510 **31-04342-000**
Ø 82,765 **31-04342-025**
Ø 83,015 **31-04342-050**

82,510

CCZA	Octavia 2.0 RS	B	11	2008	>	02	2013	4 Cyl	**1984cc**	**147kW**	(200ps)	
CCZA	Superb 2.0 TSI 16V	B	05	2010	>			4 Cyl	**1984cc**	**147kW**	(200ps)	

11-02343-000
CH 29,600
VD1 3,000
B- 6,200
BØ 50,000
TL 50,100

21,00x56,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP

91-09329-000
1 1,200 CrP St
2 1,500 P
3 2,000 CR St

Ø 82,510 **31-04343-000**
Ø 82,760 **31-04343-025**
Ø 83,010 **31-04343-050**

82,510

CCZA	OCTAVIA II 2.0 RS	B	10	2005	>	02	2013	4 Cyl	**1984cc**	**147kW**	(200ps)	
CCZA	SUPERB II 2.0 TSI	B	05	2010	>	05	2010	4 Cyl	**1984cc**	**147kW**	(200ps)	

11-02587-000
CH 29,600
VD1 3,500
B- 6,200
TL 50,100

23,00x53,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

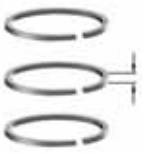
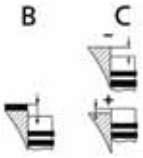
AP

99-09327-000
1 1,200 NT St
2 1,200 St
3 2,000 CR

Ø 82,510 **31-04587-000**
Ø 83,010 **31-04587-050**

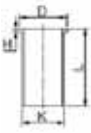
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

TATA

		Type		B C		
						

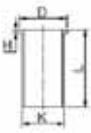
75,000

475 IDI TCIC Euro3	Indica	D	>	4 Cyl	**1405cc**	**51kW**	(70ps)
475 IDI TCIC Euro3	Indigo	D	>	4 Cyl	**1405cc**	**51kW**	(70ps)
475 IDI TCIC Euro3	Marina	D	>	4 Cyl	**1405cc**	**51kW**	(70ps)

	11-02791-000 CH 42,950 B- 1,900 TL 68,500 **25,00x60,00**	AP	**91-09791-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	1. Conta ile +0,45/+0,55 2. Conta ile +0,55/+0,65 3. Conta ile +0,65/+0,75	Ø 75,000 Ø 75,500	**31-04791-000** **31-04791-050**
	K=78,10 L=136,50 H=5,10 D=79,60	DS			**51-65982-000**	

83,000

4DLTTD I	PICKUP TELCOLINE	D	>	4 Cyl	**1948cc**	**kW**	(90ps)

	11-02799-000 CH 47,000 B- 3,200 TL 72,900 **28,00x67,00**	AP		1. Centik conta ile (+0,45/+0,55) 2. Centik conta ile (+0,56/+0,65) 3. Centik conta ile (+0,66/+0,75)	Ø 83,000	**31-04799-000**
	K=86,10 L=149,60 H=5,10 D=87,50	DS			**51-65985-000**	

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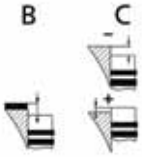
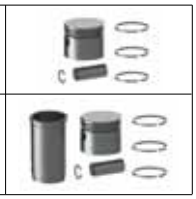
		Type		B C		
						

67,100

AER / ALL	Lupo 1.0i			B	01	1999	>	05	2000	4 Cyl	**37kW**	(50ps)
AER / ALL	Polo 1.0i			B	07	1996	>	12	1999	4 Cyl	**37kW**	(50ps)

11-02322-000
CH 31,250
B- 5,650
BØ 51,500
TL 56,270

17,00x48,00

AA=20,25 mm

91-09312-000
1 1,000 CR St
2 1,200 P
3 2,000 CR

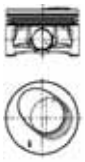
Ø 67,100
Ø 67,600

31-04322-000
31-04322-050

Seat ve Volkswagen ile Ortak Motor

71,010

CBZA / CBZB	Caddy III			B	09	2010	>			Cyl	**1197cc**	**63-77kW** (86-105ps)
CBZA / CBZB	Golf			B	08	2009	>			Cyl	**1197cc**	**63-77kW** (86-105ps)
CBZB	Beetle			B	07	2011	>			Cyl	**1197cc**	**77kW** (105ps)
CBZB	Jetta			B	02	2011	>			Cyl	**1197cc**	**77kW** (105ps)
CBZB	Polo			B	11	2009	>			Cyl	**1197cc**	**77kW** (105ps)
CBZB	Touran			B	05	2010	>			Cyl	**1197cc**	**77kW** (105ps)



11-01959-000
CH 28,940
VD1 2,000
B- 4,350
TL 46,940

19,00x42,00

HA

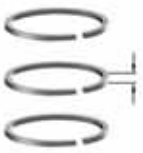
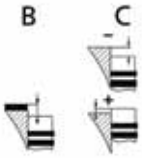
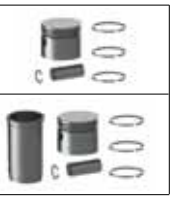
91-09106-000
1 1,200 Nt St
2 1,200 CrP
3 2,000 NtP St

Ø 71,010
Ø 71,260
Ø 71,510

31-03959-000
31-03959-025
31-03959-050

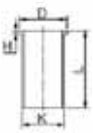
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

75,010

2G / AAV / HK / MH / HW / NU	Polo 1.3	01 1989	>	07 1994	4 Cyl	**1272cc**	**37-40kW**	(50-54ps)
2G / HK / MH / NU	Golf 1.3	01 1989	>	07 1992	4 Cyl	**1272cc**	**37-40kW**	(50-54ps)
2G / HK / MH / NU	Jetta 1.3	01 1989	>	07 1992	4 Cyl	**1272cc**	**37-40kW**	(50-54ps)
HK	Scirocco 1.3	08 1983	>	07 1984	4 Cyl	**1272cc**	**40kW**	(54ps)
HK / HW	Derby 1.3	08 1983	>	11 1984	4 Cyl	**1272cc**	**37-40kW**	(50-54ps)
NZ	Golf 1.3i		>		4 Cyl	**1272cc**	**40kW**	(55ps)
NZ	Jetta 1.3i	08 1985	>	07 1992	4 Cyl	**1272cc**	**40kW**	(55ps)
NZ	Polo 1.3i	05 1986	>	12 1992	4 Cyl	**1272cc**	**40kW**	(55ps)

	11-01299-000 CH 42,870 VD1 1,500 VD2 1,650 B- 16,600 TL 69,870 **20,00x54,00** Seat ve Volkswagen ile Ortak Motor	CP	**91-09299-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	Ø 75,010 Ø 75,260 Ø 75,510 Ø 75,760	**31-03299-000** **31-03299-025** **31-03299-050** **31-03299-075**
	K=78,00 L=133,00 H=4,50 D=81,00	DS		**51-65277-000**	

76,500

CFNA	Polo 1.6 SRE	B	03 2010	>	4 Cyl	**1598cc**	**77kW**	(105ps)	

	11-02339-000 CH 29,300 VD1 2,760 B- 4,130 BØ 64,350 TL 47,200 **17,00x45,80** Seat, Skoda ve Volkswagen ile Ortak Motor	HA	**99-09313-000**	Ø 76,500	**39-04339-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

76,510

BUD	Caddy 1.4 FSI 16V	B	05	2006	> 08	2010	4 Cyl	**1390cc**	**59kW**	(80ps)
BUD	Polo 1.4 FSI 16V	B	05	2006	> 11	2009	4 Cyl	**1390cc**	**59kW**	(80ps)
CGGA / BUD	Golf 1.4 FSI / SRE 16V	B	05	2006	> 11	2008	4 Cyl	**1390cc**	**59kW**	(80ps)
CGGA / BUD	Golf Plus 1.4 FSI / SRE 16V	B	05	2007	> 05	2011	4 Cyl	**1390cc**	**59kW**	(80ps)
CGGB Euro 5	Polo 1.4i 16V	B	03	2009	>		4 Cyl	**1390cc**	**63kW**	(85ps)

11-01282-000
CH 28,920
B- 2,280
TL 47,920

17,00x46,00

HA

99-09313-000

Ø 76,510
Ø 77,010

39-03282-000
39-03282-050

Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

CAXA	Eos 1.4 FSI 16V	B	11	2007	> 05	2008	4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Eos 1.4 TSI 16V	B	11	2010	> 11	2013	4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Golf 1.4 FSI 16V	B	07	2007	> 11	2008	4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Golf 1.4 TSI 16V	B	09	2007	> 12	2008	4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Golf Plus 1.4 FSI 16V	B	07	2007	> 01	2014	4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Golf Plus 1.4 TSI 16V	B	07	2007	> 01	2014	4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Jetta 1.4 TSI 16V	B	06	2010	>		4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Passat 1.4 TSI 16V	B	08	2010	>		4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Scirocco 1.4 TSI 16V	B	08	2008	>		4 Cyl	**1390cc**	**90kW**	(122ps)
CAXA	Tiguan 1.4 TSI 16V	B	08	2010	>		4 Cyl	**1390cc**	**90kW**	(122ps)

11-01284-000
CH 29,200
VD1 0,800
VD2 3,580
B+ 2,000
B- 4,600
TL 50,210

19,00x52,00

HA

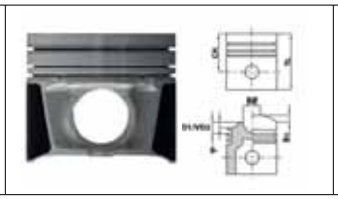
91-09313-000
1 1,200 NT St
2 1,200
3 2,000 NtP St

Ø 76,510
Ø 77,010

31-03284-000
31-03284-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

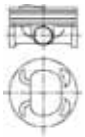
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



Type

76,510

CAVC / CAVB / CTHC / CTHB	Touran 1.4 TSI 16V	B	05	2008	>			4 Cyl	**1390cc**	**103-125kW**	(140-170ps)
CAVD / CTKA / CTHD / CNWA / CAVD	Golf 1.4 TSI 16V	B	07	2008	>	11	2012	4 Cyl	**1390cc**	**118kW**	(160ps)
CTHA	Jetta 1.4 TSI 16V	B	07	2008	>			4 Cyl	**1390cc**	**110-118kW**	(150-160ps)
CTHA / CAVA	Sharan 1.4 TSI	B	05	2010	>			4 Cyl	**1390cc**	**110kW**	(150ps)
CTHA / CTHD / CAVD / CAVA	Tiguan 1.4 TSI 16V	B	05	2008	>			4 Cyl	**1390cc**	**110-118kW**	(150-160ps)
CTHD	CC 1.4 TSI	B	11	2012	>	05	2013	4 Cyl	**1390cc**	**118kW**	(160ps)
CTHD	Eos 1.4 TSI 16V	B	11	2010	>			4 Cyl	**1390cc**	**118kW**	(160ps)
CTHD	Passat 1.4 TSI 16V	B	11	2012	>			4 Cyl	**1390cc**	**118kW**	(160ps)
CTHD	Passat CC 1.4 TSI	B	11	2012	>			4 Cyl	**1390cc**	**118kW**	(160ps)
CTHE / CAVE	Polo 1.4 TSI GTI	B	05	2010	>			4 Cyl	**1390cc**	**132kW**	(180ps)
CTKA / CTHD / CNWA / CAVD	Beetle 1.4 TSI	B	10	2011	>			4 Cyl	**1390cc**	**118kW**	(160ps)
CTKA / CTHD / CNWA / CAVD	Golf Plus 1.4 TSI 16V	B	05	2008	>	01	2014	4 Cyl	**1390cc**	**118kW**	(160ps)
CTKA / CTHD / CNWA / CAVD	Scirocco 1.4 TSI 16V	B	07	2008	>			4 Cyl	**1390cc**	**118kW**	(160ps)



11-01287-000
CH 28,970
B+ 2,000
B- 4,570
TL 49,970

19,00x54,00

AP

99-09326-000

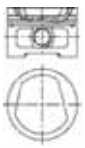
1	1,200	NT	St
2	1,500	P	
3	2,000	NtP	St

Ø 76,510 — **39-03287-000**
Ø 77,010 — **39-03287-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

ABU	Golf 1.6i	B	08	1992	>	10	1994	4 Cyl	**1598cc**	**55kW**	(75ps)
ABU	Vento 1.6i	B	08	1992	>	09	1994	4 Cyl	**1598cc**	**55kW**	(75ps)



11-01300-000
CH 32,000
B- 8,700
TL 54,000

17,00x52,00

CP

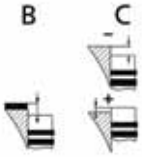
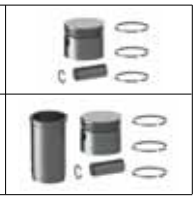
91-09300-000

1	1,500	CR	St
2	1,500	P	
3	2,500	CrP	St

Ø 76,510 — **31-03300-000**
Ø 76,760 — **31-03300-025**
Ø 77,010 — **31-03300-050**
Ø 77,260 — **31-03300-075**
Ø 77,510 — **31-03300-100**

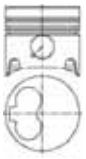
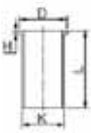
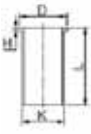
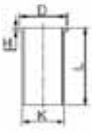
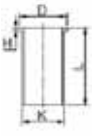
Seat ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

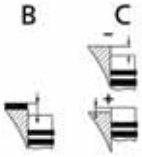
		Type		B C		
						

76,510

1C	Iltis 1.6 TD	D	08	1987	>	12	1988	4 Cyl	**1588cc**	**51kW**	(70ps)
1G	LT 28 / 31 / 35 / 40 / 45 / 50 / 55 TD	D	08	1988	>	07	1992	6 Cyl	**1588cc**	**68kW**	(92ps)
1G / ACL	T3 2.4	D	08	1988	>	07	1992	6 Cyl	**1588cc**	**68-70kW**	(92-95ps)
1V	Gol / Golf / Jetta 1.6 TD	D			>			4 Cyl	**1588cc**	**44kW**	(60ps)
ACL	LT 28 / 31 / 35 / 40 / 45 / 50 / 55 TD	D	08	1991	>	12	1995	6 Cyl	**1588cc**	**70kW**	(95ps)
CY	Quantum / Rabbit / Santana 1.6 TD	D	08	1981	>	07	1985	4 Cyl	**1588cc**	**51kW**	(70ps)
CY / JR / MF	Golf 1.6 TD	D	03	1982	>	12	1983	4 Cyl	**1588cc**	**51kW**	(70ps)
CY / JR / MF	Jetta 1.6 TD	D	08	1982	>	02	1984	4 Cyl	**1588cc**	**51kW**	(70ps)
CY / RA / SB	Passat 1.6 TD	D	12	1981	>	03	1988	4 Cyl	**1588cc**	**51-59kW**	(70-80ps)
DV	LT 28 / 31 / 35 / 40 / 45 / 50 / 55 TD	D	12	1982	>	07	1992	6 Cyl	**1588cc**	**75kW**	(102ps)
JR / MF	Gol 1.6 TD	D			>			4 Cyl	**1588cc**	**51kW**	(70ps)
JX	T3 1.6 TD	D	08	1984	>	07	1991	4 Cyl	**1588cc**	**51kW**	(70ps)
JX	Transporter T3 1.6 TD	D	08	1984	>	07	1992	4 Cyl	**1588cc**	**51kW**	(70ps)
RA / SB	Gol 1.6 TD	D			>			4 Cyl	**1588cc**	**59kW**	(80ps)
RA / SB	Golf 1.6 TD	D	04	1989	>	02	1990	4 Cyl	**1588cc**	**59kW**	(80ps)
RA / SB	Jetta 1.6 TD	D	04	1989	>	02	1990	4 Cyl	**1588cc**	**59kW**	(80ps)

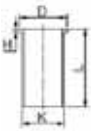
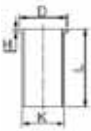
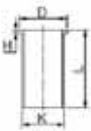
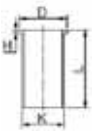
	**11-01301-000** CH 41,700 B- 1,600 TL 71,700 **24,00x64,00**	AP CP	**91-09301-000** 1 1,750 CrP 2 2,000 CrP 3 3,000 CrP	1. Centik 1,53mm (+0,66/+0,80) 2. Centik 1,57mm (+0,81/+0,90) 3. Centik 1,61mm (+0,91/+1,02)	Ø 76,510 Ø 77,010 Ø 77,510	**31-03301-000** **31-03301-050** **31-03301-100**
Audi, Nissan, Volkswagen ve Volvo ile Ortak Motor						
	K=79,50 L=145,00 H=4,70 D=81,50	DS			**51-65301-000**	
	K=80,00 L=145,00 H=6,00 D=82,00	DS +0,50			**51-65301-050**	
	K=80,50 L=145,00 H=6,00 D=82,50	DS +1,00			**51-65301-100**	
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

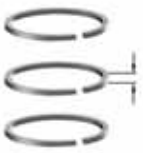
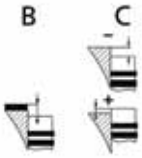
		Type		B C		
					

76,510

1S	LT 28 / 31 / 33 / 40 / 45 / 50 D	D	08	1988	>	07	1992	4 Cyl	**1598cc**	**51kW**	(70ps)
1S / DW	T3 2.4	D	08	1988	>	12	1995	4 Cyl	**1598cc**	**51kW**	(70ps)
ACT	LT 28 / 31 / 33 / 40 / 45 / 50 D	D	08	1992	>	12	1995	4 Cyl	**1598cc**	**51kW**	(70ps)
CP	LT 28 / 31 / 33 / 40 / 45 / 50 D	D	08	1978	>	11	1982	4 Cyl	**1598cc**	**55kW**	(75ps)
CR	Dasher 1.6 D (USA)	D	03	1981	>	07	1982	4 Cyl	**1598cc**	**40kW**	(54ps)
CR / CS / JK	Rabbit 1.6 D	D	03	1981	>	07	1982	4 Cyl	**1598cc**	**37-40kW**	(50-54ps)
CR / JK	Passat/Santana/Pickup1.6D	D	08	1980	>	07	1982	4 Cyl	**1598cc**	**40kW**	(54ps)
CR / JK / JP	Golf 1.6 D	D	08	1980	>	07	1982	4 Cyl	**1598cc**	**40kW**	(54ps)
CR / JK / JP	Jetta 1.6 D	D	08	1980	>	02	1984	4 Cyl	**1598cc**	**40kW**	(54ps)
CS	Quantum / T5 / Transporter T2 1.6 D	D	01	1981	>	07	1987	4 Cyl	**1598cc**	**37kW**	(50ps)
DW	LT 28 / 31 / 33 / 40 / 45 / 50 D	D	12	1982	>	07	1992	4 Cyl	**1598cc**	**55kW**	(75ps)
JK	Saveiro 1.6 D	D	09	1997	>	11	1998	4 Cyl	**1598cc**	**40kW**	(54ps)
JK / ME	Caddy 1.6 D	D	10	1982	>	07	1990	4 Cyl	**1598cc**	**40kW**	(54ps)
JP / ME	Gol 1.6 D	D			>			4 Cyl	**1598cc**	**40kW**	(54ps)

	11-01305-000 CH 41,700 B- 1,600 TL 71,700 **24,00x64,00**	AP CP	**91-09301-000** 1 1,750 CrP 2 2,000 CrP 3 3,000 CrP	1. Conta ile 1,40mm (+0,67/+0,80) 2. Conta ile 1,50mm (+0,81/+0,90) 3. Conta ile 1,60mm (+0,91/+1,02)	Ø 76,510 Ø 77,010 Ø 77,510	**31-03305-000** **31-03305-050** **31-03305-100**
Audi, Volkswagen ve Volvo ile Ortak Motor						
	K=79,50 L=145,00 H=4,70 D=81,50	DS			**51-65301-000**	
	K=80,00 L=145,00 H=6,00 D=82,00	DS +0,50			**51-65301-050**	
	K=80,50 L=145,00 H=6,00 D=82,50	DS +1,00			**51-65301-100**	
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

76,510

BAG / BLF / BLP	Golf 5	D	00	2003	>		4 Cyl	**1600cc**	**kW**	(115ps)
BAG / BLF / BLP	Jetta	D	00	2003	>		4 Cyl	**1600cc**	**kW**	(115ps)
BAG / BLF / BLP	Passat	D	00	2003	>		4 Cyl	**1600cc**	**kW**	(115ps)

11-01956-000
CH 29,300
VD1 2,800
B- 6,000
TL 49,300

17,00x47,00

HA

99-09313-000
1 1,200 NT St
2 1,200
3 2,000 NtP St

Ø 76,510
Ø 77,010

39-03956-000
39-03956-050

76,510

BLG	Touran 1.4 FSI 16V	B	11	2006	>	05	2009	4 Cyl	**125kW**	(170ps)
BMY	Golf 1.4 TSI 16V	B	05	2006	>	11	2008	4 Cyl	**103kW**	(140ps)
BMY	Golf Plus 1.4 TSI 16V	B	05	2007	>	06	2008	4 Cyl	**103kW**	(140ps)
BMY	Jetta 1.4 TSI 16V	B	07	2006	>	05	2010	4 Cyl	**103kW**	(140ps)
BMY	Touran 1.4 TSI / FSI 16V	B	02	2006	>	05	2008	4 Cyl	**103kW**	(140ps)
CAVD	Beetle 1.4 TSI	B	10	2011	>			4 Cyl	**118kW**	(160ps)
CAVD	Eos 1.4 TSI 16V	B	11	2010	>	09	2012	4 Cyl	**118kW**	(160ps)
CAVD	Scirocco 1.4 TSI 16V	B	07	2008	>			4 Cyl	**118kW**	(160ps)
CAVD	Tiguan 1.4 TSI 16V	B	05	2011	>	09	2012	4 Cyl	**118kW**	(160ps)
CAVD / BLG	Golf 1.4 TSI 16V	B	07	2008	>	11	2010	4 Cyl	**118-125kW**	(160-170ps)
CAVD / BLG	Golf Plus 1.4 TSI 16V	B	05	2008	>	09	2012	4 Cyl	**118-125kW**	(160-170ps)
CAVD / BLG	Jetta 1.4 TSI 16V	B	06	2010	>			4 Cyl	**118-125kW**	(160-170ps)

11-02297-000
CH 29,000
VD1 1,100
VD2 3,900
B- 5,900
TL 48,200

19,00x52,00

AA=20,50 mm

91-09292-000
1 1,200 NT St
2 1,500 P
3 2,000 CrP St

Ø 76,510
Ø 77,010

31-04297-000
31-04297-050

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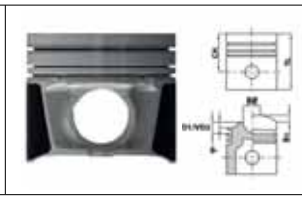
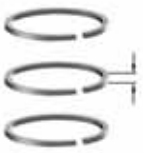
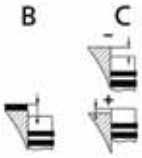
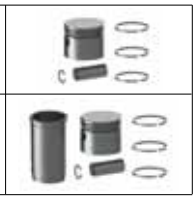
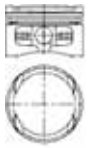
		Type		B C		
						

76,510

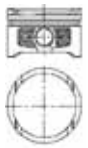
AFH / AFK / AQQ / AUB / BBZ	Polo 1.4i 16V	B	04	1996	>	04	1996	4 Cyl	**1390cc**	**74kW**	(101ps)
AFK / ANM / AQQ / AUB	Lupo 1.4i 16V	B	05	1999	>	10	2000	4 Cyl	**1390cc**	**74kW**	(101ps)
AHW / AKQ / APE / AUA / BBY	Lupo 1.4i 16V	B	01	1999	>	01	1999	4 Cyl	**1390cc**	**55kW**	(75ps)
AHW / AKQ / APE / AXP / BCA	Bora 1.4i 16V	B	10	1998	>	05	2005	4 Cyl	**1390cc**	**55kW**	(75ps)
AHW / AKQ / APE / AXP / BCA	Golf 1.4i 16V	B	10	1997	>	06	2006	4 Cyl	**1390cc**	**55kW**	(75ps)
AHW / APE / AUA / BBY	Polo 1.4i 16V	B	10	1999	>	10	1999	4 Cyl	**1390cc**	**55kW**	(75ps)
AUA / BCA	Caddy 1.4i 16V	B	09	2000	>	06	2003	4 Cyl	**1390cc**	**55kW**	(75ps)
AXP	Jetta 1.4i 16V	B	05	2000	>	04	2001	4 Cyl	**1390cc**	**55kW**	(75ps)
BBY	Polo Sedan 1.4 FSI 16V	B	11	2001	>	11	2001	4 Cyl	**1390cc**	**55kW**	(75ps)
BBZ	Polo Sedan 1.4 FSI 16V	B	05	2002	>	05	2002	4 Cyl	**1390cc**	**74kW**	(101ps)
BBZ	Polocross 1.4 FSI / 1.4i 16V	B	11	2005	>	11	2005	4 Cyl	**1390cc**	**74kW**	(101ps)
BCA	Golf Plus 1.4i 16V	B	01	2005	>	06	2006	4 Cyl	**1390cc**	**55kW**	(75ps)
BCA	New Beetle 1.4i 16V	B	08	2001	>	08	2001	4 Cyl	**1390cc**	**55kW**	(75ps)

	**11-02304-000** CH 28,920 VD1 2,323 B- 1,980 BØ 61,900 TL 49,920 **17,00x54,00**	AA=20,40 mm	**91-09306-000** 1 1,200 CR St 2 1,500 P 3 2,500 CrP St		Ø 76,510 Ø 77,010	**31-04304-000** **31-04304-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

76,510

ATN / AUS / AZD	Bora 1.6i 16V	B	11	1999	>	05	2000	4 Cyl	**1600cc**	**77kW**	(105ps)
ATN / AUS / AZD	Golf 1.6i 16V	B	05	1999	>	05	2000	4 Cyl	**1600cc**	**77kW**	(105ps)

	**11-02315-000** CH 29,270 B- 2,350 BØ 64,600 TL 50,270 **17,00x54,00**	AA=20,40 mm	**91-09306-000** 1 1,200 CR St 2 1,500 P 3 2,500 CrP St		Ø 76,510 Ø 77,010	**31-04315-000** **31-04315-050**

Seat ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
76,510						
AEA / AEE	Golf 1.6i	B	10 1994 > 07 1995	4 Cyl	**1598cc**	**55kW** (75ps)
AEA / AEE	Vento 1.6i	B	10 1994 > 07 1995	4 Cyl	**1598cc**	**55kW** (75ps)
AEA / AEE / AHS / ALM	Polo 1.6i	B	10 1994 > 07 1995	4 Cyl	**1598cc**	**55kW** (75ps)
AEE	Caddy 1.6i	B	06 1996 > 12 2000	4 Cyl	**1598cc**	**55kW** (75ps)
AEE	Gol 1.6i	B	07 1995 > 12 1997	4 Cyl	**1598cc**	**55kW** (75ps)

11-02321-000
CH 30,850
B- 8,000
TL 60,400

17,00x51,85

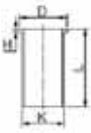
AA=20,40 mm

91-09302-000
1 1,200 NT
2 1,500 P
3 2,500 CrP St

Ø 76,510
Ø 77,010

31-04321-000
31-04321-050

Seat, Skoda ve Volkswagen ile Ortak Motor



K=79,50
L=142,00
H=4,70
D=82,50

DS

51-65313-000

78,310

BAU	Passat 2.5 TDI 24V	D	01 2003 > 05 2005	6 Cyl	**2499cc**	**132kW** (179ps)

11-02331-000
CH 47,830 *CH 47,580
VD1 1,380 *VD1 1,380
B- 17,250 *B- 17,250
BØ 36,000 *BØ 36,000
TL 71,830 *TL 71,580

* For Oversize Piston Dimensions

26,00x58,00

AP
YS

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04331-000
31-04331-050

Cyl.1/2/3 to be used with 2332 000

98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

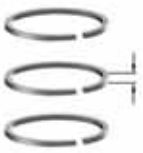
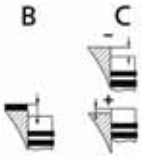
38-04331-000
38-04331-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

39-04331-000
39-04331-050

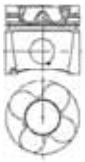
Audi, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl **cc** **kW** (ps)



11-02332-000

CH 47,830	*CH 47,580
VD1 1,380	*VD1 1,380
B- 17,250	*B- 17,250
BØ 36,000	*BØ 36,000
TL 71,830	*TL 71,580

* For Oversize Piston Dimensions

26,00x58,00

Audi, Skoda ve Volkswagen ile Ortak Motor

AP
YS

Cyl.4/5/6 to be used with 2331 000

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04332-000
31-04332-050

98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

38-04332-000
38-04332-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

39-04332-000
39-04332-050

78,310

AFB / AKN Passat 2.5 TDI 08 1998 > 08 2000 (150ps)

11-02333-000

CH 47,830	*CH 47,580
VD1 1,380	*VD1 1,380
B- 16,500	*B- 16,500
BØ 35,800	*BØ 35,800
TL 71,830	*TL 71,580

* For Oversize Piston Dimensions

26,00x65,50

Audi ve Volkswagen ile Ortak Motor

AP
YS

Cyl.1/2/3 to be used with 2334 000

91-09331-000
1 1,750 CK
2 2,000 P
3 3,000 CR

Ø 78,310
Ø 78,810

31-04333-000
31-04333-050

98-09331-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

38-04333-000
38-04333-050

99-09331-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

39-04333-000
39-04333-050

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Type

78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl **cc** **kW** (ps)

11-02334-000

CH 47,830	*CH 47,580
VD1 1,380	*VD1 1,380
B- 16,500	*B- 16,500
BØ 35,800	*BØ 35,800
TL 71,830	*TL 71,580

* For Oversize Piston Dimensions

26,00x65,50

Audi ve Volkswagen ile Ortak Motor

AP
YS

Cyl.4/5/6 to be used with 2333 000

91-09331-000

1	1,750	CK
2	2,000	P
3	3,000	CR

Ø 78,310
Ø 78,810

31-04334-000
31-04334-050

98-09331-000

1	1,750	CrP
2	2,000	P
3	3,000	CrP

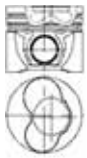
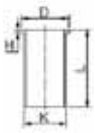
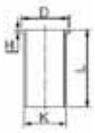
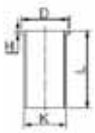
38-04334-000
38-04334-050

99-09331-000

1	1,750	CrP	St
2	2,000	P	
3	3,000	CrP	

39-04334-000
39-04334-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

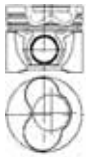
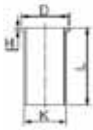
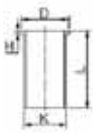
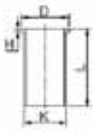
		Type		B C		
79,500						
AMF	Lupo 1.4 TDI	05 1999 > 07 2005				(75ps)
AMF	Polo 1.4 TDI	10 1999 > 05 2005				(75ps)
AMF	Polo Sedan 1.4 TDI	06 2003 > 07 2006				(75ps)
	**11-02311-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00**	AP PDB Cyl.1/2 to be used with 2312 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04311-000** **31-04311-050**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

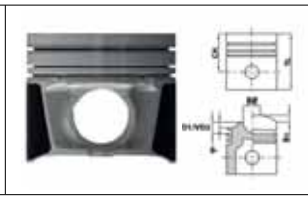
		Type		B C		

79,500

Silindir 3 de Kullanilacak / To Cylinder 3 > Cyl **cc** **kW** (ps)

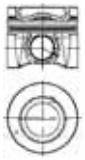
	**11-02312-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800 **26,00x63,00**	AP PDB Cyl.3 to be used with 2311 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03	Ø 79,500 Ø 80,000	**31-04312-000** **31-04312-050**
	Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



79,510

CAYA / CAYB / CAYC / CAYE / CFWA / CLHA / CLNA	POLO 1.6 TDI	06 2009	>			(75-105ps)
CAYA / CAYD / CAYE / CFWA	CADDY III Box 1.6 TDI	08 2010	>			(75-102ps)
CAYA / CAYD / CAYE / CFWA	CADDY III Estate 1.6 TDI	08 2010	>			(75-102ps)
CAYA / CAYE / CFWA	POLO 1.2 TDI	10 2009	>			(75ps)
CAYB	JETTA III 1.6 TDI	12 2009	>	10 2010		(90ps)
CAYB / CAYC / CLHA / CLNA	GOLF PLUS 1.6 TDI	02 2009	>	12 2013		(90 -105ps)
CAYB / CAYC / CLHA / CLNA	GOLF VI Variant 1.6 TDI	12 2009	>	07 2013		(90ps)
CAYB / CAYC / CLHA / CLNA	GOLF VI 1.6 TDI	02 2009	>	11 2012		(90-105ps)
CAYB / CAYC / CLHA / CLNA	TOURAN 1.6 TDI	05 2010	>			(90-105ps)
CAYC / CLHA / CLNA	BEETLE Convertible 1.6 TDI	12 2012	>			(105ps)
CAYC / CLHA / CLNA	BEETLE 1.6 TDI	10 2011	>			(105ps)
CAYC / CLHA / CLNA	GOLF VI Convertible 1.6 TDI	03 2011	>			(105ps)
CAYC / CLHA / CLNA	GOLF VI Variant 1.6 TDI 4motion	07 2009	>	07 2013		(105ps)
CAYC / CLHA / CLNA	GOLF VII Estate 1.6 TDI	05 2013	>			(105ps)
CAYC / CLHA / CLNA	GOLF VII Estate 1.6 TDI 4motion	05 2013	>			(105ps)
CAYC / CLHA / CLNA	GOLF VII 1.6 TDI	08 2012	>			(105ps)
CAYC / CLHA / CLNA	GOLF VII 1.6 TDI 4motion	11 2012	>			(105ps)
CAYC / CLHA / CLNA	JETTA III 1.6 TDI	06 2009	>	10 2010		(105ps)
CAYC / CLHA / CLNA	JETTA IV 1.6 TDI	02 2011	>			(105ps)
CAYC / CLHA / CLNA	PASSAT Variant 1.6 TDI	08 2010	>	12 2014		(105ps)
CAYC / CLHA / CLNA	PASSAT 1.6 TDI	08 2010	>	12 2014		(105ps)



11-01286-000
CH 45,300
B- 11,000
BØ 49,000
TL 68,130

26,00x66,00

AP
YS

91-09627-000

1	1,750	CkP
2	2,000	P
3	2,000	CrP

Ø 79,510
Ø 80,010

31-03286-000
31-03286-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

79,510

AAZ	Golf 1.9 TD	D	11	1991	>	12	1997	4 Cyl	**1896cc**	**55kW** (75ps)
AAZ	Jetta 1.9 TD	D	08	1992	>	12	1998	4 Cyl	**1896cc**	**55kW** (75ps)
AAZ	Passat 1.9 TD	D	03	1991	>	12	1996	4 Cyl	**1896cc**	**55kW** (75ps)
AAZ	Vento 1.9 TD	D	01	1992	>	12	1997	4 Cyl	**1896cc**	**55kW** (75ps)
AAZ / ABL	Gol 1.9 TD	D	06	1998	>	05	2002	4 Cyl	**1896cc**	**50-55kW** (68-75ps)
ABL	T4 1.9 TD	D	08	1992	>	04	2002	4 Cyl	**1896cc**	**50kW** (68ps)
ABL	Transporter T4 1.9 TD	D	10	1992	>	06	2003	4 Cyl	**1896cc**	**50kW** (68ps)

11-01302-000
CH 45,650
B- 1,900
TL 71,700

26,00x66,00

Audi, Seat ve Volkswagen ile Ortak Motor

AP
HA
CP

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

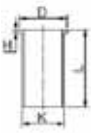
1. Centik 1,53mm (+0,66/+0,86) 2. Centik (1,57mm +0,87/+0,90) 3. Centik 1,61mm (+0,91/+1,02)

Ø 79,510 **31-03302-000**
Ø 79,760 **31-03302-025**
Ø 80,010 **31-03302-050**
Ø 80,510 **31-03302-100**

K=82,57
L=151,80
H=4,70
D=85,40

DS

51-65303-000



K=83,07
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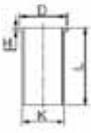
H=6,00
D=85,90

DS
+0,50

51-65303-050

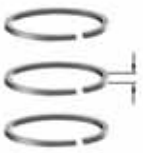
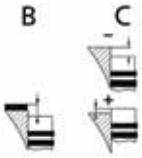


K=83,57
L=151,80
H=6,00
D=86,40

DS
+1,00

51-65303-100

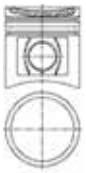
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Type

79,510

EE / EF / EJ / YG / YH / YK / YM / YV / YP	Golf	B	00	1975	>	00	1984	4 Cyl	**1588cc**	**60-63kW**	(82-85ps)
EE / EF / EJ / YG / YH / YK / YM / YV / YP	Jetta	B	00	1975	>	00	1983	4 Cyl	**1588cc**	**60-63kW**	(82-85ps)
EE / EF / EJ / YG / YH / YK / YM / YV / YP	Passat	B	00	1975	>	00	1983	4 Cyl	**1588cc**	**60-63kW**	(82-85ps)
EE / EF / EJ / YG / YH / YK / YM / YV / YP	Scirocco	B	00	1975	>	00	1984	4 Cyl	**1588cc**	**60-63kW**	(82-85ps)
FN / FP / FR / WV / WY / WZ / YN / YT / 1,6	Golf	B	00	1975	>	00	1983	4 Cyl	**1588cc**	**51-58kW**	(69-79ps)
FN / FP / FR / WV / WY / WZ / YN / YT / 1,6	Jetta	B	00	1975	>	00	1983	4 Cyl	**1588cc**	**51-58kW**	(69-79ps)
FN / FP / FR / WV / WY / WZ / YN / YT / 1,6	Passat	B	00	1975	>	00	1983	4 Cyl	**1588cc**	**51-58kW**	(69-79ps)
FN / FP / FR / WV / WY / WZ / YN / YT / 1,6	Scirocco	B	00	1975	>	00	1983	4 Cyl	**1588cc**	**51-58kW**	(69-79ps)



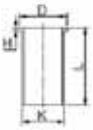
11-01304-000
CH 41,800
B- 6,100
BØ 65,000
TL 73,800

22,00x55,00

CP

91-09304-000
1 1,750 CrP
2 2,000 P
3 4,000 CrP

Ø 79,510	**31-03304-000**
Ø 79,760	**31-03304-025**
Ø 80,010	**31-03304-050**
Ø 80,510	**31-03304-100**



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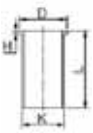
H=4,70
D=85,40

DS

51-65303-000



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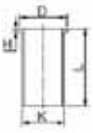
L=151,80
H=6,00
D=85,90

DS
+0,50

51-65303-050



K=83,57
L=151,80
H=6,00
D=86,40

DS
+1,00

51-65303-100

79,510

KY	TRANSPORTER T3 1.7 D	D	00	1984	>			4 Cyl	**1716cc**	**42kW**	(57ps)

11-01306-000
CH 41,700 *CH 41,450
B- 1,600 *B- 1,600
TL 71,700 *TL 71,700

* For Oversize Piston Dimensions

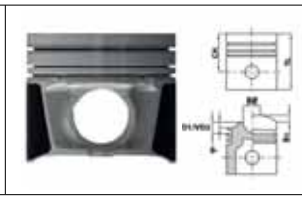
24,00x64,00

AP
CP

91-09309-000
1 1,750 CrP
2 2,000 P
3 3,000 CrP

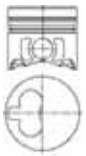
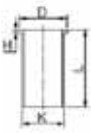
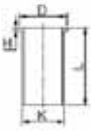
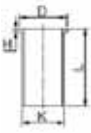
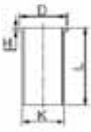
Ø 79,510	**31-03306-000**
Ø 80,010	**31-03306-050**
Ø 80,510	**31-03306-100**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



79,510

1X	T4 1.9 D	D	09	1990	> 07	1995	4 Cyl	**1896cc**	**44kW**	(60ps)
1X	Transporter T4 1.9 D	D	09	1990	> 12	1995	4 Cyl	**1896cc**	**44kW**	(60ps)
1Y	Golf/Passat/Polo Classic/Vento 1.9 D	D	11	1991	> 02	1999	4 Cyl	**1896cc**	**47kW**	(64ps)
1Y / AEF	Caddy 1.9 D	D	11	1995	> 06	2003	4 Cyl	**1896cc**	**47kW**	(64ps)
1Y / AEF	Polo 1.9 D	D	01	1996	> 10	1996	4 Cyl	**1896cc**	**47kW**	(64ps)
1Y / BGG	Gol 1.9 D	D	06	2002	> 07	2006	4 Cyl	**1896cc**	**47kW**	(64ps)
1Y / BGG	Parati 1.9 D	D	08	1998	> 03	2006	4 Cyl	**1896cc**	**47kW**	(64ps)
1Y / BGG	Saveiro 1.9 D	D	06	2002	> 03	2006	4 Cyl	**1896cc**	**47kW**	(64ps)
AAB / AJA	T4 2.4 D	D	09	1990	> 12	2000	5 Cyl	**1896cc**	**55-57kW**	(75-78ps)
AAB / AJA	Transporter T4 2.4 D	D	09	1990	> 09	1998	5 Cyl	**1896cc**	**57kW**	(78ps)
AP221	Saveiro 1.9 D	D	06	1998	> 05	2002	4 Cyl	**1896cc**	**kW**	(ps)

 **11-01309-000** CH 39,650 B- 1,900 TL 65,650 **24,00x64,00**	AP CP	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,53mm conta ile (+0,66/+0,86) 2. centik 1,57mm conta ile (+0,87/+0,90) 3. centik 1,61mm conta ile (+0,91/+1,02)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-03309-000** **31-03309-025** **31-03309-050** **31-03309-100**
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					
 K=82,50 L=155,00 H=5,10 D=85,60	DS			**51-65157-000**	
 K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
 K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
 K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

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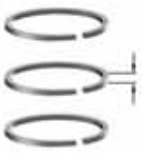
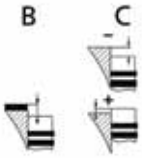
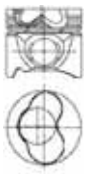



Type

79,510

1Z / AGR / AHU / ALE / ALH	Golf 1.9 TDI	D	07	1993	>	07	1996	4 Cyl	**1896cc**	**66kW**	(90ps)
1Z / AHH / AHU	Passat 1.9 TDI	D	10	1993	>	12	1996	4 Cyl	**1896cc**	**66kW**	(90ps)
1Z / AHU	Sharan 1.9 TDI	D	09	1995	>	07	1996	4 Cyl	**1896cc**	**66kW**	(90ps)
1Z / AHU / ALE	Vento 1.9 TDI	D	07	1993	>	07	1996	4 Cyl	**1896cc**	**66kW**	(90ps)
1Z / AHU / ALE / ALH	Caddy 1.9 TDI	D	10	1996	>	03	1997	4 Cyl	**1896cc**	**66kW**	(90ps)
AEY	Caddy / Golf / Vento 1.9 SDI	D	11	1995	>	09	2000	4 Cyl	**1896cc**	**47kW**	(64ps)
AEY / AGD	Gol 1.9 SDI	D			>			4 Cyl	**1896cc**	**47kW**	(64ps)
AEY / AGD / ASX	Polo 1.9 SDI	D	12	1995	>	08	1999	4 Cyl	**1896cc**	**47kW**	(64ps)
AFN	Vento 1.9 TDI	D	02	1996	>	12	1997	4 Cyl	**1896cc**	**81kW**	(110ps)
AFN / AHF / ASV / AVG	Golf 1.9 TDI	D	02	1996	>	08	1999	4 Cyl	**1896cc**	**81kW**	(110ps)
AFN / ASV	Polo 1.9 TDI	D	06	1998	>	08	1999	4 Cyl	**1896cc**	**81kW**	(110ps)
AFN / AVG	Passat 1.9 TDI	D	03	1996	>	08	1999	4 Cyl	**1896cc**	**81kW**	(110ps)
AFN / AVG	Sharan 1.9 TDI	D	12	1996	>	07	1999	4 Cyl	**1896cc**	**81kW**	(110ps)
AGR	Polo Classic 1.9 TDI	D	03	1999	>	09	2005	4 Cyl	**1896cc**	**66kW**	(90ps)
AGR / AHU / ALE / ALH	Polo 1.9 TDI	D	10	1999	>	09	2001	4 Cyl	**1896cc**	**66kW**	(90ps)
AGR / ALE	Gol 1.9 TDI	D			>			4 Cyl	**1896cc**	**66kW**	(90ps)
AGR / ALH	Bora 1.9 TDI	D	10	1998	>	05	2005	4 Cyl	**1896cc**	**66kW**	(90ps)
AHF / ASV	Bora 1.9 TDI	D	09	1998	>	05	2005	4 Cyl	**1896cc**	**81kW**	(110ps)
AHU / ALH	Jetta 1.9 TDI	D	08	1996	>			4 Cyl	**1896cc**	**66kW**	(90ps)
ALH	New Beetle 1.9 TDI	D	01	1998	>	06	2004	4 Cyl	**1896cc**	**66kW**	(90ps)



11-02301-000
CH 45,800
VD1 1,100
B- 17,650
BØ 37,900
TL 71,800

26,00x66,00

AP

PDB

Cyl.1/2 to be used with 2302 000

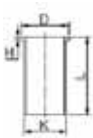
91-09309-000

1	1,750	CrP
2	2,000	P
3	3,000	CrP

1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)

Ø 79,510 — **31-04301-000**
Ø 79,760 — **31-04301-025**
Ø 80,010 — **31-04301-050**
Ø 80,510 — **31-04301-100**

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor



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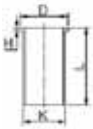
L=151,80
H=4,70
D=85,40

DS

51-65303-000

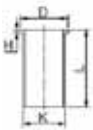


K=83,07
L=151,80
H=6,00
D=85,90

DS

+0,50

51-65303-050



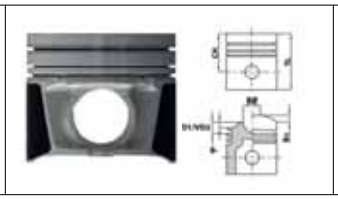
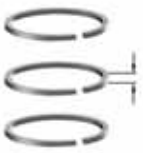
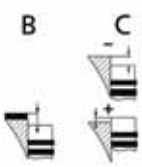
K=83,57
L=151,80
H=6,00
D=86,40

DS

+1,00

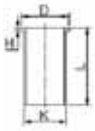
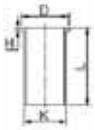
51-65303-100

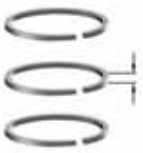
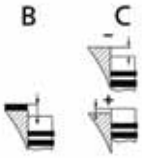
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type				

79,510

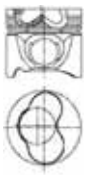
Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP PDB Cyl.3/4 to be used with 2301 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04302-000** **31-04302-025** **31-04302-050** **31-04302-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

		Type		B C		
						

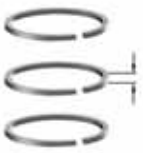
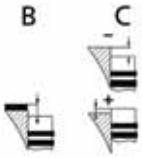
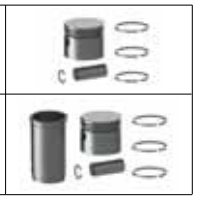
79,510

1Z / AGR / AHU / ALE / ALH	Golf 1.9 TDI	07 1993	>	07 1996		(90ps)
1Z / AHH / AHU	Passat 1.9 TDI	10 1993	>	12 1996		(90ps)
1Z / AHU	Sharan 1.9 TDI	09 1995	>	07 1996		(90ps)
1Z / AHU / ALE	Vento 1.9 TDI	07 1993	>	07 1996		(90ps)
1Z / AHU / ALE / ALH	Caddy 1.9 TDI	10 1996	>	03 1997		(90ps)
AEY	Caddy / Golf / Vento 1.9 SDI	11 1995	>	09 2000		(64ps)
AEY / AGD	Gol 1.9 SDI		>			(64ps)
AEY / AGD / ASX	Polo 1.9 SDI	12 1995	>	08 1999		(64ps)
AFN	Vento 1.9 TDI	02 1996	>	12 1997		(110ps)
AFN / AHF / ASV / AVG	Golf 1.9 TDI	02 1996	>	08 1999		(110ps)
AFN / ASV	Polo 1.9 TDI	06 1998	>	08 1999		(110ps)
AFN / AVG	Passat 1.9 TDI	03 1996	>	08 1999		(110ps)
AFN / AVG	Sharan 1.9 TDI	12 1996	>	07 1999		(110ps)
AGR	Polo Classic 1.9 TDI	03 1999	>	09 2005		(90ps)
AGR / AHU / ALE / ALH	Polo 1.9 TDI	10 1999	>	09 2001		(90ps)
AGR / ALE	Gol 1.9 TDI		>			(90ps)
AGR / ALH	Bora 1.9 TDI	10 1998	>	05 2005		(90ps)
AHF / ASV	Bora 1.9 TDI	09 1998	>	05 2005		(110ps)
AHU / ALH	Jetta 1.9 TDI	08 1996	>			(90ps)
ALH	New Beetle 1.9 TDI	01 1998	>	06 2004		(90ps)

	**11-02305-000** CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.1/2 to be used with 2306 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04305-000** **31-04305-025** **31-04305-050** **31-04305-100**

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

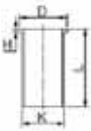
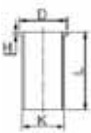
79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl **cc** **kW** (ps)

	11-02306-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800 **26,00x66,00**	AP Cyl.3/4 to be used with 2305 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	**31-04306-000** **31-04306-025** **31-04306-050** **31-04306-100**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						

79,510

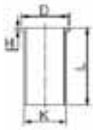
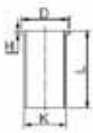
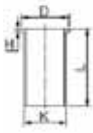
ARL	Bora / Golf 1.9 TDI	09 2000	> 05 2005		(150ps)
ASZ	Bora / Golf / Sharan 1.9 TDI	04 2001	> 05 2005		(130ps)
ASZ / BLT	Polo 1.9 TDI	11 2003	> 05 2008		(130ps)
AVF / AWX	Passat 1.9 TDI	10 2000	> 05 2005		(130ps)
AXB / AXC Euro3	T5 1.9 TDI	05 2007	> 11 2009		(85-105ps)
AXB / AXC Euro3	Transporter T5 1.9 TDI	04 2003	> 11 2009		(85-105ps)

	11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 1/2 to be used with 2314 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04313-000** **31-04313-025** **31-04313-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

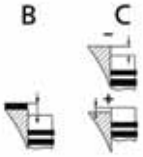
Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

79,510

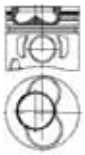
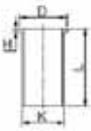
Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4			> Cyl	cc	kW	(ps)
	11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl. 3/4 to be used with 2313 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04314-000** **31-04314-025** **31-04314-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

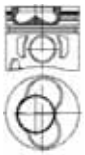
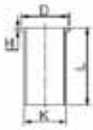
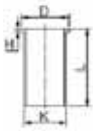
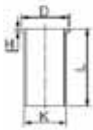
79,510

ANU	Sharan 1.9 TDI	03 1999	> 03 2010		(90ps)
ATD / AXR	Polo 1.9 TDI	11 2001	>		(101ps)
ATD / AXR	Polocross 1.9 TDI	11 2005	>		(101ps)
ATD / AXR / BEW / BKC / BXE	Bora 1.9 TDI	05 2000	> 05 2006		(101-105ps)
ATD / AXR / BEW / BKC / BXE	Golf 1.9 TDI	02 2000	> 06 2006		(101-105ps)
ATD / AXR / BEW / BSW	New Beetle 1.9 TDI	10 2000	>		(101-105ps)
AVB / BKC / BXE	Passat 1.9 TDI	02 2000	> 05 2005		(101-103ps)
AVQ / BKC / BXE	Touran 1.9 TDI	02 2003	> 05 2004		(101-105ps)
AXR / BEW / BKC / BXE	Jetta 1.9 TDI	10 2005	>		(101-105ps)
BJB	Caddy / Caddy Maxi / Maxi 1.9 TDI	02 2004	> 08 2010		(105ps)
BKC / BXE	Golf Plus 1.9 TDI	01 2005	> 01 2009		(105ps)
BKC / BXE	Vento 1.9 TDI	11 2005	> 02 2006		(105ps)
BRU / BXF / BXJ	Golf 1.9 TDI	05 2004	> 02 2006		(90ps)
BRU / BXF / BXJ	Golf Plus 1.9 TDI	05 2005	> 12 2008		(90ps)
BRU / BXF / BXJ	Touran 1.9 TDI	11 2004	> 02 2006		(90ps)

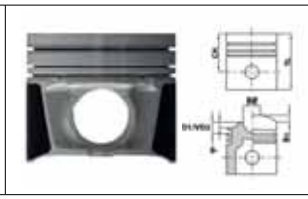
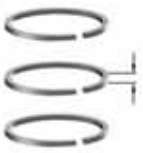
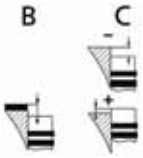
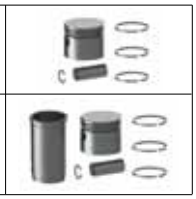
	**11-02319-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.1/2 to be used with 2320 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04319-000** **31-04319-025** **31-04319-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

		Type		B C		

79,510

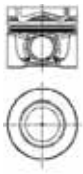
Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4			> Cyl	cc kW	(ps)
	**11-02320-000** CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800 **26,00x66,00**	AP YS PDB Cyl.3/4 to be used with 2319 000	**91-09309-000** 1 1,750 CrP 2 2,000 P 3 3,000 CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	**31-04320-000** **31-04320-025** **31-04320-050**
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor						
	K=82,57 L=151,80 H=4,70 D=85,40	DS			**51-65303-000**	
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			**51-65303-050**	
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			**51-65303-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

79,510

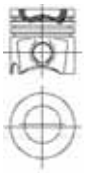
CAYA	POLO 1.6 TDI 16V	00 2009	>			(75ps)
CAYB Euro 5	Jetta 1.6 TDI 16V	12 2009	> 10 2010			(90ps)
CAYC	Jetta 1.6 TDI 16V	09 2009	> 10 2010			(105ps)
CAYC	Polo / Passat / Touran 1.6 TDI 16V	10 2010	>			(105ps)
CAYC / CAYB Euro 5	Golf Plus 1.6 TDI 16V	05 2009	> 01 2014			(90-105ps)
CFWA	POLO 1.2 TDI	00 2009	> 00 2014			(75ps)
CLNA Euro 5	Polo 1.6 TDI 16V	02 2011	>			(105ps)

	**11-02340-000** CH 45,300 B- 10,700 BØ 49,000 TL 67,900 **26,00x66,00**	AP YS	**91-09625-000** 1 1,750 CR 2 2,000 P 3 3,000 CR	1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)	Ø 79,510 Ø 80,010	**31-04340-000** **31-04340-050**

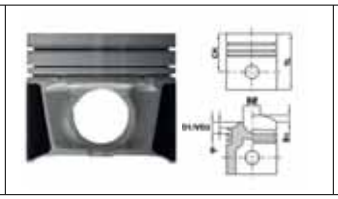
Audi, Skoda ve Volkswagen ile Ortak Motor

81,000

CRLB	Golf 2.0 TDI	D	08 2012	>	4 Cyl	**1968cc**	**110kW**	(150ps)
CRLB	Passat 2.0 TDI	D	08 2012	>	4 Cyl	**1968cc**	**110kW**	(150ps)

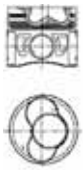
	**11-01283-000** CH 45,810 B- 12,900 BØ 50,900 TL 68,800 **26,00x66,00**	AP YS PDB	**91-09628-000** 1 1,750 CK 2 2,000 P 3 2,000 CR		Ø 81,000	**31-03283-000**

Audi, Seat ve Volkswagen ile Ortak Motor



81,000

BGW-BMM-BMP-BRT-BSS	Caddy III BOX 2.0 TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BGW-BMM-BMP-BRT-BSS	Golf VI 2.O TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BGW-BMM-BMP-BRT-BSS	Jetta III 2.0 TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BGW-BMM-BMP-BRT-BSS	Touran 2.0 TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)



11-01957-000
CH 45,800
VD1 0,700
B- 17,500
BØ 38,000
TL 68,800

26,00x66,00

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

Ø 81,000
Ø 81,500

31-03957-000
31-03957-050

Cyl. 1/2 to be used with 1958 000

98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

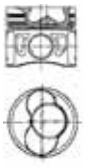
38-03957-000
38-03957-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

39-03957-000
39-03957-050

81,000

BGW-BMM-BMP-BRT-BSS	Caddy III BOX 2.0 TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BGW-BMM-BMP-BRT-BSS	Golf VI 2.O TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BGW-BMM-BMP-BRT-BSS	Jetta III 2.0 TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BGW-BMM-BMP-BRT-BSS	Touran 2.0 TDI	D	00	2003	>	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)



11-01958-000
CH 45,800
VD1 0,700
B- 17,500
BØ 38,000
TL 68,800

26,00x66,00

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

Ø 81,000
Ø 81,500

31-03958-000
31-03958-050

Cyl. 3/4 to be used with 1957 000

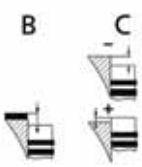
98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

38-03958-000
38-03958-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

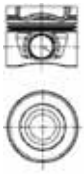
39-03958-000
39-03958-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B	C		
							

81,000

CFFA / CFFB	Eos 2.0 TDI 16V	D	11	2010	>			4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
CFFA / CFFB	Passat 2.0 TDI 16V	D	08	2010	>			4 Cyl	**1968cc**	**100-130kW**	(136-177ps)
CFFA / CFFB / CFFB / CFGB / CFGC / CFFD	Tiguan 2.0 TDI 16V	D	11	2012	>			4 Cyl	**1968cc**	**81-130kW**	(110-177ps)
CFFB	Beetle 2.0 TDI 16V	D	04	2011	>			4 Cyl	**1968cc**	**103kW**	(140ps)
CFFE / CFFA / CFFB / CFGB / CFGC	Sharan 2.0 TDI 16V	D	05	2011	>			4 Cyl	**1968cc**	**85-130kW**	(116-177ps)
CFGC / CFGB / CFHB / CFHC	Scirocco 2.0 TDI 16V	D	05	2009	>			4 Cyl	**1968cc**	**100-130kW**	(136-177ps)
CFGC / CLLA / CFGB	Passat 2.0 TDI 16V	D	08	2010	>			4 Cyl	**1968cc**	**100-130kW**	(136-177ps)
CFGC / CLLA / CFGB / CFFA / CFFB	Passat 2.0 TDI 16V	D	12	2012	>			4 Cyl	**1968cc**	**100-130kW**	(136-177ps)
CFHB / CFHC / CLCA	Golf Plus 2.0 TDI 16V	D	05	2010	>	05	2011	4 Cyl	**1968cc**	**81-103kW**	(110-140ps)
CFJA / CFJB / CLCA / CFHF / CFHC	Touran 2.0 TDI 16V	D	01	2013	>			4 Cyl	**1968cc**	**81-130kW**	(110-177ps)
CKUC / CKTC / CKUB / CKTB	Crafter 2.0 TDI	D	10	2011	>			4 Cyl	**1968cc**	**80-120kW**	(109-163ps)
CLCA	Vento 2.0 TDI 16V	D	01	2010	>			4 Cyl	**1968cc**	**81kW**	(110ps)
CLCA / CFHF / CFHE / CFJA	Caddy 2.0 TDI 16V	D	11	2010	>			4 Cyl	**1968cc**	**62kW**	(85ps)
CLCB / CFHB / CFHC / CFFA / CFFB / CLCA / CFGB	Golf 2.0 TDI 16V	D	01	2010	>	11	2012	4 Cyl	**1968cc**	**81-125kW**	(110-170ps)
CLCB / CFHC / CFFB / CLCA	Jetta 2.0 TDI 16V	D	10	2010	>			4 Cyl	**1968cc**	**81-103kW**	(110-140ps)
CLCB / CFHC / CLCA / CFHE	Caddy Maxi 2.0 TDI	D	11	2010	>			4 Cyl	**1968cc**	**62-125kW**	(85-170ps)
CLLA / CFGB / CFFA / CFFB	Passat CC 2.0 TDI 16V	D	06	2008	>	11	2011	4 Cyl	**1968cc**	**100-125kW**	(136-170ps)
CLLA / CFGB / CFGC / CFFB	CC 2.0 TDI 16V	D	12	2012	>			4 Cyl	**1968cc**	**103-130kW**	(140-170ps)
CSHA / CNEA / CNFA / CNFB	Amarok 2.0 TDI 16V	D	11	2011	>			4 Cyl	**1968cc**	**90-132kW**	(122-180ps)

	**11-02344-000** CH 45,800 B- 13,100 BØ 50,880 TL 68,800	AP YS	**91-09298-000** 1 1,750 CkP 2 2,000 P 3 3,000 CrP	1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)	Ø 81,000 Ø 81,500	**31-04344-000** **31-04344-050**
		PDB	**98-09298-000** 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**38-04344-000** **38-04344-050**
	26,00x66,00		**99-09298-000** 1 1,750 CrP St 2 2,000 Fe 3 3,000 CR			**39-04344-000** **39-04344-050**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
81,010						
AEB / ANB / APU	Passat 1.8i Turbo 20V	B	10 1996 > 02 2001	4 Cyl	**1751cc**	**110kW** (150ps)
AGU	Bora 1.8i Turbo 20V	B	05 2000 > 05 2005	4 Cyl	**1751cc**	**110kW** (150ps)
AGU / APH / AVC	New Beetle 1.8i T 20V	B	01 1998 > 06 2000	4 Cyl	**1751cc**	**110kW** (150ps)
AGU / AQA / ARZ / AWD	Golf 1.8i Turbo 20V	B	10 1997 > 05 2006	4 Cyl	**1751cc**	**110kW** (150ps)
AJH / AWC	Sharan 1.8i Turbo 20V	B	11 1997 > 02 2000	4 Cyl	**1751cc**	**110kW** (150ps)
AWD	Jetta 1.8i Turbo 20V	B	05 1999 >	4 Cyl	**1751cc**	**110kW** (150ps)

11-01296-000

CH 32,700	*CH 32,400
B- 2,050	*B- 2,050
BØ 70,000	*BØ 70,000
TL 53,700	*TL 53,400

* For Oversize Piston Dimensions

20,00x59,00

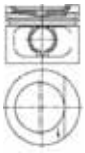
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

91-09296-000

1	1,500	MoP
2	1,750	P
3	2,000	CR

Ø 81,010	**31-03296-000**
Ø 81,260	**31-03296-025**
Ø 81,510	**31-03296-050**

81,010						
DS	Passat 1.8	B	01 1983 > 07 1988	4 Cyl	**1781cc**	**66kW** (90ps)
DS	Santana 1.8	B	01 1983 > 12 1984	4 Cyl	**1781cc**	**66kW** (90ps)



11-01307-000

CH 32,200	*CH 31,900
B+ 1,300	*B+ 1,300
B- 4,400	*B- 4,400
BØ 56,000	*BØ 56,000
TL 62,500	*TL 62,200

* For Oversize Piston Dimensions

20,00x57,00

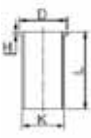
Audi, Seat ve Volkswagen ile Ortak Motor

CP

91-09307-000

1	1,500	CrP
2	1,750	P
3	3,000	CrP

Ø 81,010	**31-03307-000**
Ø 81,260	**31-03307-025**
Ø 81,510	**31-03307-050**
Ø 82,010	**31-03307-100**



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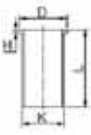
L=146,00
H=4,70
D=86,00

DS

51-65307-000



K=84,50
L=146,00
H=6,00
D=86,50

DS

+0,50

51-65307-050

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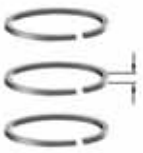
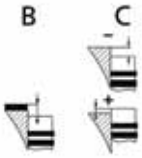
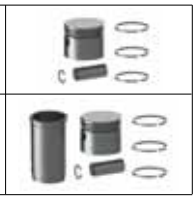
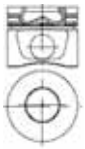
		Type		B C		
						

81,010

AZV / BKD	Golf 2.0 TDI 16V	D	10	2003	>	11	2008	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
AZV / BKD	Golf Plus 2.0 TDI 16V	D	05	2007	>	12	2008	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
AZV / BKD	Jetta 2.0 TDI 16V	D	09	2005	>	06	2008	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
AZV / BKD	Touran 2.0 TDI 16V	D	02	2003	>	05	2010	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BKD	Bora / Vento 2.0 TDI 16V	D	05	2004	>	10	2010	4 Cyl	**1968cc**	**103kW**	(140ps)
BKP / BMA	Passat 2.0 TDI 16V	D	03	2005	>	05	2009	4 Cyl	**1968cc**	**100-103kW**	(136-140ps)
BMN	Golf / Jetta / Touran 2.0 TDI 16V	D	11	2005	>	11	2008	4 Cyl	**1968cc**	**125kW**	(170ps)
BMR / BUZ	Passat 2.0 TDI 16V	D	02	2006	>			4 Cyl	**1968cc**	**120-125kW**	(163-170ps)
BVE / BWV	Passat 2.0 TDI 16V	D	05	2005	>	05	2007	4 Cyl	**1968cc**	**88-90kW**	(120-122ps)

	**11-02298-000** CH 45,800 B- 17,800 BØ 38,000 TL 68,800	AP YS PDB	**91-09298-000** 1 1,750 CkP 2 2,000 P 3 3,000 CrP	1,55mm conta ile (0,91/1,00) 1,63mm conta ile (1,01/1,10) 1,71mm conta ile (1,11/1,20)	Ø 81,010 Ø 81,510	**31-04298-000** **31-04298-050**
	26,00x66,00		**98-09298-000** 1 1,750 CrP St 2 2,000 P 3 3,000 CrP			**38-04298-000** **38-04298-050**
			99-09298-000 1 1,750 CrP St 2 2,000 Fe 3 3,000 CR			**39-04298-000** **39-04298-050**

Audi, Mitsubishi, Seat, Skoda ve Volkswagen ile Ortak Motor

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81,010

ARX / AUM	Bora 1.8i Turbo 20V	B	09	2000	> 04	2001	4 Cyl	**1781cc**	**110kW**	(150ps)
AUM / AWW	Golf 1.8i Turbo 20V	B	05	2000	> 05	2006	4 Cyl	**1781cc**	**110kW**	(150ps)
AUQ	Gol 1.8i Turbo 16V	B	06	2003	>		4 Cyl	**1781cc**	**132kW**	(180ps)
AUQ / AWP / BEK	Bora / Golf 1.8i Turbo 20V	B	05	2001	> 10	2010	4 Cyl	**1781cc**	**132kW**	(179ps)
AWM	Passat 1.8i Turbo 20V	B	02	2001	> 11	2005	4 Cyl	**1781cc**	**125kW**	(170ps)
AWP / BEK	Jetta 1.8i Turbo 20V	B	06	2001	>		4 Cyl	**1781cc**	**132kW**	(179ps)
AWP / BNU	New Beetle 1.8i T 20V	B	06	2001	>		4 Cyl	**1781cc**	**132kW**	(179ps)
AWT	Passat 1.8i Turbo 20V	B	10	2000	> 05	2005	4 Cyl	**1781cc**	**110kW**	(150ps)
AWU / AWV / BKF	New Beetle 1.8i T 20V	B	10	2000	>		4 Cyl	**1781cc**	**110kW**	(150ps)
AWW	Jetta 1.8i Turbo 20V	B	06	2000	>		4 Cyl	**1781cc**	**110kW**	(150ps)
BJX	Polo 1.8i Turbo 20V	B	09	2005	>		4 Cyl	**1781cc**	**110kW**	(150ps)

11-02299-000
CH 32,700
B- 1,900
BØ 68,000
TL 53,700

19,00x50,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA

91-09296-000
1 1,500 MoP
2 1,750 P
3 2,000 CR

Ø 81,010
Ø 81,260
Ø 81,510

31-04299-000
31-04299-025
31-04299-050

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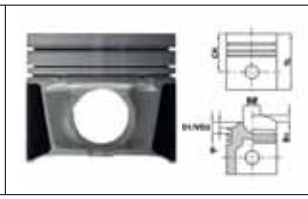
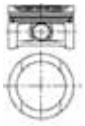


81,010

ADP / AHL	Passat 1.6	B	01	1997	>	10	1997	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AEK / AFT / AKL / AKS / APF	Golf 1.6i	B	01	1998	>	05	2004	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AFT / AKL / APF / AUR	Polo 1.6i	B	10	1999	>	09	2001	4 Cyl	**1595cc**	**74kW**	(101ps)
AEH / AKL / APF	Bora 1.6i	B	09	1998	>	05	2005	4 Cyl	**1595cc**	**74kW**	(101ps)
AEK / AFT / AKS	Vento 1.6i	B	10	1994	>	12	1995	4 Cyl	**1595cc**	**74kW**	(101ps)
AEK / AFT / ARM	Passat 1.6i	B	10	1994	>	12	1995	4 Cyl	**1595cc**	**74kW**	(101ps)
AFT / AKS	Gol 1.6i	B	05	1994	>			4 Cyl	**1595cc**	**74kW**	(101ps)
AWH	New Beetle 1.6i	B	11	1999	>	10	2000	4 Cyl	**1595cc**	**74kW**	(101ps)



11-02307-000

CH 32,700	*CH 32,400
VD1 0,700	*VD1 0,700
B- 2,300	*B- 2,300
BØ 61,400	*BØ 61,400
TL 53,700	*TL 53,400

* For Oversize Piston Dimensions

20,00x57,00

91-09107-000

1	1,200	CR	St
2	1,500	P	
3	2,000	CrP	St

+0,700/+0,900

Ø 81,010	**31-04307-000**
Ø 81,260	**31-04307-025**
Ø 81,510	**31-04307-050**
Ø 82,010	**31-04307-100**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

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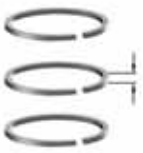
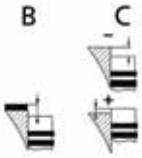
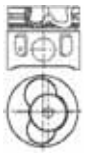



Type

81,010

ACV / AJT / AUF / AYC / AYY	T4 2.5 TDI	D	01	1996	>	09	2003	5 Cyl	**2461cc**	**65-75kW**	(88-102ps)
ACV / AJT / AUF / AYC / AYY	Transporter T4 2.5 TDI	D	09	1995	>	06	2003	5 Cyl	**2461cc**	**65-75kW**	(88-102ps)
AGX	LT 28 / 35 SDI	D	05	1996	>	04	2001	5 Cyl	**2461cc**	**55kW**	(75ps)
AHD / ANJ	LT 28 / 35 / 46 TDI	D	05	1996	>	05	1999	5 Cyl	**2461cc**	**75-80kW**	(102-109ps)
AHY / AXG	T4 2.5 TDI	D	07	1999	>	09	2000	5 Cyl	**2461cc**	**111kW**	(151ps)
AHY / AXG	Transporter T4 2.5 TDI	D	05	1998	>	09	2000	5 Cyl	**2461cc**	**111kW**	(151ps)
APA / BBE / BBF	LT 28 / 35 / 46 TDI	D	05	1999	>	04	2001	5 Cyl	**2461cc**	**61-70kW**	(83-95ps)
AXL	T4 2.5i	D	04	2001	>	09	2003	5 Cyl	**2461cc**	**75kW**	(102ps)



11-02308-000
CH 45,750
VD1 1,350
B- 17,200
BØ 39,600
TL 69,750

26,00x68,00

AP

HA

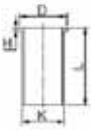
PDB

Cyl.1/2 to be used with 2309 000 AA=27,00

91-09318-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

1. centik 1,53mm conta ile (+0,80/+0,90) 2. centik 1,57mm conta ile (+0,90/+1,00) 3. centik 1,61mm conta ile (+1,00/+1,10)

Ø 81,010 **31-04308-000**
Ø 81,260 **31-04308-025**
Ø 81,510 **31-04308-050**
Ø 82,010 **31-04308-100**



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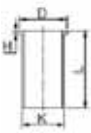
H=4,50
D=85,55

DS

51-65319-000



K=85,05
L=157,00
H=5,00
D=86,05

DS

+0,50

51-65319-050

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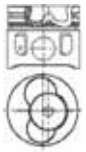
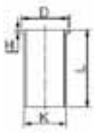
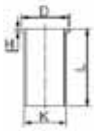
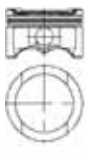
81,010

Silindir 3/4/5 de Kullanilacak / To Cylinder 3 / 4 / 5 > Cyl **cc** **kW** (ps)

	Type					
	**11-02309-000** CH 45,750 VD1 1,350 B- 17,200 BØ 39,600 TL 69,750 **26,00x68,00**	AP HA PDB Cyl.3/4/5 to be used with 2308 000 AA=27,00	**91-09318-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	1. centik 1,53mm conta ile (+0,80/+0,90) 2. centik 1,57mm conta ile (+0,90/+1,00) 3. centik 1,61mm conta ile (+1,00/+1,10)	Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010	**31-04309-000** **31-04309-025** **31-04309-050** **31-04309-100**
	K=84,55 L=157,00 H=4,50 D=85,55	DS			**51-65319-000**	
	K=85,05 L=157,00 H=5,00 D=86,05	DS +0,50			**51-65319-050**	

81,010

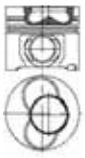
ALZ / ANA / BSE / BSF	Passat 1.6i	10 2000	> 05 2005		(102ps)
AYD / BFS	New Beetle 1.6i	06 2000	>		(102ps)
BFQ / AVU / BFQ	Bora 1.6i	05 2002	> 05 2005		(102ps)
BFQ / AVU / BFQ / BGU / BSE / BSF	Golf 1.6i	05 2002	> 06 2006		(102ps)
BGU	Caddy 1.6	04 2004	> 05 2005		(102ps)
BGU / BSE / BSF	Touran 1.6i	07 2003	> 05 2005		(102ps)
BSE	Jetta 1.6 SRE	08 2005	>		(102ps)
BSE / BSF	Caddy / Caddy Maxi / Maxi 1.6i	06 2005	> 08 2010		(102ps)
BSE / BSF	Golf / Golf Plus 1.6 SRE	10 2008	> 11 2012		(102ps)
BSE / BSF	Jetta 1.6i	08 2005	>		(102ps)

	Type					
	**11-02316-000** CH 29,780 VD1 0,700 B- 2,700 BØ 62,300 TL 50,700 **19,00x42,00**		**91-09303-000** 1 1,000 CR 2 1,200 P 3 2,000 CrP St	+0,60/+0,65	Ø 81,010 Ø 81,510 Ø 82,010	**31-04316-000** **31-04316-050** **31-04316-100**
			99-09303-000 1 1,000 CR 2 1,200 P 3 2,000 CrP St			**39-04316-000** **39-04316-050** **39-04316-100**

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

81,010

AXD / AXE / BLJ Euro3 / BNZ	Transporter T5	D	00	2004	>		5 Cyl	**2460cc**	**96-128kW**	(130ps)
AXD Euro3	T5 2.5 TDI	D	05	2007	>	11 2009	5 Cyl	**2460cc**	**96kW**	(130ps)
AXD Euro3	Transporter T5 2.5 TDI	D	04	2003	>		5 Cyl	**2460cc**	**96kW**	(130ps)



11-02317-000
CH 45,750
VD1 1,400
B- 18,200
BØ 37,800
TL 69,750

26,00x66,00

AP
YS
PDB

Cyl.1/2 to be used with 2318 000

91-09318-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

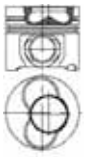
1. Conta ile +0,80/+0,90 2. Conta ile +0,90/+1,00 3. Conta ile +1,00/+1,10

Ø 81,010
Ø 81,410
Ø 81,510

31-04317-000
31-04317-040
31-04317-050

81,010

AXD / AXE / BLJ Euro3 / BNZ	Transporter T5	D	00	2004	>		5 Cyl	**2460cc**	**96-128kW**	(130ps)
AXD Euro3	T5 2.5 TDI	D	05	2007	>	11 2009	5 Cyl	**2460cc**	**96kW**	(130ps)
AXD Euro3	Transporter T5 2.5 TDI	D	04	2003	>		5 Cyl	**2460cc**	**96kW**	(130ps)



11-02318-000
CH 45,750
VD1 1,400
B- 18,200
BØ 37,800
TL 69,750

26,00x66,00

AP
YS
PDB

Cyl.3/4/5 to be used with 2317 000

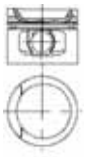
91-09318-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

Ø 81,010
Ø 81,410
Ø 81,510

31-04318-000
31-04318-040
31-04318-050

81,010

AAC	T4 2.0i	B	09	1990	>	04 2002	4 Cyl	**1998cc**	**62kW**	(84ps)
AAC	Transporter T4 2.0i	B	09	1990	>	06 2003	4 Cyl	**1998cc**	**62kW**	(84ps)
AAF / AEU	T4 2.5i	B	09	1990	>	04 1995	5 Cyl	**1998cc**	**81kW**	(110ps)
AAF / AEU	Transporter T4 2.5i	B	09	1990	>	12 1993	5 Cyl	**1998cc**	**81kW**	(110ps)



11-02328-000
CH 38,350
VD1 1,100
B- 10,500
BØ 62,000
TL 65,450

24,00x56,00

91-09158-000
1 1,750 CrP
2 2,000 P
3 3,000

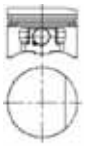
1,1

Ø 81,010
Ø 81,260
Ø 81,510

31-04328-000
31-04328-025
31-04328-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
81,010						
ADR / ARG	Passat 1.8i 20V	B	00 1995 > 00 2001	4 Cyl	**1781cc**	**92kW** (125ps)
AGN	Bora 1.8 20V	B	00 1995 > 00 2001	4 Cyl	**1781cc**	**92kW** (125ps)
AGN	Bora 1.8i 20V	B	02 1999 > 10 2000	4 Cyl	**1781cc**	**92kW** (125ps)
AGN	Golf 1.8i 20V	B	06 1997 > 10 2000	4 Cyl	**1781cc**	**92kW** (125ps)
AGN	Golf IV 1.8 20V	B	00 1995 > 00 2001	4 Cyl	**1781cc**	**92kW** (125ps)
APT	Passat 20V	B	00 1995 > 00 2001	4 Cyl	**1781cc**	**92kW** (125ps)



11-02336-000
CH 32,550 *CH 32,250
VD1 3,600 *VD1 3,600
TL 56,550 *TL 56,250

* For Oversize Piston Dimensions

20,00x59,00

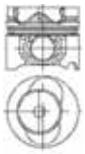
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

91-09296-000
1 1,500 MoP
2 1,750 P
3 2,000 CR

1.Conta ile +0.80/+0.90
2.Conta ile +0.90/+1.00
3.Conta İle +1.00/+1.10

Ø 81,010 **31-04336-000**
Ø 81,510 **31-04336-050**

81,010						
BJL / CECA	Crafter 2.5 TDI	D	04 2006 >	5 Cyl	**2459cc**	**100kW** (136ps)
BJL / CECA	LT 28 / 35 / 46 TDI	D	04 2006 >	5 Cyl	**2459cc**	**100kW** (136ps)
BJM	LT 28 TDI	D	04 2006 >	5 Cyl	**2459cc**	**120kW** (163ps)
BJM / CECB	Crafter 2.5 TDI	D	04 2006 >	5 Cyl	**2459cc**	**120kW** (163ps)
BJM / CECB	LT 35 / 46 TDI	D	04 2006 >	5 Cyl	**2459cc**	**120kW** (163ps)
CECB	LT 28 TDI	D	05 2009 >	5 Cyl	**2459cc**	**120kW** (163ps)



11-02337-000
CH 45,750
VD1 1,350
B- 16,600
BØ 45,900
TL 69,750

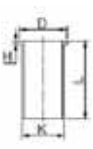
26,00x66,00

AP
YS
PDB

91-09318-000
1 2,500 CkP
2 2,000 P
3 3,000 CrP

0/+0,75 1. Conta ile +0,87/+0,96 2. Conta ile +0,97/+1,01 3. Conta ile +1,02/+1,10

Ø 81,010 **31-04337-000**
Ø 81,510 **31-04337-050**

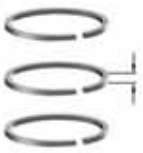
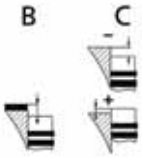
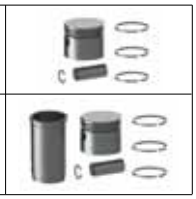


K=84,00
L=158,00
H=5,00
D=85,00

DS

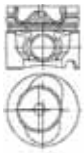
51-65785-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

81,010

AVR	LT 28 TDI	D	12	2002	>	07	2006	5 Cyl	**2461cc**	**80kW**	(109ps)
AVR	LT 35 TDI	D	12	2002	>	07	2006	5 Cyl	**2461cc**	**80kW**	(109ps)
AVR	LT 46 TDI	D	12	2002	>	07	2006	5 Cyl	**2461cc**	**80kW**	(109ps)

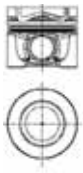
	**11-02338-000** CH 45,800 VD1 1,350 B- 16,800 BØ 46,000 TL 69,800 **26,00x68,00**	AP PDB	**91-09318-000** 1 2,500 CkP 2 2,000 P 3 3,000 CrP	1 kertik conta ile +0,87/+0,96 2 kertik conta ile +0,97/+1,01 3 kertik conta ile +1,02/+1,10	Ø 81,010 Ø 81,510	**31-04338-000** **31-04338-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Type

81,010

AZV / CBDA / BMM / BKD / CBDB	Golf V 2.0 TDI	D	10	2003	>	11	2008	4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
AZV / CBDA / CFHB / BKD / CBDB / CFHC	Golf PLUS 2.0 TDI	D	05	2005	>			4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
BKD / CBDB / CJAA / AZV / CBDA	Jetta III 2.0 TDI	D	09	2005	>	10	2010	4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
BMA / CBAA / CBAA / CFFA / BKP / CBAB / CFFB	Passat 2.0 TDI	D	03	2005	>	11	2010	4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
BMY / CEGA	Jetta III 2.0 TDI	D	10	2006	>			4 Cyl	**1998cc**	**125kW**	(170ps)
CAAA / CAAB / CAAD	T5 2.0 TDI	D	09	2009	>			4 Cyl	**1998cc**	**62-84kW**	(84-114ps)
CAAE / CCHB / CAAC / CCHA	T5 2.0 TDI	D	05	2010	>			4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
CBAA/CFFA/CBDA/CFHB / CBAB/CFFB/CBDB/CFHC/ CLCB	Golf VI 2.0 TDI	D	10	2008	>	11	2012	4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
CBAB / CFFB	EOS 2.0 TDI	D	05	2008	>			4 Cyl	**1998cc**	**103kW**	(140ps)
CBAB / CFFB / CLJA / CBAA / CFFB	Tiguan 2.0 TDI	D	11	2007	>			4 Cyl	**1998cc**	**100-103kW**	(136-140ps)
CBAC	Passat 2.0 BlueTDI	D	01	2009	>			4 Cyl	**1998cc**	**105kW**	(143ps)
CBBB / CFGB	Golf VI / Scirocco 2.0 TDI	D	11	2009	>			4 Cyl	**1998cc**	**125kW**	(170ps)
CBBB / CFGB / CBBA	Tiguan 2.0 TDI	D	02	2008	>	08	2009	4 Cyl	**1998cc**	**120-125kW**	(163-170ps)
CBBB / CFGB / CLLA / CBBA / BMR	Passat 2.0 TDI	D	05	2008	>	11	2008	4 Cyl	**1998cc**	**120-125kW**	(163-170ps)
CBDB / CFHC	Scirocco 2.0 TDI	D	09	2008	>			4 Cyl	**1998cc**	**103kW**	(140ps)
CBDC	Passat 2.0 TDI	D	11	2008	>	07	2010	4 Cyl	**1998cc**	**81kW**	(110ps)
CBDC / CLCA	Golf PLUS / Golf VI 2.0 TDI	D	03	2009	>			4 Cyl	**1998cc**	**81kW**	(110ps)
CDBA	AMAROK 2.0 TDI / 4motion	D	09	2010	>			4 Cyl	**1998cc**	**90kW**	(122ps)
CDCA	AMAROK 2.0 BiTDI / 4motion	D	09	2010	>			4 Cyl	**1998cc**	**120kW**	(163ps)
CFFB / CFHC / CJAA / CLCB	Jetta IV 2.0 TDI	D	02	2011	>			4 Cyl	**1998cc**	**103kW**	(140ps)
CFFB / CJAA	Beetle 2.0 TDI	D	04	2011	>			4 Cyl	**1998cc**	**103kW**	(140ps)



11-02341-000
CH 45,800
B- 12,700
BØ 50,900
TL 68,800

26,00x66,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

AP
YS
PDB

91-09298-000
1 1,750 CkP
2 2,000 P
3 3,000 CrP

Ø 81,010
Ø 81,510

31-04341-000
31-04341-050

98-09298-000
1 1,750 CrP St
2 2,000 P
3 3,000 CrP

38-04341-000
38-04341-050

99-09298-000
1 1,750 CrP St
2 2,000 Fe
3 3,000 CR

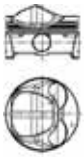
39-04341-000
39-04341-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

82,510

BLR / BLX / BLY / BVY / BVZ	Golf 2.0 FSI 16V	B	12	2004	>	07	2007	4 Cyl	**1984cc**	**110kW**	(150ps)
BLR / BLX / BLY / BVY / BVZ	Jetta 2.0 FSI 16V	B	05	2005	>	06	2008	4 Cyl	**1984cc**	**110kW**	(150ps)
BLR / BLX / BLY / BVY / BVZ	Passat 2.0 FSI 16V	B	03	2005	>	05	2007	4 Cyl	**1984cc**	**110kW**	(150ps)
BLR / BLX / BLY / BVY / BVZ	Touran 2.0 FSI 16V	B	02	2005	>	11	2005	4 Cyl	**1984cc**	**110kW**	(150ps)
BVY / BVZ	Eos 2.0 FSI 16V	B	05	2006	>	05	2008	4 Cyl	**1984cc**	**110kW**	(150ps)
BVY / BVZ	Golf Plus 2.0 FSI 16V	B	05	2007	>	06	2008	4 Cyl	**1984cc**	**110kW**	(150ps)



11-01285-000
CH 29,400
VD1 1,980
B+ 12,460
B- 7,360
TL 47,400

19,00x44,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA

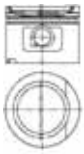
91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510
Ø 83,010

31-03285-000
31-03285-050

82,510

2E / ADY	Corrado 2.0i	B	04	1993	>	09	1994	4 Cyl	**1984cc**	**85kW**	(116ps)
2E / ADY / AGG	Passat 2.0i	B	01	1990	>	09	1994	4 Cyl	**1984cc**	**85kW**	(116ps)
2E / ADY / AGG / AKR	Golf 2.0i	B	11	1991	>	07	1995	4 Cyl	**1984cc**	**85kW**	(116ps)
2E / ADY / AGG / AKR	Vento 2.0i	B	01	1992	>	09	1994	4 Cyl	**1984cc**	**85kW**	(116ps)
ADY	Sharan 2.0i	B	09	1995	>	02	2000	4 Cyl	**1984cc**	**85kW**	(116ps)
AGG / AKE	Gol 2.0i	B	09	1994	>			4 Cyl	**1984cc**	**85kW**	(116ps)



11-01311-000
CH 30,900
B+ 0,890
B- 5,000
BØ 63,500
TL 63,800

21,00x59,00

Audi, Seat ve Volkswagen ile Ortak Motor

CP

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510
Ø 83,010
Ø 83,510

31-03311-000
31-03311-050
31-03311-100

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

82,510

CDAA	Golf 1.8 TSI 16V	B	06	2009	>	01	2011	4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA	Passat 1.8 FSI 16V	B	05	2008	>	11	2010	4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA	Sharan 1.8 TFSI	B	07	2012	>			4 Cyl	**1798cc**	**118kW**	(160ps)
CDAA / CDAB	Passat CC 1.8 TSI	B	11	2009	>	01	2012	4 Cyl	**1798cc**	**112-118kW**	(152-160ps)
CDAB	Passat 1.8 TSI 16V	B	08	2010	>			4 Cyl	**1798cc**	**112kW**	(152ps)

11-02295-000
CH 29,800
B+ 5,680
B- 4,750
TL 55,980

23,00x51,00

AP

Trapezoidal Connecting Rod

99-09327-000
1 1,200 NT St
2 1,200 St
3 2,000 CR

Ø 82,510
Ø 83,010

39-04295-000
39-04295-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

ALT	Passat 2.0i 20V	B	11	2001	>	05	2005	4 Cyl	**1984cc**	**96kW**	(131ps)

11-02327-000
CH 29,600
VD1 2,510
B- 1,200
BØ 64,000
TL 50,600

19,00x44,00

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

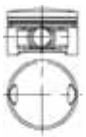
Ø 82,510
Ø 82,760
Ø 83,010

31-04327-000
31-04327-025
31-04327-050

Audi ve Volkswagen ile Ortak Motor

82,510

ACK	Passat 2.8i VR6 30V	B	05	1997	>	12	1998	6 Cyl	**2771cc**	**142kW**	(193ps)
ALG	Passat 2.8i VR6 30V	B	06	1997	>	12	1998	6 Cyl	**2771cc**	**142kW**	(193ps)



11-02330-000

CH 30,160	*CH 29,860
VD1 1,310	*VD1 1,310
B+ 2,560	*B+ 2,560
TL 53,720	*TL 53,420

* For Oversize Piston Dimensions

21,00x56,00

99-09330-000
1 1,200 NT St
2 1,500 P
3 2,000 NtP St

Ø 82,510
Ø 83,010

39-04330-000
39-04330-050

Audi ve Volkswagen ile Ortak Motor

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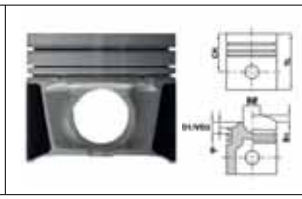
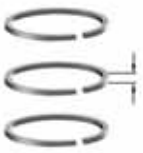
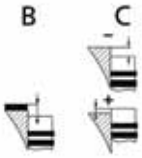
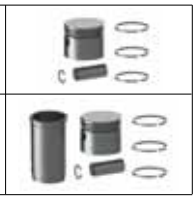
		Type		B	C		
							

82,510

BYJ	Magotan 1.8 TFSI 16V	B	04	2007	>		4 Cyl	**1800cc**	**118kW**	(160ps)
BYJ	Sagitar 1.8i TFSI 16V	B	01	2008	>		4 Cyl	**1800cc**	**118kW**	(160ps)
BZB	Passat 1.8 FSI 16V	B	05	2007	>	05 2008	4 Cyl	**1800cc**	**118kW**	(160ps)
BZB	Passat CC 1.8 TSI	B	06	2008	>	11 2010	4 Cyl	**1800cc**	**118kW**	(160ps)
CEA	CC 1.8 TSI	B	01	2011	>	05 2013	4 Cyl	**1800cc**	**118kW**	(160ps)
CEA	Tiguan 1.8 T 16V	B	12	2009	>		4 Cyl	**1800cc**	**118kW**	(160ps)
CGYA / BZB	Passat 1.8 TSI 16V	B	11	2008	>	05 2010	4 Cyl	**1800cc**	**112-118kW**	(152-160ps)

11-02342-000
CH 29,800
B+ 4,750
B- 6,000
BØ 67,000
TL 55,980

21,00x53,00

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

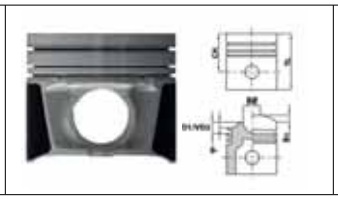
AP

91-09329-000

1	1,200	CrP	St
2	1,500	P	
3	2,000	CR	St

Ø 82,510	**31-04342-000**
Ø 82,765	**31-04342-025**
Ø 83,015	**31-04342-050**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018



Type

82,510

CAWB	Scirocco 2.0 TFSI 16V	B	05	2008	>	11	2009	4 Cyl	**1984cc**	**147kW**	(200ps)
CAWB	Scirocco 2.0 TSI 16V	B	05	2008	>	11	2009	4 Cyl	**1984cc**	**147kW**	(200ps)
CBFA / CAWB	Vento 2.0 TSI 16V	B	07	2006	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CBFA / CAWB / CGM / CCZA	Golf 2.0 TSI 16V	B	03	2008	>	11	2008	4 Cyl	**1984cc**	**147kW**	(200ps)
CBL	Magotan 2.0 TFSI 16V	B	12	2007	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CCTA	Golf / Jetta / Tiguan 2.0 FSI 16V	B	03	2008	>	11	2008	4 Cyl	**1984cc**	**147kW**	(200ps)
CCTA / CBFA	Bora 2.0 TSI 16V	B	07	2008	>	07	2009	4 Cyl	**1984cc**	**147kW**	(200ps)
CCTA / CBFA / CAWB / CCZA	Jetta 2.0 TSI 16V	B	10	2007	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CCZA	Sharan 2.0 TFSI	B	11	2010	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CCZA / CCTA / CBFA	Beetle 2.0 TSI	B	04	2011	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CCZA / CCTA / CBFA / CAWB	Eos 2.0 TSI 16V	B	11	2010	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CCZA / CCTA / CBFA / CAWB	Passat CC 2.0 TSI	B	11	2009	>	11	2010	4 Cyl	**1984cc**	**147kW**	(200ps)
CCZB	Eos / Golf / Passat / Tiguan / Scirocco	B	11	2009	>			4 Cyl	**1984cc**	**155kW**	(211ps)
CCZB	Golf 2.0 GTI 16V	B	04	2009	>	05	2011	4 Cyl	**1984cc**	**155kW**	(211ps)
CCZB	Passat CC / CC 2.0 TSI	B	02	2012	>			4 Cyl	**1984cc**	**155kW**	(211ps)
CCZB	Scirocco 2.0 TFSI 16V	B	11	2009	>			4 Cyl	**1984cc**	**155kW**	(211ps)
CCZC / CCTB	Tiguan 2.0 TSI 16V	B	11	2009	>			4 Cyl	**1984cc**	**125kW**	(170ps)
CGM / CCZA / CCTA / CAWB	Tiguan 2.0 TSI 16V	B	12	2009	>			4 Cyl	**1984cc**	**147kW**	(200ps)
CGM / CCZA / CCTA / CBFA / CAWB / CCTB	Passat 2.0 TSI 16V	B	05	2010	>			4 Cyl	**1984cc**	**125-147kW**	(170-200ps)

11-02343-000
CH 29,600
VD1 3,000
B- 6,200
BØ 50,000
TL 50,100

21,00x56,00

AP

91-09329-000

1	1,200	CrP	St
2	1,500	P	
3	2,000	CR	St

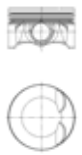
Ø 82,510
Ø 82,760
Ø 83,010

31-04343-000
31-04343-025
31-04343-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

82,510

CAWA/CCZC/CJKB/CCZD	Tiguen / Jetta / Transporter	B	06	2008	>			4 Cyl	**1984cc**	**110-132kW**	(150-180ps)
CAWB/CBFA/CCTA/CCZA/ CCZB/CJKA	Beetle/Bora/CC/Golf/Jetta/Passat	B	10	2004	>			4 Cyl	**1984cc**	**147-155kW**	(200-211ps)



11-02587-000
CH 29,600
VD1 3,500
B- 6,200
TL 50,100

23,00x53,00

AP

99-09327-000

1	1,200	NT	St
2	1,200		St
3	2,000	CR	

Ø 82,510
Ø 83,010

31-04587-000
31-04587-050

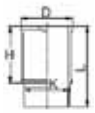
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

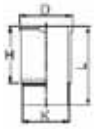
70,000

B10E 66 1.1 B 08 1975 > 08 1978 4 Cyl **1108cc** **33-35 kW** (45-47 ps)

	11-01901-000 CH 40,000 TL 68,000 **18,00x62,00** Daf, Renault ve Volvo ile Ortak Motor		**91-09901-000** 1 1,750 CR 2 2,000 P 3 3,500 CrP St		Ø 70,000	**31-03901-000**
	K=75,50 L=135,00 H=94,85 D=86,00	WF			**51-05901-000**	**71-07901-000**

73,000

B13E 66 1.3 B 08 1975 > 08 1989 4 Cyl **1289cc** **42kW** (57ps)

	11-01902-000 CH 37,500 B- 1,600 BØ 50,000 TL 62,500 **20,00x62,00** Dacia, Daf, Renault ve Volvo ile Ortak Motor		**91-09903-000** 1 1,750 CR 2 2,000 P 3 4,000 CR St		Ø 73,000	**31-03902-000**
	K=78,50 L=134,00 H=94,85 D=87,65	WF			**51-05902-000**	**71-07902-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

73,000

B13E	66 DL			B	>	00	1975	4 Cyl	**1289cc**	**42kW**	(57ps)			

11-01903-000
CH 37,500
TL 62,500

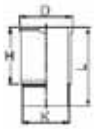
20,00x62,00

91-09903-000
1 1,750 CR
2 2,000 P
3 4,000 CR St

Ø 73,000

31-03903-000

Dacia, Daf, Renault ve Volvo ile Ortak Motor



K=78,50
L=134,00
H=94,85
D=87,65

WF

51-05902-000

71-07903-000

76,000

B 14 / B 14 E	340 1,4			B	08	1979	>	07	1991	4 Cyl	**1397cc**	**47-53kW**	(64-72ps)	
B 14 E / B 14 OE	343 1,4			B	02	1976	>	07	1979	4 Cyl	**1397cc**	**46-53kW**	(63-72ps)	
B 14 E / B 14 OE	345 1,4			B	02	1976	>	07	1979	4 Cyl	**1397cc**	**46-53kW**	(63-72ps)	

11-01904-000
CH 37,500
TL 64,000

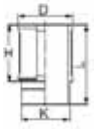
20,00x64,00

91-09904-000
1 1,750 CR
2 2,000 P
3 4,000 CrP St

Ø 76,000

31-03904-000

Renault ve Volvo ile Ortak Motor



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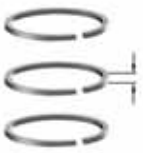
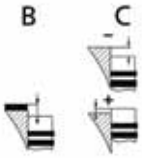
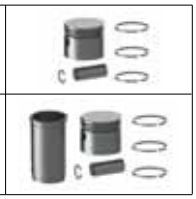
L=134,00
H=95,00
D=90,20

WF

51-05904-000

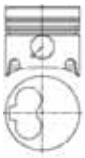
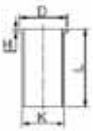
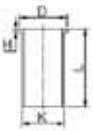
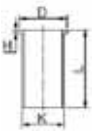
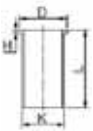
71-07904-000

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

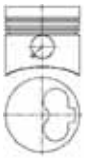
76,510

D 24 T / TIC	740 2.4 TD / Tdi	D	04	1984	>	07	1992	6 Cyl	**2383cc**	**80-90kW**	(109-122ps)
D 24 T / TIC	760 2.4 TD / Tdi	D	08	1982	>	07	1987	6 Cyl	**2383cc**	**80-90kW**	(109-122ps)
D 24 T / TIC	780 2.4 TD / Tdi	D	08	1985	>	07	1991	6 Cyl	**2383cc**	**80-90kW**	(109-122ps)
D 24 T / TIC	940 2.4 TD / Tdi	D	09	1990	>	08	1993	6 Cyl	**2383cc**	**80-90kW**	(109-122ps)
D 24 T / TIC	940 II 2.4 TD / Tdi	D	08	1994	>	10	1998	6 Cyl	**2383cc**	**80-90kW**	(109-122ps)
D 24 T / TIC	960 2.4 TD / Tdi	D	09	1990	>	08	1993	6 Cyl	**2383cc**	**80-90kW**	(109-122ps)

	**11-01301-000** CH 41,700 B- 1,600 TL 71,700 **24,00x64,00** Audi, Nissan, Volkswagen ve Volvo ile Ortak Motor	AP CP	**91-09301-000** 1 1,750 CrP 2 2,000 CrP 3 3,000 CrP	1. Centik 1,53mm (+0,66/+0,80) 2. Centik 1,57mm (+0,81/+0,90) 3. Centik 1,61mm (+0,91/+1,02)	Ø 76,510 Ø 77,010 Ø 77,510	**31-03301-000** **31-03301-050** **31-03301-100**
	K=79,50 L=145,00 H=4,70 D=81,50	DS			**51-65301-000**	
	K=80,00 L=145,00 H=6,00 D=82,00	DS +0,50			**51-65301-050**	
	K=80,50 L=145,00 H=6,00 D=82,50	DS +1,00			**51-65301-100**	
	K=79,50 L=142,00 H=4,70 D=82,50	DS			**51-65313-000**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
76,510						
D24	240 2.4 D	D	04 1979 > 08 1993	4 Cyl	**1598cc**	**60kW** (82ps)
D24	740 2.4 D	D	04 1984 > 07 1992	4 Cyl	**1598cc**	**60kW** (82ps)
D24	760 2.4 D	D	01 1982 > 07 1992	4 Cyl	**1598cc**	**60kW** (82ps)
D24	940 2.4 D	D	09 1990 > 08 1993	4 Cyl	**1598cc**	**60kW** (82ps)
D24	960 2.4 TD	D	09 1990 > 08 1993	4 Cyl	**1598cc**	**60kW** (82ps)



11-01305-000
CH 41,700
B- 1,600
TL 71,700

24,00x64,00

AP
CP

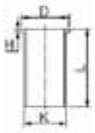
91-09301-000
1 1,750 CrP
2 2,000 CrP
3 3,000 CrP

1. Conta ile 1,40mm (+0,67/+0,80) 2. Conta ile 1,50mm (+0,81/+0,90) 3. Conta ile 1,60mm (+0,91/+1,02)

Ø 76,510
Ø 77,010
Ø 77,510

31-03305-000
31-03305-050
31-03305-100

Audi, Volkswagen ve Volvo ile Ortak Motor



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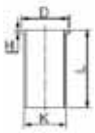
D=81,50

DS

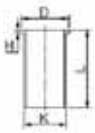
51-65301-000



K=80,00
L=145,00
H=6,00
D=82,00

DS
+0,50

51-65301-050



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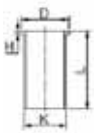
L=145,00
H=6,00
D=82,50

DS
+1,00

51-65301-100



K=79,50
L=142,00
H=4,70
D=82,50

DS

51-65313-000

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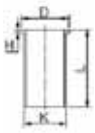
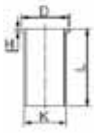
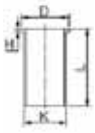
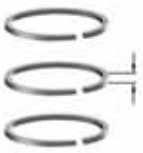
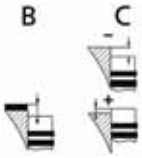
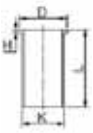
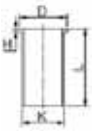
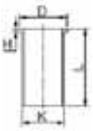
		Type		B C		
78,000						
D16 340 1.6 D D 08 1984 > 4 Cyl **1596cc** **40kW** (54ps)						
D16 360 1.6 D D 08 1984 > 4 Cyl **1596cc** **40kW** (54ps)						
	11-01905-000 CH 47,250 B- 1,500 TL 74,500 **24,00x66,50** Renault ve Volvo ile Ortak Motor		**91-09906-000** 1 2,000 CR 2 2,000 P 3 3,000 CR	1,65mm Conta ile 0/+0,885 1,75mm Conta ile +0,885/+0,985 1,85mm Conta ile +0,985/+1,085	Ø 78,000 Ø 78,250 Ø 78,500 Ø 79,000	**31-03905-000** **31-03905-025** **31-03905-050** **31-03905-100**
	K=81,00 L=149,00 H=4,50 D=83,50	DS			**51-65905-000**	
	K=81,50 L=149,00 H=5,00 D=84,00	DS +0,50			**51-65905-050**	
	K=82,00 L=149,00 H=6,00 D=84,50	DS +1,00			**51-65905-100**	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

78,000

D16	340 1.6 D		D	08	1984	>	07	1991	4 Cyl	**1596cc**	**40kW**	(54ps)
D16	360 1.6 D		D	08	1984	>	07	1991	4 Cyl	**1596cc**	**40kW**	(54ps)

	11-01906-000 CH 47,250 B- 1,500 TL 74,500 **24,00x66,50**		**91-09906-000** 1 2,000 CR 2 2,000 P 3 3,000 CR	1,65mm Conta ile 0/+0,885 1,75mm Conta ile +0,885/+0,985 1,85mm Conta ile +0,985/+1,085	Ø 78,000 Ø 78,250 Ø 78,500 Ø 79,000	**31-03906-000** **31-03906-025** **31-03906-050** **31-03906-100**
	Renault ve Volvo ile Ortak Motor										
	K=81,00 L=149,00 H=4,50 D=83,50	DS				**51-65905-000**	
	K=81,50 L=149,00 H=5,00 D=84,00	DS +0,50				**51-65905-050**	
	K=82,00 L=149,00 H=6,00 D=84,50	DS +1,00				**51-65905-100**	

81,000

B 4164 S	S40		B			>			4 Cyl	**1600cc**	**kW**	(ps)
B 4164 S	V40		B			>			4 Cyl	**1600cc**	**kW**	(ps)

	11-01168-000 CH 29,800 VD1 1,000 TL 55,300 **21,00x57,00**		**99-09351-000** 1 1,200 NT St 2 1,500 P 3 2,500 NtP St		Ø 81,000	**39-01168-000**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		

81,000

B 18 KP	440 1.7i		B	>	00	1988	4 Cyl			(90ps)
B 18 KPD	440 (Catality Converter 1.7i)		B	>	00	1988	4 Cyl			(87ps)

11-02158-000
CH 44,200
B- 14,260
BØ 60,000
TL 70,200

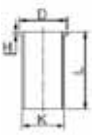
21,00x65,00

Renault ve Volvo ile Ortak Motor

91-09158-000
1 1,750 CrP
2 2,000 P
3 3,000

Ø 81,000
Ø 81,250
Ø 81,500

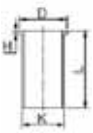
31-04158-000
31-04158-025
31-04158-050



K=85,05
L=151,00
H=5,00
D=86,05

DS

51-65906-000



K=85,50
L=151,00
H=5,50
D=86,50

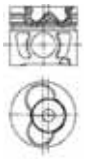
DS

+0,50

51-65906-050

81,010

D5252T	850 2.5 TDI		D	05	1996	>	08	1997	5 Cyl	**2461cc**	**103kW**	(140ps)
D5252T	S60 2.5 TDi		D	07	2000	>			5 Cyl	**2461cc**	**103kW**	(140ps)
D5252T	S70 2.5 TDI		D	01	1997	>	07	2000	5 Cyl	**2461cc**	**103kW**	(140ps)
D5252T	S80 2.5 TDI		D	08	1998	>	07	2001	5 Cyl	**2461cc**	**103kW**	(140ps)
D5252T	V70 2.5 TDI		D	01	1997	>	03	2000	5 Cyl	**2461cc**	**103kW**	(140ps)
D5252T	V70 II 2.5 TDi		D	03	2000	>	07	2001	5 Cyl	**2461cc**	**103kW**	(140ps)



11-01297-000

CH 45,750	*CH 45,500
VD1 1,350	*VD1 1,350
B- 17,200	*B- 17,200
BØ 39,600	*BØ 39,600
TL 69,750	*TL 69,500

* For Oversize Piston Dimensions

26,00x68,00

AP

PDB

Cyl. 1/2 to be used with 1298 000 AA=22,20mm

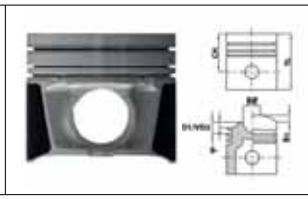
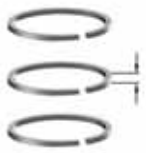
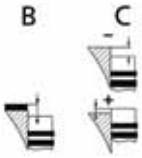
Audi ve Volvo ile Ortak Motor

91-09297-000
1 2,500 CrP
2 2,000 P
3 3,000 CR

Ø 81,010
Ø 81,260
Ø 81,510

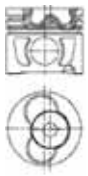
31-03297-000
31-03297-025
31-03297-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
						

81,010

Silindir 3/4/5 de Kullanilacak / To Cylinder 3 / 4 / 5 > Cyl **cc** **kW** (ps)



11-01298-000
CH 45,750 *CH 45,500
VD1 1,350 *VD1 1,350
B- 17,200 *B- 17,200
BØ 39,600 *BØ 39,600
TL 69,750 *TL 69,500

* For Oversize Piston Dimensions

26,00x68,00

AP

PDB

Cyl. 3/4/5 to be used with 1297 000 AA=22,20mm

91-09297-000
1 2,500 CrP
2 2,000 P
3 3,000 CR

Ø 81,010 **31-03298-000**
Ø 81,260 **31-03298-025**
Ø 81,510 **31-03298-050**

Audi ve Volvo ile Ortak Motor

82,700

B 20F 208KAT	440 2.0		09	1992	>				(109ps)
B 20F 208KAT	460 2.0		09	1992	>				(109ps)
B 20F 208KAT	480 2.0		09	1992	>				(109ps)

11-02176-000
CH 36,120
B- 9,080
BØ 67,000
TL 60,000

21,00x57,00

CP

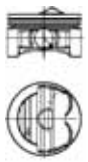
91-09176-000
1 1,500 CrP
2 1,750 P
3 3,000 CrP

Ø 82,700 **31-04176-000**
Ø 82,950 **31-04176-025**
Ø 83,200 **31-04176-050**

Renault ve Volvo ile Ortak Motor

83,000

B 4184 S	S40	B	00	1995	>	00	1999	4 Cyl	**1800cc**	**kW**	(ps)
B 4184 S	V40	B	00	1995	>	00	1999	4 Cyl	**1800cc**	**kW**	(ps)



11-01166-000
CH 27,000
VD1 2,900
TL 49,000

21,00x57,00

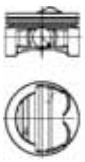
99-09161-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 83,000 **39-03166-000**
Ø 83,400 **39-03166-040**

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

83,000

B 4204 S	S40			B	00	1995	>	00	1999	4 Cyl				(ps)
B 4204 S	V40			B	00	1995	>	00	1999	4 Cyl				(ps)



11-01167-000
CH 28,000
VD1 2,500
TL 50,000

21,00x57,00

Type

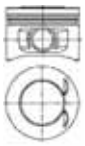
99-09161-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 83,000
Ø 83,400

39-03167-000
39-03167-040

83,000

B 4204 S	S40 2.0i 16V			B	00	1996	>	00	1999	4 Cyl				(140ps)
B 4204 S	V46 2.0i 16V			B	00	1996	>	00	1999	4 Cyl				(140ps)



11-02179-000
CH 35,900
VD1 1,300
B- 0,750
TL 60,650

23,00x61,00

Renault ve Volvo ile Ortak Motor

CP

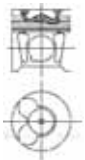
99-09161-000
1 1,200 NT St
2 1,500 P
3 2,500 NtP St

Ø 83,000
Ø 83,500

39-04179-000
39-04179-050

85,000

D 4204 T	C30 2.0 TD 16V			D	09	2006	>			4 Cyl	**1997cc**	**100kW**		(136ps)
D 4204 T	C70 2.0 TD 16V			D	09	2007	>			4 Cyl	**1997cc**	**100kW**		(136ps)
D 4204 T	S40 2.0 TDI 16V			D	10	2003	>			4 Cyl	**1997cc**	**100kW**		(136ps)
D 4204 T	S80 2.0 TD 16V			D	09	2007	>			4 Cyl	**1997cc**	**100kW**		(136ps)
D 4204 T	V50 2.0 TDI 16V			D	02	2004	>			4 Cyl	**1997cc**	**100kW**		(136ps)
D 4204 T	V70 II 2.0 TD 16V			D	09	2007	>			4 Cyl	**1997cc**	**100kW**		(136ps)



11-02497-000
CH 46,705
VD1 0,520
B- 15,400
BØ 44,800
TL 80,705

28,00x70,00

Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor

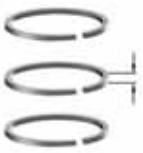
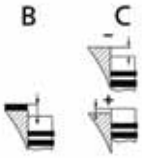
AP
YS

91-09799-000
1 3,500 CK
2 2,000
3 3,000 CR

Ø 85,000
Ø 85,600

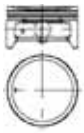
31-04497-000
31-04497-060

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

		Type		B C		
					 	

87,500

B4204S3	C30 2.0i 16V	B	09	2006	>		4 Cyl	**2000cc**	**107kW**	(145ps)
B4204S3	S40 2.0i 16V	B	05	2006	>	05 2007	4 Cyl	**2000cc**	**107kW**	(145ps)
B4204S3	S80 2.0i 16V	B	09	2007	>		4 Cyl	**2000cc**	**107kW**	(145ps)
B4204S3	V50 2.0i 16V	B	05	2006	>		4 Cyl	**2000cc**	**107kW**	(145ps)
B4204S3	V70 II 2.0i 16V	B	09	2007	>		4 Cyl	**2000cc**	**107kW**	(145ps)



11-02257-000
CH 28,400
B- 0,350
BØ 75,400
TL 51,000

21,00x60,00

Ford, Mazda ve Opel ile Ortak Motor

99-09716-000

1	1,200	NT	St
2	1,200	P	
3	2,500	NtP	St

Ø 87,500
Ø 88,000

39-04257-000
39-04257-050

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-03037-000	11-01037-000	91-09733-000							
31-03038-000	11-01038-000	91-09270-000							
31-03232-000	11-01232-000	91-09231-000	51-65547-000						
31-03283-000	11-01283-000	91-09628-000							
31-03284-000	11-01284-000	91-09313-000						32-R3009-000	
31-03285-000	11-01285-000	91-09311-000							
31-03286-000	11-01286-000	91-09627-000							
31-03294-000	11-01294-000	91-09311-000							
31-03295-000	11-01295-000	91-09295-000							
31-03296-000	11-01296-000	91-09296-000							
31-03297-000	11-01297-000	91-09297-000							
31-03298-000	11-01298-000	91-09297-000							
31-03299-000	11-01299-000	91-09299-000	51-65277-000						
31-03300-000	11-01300-000	91-09300-000							
31-03301-000	11-01301-000	91-09301-000	51-65301-000		31-M0007-000	33-W6009-000	34-L7004-000	32-R3015-000	25-E8001-000
31-03301-000	11-01301-000	91-09301-000	51-65313-000		31-M0007-000	33-W6009-000	34-L7004-000	32-R3015-000	25-E8001-000
31-03302-000	11-01302-000	91-09309-000	51-65303-000		31-M0013-000	33-W6009-000	34-L7001-000	32-R3020-000	25-E8001-000
31-03303-000	11-01303-000	91-09311-000							
31-03304-000	11-01304-000	91-09304-000	51-65303-000						
31-03305-000	11-01305-000	91-09301-000	51-65301-000		31-M0007-000	33-W6009-000	34-L7004-000	32-R3015-000	25-E8001-000
31-03305-000	11-01305-000	91-09301-000	51-65313-000		31-M0007-000	33-W6009-000	34-L7004-000	32-R3015-000	25-E8001-000
31-03306-000	11-01306-000	91-09309-000			31-M0011-000	33-W6009-000	34-L7004-000	32-R3015-000	
31-03307-000	11-01307-000	91-09307-000	51-65307-000			33-W6008-000			
31-03308-000	11-01308-000	91-09307-000	51-65307-000					32-R3014-000	
31-03309-000	11-01309-000	91-09309-000	51-65157-000		31-M0011-000	33-W6009-000	34-L7002-000	32-R3015-000	
31-03309-000	11-01309-000	91-09309-000	51-65303-000		31-M0011-000	33-W6009-000	34-L7002-000	32-R3015-000	
31-03311-000	11-01311-000	91-09311-000							
31-03312-000	11-01312-000	91-09311-000							
31-03331-000	11-01331-000	91-09689-000	51-65757-000						
31-03357-000	11-01357-000	91-09283-000	51-65390-000						
31-03358-000	11-01358-000	91-09358-000	51-95315-000	71-07358-000					
31-03359-000	11-01359-000	91-09359-000	51-95316-000	71-07359-000					
31-03360-000	11-01360-000	91-09359-000	51-95316-000	71-07360-000					
31-03389-000	11-01389-000	91-09397-000	51-65397-000						
31-03390-000	11-01390-000	91-09390-000	51-65390-000						
31-03392-000	11-01392-000	91-09392-000	51-65392-000		31-M0093-000	33-W6003-000		32-R3216-000	
31-03393-000	11-01393-000	91-09393-000	51-65393-000		31-M0093-000	33-W6003-000		32-R3216-000	
31-03394-000	11-01394-000	91-09394-000	51-65394-000		31-M0004-000	33-W6003-000		32-R3005-000	
31-03394-000	11-01394-000	91-09394-000	51-65395-000		31-M0004-000	33-W6003-000		32-R3005-000	
31-03395-000	11-01395-000	91-09395-000	51-65270-000		31-M0067-000	33-W6024-000	34-L7022-000	32-R3068-000	
31-03396-000	11-01396-000	91-09396-000			31-M0067-000	33-W6070-000	34-L7022-000	32-R3068-000	
31-03397-000	11-01397-000	91-09397-000	51-65397-000		31-M0093-000	33-W6003-000	34-L7022-000		
31-03399-000	11-01399-000	91-09399-000	51-65265-000		31-M0005-000	33-W6002-000		32-R3005-000	
31-03399-000	11-01399-000	91-09399-000	51-65268-000		31-M0005-000	33-W6002-000		32-R3005-000	
31-03420-000	11-01420-000	91-09426-000	51-65286-000		31-M0104-000	33-W6032-000		32-R3097-000	
31-03420-000	11-01420-000	91-09426-000	51-65426-000		31-M0104-000	33-W6032-000		32-R3097-000	
31-03422-000	11-01422-000	91-09422-000							
31-03423-000	11-01423-000	91-09423-000							
31-03425-000	11-01425-000	91-09424-000	51-65424-000						
31-03426-000	11-01426-000	91-09426-000	51-65286-000		31-M0104-000	33-W6032-000		32-R3103-000	
31-03426-000	11-01426-000	91-09426-000	51-65426-000		31-M0104-000	33-W6032-000		32-R3103-000	
31-03427-000	11-01427-000	91-09427-000	51-65286-000						
31-03427-000	11-01427-000	91-09427-000	51-65426-000						
31-03443-000	11-01443-000	91-09443-000	51-65284-000						
31-03443-000	11-01443-000	91-09443-000	51-65285-000						
31-03444-000	11-01444-000	91-09444-000	51-65284-000						
31-03444-000	11-01444-000	91-09444-000	51-65285-000						
31-03446-000	11-01446-000	91-09446-000							
31-03447-000	11-01447-000	91-09447-000							
31-03457-000	11-01457-000	91-09457-000							
31-03459-000	11-01459-000	91-09425-000	51-65494-000		31-M0105-000			32-R3095-000	
31-03460-000	11-01460-000	91-09460-000	51-65819-000		31-M0037-000	33-W6069-000			
31-03460-001	11-01460-001	91-09460-000							
31-03460-002	11-01460-002	91-09460-000							
31-03461-000	11-01461-000	91-09425-000	51-65496-000		31-M0105-000			32-R3095-000	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-03461-001	11-01461-001	91-09425-000							
31-03462-000	11-01462-000	91-09968-000	51-65476-000		31-M0105-000				
31-03462-000	11-01462-000	91-09968-000	51-65477-000		31-M0105-000				
31-03462-001	11-01462-001	91-09968-000							
31-03463-000	11-01463-000	91-09968-000	51-65476-000		31-M0105-000				
31-03463-000	11-01463-000	91-09968-000	51-65477-000		31-M0105-000				
31-03463-001	11-01463-001	91-09968-000							
31-03464-000	11-01464-000	91-09964-000	51-65433-000						
31-03464-000	11-01464-000	91-09964-000	51-65492-000						
31-03465-000	11-01465-000	91-09964-000	51-65433-000						
31-03465-000	11-01465-000	91-09964-000	51-65492-000						
31-03466-000	11-01466-000	91-09966-000	51-65476-000		31-M0105-000				
31-03466-001	11-01466-001	91-09966-000							
31-03467-000	11-01467-000	91-09966-000	51-65476-000		31-M0105-000				
31-03467-001	11-01467-001	91-09966-000							
31-03468-000	11-01468-000	91-09968-000	51-65476-000		31-M0105-000				
31-03468-000	11-01468-000	91-09968-000	51-65477-000		31-M0105-000				
31-03468-001	11-01468-001	91-09968-000							
31-03469-000	11-01469-000	91-09968-000	51-65476-000		31-M0105-000				
31-03469-000	11-01469-000	91-09968-000	51-65477-000		31-M0105-000				
31-03469-001	11-01469-001	91-09968-000							
31-03474-000	11-01474-000	91-09968-000	51-65476-000		31-M0105-000				
31-03474-000	11-01474-000	91-09968-000	51-65477-000		31-M0105-000				
31-03474-001	11-01474-001	91-09968-000							
31-03475-000	11-01475-000	91-09968-000	51-65476-000		31-M0105-000				
31-03475-000	11-01475-000	91-09968-000	51-65477-000		31-M0105-000				
31-03475-001	11-01475-001	91-09968-000							
31-03477-000	11-01477-000	91-09477-000	51-65492-000		31-M0096-000	33-W6030-000			
31-03478-000	11-01478-000	91-09425-000	51-65494-000		31-M0105-000			32-R3095-000	
31-03530-000	11-01530-000	91-09530-000	51-65530-000						
31-03544-000	11-01544-000	91-09544-000	51-35497-000	71-07544-000					
31-03544-001	11-01544-001	91-09544-000							
31-03546-000	11-01546-000	91-09546-000							
31-03547-000	11-01547-000	91-09546-000							
31-03548-000	11-01548-000	91-09548-000	51-66175-000						
31-03549-000	11-01549-000	91-09549-000	51-66175-000						
31-03550-000	11-01550-000	91-09550-000	51-65550-000						
31-03551-000	11-01551-000	91-09551-000	51-65549-000						
31-03551-000	11-01551-000	91-09551-000	51-65550-000						
31-03552-000	11-01552-000	91-09552-000	51-65549-000						
31-03552-000	11-01552-000	91-09552-000	51-65550-000						
31-03553-000	11-01553-000	91-09552-000	51-65549-000						
31-03554-000	11-01554-000	91-09554-000	51-65549-000						
31-03555-000	11-01555-000	91-09555-000							
31-03556-000	11-01556-000	91-09556-000							
31-03557-000	11-01557-000	91-09556-000							
31-03558-000	11-01558-000	91-09558-000							
31-03559-000	11-01559-000	91-09559-000							
31-03606-000	11-01606-000	91-09608-000	51-65632-000						
31-03608-000	11-01608-000	91-09608-000							
31-03609-000	11-01609-000	91-09617-000	51-65645-000					32-R3047-000	
31-03617-000	11-01617-000	91-09617-000	51-65645-000		31-M0046-000				
31-03630-000	11-01630-000	91-09630-000	51-65630-000						
31-03633-000	11-01633-000	91-09633-000	51-65633-000						
31-03634-000	11-01634-000	91-09634-000	51-65633-000						
31-03635-000	11-01635-000	91-09635-000							
31-03636-000	11-01636-000	91-09635-000	51-65614-000					32-R3039-000	
31-03636-000	11-01636-000	91-09635-000	51-65629-000					32-R3039-000	
31-03646-000	11-01646-000	91-09646-000							
31-03647-000	11-01647-000	98-09647-000			31-M0054-000	33-W6019-000	34-L7010-000	32-R3041-000	
31-03647-000	11-01647-000	99-09647-000			31-M0054-000	33-W6019-000	34-L7010-000	32-R3041-000	
31-03651-000	11-01651-000	91-09652-000	51-65634-000		31-M0048-000				
31-03652-000	11-01652-000	91-09652-000	51-65634-000						
31-03653-000	11-01653-000	91-09653-000	51-65630-000		31-M0047-000			32-R3040-000	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-03684-000	11-01684-000	91-09689-000	51-65400-000						
31-03685-000	11-01685-000	91-09689-000	51-65400-000						
31-03685-000	11-01685-000	91-09689-000	51-65401-000						
31-03686-000	11-01686-000	91-09686-000	51-65400-000		31-M0079-000			32-R3076-000	
31-03686-000	11-01686-000	91-09686-000	51-65452-000		31-M0079-000			32-R3076-000	
31-03687-000	11-01687-000	91-09689-000	51-65400-000						
31-03687-000	11-01687-000	91-09689-000	51-65401-000						
31-03688-000	11-01688-000	91-09689-000	51-65401-000						
31-03689-000	11-01689-000	91-09689-000	51-65400-000						
31-03690-000	11-01690-000	91-09690-000	51-65453-000						
31-03691-000	11-01691-000	91-09691-000	51-65453-000						
31-03692-000	11-01692-000	91-09691-000	51-65453-000						
31-03693-000	11-01693-000	91-09693-000	51-65453-000						
31-03751-000	11-01751-000	91-09751-000							
31-03752-000	11-01752-000	91-09755-000	51-65385-000		31-M0067-000	33-W6070-000	34-L7022-000	32-R3068-000	
31-03753-000	11-01753-000	91-09755-000	51-65385-000		31-M0093-000	33-W6003-000		32-R3216-000	
31-03755-000	11-01755-000	91-09755-000			31-M0067-000	33-W6070-000	34-L7022-000	32-R3068-000	
31-03757-000	11-01757-000	91-09397-000	51-65410-000						
31-03768-000	11-01768-000	91-09968-000	51-65476-000		31-M0105-000				
31-03768-000	11-01768-000	91-09968-000	51-65477-000		31-M0105-000				
31-03769-000	11-01769-000	91-09448-000							
31-03777-000	11-01777-000	91-09777-000	51-65433-000						
31-03778-000	11-01778-000	91-09807-000	51-65433-000						
31-03795-000	11-01795-000	91-09795-000			31-M0101-000			32-R3092-000	
31-03797-000	11-01797-000	91-09225-000							
31-03798-000	11-01798-000	91-09802-000	51-65803-000						
31-03799-000	11-01799-000	91-09807-000	51-65802-000		31-M0040-000			32-R3032-000	
31-03800-000	11-01800-000	91-09800-000	51-65800-000		31-M0040-000			32-R3030-000	
31-03801-000	11-01801-000	91-09801-000			31-M0039-000			32-R3031-000	
31-03802-000	11-01802-000	91-09802-000	51-65803-000						
31-03803-000	11-01803-000	91-09803-000			31-M0039-000			32-R3031-000	
31-03804-000	11-01804-000	91-09804-000	51-65804-000		31-M0040-000			32-R3030-000	
31-03805-000	11-01805-000	91-09805-000	51-65806-000		31-M0040-000			32-R3129-000	
31-03806-000	11-01806-000	91-09806-000	51-65805-000						
31-03807-000	11-01807-000	91-09807-000			31-M0040-000			32-R3032-000	
31-03808-000	11-01808-000	91-09808-000			31-M0039-000			32-R3031-000	
31-03810-000	11-01810-000	91-09810-000	51-65800-000						
31-03811-000	11-01811-000	91-09811-000	51-65804-000		31-M0040-000			32-R3030-000	
31-03812-000	11-01812-000	91-09805-000							
31-03815-000	11-01815-000	91-09815-000	51-65805-000						
31-03816-000	11-01816-000	91-09816-000							
31-03817-000	11-01817-000	91-09817-000	51-65776-000		31-M0039-000			32-R3031-000	
31-03818-000	11-01818-000	91-09805-000	51-65774-000		31-M0040-000			32-R3129-000	
31-03819-000	11-01819-000	91-09808-000			31-M0039-000			32-R3031-000	
31-03834-000	11-01834-000	91-09834-000	51-65831-000		31-M0137-000				
31-03874-000	11-01874-000	91-09904-000	51-05875-000	71-07874-000					
31-03875-000	11-01875-000	91-09875-000	51-05877-000	71-07875-000					
31-03876-000	11-01876-000	91-09800-000	51-65876-000		31-M0034-000	33-W6039-000		32-R3142-000	
31-03877-000	11-01877-000	91-09877-000	51-05881-000	71-07877-000					
31-03877-000	11-01877-000	91-09877-000	51-05882-000	71-07878-000					
31-03878-000	11-01878-000	91-09878-000	51-65866-000		31-M0034-000	33-W6039-000		32-R3142-000	
31-03878-001	11-01878-001	91-09878-000							
31-03879-000	11-01879-000	91-09879-000	51-65820-000		31-M0034-000	33-W6039-000		32-R3142-000	
31-03879-000	11-01879-000	91-09879-000	51-65879-000		31-M0034-000	33-W6039-000		32-R3142-000	
31-03879-000	11-01879-000	91-09879-000	51-65885-000		31-M0034-000	33-W6039-000		32-R3142-000	
31-03880-000	11-01880-000	91-09881-000	51-05880-000	71-07880-000					
31-03880-000	11-01880-000	91-09881-000	51-05883-000	71-07141-000					
31-03881-000	11-01881-000	91-09881-000	51-05880-000	71-07881-000					
31-03883-000	11-01883-000	91-09128-000	51-05883-000	71-07883-000					
31-03884-000	11-01884-000	91-09128-000	51-05880-000	71-07884-000					
31-03885-000	11-01885-000	91-09885-000	51-05878-000	71-07885-000					
31-03885-000	11-01885-000	91-09885-000	51-05881-000	71-07890-000					
31-03886-000	11-01886-000	91-09875-000	51-05877-000	71-07886-000					
31-03887-000	11-01887-000	91-09887-000	51-05868-000	71-07887-000					

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Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-03887-000	11-01887-000	91-09887-000	51-05878-000	71-07892-000					
31-03887-000	11-01887-000	91-09887-000	51-05881-000	71-07882-000					
31-03888-000	11-01888-000	91-09299-000	51-05873-000	71-07888-000					
31-03889-000	11-01889-000	91-09889-000	51-05873-000	71-07889-000	31-M0032-000			32-R3137-000	
31-03891-000	11-01891-000	91-09891-000	51-05891-000	71-07891-000					
31-03892-000	11-01892-000	91-09895-000							
31-03893-000	11-01893-000	91-09895-000	51-65892-000						
31-03893-000	11-01893-000	91-09895-000	51-65893-000						
31-03893-000	11-01893-000	91-09895-000	51-65915-000						
31-03894-000	11-01894-000	91-09895-000	51-65892-000						
31-03894-000	11-01894-000	91-09895-000	51-65893-000						
31-03895-000	11-01895-000	91-09895-000	51-65892-000						
31-03895-000	11-01895-000	91-09895-000	51-65893-000						
31-03895-000	11-01895-000	91-09895-000	51-65915-000						
31-03901-000	11-01901-000	91-09901-000	51-05901-000	71-07901-000					
31-03902-000	11-01902-000	91-09903-000	51-05902-000	71-07902-000					
31-03903-000	11-01903-000	91-09903-000	51-05902-000	71-07903-000	31-M0160-000	33-W6048-000		32-R3180-000	
31-03904-000	11-01904-000	91-09904-000	51-05904-000	71-07904-000	31-M0160-000	33-W6048-000		32-R3180-000	
31-03905-000	11-01905-000	91-09906-000	51-65905-000		31-M0156-000	33-W6050-000		32-R3174-000	
31-03906-000	11-01906-000	91-09906-000	51-65905-000		31-M0156-000	33-W6050-000		32-R3174-000	
31-03907-000	11-01907-000	91-09907-000	51-95907-000	71-07907-000	31-M0158-000				
31-03907-000	11-01907-000	91-09907-000	51-95908-000	71-07911-000	31-M0158-000				
31-03908-000	11-01908-000	91-09908-000	51-95908-000	71-07908-000		33-W6012-000			
31-03909-000	11-01909-000	91-09909-000	51-05910-000	71-07909-000		33-W6048-000		32-R3180-000	
31-03912-000	11-01912-000	91-09216-000	51-65777-000						
31-03913-000	11-01913-000	91-09222-000							
31-03914-000	11-01914-000	91-09909-000	51-05910-000						
31-03943-000	11-01943-000	91-09942-000	51-05943-000	71-07943-000					
31-03943-000	11-01943-000	91-09942-000	51-05944-000	71-07325-000					
31-03952-000	11-01952-000	91-09953-000	51-05952-000	71-07952-000					
31-03953-000	11-01953-000	91-09953-000	51-05952-000	71-07953-000					
31-03955-000	11-01955-000	91-09953-000	51-05953-000	71-07955-000					
31-03957-000	11-01957-000	91-09298-000							
31-03958-000	11-01958-000	91-09298-000							
31-03959-000	11-01959-000	91-09106-000							
31-03977-000	11-01977-000	91-09985-000							
31-03985-000	11-01985-000	91-09985-000	51-65498-000						
31-04031-000	11-02031-000	91-09031-000							
31-04032-000	11-02032-000	91-09032-000							
31-04033-000	11-02033-000	91-09425-000	51-65494-000		31-M0105-000			32-R3095-000	
31-04034-000	11-02034-000	91-09425-000	51-65496-000		31-M0105-000			32-R3095-000	
31-04100-000	11-02100-000	91-09100-000	51-05872-000	71-08100-000					
31-04101-000	11-02101-000	91-09929-000							
31-04102-000	11-02102-000	91-09929-000							
31-04103-000	11-02103-000	91-09887-000	51-05881-000	71-08117-000	31-M0690-000	33-W6039-000		32-R3027-000	
31-04104-000	11-02104-000	91-09874-000							
31-04104-002	11-02104-002	91-09874-000							
31-04105-000	11-02105-000	91-09873-000							
31-04106-000	11-02106-000	91-09874-000			31-M0036-000				
31-04106-001	11-02106-001	91-09874-000							
31-04106-002	11-02106-002	91-09874-000							
31-04107-000	11-02107-000	91-09896-000							
31-04108-000	11-02108-000	91-09874-000							
31-04109-000	11-02109-000	91-09362-000							
31-04110-000	11-02110-000	91-09110-000	51-05884-000						
31-04112-000	11-02112-000	91-09460-000							
31-04115-000	11-02115-000	91-09799-000	51-65164-000						
31-04116-000	11-02116-000	91-09877-000	51-05881-000	71-08116-000					
31-04117-000	11-02117-000	91-09145-000							
31-04118-000	11-02118-000	91-09877-000	51-05878-000	71-08118-000					
31-04118-000	11-02118-000	91-09877-000	51-05881-000	71-08119-000					
31-04120-000	11-02120-000	91-09885-000	51-05881-000	71-08120-000					
31-04127-000	11-02127-000	91-09963-000							
31-04128-000	11-02128-000	91-09128-000	51-05880-000	71-08128-000					

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Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-04128-000	11-02128-000	91-09128-000	51-05883-000	71-08129-000					
31-04129-000	11-02129-000	91-09967-000							
31-04131-000	11-02131-000	91-09131-000	51-65886-000						
31-04132-000	11-02132-000	91-09128-000	51-05880-000	71-08133-000					
31-04132-000	11-02132-000	91-09128-000	51-05883-000	71-08132-000					
31-04140-000	11-02140-000	91-09140-000	51-05889-000	71-08140-000					
31-04142-000	11-02142-000	91-09140-000	51-05889-000	71-08142-000					
31-04145-000	11-02145-000	91-09143-000							
31-04148-000	11-02148-000	91-09140-000	51-05889-000	71-08148-000					
31-04151-000	11-02151-000	91-09175-000							
31-04152-000	11-02152-000	91-09152-000	51-05895-000	71-08152-000					
31-04153-000	11-02153-000	91-09149-000	51-65152-000						
31-04153-000	11-02153-000	91-09149-000	51-65807-000						
31-04154-000	11-02154-000	91-09154-000	51-05873-000	71-08154-000					
31-04155-000	11-02155-000	91-09150-000	51-65934-000						
31-04156-000	11-02156-000	91-09156-000	51-05899-000	71-08156-000					
31-04158-000	11-02158-000	91-09158-000	51-65906-000		31-M0156-000	33-W6050-000		32-R3174-000	
31-04159-000	11-02159-000	91-09159-000	51-65152-000		31-M0162-000			32-R3166-000	
31-04159-000	11-02159-000	91-09159-000	51-65807-000		31-M0162-000			32-R3166-000	
31-04159-001	11-02159-001	91-09159-000							
31-04160-000	11-02160-000	91-09160-000	51-05888-000	71-07097-000					
31-04160-000	11-02160-000	91-09160-000	51-05909-000	71-08160-000					
31-04161-000	11-02161-000	91-09800-000	51-65903-000		31-M0156-000	33-W6050-000		32-R3174-000	
31-04162-000	11-02162-000	91-09148-000	51-65936-000		31-M0155-000	33-W6049-000	34-L7029-000	32-R3167-000	
31-04163-000	11-02163-000	91-09800-000	51-65903-000		31-M0157-000	33-W6050-000		32-R3165-000	
31-04164-000	11-02164-000	91-09148-000	51-65936-000		31-M0155-000	33-W6049-000	34-L7029-000	32-R3167-000	
31-04164-001	11-02164-001	91-09148-000							
31-04164-002	11-02164-002	91-09148-000							
31-04165-000	11-02165-000	91-09165-000	51-65903-000		31-M0157-000	33-W6050-000		32-R3165-000	
31-04166-000	11-02166-000	91-09166-000			31-M0155-000	33-W6049-000		32-R3180-000	
31-04167-000	11-02167-000	91-09166-000			31-M0155-000	33-W6049-000		32-R3180-000	
31-04169-000	11-02169-000	91-09166-000				33-W6048-000		32-R3180-000	
31-04170-000	11-02170-000	91-09800-000	51-65903-000		31-M0156-000	33-W6050-000		32-R3174-000	
31-04171-000	11-02171-000	91-09166-000			31-M0155-000	33-W6049-000		32-R3180-000	
31-04174-000	11-02174-000	91-09174-000			31-M0155-000	33-W6049-000		32-R3180-000	
31-04175-000	11-02175-000	91-09148-000	51-65936-000		31-M0155-000	33-W6049-000	34-L7029-000	32-R3167-000	
31-04175-001	11-02175-001	91-09148-000							
31-04176-000	11-02176-000	91-09176-000			31-M0157-000	33-W6050-000		32-R3165-000	
31-04177-000	11-02177-000	91-09175-000			31-M0155-000	33-W6049-000		32-R3180-000	
31-04178-000	11-02178-000	91-09102-000			31-M0157-000	33-W6050-000		32-R3165-000	
31-04180-000	11-02180-000	91-09170-000	51-65955-000		31-M0162-000			32-R3172-000	
31-04181-000	11-02181-000	91-09148-000	51-65936-000		31-M0155-000	33-W6049-000	34-L7029-000	32-R3167-000	
31-04181-001	11-02181-001	91-09148-000							
31-04182-000	11-02182-000	91-09171-000	51-65782-000						
31-04183-000	11-02183-000	91-09165-000			31-M0157-000	33-W6050-000		32-R3165-000	
31-04184-000	11-02184-000	91-09151-000							
31-04185-000	11-02185-000	91-09148-000	51-65936-000		31-M0155-000	33-W6049-000	34-L7029-000	32-R3167-000	
31-04185-001	11-02185-001	91-09148-000							
31-04186-000	11-02186-000	91-09148-000	51-65936-000		31-M0155-000	33-W6049-000	34-L7029-000	32-R3167-000	
31-04186-001	11-02186-001	91-09148-000							
31-04187-000	11-02187-000	91-09173-000	51-65779-000						
31-04188-000	11-02188-000	91-09170-000							
31-04189-000	11-02189-000	91-09147-000							
31-04190-000	11-02190-000	91-09165-000							
31-04195-000	11-02195-000	91-09796-000							
31-04196-000	11-02196-000	91-09222-000							
31-04197-000	11-02197-000	91-09790-000	51-65778-000						
31-04198-000	11-02198-000	91-09797-000			31-M0197-000				
31-04198-001	11-02198-001	91-09797-000							
31-04200-000	11-02200-000	91-09880-000							
31-04201-000	11-02201-000	91-09820-000	51-65808-000						
31-04202-000	11-02202-000	91-09202-000	51-05897-000	71-08202-000	31-M0160-000	33-W6048-000		32-R3180-000	
31-04203-000	11-02203-000	91-09203-000							
31-04204-000	11-02204-000	91-09813-000							

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-04209-000	11-02209-000	91-09804-000	51-65773-000		31-M0040-000			32-R3030-000	
31-04210-000	11-02210-000	91-09419-000	51-65814-000						
31-04212-000	11-02212-000	91-09812-000			31-M0039-000			32-R3031-000	
31-04213-000	11-02213-000	91-09223-000			31-M0131-000			32-R3128-000	
31-04214-000	11-02214-000	91-09222-000			31-M0131-000			32-R3128-000	
31-04215-000	11-02215-000	91-09817-000			31-M0039-000			32-R3031-000	
31-04216-000	11-02216-000	91-09216-000			31-M0039-000			32-R3031-000	
31-04217-000	11-02217-000	91-09217-000							
31-04218-000	11-02218-000	91-09218-000							
31-04219-000	11-02219-000	91-09219-000			31-M0039-000			32-R3031-000	
31-04220-000	11-02220-000	91-09220-000	51-05890-000	71-08220-000					
31-04221-000	11-02221-000	91-09221-000			31-M0201-000			32-R3214-000	
31-04222-000	11-02222-000	91-09222-000			31-M0131-000			32-R3128-000	
31-04223-000	11-02223-000	91-09218-000			31-M0040-000			32-R3032-100	
31-04224-000	11-02224-000	91-09156-000	51-05899-000	71-08224-000					
31-04225-000	11-02225-000	91-09805-000			31-M0040-000			32-R3129-000	
31-04226-000	11-02226-000	91-09805-000			31-M0040-000			32-R3129-000	
31-04227-000	11-02227-000	91-09419-000	51-65775-000						
31-04228-000	11-02228-000	91-09221-000							
31-04229-000	11-02229-000	91-09219-000			31-M0039-000			32-R3031-000	
31-04230-000	11-02230-000	91-09230-000							
31-04231-000	11-02231-000	91-09216-000							
31-04232-000	11-02232-000	91-09814-000							
31-04233-000	11-02233-000	91-09822-000							
31-04246-000	11-02246-000	91-09158-000	51-65906-000		31-M0156-000	33-W6050-000		32-R3174-000	
31-04250-000	11-02250-000	91-09968-000	51-65477-000		31-M0105-000				
31-04251-000	11-02251-000	91-09420-000	51-65426-000						
31-04252-000	11-02252-000	91-09420-000	51-65426-000						
31-04253-000	11-02253-000	91-09425-000	51-65496-000		31-M0105-000			32-R3095-000	
31-04256-000	11-02256-000	91-09425-000	51-65496-000		31-M0105-000			32-R3095-000	
31-04266-000	11-02266-000	91-09263-000	51-65269-000		31-M0068-000			32-R3062-000	
31-04267-000	11-02267-000	91-09262-000			31-M0067-000	33-W6024-000		32-R3068-000	
31-04268-000	11-02268-000	91-09285-000			31-M0068-000	33-W6072-000		32-R3062-000	
31-04269-000	11-02269-000	91-09969-000			31-M0067-000	33-W6024-000		32-R3068-000	
31-04270-000	11-02270-000	91-09397-000			31-M0067-000	33-W6070-000	34-L7022-000	32-R3068-000	
31-04273-000	11-02273-000	91-09395-000	51-65270-000		31-M0067-000	33-W6024-000		32-R3068-000	
31-04275-000	11-02275-000	91-09392-000			31-M0093-000	33-W6003-000		32-R3216-000	
31-04281-000	11-02281-000	91-09399-000	51-65268-000		31-M0095-000	33-W6022-000		32-R3088-000	
31-04282-000	11-02282-000	91-09282-000	51-65451-000		31-M0197-000	33-W6071-000	34-L7025-000	32-R3130-000	
31-04282-001	11-02282-001	91-09282-000							
31-04282-002	11-02282-002	91-09282-000							
31-04285-000	11-02285-000	91-09285-000	51-65491-000		31-M0068-000	33-W6072-000		32-R3062-000	
31-04287-000	11-02287-000	91-09285-000	51-65491-000		31-M0068-000	33-W6072-000		32-R3062-000	
31-04289-000	11-02289-000	91-09282-000	51-65451-000		31-M0197-000	33-W6071-000	34-L7025-000	32-R3130-000	
31-04289-001	11-02289-001	91-09282-000							
31-04290-000	11-02290-000	91-09207-000							
31-04291-000	11-02291-000	91-09284-000							
31-04292-000	11-02292-000	91-09694-000	51-65756-000						
31-04293-000	11-02293-000	91-09399-000							
31-04294-000	11-02294-000	91-09261-000							
31-04297-000	11-02297-000	91-09292-000							
31-04298-000	11-02298-000	91-09298-000							
31-04299-000	11-02299-000	91-09296-000						32-R3011-000	
31-04301-000	11-02301-000	91-09309-000	51-65303-000		31-M0013-000	33-W6009-000	34-L7001-000	32-R3020-000	25-E8001-000
31-04302-000	11-02302-000	91-09309-000	51-65303-000		31-M0013-000	33-W6009-000	34-L7001-000	32-R3020-000	25-E8001-000
31-04303-000	11-02303-000	91-09396-000			31-M0067-000	33-W6070-000	34-L7022-000	32-R3068-000	
31-04304-000	11-02304-000	91-09306-000							
31-04305-000	11-02305-000	91-09309-000							
31-04306-000	11-02306-000	91-09309-000							
31-04307-000	11-02307-000	91-09107-000			31-M0017-000	33-W6005-000	34-L7003-000		
31-04308-000	11-02308-000	91-09318-000	51-65319-000						
31-04309-000	11-02309-000	91-09318-000	51-65319-000						
31-04311-000	11-02311-000	91-09309-000	51-65303-000						
31-04312-000	11-02312-000	91-09309-000	51-65303-000						

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-04313-000	11-02313-000	91-09309-000	51-65303-000						
31-04314-000	11-02314-000	91-09309-000	51-65303-000						
31-04315-000	11-02315-000	91-09306-000							
31-04316-000	11-02316-000	91-09303-000				33-W6059-000			
31-04317-000	11-02317-000	91-09318-000							
31-04318-000	11-02318-000	91-09318-000							
31-04319-000	11-02319-000	91-09309-000	51-65303-000		31-M0013-000	33-W6009-000			25-E8001-000
31-04320-000	11-02320-000	91-09309-000	51-65303-000		31-M0013-000	33-W6009-000			25-E8001-000
31-04321-000	11-02321-000	91-09302-000	51-65313-000						
31-04322-000	11-02322-000	91-09312-000					34-L7006-000		
31-04327-000	11-02327-000	91-09311-000							
31-04328-000	11-02328-000	91-09158-000							
31-04329-000	11-02329-000	91-09294-000							
31-04331-000	11-02331-000	91-09331-000							
31-04332-000	11-02332-000	91-09331-000							
31-04333-000	11-02333-000	91-09331-000							
31-04334-000	11-02334-000	91-09331-000							
31-04336-000	11-02336-000	91-09296-000							
31-04337-000	11-02337-000	91-09318-000	51-65785-000						
31-04338-000	11-02338-000	91-09318-000							
31-04340-000	11-02340-000	91-09625-000							
31-04341-000	11-02341-000	91-09298-000							
31-04342-000	11-02342-000	91-09329-000							
31-04343-000	11-02343-000	91-09329-000							
31-04344-000	11-02344-000	91-09298-000							
31-04385-000	11-02385-000	91-09389-000	51-35721-000	71-08385-000					
31-04386-000	11-02386-000	91-09389-000	51-35720-000	71-08386-000					
31-04386-000	11-02386-000	91-09389-000	51-35721-000	71-08387-000					
31-04419-000	11-02419-000	91-09419-000	51-65814-000						
31-04494-000	11-02494-000	91-09882-000			31-M0037-000				
31-04494-001	11-02494-001	91-09882-000							
31-04494-002	11-02494-002	91-09882-000							
31-04495-000	11-02495-000	91-09799-000	51-65167-000						
31-04496-000	11-02496-000	91-09898-000			31-M0037-000			32-R3146-000	
31-04496-001	11-02496-001	91-09898-000							
31-04496-002	11-02496-002	91-09898-000							
31-04497-000	11-02497-000	91-09799-000							
31-04498-000	11-02498-000	91-09168-000	51-65826-000		31-M0037-000	33-W6069-000		32-R3146-000	
31-04498-001	11-02498-001	91-09168-000							
31-04498-002	11-02498-002	91-09168-000							
31-04498-003	11-02498-003	91-09168-000							
31-04499-000	11-02499-000	91-09499-000							
31-04500-000	11-02500-000	91-09889-000	51-05873-000	71-08500-000	31-M0032-000			32-R3137-000	
31-04501-000	11-02501-000	91-09889-000							
31-04587-000	11-02587-000	91-09327-000							
31-04595-000	11-02595-000	91-09874-000							
31-04595-001	11-02595-001	91-09874-000							
31-04596-000	11-02596-000	91-09629-000							
31-04600-000	11-02600-000	91-09600-000	51-65344-000						
31-04601-000	11-02601-000	91-09600-000	51-65344-000						
31-04608-000	11-02608-000	91-09612-000							
31-04609-000	11-02609-000	91-09609-000							
31-04611-000	11-02611-000	91-09611-000							
31-04613-000	11-02613-000	91-09613-000							
31-04614-000	11-02614-000	91-09606-000	51-65158-000						
31-04615-000	11-02615-000	91-09606-000	51-65158-000						
31-04617-000	11-02617-000	91-09610-000							
31-04618-000	11-02618-000	91-09624-000							
31-04619-000	11-02619-000	91-09350-000							
31-04621-000	11-02621-000	99-09624-000							
31-04623-000	11-02623-000	99-09624-000							
31-04675-000	11-02675-000	91-09688-000							
31-04682-000	11-02682-000	91-09616-000							
31-04683-000	11-02683-000	91-09718-000			31-M0060-000	33-W6019-000		32-R3043-000	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
31-04689-000	11-02689-000	91-09632-000							
31-04691-000	11-02691-000	91-09652-000	51-65634-000						
31-04692-000	11-02692-000	91-09721-000			31-M0060-000	33-W6019-000		32-R3043-000	
31-04693-000	11-02693-000	91-09617-000	51-65645-000						
31-04694-000	11-02694-000	91-09608-000	51-65632-000						
31-04695-000	11-02695-000	91-09617-000	51-65645-000						
31-04695-000	11-02695-000	91-09617-000	51-65745-000						
31-04696-000	11-02696-000	91-09718-000	51-65606-000		31-M0060-000	33-W6019-000		32-R3043-000	
31-04697-000	11-02697-000	91-09718-000	51-65607-000		31-M0060-000	33-W6019-000		32-R3043-000	
31-04698-000	11-02698-000	91-09698-000							
31-04699-000	11-02699-000	91-09718-000	51-65606-000		31-M0060-000	33-W6019-000		32-R3043-000	
31-04718-000	11-02718-000	91-09718-000	51-65606-000		31-M0060-000	33-W6019-000		32-R3043-000	
31-04720-000	11-02720-000	91-09720-000							
31-04765-000	11-02765-000	91-09649-000							
31-04766-000	11-02766-000	91-09651-000							
31-04791-000	11-02791-000	91-09791-000	51-65982-000						
31-04799-000	11-02799-000	91-09777-050	51-65985-000						
31-04831-000	11-02831-000	91-09838-000	51-65753-000						
31-04836-000	11-02836-000	91-09839-000	51-65754-000						
31-04838-000	11-02838-000	91-09838-000	51-65753-000		31-M0086-000			32-R3074-000	
31-04907-000	11-02907-000	91-09207-000	51-05871-000	71-08907-000	31-M0032-000	33-W6011-000		32-R3153-000	
31-04921-000	11-02921-000	91-09921-000	51-65632-000					32-R3052-000	
31-04923-000	11-02923-000	91-09881-000	51-05880-000	71-07079-000					
31-04923-000	11-02923-000	91-09881-000	51-05883-000	71-08923-000					
31-04924-000	11-02924-000	91-09887-000	51-05881-000	71-08924-000	31-M0690-000	33-W6039-000		32-R3027-000	
31-04925-000	11-02925-000	91-09885-000	51-05878-000	71-07098-000					
31-04925-000	11-02925-000	91-09885-000	51-05881-000	71-08925-000					
31-04927-000	11-02927-000	91-09927-000	51-05872-000	71-08926-000					
31-04929-000	11-02929-000	91-09929-000							
31-04949-000	11-02949-000	91-09425-000	51-65732-000		31-M0105-000			32-R3095-000	
31-04951-000	11-02951-000	91-09432-000							
31-04952-000	11-02952-000	91-09477-000			31-M0096-000	33-W6030-000		32-R3091-000	
31-04953-000	11-02953-000	91-09449-000							
31-04954-000	11-02954-000	91-09259-000	51-65731-000						
31-04955-000	11-02955-000	91-09456-000							
31-04955-001	11-02955-001	91-09456-000							
31-04979-000	11-02979-000	91-09404-000							
38-03686-000	11-01686-000	98-09686-000	51-65400-000		31-M0079-000			32-R3076-000	
38-03686-000	11-01686-000	98-09686-000	51-65452-000		31-M0079-000			32-R3076-000	
38-03803-000	11-01803-000	98-09803-000			31-M0039-000			32-R3031-000	
38-03817-000	11-01817-000	98-09817-000	51-65776-000		31-M0039-000			32-R3031-000	
38-03957-000	11-01957-000	98-09298-000							
38-03958-000	11-01958-000	98-09298-000							
38-04197-000	11-02197-000	98-09790-000	51-65778-000						
38-04215-000	11-02215-000	98-09817-000			31-M0039-000			32-R3031-000	
38-04298-000	11-02298-000	98-09298-000							
38-04331-000	11-02331-000	98-09331-000							
38-04332-000	11-02332-000	98-09331-000							
38-04333-000	11-02333-000	98-09331-000							
38-04334-000	11-02334-000	98-09331-000							
38-04341-000	11-02341-000	98-09298-000							
38-04344-000	11-02344-000	98-09298-000							
38-04690-000	11-02690-000	98-09647-000							
38-04789-000	11-02789-000	98-09081-000							
39-03166-000	11-01166-000	99-09161-000							
39-03167-000	11-01167-000	99-09161-000							
39-03168-000	11-01168-000	99-09351-000							
39-03282-000	11-01282-000	99-09313-000							
39-03287-000	11-01287-000	99-09326-000			31-M0016-000	33-W6009-000			
39-03332-000	11-01332-000	99-09695-000							
39-03686-000	11-01686-000	99-09686-000	51-65400-000		31-M0079-000			32-R3076-000	
39-03686-000	11-01686-000	99-09686-000	51-65452-000		31-M0079-000			32-R3076-000	
39-03795-000	11-01795-000	99-09795-000			31-M0101-000			32-R3092-000	
39-03803-000	11-01803-000	99-09803-000			31-M0039-000			32-R3031-000	

Engine types, descriptions, products, product design, manufacturers vehicle etc. are only given for the reference. ©Yenmak Otomotiv A.Ş. 2018

Piston+Ring Reference No	Piston Reference No	Ring Reference No	Cylinder Liner Reference No	Kit Reference No	Main Bearing	Trust Washer	Rod Bushing	Conrod Bearing	Camshaft Bushings
39-03956-000	11-01956-000	99-09313-000							
39-03957-000	11-01957-000	99-09298-000							
39-03958-000	11-01958-000	99-09298-000							
39-03977-000	11-01977-000	99-09985-000							
39-03985-000	11-01985-000	99-09985-000	51-65498-000						
39-04101-000	11-02101-000	99-09929-000							
39-04105-000	11-02105-000	99-09873-000							
39-04113-000	11-02113-000	99-09096-000	51-65886-000						
39-04114-000	11-02114-000	99-09097-000							
39-04178-000	11-02178-000	99-09102-000			31-M0157-000	33-W6050-000		32-R3165-000	
39-04179-000	11-02179-000	99-09161-000							
39-04197-000	11-02197-000	99-09790-000	51-65778-000						
39-04200-000	11-02200-000	99-09880-000							
39-04230-000	11-02230-000	99-09230-000							
39-04233-000	11-02233-000	99-09822-000							
39-04234-000	11-02234-000	99-09823-000							
39-04257-000	11-02257-000	99-09716-000							
39-04259-000	11-02259-000	99-09795-000							
39-04259-001	11-02259-001	99-09795-000							
39-04295-000	11-02295-000	99-09327-000							
39-04298-000	11-02298-000	99-09298-000							
39-04316-000	11-02316-000	99-09303-000				33-W6059-000			
39-04329-000	11-02329-000	99-09294-000							
39-04330-000	11-02330-000	99-09330-000							
39-04331-000	11-02331-000	99-09331-000							
39-04332-000	11-02332-000	99-09331-000							
39-04333-000	11-02333-000	99-09331-000							
39-04334-000	11-02334-000	99-09331-000							
39-04335-000	11-02335-000	99-09335-000							
39-04339-000	11-02339-000	99-09313-000							
39-04341-000	11-02341-000	99-09298-000							
39-04344-000	11-02344-000	99-09298-000							
39-04385-000	11-02385-000	99-09389-000	51-35721-000	71-98385-000					
39-04386-000	11-02386-000	99-09389-000	51-35720-000	71-98386-000					
39-04386-000	11-02386-000	99-09389-000	51-35721-000	71-98387-000					
39-04391-000	11-02391-000	99-09976-000							
39-04597-000	11-02597-000	99-09624-000							
39-04598-000	11-02598-000	99-09624-000							
39-04616-000	11-02616-000	99-09601-000							
39-04617-000	11-02617-000	99-09610-000							
39-04618-000	11-02618-000	99-09624-000							
39-04676-000	11-02676-000	99-09644-000							
39-04684-000	11-02684-000	99-09697-000							
39-04685-000	11-02685-000	99-09642-000							
39-04686-000	11-02686-000	99-09642-000							
39-04687-000	11-02687-000	99-09697-000							
39-04688-000	11-02688-000	99-09644-000							
39-04689-000	11-02689-000	99-09632-000							
39-04690-000	11-02690-000	99-09647-000							
39-04698-000	11-02698-000	99-09698-000							
39-04720-000	11-02720-000	99-09720-000							
39-04760-000	11-02760-000	99-09642-000							
39-04761-000	11-02761-000	99-09642-000							
39-04924-000	11-02924-000	99-09887-000	51-05881-000	71-98924-000	31-M0690-000	33-W6039-000		32-R3027-000	
39-04950-000	11-02950-000	99-09795-000							
39-04951-000	11-02951-000	99-09432-000							

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Tel : +90 212 267 06 13
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www.yenmak.com.tr

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