

THE **POWER**
IN YOUR
ENGINE



2018
2019
2020

PASSENGER CARS
LIGHT COMMERCIAL VEHICLES

OTOMOBİL
HAFIF TİCARİ ARAÇLAR

ZENMAX
ENGINE PARTS



IMPORTANT INFORMATION

The catalogue has been compiled for the aim of giving general information. Our firm can not be held responsible 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.

It is certainly prohibited to copy, imitate an reproduce this catalogue. Excerpts from the catalogue will be subject to our prior written approval and the source of the related excerpts must be clearly stated.

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.



CONTENTS

Production Facilities	II
Packaging	IV
Quality Certifications	VI
Steel Piston	VIII
Monosteel Piston	IX
Technical Definitions	X
Production Plan	1-419
Product Indexes	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		





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 Office & 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



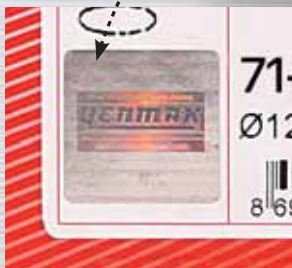
Since 2003, Yenmak products can be packed according to the format shown below and taken place in the market. Find detailed information in the below about packaging



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



Traceability number

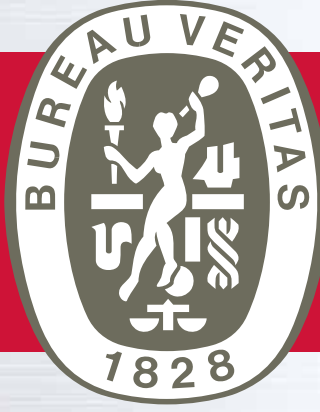


Integrated 3D safety hologram on the box for the aim of ensuring product safety.



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

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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



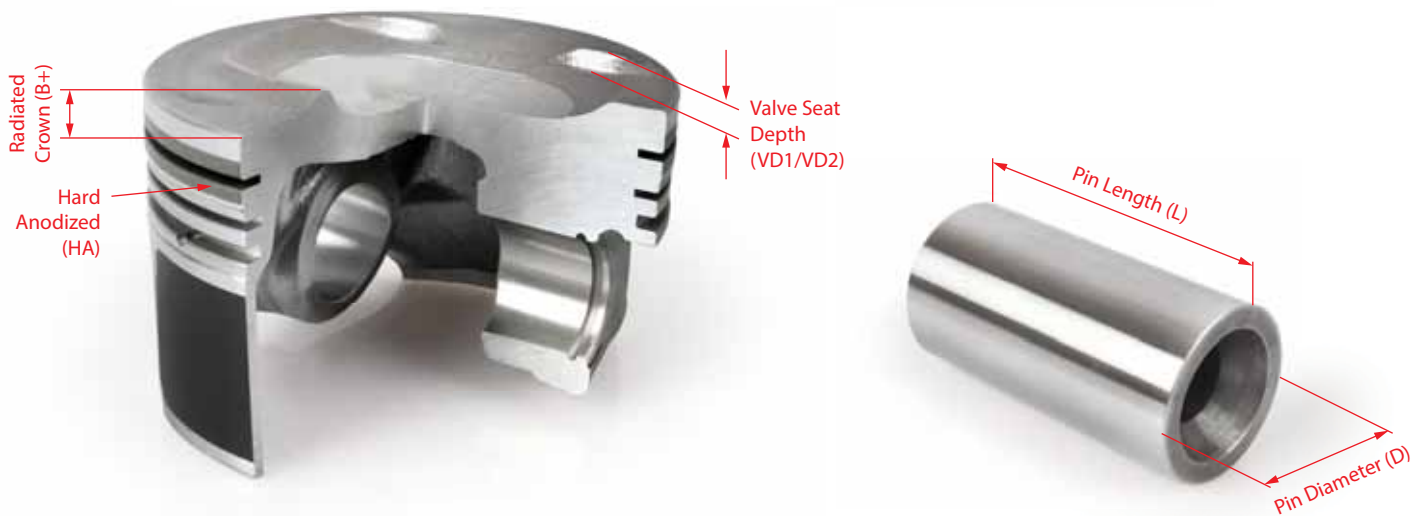
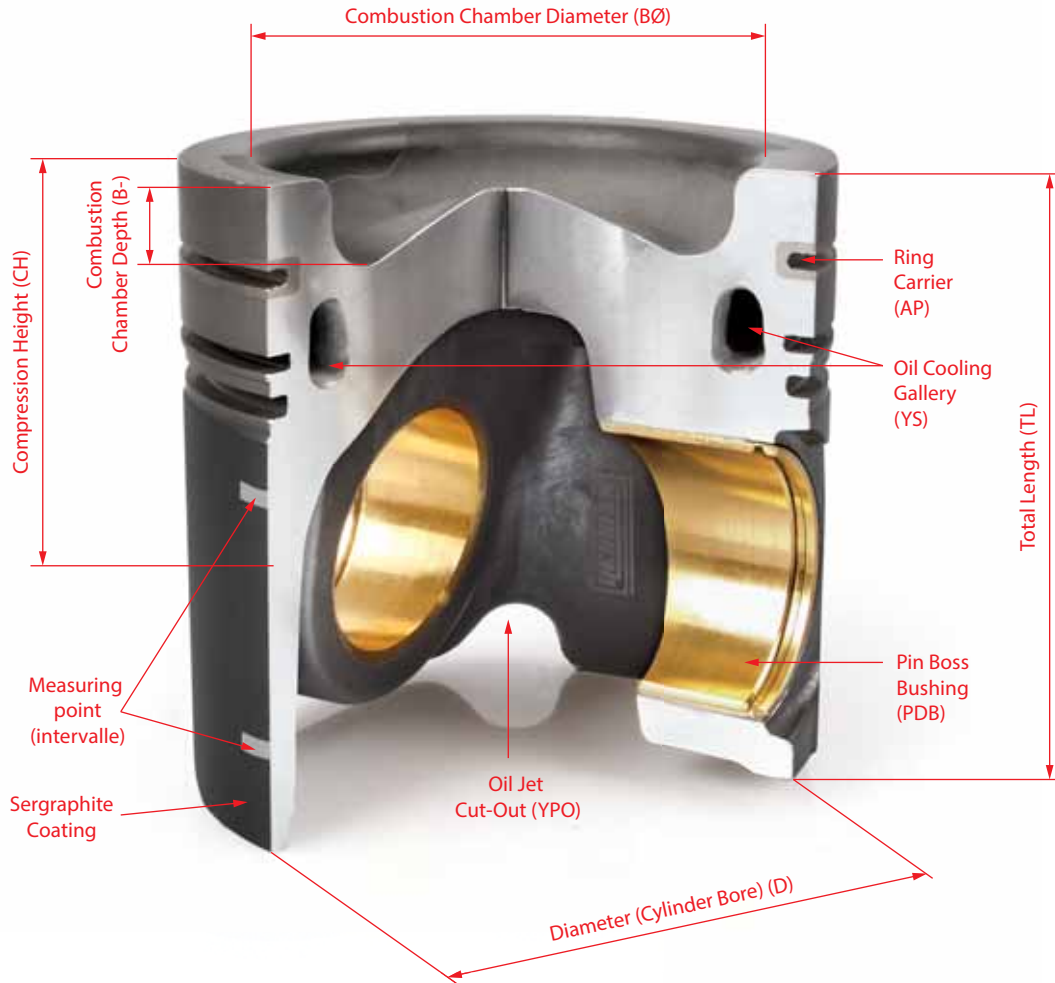
Monosteel piston has maximum load carrying capability and minimum combustion chamber deformation.

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

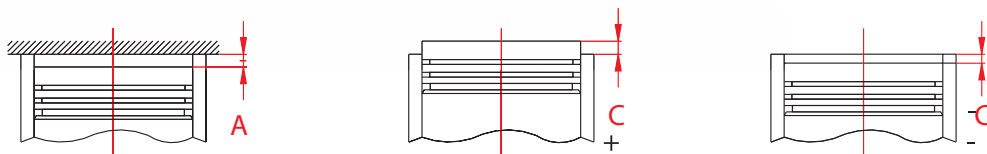
In Monosteel pistons, the cooling groove is near to combustion area and this results as an effective cooling. The large cooling gallery provides much more effective cooling of combustion chamber and the ring groove areas..

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 exhaust 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 RING 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 = Ferroxid 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 high 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 method. 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 abrasion.

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°), 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 methods:

- Hard chrome coating
- Cellular chrome coating

Hard chrome coating; after rings are coated with chrome, rings grinded 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 abrasion. 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		TI-FU	= Taper Faced Keystone Ring with Internal bevel on bottom
	D-IF	= Rectangular Ring with Internal bevel on top		TK-IW	= Taper Faced Keystone Ring with Internal step on top
	D-IFU	= Rectangular Ring with Internal bevel on bottom		TK-IWU	= Taper Faced Keystone Ring with Internal step on bottom
	D-IW	= Rectangular Ring with Internal Step on top		N	= Napier Ring
	D-IWU	= Rectangular Ring with Internal Step on bottom		N-IF	= Napier Ring with Internal bevel on top
	K	= Taper Faced Ring		N-IFU	= Napier Ring with Internal bevel on bottom
	K-IF	= Taper Faced Ring with Internal bevel on top		N-IW	= Napier Ring with Internal Step on top
	K-IFU	= Taper Faced Ring with Internal bevel on bottom		N-IWU	= Napier Ring with Internal Step on bottom
	K-IW	= Taper Faced Ring with Internal step on top		TN	= Taper Faced Napier Ring
	K-IWU	= Taper Faced Ring with Internal step on bottom		TN-IF	= Taper Faced Napier Ring with Internal bevel on top
	TT	= Half Keystone Ring		TN-IFU	= Taper Faced Napier Ring with Internal bevel on bottom
	TT-IF	= Half Keystone Ring with Internal bevel on Top		TN-IW	= Taper Faced Napier Ring with Internal step on top
	TT-IFU	= Half Keystone Ring with Internal bevel on bottom		TN-IWU	= Taper Faced Napier Ring with Internal step on bottom
	TT-IW	= Half Keystone Ring with Internal step on top		SC	= Slotted Oil Control Ring
	TT-IWU	= Half Keystone Ring with Internal step on bottom		DC	= Bevelled Edge Oil Control Ring
	T	= Keystone Ring		DB	= Double Bevelled Edge Oil Control Ring
	T-IF	= Keystone Ring with Internal bevel on Top		ES	= Slotted Oil Control Ring with Expanderspring
	T-IFU	= Keystone Ring with Internal bevel on bottom		SY	= Coil Spring Loaded Slotted Oil Control Ring
	T-IW	= Keystone Ring with Internal step on top		DY	= Coil Spring Loaded Bevelled Edge Oil Control Ring
	T-IWU	= Keystone Ring with Internal step on bottom		PS	= Coil Spring Loaded Double Bevelled Edge Oil Control Ring
	TK	= Taper Faced Keystone Ring		VF	= Multi-piece Steel-rail Oil Control
	TK-IF	= Taper Faced Keystone Ring with Internal bevel on top		UB	= U-flex Ring (Multi-piece)
	SDR	= Steel Oil Control Rings with R-Shaped Groove		SDV	= Steel Oil Control Rings with V-Shaped Groove
	X	= Ring Thickness (mm)		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 damaged 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 until 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.

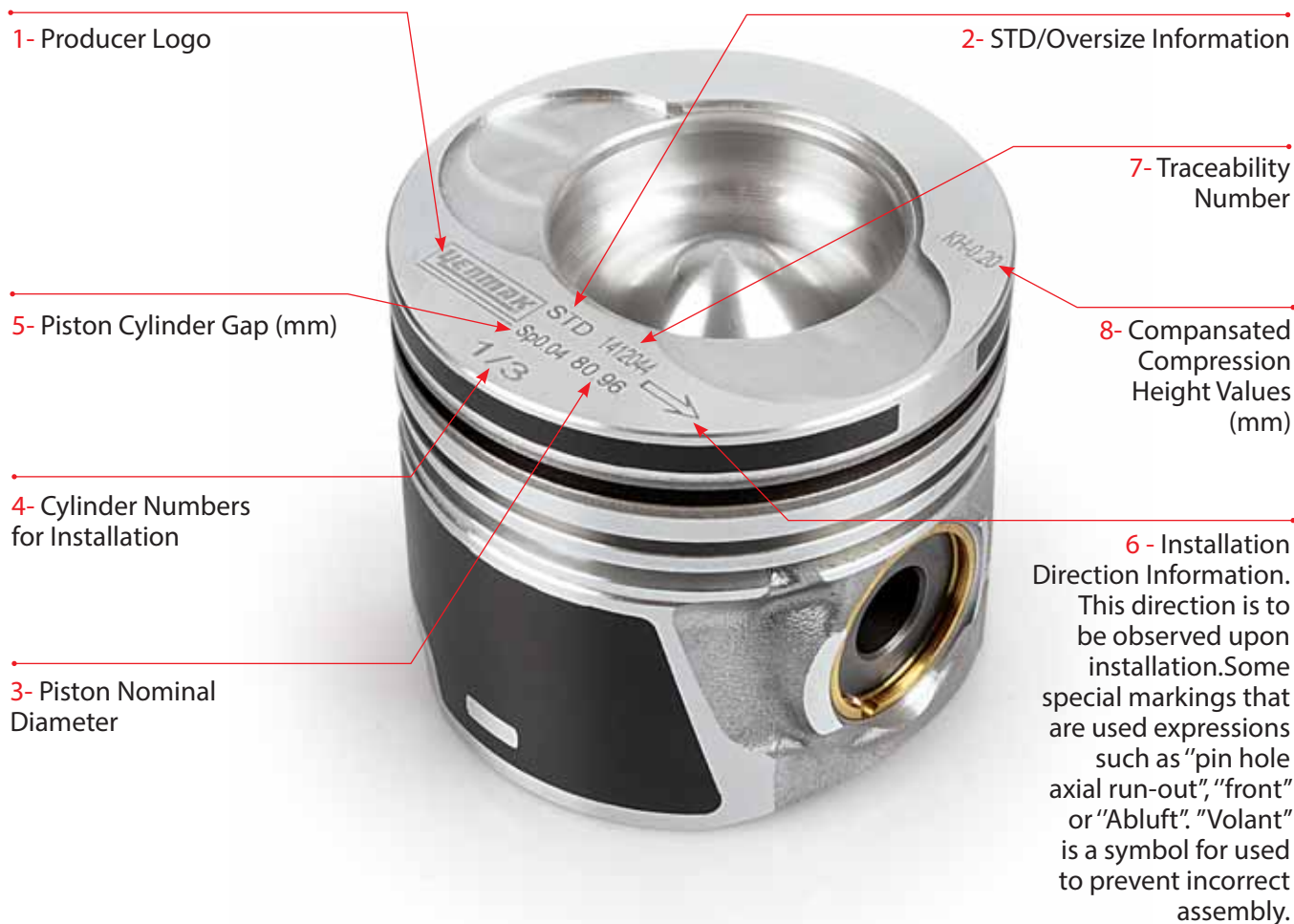
10- Controlled of piston rods linearity is very important for prevent serious problems. Before assembly, linearity of the connecting rods must be recontrolled again with appropriate equipments.

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



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 COMPLETE 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

Liner reference number ← **51-05513-000** → 000 = STD / Liner
050 = Oversize + 0,50 mm / Liner

Liner Code With O-Ring ← **52-**

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

12 - KIT, SET REFERENCE DEFINATIONS

Kit Assembly Reference: Piston + Pin + Ring + Liner

Kit Assembly reference definitions ← **71-07513-000** → 000 = STD / Kit
050 = +0,50 mm Oversize / Kit

Differences between piston ring types and coatings. ← **71-8**
71-9

Kit Assembly Code With O-Ring ← **72-**

OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13 - RING REFERENCE NUMBER

Ring Reference Number ← **91-09513-000** → 000 = STD/Ring
050 = Oversize + 0,50 mm / Ring

Differences between piston ring types and coatings. ← **98-**
99-

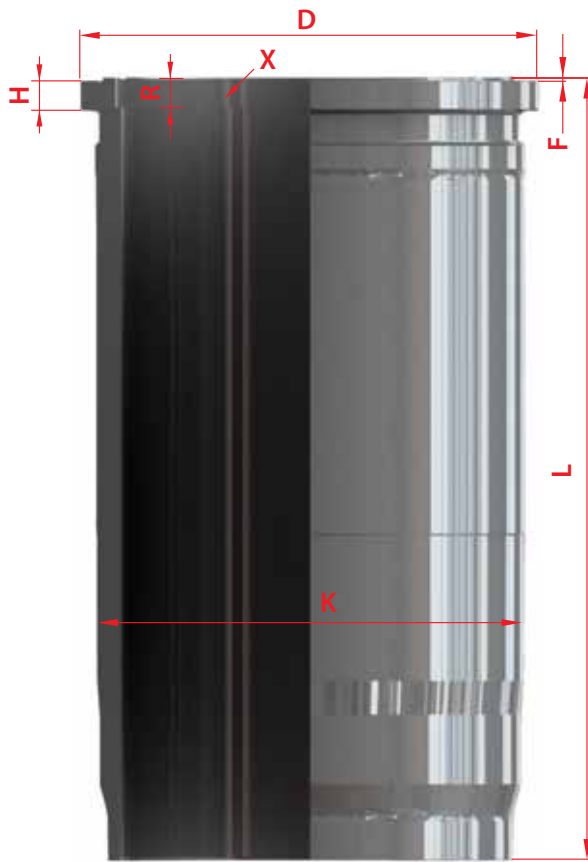
OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - SEALING RING REFERANS NUMARASI

Sealing Ring reference number ← **55-50701-000**

TECHNICAL DEFINITIONS

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)

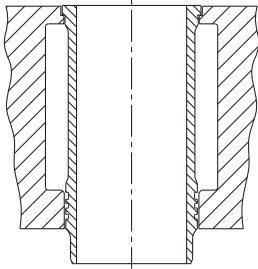


Figure - 1

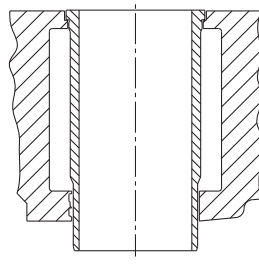


Figure - 2

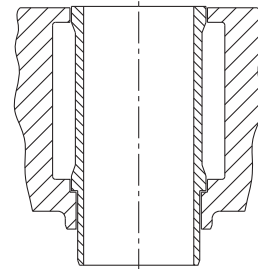


Figure - 3

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)

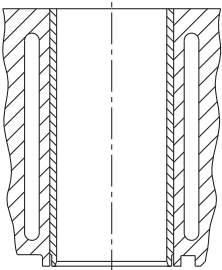


Figure - 4

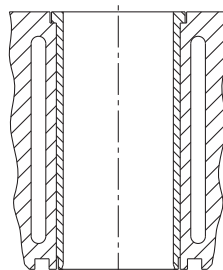


Figure - 5

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.

TECHNICAL DEFINITIONS

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.

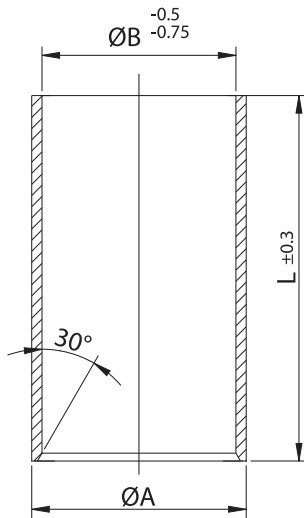


Figure - 6

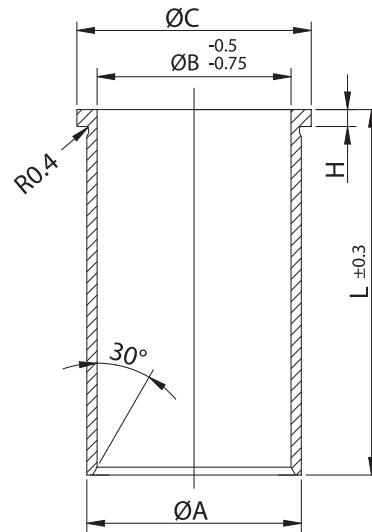


Figure - 7

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 inefficient 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 +0.015 mm. The rated dimension 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 ₁ A	+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

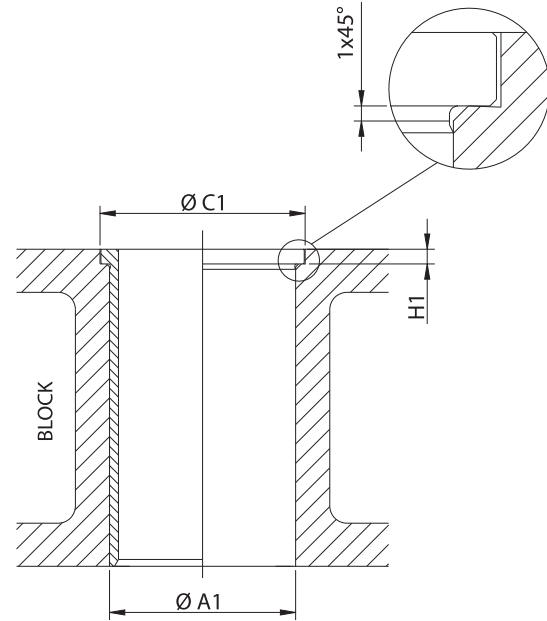


Figure - 9

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.

TECHNICAL DEFINITIONS

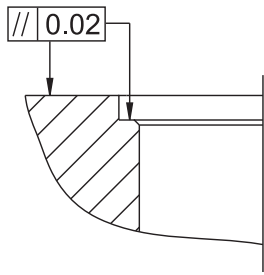


Figure - 10

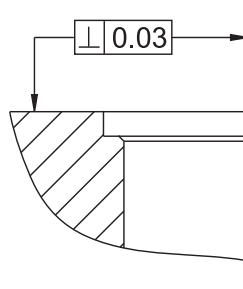


Figure - 11

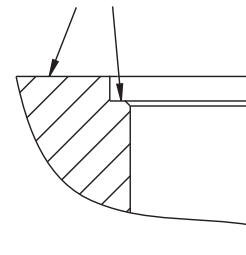


Figure - 12

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.

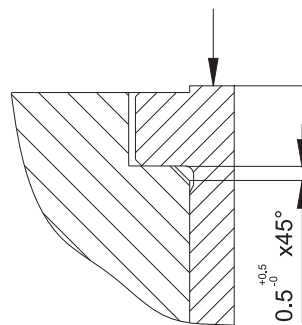


Figure - 14

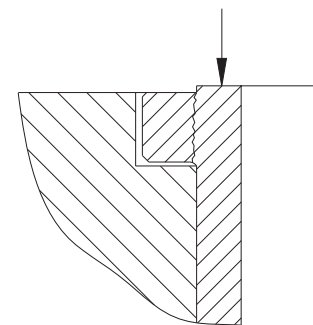


Figure - 15

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

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

İÇİNDEKİLER

Üretim Tesislerimiz	II
Paketleme	IV
Kalite Sertifikalarımız	VI
Çift Parça Çelik Pistonlar	VIII
Tek Parça Çelik Pistonlar	IX
Teknik Tanımlamalar	X
Üretim Programı	1-419
Ürün İndexleri	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		





Yenmak, 1965 yılında Kahveciođlu ailesi tarafından küçük bir atölye olarak Konya'da kuruldu. Geçen yıllar içinde YENMAK kendisini sürekli olarak yenileyerek ve geliştirerek yurt içi ve yurtdışında bağımsız motor parça tedarikçisi olarak dünya çapındaki büyük tedarikçilerden biri olmuştur.

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

Siz değerli müşterilerimiz için uzun soluklu bir iş ortađı 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.



Genel Merkez & Lojistik



Piston & Pim Fabrikası



Motor Gömleđi Fabrikası

YENMAK

MOTOR PARÇALARI



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

Ambalaja ait detayları bulacağınız bilgiler aşağıda yer almaktadır:



Özel ağız kapamalarımız sayesinde ürüne ilk ulaşan siz olun.



İzlenebilirlik numarası

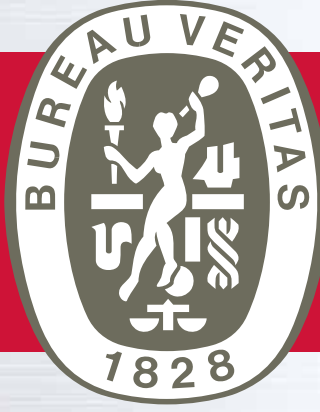


Ürün güvenliğinin sağlanması amacı ile kutu üzerine entegre halde bulunan 3D güvenlik hologramı.



Ürün güvenliğinin sağlanması amacı ile uygulanan kutu altı güvenlik etiketi.

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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 artırır.
- 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 CO₂ 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 PARA ELİK PİSTONLAR



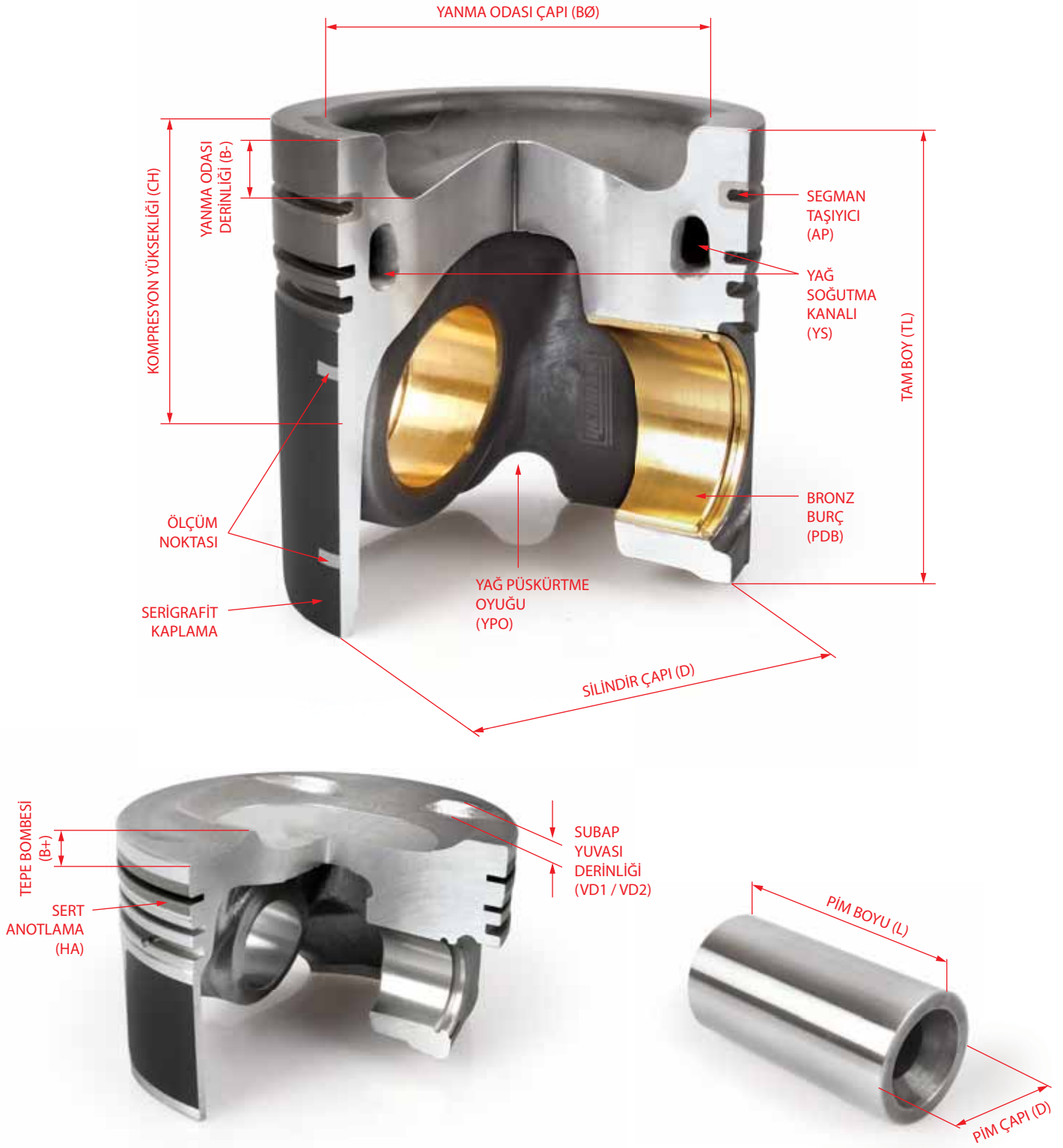
Maksimum yük taşıma kapasitesi ve minimum yanma odası deformasyonuna sahiptir.

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

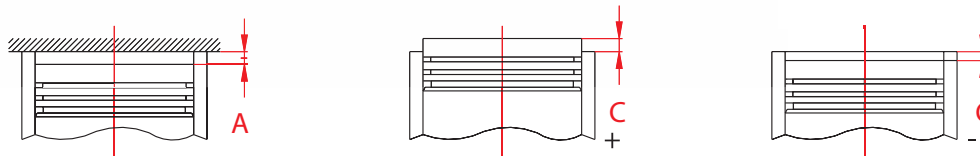
Monosteel pistonlarda, soğutma kanalı pistonun üst kısmına daha yakındır, bu da daha etkin bir soğutmanın gerçekleşmesini sağlar. Geniş soğutma kanalı sayesinde yanma odası ve segman set bölgesinin çok daha verimli soğutulması sağlanmıştır.

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 takdirde bu çizilmeler ilerde çatlamların 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 kullanılan 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 = Ferrosit 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

TEKNİK TANIMLAMALAR

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 gerçekleştirilebilir.

Molibden, yüksek erime noktası(2620 C⁰), 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, kırılğan 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 segmanın 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 kırılma direncini azaltır. Motor ömrünü uzatır.

Cdc (Krom Elmas Kaplama)

Bu kaplama tipi Euro 4 ve dizel motorların tepe segmanlarında kullanılmaktadır. Esnek ve alışımlı 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		TI-IFU	= İç kenar alt yüzey pahlı çift taraflı trapez konik segman
	D-IF	= İç kenar üst yüzey pahlı dikdörtgen segman		TK-IW	= İç kenar üst yüzey kademeli çift taraflı trapez konik segman
	D-IFU	= İç kenar alt yüzey pahlı dikdörtgen segman		TK-IWU	= İç kenar alt yüzey kademeli çift taraflı trapez konik segman
	D-IW	= İç kenar üst yüzey kademeli dikdörtgen segman		N	= Burun sıyrıcı segman
	D-IWU	= İç kenar alt yüzey kademeli dikdörtgen segman		N-IF	= İç kenar üst yüzey pahlı burun sıyrıcı segman
	K	= Konik segman		N-IFU	= İç kenar alt yüzey pahlı burun sıyrıcı segman
	K-IF	= İç kenar üst yüzey pahlı konik segman		N-IW	= İç kenar üst yüzey kademeli burun sıyrıcı segman
	K-IFU	= İç kenar alt yüzey pahlı konik segman		N-IWU	= İç kenar alt yüzey kademeli burun sıyrıcı
	K-IW	= İç kenar üst yüzey kademeli konik segman		TN	= Burun sıyrıcı konik segman
	K-IWU	= İç kenar alt yüzey kademeli konik segman		TN-IF	= İç kenar üst yüzey pahlı burun sıyrıcı konik segman
	TT	= Tek taraflı trapez segman		TN-IFU	= İç kenar alt yüzey pahlı burun sıyrıcı konik segman
	TT-IF	= İç kenar üst yüzey pahlı tek taraflı trapez segman		TN-IW	= İç kenar üst yüzey kademeli burun sıyrıcı konik segman
	TT-IFU	= İç kenar alt yüzey pahlı tek taraflı trapez segman		TN-IWU	= İç kenar alt yüzey kademeli burun sıyrıcı konik segman
	TT-IW	= İç kenar üst yüzey kademeli tek taraflı trapez segman		SC	= Yarıklı yağ kontrol segmanı
	TT-IWU	= İç kenar alt yüzey kademeli tek taraflı trapez segman		DC	= Pahlı yağ kontrol segmanı
	T	= Çift taraflı trapez segman		DB	= Çift pahlı yağ kontrol segmanı
	T-IF	= İç kenar üst yüzey pahlı çift taraflı trapez segman		ES	= Yaprak yaylı yarıklı yağ kontrol segmanı
	T-IFU	= İç kenar alt yüzey pahlı çift taraflı trapez segman		SY	= Spiral yaylı yarıklı yağ kontrol segmanı
	T-IW	= İç kenar üst yüzey kademeli çift taraflı trapez segman		DY	= Spiral yaylı kenarları pahlı yağ kontrol segmanı
	T-IWU	= İç kenar alt yüzey kademeli çift taraflı trapez segman		PS	= Spiral yaylı kenarları çift pahlı yağ kontrol segmanı
	TK	= Çift taraflı trapez konik segman		VF	= Çelik bantlı VF yaylı yağ kontrol segmanı
	TK-IF	= İç kenar üst yüzey pahlı çift taraflı trapez konik segman		UB	= Çelik bantlı U tipi yağ kontrol segmanı
	SDR	= Spiral yaylı V tipi kanallı çelik yağ kontrol segmanı		SDV	= Spiral yaylı V tipi kanallı çelik yağ kontrol segmanı
	X	= Segman kalınlığı (mm)		DKS	= Düz konik silindir uçlu yağ kontrol segmanı

GENEL PİSTON MONTAJ TALİMATI

1- Pistonun monte edileceği silindir iç yüzeyinde baklavamsı 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, piston ve pime zarar vermeyecek şekilde uygun metodlarla çıkarılmalıdır. Piston pimleri ilgili pistonlara ölçüsel uygunlukları sağlanacak şekilde eşleştirilerek monte edilmiştir, rastgele değiştirilmemelidir.

4- Segmanların piston takılması esnasında segmanları deforme etmeyecek ve piston 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 doğrusalığının kontrolü, doğabilecek çok ciddi sorunların önüne geçilmesi açısından önemlidir. Biyel kolunun doğrusalığı, montaj öncesinde uygun cihazlarla yeniden kontrol edilmelidir.

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

TEKNİK TANIMLAMALAR

8- PİSTON MARKALAMA VE KODLAR



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

1513 000

YENİ REFERANS NUMARASI

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

3513 000

YENİ REFERANS NUMARASI

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

Gömlek referans
numarası

51-05513-000

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

O-ringli Gömlek Kodu

52-

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

12 - KİT, SET, REFERANS TANIMLAMALARI

KİT Referans : Piston + Pim + Segman + Gömlek

KİT Referans
numarası

71-07513-000

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

Segman farklılıklarına
göre değişen Kit kodları

71-8

71-9

O-ringli Kit Kodu

72-

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

Segman
referans numarası

91-09513-000

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

Segman tip ve
kaplamalarındaki
farklılıklar.

98-

99-

ESKİ REFERANS NUMARASI	YENİ REFERANS NUMARASI
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - O-RİNG REFERANS NUMARASI

O-Ring
referans numarası

55-50701-000

TEKNİK TANIMLAMALAR

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 Tanımı:

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:

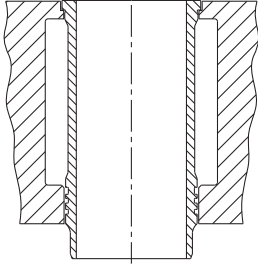
Takıldıkları silindir blokunda dıştan su ile soğutulan gömleklerdir.

3 ana grupta toplanır:

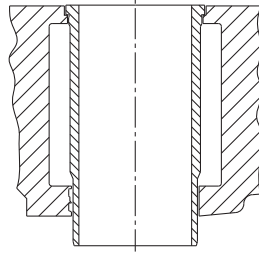
a- Flanşlı ve Kanallı: Silindir blokuna, üstten flanşla oturan, alt kısmında motor soğutma suyunun sızmasını sağlamak için conta kanalları bulunan gömleklerdir. (Şekil-1)

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

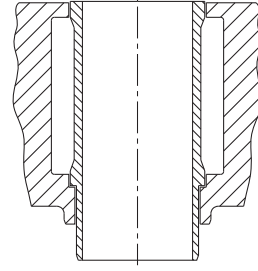
c- Çift Flanşlı: Silindir blokuna, motor soğutma suyunu kaçırmayacak şekilde üstten ve alttan flanşlı ve contalı olarak tespit edilen silindir gömleklerdir. (Şekil-3)



Şekil - 1



Şekil - 2



Şekil - 3

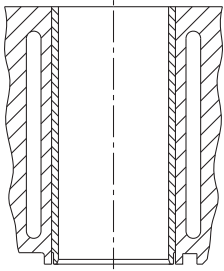
Kuru Silindir Gömlekleri:

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

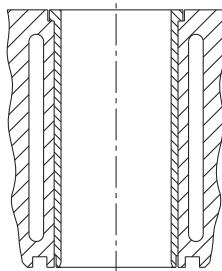
Şekil yönünden 2 ana sınıfa incelenebilir:

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 gömlelerde pistonun takılması halinde aksel yönde sık sık görülmesi muhtemel olan kaymalara flanşlı gömlelerde rastlanmaz. Bu da flanşın sağladığı bir avantajdır.

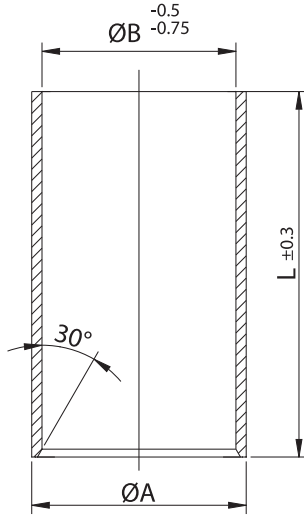
Gömlekler, silindire preslenmeden önce mutlaka silindirler aşağıdaki listede gömlek dış çapı için (A) gösterilen Nominal ölçülere uygun olarak ya taşlanır veya hassas tornalama ve honlama işlemine tabi tutulur.

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.

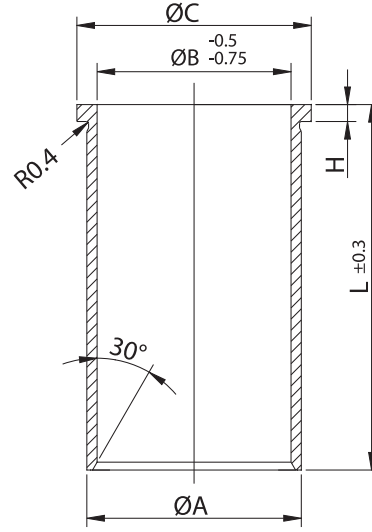
Flanşlı kuru gömleği silindir bloğuna presle monte ederken, flanşın kopmasını önlemek maksadı ile, blokta flanş için işlenen deliğin, flanşın dış çapından (C) daha büyük olarak işlenmesi gerekir

TEKNİK TANIMLAMALAR

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 takdirde gömlek flanşının kopması kaçınılmazdır.

Yeni gömlekler monte edilmeden önce motor blokundaki silindirler özenle temizlenmeli ve ölçüleri hassas olarak kontrol edilmelidir. Ovallık 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.

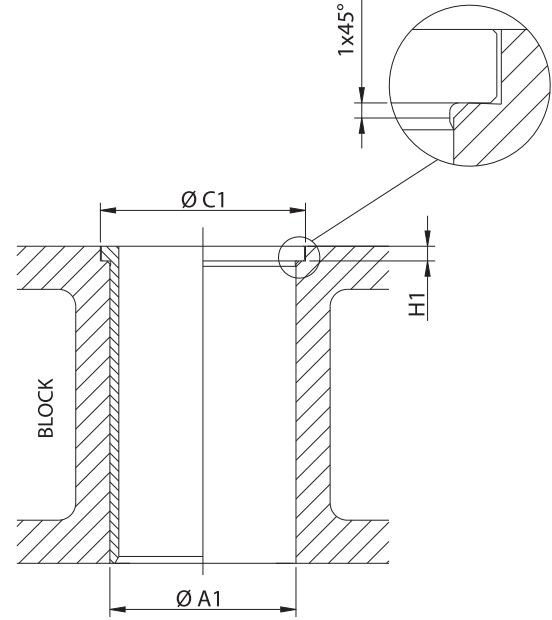
Kuru silindir gömleklerinin presle basılmalarında 3000-5000 kg lık bir basınç yeterlidir. Montaj esnasında yağlama maddesi olarak katı bir madde kullanılacak olursa daha sonra ısıdan dolayı bu madde koklaşacak ve ısı transferini zorlaştıracaktır. Presle yapılan montajdan sonra silindir blokunu conta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

Silindir bloğunun conta yüzeyini işleme tabi tutmak gerektiği takdirde, 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 ₁ A	+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.

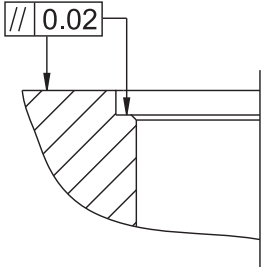
Motor blokunda silindirlerin temas yerleri kireç çamur ve diğer kirli maddelerden özenle temizlenmelidir. Temizlik esnasında çizilmeye yol açacak raspa, keski gibi aletler kullanılmamalıdır. Bu işlem için elverişli araç çelik telli fırçadır. Pas kireç tabakaları ile silindirde sabitleşen gömleklerin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

Gömlek flanş alt yüzeyinin oturduğu yüzey bloku yüzeyine paralel 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)

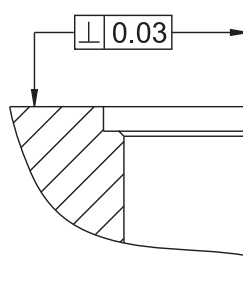
Gömlek flanş alt yüzeyindeki radyüsün (d) silindirdeki flanş oturma yüzeyi (a) daki köşeye oturmasını önlemek için silindir çapını (c) geçiş yaptığı noktada 0.5-1.0 mm. 45° lik bir radyüs verilmelidir.

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

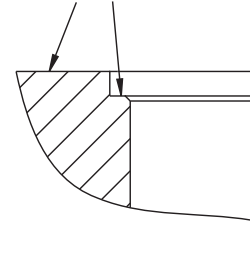
TEKNİK TANIMLAMALAR



Şekil 10

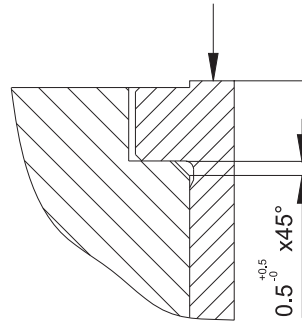


Şekil 11

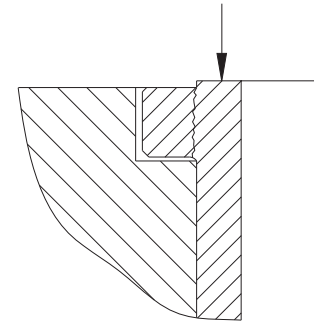


Şekil 12

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, flaş oturma yüzeyine yerleştirilmesi tavsiye edilir. Flaş 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 dayanıklı, 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 yalnızca 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 kazanmamalıdır.

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 doldurularak 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)
 <p>11-02385-000</p> <p>CH 51,850</p> <p>VD1 0,550</p> <p>B- 19,500</p> <p>BØ 43,900</p> <p>TL 91,850</p>		8	14	91-09389-000	16	17	18	19				
 <p>31,00x76,00</p>		15		99-09389-000	16			39-04385-000				
Isuzu ve Opel ile Ortak Motor		27										
 <p>K=95,00</p> <p>L=181,00</p> <p>H=0,90</p> <p>D=101,00</p>		22	26				51-35721-000	71-08385-000	71-98385-000			
 <p>K=120,00</p> <p>L=229,00</p> <p>H+F=9,00+1,10</p> <p>D=128,50</p>		22	26				51-06067-000	71-07152-000	72-07152-000			
							55-50613-000	52-06067-000				
							2 FFM 112,00x3,00					

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

СОДЕРЖАНИЕ

Производственные мощности	II
Упаковка	IV
Сертификат качества	VI
Стальной Поршень	VIII
Технические Определения	X
Производственная программа	1-419
Индексы продукции	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		





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

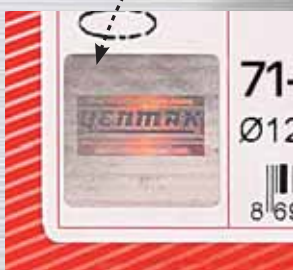


Начиная с 2003 года, продукция компании Yenmak упаковывается и поставляется на рынок в представленном ниже виде. Сведения, содержащие подробную информацию об упаковке, представлены ниже:

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



Номер отслеживаемости

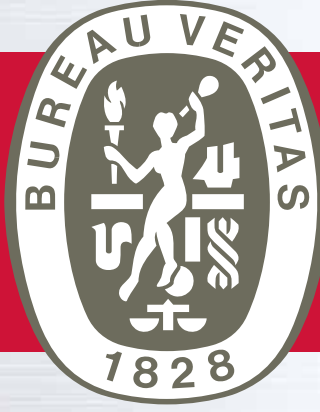


Защитная 3D-голограмма, которая интегрирована в поверхность упаковки с целью обеспечения защиты продукции.



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

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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.

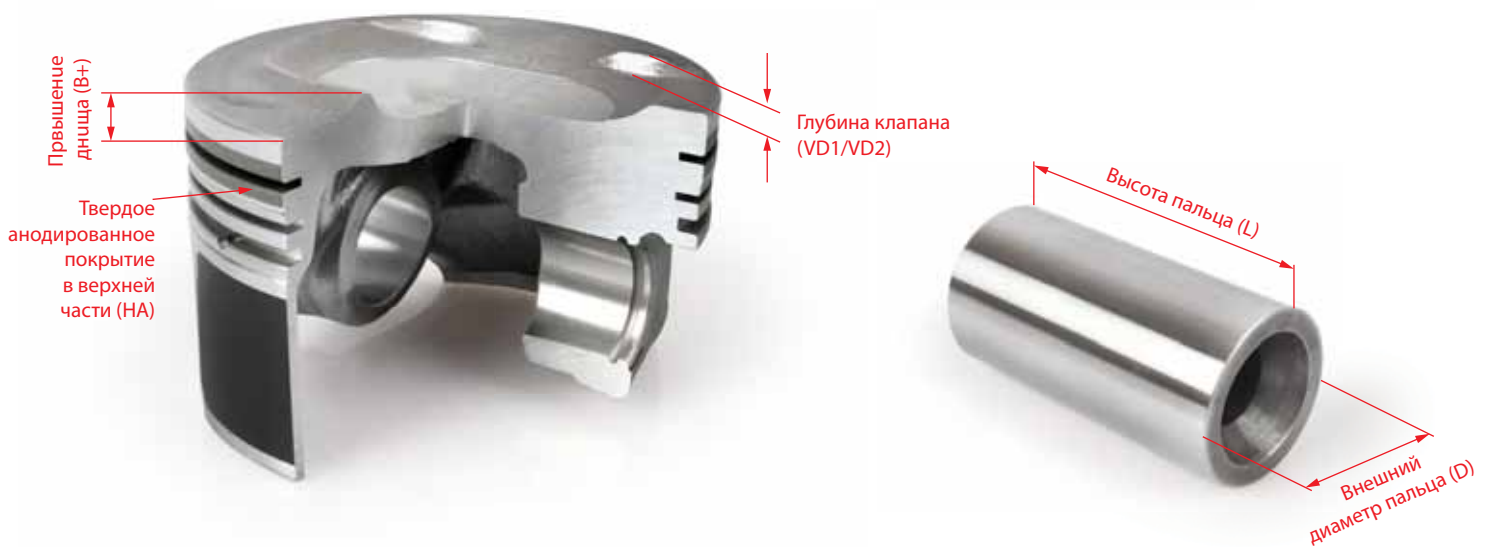
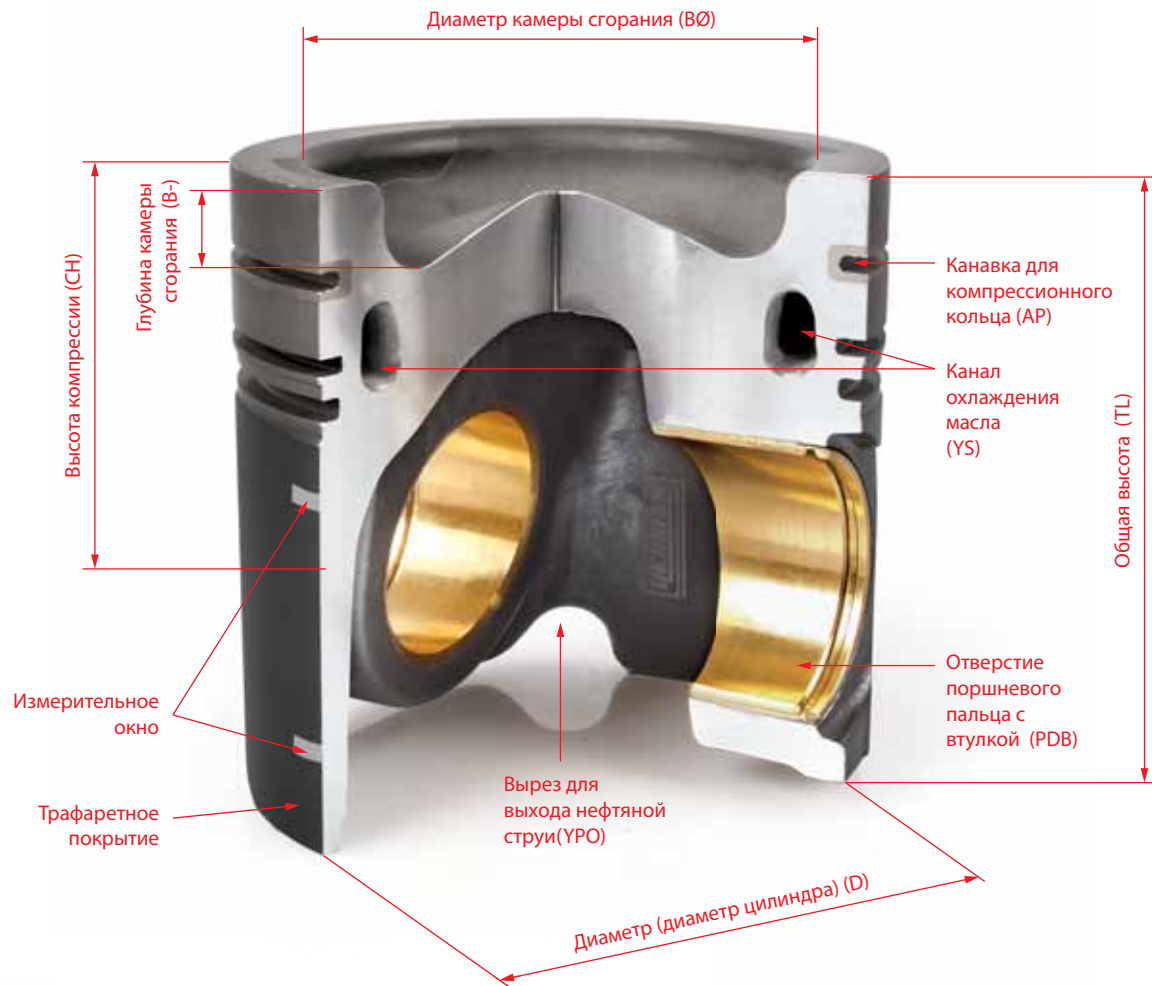
Составные стальные поршни используются:

- 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,

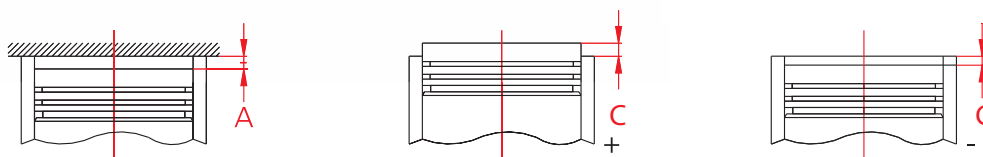
Преимущества составных стальных поршней:

- 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 CO₂ 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

Ск (хромо-керамическое покрытие)

Хромо-керамическое покрытие (СК) 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 СК обеспечивает высокое качество и производительность.

Отличия покрытия Ск от покрытия твердым хромом:

- Более высокая износостойкость
- Более высокая точка плавления
- Более высокая твердость и интенсивность трещин

Благодаря вышеуказанным преимуществам покрытия СК 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 диссоциируя 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 С°), 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 чугуновых колец. Увеличивает срок службы двигателя.




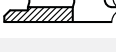



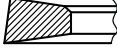

Cdc (Хромо-алмазное покрытие)

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		TI-IFU = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью со скошенной выточкой на нижней поверхности внутреннего края
	D-IF = Прямоугольное в поперечном сечении кольцо со скошенной выточкой на верхней 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
	D-IFU = Прямоугольное в поперечном сечении кольцо со скошенной выточкой на нижней 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
	D-IW = Прямоугольное в поперечном сечении кольцо с прямоугольной выточкой на верхней поверхности внутреннего края		N = Скребок кольцо
	D-IWU = Прямоугольное в поперечном сечении кольцо с прямоугольной выточкой на нижней поверхности внутреннего края		N-IF = Скребок кольцо со скошенной выточкой на верхней поверхности внутреннего края
	K = Кольцо с конической рабочей поверхностью		N-IFU = Скребок кольцо со скошенной выточкой на нижней поверхности внутреннего края
	K-IF = Кольцо с конической рабочей поверхностью со скошенной выточкой на верхней поверхности внутреннего края		N-IW = Скребок кольцо с прямоугольной выточкой на верхней поверхности внутреннего края
	K-IFU = Кольцо с конической рабочей поверхностью со скошенной выточкой на нижней поверхности внутреннего края		N-IWU = Скребок кольцо с прямоугольной выточкой на нижней поверхности внутреннего края
	K-IW = Кольцо с конической рабочей поверхностью с прямоугольной выточкой на верхней поверхности внутреннего края		TN = Скребок кольцо с конической рабочей поверхностью
	K-IWU = Кольцо с конической рабочей поверхностью с прямоугольной выточкой на нижней поверхности внутреннего края		TN-IF = Скребок кольцо с конической рабочей поверхностью со скошенной выточкой на верхней поверхности внутреннего края
	TT = Кольцо с поперечным сечением в виде несимметричной трапеции		TN-IFU = Скребок кольцо с конической рабочей поверхностью со скошенной выточкой на нижней поверхности внутреннего края
	TT-IF = Кольцо с поперечным сечением в виде несимметричной трапеции со скошенной выточкой на верхней поверхности внутреннего края		TN-IW = Скребок кольцо с конической рабочей поверхностью с прямоугольной выточкой на верхней поверхности внутреннего края
	TT-IFU = Кольцо с поперечным сечением в виде несимметричной трапеции со скошенной выточкой на нижней поверхности внутреннего края		TN-IWU = Скребок кольцо с конической рабочей поверхностью с прямоугольной выточкой на нижней поверхности внутреннего края
	TT-IW = Кольцо с поперечным сечением в виде несимметричной трапеции с прямоугольной выточкой на верхней поверхности внутреннего края		SC = Раздвоенное маслоъемное кольцо
	TT-IWU = Кольцо с поперечным сечением в виде несимметричной трапеции с прямоугольной выточкой на нижней поверхности внутреннего края		DC = Маслоъемное кольцо со скошенной выточкой
	T = Кольцо с поперечным сечением в виде симметричной трапеции		DB = Маслоъемное кольцо с двойной скошенной выточкой
	T-IF = Кольцо с поперечным сечением в виде симметричной трапеции со скошенной выточкой на верхней поверхности внутреннего края		ES = Раздвоенное маслоъемное кольцо с пластинчатой пружиной
	T-IFU = Кольцо с поперечным сечением в виде симметричной трапеции со скошенной выточкой на нижней поверхности внутреннего края		SY = Раздвоенное маслоъемное кольцо со спиральной пружиной
	T-IW = Кольцо с поперечным сечением в виде симметричной трапеции с прямоугольной выточкой на верхней поверхности внутреннего края		DY = Маслоъемное кольцо со спиральной пружиной со скошенной выточкой по краям
	T-IWU = Кольцо с поперечным сечением в виде симметричной трапеции с прямоугольной выточкой на нижней поверхности внутреннего края		PS = Маслоъемное кольцо со спиральной пружиной с двойной скошенной выточкой по краям
	TK = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью		VF = Маслоъемное кольцо с VF-пружиной и стальной лентой
	TK-IF = Кольцо с поперечным сечением в виде симметричной трапеции с конической рабочей поверхностью со скошенной выточкой на верхней поверхности внутреннего края		UB = Маслоъемное кольцо U-образного типа со стальной лентой
	SDR = Стальное маслоъемное кольцо с V-образной канавкой со спиральной пружиной		SDV = Стальное маслоъемное кольцо с V-образной канавкой со спиральной пружиной
	X = Толщина поршневого кольца (мм)		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 внутри 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

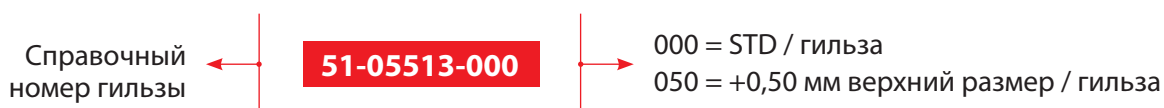
Разница между поршневыми кольцами и покрытиями

38-

39-

11 - СПРАВОЧНЫЕ ОПРЕДЕЛЕНИЯ ДЛЯ ГИЛЬЗ ЦИЛИНДРА

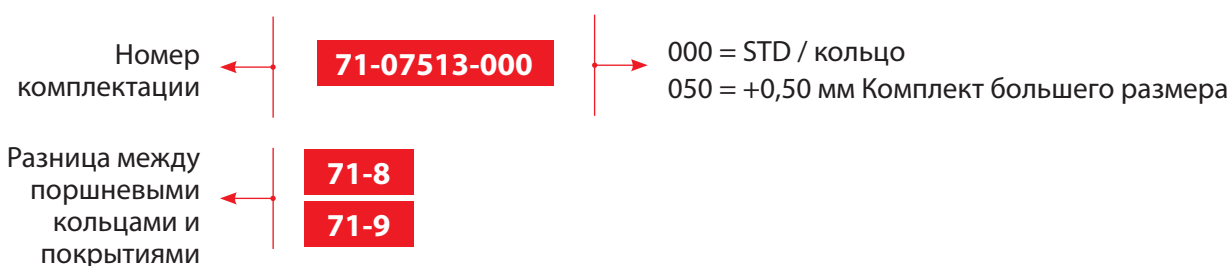
ПРИМЕР



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

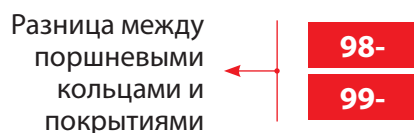
12 - СПРАВОЧНЫЕ ОПРЕДЕЛЕНИЯ ДЛЯ КОМПЛЕКТА, НАБОРА

Комплект: поршень, штырь, кольцо, футеровка



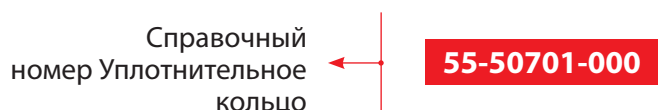
СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13- СПРАВОЧНЫЙ НОМЕР ПОРШНЕВЫЕ КОЛЬЦА



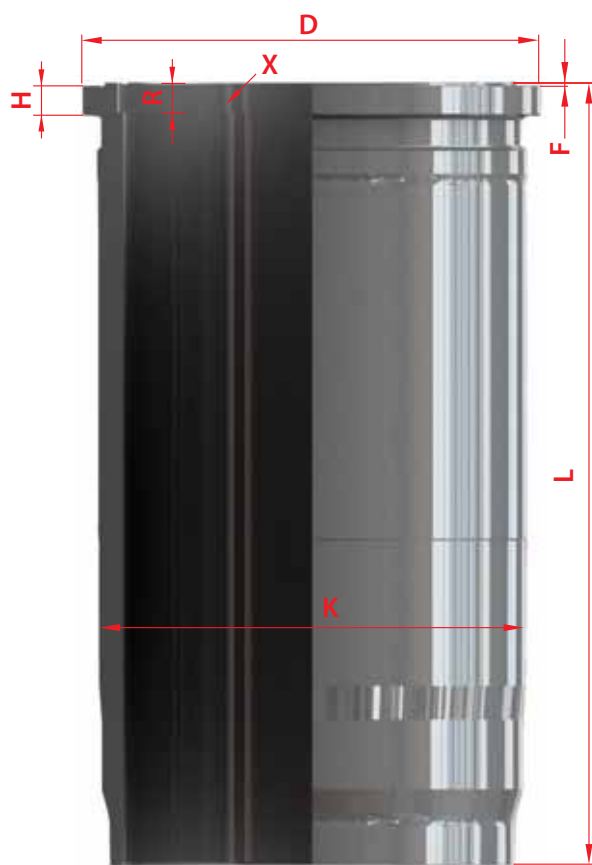
СТАРЫЙ СПРАВОЧНЫЙ НОМЕР	НОВЫЙ СПРАВОЧНЫЙ НОМЕР
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - "СПРАВОЧНЫЙ НОМЕР УПЛОТНИТЕЛЬНОЕ КОЛЬЦО"



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:

а- 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).

б- 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).

с- 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).

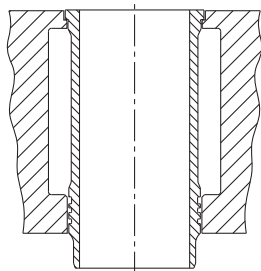


Рисунок 1

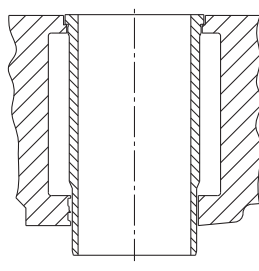


Рисунок 2

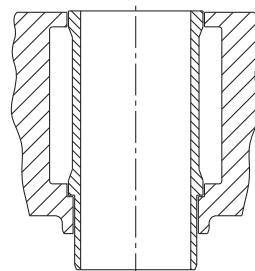


Рисунок 3

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:

а- С фланцем (Рисунок 4) **б- Без фланца - прямые** (Рисунок 5)

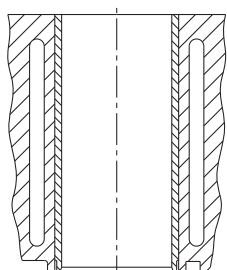


Рисунок 4

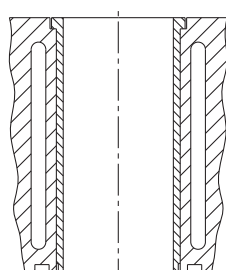


Рисунок 5

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 (А), 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 (С).

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

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

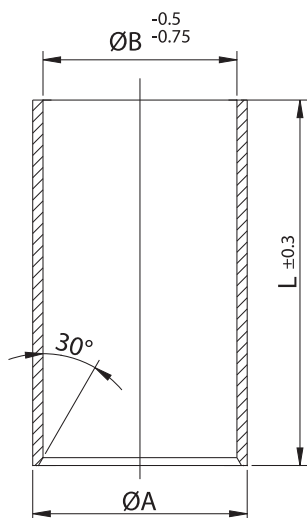


Рисунок 6

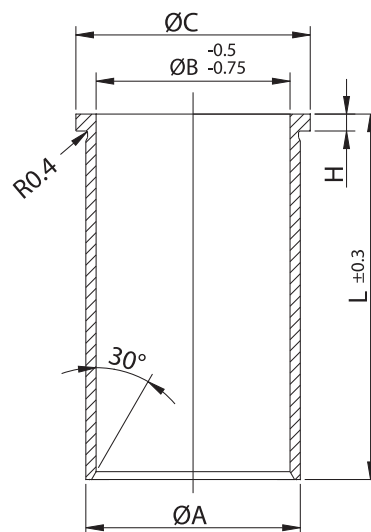


Рисунок 7

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 прессы, 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 ₁ A	+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

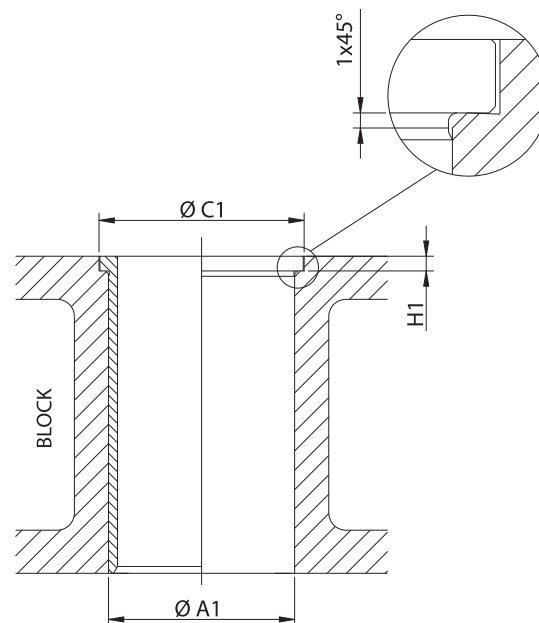


Рисунок 9

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 удастся, 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.

ТЕХНИЧЕСКИЕ ОПРЕДЕЛЕНИЯ

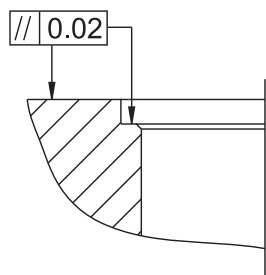


Рисунок 10

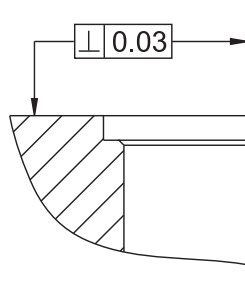


Рисунок 11

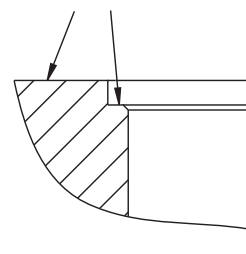


Рисунок 12

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.

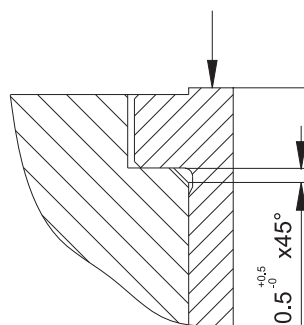


Рисунок 14

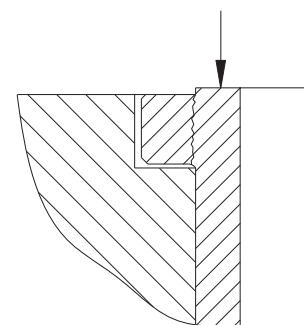


Рисунок 15

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)	
 <p>11-02385-000 8 CH 51,850 VD1 0,550 10 B- 19,500 BØ 43,900 12 TL 91,850 13</p> <p>15 31,00x76,00</p> <p>Isuzu ve Opel ile Ortak Motor 27</p>	14	<p>AP</p> <p>YS</p> <p>HA</p> <p>CP</p>	<p>91-09389-000</p> <p>1 2,000 P 16</p> <p>2 2,000 P 16</p> <p>3 4,000 CrP 17</p>	<p>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)</p>	Ø 93,000 18	31-04385-000 19	
		<p>99-09389-000</p> <p>1 2,000 FeP 16</p> <p>2 2,000 FeP 16</p> <p>3 4,000 TeF 16</p>			39-04385-000		
 <p>K=95,00 22 L=181,00 H=0,90 25 D=101,00 23</p>	26	DF-CR-ST			51-35721-000 20	71-08385-000 71-98385-000 21	
 <p>K=120,00 22 L=229,00 H+F=9,00+1,10 25 D=128,50 23</p>	26	WF		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 | 16 - Характеристики кольца |
| 2 - Код двигателя | 17 - Выступ головки поршня |
| 3 - Сведения о топливе | 18 - Диаметр цилиндра |
| 4 - Годы выпуска модели | 19 - Код поршень + кольцо |
| 5 - Количество цилиндров | 20 - Код гильзы |
| 6 - Объем цилиндра | 21 - Код комплекта |
| 7 - Мощность двигателя | 22 - Наружный диаметр цилиндра |
| 8 - Поршневой Код | 23 - Диаметр фланцы гильзы |
| 9 - CH: Ход | 24 - Полная длина гильзы |
| 10 - VD1/VD2: Глубина клапана | 25 - Толщина фланца |
| 11 - В- : Глубина камеры сгорания
В+ : Првышение днища | 26 - Тип и характеристики гильзы |
| 12 - ВØ: Диаметр ячейки | *WS : Влажные лайнер полуфабриката |
| 13 - TL: Полная длина | *WF : Влажные подкладка полная отделка |
| 14 - Характеристики поршня | *DS : Сухой лайнер полуфабриката |
| *DAP: Двойной алфиновый поршень | *DF : Сухая подкладка полная отделка |
| *AP: Алфиновый поршень | *AF : Воздушное охлаждение полной отделкой |
| *YS: Поршень с масляным охлаждением | *PH : Фосфат |
| *CP: Поршень из листовой стали | *CR : Хром |
| *HA: С твердым анодированным покрытием | *HR : Закаленный |
| *PDB: Отверстие поршневого | *NT : нитрит |
| 15 - Диаметр - длина - характеристики пальца пальца с втулкой | *HT : Термическая обработка |
| | *STEEL: Стали |
| | 27 - Общий двигатель |
| | 28 - Уплотнительное Кольцо Код |

المحتوى

مرافقنا الانتاجية	II
التعليب	IV
شهادة الجودة	VI
بيستون الفولاذ ذو قطعتين	VIII
التعاريف التقنية	X
برنامج الانتاج	1-419
فهارس المنتج	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		



YENMAK

قطع غيار المحركات

تأسست شركة ينماك عام 1965 كورشنة صغيرة من قبل عائلة قهوجي اوغلو 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 اطعم الكيتات والبساتم وبنزاتها والشانير 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 ما بعد البيع بأسعار معقولة .

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

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

الشركة مستمرة 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 .



ولو جستي & مركز العام



مصنع البساتم وبنزاتها



مصنع قمصان سلندر

YENMAK

قطع غيار المحركات



منذ عام 2003 اخذت بضائع ينماك مكانتها في
الاسواق داخل علبتها ادناه .
ستجد التفاصيل المتعلقة بالعبه ادناه :



بفضل ختم العبته كن اول من
يحصل على المنتج .



رقم التتبع

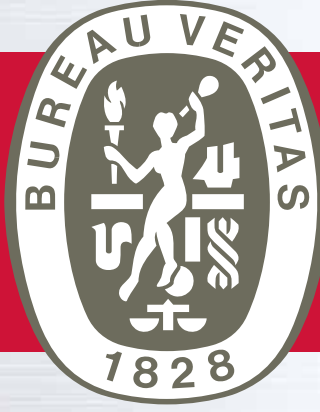


من اجل ضمان سلامة المنتج
وضعت على العلب صور
ذات الابعاد الثلاثية .



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

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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 الثقيلة ذات الانبعاثات المنخفضة

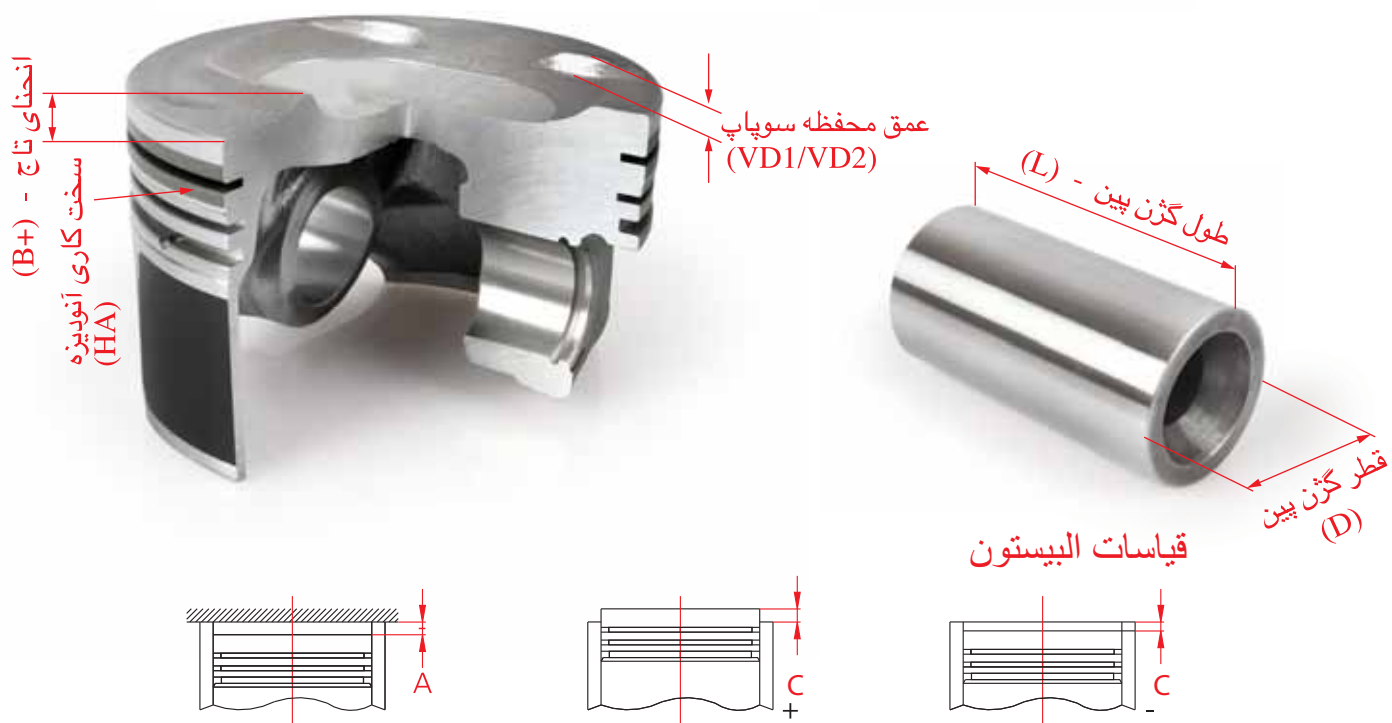
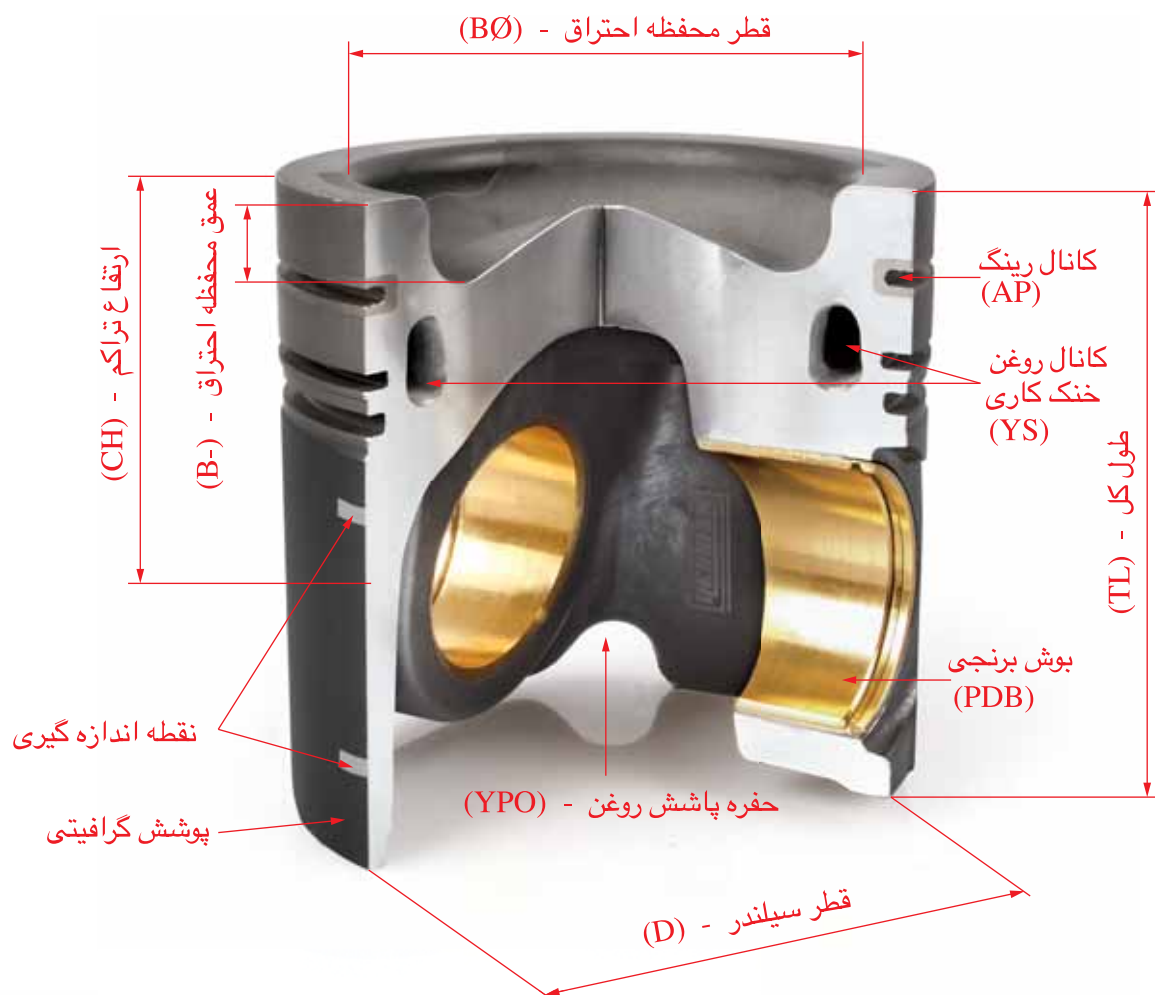
بيستون الفولاذ ذو قطعتين :

- الجيل الجديد من محركات مع نسب ضغط عالية و غرفة 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 يؤدي 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 الشناير .
- 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 الكربون 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 تثقيبته بيد ان هذه المشاكل لاتحصل في بساتم الفولاذ ذات قطعتين .

المصطلحات الفنية



A = القياس الى راس السلندر
 C = القياس من سطح المحرك الى راس البيستون

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 ايداء التجاويف والزوايا للبيستون عند عملية التنظيف والا فان اي خدش بسيط سوف يكون سبب للتشققات المستقبلية . قياسات ينامك متوافقة مع الشنابر الاصلية لذا لا داعي باجراء اي تغيير في قياسات البيستون يمكن استخدام شنابر البساتم ماركة ينامك 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 بتغيير البساتم التي حصلت فيها تشويهاات 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 المجردة 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 الاثناء 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 محاذة غرفة الاحتراق عند تركيبها على البساتم وفي حالة عدم وجود مثل تلك الكتابة انذاك بالامكان تركيب الشنبر كيفما يشاء

طلاء الشنابر والمعالجة السطحية

Cr = طلاء الكربون
Mo = طلاء الموليبيدين
P = طلاء الفوسفات
Fe = طلاء فيروكسيت
Cu = طلاء النحاس
Nt = طلاء نترت

Sn = طلاء القصدير
Ck = السيراميك كروم
Pvd = تراكم البخار المادية
Cdc = كروم المطلبي بالماس
Dlc = طلاء الماس طلاء الكربون
Tef = پوشش تفلونى

طلاء الشنابر والمعالجة السطحية

CK طلاء السيراميك كروم

طلاء الكروم الخزفية

الكروم الطلاءات الخزفية

نوع من الطلاء يتكون من تركيب هيكلية 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 .

مميزات الطلاء الخزفية من الطلاء بالكروم

- المقاومة الاعلى للتآكل

- نقطة انصهار أعلى اكثر

- الصلابة وكثافة التصدع اعلى

بسبب هذا المزاي 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 الموليبدن

لمنع تآكل سطح الشنبر يطلى بمادة الموليبدن لتفادي من اثار الاحتراق يحشى الوجه العامل للشنبر بهذه المادة او يطلى الشنبر بالكامل بالموليبدن وبالإمكان الحصول مثل هذا الطلاء عن طريق الرش باللهيب او عن طريق التاين الكهربائي . (C⁰ 2620) نقطة انصهار العليا للموليبدن وبفضل النتوءات الموجودة على مادة الموليبدن حيث انها تساعد على بقاء سطح الشنبر مزيته وهذا يساعد ايجابا بزيادة المقاومة و من عمر الشنبر والعمل بانزلاقية جيدة .

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 للشنابر 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 الشنابر بالكروم ثم تجري عملية التخليج لاعطاء الشكل النهائي للشنابر وبما ان السطوح بعد التخليج يكون ذو مسامات وهذا يؤدي الى الاحتفاظ بالزيت عند التشغيل وبهذا يكون يحتفظ على نفسه اولا ويحافظ على جدار القمصان من التردى .

Nt طلاء نترت

يتم باعطاء الصلادة على جميع سطوح الشنابر بواسطة الطلاء بالنترت . وبهذه الطريقة تتم زيادة من العمر الافتراضي للشنابر وبخصوصية هذا الطلاء يقلل من الانبعاثات 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 الاماس 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 اوامر الكيماوية متينة، لا ينكسر تحت الضغوطات ، 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

	D = شنبير قائم		TI-IFU = شنبير مخروطي ثنائية الانحراف السطح السفلي من الحافة الداخلية مشطوفة
	D-IF = شنبير قائم السطح العلوي من الحافة الداخلية مشطوفة		TK-IW = شنبير السطح العلوي من الحافة الداخلية كلا الطرفين منحرف تدريجي
	D-IFU = شنبير قائم السطح السفلي من الحافة الداخلية مشطوفة		TK-IWU = شنبير السطح السفلي من الحافة الداخلية كلا الطرفين منحرف تدريجي
	D-IW = شنبير السطح العلوي من الحافة الداخلية قائم تدريجي		N = شنبير مكشوط الراس
	D-IWU = شنبير السطح السفلي من الحافة الداخلية قائم تدريجي		N-IF = شنبير مكشوط الراس، السطح العلوي من الحافة الداخلية مشطوفة
	K = شنبير مخروطي		N-IFU = شنبير مكشوط الراس ، السطح السفلي من الحافة الداخلية مشطوفة
	K-IF = شنبير مخروطي السطح العلوي من الحافة الداخلية مشطوفة		N-IW = شنبير السطح العلوي من الحافة الداخلية مكشوط الراس تدريجي
	K-IFU = شنبير مخروطي السطح السفلي من الحافة الداخلية مشطوفة		N-IWU = شنبير السطح السفلي من الحافة الداخلية مكشوط الراس تدريجي
	K-IW = شنبير السطح العلوي من الحافة الداخلية مخروط تدريجي		TN = شنبير مخروطي مكشوط الراس
	K-IWU = شنبير السطح العلوي من الحافة السفلية مخروط تدريجي		TN-IF = شنبير مكشوط الراس مخروطي ، السطح العلوي من الحافة الداخلية مشطوفة
	TT = شنبير احادية الانحراف		TN-IFU = شنبير مكشوط الراس مخروطي ، السطح السفلي من الحافة الداخلية مشطوفة
	TT-IF = شنبير احادية الانحراف السطح العلوي من الحافة الداخلية مشطوفة		TN-IW = شنبير مخروطي ، السطح العلوي من الحافة الداخلية مكشوط الراس تدريجي
	TT-IFU = شنبير احادية الانحراف السطح السفلي من الحافة الداخلية مشطوفة		TN-IWU = شنبير مخروطي ، السطح السفلي من الحافة الداخلية مكشوط الراس تدريجي
	TT-IW = شنبير السطح العلوي من الحافة الداخلية منحرف احد طرفه تدريجي		SC = شنبير ذو شق ضبط الزيت
	TT-IWU = شنبير السطح السفلي من الحافة الداخلية منحرف احد طرفه تدريجي		DC = شنبير ذو شطف ضبط الزيت
	T = شنبير ثنائية الانحراف		DB = شنبير ذو ثنائي ضبط الزيت
	T-IF = شنبير ثنائية الانحراف السطح العلوي من الحافة الداخلية مشطوفة		ES = شنبير ذو شق ضبط الزيت نابض ورقي
	T-IFU = شنبير ثنائية الانحراف السطح السفلي من الحافة الداخلية مشطوفة		SY = شنبير ذو شق ضبط الزيت نابض حلزوني
	T-IW = شنبير السطح العلوي من الحافة الداخلية منحرف الطرفين تدريجيا		DY = شنبير ضبط الزيت نابض حلزوني مشطوف الحافة
	T-IWU = شنبير السطح العلوي من الحافة السفلية منحرف الطرفين تدريجيا		PS = شنبير ضبط الزيت نابض حلزوني مزدوج مشطوف الحافة
	TK = شنبير مخروطي ثنائية الانحراف		VF = شنبير ذو حزام فولاذي لولب ضبط الزيت على شكل VF
	TK-IF = شنبير مخروطي ثنائية الانحراف السطح العلوي من الحافة الداخلية مشطوفة		UB = شنبير ذو حزام فولاذي لولب ضبط الزيت على شكل U
	SDR = شنبير قناة السطره على الزيت فولاذي ذات لولب على شكل V		SDV = شنبير ذو حزام فولاذي لولب ضبط الزيت على شكل V
	X = سمك الشنبير (مم)		DKS = رينج كمنترول روغن سه تكة اى تخت، ذوزنقه اى و استوانه اى

تعليمات تركيب البساتم

- 1 - يجب ان يكون سطح السلندر المراد تركيب البيستون عليه مشحوذ على شكل خطوط مربعة و عند تركيب البساتم على سلندرات او على قمصان مستعلمة يجب مراعاة والتاكيد من تواجد تلك المربعات على السطوح الداخلية لتجويف السندر و عند اختفاء او مسح تلك الخطوط يجب شخذ السلندر او القميص من جديد.
 - 2 - يصنع البساتم التي تتركب 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 القطر ضمن نطاق 0,000 الى 0,025 ملم .
 - 3 - ينبغي تركيب بنزات البساتم الجاهزة على البساتم بصورة صحيحة ماخذنا 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 الشنابر او عدة القمع المخروطي وتزيتها جيدا ثم قم بتنزيل البيستون على تجويف السلندر بشكل صحيح ودون استعمال القوة المفرطة في عملية التنزيل لانها تسبب في كسر الشنابر كما يجب ان تاخذ بنظر الاعتبار اتجاه الشنابر مع بعضها
 - 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 لأول 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 والقياسات المطلوبة والمتوافقه عليها لذا لايمكن اجراء اي عملية تعديل على البساتم قبل تركيبها .
 - 9 - لايمكن استعمال البنزات وشنابر البنزات المستعلمة لذا يجب تغيير 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 مسؤولة عن الاضرار او التلف التي تنجم من خلال تركيب القطع دون مراعاة النقاط المبينة اعلاه .

8 - وسمة ورموز البيستون



9 - رقم مرجع المكبس نموذج

رقم مرجع البيستون	11-01513-000	<p>القياس الاصيلي / بيستون + شنبر = 000</p> <p>ارتفاع انضغاط البيستون 0,20 مم قصيرة = 001</p> <p>ارتفاع انضغاط البيستون 0,40 مم قصيرة = 002</p> <p>ارتفاع انضغاط البيستون 0,60 مم قصيرة = 003</p> <p>بيستون + شنبر / اعلى مقياس 0,50 = 050</p>
-------------------	---------------------	--

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

10 - رقم مرجع البيستون + شنبر نموذج

رقم مرجع البيستون + شنبر	31-03513-000	<p>المقاسات الاصلية/ بيستون + شنبر = 000</p> <p>المقاس الاعلى / بيستون + شنبر ملم 0,50 = 050</p>
--------------------------	---------------------	--

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

المختلفة الطلاء
ونوعية الشنبر شكل

38-

39-

11 - رقم مرجع تعريفات القميص نموذج

رقم مرجع القميص ← **51-05513-000** → القميص / STD = 000
مقياس اعلى / قميص +0,50 مم = 050

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

12 - ارقام مراجع اطقم الكيئات

كد كييت: ببيستون + كژن بين + رينگ + بوش

كد كييت ← **71-07513-000** → كييت / STD = 000
اندازه خارج از استاندارد / كييت +0,50 مم = 050

نوع رينگ و تفاوت
پوششهای مختلف ← **71-8**
71-9

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

13 - رقم مرجع الشنبر

رقم مرجع البيستون ← **91-09513-000** → الشنبر / STD = 000
شنبر / مقياس اعلى +0,50 مم = 050

نوع رينگ و تفاوت
پوششهای مختلف ← **98-**
99-

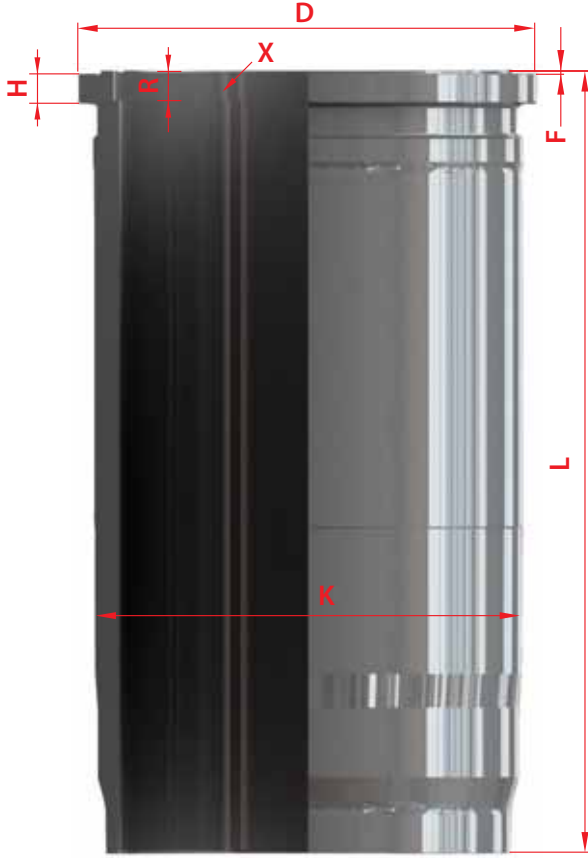
رقم المرجع القديم	رقم المرجع الجديد
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - رقم ربلات قميص سلندر

رقم ربلات قميص سلندر ← **55-50701-000**

المصطلحات الفنية

توضيحات حول الموصفات التقنية للقمصان



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

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

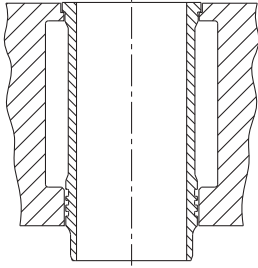
قمصان سلندر مبللة :

تلك القمصان التي تتركب 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 :

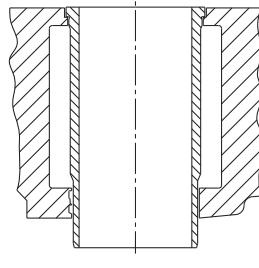
ا- ذو شفة وقناة : يجلس على بلوك السنذر بواسطة شفة بارزة وله قناة يركب عليه ربلات لكي يمنع تسرب الماء الذي يمسه في عملية التبريد . (الشكل 1)

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

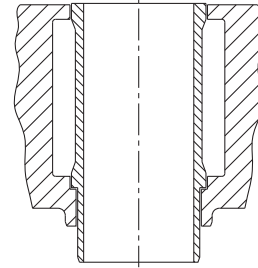
ت - ثنائية الشفة : لاجل يمنع تسرب الماء من بلوك السنذر تكون هناك شفة من الاعلى و شفة من الاسفل (الشكل 3)



الشكل-1



الشكل-2



الشكل-3

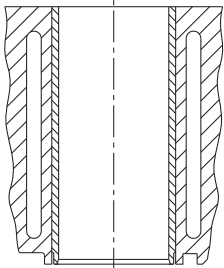
قميص سلندر جاف :

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

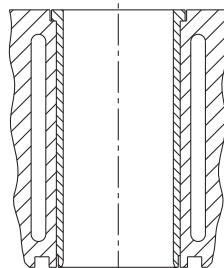
يمكن تصنيفه على فئتين على اساس الشكل :

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

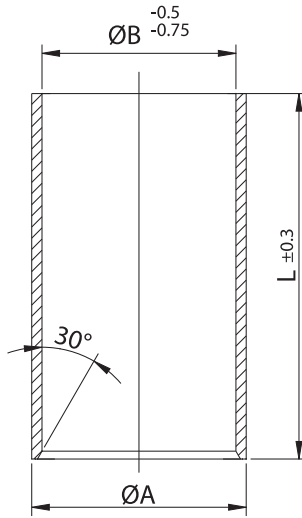
قبل تنزيل القمصان بالضغط يجب ان يكون المقياس الخارجي مطابقة كما في القيم الموجود في القائمة (أ) وعند عدم ملائمة المقياس يجب شحذ القميص او خراطته .

ويجب مراعاة القياسات ادناه كما في الشكل 7 وعلى خلاف ذلك فلو كانت الارتداد الامامي واطنة جدا فان عملية تصريف الحرارة سوف لن تكون بشكل مرضي ولو كانت الارتداد 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 .

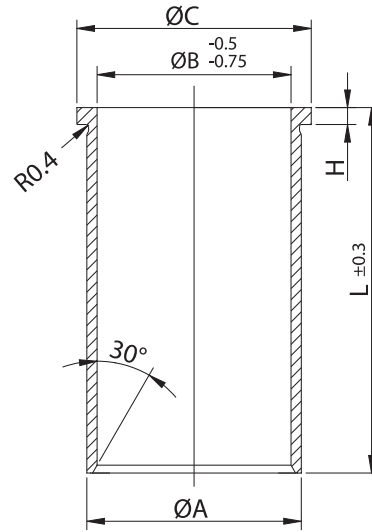
عند تنزيل القمصان الجافة ذات شفة على بلوك سلندر بواسطة المكبس يجب خراطة القطر الخارجي للشفة من فوهة السلندر التي تجلس عليها شفة القميص بقطر اكبر تفاديا من تعرض شفة القميص الى القطع .

المصطلحات الفنية

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



الشكل 6-



الشكل 7-

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 وظيف قياسته الحساسة بشكل دقيق ويجب ان لا يتعدى مخروطيته وبيضويته من 0,025 ملم . وعند الشد يجب محاولة تحقيق سطح لامع كما يجب تحقيق خشونه سطحية ملائمة حسب نوعية المحرك . ومن اجل تحقيق عملية تزييت صحية يجب الابتعاد من تحقيق لمعان او خشونه مفرطة .

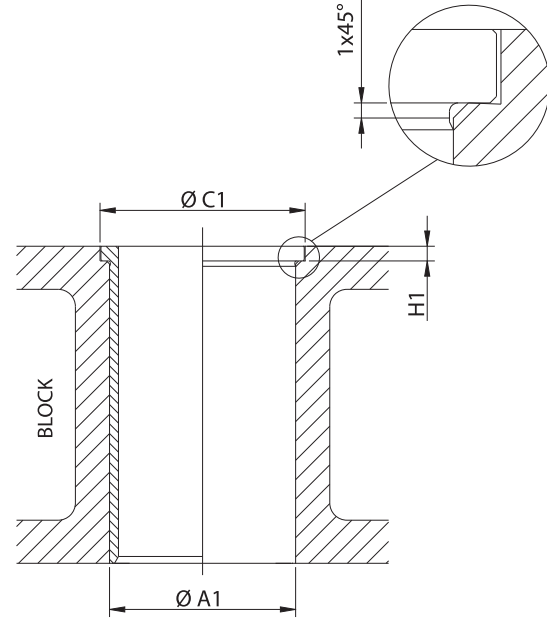
ضغط 3000-5000 كغم كافية عند كبس القميص الجاف في عملية تنزيله الى السلندرات . يجب الابتعاد من استعمال المواد الصلبة (غير مائعة) في عملية التزييت عند تنزيل القمصان لان تلك المواد سوف تتفحم وتعدوا مادة عازلة تعوق دون اتمام تسريب الحرارة في اثناء عملية التبريد . كما يجب تخليخ سطح السلندر بعد تنزيل القمصان لاجل عمل سطح مناسب للكاسكيت .

في حالة ايجاب معالجة السطح العلوي للبلوك - مكان تجليس الكاسكيت- يجب انذاك معالجة فوهة جلوس الكاسكيت 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 للشد 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 ₁ A	+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

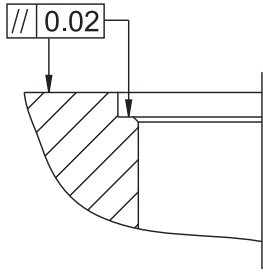
تعليمات تركيب قمصان مبللة

يتم تصنيع قمصان سلندر في ينماك بطريقة الطرد المركزي لمقاومة الانكماش والتآكل . لتفادي حدوث تخريبات على البلوك يوصى اخراج القمصان من البلوك بعناية فائقة . يجب تنظيف بلوك السندر من الترسبات الطينية والجيرية والترسبات الملحية 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 .

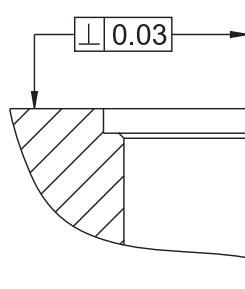
يجب ان يكون سطح البلوك الذي يجلس عليه القميص والسطح السفلي لشفة القميص موازيا مع بعض كما في الشكل (10) . ويجب ان لا يكون هناك اي اختلاف في التسطيح والنعمومة لكلا الوجهين . بالإضافة إلى ذلك، يجب فحص ما إذا كان محور سطح البلوك مقعد الكاسكيت عموديا ام لا . (الشكل 11) كما هناك نقطة مهمة جدا وهي فحص سطح البلوك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

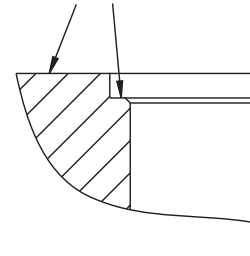
المصطلحات الفنية



الشكل- 10

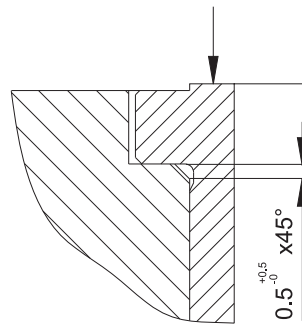


الشكل- 11

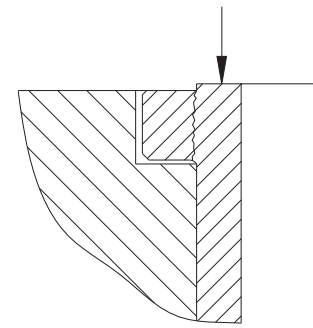


الشكل- 12

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 .



الشكل- 14



الشكل- 15

- 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 ووضعها 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 ادوة 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 للانفخاخ والبلى وخلاف ذلك فانها تسرب الماء الى الكارتير وهذا يؤدي 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 ينبغي عدم حفر فنوات الربلات مطلقا .

من الاحسن اعادة قياسات السلندر بعد تجليس القميص فيه ، هذه القياسات يجب ان تجري تحديدا في المناطق الموجودة 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	
EPDM	مطاط EPDM
NBR	مطاط NBR
FPM / VI	فايتون
Cu	نحاس
T	سبيكة من نحاس والزنك
ST	فولاذ
SC / MVQ	سليكون
Shim / SM	معدن لين



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

- | | |
|---------------------------------|----------------------------------|
| 1- قطر البيستون | 15- قطر البنز - طول- خصائص |
| 2- رمز المحرك | 16- خصائص الرنك . |
| 3- معلومات الوقود | 17- بروزات رأس البيستون |
| 4- موديل الاعوام | 18- قطر السلندر |
| 5- عدد السلندرات | 19- رمز البيستون + الرنك |
| 6- حجم السنذر | 20- رمز القميص |
| 7- قوة المحرك | 21- رمز اطقم الكيتات |
| 8- رمز البيستون | 22- القطر الخارجي للقميص |
| 9- التخزين: CH | 23- قطر شفة القميص |
| 10- عمق الصباب : VD1/VD2 | 24- طول القميص |
| 11- الاحتراق غرفة عمق (B-) | 25- سمك الشفة |
| 12- العليا القبة (B+) | 26- ميزات القمصان |
| 13- قطر الغرفة: BØ | |
| 14- الطول الكلي: TL | |
| 15- خصائص البيستون | |
| 16- بيستون ثنائية التسليح: *DAP | |
| 17- بيستون مسلح: *AP | |
| 18- بيستون تبريد زيت: *YS | |
| 19- بيستون ذو رقائق فولاذ: *CP | |
| 20- معالج بأكسيد الصلب: *HA | |
| 21- ثقب البنز ذو بطانه: *PDB | |
| | WS* بوش مرطوب نيمه به پايان رسيد |
| | WF* بوش مرطوب پايان كامل |
| | DS* بوش خشك نيمه به پايان رسيد |
| | DF* بوش خشك پايان كامل |
| | AF* هوا سرد می شود پايان كامل |
| | PH* فسفات |
| | CR* كروم |
| | HR* سخت |
| | NT* نيتريت |
| | HT* حرارت درماني |
| | STEEL* فولاد |
| | 27- موتور معمولی |
| | 28- رمز ربلات قمصان |

CONTENU

SITE DE PRODUCTION	II
EMBALLAGE	IV
NOS CERTIFICATS DE QUALITEE	VI
LES PISTONS ARTICULES EN ACIER DOUBLE PIECES	VIII
SPECIFICATIONS TECHNIQUES	X
PROGRAMME DE PRODUCTION	1-419
INDEX DES PRODUITS	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		





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, PISTON, AXES DE PISTON, SEGMENT et CHEMISE; JOINT De CULASSE, et fait la distribution de SOUPAPE et COUSSINET 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 m² est installé à la zone industrielles 1,2 et 3 à Konya.

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



Siège Social & Logistique



Site de Production Piston & axe de piston



Site de Production Chemise de Moteur

YENMAK

PIECES MOTEUR



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

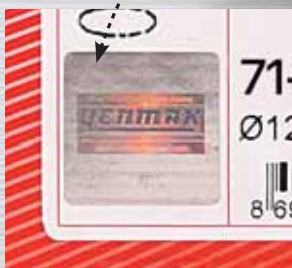
Voici les détails de l'emballage:



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



Numéro de traçabilité

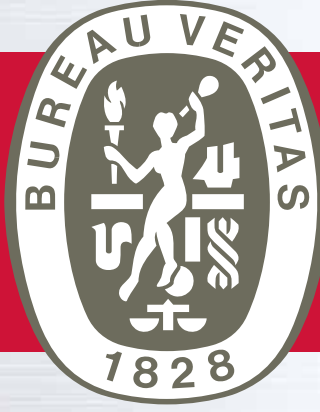


Un hologramme 3D est intégré sur la boîte, pour assurer la sécurité du produit.



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

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 Sistemini aşağıda belirtilen belgelerin Standardı gerekliliklerine uygunluğunu değerlendirmiş olup, onaylanmaktadır.

Standart

ISO 9001:2008
Belgelendirme Kapsamı

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

İlk Doğru Başlangıç Tarihi: 23 Eylül 2014
Onsuz Doğru Geçerlilik Tarihi: 22 Eylül 2017
Belgelendirme / Yeniden Belgelendirme Denetim Tarihi: 24 Mayıs 2017
Belgelendirme / Yeniden Belgelendirme Doğrulama Başlangıç Tarihi: 21 Eylül 2017
Kuruluşun yönetim sistemi, standart gerekliliklerini karşılamaya devam ettiği sürece bu sertifikayı 14 Eylül 2018 tarihine kadar geçerlidir.

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

SEKİN DEMİRALP
Belgelendirme Müdürü

TÜRKAK
T.C. EKİŞ
T.C. EKİŞ
T.C. EKİŞ

Notlar: Bureau Veritas Belgelendirme Hizmetleri Ltd.Şti.
Kuyuluca Sokak Kat:10 Kat:10 No:10/10 Konya, Türkiye
Bünye adresi ve ilgili standart gerekliliklerini karşıladığı için ilgili kuruluşun, belgelendirme kuruluşuna belge vermektedir.
Bünye adresi: +90 312 210 40 40 telefon numaralarından bilgi alınabilir.
Etiler 33. Kat: 06500

Sayfa 1/1

BUREAU VERITAS
Certification

Certificate of Approval

Issued to

YENMAK PİSTON SEGMAN SAN. VE TİC. A.Ş.
KIRIM CAD. SARIÇİÇEK SK. NO:12 SELÇUKLU KONYA
42080 - Konya - Turkey

Bureau Veritas Certification certifies 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 quality requirements.

ISOIR
Manufacturing

PERMITTED EXCLUSIONS:
7.3 - Product design responsibility
PRODUCTS DELIVERED

PİSTON AND PİSTON PINS BY ALUMİNYUM GRAVITY CASTING AND MACHINED FOR INTERNAL COMBUSTION ENGINES

Original cycle start date: 21 September 2017
Expiry date of previous cycle: 14 September 2018
Certification / Recertification Audit date: 14 September 2018
Certificate / Recertification cycle start date: 14 September 2018

SEKİN DEMİRALP
Belgelendirme Müdürü

Notlar: Bureau Veritas Belgelendirme Hizmetleri Ltd.Şti.
Kuyuluca Sokak Kat:10 Kat:10 No:10/10 Konya, Türkiye
Bünye adresi ve ilgili standart gerekliliklerini karşıladığı için ilgili kuruluşun, belgelendirme kuruluşuna belge vermektedir.
Bünye adresi: +90 312 210 40 40 telefon numaralarından bilgi alınabilir.
Etiler 33. Kat: 06500

Sayfa 1/1

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 Sistemini aşağıda belirtilen belgelerin Standardı gerekliliklerine uygunluğunu değerlendirmiş olup, onaylanmaktadır.

Standart

ISO 14001:2004
Belgelendirme Kapsamı

İÇTEN YANMALI MOTORLAR İÇİN PİSTON VE PİSTON PİMİ ÜRETİMİ

Belgelendirme Doğrulama Başlangıç Tarihi: 26 Ağustos 2018
15 Eylül 2018 tarihine kadar geçerli olan bu sertifikanın geçerliliği, Bureau Veritas tarafından periyodik olarak kontrol edilmektedir.

Öznel Sertifika Tarihi: 26 Ağustos 2018

Sertifika Numarası: TR004743-1 Sürüm No: 1 Revizyon Tarihi: 26 Ağustos 2018

SEKİN DEMİRALP
BÜYÜK İŞLER İZMİR ŞUBESİ
Müdürü

UKAS
UKAS
UKAS

Notlar: Bureau Veritas Belgelendirme Hizmetleri Ltd.Şti.
Kuyuluca Sokak Kat:10 Kat:10 No:10/10 Konya, Türkiye
Bünye adresi ve ilgili standart gerekliliklerini karşıladığı için ilgili kuruluşun, belgelendirme kuruluşuna belge vermektedir.
Bünye adresi: +90 312 210 40 40 telefon numaralarından bilgi alınabilir.
Etiler 33. Kat: 06500

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, TÜRKİYE

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

Standart

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
Certificate / Recertification cycle start date: 12 January 2018
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 11 January 2021

Certificate No: TR006247-1 Version No: 1 Revision date: 12 January 2018

SEKİN DEMİRALP
BÜYÜK İŞLER İZMİR ŞUBESİ
Müdürü

UKAS
UKAS
UKAS

Notlar: Bureau Veritas Belgelendirme Hizmetleri Ltd.Şti.
Kuyuluca Sokak Kat:10 Kat:10 No:10/10 Konya, Türkiye
Bünye adresi ve ilgili standart gerekliliklerini karşıladığı için ilgili kuruluşun, belgelendirme kuruluşuna belge vermektedir.
Bünye adresi: +90 312 210 40 40 telefon numaralarından bilgi alınabilir.
Etiler 33. Kat: 06500

Sayfa 1/1

ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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.

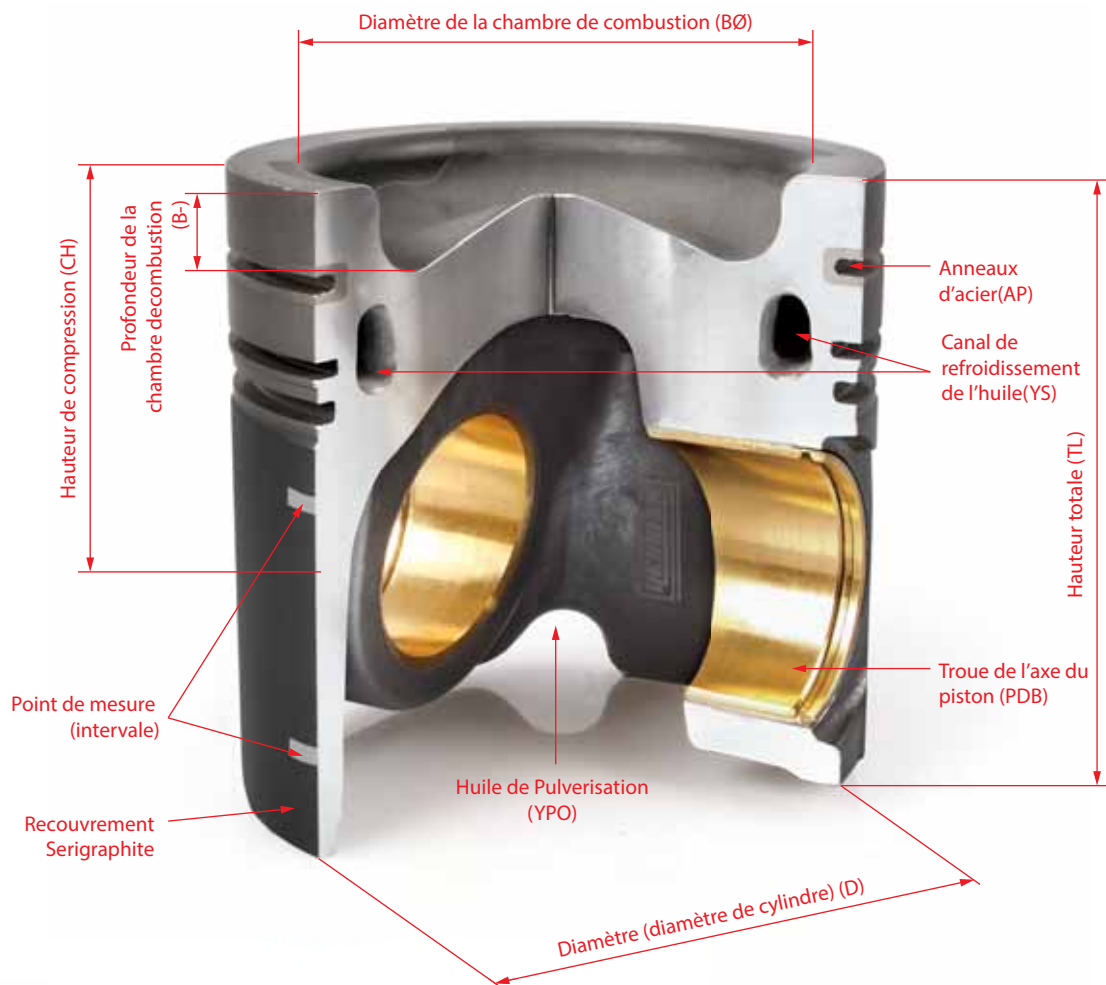
Les pistons articulés en acier sont utilisés pour;

- 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

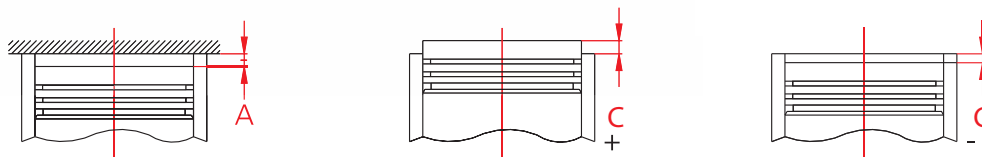
Les avantages de piston articulés en acier à doubles pièces

- 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 CO2 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 PISTON 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

SPECIFICATIONS TECHNIQUES

REVETEMENT DE PISTON ET TRAITEMENTS 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 premiers segments de pistons pour véhicules à moteur 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 aux 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 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. À la fin de ceci, les atomes métalliques 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 la 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 brûlures, 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 utilisée 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 couverts 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 face 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 faibles 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'autres revêtements et en même temps sa résistance est plus élevée contre l'abrasion.

SPECIFICATIONS TECHNIQUES



D = Segment rectangulaire



D-IF = bord intérieure surface supérieur biseauté segment rectangulaire



D-IFU = bord intérieure la surface intérieure segment rectangulaire



D-IW = bord intérieure la surface supérieur segment rectangulaire



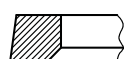
D-IWU= bord intérieure surface intérieure graduelle segment rectangulaire



K = Segment conique



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



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



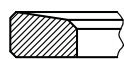
K-IW = Segment, le bord intérieure la surface supérieur conique graduelle



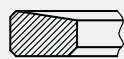
K-IWU= Segment, le bord intérieure la surface intérieure conique graduelle



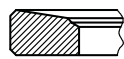
TT = Segment de trapèze unilatérale



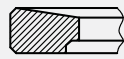
TT-IF = Le bord intérieure la surface supérieur segment de trapèze biseauté unilatérale



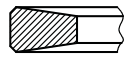
TT-IFU= Le bord intérieure la surface intérieure segment de trapèze biseauté unilatérale



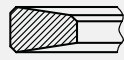
TT-IW = Le bord intérieure la surface supérieur segment de trapèze graduelle unilatérale



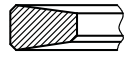
TT-IWU= Le bord intérieure la surface intérieure segment de trapèze graduelle unilatérale



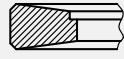
T = Segment de trapèze à deux côtés



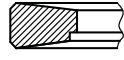
T-IF = Le bord intérieure la surface supérieur segment de trapèze biseauté à deux côtés



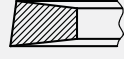
T-IFU = Le bord intérieure la surface intérieure segment de trapèze biseauté à deux côtés



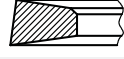
T-IW = Le bord intérieure la surface supérieur segment de trapèze graduelle à deux côtés



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



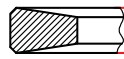
TK = Segment de trapèze conique à deux côtés



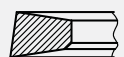
TK-IF = Le bord intérieure la surface supérieur segment de trapèze biseauté conique à deux côtés



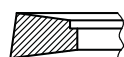
SDR = Type V, avec un canal, segment de contrôle d'huile en acier, spiral avec arc



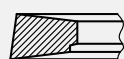
X = L'épaisseur de segment (mm)



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



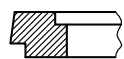
TN = Segment conique au nez éraflant



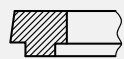
TN-IF = Le bord intérieure la surface supérieur segment biseauté conique au nez éraflant



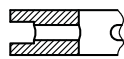
TN-IFU= Le bord intérieure la surface supérieur segment biseauté conique au nez éraflant



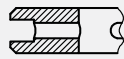
TN-IW = Le bord intérieure la surface supérieur segment graduelle conique au nez éraflant



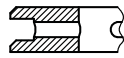
TN-IWU= Le bord intérieure la surface intérieure segment graduelle conique au nez éraflant



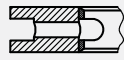
SC = Segment fendu de contrôle de l'huile



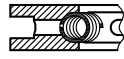
DC = Segment biseauté de contrôle de l'huile



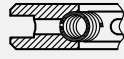
DB = Segment à deux biseautés de contrôle de l'huile



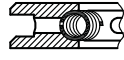
ES = Segment de contrôle de l'huile fendu ressort à feuille



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 PISTONS

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 PISTON

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- PISTON + 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

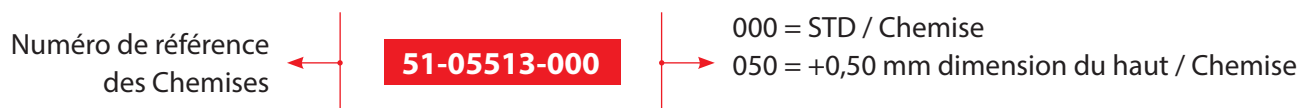
Différences entre types de segments et recouvrements

38-

39-

11 - DESCRIPTIONS DES REFERENCES DES CHEMISES

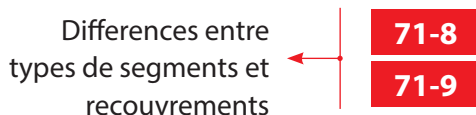
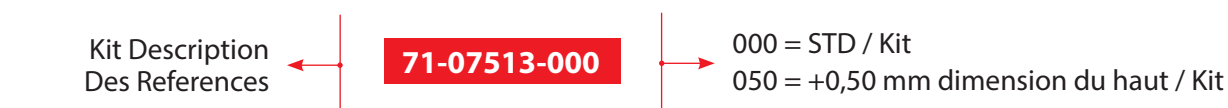
EXEMPLE



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

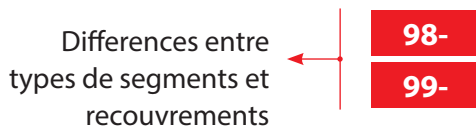
12 - KIT, SET, DESCRIPTION DES REFERENCES

Ensemble Kit : Piston + Segment + Chemise + Pim



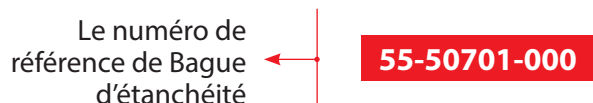
ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13 - LES NUMEROS DES REFERENCES DES SEGMENTS



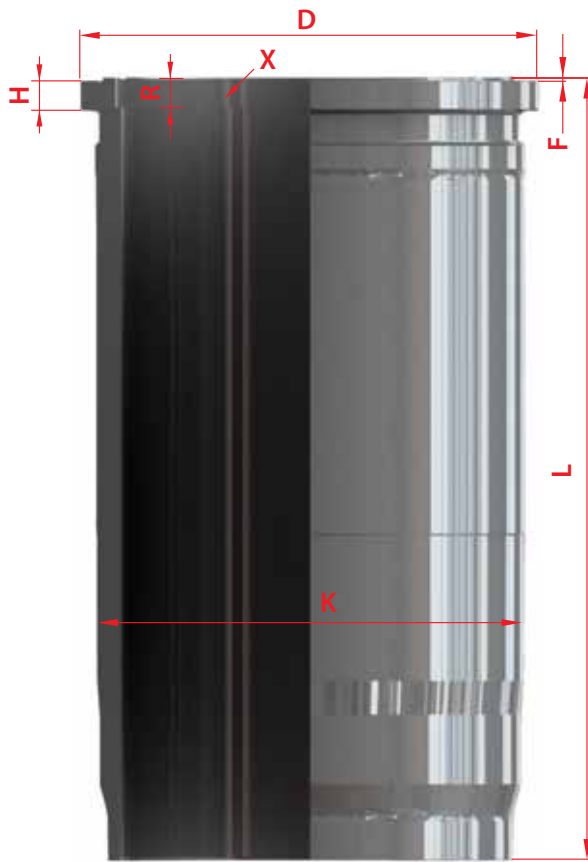
ANCIEN NUMERO DE REFERENCE	NOUVEAU NUMERO DE REFERENCE
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - LE NUMÉRO DE RÉFÉRENCE DE BAGUE D'ÉTANCHÉITÉ



SPECIFICATIONS TECHNIQUES

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)

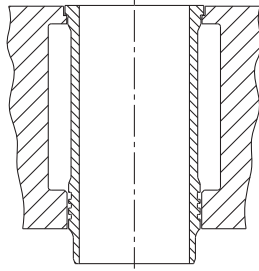


Figure - 1

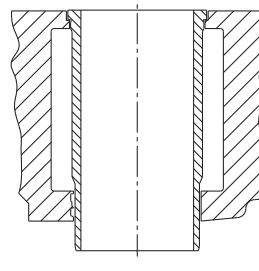


Figure - 2

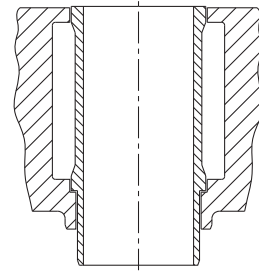


Figure - 3

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)

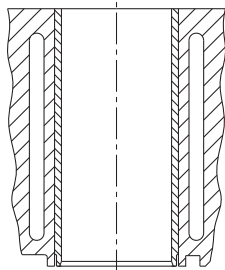


Figure - 4

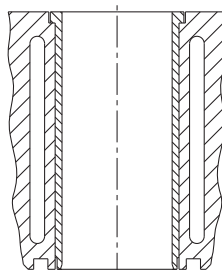


Figure - 5

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.

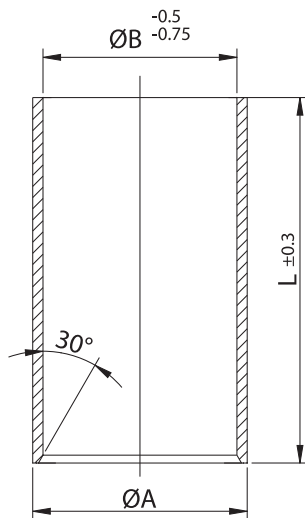


Figure - 6

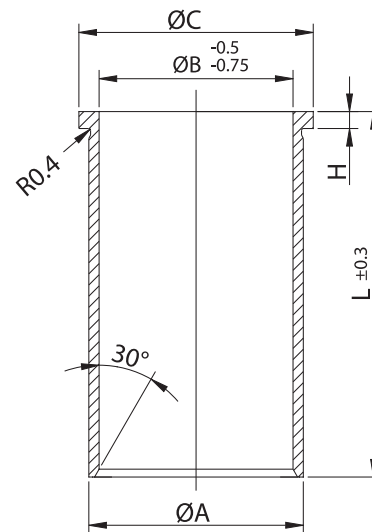


Figure - 7

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'après 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 ₁ A	+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

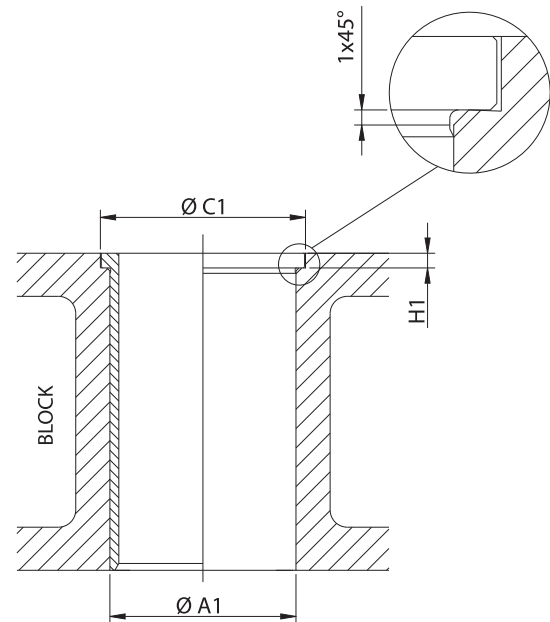


Figure 9

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°

SPECIFICATIONS TECHNIQUES

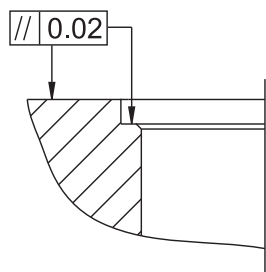


Figure 10

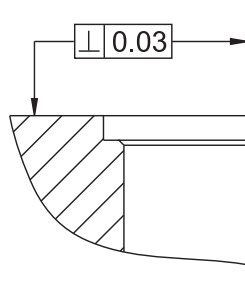


Figure 11

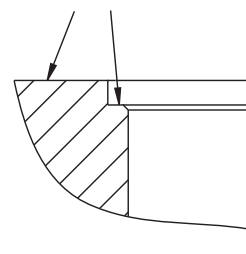


Figure 12

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.

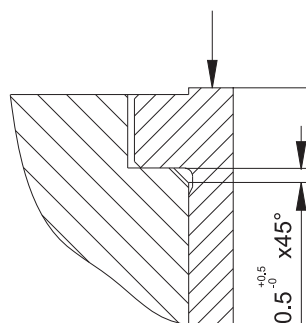


Figure 14

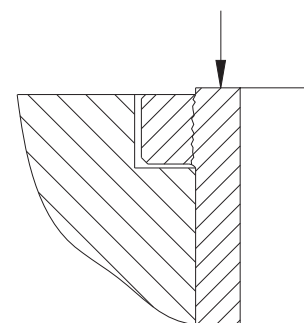


Figure 15

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 fabricant 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.

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

- 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

واحدهای تولیدی	II
بسته بندی	IV
گواهینامه های کیفی	VI
پیستون فولادی دوپارچه	VIII
اصطلاحات فنی بکار رفته	X
برنامه تولید	1-419
شاخصهای محصول	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		



YENMAK

قطعات موتور

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 مستمر خود 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.

امروز کارخانه ینماک با تولید کیت، پیستون، گژن پین و بوش موتور سیلندر و با تامین و اشتر سر سیلندر، سوپاپ و یاتاقان موتور این محصولات را در ۵ قاره به بیش از ۸۰ کشور صادر می کند.

به عنوان یک همراه قدیمی برای مشتریان گرانقدر خود علاوه بر تهیه محصولات با کیفیت و قیمت مناسب و ارائه خدمات پس از فروش امکان تدارک تمامی قطعات موتور را بصورت یک بسته کامل نیز فراهم می کند. علاوه بر این ینماک به اهمیت افراد در تمامی اجزاء یک فعالیت واقف بوده و به روابط مشتریان بسیار اهمیت قائل می باشد.

ینماک دارای گواهینامه های INMETRO, ISO 9001, ISO / TS 16949, IATF 16949, ISO 14001 میباشد. امروز ینماک با دو کارخانه و یک مرکز اصلی و تدارکات حمل سفارشات در کل در مساحتی بالغ بر ۵۰۰۰۰ متر مربع در شهرکهای صنعتی شماره ۱، ۲ و ۳ قونیه فعالیت دارد. 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



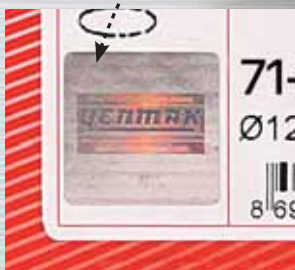
از سال ۲۰۰۳ محصولات ینماک بصورت ذیل بسته بندی شده و جایگاه خود را در بازار کسب کرده است
 مشخصات و جزئیات اطلاعات موجود بر روی بسته بندی در ذیل ارائه شده است



در سایه در پوشه‌های مخصوص اولین کسی باشید که به محصول دسترسی پیدا می‌کند



شماره قابلیت ردیابی

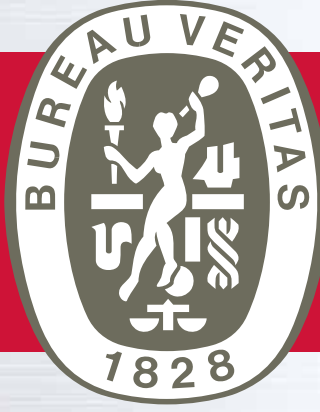


به منظور ایمنی و اطمینان برچسب هولوگرام سه بعدی بر روی جعبه بسته بندی محصول وجود دارد



به منظور حفظ ایمنی محصول در پایین جعبه محصول برچسب ایمنی نصب شده است

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



پیستون فولادی دوپارچه



پیستون فولادی دوپارچه : از دو قسمت سر پیستون که فولادی می باشد و قسمت پایین پیستون که آلومینیومی می باشد و توسط گزن پین به یکدیگر متصل بوده و یکپارچه حرکت می کنند، تشکیل شده است. دلیل مقاومت بالا و ساییدگی بسیار کم این نوع پیستون کارکرد موتور را در وسایط نقلیه سنگین دیزلی با میزان آلاینده خروجی کمتر در آگروز و در حد استاندارد فراهم می نماید.

پیستون فلزی دوپارچه :

در موتورهای با قابلیت تراکم بالا و محفظه احتراق مدرن
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.

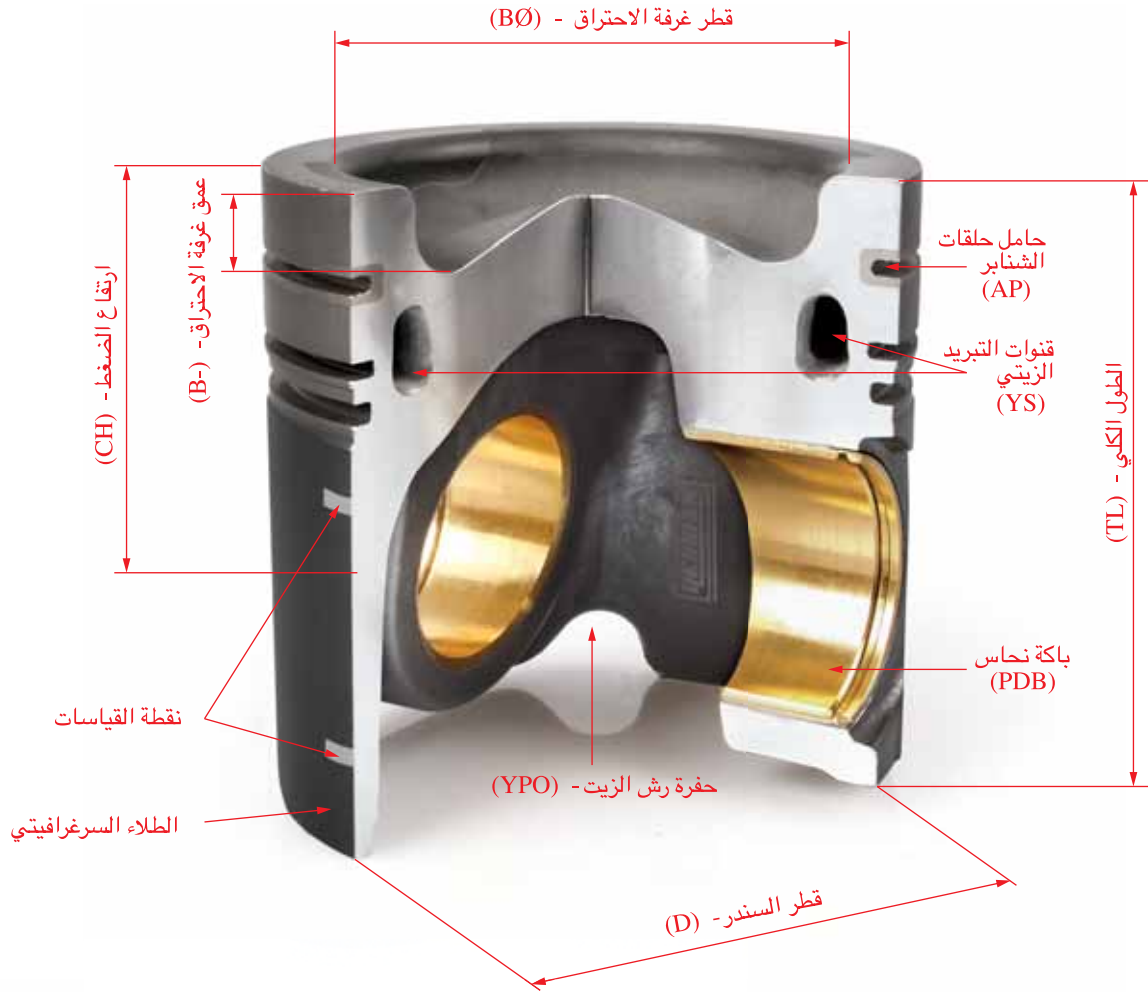
قابلیت تراکم موتور را افزایش می دهد و بمیزان ۲الی ۵ درصد میزان تولید گاز CO₂ را کاهش می دهد. آلفین (مقاوم شده با نیکل) بکار رفته در پیستونهای آلومینیومی موتورهای دیزلی مشکلات تماسی ناشی از مواد بکار رفته را کاهش می دهد.

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.

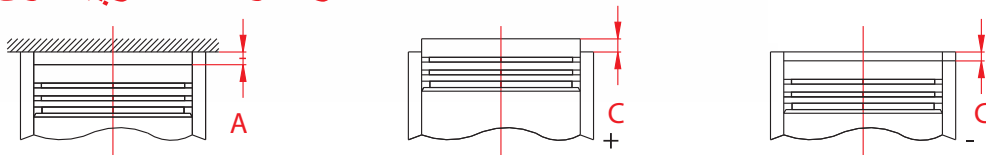
پیستون های فولادی دو پارچه باعث افزایش عمر موتور و کاهش هزینه های تعمیر موتور می شوند.

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

مشخصات فنی



اندازه فواصل در پیستون



A = فاصله تا سر سيلندر
 C = فاصله سر پیستون از سطح بلوك

دستور العمل 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 متر از 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 شکایتی 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 علامت YEN و یا 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

Cr = روکش کروم	Sn = روکش قلع
Mo = روکش مولیبدن	Ck = کروم سرامیک
P = روکش فسفات	Pvd = روکش رسوب فیزیکی بخار
Fe = روکش فررو اکسید	Cdc = روکش کروم الماس
Cu = روکش مس	Dlc = روکش کربن با پوشش الماس
Nt = روکش نیتريد	Tef = الطلاء بالتفلون

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 بخار طی 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 نیتريد، 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 (۲۶۲۰ درجه 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 نیتريد تمامی سطح رینگ سخت می شود با این روکش مقاومت سطح در مقابل سایش افزایش می یابد و عمر رینگ نیز افزایش می یابد روکش نیتريد به لحاظ ویژگیهای تولید و نشر گازهای آلاینده دوست طبیعت می باشد با استفاده از روکش نیتريد 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 دوستانه 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

D = رینگ مستطیلی		TI-IFU = رینگ گوه ای دو طرفه مخروطی با پخ سطح پایینی لبه داخلی	
D-IF = رینگ مستطیلی با پخ سطح بالایی لبه داخلی		TK-IW = رینگ گوه ای دو طرفه مخروطی با سطح بالایی پلکانی لبه داخلی	
D-IFU = رینگ مستطیلی با پخ سطح پایینی لبه داخلی		TK-IWU = رینگ گوه ای دو طرفه مخروطی با سطح پایینی پلکانی لبه داخلی	
D-IW = رینگ مستطیلی با سطح بالایی پلکانی لبه داخلی		N = رینگ خاردار	
D-IWU = رینگ مستطیلی با سطح پایینی پلکانی لبه داخلی		N-IF = رینگ خاردار با پخ سطح بالایی لبه داخلی	
K = رینگ مخروطی		N-IFU = رینگ خاردار با پخ سطح پایینی لبه داخلی	
K-IF = رینگ مخروطی با پخ سطح بالایی لبه داخلی		N-IW = رینگ خاردار با سطح بالایی پلکانی لبه داخلی	
K-IFU = رینگ مخروطی با پخ سطح پایینی لبه داخلی		N-IWU = رینگ خاردار با سطح پایینی پلکانی لبه داخلی	
K-IW = رینگ مخروطی با سطح بالایی پلکانی لبه داخلی		TN = رینگ خاردار مخروطی	
K-IWU = رینگ مخروطی با سطح پایینی پلکانی لبه داخلی		TN-IF = رینگ خاردار مخروطی با پخ سطح بالایی لبه داخلی	
TT = رینگ گوه ای یک طرفه		TN-IFU = رینگ خاردار مخروطی با پخ سطح پایینی لبه داخلی	
TT-IF = رینگ گوه ای یک طرفه با پخ سطح بالایی لبه داخلی		TN-IW = رینگ خاردار مخروطی با سطح بالایی پلکانی لبه داخلی	
TT-IFU = رینگ گوه ای یک طرفه با پخ سطح پایینی لبه داخلی		TN-IWU = رینگ خاردار مخروطی با سطح پایینی پلکانی لبه داخلی	
TT-IW = رینگ گوه ای یک طرفه با سطح بالایی پلکانی لبه داخلی		SC = رینگ شیاردار کنترل روغن	
TT-IWU = رینگ گوه ای یک طرفه با سطح پایینی پلکانی لبه داخلی		DC = رینگ کنترل روغن با لبه پخدار	
T = رینگ گوه ای دو طرفه		DB = رینگ کنترل روغن با دو لبه پخدار	
T-IF = رینگ گوه ای دو طرفه با پخ سطح بالایی لبه داخلی		ES = رینگ شیاردار با فنر ورقه ای کنترل روغن	
T-IFU = رینگ گوه ای دو طرفه با پخ سطح پایینی لبه داخلی		SY = رینگ شیاردار با فنر مارپیچی کنترل روغن	
T-IW = رینگ گوه ای دو طرفه با سطح بالایی پلکانی لبه داخلی		DY = رینگ با فنر مارپیچی و با لبه پخدار کنترل روغن	
T-IWU = رینگ گوه ای دو طرفه با سطح پایینی پلکانی لبه داخلی		PS = رینگ با فنر مارپیچی و با لبه های پخدار کنترل روغن	
TK = رینگ گوه ای دو طرفه مخروطی		VF = رینگ کنترل روغن با ریلهای فولادی فنر بندی VF	
TK-IF = رینگ گوه ای دو طرفه مخروطی با پخ سطح بالایی لبه داخلی		UB = رینگ کنترل روغن با ریلهای فولادی فنر بندی U	
SDR = رینگ کنترل روغن فولادی با کانال نوع V و فنرهای مارپیچی		SDV = رینگ فدری مارپیچی کنترل روغن، دارای کانال فلزی به شکل V	
X = ضخامت رینگ (میلی متر)		DKS = شنبر التحکم بالتزیت حافظه علی شکل انحراف استقامی	

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 کاملاً و یا قسمتی از بین رفته و سطح برآقی 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 روی 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 کار کرده وجود داشته باشد بایستی در محدوده تolerانس ۰/۰۰۰/۰۲۵ 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 اندازه های 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 بعداً بایستی 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.

وقت: 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



۹ شماره مرجع پیستون

مثال

شماره مرجع پیستون	11-01513-000	<p>رینگ پیستون استاندارد = 000</p> <p>ارتفاع تراکم به اندازه 0.20 میلی متر کوتاهتر از استاندارد = 001</p> <p>ارتفاع تراکم به اندازه 0.40 میلی متر کوتاهتر از استاندارد = 002</p> <p>ارتفاع تراکم به اندازه 0.60 میلی متر کوتاهتر از استاندارد = 003</p> <p>رینگ پیستون به میزان 0.50 میلیمتر بزرگتر از استاندارد = 050</p>
-------------------	---------------------	--

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

۱۰ شماره مرجع رینگ + پیستون

مثال

شماره مرجع رینگ + پیستون	31-03513-000	<p>رینگ + پیستون / استاندارد = 000</p> <p>به میزان 0,50+ میلیمتر بزرگتر از استاندارد = 050</p> <p>رینگ + پیستون /</p>
--------------------------	---------------------	---

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

مختلف پوششهای تفاوت و رینگ نوع

38-

39-

۱۱ توضیحات شماره مرجع بوش سیلندر

مثال

بوش سیلندر / استاندارد = 000
به میزان 0,50+ میلیمتر بزرگتر از استاندارد = 050
بوش سیلندر /

شماره مرجع بوش سیلندر

51-05513-000

کد فنی قدیمی	کد فنی جدید
5513 000	51-05513-000

۱۲ توضیحات کد مرجع کیتها و ستها

رقم الكیت بیستون + بنز + شنبر + قمیص

ارقام التعرف لاطقم
الكیئات

71-07513-000

رینگ / کیت = 000
کیت استاندارد از خارج اندازه = 0.50
رینگ / به میزان 0.50

شكل الشنبر ونوعية الطلاء المختلفة

71-8

71-9

کد فنی قدیمی	کد فنی جدید
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

۱۳ شماره مرجع رینگ

شماره مرجع رینگ

91-09513-000

رینگ / استاندارد = 000
میلیمتر بزرگتر از استاندارد = 0.50
رینگ / به میزان 0.50

شكل الشنبر ونوعية الطلاء المختلفة

98-

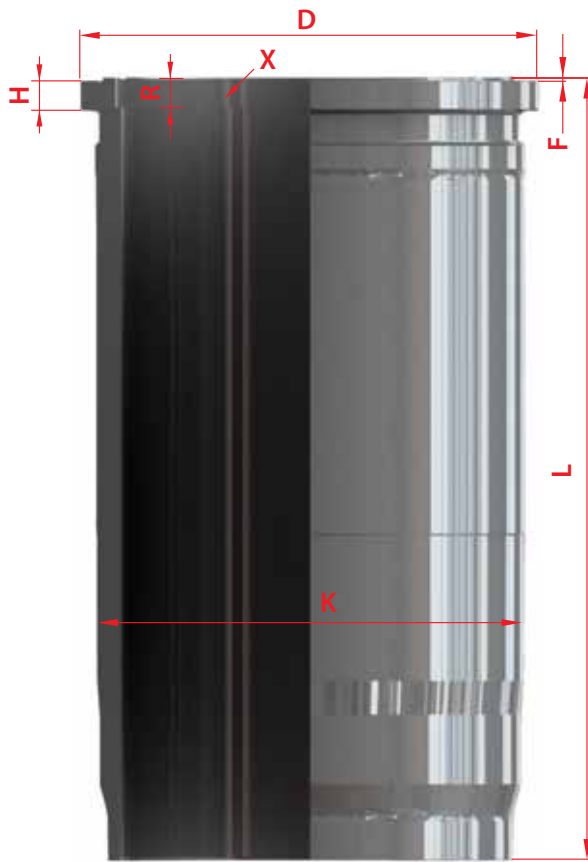
99-

کد فنی قدیمی	کد فنی جدید
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

۱۴ شماره فنی اورینگ

شماره فنی اورینگ

55-50701-000



- K = قطر خارجی
- L = طول کل
- H = طول فلانچ
- F = ضخامت واشر سر سیلندر
- D = قطر اِفلانچ
- 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:

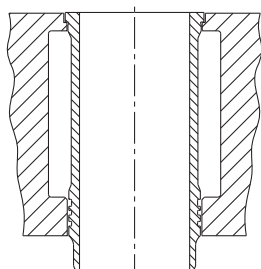
بوش هایی هستند که داخل بلوک سیلندر از اطراف بوسیله آب خنکاری می شوند. شامل سه گروه اصلی می شوند:

الف دارای کانال و فلانچ:

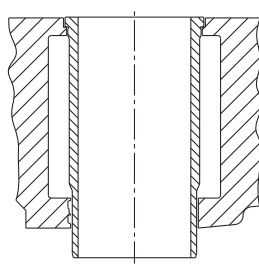
در این نوع، بوش سیلندر از بالا از طریق فلانچ بر روی بلوک سیلندر قرار می گیرد و از پایین برای جلوگیری از نشت آب خنک کاری به داخل بوش سیلندر کانالهایی جهت قرار گرفتن اورینگ جود دارد. (شکل ۱)

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

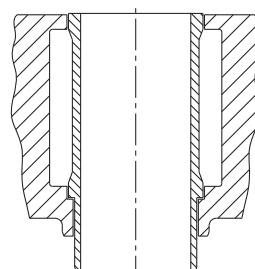
ج دارای دو فلانچ
در این نوع، بوش سیلندر از بالا و پایین دارای فلانچ و کانال جهت قرار گرفتن بوش می باشد. (شکل ۳)



شکل ۱



شکل ۲



شکل ۳

بوش سیلندر خشک

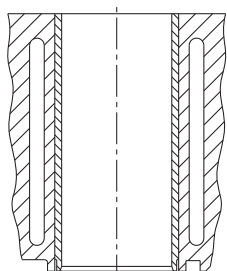
بوش سیلندرهایی که وقتی داخل بلوک سیلندر قرار می گیرند به طور

مستقیم با آب خنک کاری در تماس نمی باشند

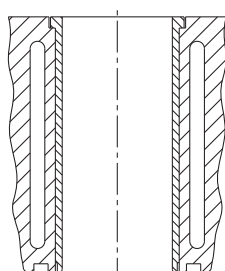
دارای دو نوع اصلی می باشند

الف فلانچ دار (شکل ۴)

ب بدون فلانچ (شکل ۵)



شکل ۴



شکل ۵

مواردی که بایستی در مونتاژ بوش سیلندرها رعایت شود

دستورالعمل مونتاژ بوش سیلندرهای خشک:

سیلندرهای خشک بصورت فلانچ دار و بدون فلانچ تولید می شوند. (شکل ۶) در شرایط کارکرد نامناسب در

موتورهایی که پیستون داخل بوش سیلندر بدون فلانچ نصب می شود لغزشهایی در راستای محور مشاهده می

شود که چنین مشکلی در بوش سیلندرهای فلانچ دار بوجود نمی آید که این از مزایای فلانچ 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 تolerانس های ذکر شده در پایین دقت شود. (شکل ۷) 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

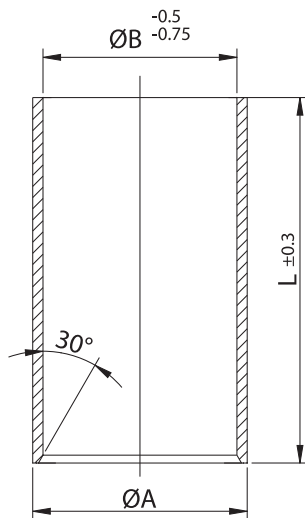
آمدن مشکلات در عملکرد می شود در سیلندرهای خشکی که قطر خارجی آنها به اندازه مقدار نهایی آن

ماشینکاری شده اند قطر داخلی آنها به $0/5$ تا $0/75$ میلیمتر کوچکتر از انداز نهایی ماشینکاری می شود

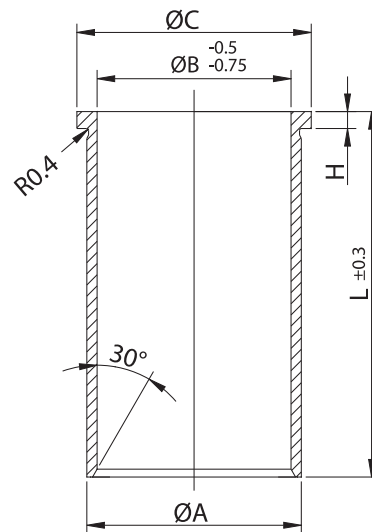
موقع مونتاژ پرسی بوش سیلندر در داخل سیلندر، بمنظور آسیب ندیدن فلانچ بوش، بایستی قطر محل قرار

گرفتن فلانچ در سیلندر کمی بزرگتر از قطر خارجی فلانچ (C) باشد

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



شکل ۶



شکل ۷

همانطور که می دانیم فلانچ در قسمت پایین دارای رادیوسی به قطر ۰/۴ می باشد که برای جلوگیری از نشستن این انحنا بر روی سیلندر، در محل تماس فلانچ و سیلندر، در گوشه محل تماس بر روی سیلندر پخی به اندازه ۱ میلیمتر داده می شود. در غیر اینصورت شکستن فلانچ 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 ۰/۰۲۵ 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

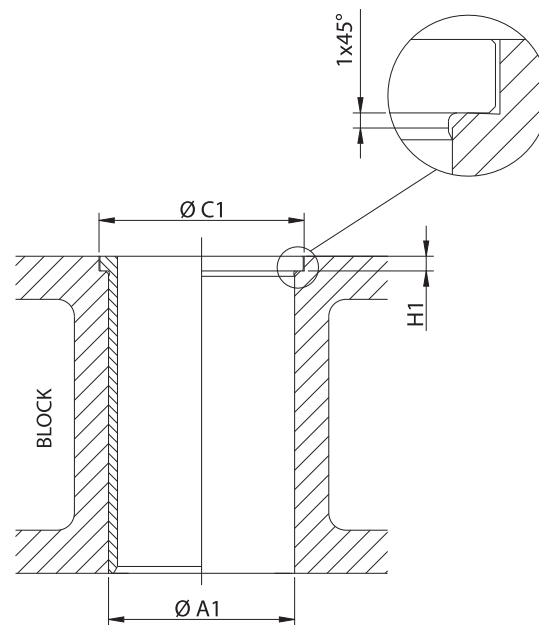
برای پرس بوش سیلندرهای خشک فشاری به اندازه ۵۰۰۰ تا ۳۰۰۰ کیلوگرم کافی است در طی مراحل مونتاژ اگر ماده ای که برای روغن کاری بکار می رود غلیظ باشد در اثر گرما این ماده دچار فرآیند ککساز می شده و در انتقال گرما دچار مشکل می شود. بعد از مونتاژ از طریق پرس، سنگ زنی سطحی از بلوک سیلندر که بوش سر سیلندر قرار 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 فلانچ بوش سیلندر در آن قرار می 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 تolerانس قطر داخلی سیلندر از اندازه اسمی آن بین ۰ و ۰/۰۱۵ میلی متر است میزان تolerانس قطر بیرونی بوش سیلندر از اندازه اسمی بین ۰/۰۱۲ + و ۰/۰۲۴ میلی متر می باشد.

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

قطر سوراخهای بلوک سیلندر (میلیمتر)			
	50 - 80	80 - 120	120 - 180
Q ₁ A	+0.01	+0.01	+0.01
H ₁	+0	+0	+0
	-0.15	-0.15	-0.15
QC ₁	+0.10	+0.10	+0.10
	+0.25	+0.25	+0.25



شکل ۹

دستور العمل مونتاژ بوش سیلندر های تر

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

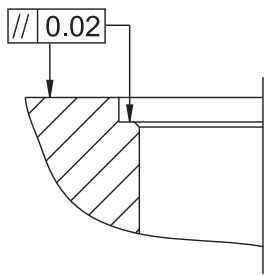
در بلوک سیلندر محل های تماس بایستی بدقت از بقایای گل، زنگ و سایر آلودگیها تمییز شود. بهنگام تمییزکاری هرگونه وسیله مانند سمباده یا چکش که موجب ایجاد خراش می شود نبایستی استفاده شود. بهترین وسیله برای اینکار فرچه با سیمهای فولادی است. در صورتیکه بوش سیلندر در نتیجه زنگ زدگی و رسوب به بلوک محکم چسبیده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

سطح پایینی فلانچ بوش سیلندر بایستی کاملاً 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. (شکل ۱۲)

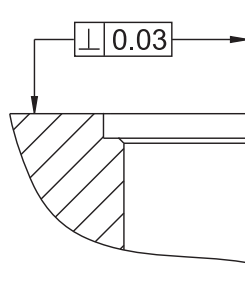
برای جلوگیری از برخورد رادیوس موجود در قسمت پایین فلانچ بوش سیلندر (د) با سیلندر در نقطه (آ) در محل تغییر زاویه سیلندر پخی به اندازه ۱/۰ - ۱/۵ میلی متر به شعاع ۴۵ درجه داده می شود.

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

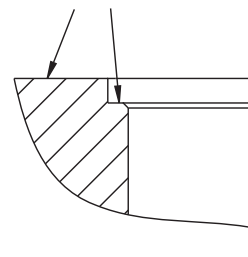
مشخصات فنی



شکل ۱۰

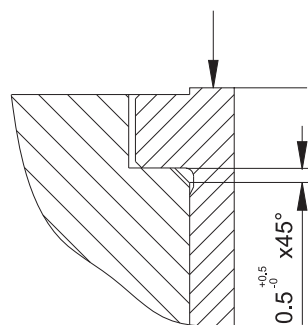


شکل ۱۱

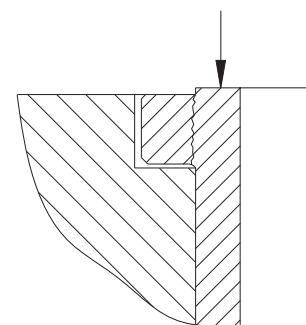


شکل ۱۲

قطر سوراخ واشر سر سیلندر (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 فلانچ بوش سیلندر در جایگاه خود در بلوک سیلندر، قبل از مونتاژ بوش سیلندر را به حالت معکوس در آورده و در محل قرار گرفتن فلانچ در سیلندر قرار می گیرد. همانطور که می دانیم فلانچ 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 متر مورد 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 باستانی بطور صحیح انجام شود یعنی در هنگام مونتاژ استفاده 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 و در مقابل ورم کردن، استهلاک، گرما و روغن مقاوم باشند در غیر اینصورت موجب نفوذ آب به داخل کارتر شده و باعث 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 استفاده از اورینگ نامناسب می باشد کانالهای محل قرار گیری اورینگها بایستی کنده شود

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




جزئیات برجسب زنی بوش سیلندر



اورینگ

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



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

- ۱۵- قطر بین 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 فلانچ
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 کروم
HR تصلب
NT النتريت
HT المعالجة الحرارية
STEEL فولاذ
- ۲۷- المحرك المشترك
۲۸- کد اورینگ
- 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- احتراق محفظه عمق B-
B+ تاج انحنای
۱۲- قطر محفظه: 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 بین بوشدار

CONTENIDO

INSTALACIONES DE PRODUCCIÓN	II
EMPAQUE	IV
CERTIFICACIONES DE CALIDAD	VI
PISTONES DE ACERO DE DOS PIEZAS	VIII
ESPECIFICACIONES TÉCNICAS	X
PROGRAMACIÓN DE PRODDUCION	1-419
PRODUCTOS ÍNDICE	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		





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 países 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

YENMAK

PIEZAS DE MOTOR





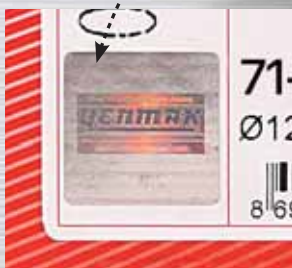
Desde el año 2003 los productos de Yenmak se toman lugar en el mercado envasado el formato que se puede ver aquí abajo.

La información sobre detalles de envasado se puede ver aquí abajo:

Gracias a cubertura especial será usted la primera persona en tocar el producto.



Número de Trazabilidad

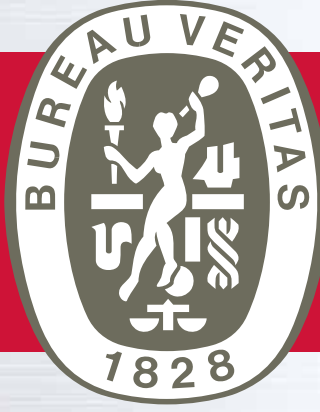


Para asegurar la seguridad del producto sobre el envase se encuentra integrado un holograma 3D de seguridad.



Una etiqueta que se encuentra bajo envase para proporcionar seguridad al producto.

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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 límites bajos de emisión y gases de escape.

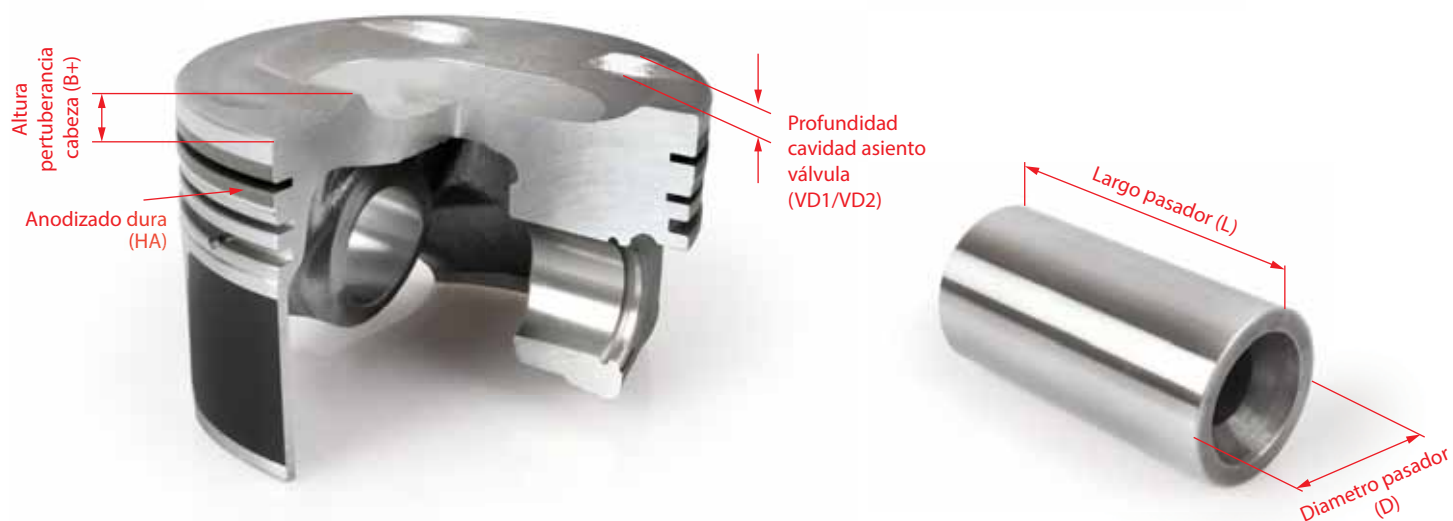
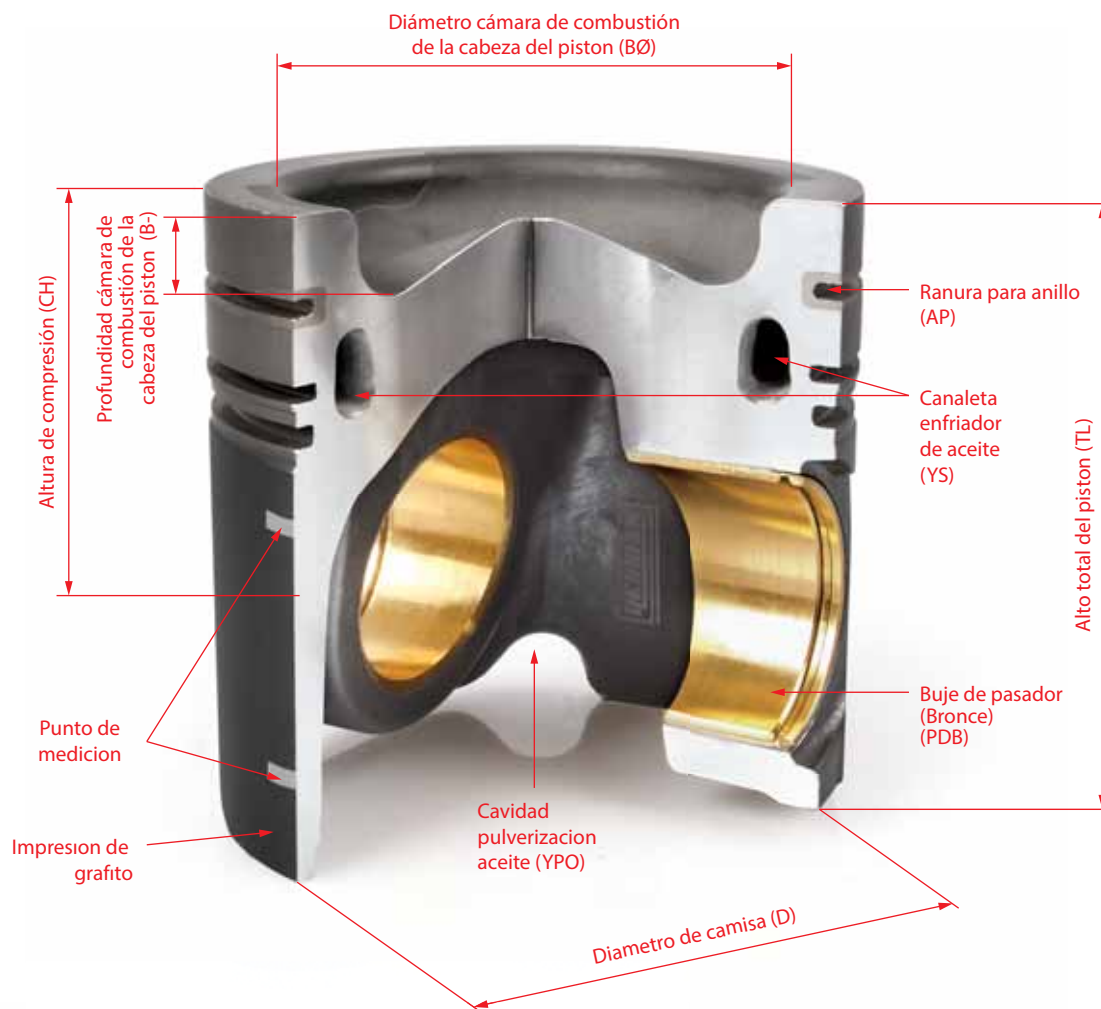
Pistones de Acero de Dos Piezas

- 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.

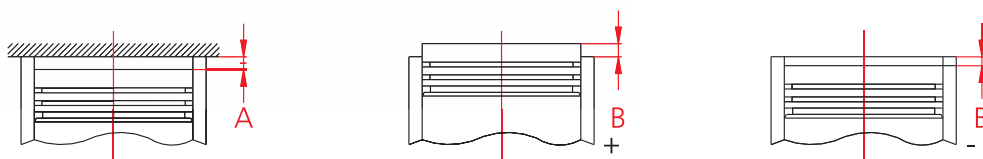
Ventajas de Pistones de Acero de Dos Piezas

- 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 CO₂ . 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 rayas pueden causar quiebras en futuro. No es necesario procesar los pistones, porque kit de segmento de Yenmak son diseñados para sentar 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 Colcótár

Cu = Revestimiento de Cobre

Nt = Revestimiento de Nitrito

Sn = Revestimiento de Bidón

Ck = Revestimiento de Cromo

Pvd = Acumulación de Vapor Físico

Cdc = Revestimiento de Diamante Cromo

Dlc = Revestimiento de Carbono con

Tef = Revestimiento teflon

DESCRIPCIONES TECNICAS

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 estas 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

iones 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°), 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 común 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 Diamante 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 diamante se utiliza en lugar de pieza de cerámica. Así la resistencia contra desgastes y rendimiento contra la fricción se aumenta.

Dlc (Diamante Como Carbono) (Revestimiento de Carbono con Revestimiento de Diamante)

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.



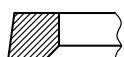
D-IWU = Segmento rectangular con superficie inferior de margen interior escalonado.



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.



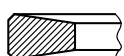
TT-IFU = Segmento unilateral con superficie inferior de margen interior achaflanado.



TT-IW = Segmento unilateral con superficie superior de margen interior escalonado.



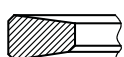
TT-IWU = Segmento unilateral con superficie inferior de margen interior escalonado.



TT = Segmento trapecio bilateral



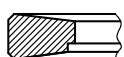
T-IF = Segmento bilateral con superficie superior de margen interior achaflanado.



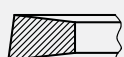
T-IFU = Segmento bilateral con superficie inferior de margen interior achaflanado.



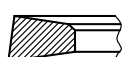
T-IW = Segmento bilateral con superficie superior de margen interior escalonado.



T-IWU = Segmento bilateral con superficie inferior de margen interior escalonado.



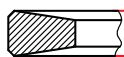
TK = Segmento cónico trapecio bilateral



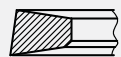
TK-IF = Segmento bilateral con superficie superior de margen interior achaflanado.



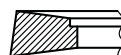
SDR = Segmento de acero con canales tipo V y con muelle helicoidal para control de aceite



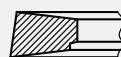
X = Espesor del segmento (mm)



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



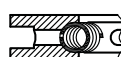
DC = Segmento achaflanado para control aceite



DB = Segmento achaflanado doble para control aceite



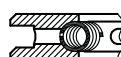
ES = Segmento dentado y con muelle plano para control de aceite



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

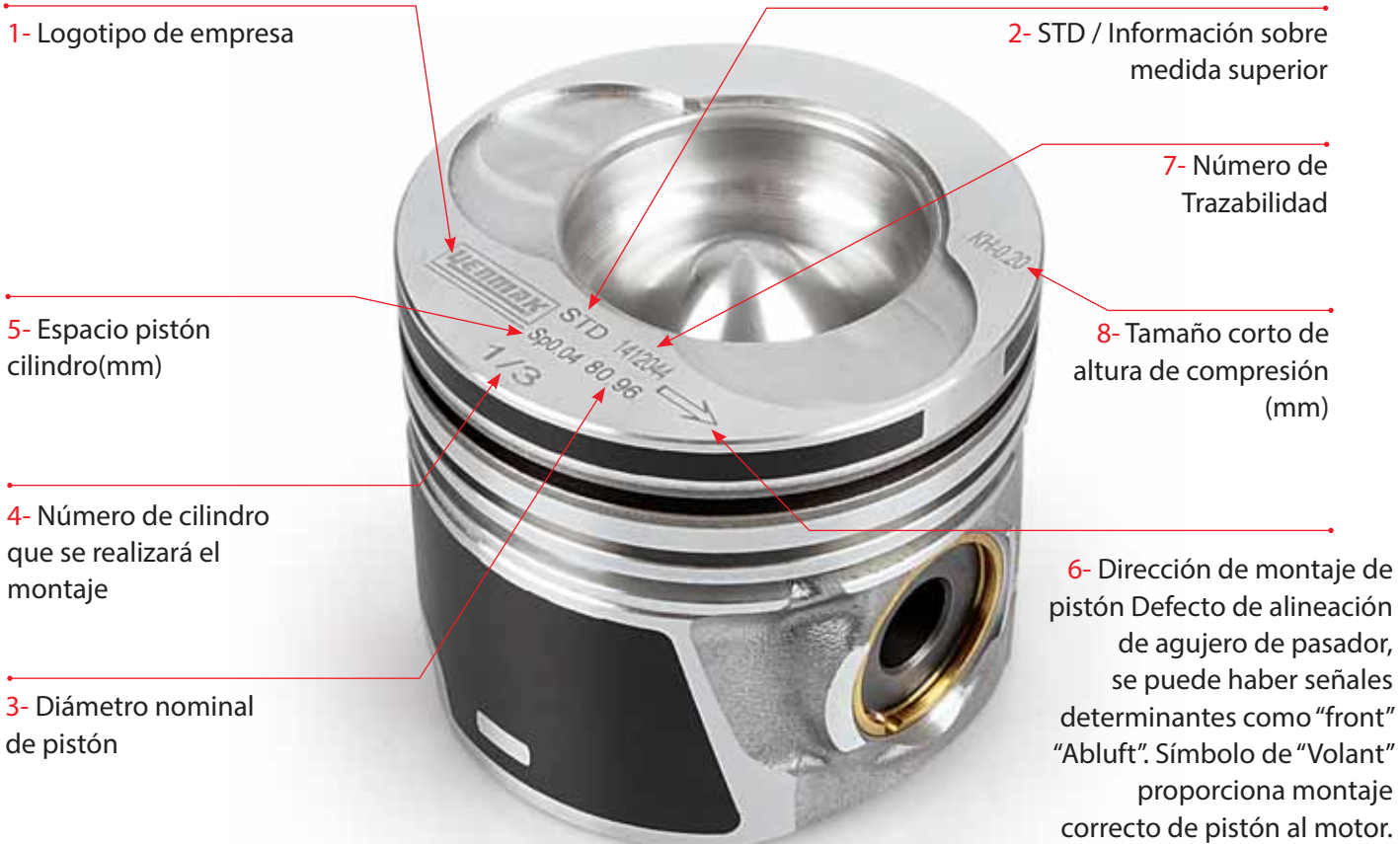
INSTRUCCIONES GENERALES PARA MONTAJE DE LOS PISTONES

- 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 controlar 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 problemas causadas de montaje no realizado conforme las instrucciones.

DESCRIPCIONES TECNICAS

8- MARCAJE DE PISTON Y CODIGOS



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

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

Diferencias entre tipos y revestimientos de los anillos motor.

38-
39-

11- DESCRIPCIONES DE REFERENCIA DE CAMISA

EJEMPLO

Número de referencia 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 kit

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

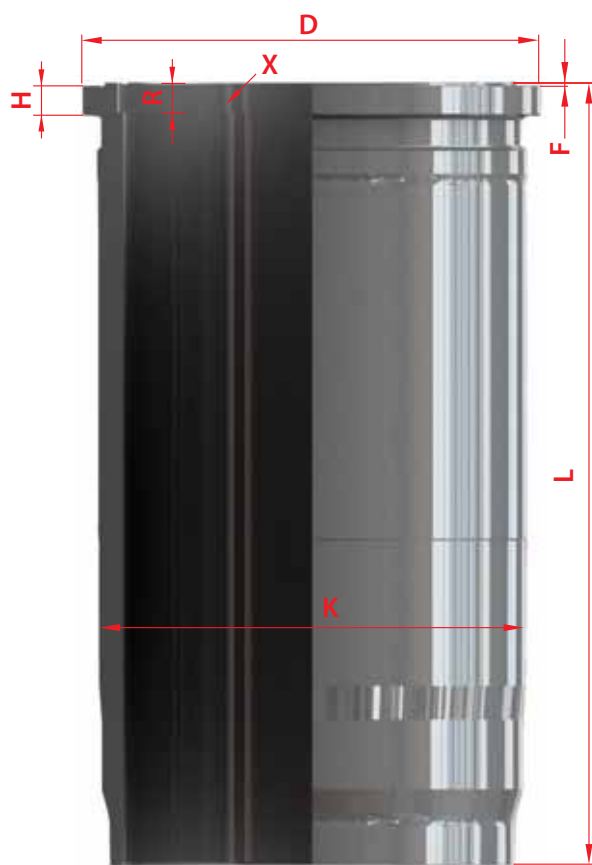
14 - NÚMERO DE REFERENCIA DE RETÉN

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)

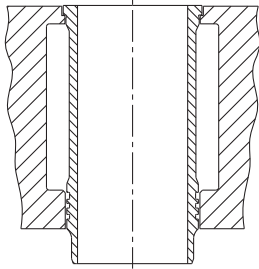


Imagen- 1

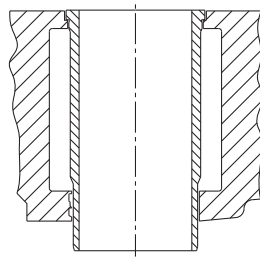


Imagen- 2

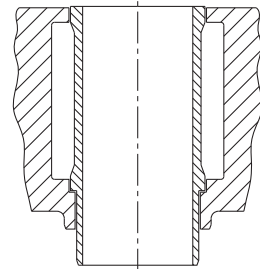


Imagen- 3

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)

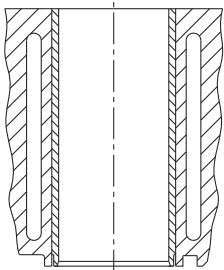


Imagen- 4

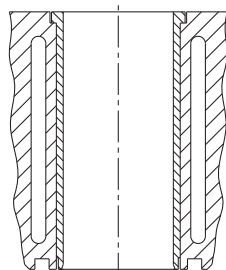


Imagen- 5

LOS PUNTOS A CONSIDERAR EN EL MONTAJE DE CAMISAS DE CILINDRO

INSTRUCCIÓN 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 bajo 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 finas 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.

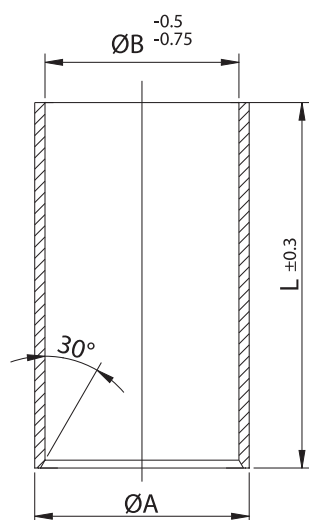


Imagen- 6

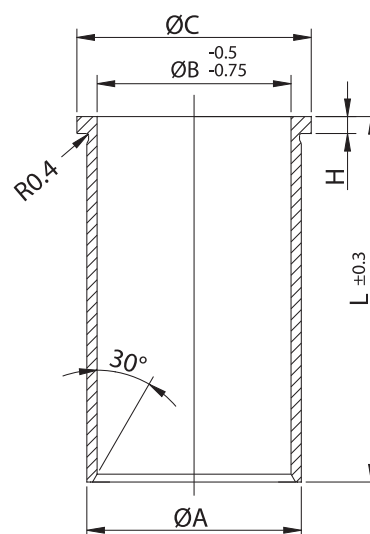


Imagen- 7

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 una 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 las 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 ₁ A	+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

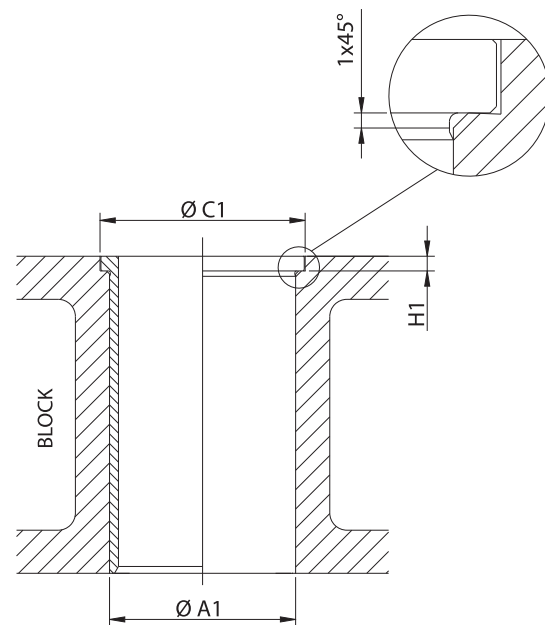


Imagen- 9

INSTUCCÓN 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 así 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 también para no aplastar superficies de sentar de cilindro. (Imagen 12)

Para evitar que radio que se encuentra 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 opuestos.

DESCRIPCIONES TECNICAS

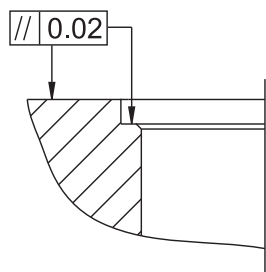


Imagen- 10

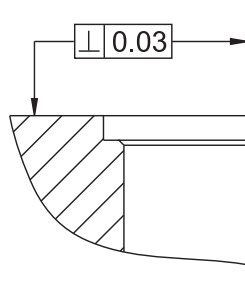


Imagen- 11

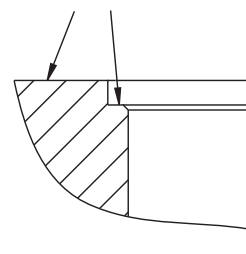


Imagen- 12

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.

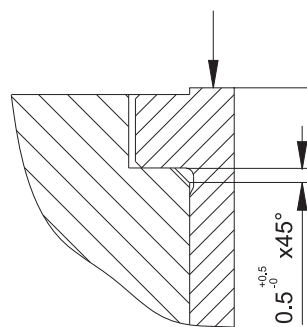


Imagen- 14

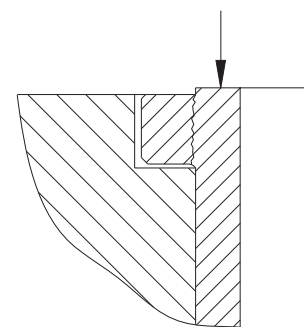


Imagen- 15

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

- 1- Diámetro de Pistón
- 2- Código de Motor
- 3- Información de Combustible
- 4- Años de Modelos
- 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

CONTEÚDO

INSTALAÇÕES DE PRODUÇÃO	II
EMBALAGEM	IV
CERTIFICADOS DE QUALIDADE	VI
PÍSTÕES DE AÇO PEDAÇO DE CASAL	VIII
DESCRIÇÃO TÉCNICA	X
PROGRAMA DE PRODUÇÃO	1-419
PRODUÇÃO INDEX	420

ALFA ROMEO	1	MERCEDES-BENZ	179
AUDI	7	MINI (BMW)	202
BMW	33	OPEL	205
CHEVROLET	41	PEUGEOT	236
CHRYSLER	43	RANGE ROVER	280
CITROEN	46	RENAULT	281
DACIA	70	ROVER	318
DAF	75	SAAB	321
FIAT / IVECO	78	SEAT	324
FORD	118	SKODA	350
JEEP	160	TATA	368
LADA	161	VOLKSWAGEN	369
LANCIA	164	VOLVO	410
LAND ROVER	173		





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

YENMAK

PEÇAS DE MOTOR



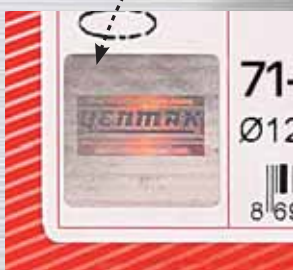
Desde 2003; Yenmak produtos, embalados em um formato que vemos a seguir, realizou-se no mercado. Os dados para encontrar os detalhes do pacote são:



Graças ao nosso selo especial, você é o primeiro a abrir o produto.



Número de rastreabilidade

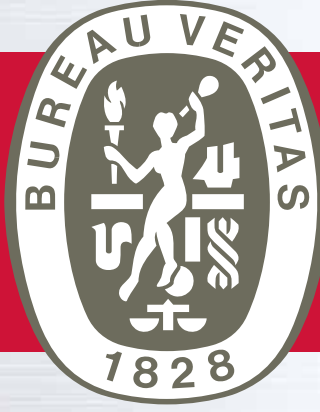


Com o objetivo de ser segura, uma holograma 3D integrado na caixa.



Com o objetivo de garantir a segurança dos produtos, aplicado caixa de seis etiqueta de segurança.

BUREAU VERITAS Certification



ISO 14001
ISO / TS 16949
BUREAU VERITAS
Certification



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.

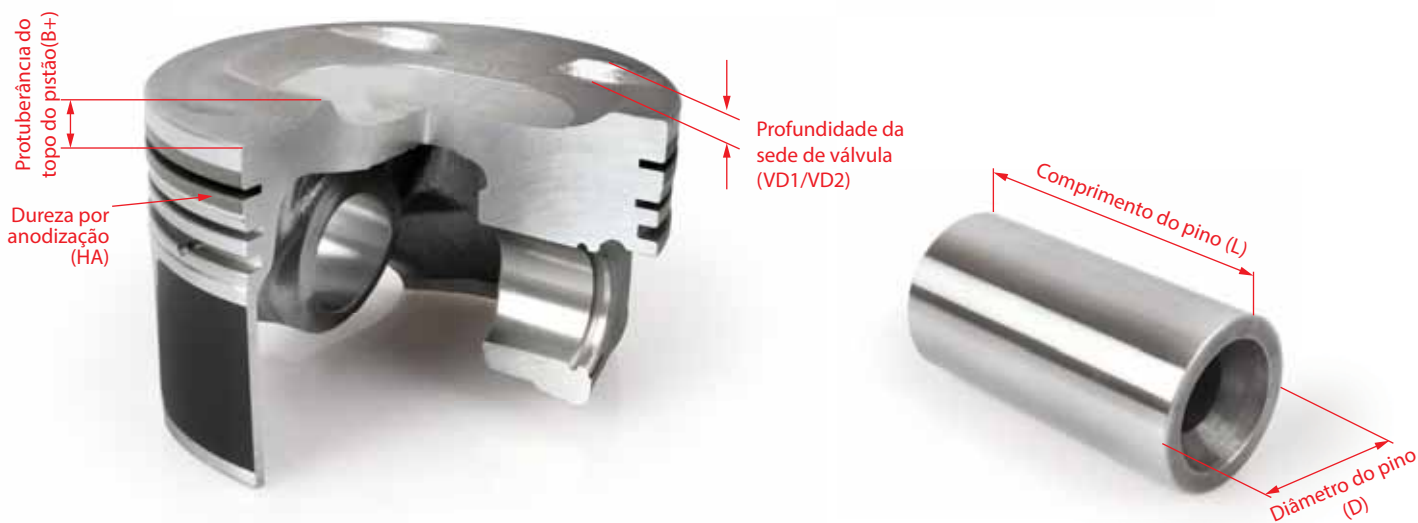
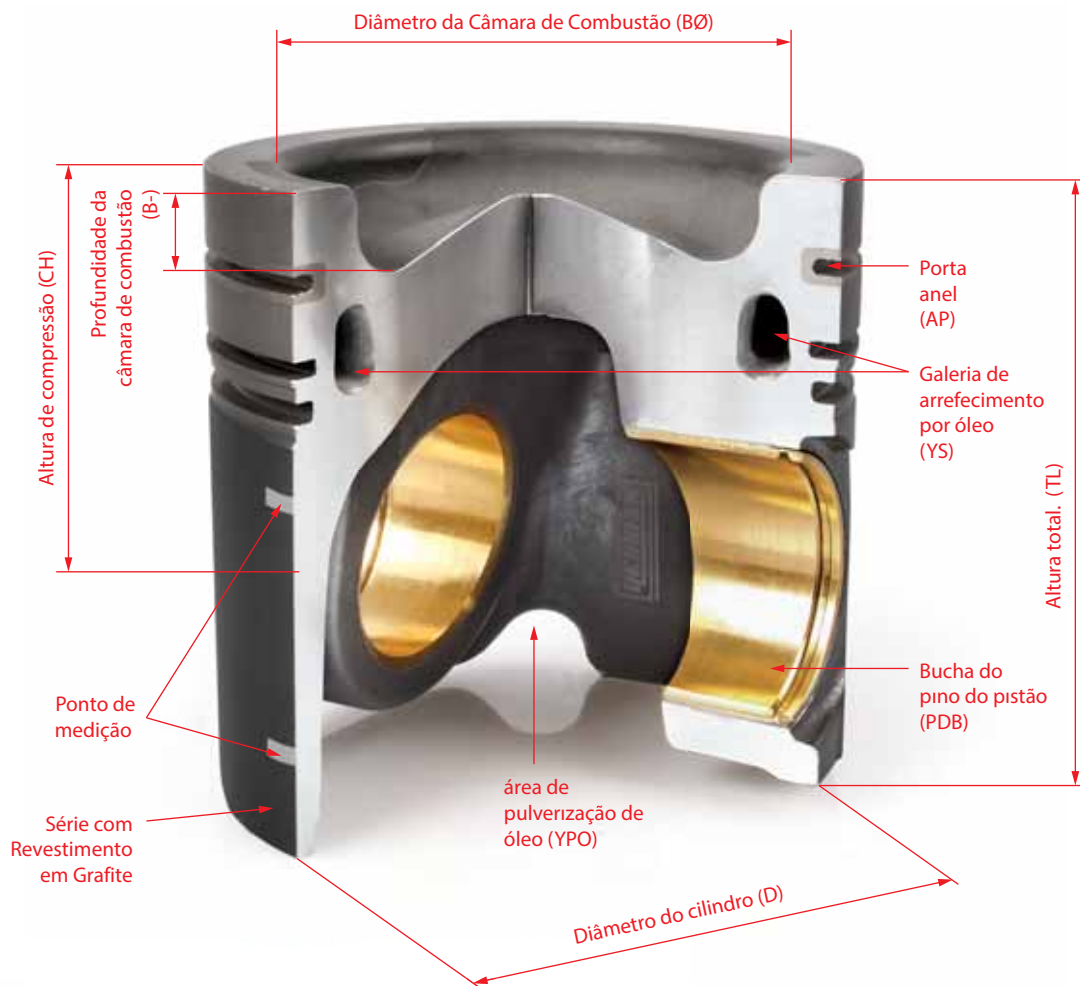
Peça de aço Pistons dupla;

- 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,

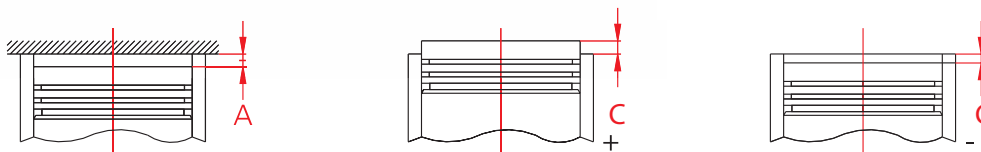
Vantagens de via dupla pistão de aço;

- 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 CO₂. 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 é 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-crômio, 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 direção.

ANEL REVESTIMENTOS E TRATAMENTOS DE SUPERFÍCIE

Cr = cromagem.

Mo = revestimento do molibdênio

P = revestimento de fosfato

Fe = revestimento ferrosit

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. Molibdénio, elevado ponto de fusão (2620 C°), 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 cromo. Hoje em dia, não só o anel de pistão superior, mas também tem a tendência de cromo 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 cromo é aplicada de duas maneiras:

- Difícil,
- Revestimento poroso com cromo,

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.		TI-IFU = Com dois lados bordas da superfície inferior do anel de trapézio cone superior chanfrada.
	D-IF = Superfície chanfrada anel rectangular borda interna.		TK-IW = Superfície de dupla face gradualmente reduzida anéis trapézio borda interna.
	D-IFU = Anel inferior interior borda chanfrada oblongo.		TK-IWU = Anéis de trapézio Duplex gradualmente reduzida borda interna da superfície do fundo.
	D-IW = Superfície de Borda dentro gradualmente anel rectangular.		N = Anéis de nariz raspador.
	D-IWU = Borda interna gradualmente menor anel rectangular superfície.		N-IF = Superfície chanfrada dentro anéis raspadores nariz borda.
	K = Arruelas cônicas.		N-IFU = A superfície inferior da borda interna chanfrada anéis raspadores nariz.
	K-IF = Anel interno cônico cantos chanfrados superfície.		N-IW = Inside Edge skimmers de superfície gradualmente anéis de nariz.
	K-IFU = Bordas chanfradas cônico anel inferior interior.		N-IWU = Nariz dentro de borda skimmers gradualmente inferiores.
	K-IW = Superfície periférica interna gradualmente reduzida anel.		TN = Anéis Nosecone raspador.
	K-IWU = Gradualmente afunilada bordo interior do anel inferior.		TN-IF = Superfície interior bordas chanfradas nariz afilado anel raspador
	TT = Anéis de trapézio unilaterais.		TN-IFU = Bordas chanfradas interior inferior nariz afilado anel raspador
	TT-IF = Arestas interiores de superfície chanfrada anéis trapézio lados.		TN-IW = Dentro superfície Borda anel raspador de nariz gradualmente reduzida
	TT-IFU = İçken faces chanfradas anéis de trapézio de superfície.		TN-IWU = Fundo borda interna do anel raspador de nariz gradualmente reduzida
	TT-IW = Dentro superfície Borda gradualmente anéis de trapézio lados.		SC = Fenda anel de controle de óleo
	TT-IWU = Borda interna gradualmente inferiores anéis trapézio unilaterais.		DC = Anel de controle de óleo chanfrada
	T = Anéis trapezoidais frente e verso.		DB = Anel de controle de óleo duas vezes chanfrada
	T-IF = Superfície chanfrada dentro de anéis de trapézio borda duplex.		ES = Reed fenda anel de controle de óleo
	T-IFU = Com dois lados bordas da superfície inferior do anel interior chanfrada trapézio.		SY = Mola helicoidal com fenda anel de controle de óleo
	T-IW = Superfície do bordo interior anéis trapezoidais duplas gradualmente.		DY = Mola helicoidal bordas chanfradas anel de controle de óleo
	T-IWU = Borda interna gradualmente mais baixo face anéis trapezoidais.		PS = Mola helicoidal bordas chanfradas casal, anel de controle de óleo
	TK = Trapezoidal anéis cônicos de dupla face.		VF = Anéis de controle de óleo VF feito de banda de aço mola
	TK-IF = Superfície chanfrada dentro de borda dupla trapezoidais anéis cônicos.		UB = Aço do tipo banda de anel de controle de óleo
	SDR = V-channel anel de controle de óleo de aço mola helicoidal.		SDV = Canal-V anel de controle de óleo de aço mola helicoidal
	X = Espessura do corte (mm)		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 cônica 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;



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

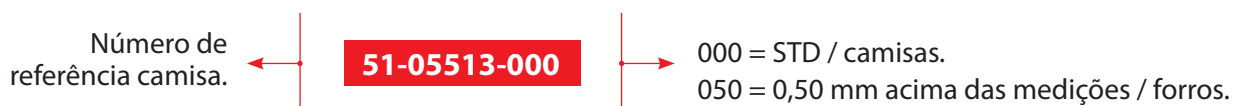
Diferenças entre tipos de pistão e revestimentos.

38-

39-

11 - REFEREM-SE AOS FORROS DESCRIÇÕES.

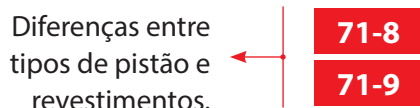
EXEMPLO



NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
5513 000	51-05513-000

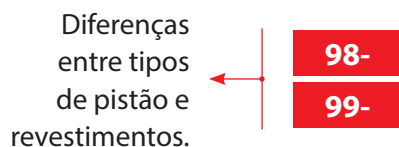
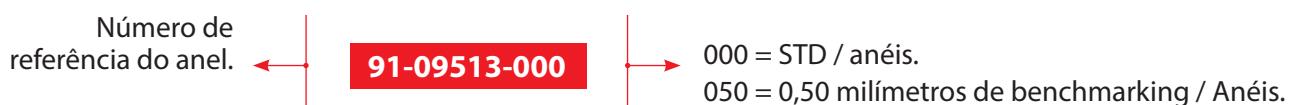
12 - DEFINIÇÕES DE EQUIPAMENTOS E KIT.

Referência do kit montado : Pistão + pino + anel de segmento + camisa de cilindro



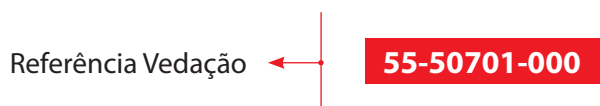
NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
7513 000	71-07513-000
7513 000-08	71-87513-000
7513 000-09	71-97513-000

13 - NÚMERO DE REFERÊNCIA DO ANEL.



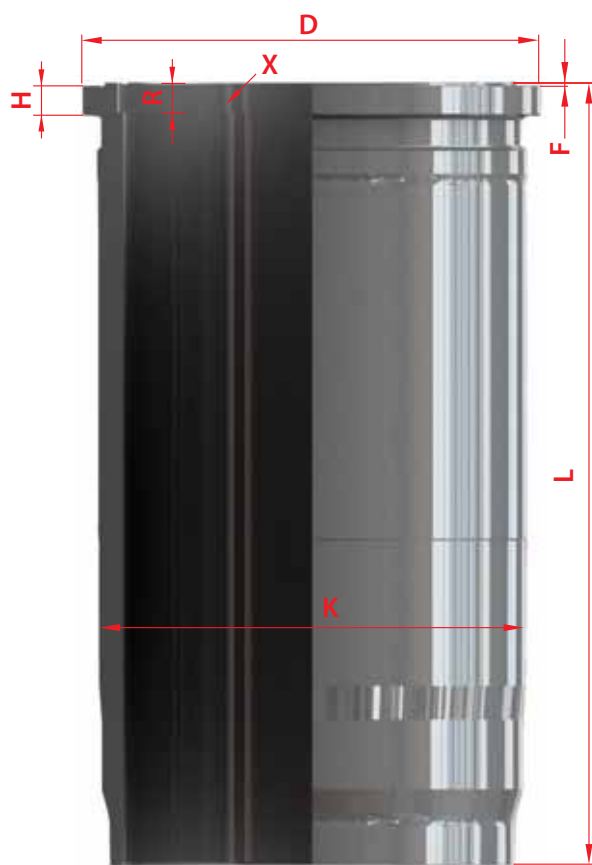
NÚMERO DE REFERÊNCIA ANTERIOR	NOVO NÚMERO DE REFERÊNCIA
9513 000	91-09513-000
9513 000-08	98-09513-000
9513 000-09	99-09513-000

14 - REFERÊNCIA VEDAÇÃO



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 instituído.
- R = em vez de 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)

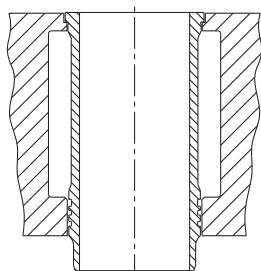


Figura - 1

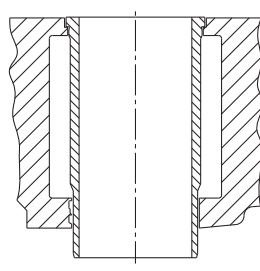


Figura - 2

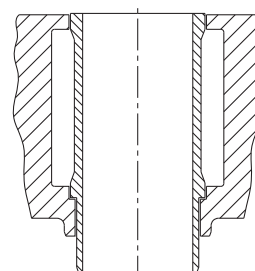


Figura - 3

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)

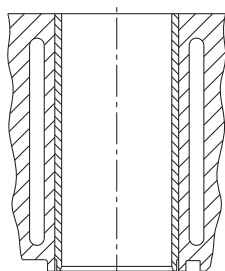


Figura - 4

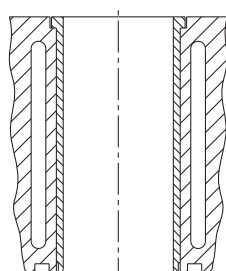


Figura - 5

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 secas, enquanto prima passe, assim como o ajuste direito deve ser fornecida no lado de baixo do assento do alojamento da flange de bloco.

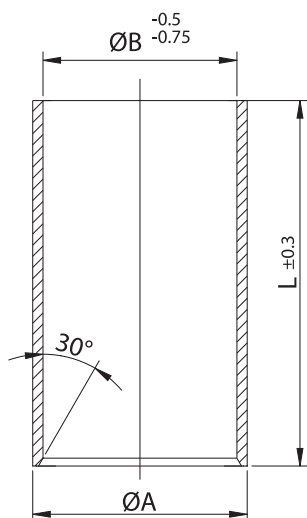


Figura - 6

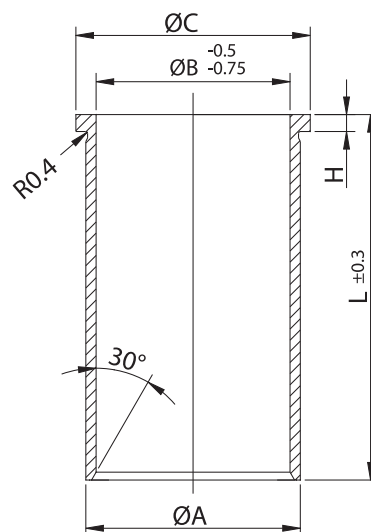


Figura - 7

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 ₁ A	+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

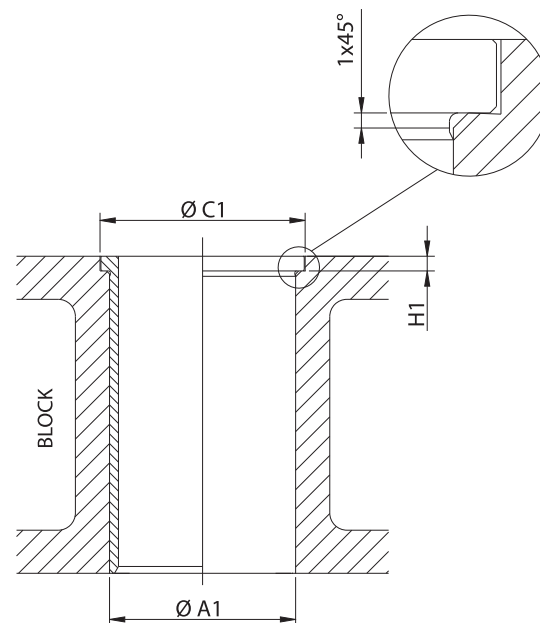


Figura - 9

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 perpendiculars 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 perpendiculars entre si.

DEFININDO DESCRIÇÃO TÉCNICA;

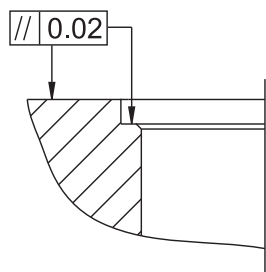


Figura - 10

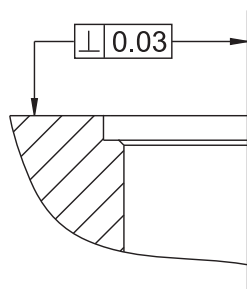


Figura - 11

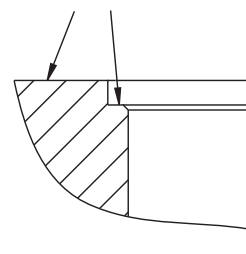


Figura - 12

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.

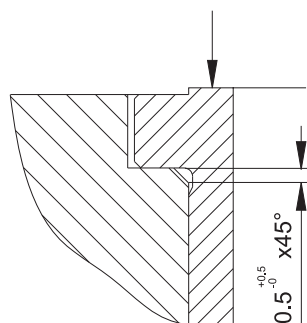


Figura - 14

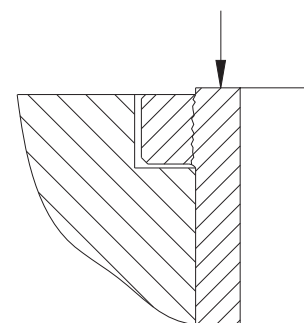


Figura - 15

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.



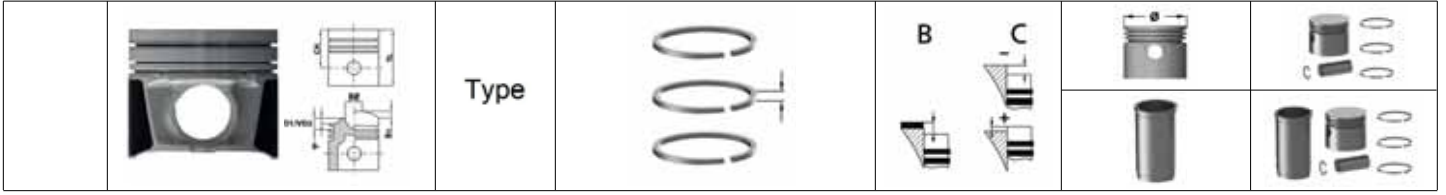
VEDAÇÃO

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

- | | |
|--|--|
| <p>1 - Diâmetro Do Pistão</p> <p>2 - Código De Motor</p> <p>3 - Informações De Combustível</p> <p>4 - Anos De Modelo</p> <p>5 - O Número De Cilindros</p> <p>6 - Volume Do Cilindro</p> <p>7 - A Potência Do Motor</p> <p>8 - Código De Pistão</p> <p>9 - Ch: Acidente Vascular Cerebral</p> <p>10 - Vd1 / Vd2: Profundidade Válvula</p> <p>11 - B- : Profundidade da câmara de combustão.
B+ : Protuberância do topo do pistão</p> <p>12 - Bo: Diâmetro De Célula</p> <p>13 - TL: Tamanho Grande</p> <p>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</p> <p>15 - Pin Diâmetro - Altura - Recursos</p> <p>16 - Características Do Segmento</p> | <p>17 - Projeção Cruzeta</p> <p>18 - Diâmetro</p> <p>19 - Código De Pistão +</p> <p>20 - Código De Camisa</p> <p>21 - Código Kit</p> <p>22 - Diâmetro Exterior Do Cilindro</p> <p>23 - Diâmetro Camisas Flange</p> <p>24 - Camisa De Corpo Inteiro</p> <p>25 - Flange Bill Espessura</p> <p>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</p> <p>27 - Motor comum</p> <p>28 - Código De Vedação</p> |
|--|--|



69,600

199 A3.000 Mito 1.3 JTDM 16V D 11 2009 > 4 Cyl 1248cc 66-77kW (90-105ps)

 <p>11-02289-000 CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43</p>  <p>23,00x56,70</p> <p>Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor</p>	<p>AP</p> <p>YS</p>	<p>91-09282-000</p> <p>1 2,000  CK</p> <p>2 1,500  P</p> <p>3 2,000  NT St</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04289-000</p> <p>31-04289-040</p>
---	---------------------	--	--	---------------------------------	---






 <p>K=72,50 L=142,00 H=5,10 D=74,00</p>	DS				51-65451-000
---	----	--	--	--	---------------------

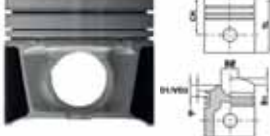
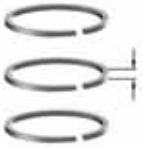
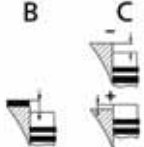

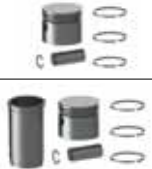
 <p>K=73,00 L=142,00 H=5,20 D=74,50</p>	DS +0,50				51-65451-050
--	-------------	--	--	--	---------------------

 <p>K=73,50 L=142,00 H=5,20 D=75,00</p>	DS +1,00				51-65451-100
---	-------------	--	--	--	---------------------

69,600






Strok Boyu 0,20mm Kisa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)


 <p>11-02289-001 CH 40,230 VD1 0,904 B- 12,400 BØ 38,000 TL 62,230</p>  <p>23,00x56,70</p> <p>Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor</p>	<p>AP</p> <p>YS</p>	<p>91-09282-000</p> <p>1 2,000  CK</p> <p>2 1,500  P</p> <p>3 2,000  NT St</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04289-001</p> <p>31-04289-041</p>
	CH-0,20 mm				

	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	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
	26,00x61,00					
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	
---	--	----	--	--	---------------------	--

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	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
	26,00x61,00					
Alfa Romeo ve Opel ile Ortak Motor						



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)

<p>11-02197-000 CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630</p> <p> 29,98x67,00</p> <p>Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor</p>	AP	91-09790-000	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
	YS	<p>1 1,500 CkP</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>			
		<p>98-09790-000</p> <p>1 1,500 CrP St</p> <p>2 1,500 P</p> <p>3 2,000 CR St</p>			38-04197-000 38-04197-040
		<p>99-09790-000</p> <p>1 1,500 NtPvD St</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>			39-04197-000

<p>K=86,00 L=155,00 H=5,00 D=87,50</p>	DS			51-65778-000	
--	----	--	--	---------------------	--

	Type		B 	C 		

93,000

8140.27.2700

30 AR 8 Turbo

D 04 1985 > 12 1988 4 Cyl

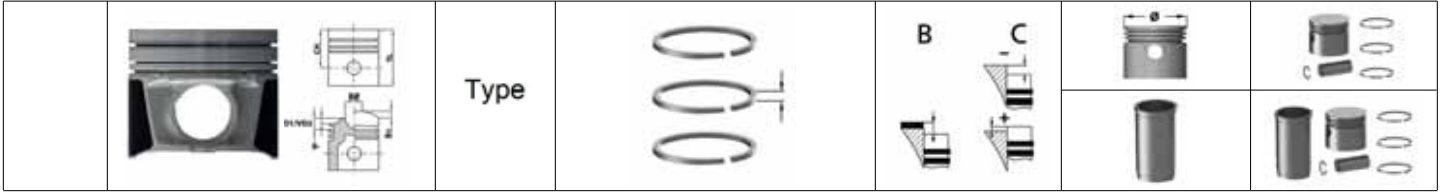
2499cc

69-76 kW

(94-103 ps)

	11-01685-000 CH 58,750 B- 18,000 BØ 38,000 TL 96,750	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	31-03685-000 31-03685-040 31-03685-060	
							PDB
32,00x78,00							
Alfa Romeo, 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	



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

98-09686-000

- 1 3,000 CrP
- 2 2,000 P
- 3 4,000 CrP

99-09686-000

- 1 3,000 CR St
- 2 2,000 Fe
- 3 4,000 CR

Ø 93,000
Ø 93,400
Ø 93,600

31-03686-000
31-03686-040
31-03686-060

38-03686-000
38-03686-040
38-03686-060

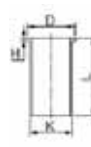
39-03686-000
39-03686-040
39-03686-060



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

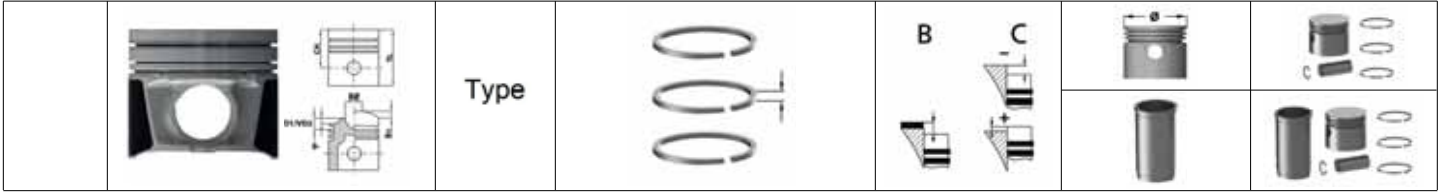
51-65400-020



K=96,06
L=167,30

DS

51-65452-000

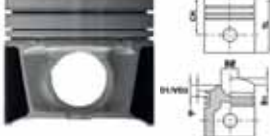
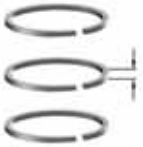
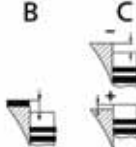

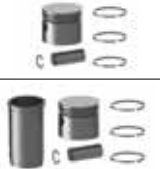


93,000

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)







<p>11-01688-000 CH 59,650 B- 14,800 BØ 52,000 TL 97,650</p> <p>32,00x75,20</p>	AP	91-09689-000	<p>1 3,000 CrP 2 2,000 P 3 3,000 CrP</p>	<p>Ø 93,000 Ø 93,400 Ø 93,600</p>	<p>31-03688-000 31-03688-040 31-03688-060</p>
	CP				
Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor					

<p>K=96,06 L=171,00 H=5,00 D=98,90</p>	DS			51-65401-000	
<p>K=96,50 L=171,00 H=6,00 D=99,40</p>	DS +0,50			51-65401-050	

	Type				
---	-------------	---	--	---	---







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	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
 19,00x42,00		Audi, Seat, Skoda ve Volkswagen ile Ortak Motor				







76,510

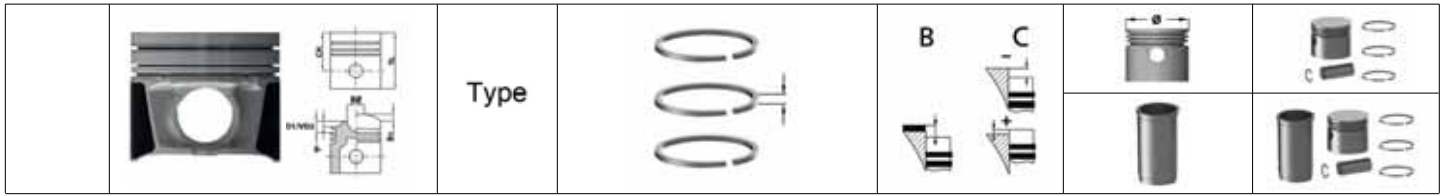
CMSA / CAXC	A3 1.4 TFSI 16V	04 2010 > 07 2012	4 Cyl	1390cc	92kW	(125ps)
CNVA / CAXA	A1 1.4 TFSI	05 2011 >	4 Cyl	1390cc	90kW	(122ps)

	11-01284-000 CH 29,200 VD1 0,800 VD2 3,580 B+ 2,000 B- 4,600 TL 50,210	HA	91-09313-000 1 1,200  NT St 2 1,200  NtP St 3 2,000 		Ø 76,510 Ø 77,010	31-03284-000 31-03284-050
 19,00x52,00		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	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
 19,00x54,00		Audi, Seat, Skoda ve Volkswagen ile Ortak Motor				

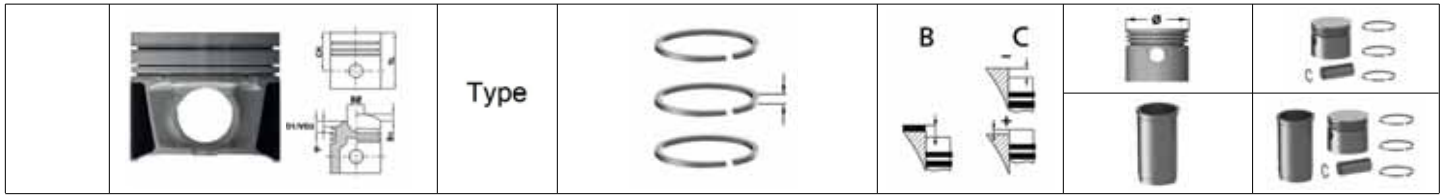


76,510

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)






 <p>11-01301-000 CH 41,700 B- 1,600 TL 71,700</p>  <p>24,00x64,00</p>	AP	<p>91-09301-000</p> <p>1 1,750  CrP</p> <p>2 2,000  CrP</p> <p>3 3,000  CrP</p>	<p>1. Centik 1,53mm (+0,66/+0,80) 2. Centik 1,57mm (+0,81/+0,90) 3. Centik 1,61mm (+0,91/+1,02)</p>	<p>Ø 76,510 Ø 77,010 Ø 77,510</p>	<p>31-03301-000 31-03301-050 31-03301-100</p>
	CP				
<p>Audi, Nissan, Volkswagen ve Volvo ile Ortak Motor</p>					





 <p>K=79,50 L=145,00 H=4,70 D=81,50</p>	DS			51-65301-000	
 <p>K=80,00 L=145,00 H=6,00 D=82,00</p>	DS +0,50			51-65301-050	
 <p>K=80,50 L=145,00 H=6,00 D=82,50</p>	DS +1,00			51-65301-100	
 <p>K=79,50 L=142,00 H=4,70 D=82,50</p>	DS			51-65313-000	

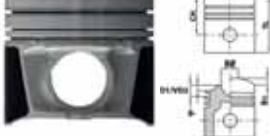
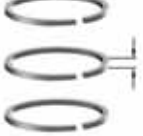
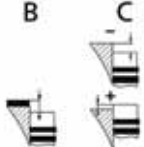

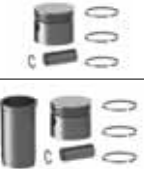


76,510

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)






 <p>11-01305-000 CH 41,700 B- 1,600 TL 71,700</p>  <p>24,00x64,00</p>	AP	<p>91-09301-000</p> <p>1 1,750  CrP</p> <p>2 2,000  CrP</p> <p>3 3,000  CrP</p>	<p>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)</p>	<p>Ø 76,510 Ø 77,010 Ø 77,510</p>	<p>31-03305-000 31-03305-050 31-03305-100</p>
	CP				
<p>Audi, Volkswagen ve Volvo ile Ortak Motor</p>					

 <p>K=79,50 L=145,00 H=4,70 D=81,50</p>	DS				51-65301-000
 <p>K=80,00 L=145,00 H=6,00 D=82,00</p>	DS +0,50				51-65301-050
 <p>K=80,50 L=145,00 H=6,00 D=82,50</p>	DS +1,00				51-65301-100
 <p>K=79,50 L=142,00 H=4,70 D=82,50</p>	DS				51-65313-000

	Type				
---	-------------	---	--	---	---












76,510

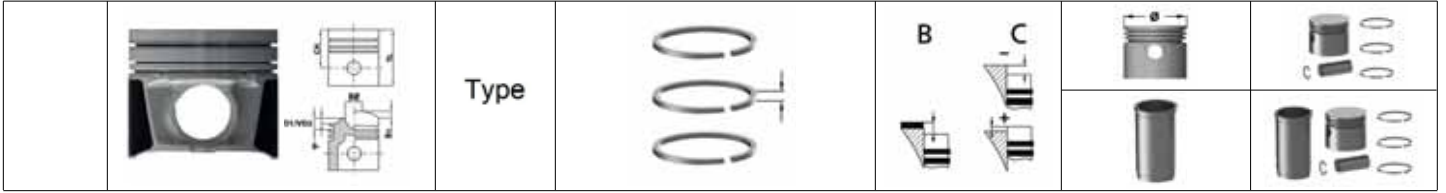
AUA / BBY A2 1.4i 16V B 05 2000 > 04 2002 4 Cyl 1390cc 55kW (75ps)

 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 Cyl.1/2/3 to be used with 2332 000	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
		98-09331-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	Ø 78,310 Ø 78,810	38-04331-000 38-04331-050
		99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP	Ø 78,310 Ø 78,810	39-04331-000 39-04331-050
Audi, Skoda ve Volkswagen ile Ortak Motor				













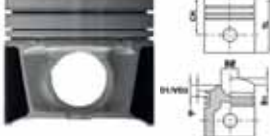
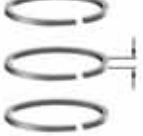
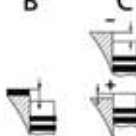


78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6		>	Cyl	cc	kW	(ps)
 <p>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</p> <p>* For Oversize Piston Dimensions 26,00x58,00</p> <p>Audi, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>Cyl.4/5/6 to be used with 2331 000</p>	<p>91-09331-000 1 1,750  CK 2 2,000  P 3 3,000  CR</p>		<p>Ø 78,310 Ø 78,810</p>	<p>31-04332-000 31-04332-050</p>	
		<p>98-09331-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>		<p>38-04332-000 38-04332-050</p>		
		<p>99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>		<p>39-04332-000 39-04332-050</p>		

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)

 <p>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</p> <p>* For Oversize Piston Dimensions 26,00x65,50</p> <p>Audi ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>Cyl.1/2/3 to be used with 2334 000</p>	<p>91-09331-000 1 1,750  CK 2 2,000  P 3 3,000  CR</p>		<p>Ø 78,310 Ø 78,810</p>	<p>31-04333-000 31-04333-050</p>
		<p>98-09331-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>		<p>38-04333-000 38-04333-050</p>	
		<p>99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>		<p>39-04333-000 39-04333-050</p>	

	Type				
---	-------------	---	--	---	---









78,310

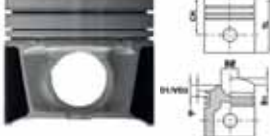
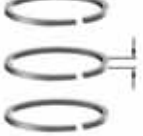
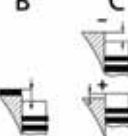


Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl cc kW (ps)

 <p>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</p> <p>* For Oversize Piston Dimensions  26,00x65,50</p> <p>Audi ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>Cyl.4/5/6 to be used with 2333 000</p>	<p>91-09331-000</p> <p>1 1,750  CK 2 2,000  P 3 3,000  CR</p>	<p>Ø 78,310 Ø 78,810</p>	<p>31-04334-000 31-04334-050</p>	
		<p>98-09331-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>			<p>38-04334-000 38-04334-050</p>
		<p>99-09331-000</p> <p>1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>			

79,500






AMF A2 1.4 TDI 06 2000 > 08 2003 (75ps)

 <p>11-02311-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800</p> <p> 26,00x63,00</p> <p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP PDB</p> <p>Cyl.1/2 to be used with 2312 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03</p>	<p>Ø 79,500 Ø 80,000</p>	<p>31-04311-000 31-04311-050</p>		
		<p> K=82,57 L=151,80 H=4,70 D=85,40</p>				<p>DS</p>	<p>51-65303-000</p>
		<p> K=83,07 L=151,80 H=6,00 D=85,90</p>				<p>DS +0,50</p>	
<p> K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>	<p>51-65303-100</p>					

	Type				
---	-------------	---	--	---	---

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	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
 26,00x63,00						
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						






	K=82,57 L=151,80 H=4,70 D=85,40	DS			51-65303-000	
--	--	----	--	--	---------------------	--

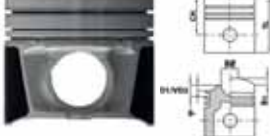







	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
---	--	-------------	--	--	---------------------	--

	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	AP YS	91-09627-000 1 1,750  CrP 2 2,000  P 3 2,000  CrP		Ø 79,510 Ø 80,010	31-03286-000 31-03286-050
 26,00x66,00						
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						



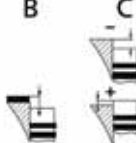

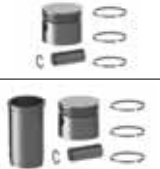
	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,510

AAZ 80 1.9 TD D 09 1991 > 07 1995 4 Cyl 1896cc 55kW (75ps)






	<p>11-01302-000 CH 45,650 B- 1,900 TL 71,700</p>	<p>AP HA CP</p>	<p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1. Centik 1,53mm (+0,66/+0,86) 2. Centik (1,57mm +0,87/+0,90) 3. Centik 1,61mm (+0,91/+1,02)</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-03302-000 31-03302-025 31-03302-050 31-03302-100</p>
<p>Audi, Seat ve Volkswagen ile Ortak Motor</p>						





	<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
	<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
	<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	

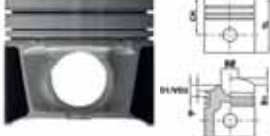
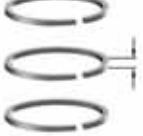
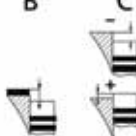


	Type				
---	------	---	--	---	---

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)

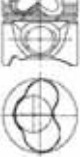




	11-01309-000 CH 39,650 B- 1,900 TL 65,650	AP	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	1. centik 1,53mm conta ile (+0,66/+0,86) 2. centik 1,57mm conta ile (+0,87/+0,90) 3. centik 1,61mm conta ile (+0,91/+1,02)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	31-03309-000 31-03309-025 31-03309-050 31-03309-100
	24,00x64,00					
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	

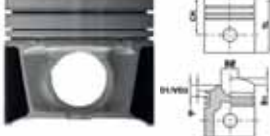
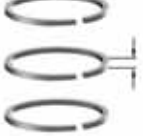
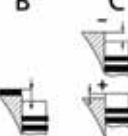


	Type				
---	-------------	---	--	---	---

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	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
	PDB				
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				
---	------	---	--	---	---

79,510






Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

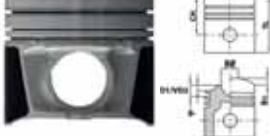
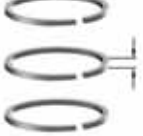
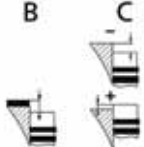

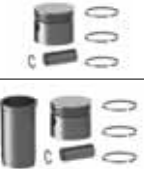
	11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800	AP PDB Cyl.3/4 to be used with 2301 000	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	31-04302-000 31-04302-025 31-04302-050 31-04302-100
 26,00x66,00		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	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
 26,00x66,00		Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor				




	Type				
---	-------------	---	--	---	---



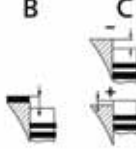





79,510

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	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		Cyl.3/4 to be used with 2305 000			

79,510







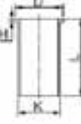

ASZ	A3 1.9 TDI	05 2000 > 06 2003			(130ps)
AVF / AWX	A4 1.9 TDI	12 2000 > 11 2004			(130ps)
AVF / AWX	A6 1.9 TDI	06 2001 > 01 2005			(130ps)
 11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800  26,00x66,00	AP YS PDB	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	1,45mm +0,91/+1,00 1,53mm +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		Cyl. 1/2 to be used with 2314 000			

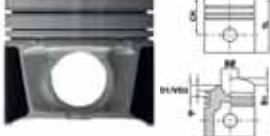

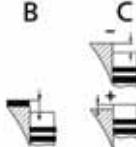

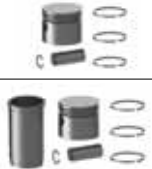
 K=82,57 L=151,80 H=4,70 D=85,40	DS			51-65303-000	
 K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
 K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			51-65303-100	

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,510






Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)




 <p>11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP</p> <p>YS</p> <p>PDB</p> <p>Cyl. 3/4 to be used with 2313 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p>	<p>31-04314-000</p> <p>31-04314-025</p> <p>31-04314-050</p>
 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS</p> <p>+0,50</p>			<p>51-65303-050</p>	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS</p> <p>+1,00</p>			<p>51-65303-100</p>	

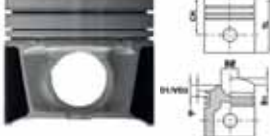
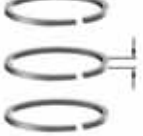
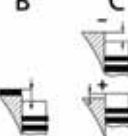


	Type				
---	------	---	--	---	---

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	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
 26,00x66,00						
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				
---	------	---	--	---	---

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	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
 26,00x66,00		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	
--	--	----	--	--	---------------------	--

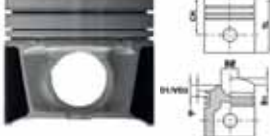
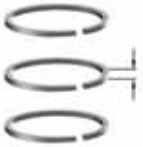








	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
---	--	-------------	--	--	---------------------	--

	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			51-65303-100	
--	--	-------------	--	--	---------------------	--






79,510

CAYC / 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	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
 26,00x66,00		Audi, Skoda ve Volkswagen ile Ortak Motor				



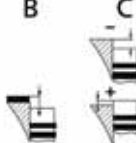

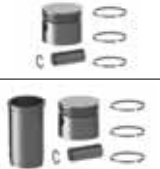
	Type		B 	C 		
						

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	AP YS	91-09628-000 1 1,750  CK 2 2,000  P 3 2,000  CR				Ø 81,000		31-03283-000
	 26,00x66,00	PDB							
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	AP YS	91-09298-000 1 1,750  CrP 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
	 26,00x66,00	PDB	98-09298-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP						38-04344-000 38-04344-050
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor									
			99-09298-000 1 1,750  CrP St 2 2,000  Fe 3 3,000  CR						39-04344-000 39-04344-050

	Type				
---	------	---	--	---	---

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



91-09296-000

1 1,500  MoP
 2 1,750  P
 3 2,000  CR

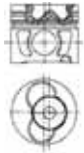
Ø 81,010
 Ø 81,260
 Ø 81,510

31-03296-000
31-03296-025
31-03296-050

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



AP

91-09297-000

1 2,500  CrP
 2 2,000  P
 3 3,000  CR

PDB

Cyl. 1/2 to be used with 1298 000 AA=22,20mm

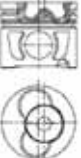




Ø 81,010
 Ø 81,260
 Ø 81,510

31-03297-000
31-03297-025
31-03297-050


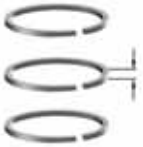
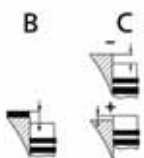

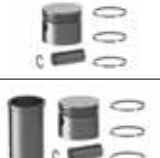
Audi ve Volvo ile Ortak Motor

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	AP	91-09297-000 1 2,500  CrP 2 2,000  P 3 3,000  CR		Ø 81,010 Ø 81,260 Ø 81,510	31-03298-000 31-03298-025 31-03298-050
	* For Oversize Piston Dimensions	PDB	Cyl. 3/4/5 to be used with 1297 000 AA=22,20mm			


Audi ve Volvo ile Ortak Motor

	Type				
---	------	---	--	---	---

81,010

DS 80 / 100 / Coupe 1.8 05 1983 > 07 1989 (90ps)





	<p>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</p> <p>* For Oversize Piston Dimensions 20,00x57,00</p>	CP	<p>91-09307-000 1 1,500  CrP 2 1,750  P 3 3,000  CrP</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010</p>	<p>31-03307-000 31-03307-025 31-03307-050 31-03307-100</p>
Audi, Seat ve Volkswagen ile Ortak Motor					


	<p>K=84,00 L=146,00 H=4,70 D=86,00</p>	DS			51-65307-000
--	---	----	--	--	---------------------

	<p>K=84,50 L=146,00 H=6,00 D=86,50</p>	DS +0,50			51-65307-050
---	---	-------------	--	--	---------------------

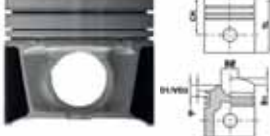
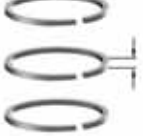
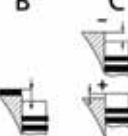


81,010

ABM / JU 80 1.6i B 01 1992 > 06 1994 4 Cyl 1595cc 52-55kW (71-75ps)

	<p>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</p> <p>* For Oversize Piston Dimensions 20,00x57,00</p>	CP	<p>91-09307-000 1 1,500  CrP 2 1,750  P 3 3,000  CrP</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510 Ø 81,760 Ø 82,010</p>	<p>31-03308-000 31-03308-025 31-03308-050 31-03308-075 31-03308-100</p>
Audi ve Seat ile Ortak Motor					












	<p>K=84,00 L=146,00 H=4,70 D=86,00</p>	DS			51-65307-000
--	---	----	--	--	---------------------

	<p>K=84,50 L=146,00 H=6,00 D=86,50</p>	DS +0,50			51-65307-050
--	---	-------------	--	--	---------------------

	Type				
---	------	---	--	---	---






81,010

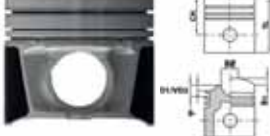
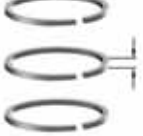
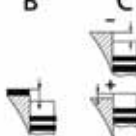

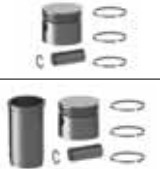
AZV / BKD / BMN / BUY	A3 2.0 TDI 16V	D 05 2003	> 04 2008	4 Cyl	1968cc	100-125kW	(136-170ps)
BLB / BNA / BRE / BRF / BVF / BVG / BRD / BVA	A4 2.0 TDI 16V	D 11 2004	> 03 2008	4 Cyl	1968cc	93-125kW	(121-170ps)
BLB / BNA / BRE / BRF / BVG	A6 2.0 TDI 16V	D 07 2004	> 10 2008	4 Cyl	1968cc	89-103kW	(121-140ps)

 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  CrP 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 / 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
--	----	---	--	----------------------------------	---

	Type				
---	-------------	---	--	---	---









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)

 <p>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</p> <p>* For Oversize Piston Dimensions</p>  20,00x57,00		<p>91-09107-000</p> <p>1 1,200  CR St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	+0,700/+0,900	<p>Ø 81,010</p> <p>Ø 81,260</p> <p>Ø 81,510</p> <p>Ø 82,010</p>	<p>31-04307-000</p> <p>31-04307-025</p> <p>31-04307-050</p> <p>31-04307-100</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>			









81,010

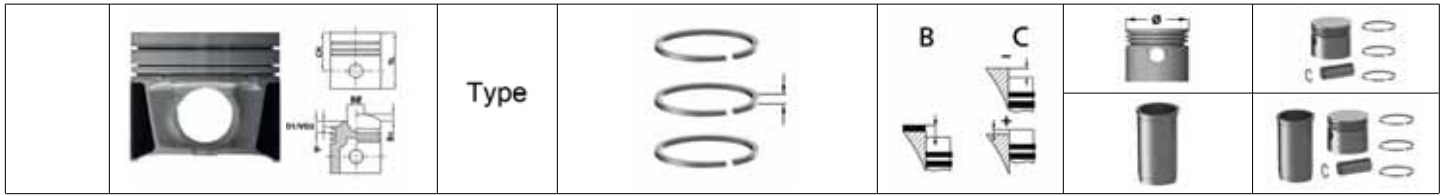
ALZ / ANA	A4 1.6i	B	11	2004	>	03	2008	4 Cyl	1600cc	75kW	(102ps)
BFQ / AVU / BFQ / BGU / BSE / BSF	A3 1.6i	B	05	2002	>	06	2003	4 Cyl	1600cc	75kW	(102ps)

 <p>11-02316-000 CH 29,780 VD1 0,700 B- 2,700 BØ 62,300 TL 50,700</p>  19,00x42,00		<p>91-09303-000</p> <p>1 1,000  CR</p> <p>2 1,200  P</p> <p>3 2,000  CrP St</p>	+0,60/+0,65	<p>Ø 81,010</p> <p>Ø 81,510</p> <p>Ø 82,010</p>	<p>31-04316-000</p> <p>31-04316-050</p> <p>31-04316-100</p>
		<p>99-09303-000</p> <p>1 1,000  CR</p> <p>2 1,200  P</p> <p>3 2,000  CrP St</p>		<p>39-04316-000</p> <p>39-04316-050</p> <p>39-04316-100</p>	
<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>					

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)

 <p>11-02329-000 CH 32,700 B- 2,100 BØ 70,300 TL 53,700</p>  20,00x62,00	HA	<p>91-09294-000</p> <p>1 1,500  CR</p> <p>2 1,750  P</p> <p>3 2,000  CR St</p>		<p>Ø 81,010</p> <p>Ø 81,510</p>	<p>31-04329-000</p> <p>31-04329-050</p>
		<p>99-09294-000</p> <p>1 1,500  CrP St</p> <p>2 1,750  Fe</p> <p>3 2,000  NiP St</p>		<p>39-04329-000</p>	



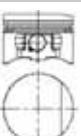



81,010

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)

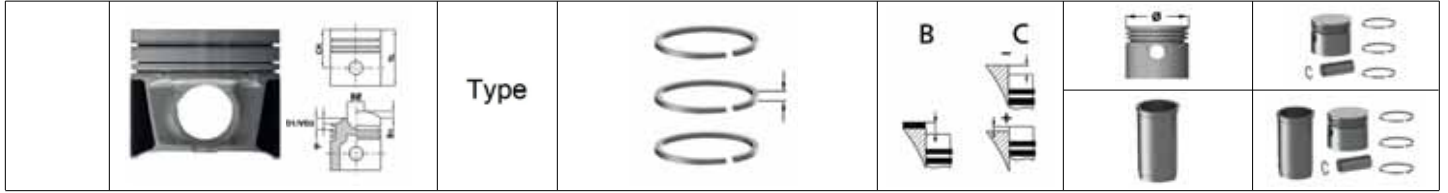
 <p>11-02335-000 CH 30,300 VD1 2,900 B+ 3,600 TL 53,900</p> <p>20,00x44,00</p>	HA	99-09335-000		<p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  NiP St</p>	<p>Ø 81,010</p> <p>Ø 81,510</p>	<p>39-04335-000 39-04335-050</p>

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)

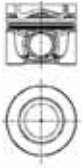
 <p>11-02336-000 CH 32,550 *CH 32,250 VD1 3,600 *VD1 3,600 TL 56,550 *TL 56,250</p> <p>20,00x59,00</p> <p>* For Oversize Piston Dimensions</p>		91-09296-000		<p>1 1,500  MoP</p> <p>2 1,750  P</p> <p>3 2,000  CR</p>	<p>1.Conta ile +0.80/+0.90 2.Conta ile +0.90/+1.00 3.Conta ile +1.00/+1.10</p>	<p>Ø 81,010</p> <p>Ø 81,510</p>	<p>31-04336-000 31-04336-050</p>

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor



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 / BRP / 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 CrP
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

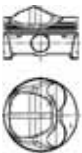
38-04341-000
38-04341-050

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

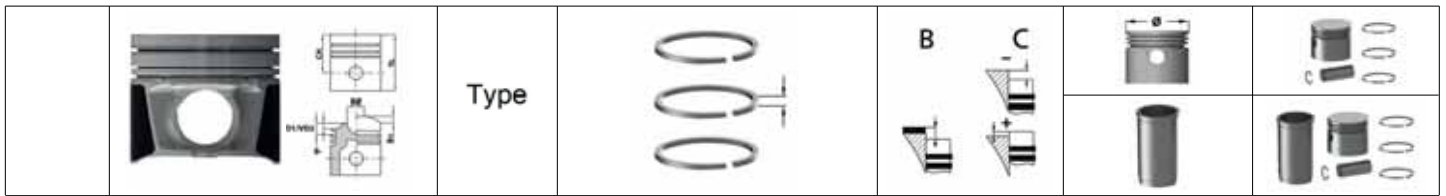
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

HA

91-09311-000
1 1,200 NT St
2 1,500 P
3 2,000 NiP St

Ø 82,510
Ø 83,010

31-03285-000
31-03285-050

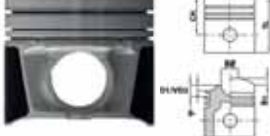
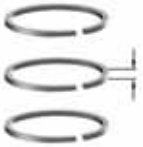
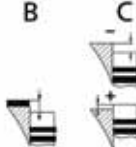




82,510											
AAH	100 2.8i		B	12	1990	> 07	1994	6 Cyl	2771cc	128kW	(174ps)
AAH	80 2.8i		B	09	1991	> 07	1995	6 Cyl	2771cc	128kW	(174ps)
AAH	A4 2.8i		B	11	1994	> 07	1997	6 Cyl	2771cc	128kW	(174ps)
AAH	Cabriolet 2.8i		B	11	1992	> 08	2000	6 Cyl	2771cc	128kW	(174ps)
AAH	Coupé 2.8i		B	08	1991	> 12	1995	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)

<p>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</p> <p>* For Oversize Piston Dimensions</p> <p>21,00x56,00</p>	CP	<p>91-09311-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,000 NiP St</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p> <p>Ø 83,510</p>	<p>31-03294-000</p> <p>31-03294-025</p> <p>31-03294-050</p> <p>31-03294-100</p>






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)

<p>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</p> <p>* For Oversize Piston Dimensions</p> <p>20,00x57,00</p>	CP	<p>91-09295-000</p> <p>1 1,500 MoP</p> <p>2 1,750 P</p> <p>3 3,000 CrP</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p> <p>Ø 83,510</p>	<p>31-03295-000</p> <p>31-03295-025</p> <p>31-03295-050</p> <p>31-03295-100</p>

	Type				
---	-------------	---	--	---	---






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	91-09311-000 1 1,200  NT St 2 1,500  P 3 2,000  NiP St		Ø 82,510 Ø 83,010 Ø 83,510	31-03303-000 31-03303-050 31-03303-100
 21,00x56,00					
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	91-09311-000 1 1,200  NT St 2 1,500  P 3 2,000  NiP St	CP	Ø 82,510 Ø 83,010 Ø 83,510	31-03311-000 31-03311-050 31-03311-100
 21,00x59,00					
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	91-09311-000 1 1,200  NT St 2 1,500  P 3 2,000  NiP St	CP	Ø 82,510 Ø 83,010 Ø 83,510	31-03312-000 31-03312-050 31-03312-100
 21,00x59,00					



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)

<p>11-02295-000 CH 29,800 B+ 5,680 B- 4,750 TL 55,980</p> <p>23,00x51,00</p>	<p>AP</p> <p>Trapezoidal Connecting Rod</p>	<p>99-09327-000</p> <p>1 1,200 NT St</p> <p>2 1,200 St</p> <p>3 2,000 CR</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>39-04295-000</p> <p>39-04295-050</p>

82,510

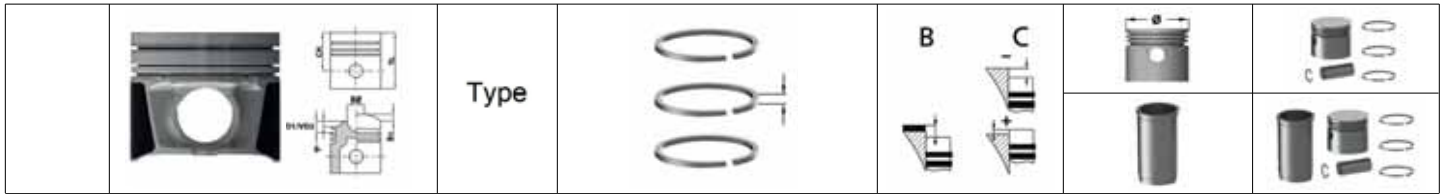
ALT	A4 2.0i 20V	B	12 2000 > 10 2005	4 Cyl	1984cc	96kW	(131ps)
ALT	A6 2.0i 20V	B	06 2001 > 01 2005	4 Cyl	1984cc	96kW	(131ps)

<p>11-02327-000 CH 29,600 VD1 2,510 B- 1,200 BØ 64,000 TL 50,600</p> <p>19,00x44,00</p>	<p>91-09311-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,000 NtP St</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p>	<p>31-04327-000</p> <p>31-04327-025</p> <p>31-04327-050</p>

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)

<p>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</p> <p>21,00x56,00</p> <p>* For Oversize Piston Dimensions</p>	<p>99-09330-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,000 NtP St</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>39-04330-000</p> <p>39-04330-050</p>



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)

<p>11-02342-000 CH 29,800 B+ 4,750 B- 6,000 BØ 67,000 TL 55,980</p> <p>21,00x53,00</p>	AP	<p>91-09329-000</p> <p>1 1,200 CrP St</p> <p>2 1,500 P</p> <p>3 2,000 CR St</p>		<p>Ø 82,510</p> <p>Ø 82,765</p> <p>Ø 83,015</p>	<p>31-04342-000 31-04342-025 31-04342-050</p>

82,510

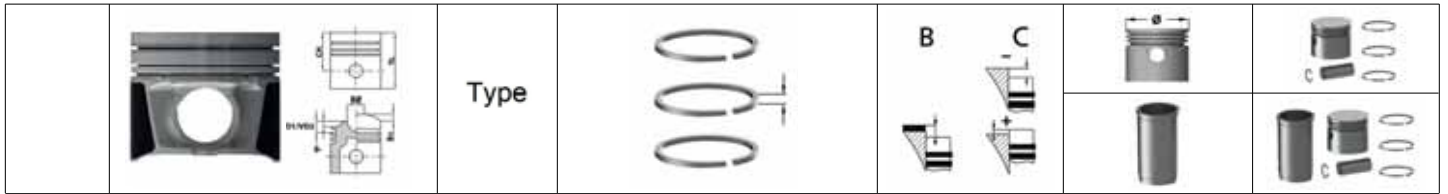
CADA Euro 5	Q5 2.0 TFSI 16V	B	01 2010	>	4 Cyl	1984cc	155kW	(211ps)
CCTA / CCZC	Q3 2.0 TFSI 16V	B	06 2011	>	4 Cyl	1984cc	125-147kW	(170-200ps)
CCZA / CBFA / CAWB	A3 2.0 TFSI 16V	B	04 2009	> 07 2012	4 Cyl	1984cc	147kW	(200ps)
CCZA / CCTA	TT 2.0 TFSI 16V	B	06 2008	> 05 2010	4 Cyl	1984cc	147kW	(200ps)
CDZA / CADA Euro 5	A4 2.0 TFSI 16V	B	06 2008	>	4 Cyl	1984cc	132-155kW	(180-211ps)

<p>11-02343-000 CH 29,600 VD1 3,000 B- 6,200 BØ 50,000 TL 50,100</p> <p>21,00x56,00</p>	AP	<p>91-09329-000</p> <p>1 1,200 CrP St</p> <p>2 1,500 P</p> <p>3 2,000 CR St</p>		<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p>	<p>31-04343-000 31-04343-025 31-04343-050</p>

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)

<p>11-02587-000 CH 29,600 VD1 3,500 B- 6,200 TL 50,100</p> <p>23,00x53,00</p>	AP	<p>99-09327-000</p> <p>1 1,200 NT St</p> <p>2 1,200 St</p> <p>3 2,000 CR</p>		<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>31-04587-000 31-04587-050</p>









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







77,010

Strok Boyu 0,20mm Kisa Piston	/ Stroke Length 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	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

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 B- 2,000 TL 79,300 *CH 46,200 *B- 2,000 *TL 79,300  26,00x69,00 * For Oversize Piston Dimensions	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



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)

<p>11-02613-000 CH 39,450 VD1 2,500 TL 62,450</p> <p>27,00x63,00</p>	<p>AP</p> <p>YS</p> <p>CP</p>	<p>91-09613-000</p> <p>1 3,000 CrP</p> <p>2 1,750 P</p> <p>3 3,000 CrP</p>	<p>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</p>	<p>Ø 80,000</p> <p>Ø 80,250</p> <p>Ø 80,500</p>	<p>31-04613-000</p> <p>31-04613-025</p> <p>31-04613-050</p>						
						<p>Bmw, Opel ve Rover ile Ortak Motor</p>					

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)

<p>11-02619-000 CH 27,550 B+ 3,800 TL 50,300</p> <p>20,00x46,00</p>	<p>HA</p>	<p>91-09350-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,000 NiP St</p>	<p>Ø 82,010</p> <p>Ø 82,510</p>	<p>31-04619-000</p> <p>31-04619-050</p>						

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)

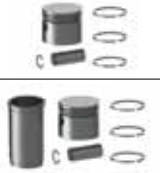



<p>11-02596-000 CH 44,870 VD1 1,360 VD2 1,480 B+ 14,500 B- 14,500 BØ 47,500 TL 70,370</p> <p>30,00x68,00</p>	<p>AP</p> <p>YS</p>	<p>91-09629-000</p> <p>1 3,000 CK</p> <p>2 2,000 CK</p> <p>3 3,000 CK</p>	<p>1,45mm conta +0,45/+0,56 1,55mm conta +0,56/+0,65 1,65mm conta +0,65/+0,75</p>	<p>Ø 84,000</p> <p>Ø 84,500</p>	<p>31-04596-000</p> <p>31-04596-050</p>						



84,000

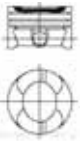




N20 B20 A (2013 oncesi)	125i (F20/F21)	B	>	4 Cyl	(163-184ps)
N20 B20 A (2013 oncesi)	220i (F22/F23)	B	>	4 Cyl	(163-184ps)
N20 B20 A (2013 oncesi)	228i (F22/F23) / N20-N26 (F22)	B	>	4 Cyl	(163-184ps)
N20 B20 A (2013 oncesi)	228iX N20-26 (F22) / /F23)	B	>	4 Cyl	(163-184ps)
N20 B20 A (2013 oncesi)	320i (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)


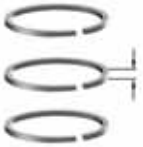
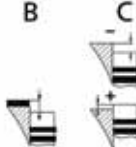
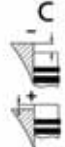
	<p>11-02597-000 CH 32,430 VD1 3,630 B- 3,750 BØ 52,500 TL 51,100</p>	HA	<p>99-09624-000</p>		<p>Ø 84,000</p>	<p>39-04597-000</p>			
			1	1,200				NT	St
			2	1,500				P	
	<p>22,00x51,80</p>		3	2,000		NtP	St		

		Type					
							

84,000






N20 B20 A (2013 sonrası)	125i (F20/F21)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	220i (F22/F23)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	228i (F22/F23) / N20-N26 (F22)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	228iX N20-26 (F22) / /F23)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	320i (F30/F34)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	320iX (F30/F34)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	320Li (F35)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	328i N20-26 (F30-34)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	328iX N20-26 (F30-34)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	328Li / LiX (F35)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	420i / iX (F32)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	428i N20-26 (F32-33-36)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	428iX N20-26(F32-33-36)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	520i (F10-F10N-F11N)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	520Li N20 (F18) / (F18) / (F18N)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	528i N20 (F07-10-11)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	528iX (F10-F10N-F11-F11N)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	528Li-LiX (F18N)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	530Le (F18N)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	X1 18i N20 (E84)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	X3 20i-iX (F25) / 28i N20 (F25)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	X4 20iX-28iX (F26)	B	>	4 Cyl	1997cc	120-135kW	(163-184ps)
N20 B20 A (2013 sonrası)	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	HA	99-09624-000 1 1,200  NT St 2 1,500  P 3 2,000  NiP St	Ø 84,000	39-04598-000
	22,00x51,80				

	Type			
---	------	---	--	---

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)

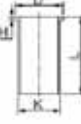
	11-02600-000 CH 34,090 B+ 4,340 B- 4,950 BØ 71,200 TL 69,430  22,00x54,00	CP	91-09600-000 1 1,500  CR 2 1,750  3 3,000 		Ø 84,000 Ø 84,250 Ø 84,500	31-04600-000 31-04600-025 31-04600-050
--	---	----	---	--	----------------------------------	---

	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	
--	--	----	--	--	---------------------	--

	Type				
---	------	---	--	---	---

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



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 20,00x50,00	HA	91-09624-000	Ø 84,000 Ø 84,250 Ø 84,500	31-04618-000 31-04618-025 31-04618-050
		99-09624-000 1 1,200 NT St 2 1,500 P 3 2,000 NiP St		39-04618-000

84,000

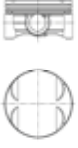




N42 B18	316 1.8i 16V (E46)	B 00 2001 > 00 2004	4 Cyl	1796cc	85kW	(116ps)
N42 B20	318 2.0i 16V (E46)	B 00 2001 > 00 2004	4 Cyl	1796cc	105kW	(143ps)
N45 B16	116 1.6i 16V (E87)	B 00 2004 > 00 2007	4 Cyl	1796cc	85kW	(116ps)
N45 B16	316 1.6i 16V (E46)	B 00 2004 > 00 2007	4 Cyl	1796cc	85kW	(116ps)
N45 B16	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 20,00x50,00	HA	99-09624-000 1 1,200 NT St 2 1,500 P 3 2,000 NiP St	Ø 84,000	39-04621-000
--	----	--	----------	---------------------



84,000






M54 256 Z4 / X3 / 325 / 525 B 00 2003 > 00 2010 4 Cyl 2494cc 125-170kW (170-231ps)

 <p>11-02623-000 CH 27,600 VD1 2,600 TL 47,600</p>  <p>22,00x56,00</p>	<p>99-09624-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  NiP St</p>	<p>Ø 84,000 Ø 84,500</p>	<p>39-04623-000 39-04623-050</p>

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)

 <p>11-02609-000 CH 47,100 B+ 4,500 TL 83,600</p>  <p>22,00x58,00</p>	<p>CP</p>	<p>91-09609-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>	<p>Ø 89,000 Ø 89,500</p>	<p>31-04609-000 31-04609-050</p>

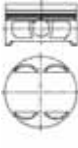




92,000

M62 B44 540i 4.4 32V B 01 1996 > 09 1998 8 Cyl 4395cc 210kW (286ps)

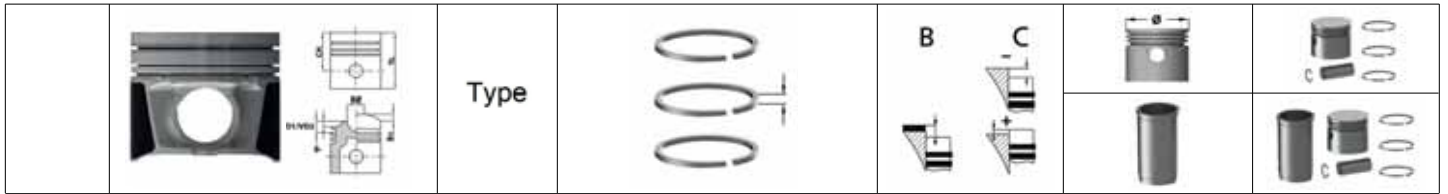
M62 B44 740i 4.0 32V / 4.4 32V B 03 1996 > 09 1998 8 Cyl 4395cc 210kW (286ps)

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)






 <p>11-02611-000 CH 31,300 VD1 2,700 TL 53,300</p>  <p>22,00x60,00</p>	<p>HA</p>	<p>91-09611-000</p> <p>1 1,500  CR</p> <p>2 1,500  P</p> <p>3 2,000  CR</p>	<p>Ø 92,000 Ø 92,250 Ø 92,500</p>	<p>31-04611-000 31-04611-025 31-04611-050</p>

Bmw ve Rover ile Ortak Motor



73,400

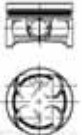




A14XER Aveo II 1.4i 16V B 03 2011 > 4 Cyl 1364cc 74kW (101ps)

 11-01913-000 CH 25,850 VD1 3,600 B- 1,600 BØ 52,500 TL 46,800  18,00x53,00	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

Chevrolet ve Opel ile Ortak Motor

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	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

Chevrolet ve Opel ile Ortak Motor






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



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  CrP 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			

Chevrolet ve Opel ile Ortak Motor

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

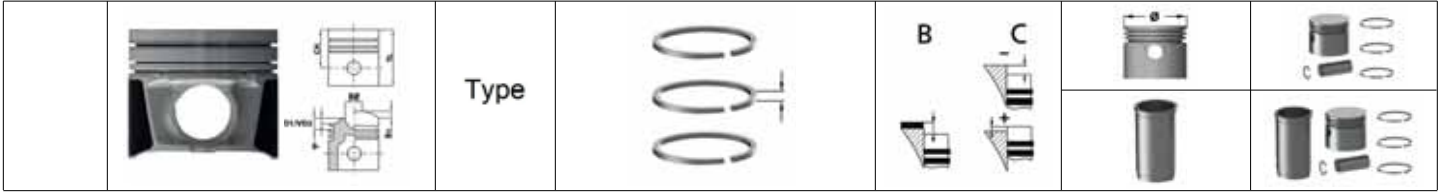
Chevrolet ve Opel ile Ortak Motor

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  NiP St		Ø 87,500 Ø 88,000	31-04232-000 31-04232-050

Chevrolet ve Opel ile Ortak Motor








83,000

OM 651.925 Compass 2.2 CRD D 05 2011 > 4 Cyl 2143cc 100kW (136ps)

 <p>11-02688-000 CH 48,500 VD1 0,970 B- 13,250 BØ 49,400 TL 75,500</p>  <p>30,00x66,00</p>	<p>AP YS</p>	<p>99-09644-000 1 2,000  CkP 2 1,750  P 3 2,000  NT St</p>	<p>+0,50/+0,75</p>	<p>Ø 83,000 Ø 83,500</p>	<p>39-04688-000 39-04688-050</p>






83,010

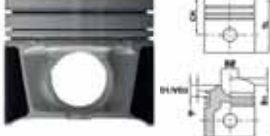
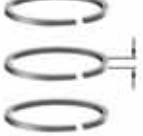
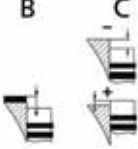

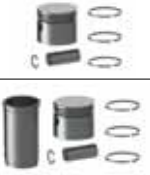
OM 642.910 300 C 3.0 CRD 24V D 10 2005 > 6 Cyl 2987cc 160-165kW (218-224ps)

 <p>11-02760-000 CH 45,650 VD1 1,330 VD2 1,490 B- 14,650 BØ 43,400 TL 71,650</p>  <p>30,00x66,00</p>	<p>AP YS</p>	<p>99-09642-000 1 2,000  NT St 2 2,000  CR 3 2,000  NT St</p>	<p>+0,53/+0,77</p>	<p>Ø 83,010 Ø 83,260 Ø 83,510 Ø 83,760</p>	<p>39-04760-000 39-04760-025 39-04760-050 39-04760-075</p>

83,010






OM 642.910 300 C 3.0 CRD 24V D 10 2005 > 6 Cyl 2987cc 160-165kW (218-224ps)

 <p>11-02761-000 CH 45,650 VD1 1,330 VD2 1,490 B- 14,650 BØ 43,400 TL 71,650</p>  <p>30,00x66,00</p>	<p>AP YS</p>	<p>99-09642-000 1 2,000  NT St 2 2,000  CR 3 2,000  NT St</p>	<p></p>	<p>Ø 83,010 Ø 83,260 Ø 83,510 Ø 83,760</p>	<p>39-04761-000 39-04761-025 39-04761-050 39-04761-075</p>

	Type				
---	------	---	--	---	---

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		91-09907-000 1 2,000  MoP 2 2,000  MoP 3 4,000  CR		Ø 86,000	31-03907-000
 28,00x75,00						
Chrysler ve Renault ile Ortak Motor						

	K=93,55 L=166,00 H=93,05	WS			51-95907-000	71-07907-000
--	--------------------------------	----	--	--	---------------------	---------------------

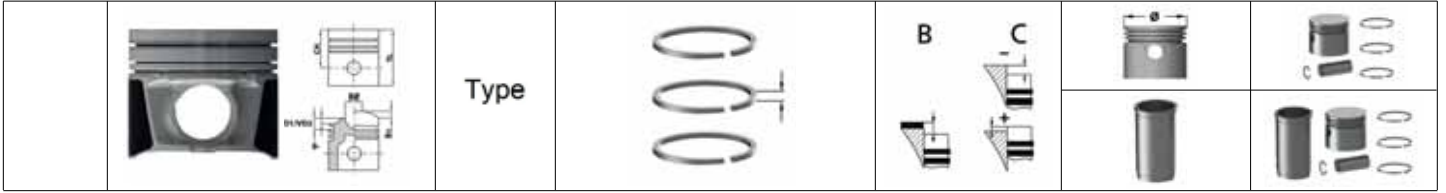
	K=93,55 L=166,00 H=93,05	WS			51-95908-000	71-07911-000
---	--------------------------------	----	--	--	---------------------	---------------------

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)

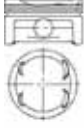
	11-01908-000 CH 50,990 B- 4,000 TL 93,000	AP	91-09908-000 1 2,500  Mo 2 2,500  Mo 3 4,000  CR		Ø 86,000	31-03908-000
 28,00x75,00						
Chrysler ve Renault ile Ortak Motor						

	K=93,55 L=166,00 H=93,05	WS			51-95908-000	71-07908-000
--	--------------------------------	----	--	--	---------------------	---------------------



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

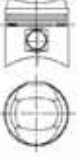




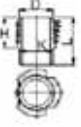
38-03647-050

38-03647-100








Chrysler, Daewoo ve Mercedes-Benz ile Ortak Motor

	Type			
---	------	---	--	---

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	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
	20,00x58,20						
	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	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 Kısa / Stroke Length 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	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
	CH-0,20 mm			
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor				






73,700

Strok Boyu 0,40mm Kısa / Stroke Length 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	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
	CH-0,40 mm			
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor				






73,700


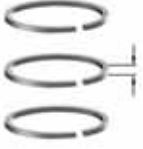
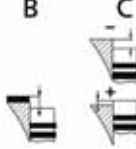


8HY (DV4TED4) C3 1.4 HDi 02 2002 > 04 2005 (90ps)

 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  CR 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				

	Type				
---	------	---	--	---	---






73,700

Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

	11-02494-001 CH 42,744 B- 12,500 BØ 45,000 TL 65,240	AP	91-09882-000 1 2,500  CK 2 1,950  CR 3 2,000  CR	Ø 73,700 Ø 74,200	31-04494-001 31-04494-051
	25,00x60,00	CH -0,20 mm			
Citroen ve Peugeot ile Ortak Motor					






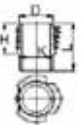
73,700

Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter > (ps)

	11-02494-002 CH 42,544 B- 12,500 BØ 45,000 TL 65,040	AP	91-09882-000 1 2,500  CK 2 1,950  CR 3 2,000  CR	Ø 73,700 Ø 74,200	31-04494-002 31-04494-052
	25,00x60,00	CH -0,40 mm			
Citroen ve Peugeot ile Ortak Motor					

74,000





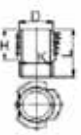

M28 Ami 6 / 8 05 1968 > 07 1969 (30-32ps)
M28 Dyane 6 01 1968 > 07 1983 (30-32ps)

	11-01359-000 CH 34,800 B+ 11,200 B- 13,900 TL 77,400	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
	20,00x63,90				
	K=83,00 L=129,00 H=99,50 D=82,00	AF		51-95316-000	71-07359-000

	Type				
---	------	---	--	---	---






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	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
	20,00x63,90					

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		91-09299-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP		Ø 75,000	31-03888-000
	19,50x62,00					
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
--	---	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---






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	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
	17,00x51,00					
Citroen, Peugeot ve Toyota ile Ortak Motor						






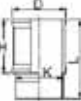
75,000

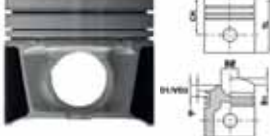
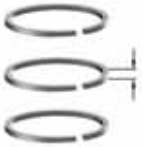







KFU (ET3J4) C2, C3, C4 D 12 2003 > 4 Cyl 1360cc 65kW (88ps)

	11-02127-000 CH 28,250 VD1 3,100 B+ 1,300 TL 52,330		91-09963-000 1 1,200  MoP 2 1,500  P 3 2,500  P		Ø 75,000	31-04127-000
	17,98x44,50					
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		91-09154-000 1 1,750  CR 2 2,000  P 3 4,000  CR		Ø 75,000	31-04154-000
	19,50x65,00					
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

	Type		 		
					







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	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
		26,00x61,00				
Citroen, Ford ve Peugeot ile Ortak Motor						

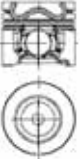





75,000

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	AP YS	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
		26,00x61,00	CH -0,20 mm			
Citroen, Ford ve Peugeot ile Ortak Motor						

75,000






Strok Boyu 0,40mm Kisa Piston	/ Stroke Lenght 0,40mm Shorter	>			(ps)
----------------------------------	--------------------------------	---	--	--	------

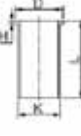
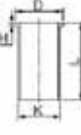

	11-02496-002 CH 41,350 B- 13,850 BØ 45,000 TL 64,800	AP YS	91-09898-000 1 2,500  CK 2 1,950  P 3 2,000  CR		Ø 75,000 Ø 75,500	31-04496-002 31-04496-052
		26,00x61,00	CH -0,40 mm			
Citroen, Ford ve Peugeot ile Ortak Motor						








75,000

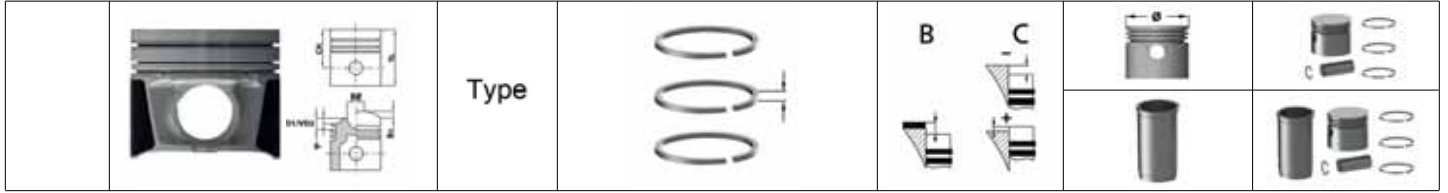
9HU / 9HX / DV6TED 4 Euro4	Jumpy 1.6 HDi 16V	01 2007 > 05 2008	(92ps)
9HX / 9HY / 9HZ	C4 / C4 Picasso 1.6 HDi 16V	11 2004 >	(92-109ps)
9HX / 9HY / 9HZ	C5 1.6 HDi 16V	11 2004 >	(92-109ps)
9HX / 9HZ	Berlingo 1.6 HDi 16V	09 2005 >	(92-109ps)
9HX / 9HZ	Xsara Picasso 1.6 HDi 16V	05 2004 >	(92-109ps)
9HX / 9HZ / DV6TED 4 Euro4	C3 / C3 Picasso 1.6 HDi 16V	09 2005 >	(92-109ps)
9HZ	C2 1.6 HDi 16V	01 2006 >	(109ps)

 <p>11-02498-000 CH 41,700 VD1 1,200 B- 13,250 BØ 41,800 TL 65,300</p>  <p>26,00x61,00</p>	AP YS	<p>91-09168-000</p> <p>1 3,000  CkP 2 1,950  P 3 2,500  CrP</p>	<p>1,25 Conta ile (+0,53/+0,63) 1,30 Conta ile (+0,63/+0,68) 1,35 Conta ile (+0,68/+0,73)</p>	<p>Ø 75,000 Ø 75,500 Ø 75,600</p>	<p>31-04498-000 31-04498-050 31-04498-060</p>
	<p>Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor</p>				

 <p>K=78,05 L=142,00 H=5,00 D=79,45</p>	DS			51-65826-000	
 <p>K=78,55 L=142,00 H=6,00 D=79,95</p>	DS +0,50			51-65826-050	
 <p>K=79,05 L=142,00 H=6,00 D=80,45</p>	DS +1,00			51-65826-100	

75,000

Strok Boyu 0,20mm Kısa Piston	/ Stroke Length 0,20mm Shorter	>	Cyl	cc	kW	(ps)
 <p>11-02498-001 CH 41,500 VD1 1,200 B- 13,250 BØ 41,800 TL 65,100</p>  <p>26,00x61,00</p>	AP YS	<p>91-09168-000</p> <p>1 3,000  CkP 2 1,950  P 3 2,500  CrP</p>			<p>Ø 75,000 Ø 75,500</p>	<p>31-04498-001 31-04498-051</p>
<p>Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor</p>						








75,000

Strok Boyu 0,40mm Kısa
Piston

/ Stroke Length 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






75,000

Strok Boyu 0,60mm Kısa
Piston

/ Stroke Length 0,60mm Shorter






>

(ps)

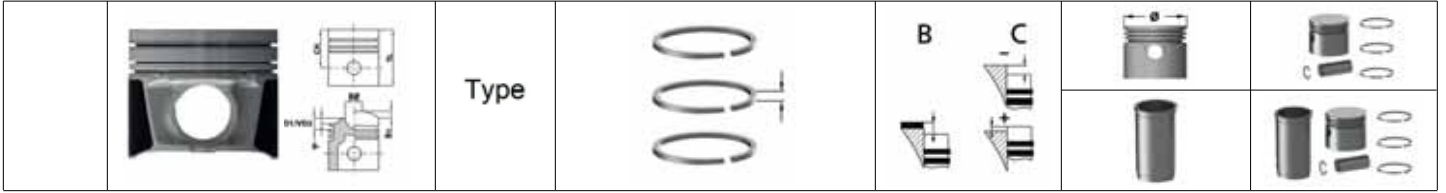
 11-02498-003 CH 41,100 VD1 1,200 B- 13,250 BØ 41,800 TL 64,700  26,00x61,00	AP YS CH -0,60 mm	91-09168-000 1 3,000  CkP 2 1,950  P 3 2,500  CrP		Ø 75,000	31-04498-003

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)

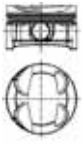
 11-02500-000 CH 27,800 B+ 0,180 TL 49,800  18,00x55,00		91-09889-000 1 1,500  CR 2 1,500  P 3 2,500  P		Ø 75,000	31-04500-000

 K=79,45 L=134,50 H=90,00 D=89,20	WF			51-05873-000	71-08500-000
---	----	--	--	---------------------	---------------------



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

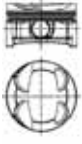
Ø 77,000
Ø 77,508

31-04104-000
31-04104-050

Citroen ve Peugeot ile Ortak Motor

77,000

Strok Boyu 0,40mm Kısa Piston	/ Stroke Length 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

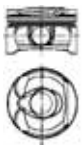
Ø 77,000

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

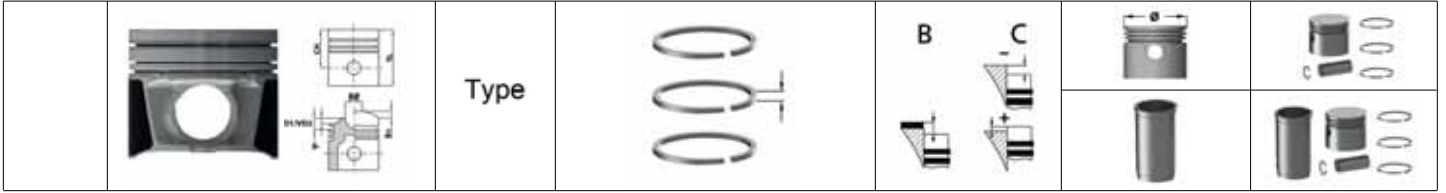
91-09874-000

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








77,000

Strok Boyu 0,20mm Kisa / Stroke Length 0,20mm Shorter B 10 2010 > 4 Cyl 1598cc 115kW (156ps)
Piston

 <p>11-02106-001 CH 30,000 VD1 1,900 B- 3,630 BØ 31,000 TL 48,450</p>  20,00x47,90	<p>CH -0,20 mm</p>	<p>91-09874-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	<p>Ø 77,000</p>	<p>31-04106-001</p>
		<p>Citroen ve Peugeot ile Ortak Motor</p>		






77,000

Strok Boyu 0,40mm Kisa / Stroke Length 0,40mm Shorter B 10 2010 > 4 Cyl 1598cc 115kW (156ps)
Piston

 <p>11-02106-002 CH 29,800 VD1 1,900 B- 3,630 BØ 31,000 TL 48,450</p>  20,00x47,90	<p>CH -0,40 mm</p>	<p>91-09874-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	<p>Ø 77,000</p>	<p>31-04106-002</p>
		<p>Citroen ve Peugeot ile Ortak Motor</p>		






77,000


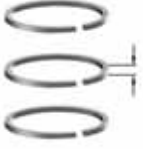
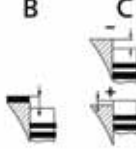

TUD5 (VJY) AX 15 D / Saxo 1.5D / ZX Break 1.5D D 08 1994 > 09 2003 4 Cyl 1527cc 42kW (57ps)
TUD5 (VJZ) AX 15 D / Saxo 1.5D / Xsara 1.5D D 08 1994 > 06 2001 4 Cyl 1527cc 42kW (57ps)

 <p>11-02107-000 CH 40,370 *CH 40,100 B- 1,650 *B- 1,650 TL 66,320 *TL 66,320</p>  23,00x60,00 * For Oversize Piston Dimensions	<p>CH -0,40 mm</p>	<p>91-09896-000</p> <p>1 2,000  MoP</p> <p>2 1,750  P</p> <p>3 3,000  CrP</p>	<p>Ø 77,000 Ø 77,400</p>	<p>31-04107-000 31-04107-040</p>
		<p>Citroen, Nissan ve Peugeot ile Ortak Motor</p>		

77,000






EP3C 1.4 vti C3 B > 4 Cyl 1400cc kW (ps)

 <p>11-02108-000 CH 30,800 VD1 5,880 VD2 3,540 B+ 3,200 TL 50,800</p>  18,00x43,00	<p>CH -0,20 mm</p>	<p>91-09874-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	<p>Ø 77,000</p>	<p>31-04108-000</p>
		<p>Citroen ve Peugeot ile Ortak Motor</p>		

	Type			
---	------	---	--	---









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	HA	91-09967-000 1 1,200  MoP St 2 1,200  P 3 2,000  CR	Ø 77,000	31-04129-000
 20,00x47,90					
Citroen ve Peugeot ile Ortak Motor					

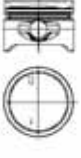




78,500

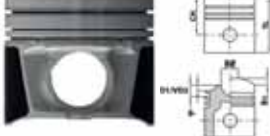
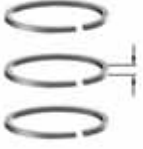
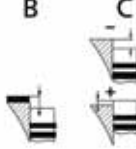

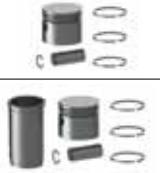
NFU	C2 1.6i 16V	B	09 2003 >	4 Cyl	(109ps)
NFU	C3 / C3 Pluriel 1.6i 16V	B	01 2002 > 08 2005	4 Cyl	(109ps)
NFU	C4 1.6i 16V	B	11 2004 >	4 Cyl	(109ps)
NFU	Elysee 1.6i 16V	B	06 2002 >	4 Cyl	(109ps)
NFU	Xsara / Xsara Picasso 1.6i 16V	B	09 2000 >	4 Cyl	(109ps)
TU 5JP4 / NFU	Berlingo 1.6 16V / 1.6i 16V	B	05 2008 >	4 Cyl	(109ps)

	11-02101-000 CH 32,350 B+ 0,150 TL 50,000		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
 19,50x57,00			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		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
 19,50x62,91					
Citroen ve Peugeot ile Ortak Motor					

	Type				
---	------	---	--	---	---






78,500

TU5JP4 Berlingo 1.6 16V B 05 2008 > 4 Cyl 1587cc 80kW (109ps)

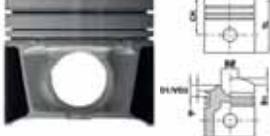
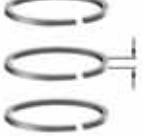




	11-02929-000 CH 32,350 B+ 1,300 TL 51,300		91-09929-000 1 1,200  MoP 2 1,500  P 3 2,500  NtP		Ø 78,500 Ø 78,900 Ø 79,000	31-04929-000 31-04929-040 31-04929-050
	19,50x57,00					
Citroen ve Peugeot ile Ortak Motor						

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		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
	25,00x69,80					
Citroen ve Peugeot ile Ortak Motor						

	K=83,05 L=154,00 H=4,50 D=86,00	DS			51-65876-000	
--	--	----	--	--	---------------------	--

	Type		 		
---	------	---	--	---	---

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		91-09877-000 1 1,750  CR 2 1,750  CrP St 3 4,000 		Ø 83,000	31-03877-000
 22,00x66,20						
Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor						

	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
--	---	----	--	--	---------------------	---------------------

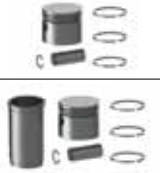




83,000

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)






<p>11-01879-000 CH 46,800 B- 2,200 TL 84,300</p> <p>25,00x72,00</p>	<p>91-09879-000</p> <p>1 2,000 CR</p> <p>2 2,000 CR</p> <p>3 3,000 CR</p>	<p>1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)</p>	<p>Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000</p>	<p>31-03879-000 31-03879-020 31-03879-050 31-03879-080 31-03879-100</p>

<p>K=86,00 L=153,50 H=4,80 D=89,00</p>	DS			51-65820-000
<p>K=86,04 L=153,50</p>	DS			51-65879-000
<p>K=86,54 L=153,50</p>	DS +0,50			51-65879-050
<p>K=85,66 L=153,50 H=3,90 D=88,45</p>	DS			51-65885-000
<p>K=86,15 L=153,50 H=3,90 D=88,45</p>	DS +0,50			51-65885-050

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

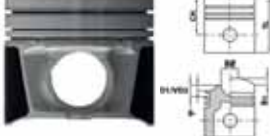
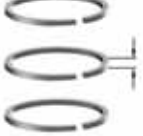
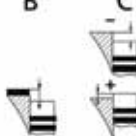


83,000

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)

 <p>11-01885-000 CH 37,500 B- 9,000 TL 67,500</p>  <p>22,00x66,20</p>	<p>CP</p>	<p>91-09885-000</p> <p>1 1,500  CR</p> <p>2 1,500  CR</p> <p>3 4,000  CR</p>	<p>Ø 83,000</p>	<p>31-03885-000</p>
<p>Citroen ve Peugeot ile Ortak Motor</p>				






 <p>K=88,60 L=141,00 H=95,14 D=97,00</p>	<p>WF</p>		<p>51-05878-000</p>	<p>71-07885-000</p>
--	-----------	--	----------------------------	----------------------------

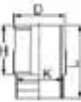

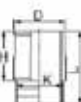
 <p>K=88,60 L=141,00 H=95,19 D=97,00</p>	<p>WF</p>		<p>51-05881-000</p>	<p>71-07890-000</p>
--	-----------	--	----------------------------	----------------------------


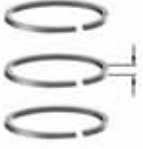
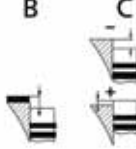

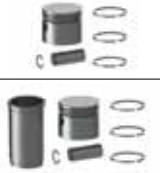
	Type				
---	------	---	--	---	---

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	CP	91-09887-000 1 1,500  Mo 2 1,500  CR 3 3,000  CR		Ø 83,000	31-03887-000
	22,00x62,00	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

	Type				
---	------	---	--	---	---

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		91-09877-000 1 1,750  CR 2 1,750  CR 3 4,000  CrP St		Ø 83,000	31-04116-000
	22,00x66,20					
Citroen ve Peugeot ile Ortak Motor						

	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)

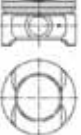





	11-02120-000 CH 37,500 B+ 0,600 TL 67,000	CP	91-09885-000 1 1,500  CR 2 1,500  CR 3 4,000  CR		Ø 83,000	31-04120-000
	22,00x66,20					
Citroen ve Peugeot ile Ortak Motor						

	K=88,60 L=141,00 H=95,19 D=97,00	WF			51-05881-000	71-08120-000
--	---	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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  Mo 3 3,000  CR		Ø 83,000	31-04924-000
Citroen ve Peugeot ile Ortak Motor						


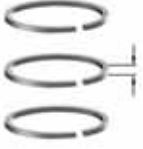
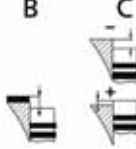


	K=88,60 L=141,00 H=95,19 D=97,00	WF			51-05881-000	71-08924-000
--	---	----	--	--	---------------------	---------------------

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
--	---	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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
- 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

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
- 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

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)

<p>11-02495-000 CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750</p> <p>28,00x70,00</p>	AP	<p>91-09799-000</p> <p>1 3,500 CK</p> <p>2 2,000 CR</p> <p>3 3,000 </p>	<p>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)</p>	<p>Ø 85,000 Ø 85,500 Ø 85,600</p>	<p>31-04495-000 31-04495-050 31-04495-060</p>

<p>K=89,00 L=155,00 H=4,50 D=91,20</p>	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 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)

<p>11-02497-000 CH 46,705 VD1 0,520 B- 15,400 BØ 44,800 TL 80,705</p> <p>28,00x70,00</p>	AP YS	<p>91-09799-000</p> <p>1 3,500 CK</p> <p>2 2,000 CR</p> <p>3 3,000 </p>		<p>Ø 85,000 Ø 85,600</p>	<p>31-04497-000 31-04497-060</p>

	Type				
---	------	---	--	---	---






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	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
	22,00x62,00					
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	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
	30,00x66,85					
Citroen, Ford ve Peugeot ile Ortak Motor						


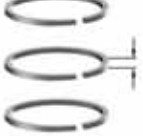
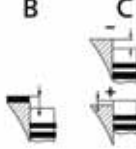

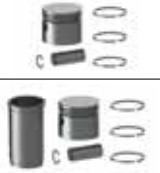
	K=89,00 L=156,00 H=5,00 D=90,50	DS			51-65496-000	
--	--	----	--	--	---------------------	--

	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			51-65496-050	
--	--	-------------	--	--	---------------------	--

86,010






Strok Boyu 0,20mm Kısa Piston	/ Stroke Length 0,20mm Shorter	>	Cyl	cc	kW	(ps)
----------------------------------	--------------------------------	---	-----	----	----	------

	11-01461-001 CH 43,220 B- 15,850 BØ 46,900 TL 69,620	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	31-03461-001 31-03461-051
	30,00x66,85	CH -0,20 mm				
Citroen, Ford ve Peugeot ile Ortak Motor						

	Type				
---	------	---	--	---	---

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	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
	30,00x66,85					
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	
---	--	-------------	--	--	---------------------	--


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	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
	22,00x63,00					
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	
--	--	-------------	--	--	---------------------	--

	Type				
---	------	---	--	---	---

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		91-09160-000 1 1,750  CR 2 2,000  CrP St 3 4,000 		Ø 88,000	31-04160-000
	23,00x75,00	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
--	--	----	--	--	---------------------	---------------------

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)

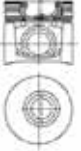




	11-02113-000 CH 57,000 VD1 1,400 B- 18,250 BØ 41,000 TL 89,000	AP YS	99-09096-000 1 3,500  CrP 2 2,000  P 3 3,500  CrP	1,30mm conta ile +0,50/+0,60	Ø 92,000 Ø 92,500	39-04113-000 39-04113-050
	34,00x68,00	Citroen ve Peugeot ile Ortak Motor				


	K=96,00 L=160,00 H=5,00 D=97,00	DS			51-65886-000	
--	--	----	--	--	---------------------	--



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 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

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 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	
--	----	--	--	---------------------	--

	Type				
---	------	---	--	---	---

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		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03902-000
Dacia, Daf, Renault ve Volvo ile Ortak Motor					

	K=78,50 L=134,00 H=94,85 D=87,65	WF		51-05902-000	71-07902-000
--	---	----	--	---------------------	---------------------


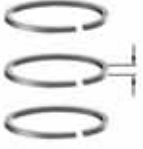
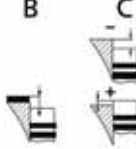

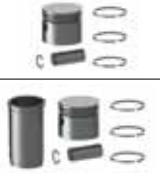



73,000

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		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					


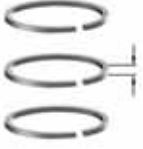
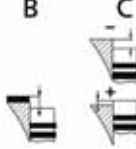

	K=78,50 L=134,00 H=94,85 D=87,65	WF		51-05902-000	71-07903-000
--	---	----	--	---------------------	---------------------

	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	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
	25,00x60,00					
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	

	Type			
---	------	---	--	---

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	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
	26,00x60,00	Dacia, Nissan, Renault, Suzuki ile Ortak Motor				

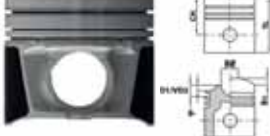
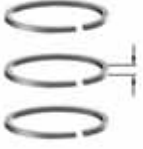
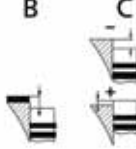

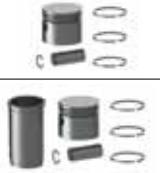
	K=79,10 L=142,00 H=5,00 D=81,00	DS			51-65936-000	
--	--	----	--	--	---------------------	--

	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 / Stroke Length 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	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	31-04164-001 31-04164-051 31-04164-101
	26,00x60,00	CH -0,20 mm	Dacia, Nissan, Renault, Suzuki ile Ortak Motor			

	Type				
---	------	---	--	---	---

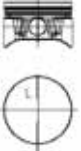




76,000

Strok Boyu 0,40mm Kısa / Stroke Length 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

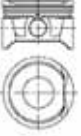




K7J 710 Solenza 1.4i B 00 2004 > 4 Cyl (75ps)
K7J 710 / 714 Logan / Logan Express / Logan MCV 1.4i 07 2004 > 4 Cyl (75ps)
K7J 710 / 714 Sandero 1.4i B 05 2008 > 4 Cyl (75ps)

 11-02169-000 CH 35,830 TL 58,000  19,00x62,00		91-09166-000 1 1,500  Mo 2 1,500  P 3 2,500 	Ø 79,500 Ø 80,000	31-04169-000 31-04169-050
Dacia ve Renault ile Ortak Motor				

	Type				
---	------	---	--	---	---






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		91-09166-000 1 1,500  Mo 2 1,500  3 2,500 		\varnothing 79,500 \varnothing 79,750 \varnothing 80,000 \varnothing 80,500	31-04171-000 31-04171-025 31-04171-050 31-04171-100
	20,00x62,00	<i>Dacia, Nissan ve Renault ile Ortak Motor</i>				

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	AP	91-09800-000 1 2,000  MoP 2 2,000  P 3 3,000  CrP		\varnothing 80,000 \varnothing 80,500 \varnothing 80,800	31-04170-000 31-04170-050 31-04170-080
	24,00x63,00	<i>Dacia, Opel ve Renault ile Ortak Motor</i>				

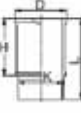
	K=83,05 L=154,00 H=5,00 D=85,00	DS			51-65903-000
	K=83,50 L=154,00 H=5,50 D=85,50	DS +0,50			51-65903-050
	K=84,05 L=154,00 H=6,00 D=86,00	DS +1,00			51-65903-100

	Type				
---	------	---	--	---	---

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		91-09901-000 1 1,750  CR 2 2,000  P 3 3,500  CrP St		Ø 70,000	31-03901-000
	18,00x62,00					
Daf, Renault ve Volvo ile Ortak Motor						

	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		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03902-000
	20,00x62,00					
Dacia, Daf, Renault ve Volvo ile Ortak Motor						

	K=78,50 L=134,00 H=94,85 D=87,65	WF			51-05902-000	71-07902-000
--	---	----	--	--	---------------------	---------------------

73,000

1.3	66 Series	B > 03 1973	4 Cyl	1289cc	42kW	(57ps)
-----	-----------	-------------	-------	--------	------	--------






	11-01903-000 CH 37,500 TL 62,500		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03903-000
	20,00x62,00					
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
--	---	----	--	--	---------------------	---------------------








94,000

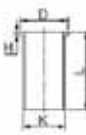
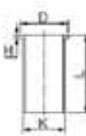

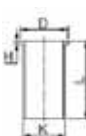
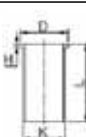

EN55 / XD3P Series 400 D 02 1987 > 09 1993 4 Cyl 2304cc 51-58kW (70-79ps)


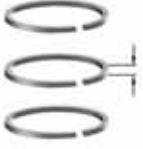
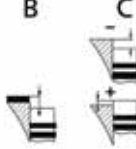

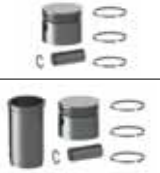
 <p>11-01892-000 CH 57,420 B- 2,000 TL 99,920</p>  <p>28,00x81,00</p>	<p>91-09895-000</p> <p>1 2,000  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>	<p>0/+0,84 Conta ile 0,75/0,90</p>	<p>Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000</p>	<p>31-03892-000 31-03892-040 31-03892-060 31-03982-100</p>

94,000

EN55 / XD3P Series 400 D 02 1987 > 09 1993 4 Cyl 2498cc 51-58kW (70-79ps)






 <p>11-01893-000 CH 53,920 B- 1,800 TL 96,420</p>  <p>30,00x78,80</p>	<p>91-09895-000</p> <p>1 2,000  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>	<p>1,53mm Conta ile 0/+0,79 1,63mm Conta ile +0,79/+0,89 1,73mm Conta ile +0,89/...</p>	<p>Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000</p>	<p>31-03893-000 31-03893-040 31-03893-060 31-03893-100</p>







 <p>K=97,05 L=170,60 H=3,90 D=99,50</p>	DS			51-65892-000
 <p>K=98,05 L=170,60 H=5,00 D=100,50</p>	DS +1,00			51-65892-100
 <p>K=97,05 L=170,60 H=5,00 D=99,50</p>	DS			51-65893-000
 <p>K=97,50 L=170,60 H=6,00 D=100,00</p>	DS +0,50			51-65893-050
 <p>K=97,05 L=166,00 H=4,00 D=99,50</p>	DS			51-65915-000
 <p>K=97,55 L=166,00 H=5,00 D=100,00</p>	DS +0,50			51-65915-050

	Type				
---	------	---	--	---	---

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		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
	30,00x78,80					
Daf, Ford ve Peugeot ile Ortak Motor						

	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	

		Type				
--	--	------	--	--	--	--

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
		99-09283-000 1 1,500 CrP 2 1,500 P 3 3,000 CR	Ø 65,000 Ø 65,400 Ø 65,600	39-03357-000 39-03357-040 39-03357-060

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	DS	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	Ø 65,000 Ø 65,400 Ø 65,600	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

	Type				
---	------	---	--	---	---

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		91-09390-000 1 1,750  CrP 2 2,000  P 3 3,947  CrP		\varnothing 65,000 \varnothing 65,200 \varnothing 65,400 \varnothing 65,600 \varnothing 65,800	31-03390-000 31-03390-020 31-03390-040 31-03390-060 31-03390-080
	20,00x54,00					
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

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	AP YS	91-09797-000 1 1,500  CrP 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)	\varnothing 69,600 \varnothing 70,000	31-04198-000 31-04198-040
	23,00x56,70					
Fiat / Iveco ve Opel ile Ortak Motor						



69,600

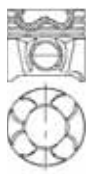




Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)




 <p>11-02198-001 CH 40,230 VD1 0,904 B- 12,700 BØ 37,000 TL 62,230</p>  <p>23,00x56,70</p>	<p>AP YS</p>	<p>91-09797-000 1 1,500  CkP 2 1,500  P 3 2,000  CrP</p>	<p>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)</p>	<p>Ø 69,600 Ø 70,000</p>	<p>31-04198-001 31-04198-041</p>
	<p>CH -0,20 mm</p>				

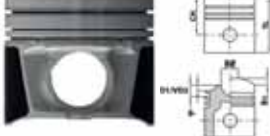
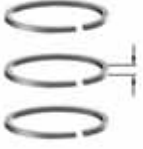
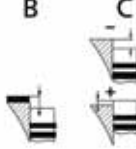

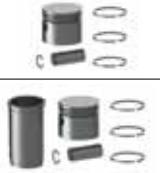
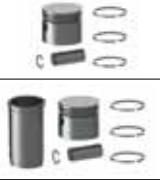


Fiat / Iveco ve Opel ile Ortak Motor

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)

 <p>11-02282-000 CH 40,430 VD1 1,000 B- 12,400 BØ 37,000 TL 63,430</p>  <p>23,00x56,70</p>	<p>AP</p>	<p>91-09282-000 1 2,000  CK 2 1,500  P 3 2,000  NT St</p>	<p>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)</p>	<p>Ø 69,600 Ø 70,000 Ø 70,200 Ø 70,400 Ø 70,600</p>	<p>31-04282-000 31-04282-040 31-04282-060 31-04282-080 31-04282-100</p>
	<p>Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor</p>				

 <p>K=72,50 L=142,00 H=5,10 D=74,00</p>	<p>DS</p>			<p>51-65451-000</p>
 <p>K=73,00 L=142,00 H=5,20 D=74,50</p>	<p>DS +0,50</p>			<p>51-65451-050</p>
 <p>K=73,50 L=142,00 H=5,20 D=75,00</p>	<p>DS +1,00</p>			<p>51-65451-100</p>

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

69,600

Strok Boyu 0,20mm Kısa
Piston

/ Stroke Length 0,20mm Shorter






>

Cyl

cc

kW

(ps)

	<p>11-02282-001 CH 40,230 VD1 1,000 B- 12,400 BØ 37,000 TL 63,230</p>  <p>23,00x56,70</p>	<p>AP</p> <p>CH -0,20 mm</p>	<p>91-09282-000 1 2,000  CK 2 1,500  P 3 2,000  NT St</p>	<p>Ø 69,600 Ø 70,000 Ø 70,200</p>	<p>31-04282-001 31-04282-041 31-04282-061</p>






69,600

Strok Boyu 0,40mm Kısa
Piston

/ Stroke Length 0,40mm Shorter

>

(ps)

	<p>11-02282-002 CH 40,030 VD1 1,000 B- 12,400 BØ 37,000 TL 63,030</p>  <p>23,00x56,70</p>	<p>AP</p> <p>CH -0,40 mm</p>	<p>91-09282-000 1 2,000  CK 2 1,500  P 3 2,000  NT St</p>	<p>Ø 69,600 Ø 70,000 Ø 70,200</p>	<p>31-04282-002 31-04282-042 31-04282-062</p>



69,600


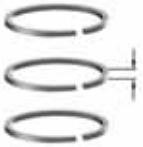
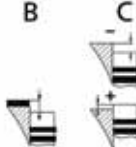

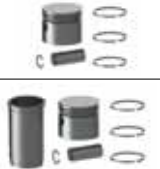
199 A3.000	Doblo II 1.3 M-Jet 16V	01 2010	>	(90-105ps)
199 A3.000	Grande Punto 1.3D Multijet 16V	10 2005	>	(90-105ps)
199 A3.000	Idea 1.3 JTD 16V	10 2005	>	(90-105ps)
199 A3.000	Linea 1.3 JTD 16V	06 2007	>	(90-105ps)
199 A3.000	Punto EVO 1.3D Multijet 16V	10 2009	> 02 2012	(90-105ps)

<p>11-02289-000 CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43</p> <p>23,00x56,70</p>	<p>AP</p> <p>YS</p>	<p>91-09282-000</p> <p>1 2,000 CK</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04289-000</p> <p>31-04289-040</p>
	<p>Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor</p>				

	<p>K=72,50 L=142,00 H=5,10 D=74,00</p>	<p>DS</p>			<p>51-65451-000</p>
	<p>K=73,00 L=142,00 H=5,20 D=74,50</p>	<p>DS</p> <p>+0,50</p>			<p>51-65451-050</p>
	<p>K=73,50 L=142,00 H=5,20 D=75,00</p>	<p>DS</p> <p>+1,00</p>			<p>51-65451-100</p>






69,600

<p>Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter</p> <p>Piston</p>	<p>AP</p> <p>YS</p>	<p>91-09282-000</p> <p>1 2,000 CK</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04289-001</p> <p>31-04289-041</p>
<p>11-02289-001 CH 40,230 VD1 0,904 B- 12,400 BØ 38,000 TL 62,230</p> <p>23,00x56,70</p>	<p>CH -0,20 mm</p>	<p>Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor</p>			

	Type				
---	------	---	--	---	---






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	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
 17,98x53,00					
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		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
 17,98x53,00					
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		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	31-04268-000 31-04268-040 31-04268-060
 18,00x53,00					



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)

 <p>11-02285-000 CH 28,000 VD1 1,400 B- 2,100 BØ 60,000 TL 48,000</p>  <p>18,00x53,00</p>	<p>91-09285-000</p> <p>1 1,200  NT St</p> <p>2 1,200  P</p> <p>3 2,500  NtP St</p>	<p>Ø 70,800</p> <p>Ø 71,200</p> <p>Ø 71,400</p>	<p>31-04285-000</p> <p>31-04285-040</p> <p>31-04285-060</p>

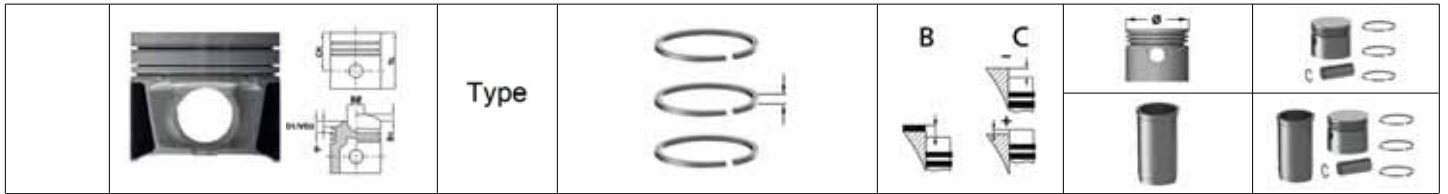
 <p>K=73,80 L=128,00 H=5,00 D=75,00</p>	DS				51-65491-000	
--	----	--	--	--	---------------------	--

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)

 <p>11-02287-000 CH 28,000 VD1 2,000 B- 5,100 TL 48,000</p>  <p>18,00x49,00</p>	<p>91-09285-000</p> <p>1 1,200  NT St</p> <p>2 1,200  P</p> <p>3 2,500  NtP St</p>	<p>Ø 70,800</p> <p>Ø 71,200</p> <p>Ø 71,400</p>	<p>31-04287-000</p> <p>31-04287-040</p> <p>31-04287-060</p>

 <p>K=73,80 L=128,00 H=5,00 D=75,00</p>	DS				51-65491-000	
---	----	--	--	--	---------------------	--



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)

<p>11-01332-000 CH 26,800 VD1 1,400 VD2 2,300 B- 8,000 BØ 61,000 TL 49,800</p> <p>18,00x53,00</p>		<p>99-09695-000</p> <p>1 1,200 CK</p> <p>2 1,200 P</p> <p>3 2,000 CrP</p>		<p>Ø 72,000</p> <p>Ø 72,400</p>	<p>39-03332-000</p> <p>39-03332-040</p>

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)

<p>11-02266-000 CH 26,000 VD1 2,050 B- 4,750 TL 49,000</p> <p>18,00x49,00</p>		<p>91-09263-000</p> <p>1 1,000 NT St</p> <p>2 1,200 P</p> <p>3 2,000 CrP</p>		<p>Ø 72,000</p> <p>Ø 72,400</p>	<p>31-04266-000</p> <p>31-04266-040</p>






Fiat / Iveco ve Lancia ile Ortak Motor

<p>K=75,00 L=126,00 H=5,10 D=76,50</p>	DS				51-65269-000
--	----	--	--	--	---------------------


	Type				
---	------	---	--	---	---

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	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 Kısa / Stroke Length 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	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 Kısa / Stroke Length 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	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					

	Type		 		
					






75,000

Strok Boyu 0,60mm Kısa
Piston

/ Stroke Length 0,60mm Shorter

>

(ps)

	11-02498-003 CH 41,100 VD1 1,200 B- 13,250 BØ 41,800 TL 64,700	AP YS	91-09168-000 1 3,000  CrP 2 1,950  P 3 2,500  CrP		Ø 75,000	31-04498-003
	26,00x61,00	CH -0,60 mm				
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor						






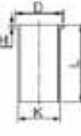

76,000

131A000

131 1.3







10 1974 > 00 1980


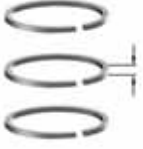
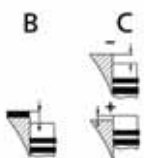

(55ps)

	11-01392-000 CH 38,450 B- 0,500 BØ 45,000 TL 77,950	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
	22,00x61,00					
	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	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
	22,00x64,50					
	K=79,08 L=135,50	DS			51-65393-000	

	Type			
---	------	---	--	---

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		91-09392-000 1 1,500  CrP 2 2,000  P 3 3,947  CrP		Ø 76,000 Ø 76,200 Ø 76,400 Ø 76,600	31-04275-000 31-04275-020 31-04275-040 31-04275-060
	22,00x60,90					

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	CP	91-09751-000 1 2,000  CrP 2 2,000  P 3 3,947  CrP		Ø 77,000 Ø 77,400 Ø 77,600 Ø 77,800 Ø 78,000	31-03751-000 31-03751-040 31-03751-060 31-03751-080 31-03751-100
	22,00x65,00					

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	AP	91-09694-000 1 1,500  CrP 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 Ø 79,900	31-04292-000 31-04292-040
	26,00x62,80					

	K=82,50 L=142,00 H=5,00 D=84,00	DS			51-65756-000	
--	--	----	--	--	---------------------	--

		Type				
--	--	------	--	--	--	--

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	CP	91-09755-000 1 1,500 CrP 2 2,000 P 3 3,947 P		Ø 80,000 Ø 80,400 Ø 80,600 Ø 80,800 Ø 81,000	31-03752-000 31-03752-040 31-03752-060 31-03752-080 31-03752-100
	22,00x71,00					

	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	CP	91-09755-000 1 1,500 CrP 2 2,000 P 3 3,947 P		Ø 80,000 Ø 80,400 Ø 80,600 Ø 80,800 Ø 81,000	31-03753-000 31-03753-040 31-03753-060 31-03753-080 31-03753-100
	22,00x68,00					

	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)

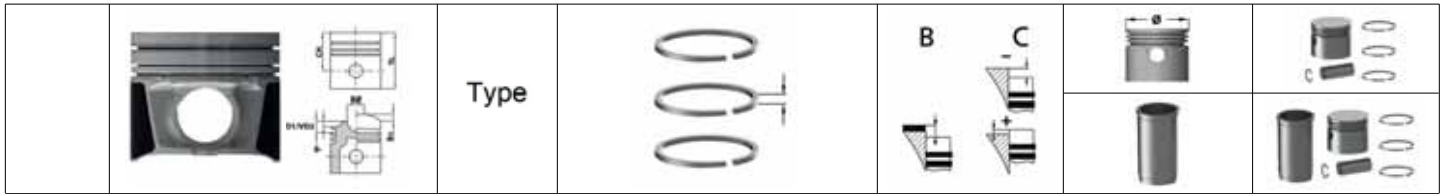
138 AE.0A.0 Ritmo 60 1.1 B 10 1978 > 09 1982 4 Cyl 1116cc 44 kW (60 ps)

	11-01755-000 CH 34,400 B- 0,500 TL 77,100	CP	91-09755-000 1 1,500 CrP 2 2,000 P 3 3,947 P		Ø 80,000 Ø 80,400 Ø 80,600 Ø 80,800 Ø 81,000	31-03755-000 31-03755-040 31-03755-060 31-03755-080 31-03755-100
	22,00x68,00					

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		91-09396-000 1 1,500 CrP 2 1,750 P 3 3,000 P		Ø 80,500 Ø 80,700 Ø 80,800 Ø 80,900 Ø 81,100	31-03396-000 31-03396-020 31-03396-030 31-03396-040 31-03396-060
	22,00x58,20					



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)

<p>11-02267-000 CH 28,650 VD1 2,200 B- 1,200 BØ 62,000 TL 50,700</p> <p>21,00x56,00</p>	<p>91-09262-000</p> <p>1 1,200 CR St</p> <p>2 1,200 P</p> <p>3 2,000 CrP St</p>	<p>Ø 80,500</p> <p>Ø 80,900</p>	<p>31-04267-000</p> <p>31-04267-040</p>

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)

<p>11-02303-000 CH 33,300 B- 2,900 TL 65,300</p> <p>22,00x58,00</p>	<p>91-09396-000</p> <p>1 1,500 CrP</p> <p>2 1,750 P</p> <p>3 3,000 P</p>	<p>Ø 80,500</p> <p>Ø 80,900</p> <p>Ø 81,100</p>	<p>31-04303-000</p> <p>31-04303-040</p> <p>31-04303-060</p>



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)

<p>11-01399-000 CH 44,500 B- 1,300 TL 70,300</p> <p>26,00x65,00</p>	<p>91-09399-000</p> <p>1 2,000 CkP</p> <p>2 2,000 P</p> <p>3 2,000 NT St</p>	<p>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)</p>	<p>Ø 82,000 Ø 82,400 Ø 82,600</p>	<p>31-03399-000 31-03399-040 31-03399-060</p>

<p>K=85,00 L=155,00 H=4,50 D=88,00</p>	DS			51-65265-000	
--	----	--	--	---------------------	--

<p>K=85,00 L=155,00 H=5,00 D=86,00</p>	DS			51-65268-000	
--	----	--	--	---------------------	--

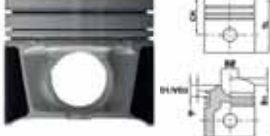
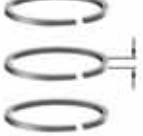
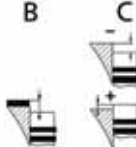


82,000

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)

<p>11-02281-000 CH 46,500 VD1 0,500 B- 17,500 BØ 37,500 TL 72,500</p> <p>26,00x61,00</p>	<p>91-09399-000</p> <p>1 2,000 CkP</p> <p>2 2,000 P</p> <p>3 2,000 NT St</p>	<p>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)</p>	<p>Ø 82,000 Ø 82,400 Ø 82,600</p>	<p>31-04281-000 31-04281-040 31-04281-060</p>






Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor

<p>K=85,00 L=155,00 H=5,00 D=86,00</p>	DS			51-65268-000	
--	----	--	--	---------------------	--

	Type				
---	------	---	--	---	---

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		91-09878-000 1 2,000  CR 2 2,000  CR 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
	25,00x65,50					
Fiat / Iveco ve Peugeot ile Ortak Motor						

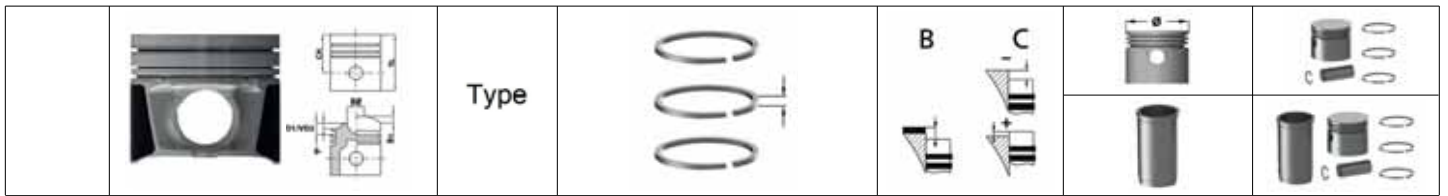
	K=85,05 L=154,00 H=5,10 D=86,95	DS			51-65866-000	
--	--	----	--	--	---------------------	--

	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 / Stroke Length 0,20mm Shorter Piston D 09 1998 > 4 Cyl 1868cc 51kW (69ps)

	11-01878-001 CH 46,500 B- 1,200 TL 78,000		91-09878-000 1 2,000  CR 2 2,000  CR 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
	25,00x65,50	CH-0,20 mm				
Fiat / Iveco ve Peugeot ile Ortak Motor						




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

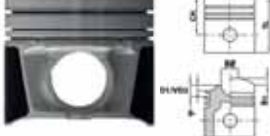
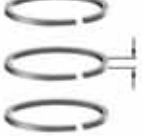
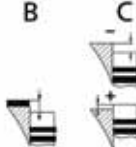


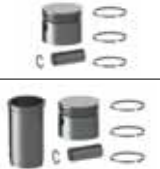





51-65394-100

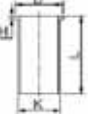


K=86,06
L=154,00
H=4,50
D=89,00

DS






51-65395-000

	Type		B 	C 		
						

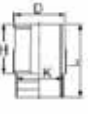
	K=87,06 L=154,00 H=5,50 D=90,00	DS +1,00			51-65395-100	
--	--	-------------	--	--	---------------------	--

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		91-09877-000 1 1,750  CR 2 1,750  CrP 3 4,000  St			Ø 83,000	31-03877-000
	 22,00x66,20						
Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor							




	K=88,60 L=141,00 H=95,19 D=97,00	WF				51-05881-000	71-07877-000
---	---	----	--	--	--	---------------------	---------------------




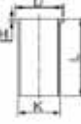

	K=88,60 L=141,00 H=95,14 D=97,00	WF				51-05882-000	71-07878-000
--	---	----	--	--	--	---------------------	---------------------





	Type			
---	------	---	--	---

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		91-09879-000 1 2,000 CR 2 2,000 CR 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
 25,00x72,00						
Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor						

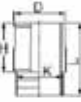

	K=86,00 L=153,50 H=4,80 D=89,00	DS			51-65820-000	
	K=86,04 L=153,50	DS			51-65879-000	
	K=86,54 L=153,50	DS +0,50			51-65879-050	
	K=85,66 L=153,50 H=3,90 D=88,45	DS			51-65885-000	
	K=86,15 L=153,50 H=3,90 D=88,45	DS +0,50			51-65885-050	

	Type				
					

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	CP	91-09887-000 1 1,500  Mo 2 1,500  Mo 3 3,000  CR		Ø 83,000	31-03887-000
	22,00x62,00					
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

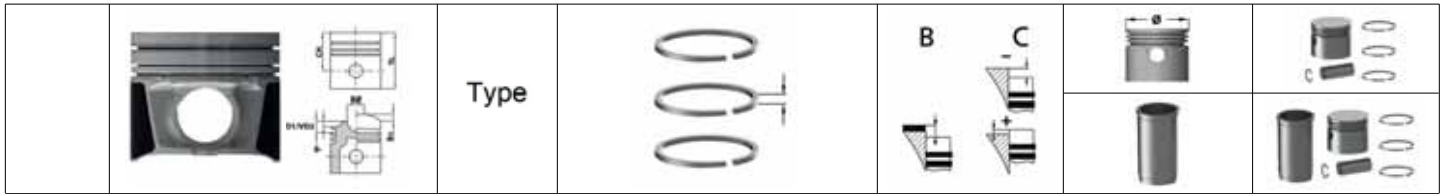


83,000

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)

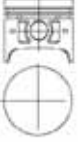





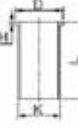
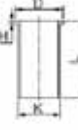
<p>11-02197-000 CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630</p> <p>29,98x67,00</p> <p>Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor</p>	AP	91-09790-000	0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)	Ø 83,000 Ø 83,400	31-04197-000 31-04197-040
	YS	<p>1 1,500 CkP</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>			
		<p>98-09790-000</p> <p>1 1,500 CrP St</p> <p>2 1,500 P</p> <p>3 2,000 CR St</p>			38-04197-000 38-04197-040
		<p>99-09790-000</p> <p>1 1,500 NtPvD St</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>			39-04197-000

<p>K=86,00 L=155,00 H=5,00 D=87,50</p>	DS			51-65778-000	
--	----	--	--	---------------------	--



84,000

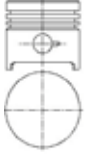




131 A.000 131 1.6 B 10 1974 > 02 1981 4 Cyl 1585cc 55kW (75ps)

 	<p>11-01389-000 CH 38,600 TL 78,100</p> <p>22,00x71,00</p>	<p>CP</p>	<p>91-09397-000</p> <p>1 1,500  CrP</p> <p>2 2,000  P</p> <p>3 3,947  CrP</p>		<p>Ø 84,000</p> <p>Ø 84,200</p> <p>Ø 84,400</p> <p>Ø 84,600</p> <p>Ø 84,800</p>	<p>31-03389-000</p> <p>31-03389-020</p> <p>31-03389-040</p> <p>31-03389-060</p> <p>31-03389-080</p>
	<p>K=88,00 L=133,50 H=5,00 D=89,18</p>	<p>DS</p>			<p>51-65397-000</p>	
	<p>K=88,50 L=133,50 H=6,00 D=90,00</p>	<p>DS +0,50</p>			<p>51-65397-050</p>	
	<p>K=89,00 L=133,50 H=6,00 D=90,50</p>	<p>DS +1,00</p>			<p>51-65397-100</p>	

	Type			
---	------	---	--	---

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		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
	22,00x69,00					






	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	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
	22,00x69,00					
Fiat / Iveco, Lancia ve Seat ile Ortak Motor						

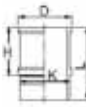
	K=88,02 L=145,50	DS			51-65410-000	
--	---------------------	----	--	--	---------------------	--



84,000






169 B / XM 7T Ducato I (280) 1.8 B 09 1981 > 12 1990 4 Cyl 1796cc 44-51kW (60-69ps)


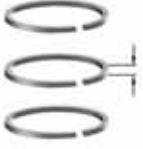
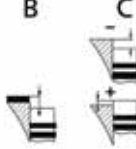

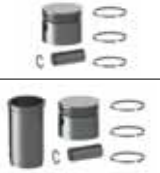
 <p>11-01881-000 CH 37,800 TL 69,300</p>  <p>23,00x70,00</p>	CP	<p>91-09881-000</p> <p>1 1,500  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP St</p>		Ø 84,000	31-03881-000

 <p>K=92,95 L=136,20 H=90,00 D=99,20</p>	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)

 <p>11-02270-000 CH 38,450 VD1 3,800 TL 77,950</p>  <p>22,00x69,00</p>	CP	<p>91-09397-000</p> <p>1 1,500  CrP</p> <p>2 2,000  P</p> <p>3 3,947  CrP</p>		<p>Ø 84,000</p> <p>Ø 84,400</p> <p>Ø 84,600</p> <p>Ø 84,800</p> <p>Ø 85,000</p>	<p>31-04270-000</p> <p>31-04270-040</p> <p>31-04270-060</p> <p>31-04270-080</p> <p>31-04270-100</p>

	Type				
---	------	---	--	---	---






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		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
	21,00x58,00					

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	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
	30,00x71,50					

Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor


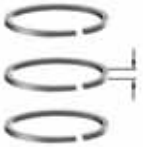
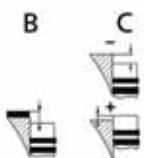

85,000

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	AP	91-09799-000 1 3,500  CK 2 2,000  CR 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
	28,00x70,00					






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			
---	------	---	--	---






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	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
	28,00x70,00					
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	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
	22,00x62,00					
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	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
	30,00x66,85					
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	

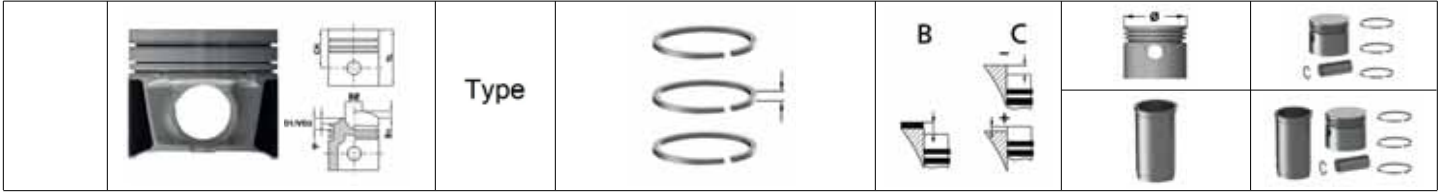
	Type				
---	------	---	--	---	---

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	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
	22,00x63,00	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



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)

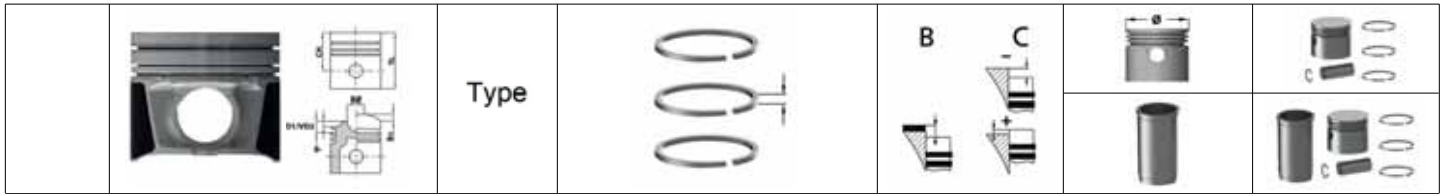
<p>11-02269-000 CH 34,170 VD1 2,200 TL 59,430</p> <p>22,00x56,00</p>	<p>91-09969-000</p> <p>1 1,500 CrP</p> <p>2 1,500 P</p> <p>3 3,000 CrP St</p>	<p>Ø 86,400</p> <p>Ø 86,800</p> <p>Ø 87,000</p>	<p>31-04269-000</p> <p>31-04269-040</p> <p>31-04269-060</p>

		Type					
--	--	------	--	--	--	--	--

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 Ø 86,800 Ø 87,000 Ø 87,200 Ø 87,400	31-04273-000 31-04273-040 31-04273-060 31-04273-080 31-04273-100
	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	



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)

<p>11-02831-000 CH 57,000 B- 18,180 BØ 44,700 TL 84,000</p> <p>31,00x67,00</p>	AP	<p>91-09838-000</p> <p>1 2,500 CK</p> <p>2 2,000 P</p> <p>3 2,500 CrP</p>			<p>1,10mm conta ile (0,30/0,40) 1,20mm conta ile (0,40/0,50) 1,30mm conta ile (0,50/0,60)</p>	<p>Ø 88,000 Ø 88,600</p>	<p>31-04831-000 31-04831-060</p>

<p>K=91,00 L=160,00 H=4,70 D=95,00</p>	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)

<p>11-02838-000 CH 57,000 B- 13,750 BØ 50,000 TL 84,000</p> <p>31,00x67,00</p>	AP YS	<p>91-09838-000</p> <p>1 2,500 CK</p> <p>2 2,000 P</p> <p>3 2,500 CrP</p>			<p>1,10mm conta ile (0,30/0,40) 1,20mm conta ile (0,40/0,50) 1,30mm conta ile (0,50/0,60)</p>	<p>Ø 88,000 Ø 88,400 Ø 88,600</p>	<p>31-04838-000 31-04838-040 31-04838-060</p>

<p>K=91,00 L=160,00 H=4,70 D=95,00</p>	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)

<p>11-02979-000 CH 57,000 B- 14,300 BØ 49,150 TL 84,270</p> <p>31,00x67,00</p>	AP YS	<p>91-09404-000</p> <p>1 1,750 CR</p> <p>2 1,500 P</p> <p>3 2,000 CrP</p>				<p>Ø 88,000</p>	<p>31-04979-000</p>



91,480

D3.152 Series AC 160 D 01 1971 > 12 1975 3 Cyl 2503cc 35kW (47ps)






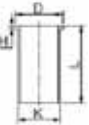
	<p>11-01834-000 CH 62,000 B- 19,250 BØ 59,800 TL 109,600</p> <p> 31,75x75,30</p>	<p>91-09834-000</p> <p>1 2,385 CrP 2 2,385 P 3 2,385 P 4 4,747 CrP</p>	<p>-0,025/+0,010</p>	<p>Ø 91,480</p>	<p>31-03834-000</p>
<p>Fiat / Iveco ve Perkins ile Ortak Motor</p>					

	<p>K=93,80 L=216,00 H=5,00 D=97,00</p>	<p>DS</p>		<p>51-65831-000</p>	
	<p>K=94,30 L=216,00 H=5,00 D=97,00</p>	<p>DS +0,50</p>		<p>51-65831-050</p>	
	<p>K=94,80 L=216,00 H=5,00 D=97,65</p>	<p>DS +1,00</p>		<p>51-65831-100</p>	
	<p>K=95,05 L=216,00 H=6,00 D=98,00</p>	<p>DS +1,25</p>		<p>51-65831-125</p>	
	<p>K=95,30 L=216,00 H=6,00 D=98,25</p>	<p>DS +1,50</p>		<p>51-65831-150</p>	
	<p>K=95,80 L=216,00 H=6,00 D=98,75</p>	<p>DS +2,00</p>		<p>51-65831-200</p>	
	<p>K=96,30 L=216,00 H=6,00 D=99,25</p>	<p>DS +2,50</p>		<p>51-65831-250</p>	
	<p>K=96,80 L=216,00 H=6,00 D=99,75</p>	<p>DS +3,00</p>		<p>51-65831-300</p>	

	Type				
---	------	---	--	---	---






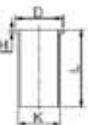
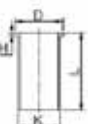
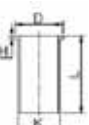
93,000


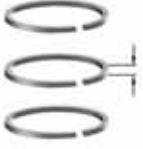
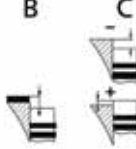

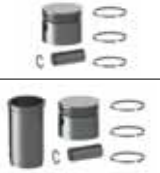
8140.67.X230-F3700-F3711-2 585 DUCATO 2.5 D Biyel Kolu Duz D 00 1994 > 4 Cyl 2499cc 63kW (83ps)

	11-01331-000 CH 54,000 B- 2,200 TL 89,000	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
	32,00x75,20					
	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	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
						
	32,00x68,00					
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	

	Type				
---	------	---	--	---	---

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)

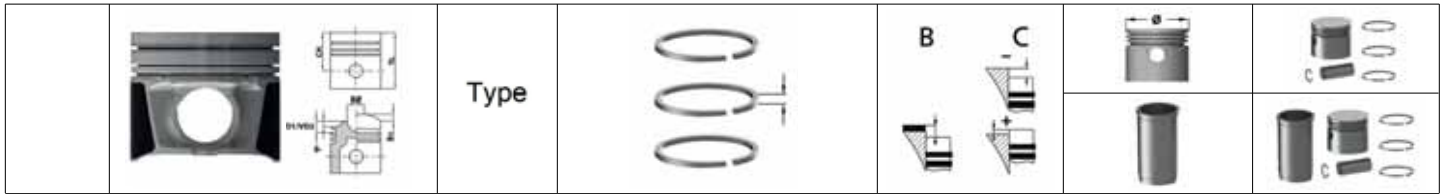
	11-01685-000 CH 58,750 B- 18,000 BØ 38,000 TL 96,750	AP	91-09689-000 1 3,000  CrP 2 2,000  P 3 3,000  CrP	Ø 93,000 Ø 93,400 Ø 93,600	31-03685-000 31-03685-040 31-03685-060
	32,00x78,00	PDB			
Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor					

	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



93,000		Type							
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)			

<p>11-01686-000 CH 55,000 B- 2,200 TL 90,000</p> <p>32,00x75,00</p> <p>Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor</p>	AP	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
	HA CP	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
<p>K=96,00 L=167,00 H=5,00 D=98,90</p>	DS			51-65400-000	
<p>K=96,10 L=167,00 H=5,00 D=98,90</p>	DS +0,10			51-65400-010	
<p>K=96,20 L=167,00 H=5,00 D=98,90</p>	DS +0,20			51-65400-020	
<p>K=96,06 L=167,30</p>	DS			51-65452-000	



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

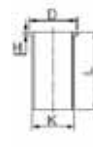
Fiat / Iveco ve Renault ile Ortak Motor



K=96,00
L=167,00
H=5,00
D=98,90

DS

51-65400-000

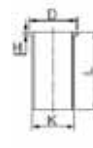


K=96,10
L=167,00
H=5,00
D=98,90

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

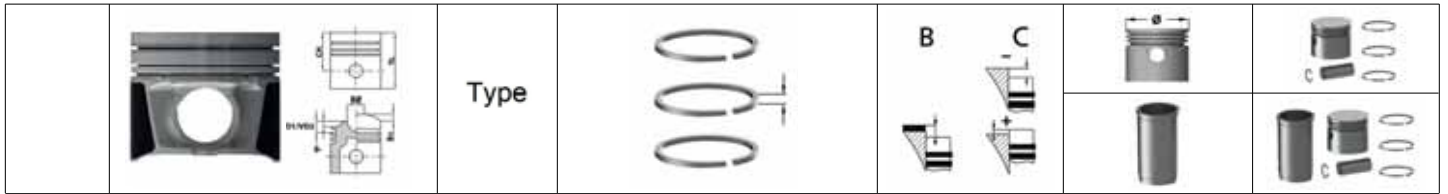
	Type			
---	------	---	--	---

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	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	31-03688-000 31-03688-040 31-03688-060
	32,00x75,20	CP				
Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor						

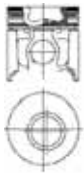
	K=96,06 L=171,00 H=5,00 D=98,90	DS			51-65401-000	
	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			51-65401-050	

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	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					
	32,00x68,00										
	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						



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

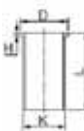
1 3,000  CR
2 2,000  P
3 3,000  CR

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

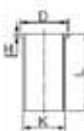
Fiat / Iveco, Opel ve Renault ile Ortak Motor



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

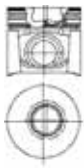
+0,50

51-65453-050



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

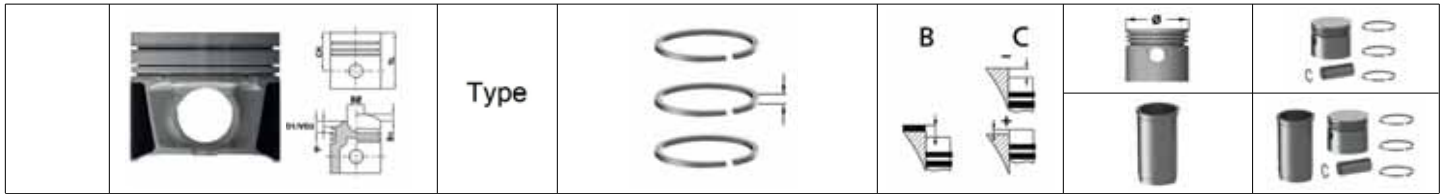


94,400








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)

<p>11-01692-000 CH 58,750 B- 21,350 BØ 39,300 TL 87,600</p>  <p>32,00x72,00</p>	<p>AP YS</p>	<p>91-09691-000</p> <p>1 2,500  CR 2 2,000  P 3 2,500  CrP</p>	<p>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</p>	<p>Ø 94,400 Ø 94,800 Ø 95,000</p>	<p>31-03692-000 31-03692-040 31-03692-060</p>

<p>K=97,50 L=167,00 H=5,10 D=100,90</p>	<p>DS</p>			<p>51-65453-000</p>	
<p>K=98,00 L=167,00 H=6,00 D=101,35</p>	<p>DS +0,50</p>			<p>51-65453-050</p>	








94,400	
814063.2200 Euro2 (Sofim)	30.8 New Daily 2.8D
814063.2200 Euro2 (Sofim)	35.8 New Daily 2.8D
814063.2200 Euro2 (Sofim)	Ducato 2.8D

 <p>11-01693-000 CH 55,000 B- 2,800 TL 90,000</p>  <p>32,00x68,00</p>	<p>AP</p> <p>91-09693-000</p> <p>1 3,000  CrP</p> <p>2 2,000  P</p> <p>3 2,500  CrP</p>	<p>1,20mm Conta ile +0,40/+0,50 1,30mm Conta ile +0,51/+0,60 1,40mm Conta ile +0,61/+0,70</p>	<p>Ø 94,400</p> <p>Ø 94,800</p> <p>Ø 95,000</p>	<p>31-03693-000</p> <p>31-03693-040</p> <p>31-03693-060</p>
	<p>HA</p>			
 <p>K=97,50 L=167,00 H=5,10 D=100,90</p>	DS			51-65453-000
 <p>K=98,00 L=167,00 H=6,00 D=101,35</p>	DS +0,50			51-65453-050


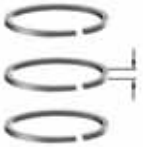
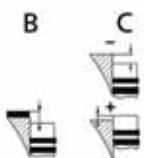




95,800

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)






 <p>11-02836-000 CH 63,000 B- 16,000 BØ 50,500 TL 93,400</p>  <p>36,00x81,00</p>	<p>AP YS</p>	<p>91-09839-000</p> <p>1 2,500  CrP 2 2,000  P 3 2,500  CrP</p>	<p>1,60mm conta ile (+0,718/+0,773) 1,65mm conta ile (+0,773/+0,819) 1,70mm conta ile (+0,819/+0,874)</p>	<p>Ø 95,800 Ø 96,200 Ø 96,400</p>	<p>31-04836-000 31-04836-040 31-04836-060</p>

 <p>K=99,00 L=175,00 H=4,80 D=102,00</p>	<p>DS</p>	<p>51-65754-000</p>
--	-----------	----------------------------

	Type				
---	------	---	--	---	---









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	CP	91-09457-000 1 1,500  CR 2 1,750  P 3 3,000  CR		Ø 68,685 Ø 69,185 Ø 69,685	31-03457-000 31-03457-050 31-03457-100
	18,03x59,00					






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		91-09432-000 1 1,200  NT St 2 1,500  P 3 2,500  NiP St		Ø 71,910 Ø 72,410	31-04951-000 31-04951-025
	19,00x49,00		99-09432-000 1 1,200  NT St 2 1,500  P 3 2,500  NiP 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	AP YS	91-09456-000 1 2,000  CK 2 2,000  P 3 2,000  CR		Ø 73,500 Ø 74,000	31-04955-000 31-04955-050
	26,00x59,00					

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	AP YS	91-09456-000 1 2,000  CK 2 2,000  P 3 2,000  CR		Ø 73,500	31-04955-001
	26,00x59,00					


	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)

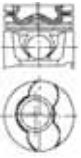




	11-01460-000 CH 42,940 VD1 1,650 B- 14,700 BØ 37,150 TL 65,440	AP	91-09460-000 1 2,500  CkP 2 1,950  P 3 2,500  CrP	1. Conta ile 1,252mm (+0,618/+0,725) 2. Conta ile 1,303mm (+0,726/+0,775) 3. Conta ile 1,351mm (+0,776/+0,825) 4. Conta ile 1,400mm (+0,83/+0,88) 5. Conta ile 1,450mm (+0,88/+0,98)	Ø 73,700 Ø 74,200	31-03460-000 31-03460-050
	25,00x60,00					
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


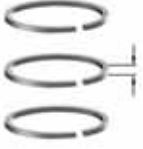
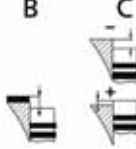


Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter	>	Cyl	cc	kW	(ps)
---	---	-----	----	----	------

	11-01460-001 CH 42,740 VD1 1,650 B- 14,700 BØ 37,150 TL 65,240	AP	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
	25,00x60,00	CH -0,20 mm				
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor						

73,700

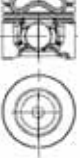




Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter	>				(ps)
---	---	--	--	--	------

	11-01460-002 CH 42,540 VD1 1,650 B- 14,700 BØ 37,150 TL 65,040	AP	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
	25,00x60,00	CH -0,40 mm				
Citroen, Ford, Mazda, Peugeot ve Toyota ile Ortak Motor						

	Type				
---	-------------	---	--	---	---






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	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
 26,00x61,00						
Citroen, Ford ve Peugeot ile Ortak Motor						

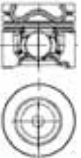




75,000

Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl kW (ps)

	11-02496-001 CH 41,550 B- 13,850 BØ 45,000 TL 65,000	AP YS	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
 26,00x61,00		CH -0,20 mm				
Citroen, Ford ve Peugeot ile Ortak Motor						

75,000






Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter > (ps)

	11-02496-002 CH 41,350 B- 13,850 BØ 45,000 TL 64,800	AP YS	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
 26,00x61,00		CH -0,40 mm				
Citroen, Ford ve Peugeot ile Ortak Motor						

	Type			
---	------	---	--	---

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	AP	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
	YS				
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	
---	----	--	--	---------------------	--

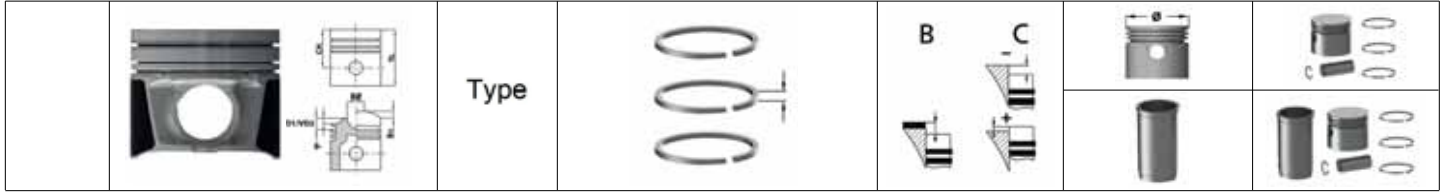
 K=78,55 L=142,00 H=6,00 D=79,95	DS +0,50			51-65826-050	
--	-------------	--	--	---------------------	--

 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 / Stroke Length 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	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
	YS				
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor					
	CH -0,20 mm				








75,000

Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter > (ps)

 <p>11-02498-002 CH 41,300 VD1 1,200 B- 13,250 BØ 41,800 TL 64,900</p>  26,00x61,00	AP YS	<p>91-09168-000</p> 1 3,000  CrP 2 1,950  P 3 2,500  CrP	Ø 75,000 Ø 75,500	31-04498-002 31-04498-052
	CH -0,40 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				






75,000

Strok Boyu 0,60mm Kısa / Stroke Length 0,60mm Shorter > (ps)

 <p>11-02498-003 CH 41,100 VD1 1,200 B- 13,250 BØ 41,800 TL 64,700</p>  26,00x61,00	AP YS	<p>91-09168-000</p> 1 3,000  CrP 2 1,950  P 3 2,500  CrP	Ø 75,000	31-04498-003
	CH -0,60 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				

76,000

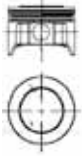
L1E	Orion 1.6i 16V	09 1992 > 12 1993	(88-90ps)
L1E / H / K	Escort 1.6i 16V	09 1992 > 09 2001	(90ps)
L1F / J	Mondeo 1.6i 16V	01 1993 > 11 1996	(90ps)
L1G	Fiesta III 1.6i 16V	03 1994 > 07 1996	(88-90ps)
L1J / L / N / Q	Mondeo II 1.6i 16V	11 1996 > 11 2000	(88-95ps)
LUH	Fiesta III 1.6i	03 1989 > 07 1996	(88-90ps)
LUJ	Escort 1.6	07 1990 > 12 1994	(88-90ps)
LUJ	Orion 1.6	07 1990 > 09 1992	(88-90ps)

 <p>11-01769-000 CH 32,650 B+ 1,700 BØ 61,400 TL 58,350</p>  20,63x63,40	CP	<p>91-09448-000</p> 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

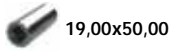


76,010

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



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



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

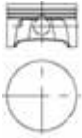
99-09795-000

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



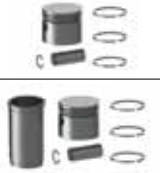
99-09795-000

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

	Type		 		
---	-------------	---	--	---	---







79,000

Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

	11-02259-001 CH 24,650 TL 47,700		99-09795-000 1 1,200  CrP St 2 1,500  P 3 2,000  NiP St		Ø 79,000 Ø 79,500	39-04259-001 39-04259-051
	 18,00x51,00	CH -0,20 mm				







79,000




1.6 ZETEC-S C-Max 1,6i 16V 00 2003 > (115ps)

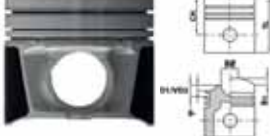
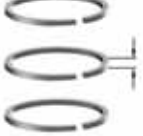
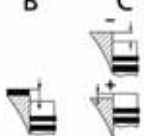


	11-02950-000 CH 25,050 B- 0,650 BØ 57,300 TL 48,050		99-09795-000 1 1,200  CrP St 2 1,500  P 3 2,000  NiP St		Ø 79,000 Ø 79,500	39-04950-000 39-04950-050
	 18,00x50,90					

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)

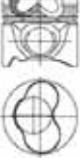




	11-02301-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800	AP PDB	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	31-04301-000 31-04301-025 31-04301-050 31-04301-100
	 26,00x66,00	Cyl.1/2 to be used with 2302 000				
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				
---	-------------	---	--	---	---

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	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
 26,00x66,00		Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor				

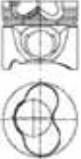




	K=82,57 L=151,80 H=4,70 D=85,40	DS			51-65303-000	
--	--	----	--	--	---------------------	--

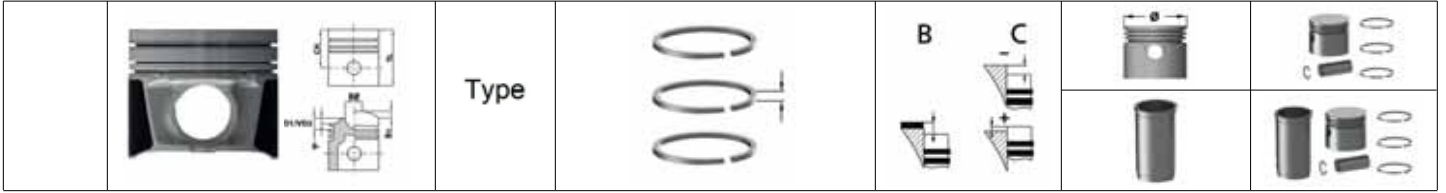
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
---	--	-------------	--	--	---------------------	--

	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	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
 26,00x66,00		Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor				








79,510




Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

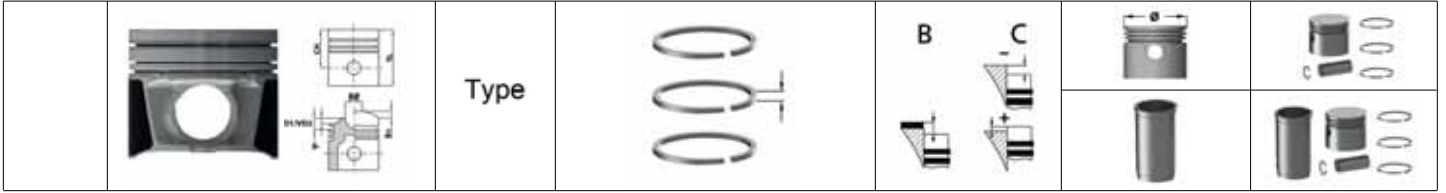
 <p>11-02306-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800</p>  26,00x66,00	AP	<p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>		<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-04306-000 31-04306-025 31-04306-050 31-04306-100</p>
	Cyl.3/4 to be used with 2305 000				
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					

79,510









ASZ Galaxy 1.9 TDI 01 2003 > 02 2006 (130ps)





 <p>11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p>  26,00x66,00	AP YS	<p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04313-000 31-04313-025 31-04313-050</p>
	PDB Cyl. 1/2 to be used with 2314 000				
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor					

 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	









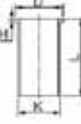

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4				>	Cyl	cc	kW	(ps)
 <p>11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP</p> <p>YS</p> <p>PDB</p> <p>Cyl. 3/4 to be used with 2313 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00</p> <p>1,53mm +1,01/+1,10</p> <p>1,61mm +1,11/+1,20</p>		<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p>	<p>31-04314-000</p> <p>31-04314-025</p> <p>31-04314-050</p>		
	 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS				51-65303-000		
	 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50				51-65303-050		
	 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00				51-65303-100		

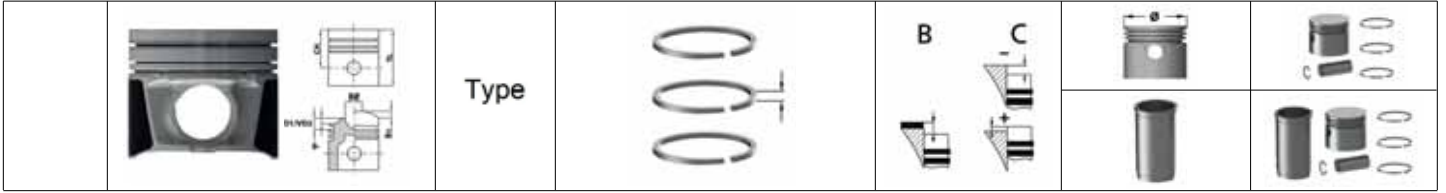
	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,510






ANU Galaxy 1.9 TDI 04 2000 > 02 2006 (90ps)


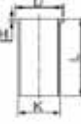

	<p>11-02319-000 CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p>	<p>AP YS</p> <p>PDB</p> <p>Cyl.1/2 to be used with 2320 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04319-000 31-04319-025 31-04319-050</p>
	<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
	<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
	<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor



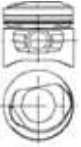




79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4		>	Cyl	cc	kW	(ps)
 <p>11-02320-000 CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800</p>  26,00x66,00	AP	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04320-000 31-04320-025 31-04320-050</p>	
	YS					
	PDB					
<p>Cyl.3/4 to be used with 2319 000</p>						
<p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>						

 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS				51-65303-000	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50				51-65303-050	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00				51-65303-100	






79,970


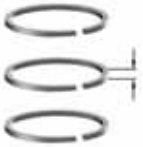
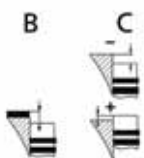







CHVLUC	Escort 1.6	00 1985	>	00 1992		(90-95ps)
CHVLUC	Fiesta XR2	00 1985	>	00 1992		(90-95ps)
CHVLUC	Orion	00 1985	>	00 1992		(90-95ps)

 <p>11-02031-000 CH 36,590 B+ 7,120 BØ 75,000 TL 73,710</p>  20,63x66,70	CP	<p>91-09031-000</p> <p>1 1,600  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>		<p>Ø 79,970 Ø 80,470 Ø 80,970</p>	<p>31-04031-000 31-04031-050 31-04031-100</p>

80,600






ZH1.8ZETEC	Mondeo 1.8 16v	B	00 1994	>	4 Cyl	1796cc	kW	(103-113ps)
------------	----------------	---	---------	---	-------	--------	----	-------------

 <p>11-02032-000 CH 33,050 TL 57,100</p>  20,63x63,50	CP	<p>91-09032-000</p> <p>1 1,500  CrP</p> <p>2 1,750  P</p> <p>3 3,000  CrP</p>		<p>Ø 80,600 Ø 81,100 Ø 81,600</p>	<p>31-04032-000 31-04032-050 31-04032-100</p>

	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	AP	91-09446-000						Ø 81,010	31-03446-000
		CP	1 2,000  CR						Ø 80,515	31-03446-020
			2 2,000  P						Ø 81,015	31-03446-040
			3 3,000  CR							
										
	24,00x62,00									






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	CP	91-09422-000						Ø 81,335	31-03422-000
			1 1,600  CR						Ø 81,835	31-03422-050
			2 2,000  P						Ø 82,335	31-03422-100
			3 4,000  CR							
										
	24,00x68,80									

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	AP YS	91-09964-000	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
			1 2,500  CrP						Ø 83,000	31-03464-050
			2 2,000  P						Ø 83,500	31-03464-100
			3 3,000  CrP							
										
	28,00x66,00									

	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

C9DA / C9DB / C9DC Focus 1.8 DI D 01 1999 > 09 2001 4 Cyl 1753cc 67kW (91ps)

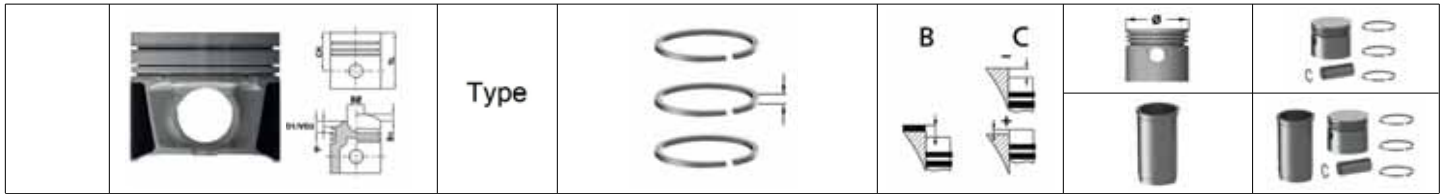
<p>11-01465-000 CH 45,700 B- 16,100 BØ 36,750 TL 70,700</p> <p>28,00x66,00</p>	<p>AP</p> <p>91-09964-000</p> <p>1 2,500 CkP 2 2,000 P 3 3,000 CrP</p> <p>1,36mm Conta ile +0,43/+0,68 1,42mm Conta ile +0,68/+0,74 1,52mm Conta ile +0,74/+0,86</p>	<p>Ø 82,500 Ø 83,000 Ø 83,500</p>	<p>31-03465-000 31-03465-050 31-03465-100</p>
<p>K=86,05 L=140,00</p>	<p>DS</p>		<p>51-65433-000</p>
<p>K=85,50 L=146,00 H=5,00 D=87,00</p>	<p>DS</p>		<p>51-65492-000</p>
<p>K=86,00 L=146,00 H=5,00 D=87,00</p>	<p>DS +0,50</p>		<p>51-65492-050</p>

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)

<p>11-01477-000 CH 45,650 B- 12,470 BØ 45,290 TL 71,150</p> <p>28,00x66,00</p>	<p>AP YS</p> <p>91-09477-000</p> <p>1 1,750 NT St 2 2,000 P 3 2,000 NT St</p> <p>1,36mm Conta ile +0,43/+0,68 1,42mm Conta ile +0,68/+0,74 1,52mm Conta ile +0,74/+0,86</p>	<p>Ø 82,500 Ø 83,000</p>	<p>31-03477-000 31-03477-050</p>
<p>K=85,50 L=146,00 H=5,00 D=87,00</p>	<p>DS</p>		<p>51-65492-000</p>
<p>K=86,00 L=146,00 H=5,00 D=87,00</p>	<p>DS +0,50</p>		<p>51-65492-050</p>



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)

<p>11-01777-000 CH 45,650 B- 1,500 TL 75,800</p> <p>26,00x69,00</p>	AP	<p>91-09777-000</p> <p>1 2,500 CR</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>	<p>Ø 82,500</p> <p>Ø 83,000</p> <p>Ø 83,500</p>	<p>31-03777-000</p> <p>31-03777-020</p> <p>31-03777-040</p>
	CP			

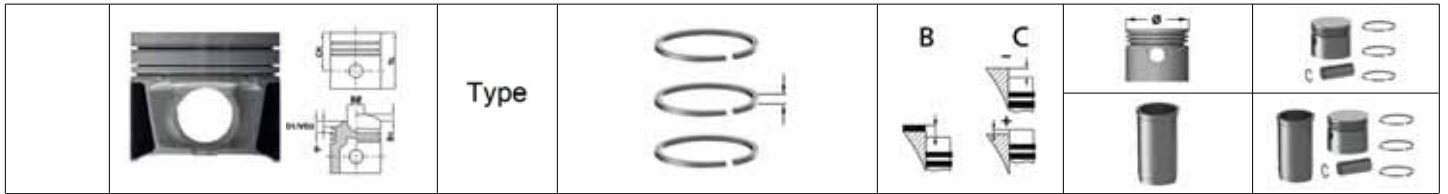
<p>K=86,05 L=140,00</p>	DS			51-65433-000
-----------------------------	----	--	--	---------------------

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)

<p>11-01778-000 CH 45,700 B- 1,600 TL 73,700</p> <p>26,00x59,00</p>	AP	<p>91-09807-000</p> <p>1 2,000 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>Ø 82,500</p> <p>Ø 83,000</p> <p>Ø 83,500</p>	<p>31-03778-000</p> <p>31-03778-020</p> <p>31-03778-040</p>
	CP			







<p>K=86,05 L=140,00</p>	DS			51-65433-000
-----------------------------	----	--	--	---------------------



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	AP	91-09477-000	1 1,750 	NT	St		Ø 82,500 Ø 83,000	31-04952-000 31-04952-050
				2 2,000 	P				
	28,00x66,00			3 2,000 	NT	St			

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	AP YS	91-09799-000	1 3,500 	CK			Ø 85,000 Ø 85,600	31-04497-000 31-04497-060
				2 2,000 					
	28,00x70,00			3 3,000 	CR				
Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor									



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)


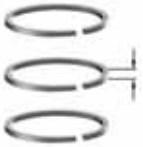
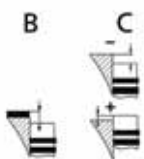

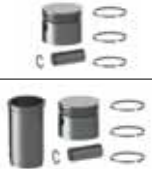
	11-01447-000 CH 32,270 VD1 1,400 VD2 1,600 TL 62,270	CP	91-09447-000			Ø 86,000 Ø 86,500 Ø 87,000	31-03447-000 31-03447-020 31-03447-040	
			1	1,600				CrP
			2	1,750				P
			3	3,000		CrP		
20,63x63,40								

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	AP	91-09530-000			(+0,35/+0,55) (+035/+0,65)	Ø 86,000 Ø 86,500	31-03530-000 31-03530-050	
		CP	1	2,000					CrP
			2	2,000					P
			3	4,000		CrP			
25,00x68,00									








Ford, Kia ve Mazda ile Ortak Motor

	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

	Type				
---	-------------	---	--	---	---






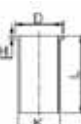
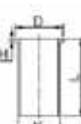
86,010


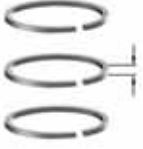
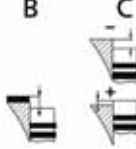


CD132 Duratorq TDCI	Mondeo 2.0 TDCI	D 00 2001 >	4 Cyl	1998cc	kW	(115-130ps)
V185 Duratorq TDCI	Transit 2.0 TDCI	D 00 2000 >	4 Cyl	1998cc	kW	(125ps)

	11-01459-000 CH 47,700 B- 15,200 BØ 43,300 TL 74,100	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
	30,00x66,85					
	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	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
	30,00x66,85					
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	






	Type				
---	-------------	---	--	---	---

86,010

Strok Boyu 0,20mm Kısa
Piston








/ Stroke Length 0,20mm Shorter

> Cyl cc kW (ps)

	11-01461-001 CH 43,220 B- 15,850 BØ 46,900 TL 69,620	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	31-03461-001 31-03461-051
	30,00x66,85	CH -0,20 mm				
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	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
	30,00x66,85					
	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	

	Type				
---	-------------	---	--	---	---

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	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
	30,00x66,85					

	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

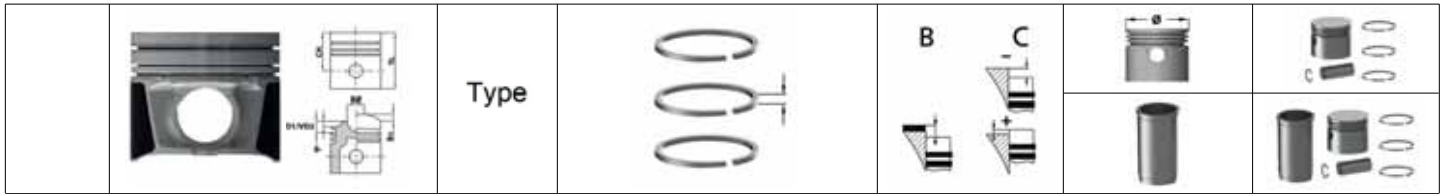
PGFA Euro4	Transit 2.2 TDCI 16V	D 10 2007 >	4 Cyl	103kW	(140ps)
PGFB	Transit 2.2 TDCI 16V	D 10 2007 >	4 Cyl	103kW	(140ps)
QVFA Euro4	Transit 2.2 TDCI 16V	D 07 2006 >	4 Cyl	81kW	(110ps)
QWFA Euro4	Transit 2.2 TDCI 16V	D 07 2006 >	4 Cyl	96kW	(130ps)

	11-02034-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820	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
	30,00x66,85					

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	
--	--	-------------	--	--	---------------------	--



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

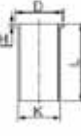
	K=89,00 L=156,00 H=5,00 D=90,50	DS			51-65496-000	
--	--	----	--	--	---------------------	--

	K=89,50 L=156,00 H=5,50 D=91,00	DS +0,50			51-65496-050	
---	--	-------------	--	--	---------------------	--


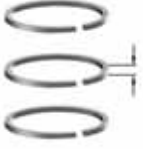
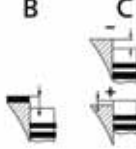

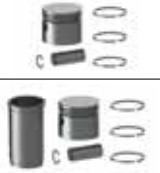
86,010

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	
--	--	-------------	--	--	---------------------	--

	Type				
---	-------------	---	--	---	---

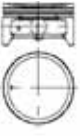




86,010

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	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	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
	24,00x68,80							

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		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
	21,00x60,00						

Ford, Mazda ve Opel ile Ortak Motor



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	Taurus 1600	B	00	1970	>	00	1981	4 Cyl	1576cc	44-70kW	(60-95ps)







	11-01425-000 CH 41,100 TL 72,700	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
	24,00x72,80					

	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		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
	28,00x72,00					

Ford ve Peugeot ile Ortak Motor

	K=96,00 L=173,00 H=7,00 D=106,30	WF			51-05890-000	71-08220-000
--	---	----	--	--	---------------------	---------------------



89,910

V348 TDCI TRANSIT 3.2 D 01 2006 > 5 Cyl 3200cc 151kW (200ps)

	<p>11-01462-000 CH 48,200 B- 16,760 BØ 50,300 TL 75,250</p>	<p>AP YS</p>	<p>91-09968-000 1 2,000 CK 2 2,000 P 3 2,000 NT St</p>	<p>1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50</p>	<p>Ø 89,910 Ø 90,410</p>	<p>31-03462-000 31-03462-050</p>
		<p>DS</p>			<p>51-65476-000</p>	
		<p>DS +0,50</p>			<p>51-65476-050</p>	
		<p>DS</p>			<p>51-65477-000</p>	
		<p>DS +0,50</p>			<p>51-65477-050</p>	








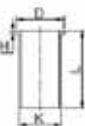
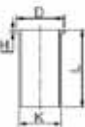
89,910

Strok Boyu 0,20mm Kisa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

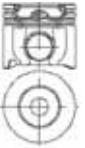




	<p>11-01462-001 CH 48,000 B- 16,760 BØ 50,300 TL 75,020</p>	<p>AP YS CH -0,20 mm</p>	<p>91-09968-000 1 2,000 CK 2 2,000 P 3 2,000 NT St</p>		<p>Ø 89,910</p>	<p>31-03462-001</p>
--	--	---------------------------------------	---	--	-----------------	----------------------------



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 / Stroke Length 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
--	-----------------------------	---	--	----------	---------------------



89,910

HFFA / RBFA / V184 PUMA DT24H Duratorq (Turbo Intercooled) Transit 2.4 TDI D 2000 > 2003 88kW (120ps)






 <p>11-01466-000 CH 53,500 B- 17,240 BØ 40,400 TL 80,500</p>  32,00x71,10	AP	<p>91-09966-000</p> <p>1 2,500  CkP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50</p>	<p>Ø 89,910</p> <p>Ø 90,160</p> <p>Ø 90,410</p>	<p>31-03466-000</p> <p>31-03466-025</p> <p>31-03466-050</p>
	YS				

 <p>K=92,50 L=165,00 H=3,10 D=95,50</p>	DS			51-65476-000	
---	----	--	--	---------------------	--

 <p>K=93,00 L=165,00 H=3,40 D=95,50</p>	DS +0,50			51-65476-050	
---	-------------	--	--	---------------------	--

89,910






Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

 <p>11-01466-001 CH 53,300 B- 17,240 BØ 40,400 TL 80,300</p>  32,00x71,10	AP	<p>91-09966-000</p> <p>1 2,500  CkP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>			<p>Ø 89,910</p>	<p>31-03466-001</p>
	YS					

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)

 <p>11-01467-000 CH 53,500 B- 17,000 BØ 41,050 TL 80,500</p>  32,00x66,15	AP	<p>91-09966-000</p> <p>1 2,500  CkP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,10mm Conta ile +0,30/+0,40 1,15mm Conta ile +0,40/+0,45 1,20mm Conta ile +0,45/+0,50</p>	<p>Ø 89,910</p> <p>Ø 90,160</p> <p>Ø 90,410</p>	<p>31-03467-000</p> <p>31-03467-025</p> <p>31-03467-050</p>
	YS				






 <p>K=92,50 L=165,00 H=3,10 D=95,50</p>	DS			51-65476-000	
---	----	--	--	---------------------	--

 <p>K=93,00 L=165,00 H=3,40 D=95,50</p>	DS +0,50			51-65476-050	
---	-------------	--	--	---------------------	--

	Type				
---	------	---	--	---	---






89,910

Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

	11-01467-001 CH 53,300 B- 17,000 BØ 41,050 TL 80,300	AP	91-09966-000 1 2,500  CkP 2 2,000  P 3 3,000  CrP		Ø 89,910	31-03467-001
	32,00x66,15	CH -0,20 mm				

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	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
	32,00x71,10					

	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 Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

	11-01468-001 CH 53,300 B- 15,620 BØ 47,100 TL 80,300	AP YS	91-09968-000 1 2,000  CK 2 2,000  P 3 2,000  NT St		Ø 89,910	31-03468-001
	32,00x71,10	CH -0,20 mm				



89,910
 V348 Duratorq TDCI TRANSIT 2,4 TDI 00 2003 > (100ps)

	<p>11-01469-000 CH 53,500 B- 16,300 BØ 49,000 TL 80,500</p>	<p>AP</p>	<p>91-09968-000 1 2,000 CK 2 2,000 P 3 2,000 NT St</p>		<p>Ø 89,910 Ø 90,410</p>	<p>31-03469-000 31-03469-050</p>
	<p>K=92,50 L=165,00 H=3,10 D=95,50</p>	<p>DS</p>			<p>51-65476-000</p>	
	<p>K=93,00 L=165,00 H=3,40 D=95,50</p>	<p>DS +0,50</p>			<p>51-65476-050</p>	
	<p>K=92,50 L=165,00 H=5,00 D=94,00</p>	<p>DS</p>			<p>51-65477-000</p>	
	<p>K=93,00 L=165,00 H=5,00 D=94,50</p>	<p>DS +0,50</p>			<p>51-65477-050</p>	

89,910
 Strok Boyu 0,20mm Kisa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)


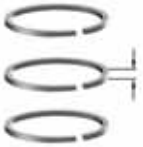
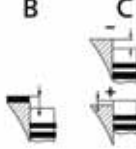

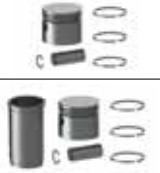
	<p>11-01469-001 CH 53,300 B- 16,300 BØ 49,000 TL 80,300</p>	<p>AP</p>	<p>91-09968-000 1 2,000 CK 2 2,000 P 3 2,000 NT St</p>		<p>Ø 89,910</p>	<p>31-03469-001</p>
	<p> 32,00x66,15</p>	<p>CH -0,20 mm</p>				



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	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 Kısa / Stroke Length 0,20mm Shorter		>	Cyl cc kW (ps)
	11-01474-001 CH 53,300 B- 17,240 BØ 40,400 TL 80,300	AP YS	91-09968-000 1 2,000 CK 2 2,000 P 3 2,000 NT St
		32,00x71,10	

	Type				
---	------	---	--	---	---






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	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
	32,00x66,15					
	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










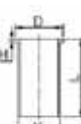

Strok Boyu 0,20mm Kisa Piston	/ Stroke Lenght 0,20mm Shorter	>	Cyl	cc	kW	(ps)
----------------------------------	--------------------------------	---	-----	----	----	------

	11-01475-001 CH 53,300 B- 17,240 BØ 41,050 TL 80,300	AP	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
	32,00x66,15	CH -0,20 mm				












89,910

H9FA Euro4 Transit 2.4 TDCi 16V 03 2004 > 03 2004 (137ps)

  	<p>11-01768-000 CH 53,500 B- 15,620 BØ 47,100 TL 80,500</p> <p> 32,00x71,10</p>	<p>AP YS</p>	<p>91-09968-000 1 2,000  CK 2 2,000  P 3 2,000  NT St</p>		<p>Ø 89,910 Ø 90,160 Ø 90,410</p>	<p>31-03768-000 31-03768-025 31-03768-050</p>
	<p>K=92,50 L=165,00 H=3,10 D=95,50</p>	<p>DS</p>			<p>51-65476-000</p>	
	<p>K=93,00 L=165,00 H=3,40 D=95,50</p>	<p>DS +0,50</p>			<p>51-65476-050</p>	
	<p>K=92,50 L=165,00 H=5,00 D=94,00</p>	<p>DS</p>			<p>51-65477-000</p>	
	<p>K=93,00 L=165,00 H=5,00 D=94,50</p>	<p>DS +0,50</p>			<p>51-65477-050</p>	

89,910







HFFA / RBFA / V184 TDI TRANSIT 2.4 TDI D 00 2003 > 4 Cyl 2400cc kW (125ps)

  	<p>11-02250-000 CH 53,500 B- 17,240 BØ 40,400 TL 80,500</p> <p> 32,00x71,10</p>	<p>AP YS</p>	<p>91-09968-000 1 2,000  CK 2 2,000  P 3 2,000  NT St</p>		<p>Ø 89,910 Ø 90,410</p>	<p>31-04250-000 31-04250-050</p>
	<p>K=92,50 L=165,00 H=5,00 D=94,00</p>	<p>DS</p>			<p>51-65477-000</p>	
	<p>K=93,00 L=165,00 H=5,00 D=94,50</p>	<p>DS +0,50</p>			<p>51-65477-050</p>	



90,000

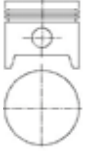




WTA Granada 2.1 D D 08 1977 > 08 1982 4 Cyl 46kW (63ps)

 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

 K=96,00 L=173,00 H=7,00 D=106,30	WF	51-05891-000 71-07891-000
---	----	--

90,800

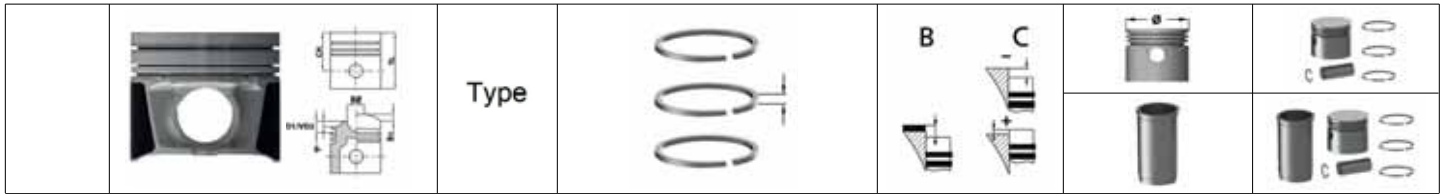
HC	CORTINA	B 00 1970 > 00 1982 4 Cyl	1994cc	72-81kW	(98-110ps)
HC	ESCORT RS	B 00 1970 > 00 1982 4 Cyl	1994cc	72-81kW	(98-110ps)
HC	GRANADA	B 00 1970 > 00 1982 4 Cyl	1994cc	72-81kW	(98-110ps)
HC	SCORPIO	B 00 1983 > 00 1993 4 Cyl	1994cc	84kW	(115ps)
HC	SIERRA	B 00 1986 > 00 1993 4 Cyl	1994cc	73kW	(100ps)
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	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
--	----	---------------------

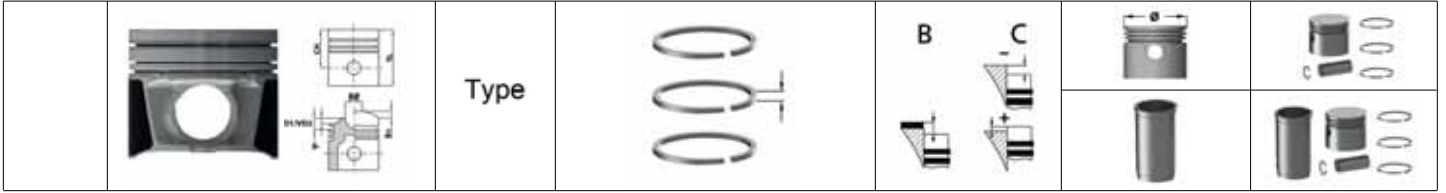
 K=94,50 L=137,00 H=6,00 D=96,00	DS +0,50	51-65284-050
--	-------------	---------------------

 K=94,05 L=137,00	DS	51-65285-000
---	----	---------------------



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	Taurus 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)

<p>11-01444-000 CH 41,550 TL 69,550</p> <p>24,00x68,80</p>	CP	<p>91-09444-000</p> <p>1 1,600 CR</p> <p>2 2,000 P</p> <p>3 4,000 CrP</p>	<p>Ø 90,800</p> <p>Ø 91,300</p> <p>Ø 91,550</p> <p>Ø 91,800</p> <p>Ø 92,300</p>	<p>31-03444-000</p> <p>31-03444-020</p> <p>31-03444-030</p> <p>31-03444-040</p> <p>31-03444-060</p>
<p>K=94,05 L=137,00 H=5,00 D=95,50</p>	DS			51-65284-000
<p>K=94,50 L=137,00 H=6,00 D=96,00</p>	DS +0,50			51-65284-050
<p>K=94,05 L=137,00</p>	DS			51-65285-000



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 32,00x70,00	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
		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 32,00x70,00 Ford ve Mazda ile Ortak Motor	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				
	 K=96,00 L=162,00 H=5,00 D=97,50	DS			51-65498-000				

	Type			
---	------	---	--	---

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	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
	34,00x70,00					

	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	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
	29,00x79,30					

	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	
--	--	----	--	--	---------------------	--

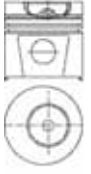




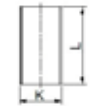

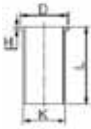
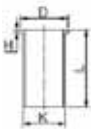
	K=98,00 L=171,45 H=6,00 D=99,00	DS +0,50			51-65426-050	
--	--	-------------	--	--	---------------------	--



	K=98,50 L=171,45 H=6,00 D=99,50	DS +1,00			51-65426-100	
--	--	-------------	--	--	---------------------	--

	Type				
---	------	---	--	---	---

93,670










89 MY D1, M4 T-6110-BA Transit 2.5 D D > 4 Cyl 2496cc 50-52kW (68-71ps)




	<p>11-01426-000 CH 59,520 B- 18,000 BØ 40,000 TL 94,000</p> <p> 29,00x77,00</p>	<p>AP</p> <p>CP</p>	<p>91-09426-000</p> <p>1 2,500  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>	+0,30/+0,40	<p>Ø 93,670</p> <p>Ø 94,320</p> <p>Ø 94,670</p>	<p>31-03426-000</p> <p>31-03426-065</p> <p>31-03426-100</p>
	<p>K=96,94 L=171,45</p>	DS			51-65286-000	
	<p>K=97,50 L=171,45 H=6,00 D=98,50</p>	DS			51-65426-000	
	<p>K=98,00 L=171,45 H=6,00 D=99,00</p>	DS +0,50			51-65426-050	
	<p>K=98,50 L=171,45 H=6,00 D=99,50</p>	DS +1,00			51-65426-100	

	Type				
					

93,670









YORK D 25N/P Transit 2.5 D D > 4 Cyl 2496cc 50kW (68ps)

	<p>11-01427-000 CH 59,500 VD1 0,600 VD2 0,950 B- 16,940 BØ 46,700 TL 93,500</p> <p> 29,00x77,00</p>	<p>AP</p> <p>CP</p>	<p>91-09427-000</p> <p>1 2,000  CR</p> <p>2 2,000  CR</p> <p>3 4,000  CR</p>	+0,30/+0,50	<p>Ø 93,670</p> <p>Ø 94,320</p> <p>Ø 94,670</p>	<p>31-03427-000</p> <p>31-03427-065</p> <p>31-03427-100</p>
	<p>K=96,94 L=171,45</p>	DS			51-65286-000	
	<p>K=97,50 L=171,45 H=6,00 D=98,50</p>	DS			51-65426-000	
	<p>K=98,00 L=171,45 H=6,00 D=99,00</p>	DS +0,50			51-65426-050	
	<p>K=98,50 L=171,45 H=6,00 D=99,50</p>	DS +1,00			51-65426-100	

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

93,670








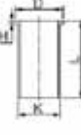
2.5DiTC TRANSIT D 00 1995 > 4 Cyl 2496cc 55kW (76ps)

	<p>11-02251-000 CH 59,520 B- 18,000 BØ 40,000 TL 94,000</p>  <p>29,00x77,00</p>	<p>AP</p>	<p>91-09420-000 1 2,500  CrP 2 2,000  P 3 4,000  CrP</p>	<p>+0,25/+0,40</p>	<p>Ø 93,670 Ø 94,320 Ø 94,670</p>	<p>31-04251-000 31-04251-065 31-04251-100</p>
	<p>K=97,50 L=171,45 H=6,00 D=98,50</p>	<p>DS</p>			<p>51-65426-000</p>	
	<p>K=98,00 L=171,45 H=6,00 D=99,00</p>	<p>DS +0,50</p>			<p>51-65426-050</p>	
	<p>K=98,50 L=171,45 H=6,00 D=99,50</p>	<p>DS +1,00</p>			<p>51-65426-100</p>	

	Type				
---	------	---	--	---	---






93,670

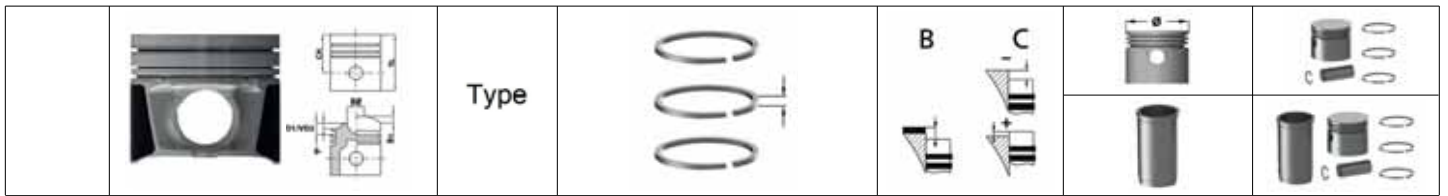
2.5DiTC	TRANSIT V5 MINIBUS	D	>	4 Cyl	2496cc	74kW	(100ps)
---------	--------------------	---	---	-------	--------	------	---------

	11-02252-000 CH 59,420 B- 18,400 BØ 44,000 TL 93,950	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
	29,00x79,25					
	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		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
	28,00x81,00					
Daf, Ford ve Peugeot ile Ortak Motor						



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)






<p>11-01893-000 CH 53,920 B- 1,800 TL 96,420</p> <p>30,00x78,80</p>	<p>91-09895-000</p> <p>1 2,000 CrP</p> <p>2 2,000 P</p> <p>3 4,000 CrP</p>	<p>1,53mm Conta ile 0/+0,79 1,63mm Conta ile +0,79/+0,89 1,73mm Conta ile +0,89/...</p>	<p>Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000</p>	<p>31-03893-000 31-03893-040 31-03893-060 31-03893-100</p>





<p>K=97,05 L=170,60 H=3,90 D=99,50</p>	DS		51-65892-000
<p>K=98,05 L=170,60 H=5,00 D=100,50</p>	DS +1,00		51-65892-100
<p>K=97,05 L=170,60 H=5,00 D=99,50</p>	DS		51-65893-000
<p>K=97,50 L=170,60 H=6,00 D=100,00</p>	DS +0,50		51-65893-050
<p>K=97,05 L=166,00 H=4,00 D=99,50</p>	DS		51-65915-000
<p>K=97,55 L=166,00 H=5,00 D=100,00</p>	DS +0,50		51-65915-050

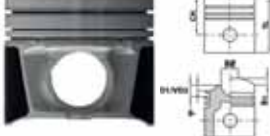
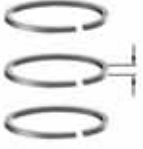
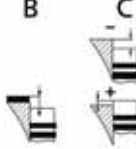

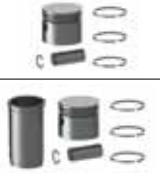
	Type				
---	-------------	---	--	---	---

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		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
	30,00x78,80					
Ford ve Peugeot ile Ortak Motor						







	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	

	Type				
---	------	---	--	---	---

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	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
	30,00x78,80				
Daf, Ford ve Peugeot ile Ortak Motor					






	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



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	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
	PDB			

	Type				
---	-------------	---	--	---	---

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		91-09390-000 1 1,750  CrP 2 2,000  P 3 3,947  CrP			Ø 65,000 Ø 65,200 Ø 65,400 Ø 65,600 Ø 65,800	31-03390-000 31-03390-020 31-03390-040 31-03390-060 31-03390-080
	20,00x54,00	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	CP	91-09231-000 1 1,500  CR 2 2,000  P 3 3,947  CrP			Ø 76,000 Ø 76,400 Ø 76,600 Ø 76,800 Ø 77,000	31-03232-000 31-03232-040 31-03232-060 31-03232-080 31-03232-100
	22,00x67,00						

	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	
--	--	-------------	--	--	--	---------------------	--



83,000

XUD9A Niva 1.9 D D 01 1993 > 4 Cyl 1905cc 47-52kW (64-71ps)

<p>11-01879-000 CH 46,800 B- 2,200 TL 84,300</p> <p>25,00x72,00</p>	<p>91-09879-000</p> <p>1 2,000 CR</p> <p>2 2,000 CR</p> <p>3 3,000 CR</p>	<p>1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)</p>	<p>Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000</p>	<p>31-03879-000 31-03879-020 31-03879-050 31-03879-080 31-03879-100</p>
<p>Citroen, Fiat / Iveco, Hyundai, Lada, Peugeot, Rover ve Suzuki ile Ortak Motor</p>				


	<p>K=86,00 L=153,50 H=4,80 D=89,00</p>	<p>DS</p>		<p>51-65820-000</p>
--	--	-----------	--	----------------------------

	<p>K=86,04 L=153,50</p>	<p>DS</p>		<p>51-65879-000</p>
--	-----------------------------	-----------	--	----------------------------

	<p>K=86,54 L=153,50</p>	<p>DS +0,50</p>		<p>51-65879-050</p>
--	-----------------------------	---------------------	--	----------------------------

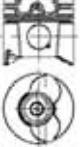




	<p>K=85,66 L=153,50 H=3,90 D=88,45</p>	<p>DS</p>		<p>51-65885-000</p>
--	--	-----------	--	----------------------------

	<p>K=86,15 L=153,50 H=3,90 D=88,45</p>	<p>DS +0,50</p>		<p>51-65885-050</p>
--	--	---------------------	--	----------------------------

		Type				

85,000






DW10TD 2123 2.0 TD D > 4 Cyl 2000cc 66kW (90ps)

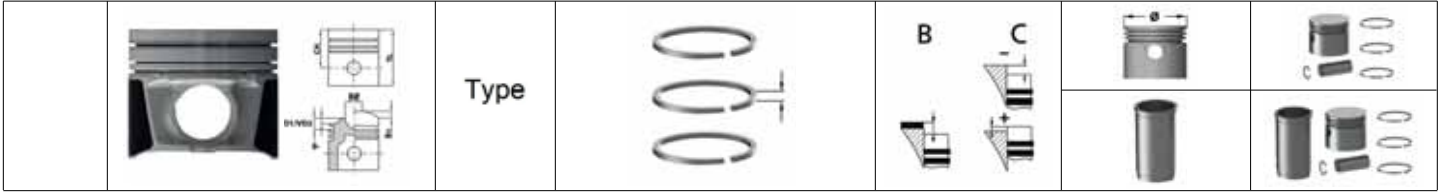
	11-02495-000 CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750  28,00x70,00	AP	91-09799-000 1 3,500  CK 2 2,000  3 3,000  CR	1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)	Ø 85,000 Ø 85,500 Ø 85,600	31-04495-000 31-04495-050 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		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



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)

<p>11-02282-000 CH 40,430 VD1 1,000 B- 12,400 BØ 37,000 TL 63,430</p> <p>23,00x56,70</p>	AP	<p>91-09282-000</p> <p>1 2,000 CK</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>	<p>0,67/0,77mm Conta ile (+0,02/+0,13)</p> <p>0,77/0,87mm Conta ile (+0,13/+0,23)</p> <p>0,87/0,97mm Conta ile (+0,23/+0,33)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p> <p>Ø 70,200</p> <p>Ø 70,400</p> <p>Ø 70,600</p>	<p>31-04282-000</p> <p>31-04282-040</p> <p>31-04282-060</p> <p>31-04282-080</p> <p>31-04282-100</p>

<p>K=72,50 L=142,00 H=5,10 D=74,00</p>	DS				51-65451-000
--	----	--	--	--	---------------------

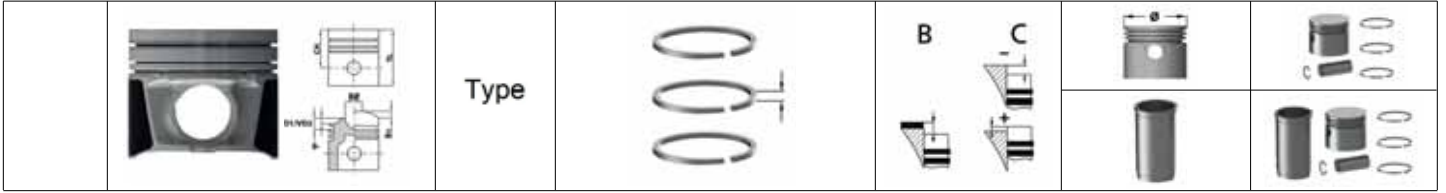
<p>K=73,00 L=142,00 H=5,20 D=74,50</p>	DS +0,50				51-65451-050
--	-------------	--	--	--	---------------------

<p>K=73,50 L=142,00 H=5,20 D=75,00</p>	DS +1,00				51-65451-100
--	-------------	--	--	--	---------------------

69,600

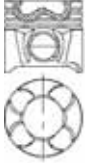




Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

<p>11-02282-001 CH 40,230 VD1 1,000 B- 12,400 BØ 37,000 TL 63,230</p> <p>23,00x56,70</p>	AP	<p>91-09282-000</p> <p>1 2,000 CK</p> <p>2 1,500 P</p> <p>3 2,000 NT St</p>		<p>Ø 69,600</p> <p>Ø 70,000</p> <p>Ø 70,200</p>	<p>31-04282-001</p> <p>31-04282-041</p> <p>31-04282-061</p>



69,600

Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter > (ps)






 <p>11-02282-002 CH 40,030 VD1 1,000 B- 12,400 BØ 37,000 TL 63,030</p>  <p>23,00x56,70</p>	AP	<p>91-09282-000</p> <p>1 2,000  CK</p> <p>2 1,500  P</p> <p>3 2,000  NT St</p>	<p>Ø 69,600</p> <p>Ø 70,000</p> <p>Ø 70,200</p>	<p>31-04282-002</p> <p>31-04282-042</p> <p>31-04282-062</p>
	CH -0,40 mm			

Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor


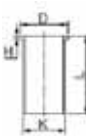
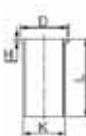
69,600


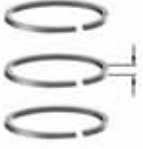
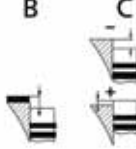

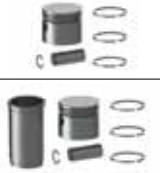


199 A3.000 Musa 1.3 JTD 16V 09 2006 > (90-105ps)

199 A3.000 Ypsilon (843) 1.3 JTD 16V 09 2006 > (90-105ps)

 <p>11-02289-000 CH 40,430 VD1 0,904 B- 12,400 BØ 38,000 TL 62,43</p>  <p>23,00x56,70</p>	AP YS	<p>91-09282-000</p> <p>1 2,000  CK</p> <p>2 1,500  P</p> <p>3 2,000  NT St</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04289-000</p> <p>31-04289-040</p>

Alfa Romeo, Fiat / Iveco, Lancia ve Opel ile Ortak Motor

 <p>K=72,50 L=142,00 H=5,10 D=74,00</p>	DS			51-65451-000	
 <p>K=73,00 L=142,00 H=5,20 D=74,50</p>	DS +0,50			51-65451-050	
 <p>K=73,50 L=142,00 H=5,20 D=75,00</p>	DS +1,00			51-65451-100	






	<p>Type</p>				
					

69,600

Strok Boyu 0,20mm Kısa
Piston

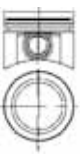




/ Stroke Length 0,20mm Shorter

> Cyl cc kW (ps)

	<p>11-02289-001 CH 40,230 VD1 0,904 B- 12,400 BØ 38,000 TL 62,230</p>  23,00x56,70	<p>AP YS</p>	<p>91-09282-000 1 2,000  CK 2 1,500  P 3 2,000  NT St</p>	<p>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)</p>	<p>Ø 69,600 Ø 70,000</p>	<p>31-04289-001 31-04289-041</p>






70,000


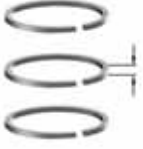
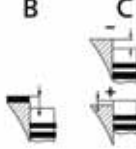

156 A2.000	Y 10 1.0	03 1985 > 06 1989	(45ps)
156 A3.000	Y 10 1.0	12 1986 > 10 1995	(50ps)

	<p>11-02290-000 CH 33,900 B- 0,500 BØ 55,000 TL 57,400</p>  17,98x53,00	<p>CP</p>	<p>91-09207-000 1 1,500  CR 2 1,500  P 3 3,000  CrP St</p>	<p>Ø 70,000 Ø 70,400 Ø 70,600</p>	<p>31-04290-000 31-04290-040 31-04290-060</p>

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)

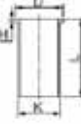
	<p>11-02291-000 CH 30,000 VD1 0,700 B- 1,500 BØ 60,000 TL 50,000</p>  17,98x53,00	<p>CP</p>	<p>91-09284-000 1 1,200  CR 2 1,200  P 3 2,500  CR</p>	<p>Ø 70,000 Ø 70,400 Ø 70,600</p>	<p>31-04291-000 31-04291-040 31-04291-060</p>

	Type			
---	------	---	--	---

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  NiP 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	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  NiP 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						

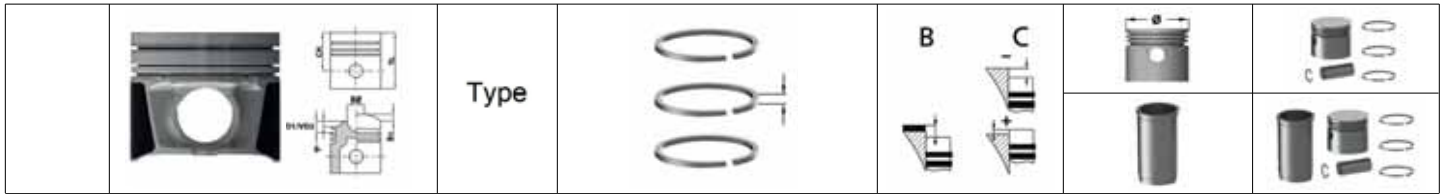
	K=73,80 L=128,00 H=5,00 D=75,00	DS				51-65491-000
--	--	----	--	--	--	---------------------

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 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
--	--	----	--	--	--	---------------------








80,500

182 B6.000	Lybra 1.8i 16V	B	10	2000	>	4 Cyl	1596cc	76kW	(103ps)
------------	----------------	---	----	------	---	-------	--------	------	---------

 <p>11-02267-000 CH 28,650 VD1 2,200 B- 1,200 BØ 62,000 TL 50,700</p>  <p>21,00x56,00</p>			91-09262-000				Ø 80,500 Ø 80,900	31-04267-000 31-04267-040	
			1	1,200					CR
			2	1,200		P			
			3	2,000		CrP	St		
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)

 <p>11-02303-000 CH 33,300 B- 2,900 TL 65,300</p>  <p>22,00x58,00</p>			91-09396-000				Ø 80,500 Ø 80,900 Ø 81,100	31-04303-000 31-04303-040 31-04303-060	
			1	1,500					CrP
			2	1,750		P			
			3	3,000		P			
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)

 <p>11-02281-000 CH 46,500 VD1 0,500 B- 17,500 BØ 37,500 TL 72,500</p>  <p>26,00x61,00</p>	AP	PDB	AA=22,35 mm	91-09399-000			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
				1	2,000				
			2	2,000		P			
			3	2,000		NT	St		
Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor									

 <p>K=85,00 L=155,00 H=5,00 D=86,00</p>	DS							51-65268-000	
---	----	--	--	--	--	--	--	---------------------	--



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)










<p>11-01394-000 CH 42,600 B- 2,400 TL 84,400</p> <p>25,00x69,50</p>	<p>AP</p> <p>91-09394-000</p> <p>1 2,500 CrP</p> <p>2 2,000 P</p> <p>3 4,000 CrP</p>	<p>Ø 82,600</p> <p>Ø 83,000</p> <p>Ø 83,200</p>	<p>31-03394-000</p> <p>31-03394-040</p> <p>31-03394-060</p>

<p>K=86,08 L=154,00</p>	DS			51-65394-000
<p>K=87,08 L=154,00</p>	DS +1,00			51-65394-100
<p>K=86,06 L=154,00 H=4,50 D=89,00</p>	DS			51-65395-000
<p>K=87,06 L=154,00 H=5,50 D=90,00</p>	DS +1,00			51-65395-100

	Type				
---	------	---	--	---	---

83,000







198 A5.000 Delta (844) 2.0 M-JTD 16V D 09 2008 > 4 Cyl 1956cc 121kW (165ps)


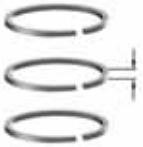
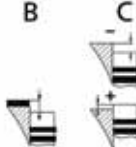

 11-02197-000 CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630  29,98x67,00 Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor	AP	91-09790-000	0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)	Ø 83,000 Ø 83,400	31-04197-000 31-04197-040
	YS	1 1,500  CkP 2 1,500  P 3 2,000  NT St			38-04197-000 38-04197-040
		98-09790-000 1 1,500  CrP St 2 1,500  P 3 2,000  CR 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		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
		1 1,500  CrP 2 2,000  P 3 3,947  CrP			
 K=88,02 L=145,50	DS			51-65410-000	

	Type			
---	------	---	--	---







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	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
 22,00x69,00		Fiat / Iveco, Lancia ve Seat ile Ortak Motor				

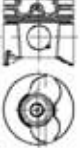



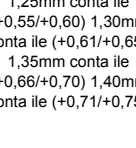

85,000

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		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
 21,00x58,00						

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	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
 28,00x70,00		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				
---	------	---	--	---	---






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	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
	28,00x70,00					
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	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
	22,00x62,00					
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		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
	22,00x56,00					
Fiat / Iveco ve Lancia ile Ortak Motor						



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)






<p>11-01548-000 CH 47,970 B- 17,000 BØ 38,000 TL 76,970</p> <p>30,00x70,00</p>	AP	<p>91-09548-000</p> <p>1 3,000 CR</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>	<p>Ø 84,450</p> <p>Ø 84,950</p>	<p>31-03548-000</p> <p>31-03548-050</p>

<p>K=88,00 L=158,50</p>	DS			51-66175-000
-----------------------------	----	--	--	--------------

84,450											
5R	Discovery 2.5 Td5	D	10	1998	>	10	2004	5 Cyl	2496cc	102kW	(138ps)










<p>11-01549-000 CH 47,940 B- 17,400 BØ 39,000 TL 78,940</p> <p>30,00x70,00</p>	AP YS	<p>91-09549-000</p> <p>1 3,000 CR</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>	<p>Ø 84,450</p> <p>Ø 84,950</p>	<p>31-03549-000</p> <p>31-03549-020</p>

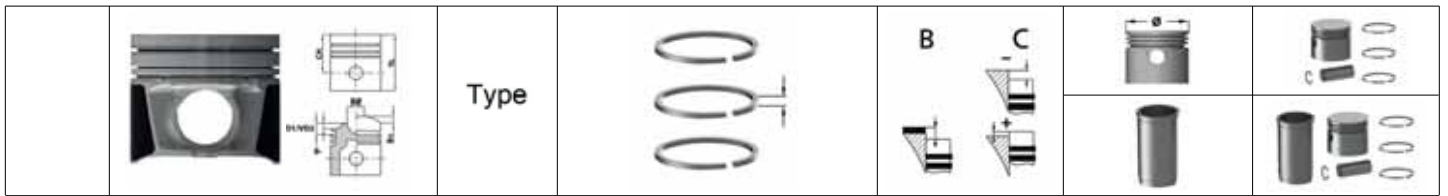
<p>K=88,00 L=158,50</p>	DS			51-66175-000
-----------------------------	----	--	--	--------------

	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	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
	30,16x74,50					
	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						
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 31-03552-000 Ø 90,975 31-03552-020 Ø 91,225 31-03552-030 Ø 91,475 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	
--	--	----	--	--	---------------------	--

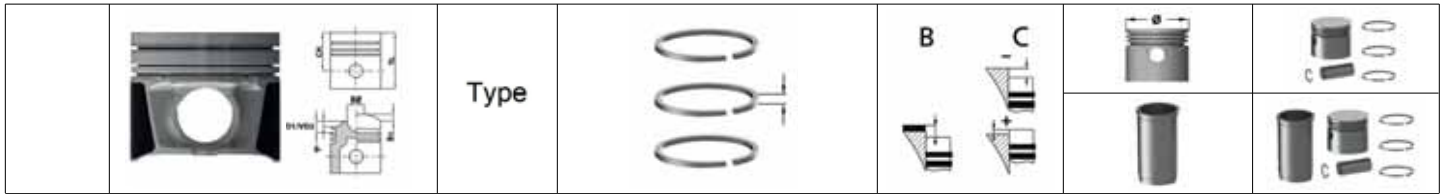
	K=95,00 L=191,30 H=4,76 D=99,70	DS +0,50			51-65550-050	
--	--	-------------	--	--	---------------------	--

	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 31-03553-000 Ø 90,975 31-03553-020 Ø 91,225 31-03553-030 Ø 91,475 31-03553-040

	K=94,53 L=190,36	DS			51-65549-000	
--	---------------------	----	--	--	---------------------	--




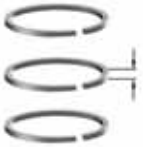
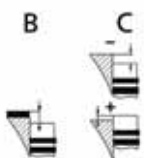


90,475									
14L	Range Rover 2.5 TDi	D	10	1992	>	04	1996	4 Cyl	(113ps)
16L / 19L / 23L	Defender 90-110-130 2.5 TDi	D	09	1994	>	12	1998	4 Cyl	(113-122ps)
19L	Discovery 2.5 D / Tdi	D	07	1994	>	12	1998	4 Cyl	(113-122ps)

	11-01554-000 CH 55,400 B- 18,450 BØ 39,080 TL 91,900	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
			30,16x77,00					
	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	AP	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
		CP	30,16x77,00					

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	AP	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	
		HA CP	30,16x74,50						

	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		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



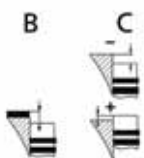





V8 Range Rover 4.0 V8 D 09 1994 > 8 Cyl 3950cc kW (ps)

	11-01546-000 CH 35,900 B- 3,380 BØ 77,000 TL 66,350		91-09546-000 1 1,200  CR 2 1,500  P 3 3,000  CR		Ø 94,000	31-03546-000
	24,00x60,20					

94,000






4.6LV8 Range Rover 4.6 V8 HSE D 09 1994 > 8 Cyl (ps)

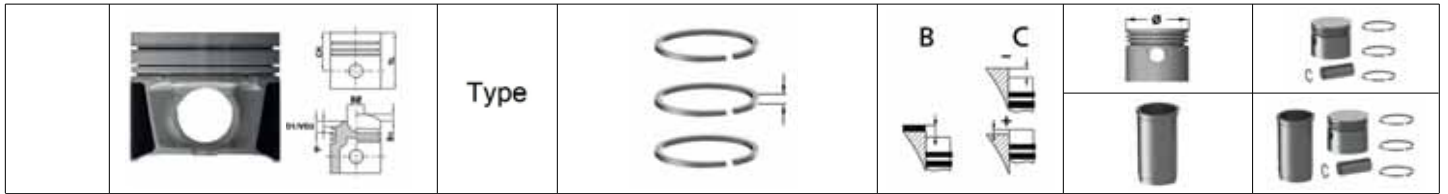
	11-01547-000 CH 35,900 B- 5,830 BØ 77,000 TL 66,350		91-09546-000 1 1,200  CR 2 1,500  P 3 3,000  CR		Ø 94,000	31-03547-000
	24,00x60,20					

	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	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
	 22,22x72,80			



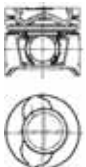




63,500

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)

 <p>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</p> <p>* For Oversize Piston Dimensions AA=17,25 mm</p>  16,00x48,00	<p>91-09720-000</p> <p>1 1,200  CrP</p> <p>2 1,500  P</p> <p>3 2,500  CrP St</p>	<p>Ø 63,500 Ø 63,750 Ø 64,000</p>	<p>31-04720-000 31-04720-025 31-04720-050</p>






65,500

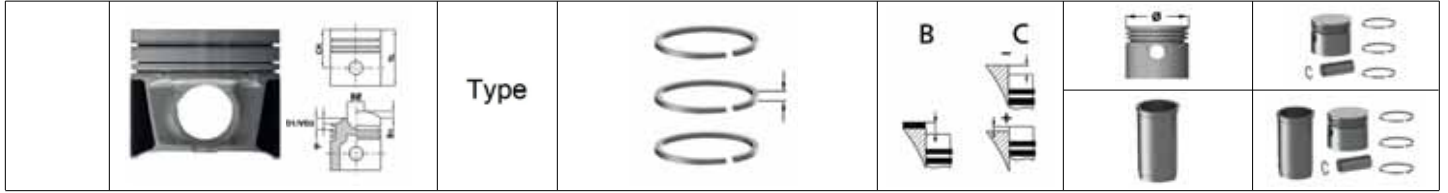
OM 660.914	Fortwo City Cabrio 800 CDi	D		>		3 Cyl	799cc	30kW	(41ps)
OM 660.914	Fortwo City Coupé 800 CDi	D		>		3 Cyl	799cc	30kW	(41ps)

 <p>11-02675-000 CH 36,000 VD1 0,950 B- 11,100 BØ 38,700 TL 60,000</p>  23,00x53,00	<p>AP</p>	<p>91-09688-000</p> <p>1 1,500  NT St</p> <p>2 1,500  P</p> <p>3 2,500  NT St</p>	<p>Ø 65,500 Ø 66,000</p>	<p>31-04675-000 31-04675-050</p>

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)

 <p>11-02698-000 CH 25,200 B- 3,300 TL 41,700</p>  16,00x52,00		<p>91-09698-000</p> <p>1 1,200  CR St</p> <p>2 1,200  P</p> <p>3 2,500  CrP St</p>	<p>Ø 66,500 Ø 67,750</p>	<p>31-04698-000 31-04698-025</p>



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)

<p>11-02684-000 CH 29,900 VD1 1,000 B- 4,610 BØ 71,200 TL 50,900</p> <p>20,00x56,00</p>	HA	<p>99-09697-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,500 NiP St</p>	<p>Ø 82,000</p> <p>Ø 82,500</p>	<p>39-04684-000</p> <p>39-04684-050</p>

82,000

M271	C 180 KOMPRESSOR	B 01 2007 >	4 Cyl	1597cc	115kW	(156ps)
------	------------------	-------------	-------	--------	-------	---------

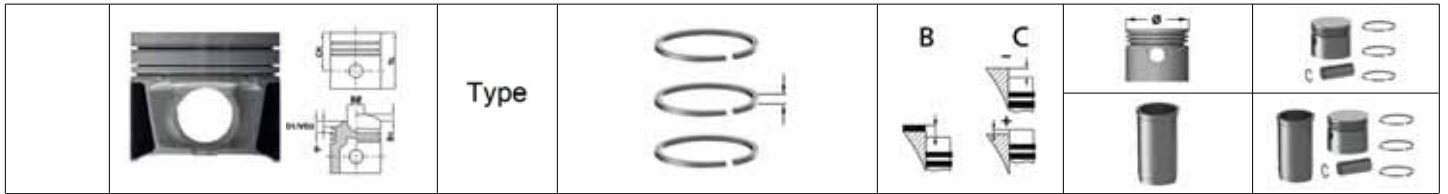
<p>11-02687-000 CH 29,900 VD1 1,000 B- 1,000 TL 50,900</p> <p>20,00x56,00</p>	HA	<p>99-09697-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,500 NiP St</p>	<p>Ø 82,000</p> <p>Ø 82,500</p>	<p>39-04687-000</p> <p>39-04687-050</p>

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)






<p>11-02676-000 CH 48,500 VD1 1,500 B- 13,250 BØ 49,400 TL 75,500</p> <p>30,00x66,00</p>	AP YS PDB	<p>98-09644-000</p> <p>1 2,000 CrP</p> <p>2 1,750 P</p> <p>3 2,000 CR</p>	<p>Ø 83,000</p> <p>Ø 83,500</p>	<p>38-04676-000</p> <p>38-04676-050</p>

Jeep ve Mercedes-Benz ile Ortak Motor








83,000

OM 642.830 C 350 CDI (204) D 00 2009 > 6 Cyl 2987cc 170kW (231ps)

 <p>11-02685-000 CH 45,650 VD1 1,430 B- 15,510 BØ 51,100 TL 71,650</p>  30,00x66,00	AP YS	99-09642-000 1 2,000  NT St 2 2,000  CR 3 2,000  NT St	Ø 83,000	39-04685-000
	CYL 4-5-6 to be used with 2686 000			






83,000

OM 642.830 C 350 CDI (204) D 00 2009 > 6 Cyl 2987cc 170kW (231ps)

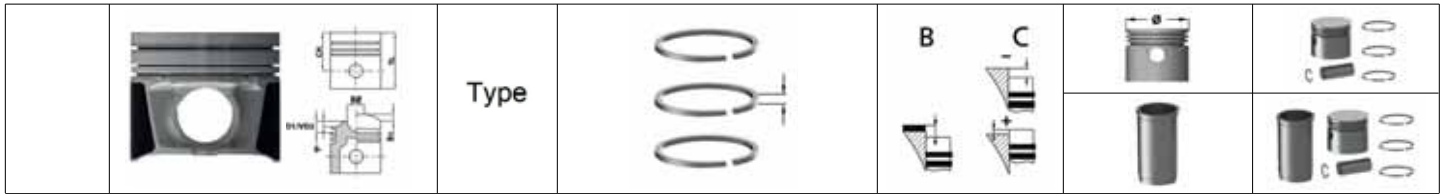
 <p>11-02686-000 CH 45,650 VD1 1,430 B- 15,510 BØ 51,100 TL 71,650</p>  30,00x66,00	AP YS	99-09642-000 1 2,000  NT St 2 2,000  CR 3 2,000  NT St	+0,53/+0,77 Ø 83,000	39-04686-000
	CYL 1-2-3 to be used with 2685 000			

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 CDD	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)






 <p>11-02688-000 CH 48,500 VD1 0,970 B- 13,250 BØ 49,400 TL 75,500</p>  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

Chrysler ve Mercedes-Benz ile Ortak Motor








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








83,010

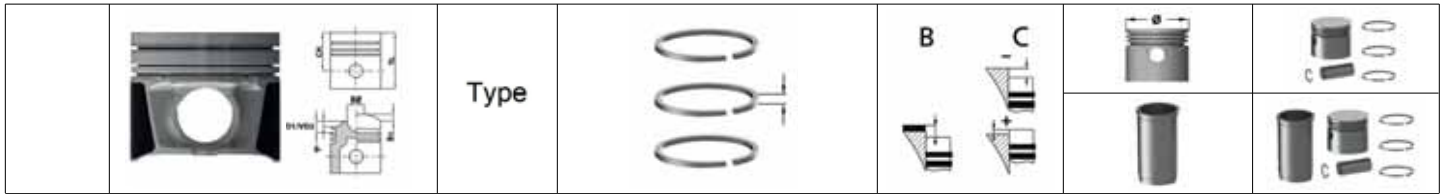
OM 642.910-920-921-930 - 932-960-961-970	C/CLK/CLS/E/G/GL/GLK/S320 CDI	D	09	2004	>	08	2007	6 Cyl	2987cc	160-165kW	(218-224ps)
OM 642.920	E 300 BLUETEC	D	09	2007	>	07	2009	6 Cyl	2987cc	155-165kW	(211-224ps)
OM 642.920	Sprinter 418 CDI	D	03	2009	>			6 Cyl	2987cc	155-165kW	(211-224ps)
OM 642.920 / 921 / 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)

 <p>11-02760-000 CH 45,650 VD1 1,330 VD2 1,490 B- 14,650 BØ 43,400 TL 71,650</p>  <p>30,00x66,00</p>	<p>AP YS</p>	<p>99-09642-000</p> <p>1 2,000  NT St</p> <p>2 2,000  CR</p> <p>3 2,000  NT St</p>	<p>+0,53/+0,77</p>	<p>Ø 83,010 Ø 83,260 Ø 83,510 Ø 83,760</p>	<p>39-04760-000 39-04760-025 39-04760-050 39-04760-075</p>
<p>Chrysler ve Mercedes-Benz ile Ortak Motor</p>					

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)

 <p>11-02761-000 CH 45,650 VD1 1,330 VD2 1,490 B- 14,650 BØ 43,400 TL 71,650</p>  <p>30,00x66,00</p>	<p>AP YS</p>	<p>99-09642-000</p> <p>1 2,000  NT St</p> <p>2 2,000  CR</p> <p>3 2,000  NT St</p>	<p>Ø 83,010 Ø 83,260 Ø 83,510 Ø 83,760</p>	<p>39-04761-000 39-04761-025 39-04761-050 39-04761-075</p>
<p>Chrysler ve Mercedes-Benz ile Ortak Motor</p>				



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 CR 3 3,000 CR	+0,73/+0,96	Ø 87,000 Ø 87,500	31-03606-000 31-03606-050	
	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		

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 CR 3 3,000 CR		Ø 88,009 Ø 88,509	31-03608-000 31-03608-050					

	Type				
---	------	---	--	---	---

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

AP

91-09630-000

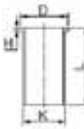
CP

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

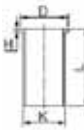
Mercedes-Benz ve Seat ile Ortak Motor



K=90,06
L=158,40
H=4,70
D=91,92

DS

51-65630-000

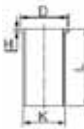


K=90,50
L=158,40
H=5,00
D=92,40

DS

+0,50

51-65630-050



K=91,06
L=158,40
H=6,00
D=92,92






DS


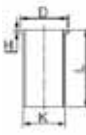
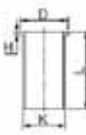
+1,00

51-65630-100



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)

 <p>11-01653-000 CH 52,900 VD1 1,200 B- 8,850 TL 91,400</p>  <p>26,00x72,00</p>	AP	<p>91-09653-000</p> <p>1 2,000  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>	+0,65/+1,05	<p>Ø 87,000</p> <p>Ø 87,500</p> <p>Ø 88,000</p>	<p>31-03653-000</p> <p>31-03653-050</p> <p>31-03653-100</p>
	CP				
	Mercedes-Benz ve Seat ile Ortak Motor				

 <p>K=90,06 L=158,40 H=4,70 D=91,92</p>	DS			51-65630-000	
 <p>K=90,50 L=158,40 H=5,00 D=92,40</p>	DS +0,50			51-65630-050	
 <p>K=91,06 L=158,40 H=6,00 D=92,92</p>	DS +1,00			51-65630-100	



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)

<p>11-02694-000 CH 44,900 VD1 2,410 B+ 1,320 TL 76,220</p> <p> 26,00x55,00</p>	AP	<p>91-09608-000</p> <p>1 2,500 CR</p> <p>2 2,000 CR</p> <p>3 3,000 CR</p>	+0,74/+0,97	<p>Ø 87,000</p> <p>Ø 87,500</p>	<p>31-04694-000</p> <p>31-04694-050</p>
<p>K=90,08 L=148,40 H=4,70 D=92,55</p>	DS			51-65632-000	
<p>K=90,50 L=148,40 H=5,00 D=93,00</p>	DS +0,50			51-65632-050	
<p>K=91,05 L=148,40 H=6,00 D=93,50</p>	DS +1,00			51-65632-100	

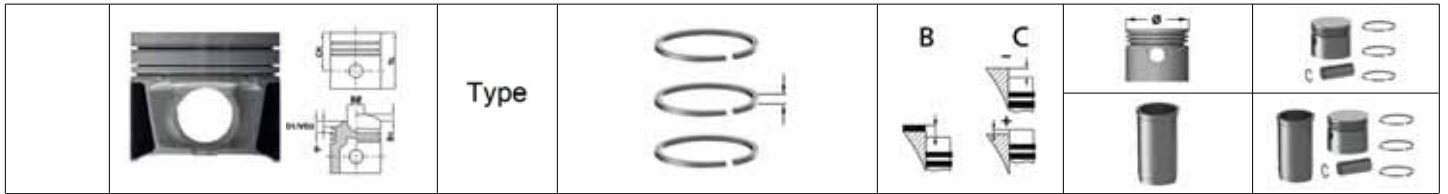


87,000

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)

<p>11-02921-000 CH 44,850 VD1 1,050 B- 9,050 TL 74,850</p> <p>26,00x55,00</p>	AP	<p>91-09921-000</p> <p>1 2,000 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>	+0,735/+0,965	<p>Ø 87,000</p> <p>Ø 87,500</p> <p>Ø 87,700</p> <p>Ø 88,000</p>	<p>31-04921-000</p> <p>31-04921-050</p> <p>31-04921-070</p> <p>31-04921-100</p>
	CP				

<p>K=90,08 L=148,40 H=4,70 D=92,55</p>	DS			51-65632-000	
<p>K=90,50 L=148,40 H=5,00 D=93,00</p>	DS +0,50			51-65632-050	
<p>K=91,05 L=148,40 H=6,00 D=93,50</p>	DS +1,00			51-65632-100	



88,000

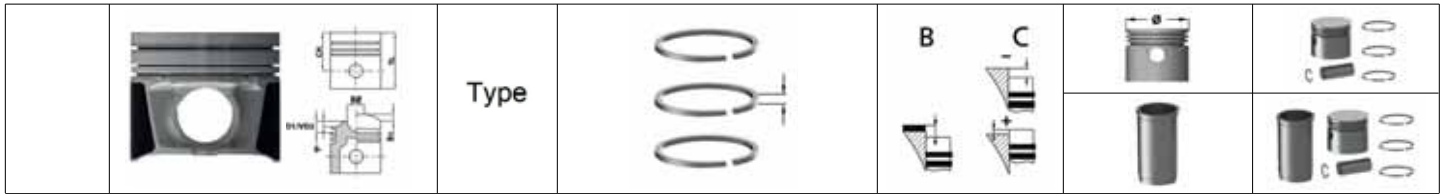
OM 611.960	C 200 / C 220 CDI	D 06 1998 > 02 2001	4 Cyl	2151cc	75-92kW	(102-125ps)
OM 611.961	E 200 / E 220 CDI	D 07 1998 > 03 2002	4 Cyl	2151cc	75-105kW	(102-143ps)
OM 611.980	V 200 / V 220 CDI	D 06 1999 > 09 2003	4 Cyl	2151cc	60-90kW	(82-122ps)
OM 611.980	Vito 108-110-112 CDI	D 04 1999 > 07 2003	4 Cyl	2151cc	60-90kW	(82-122ps)

<p>K=91,00 L=147,00 H=5,00 D=93,00</p>	<p>11-02696-000 CH 42,300 VD1 2,100 B- 13,300 BØ 43,100 TL 68,300</p> <p> 28,00x70,00</p>	<p>AP YS</p> <p>AA=22,20 mm</p>	<p>91-09718-000 1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>+0,38/+0,62</p>	<p>Ø 88,000 Ø 88,500</p>	<p>31-04696-000 31-04696-050</p>

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)

<p>K=92,05 L=165,00 H=4,70 D=94,00</p>	<p>11-02697-000 CH 42,300 VD1 2,030 B- 14,100 BØ 46,000 TL 72,300</p> <p> 30,00x70,00</p>	<p>AP YS</p> <p>AA=22,20 mm</p>	<p>91-09718-000 1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>+0,38/+0,60</p>	<p>Ø 88,000 Ø 88,500 Ø 89,000</p>	<p>31-04697-000 31-04697-050 31-04697-100</p>



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	AP YS	91-09718-000 1 2,500 CrP 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	AP YS	91-09718-000 1 2,500 CrP 2 2,000 P 3 3,000 CrP	+0,38/+0,62	Ø 88,009 Ø 88,509	31-04683-000 31-04683-050



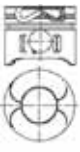




88,010

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)

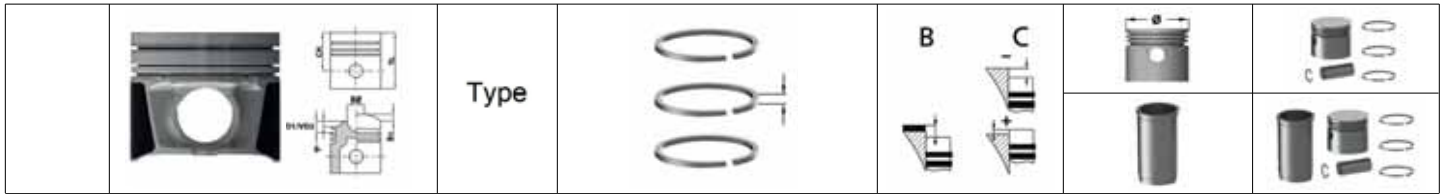
 <p>11-02692-000 CH 42,400 VD1 1,780 B- 14,100 BØ 46,000 TL 72,300</p>  <p>30,00x70,00</p>	<p>AP YS</p> <p>PDB</p> <p>AA=22,20 mm</p>	<p>91-09721-000</p> <p>1 2,500  CkP</p> <p>2 2,000  CrP</p> <p>3 2,000  CrP</p>	<p>+0,38/+0,62</p>	<p>Ø 88,010</p> <p>Ø 88,510</p>	<p>31-04692-000</p> <p>31-04692-050</p>
--	--	---	--------------------	---------------------------------	---

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)

 <p>11-02718-000 CH 42,330 VD1 2,300 B- 13,900 BØ 43,700 TL 72,300</p>  <p>30,00x70,00</p>	<p>AP YS</p> <p>AA=23,50 mm</p>	<p>91-09718-000</p> <p>1 2,500  CkP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>+0,38/+0,62</p>	<p>Ø 88,010</p> <p>Ø 88,510</p> <p>Ø 88,760</p> <p>Ø 89,010</p>	<p>31-04718-000</p> <p>31-04718-050</p> <p>31-04718-075</p> <p>31-04718-100</p>
--	-------------------------------------	---	--------------------	---	---

 <p>K=91,00 L=147,00 H=5,00 D=93,00</p>	<p>DS</p>			<p>51-65606-000</p>	
---	-----------	--	--	----------------------------	--



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)

<p>11-01646-000 CH 33,000 B- 2,700 TL 66,000</p>	<p>22,00x52,00</p>	<p>AA=22,40 mm</p>	<p>91-09646-000 1 1,500 CrP 2 1,750 P 3 3,000 CR</p>	<p>Ø 88,500 Ø 89,000 Ø 89,500</p>	<p>31-03646-000 31-03646-050 31-03646-100</p>

89,000

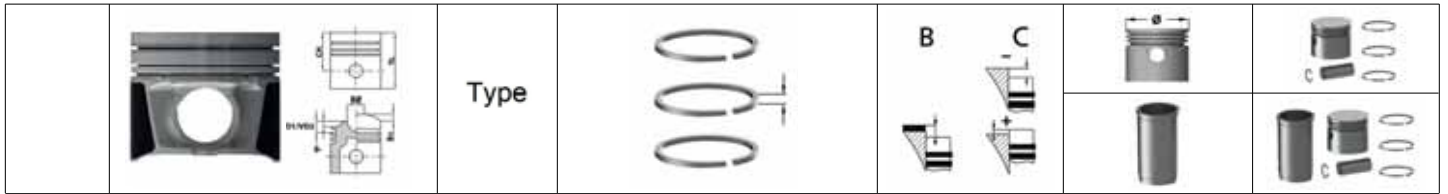
OM 602.980 Euro 2 / 986	Sprinter 210/212/310/312/410/412D	D 01 1997 > 03 2000	5 Cyl	2874cc	90kW	(122ps)
OM 602.980OM 602DE29LA	290 GD Turbo (461)	D 04 1992 > 09 2001	5 Cyl	2874cc	88kW	(120ps)
OM 602.980OM 602DE29LA	G 290 TD	D 07 1997 >	5 Cyl	2874cc	88kW	(120ps)
OM 602.982	E 290 D Turbo	D 01 1996 > 06 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)

<p>11-01609-000 CH 44,750 VD1 0,300 VD2 0,600 B- 16,730 BØ 42,000 TL 71,250</p>	<p>28,00x70,00</p>	<p>AA=22,20 mm</p>	<p>91-09617-000 1 2,500 CrP 2 2,000 P 3 3,000 CrP</p>	<p>+0,83/+1,06</p>	<p>Ø 89,000 Ø 89,500</p>	<p>31-03609-000 31-03609-050</p>

<p>K=91,50 L=156,00 H=4,75 D=94,05</p>	DS			51-65645-000	
--	----	--	--	---------------------	--

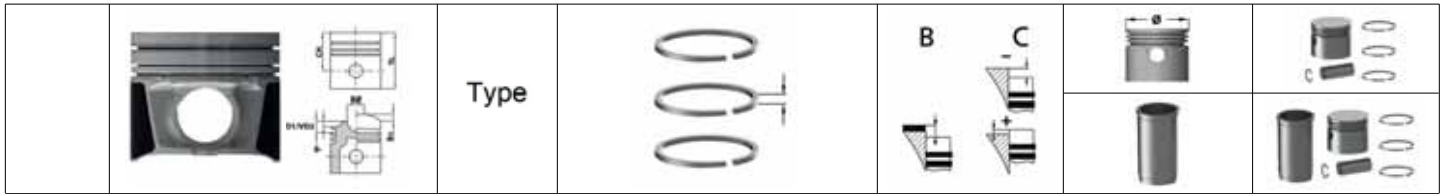
<p>K=92,00 L=156,00 H=6,00 D=94,55</p>	DS +0,50			51-65645-050	
--	-------------	--	--	---------------------	--

<p>K=92,50 L=156,00 H=6,00 D=95,05</p>	DS +1,00			51-65645-100	
--	-------------	--	--	---------------------	--








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	>			5 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	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
		CP				
	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	








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)

 <p>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</p> <p>* For Oversize Piston Dimensions</p>  <p>22,00x56,00</p>	CP	<p>91-09652-000</p> <p>1 1,750  MoP 2 2,000  P 3 3,500  CrP</p>			<p>Ø 89,000 Ø 89,500 Ø 90,000</p>	<p>31-03651-000 31-03651-050 31-03651-100</p>

 <p>K=92,00 L=165,00 H=4,10 D=94,95</p>	DS			51-65634-000	
---	----	--	--	---------------------	--

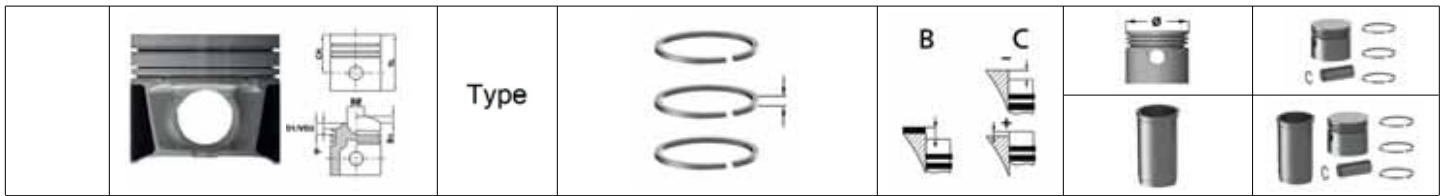
 <p>K=93,00 L=165,00 H=6,00 D=95,95</p>	DS +1,00			51-65634-100	
--	-------------	--	--	---------------------	--

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)

 <p>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</p> <p>* For Oversize Piston Dimensions</p>  <p>24,00x62,00</p>	CP	<p>91-09652-000</p> <p>1 1,750  MoP 2 2,000  P 3 3,500  CrP</p>			<p>Ø 89,000 Ø 89,500 Ø 90,000</p>	<p>31-03652-000 31-03652-050 31-03652-100</p>

 <p>K=92,00 L=165,00 H=4,10 D=94,95</p>	DS			51-65634-000	
--	----	--	--	---------------------	--

 <p>K=93,00 L=165,00 H=6,00 D=95,95</p>	DS +1,00			51-65634-100	
--	-------------	--	--	---------------------	--



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	CP	91-09652-000 1 1,750 MoP 2 2,000 P 3 3,500 CrP	AA=22,50 mm	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	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	



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)

	<p>11-02695-000 CH 44,650 VD1 1,050 B- 9,050 TL 74,650</p>	<p>AP YS HA</p>	<p>91-09617-000 1 2,500 CrP 2 2,000 P 3 3,000 CrP</p>	<p>1,74mm Conta ile +0,83/+1,06 1,97mm Conta ile +1,03/+1,26</p>	<p>Ø 89,000 Ø 89,500 Ø 90,000</p>	<p>31-04695-000 31-04695-050 31-04695-100</p>

	<p>K=91,50 L=156,00 H=4,75 D=94,05</p>	<p>DS</p>			<p>51-65645-000</p>	
--	--	-----------	--	--	----------------------------	--

	<p>K=92,00 L=156,00 H=6,00 D=94,55</p>	<p>DS +0,50</p>			<p>51-65645-050</p>	
--	--	---------------------	--	--	----------------------------	--

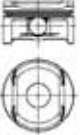




	<p>K=92,50 L=156,00 H=6,00 D=95,05</p>	<p>DS +1,00</p>			<p>51-65645-100</p>	
--	--	---------------------	--	--	----------------------------	--

	<p>K=91,50 L=156,00 H=4,75 D=96,50</p>	<p>DS</p>			<p>51-65745-000</p>	
--	--	-----------	--	--	----------------------------	--








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		Ø 89,900	31-04682-000
			1 1,500  NT St	2 1,750  P		
			3 3,000  NT St			

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)

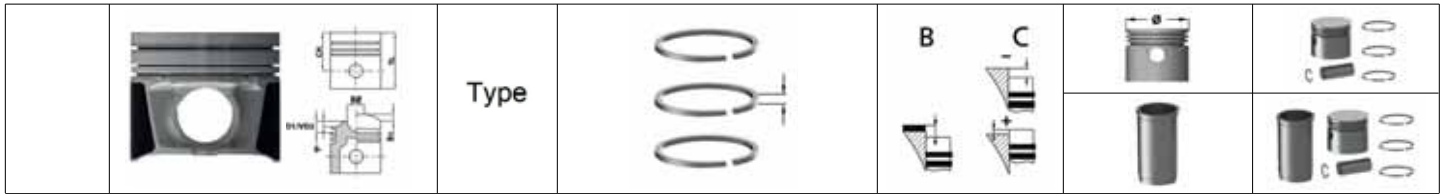
 11-01647-000 CH 31,100 *CH 30,800 B- 1,200 *B- 1,200 BØ 74,500 *BØ 74,500 TL 54,600 *TL 54,600 * For Oversize Piston Dimensions  22,00x56,00	AA=22,20 mm	98-09647-000		Ø 89,910 Ø 90,160 Ø 90,410 Ø 90,910	38-03647-000 38-03647-025 38-03647-050 38-03647-100
		1 1,500  NT St	2 1,750  P		
		3 3,000  CrP			

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)

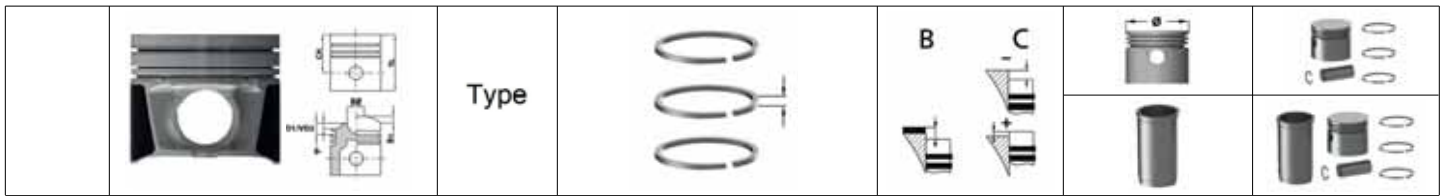
 11-02690-000 CH 31,650 VD1 1,400 TL 55,150  22,00x56,00		98-09647-000		Ø 89,910 Ø 90,910	38-04690-000
		1 1,500  NT St	2 1,750  P		
		3 3,000  CrP			



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)

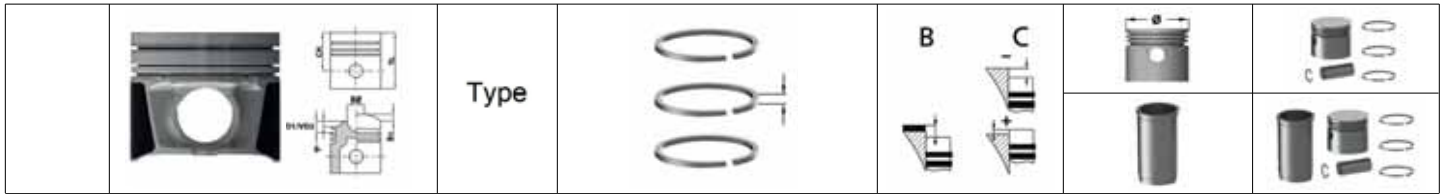
	<p>11-01633-000 CH 48,350 VD1 1,150 B- 8,850 TL 81,850</p> <p>26,00x74,00</p>	AP	<p>91-09633-000</p> <p>1 3,000 MoP 2 2,000 MoP 3 4,000 CrP</p>	+0,50/+0,90	<p>Ø 90,900 Ø 91,400 Ø 91,900</p>	<p>31-03633-000 31-03633-050 31-03633-100</p>
		CP				
	<p>K=94,06 L=158,40 H=4,70 D=96,00</p>	DS			51-65633-000	
	<p>K=94,50 L=158,40 H=6,00 D=96,50</p>	DS +0,50			51-65633-050	
	<p>K=95,06 L=158,40 H=6,00 D=97,00</p>	DS +1,00			51-65633-100	



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)

<p>11-01634-000 CH 48,350 VD1 1,050 B- 6,270 BØ 60,000 TL 81,850</p> <p> 26,00x74,00</p>	AP	91-09634-000 1 3,000 CrP 2 2,000 P 3 4,000 CrP	+0,50/+0,90	Ø 91,000 Ø 91,500 Ø 92,000	31-03634-000 31-03634-050 31-03634-100
<p>K=94,06 L=158,40 H=4,70 D=96,00</p>	DS			51-65633-000	
<p>K=94,50 L=158,40 H=6,00 D=96,50</p>	DS +0,50			51-65633-050	
<p>K=95,06 L=158,40 H=6,00 D=97,00</p>	DS +1,00			51-65633-100	



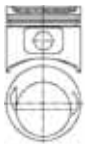







92,900

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)

 <p>11-02689-000 CH 30,430 VD1 1,550 TL 50,830</p>  <p>22,00x52,00</p>	HA	<p>91-09632-000</p> <p>1 1,500  NT St</p> <p>2 1,750  P</p> <p>3 2,500  NiP St</p>	<p>Ø 92,900 Ø 93,150</p>	<p>31-04689-000 31-04689-025</p>
		<p>99-09632-000</p> <p>1 1,500  NT St</p> <p>2 1,750  P</p> <p>3 2,500  NT St</p>		

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)

 <p>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</p> <p>* For Oversize Piston Dimensions</p>  <p>24,00x62,00</p>	CP	<p>91-09635-000</p> <p>1 1,750  MoP</p> <p>2 2,000  P</p> <p>3 3,500  CrP</p>	<p>+0,50/+0,90</p> <p>Ø 95,500 Ø 96,000 Ø 96,500</p>	<p>31-03635-000 31-03635-050 31-03635-100</p>
		<p>99-09635-000</p> <p>1 1,750  MoP</p> <p>2 2,000  P</p> <p>3 3,500  CrP</p>		








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)

<p>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</p> <p>* For Oversize Piston Dimensions 22,00x56,00</p>	CP	AA=22,20 mm	<p>91-09635-000</p> <p>1 1,750 MoP 2 2,000 P 3 3,500 CrP</p>			Ø 95,500 Ø 96,000 Ø 96,500	31-03636-000 31-03636-050 31-03636-100
			<p>K=101,00 L=215,00 H=4,50 D=103,00</p>	DS			
<p>K=98,50 L=148,00 H=4,70 D=100,30</p>	DS			51-65629-000			
<p>K=99,50 L=148,00 H=5,95 D=100,54</p>	DS +1,00			51-65629-100			

	Type			
---	------	---	--	---






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)

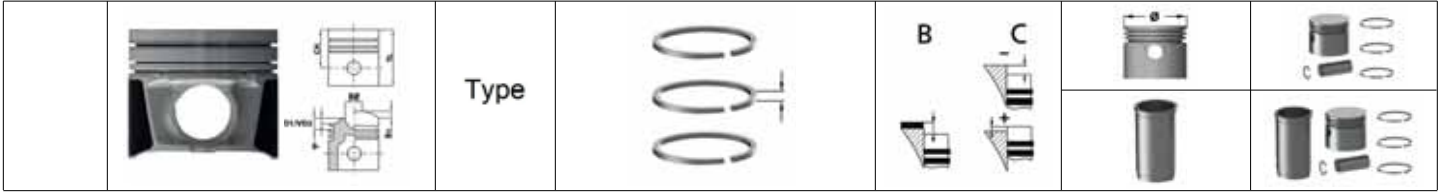
	11-02789-000 CH 41,940 VD1 0,900 VD2 0,900 B- 14,700 BØ 36,500 TL 64,350	AP YS HA	98-09081-000 1 1,500  NT St 2 1,500  P 3 3,000  NT St	1 kertik 0,375/0,425mm 2 kertik 0,425/0,475mm 3 kertik 0,475/0,525mm 4 kertik 0,525/0,575mm 5 kertik 0,575/0,625mm	Ø 73,000 Ø 73,500	38-04789-000 38-04789-050
 27,00x59,30						
Mini (Bmw) ve Toyota ile Ortak Motor						

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	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
 26,00x61,00						
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 Kısa / Stroke Length 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	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
	CH -0,20 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				






75,000

Strok Boyu 0,40mm Kısa / Stroke Length 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	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
	CH -0,40 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				

75,000

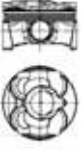




Strok Boyu 0,60mm Kısa / Stroke Length 0,60mm Shorter > (ps)

 11-02498-003 CH 41,100 VD1 1,200 B- 13,250 BØ 41,800 TL 64,700  26,00x61,00	AP YS	91-09168-000 1 3,000  CkP 2 1,950  P 3 2,500  CrP	Ø 75,000	31-04498-003
	CH -0,60 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				



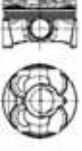




77,010

N18 B16 A COOPER 1.6 / S 1.6 11 2014 > (122-218ps)

 <p>11-02595-000 CH 28,500 VD1 3,300 B- 3,500 BØ 34,700 TL 51,200</p>  20,00x48,00	HA	<p>91-09874-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	<p>Ø 77,010</p> <p>Ø 77,260</p> <p>Ø 77,510</p>	<p>31-04595-000</p> <p>31-04595-025</p> <p>31-04595-050</p>

77,010

Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter B 11 2014 > 4 Cyl 1598cc 90-160kW (122-218ps)






 <p>11-02595-001 CH 28,300 VD1 3,300 B- 3,500 BØ 34,700 TL 51,200</p>  20,00x48,00	HA	<p>91-09874-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	<p>Ø 77,010</p>	<p>31-04595-001</p>

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)

 <p>11-02198-000 CH 40,430 VD1 0,904 B- 12,700 BØ 37,000 TL 62,430</p>  23,00x56,70	AP YS	<p>91-09797-000</p> <p>1 1,500  CkP</p> <p>2 1,500  P</p> <p>3 2,000  CrP</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04198-000</p> <p>31-04198-040</p>

69,600

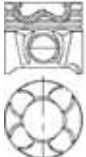




Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

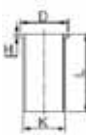

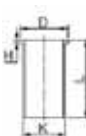
 <p>11-02198-001 CH 40,230 VD1 0,904 B- 12,700 BØ 37,000 TL 62,230</p>  23,00x56,70	AP YS	<p>91-09797-000</p> <p>1 1,500  CkP</p> <p>2 1,500  P</p> <p>3 2,000  CrP</p>	<p>0,67/0,77mm conta ile (+0,028/+0,127)</p> <p>0,77/0,87mm conta ile (+0,127/+0,227)</p> <p>0,87/0,97mm conta ile (+0,228/+0,327)</p>	<p>Ø 69,600</p> <p>Ø 70,000</p>	<p>31-04198-001</p> <p>31-04198-041</p>



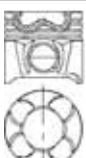




69,600

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	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

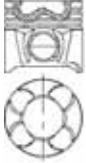




69,600

Strok Boyu 0,20mm Kısa / Stroke Length 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	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



69,600

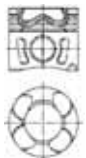




Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter > (ps)

 11-02282-002 CH 40,030 VD1 1,000 B- 12,400 BØ 37,000 TL 63,030  23,00x56,70	AP	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
	CH -0,40 mm			


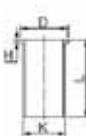
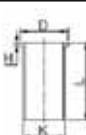
Fiat / Iveco, Lancia, Opel ve Suzuki ile Ortak Motor

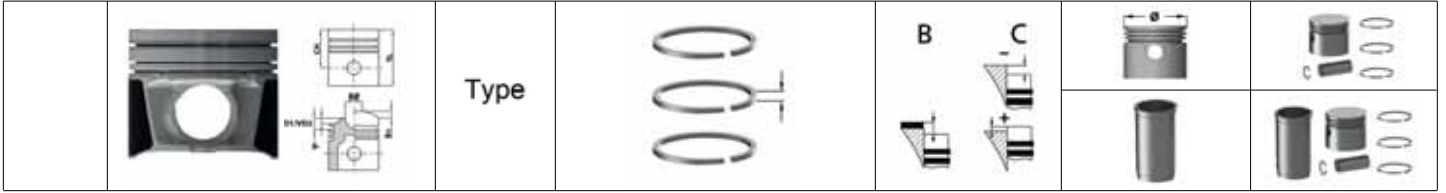
69,600

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	








69,600

Strok Boyu 0,20mm Kısa / Stroke Length 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








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	Type	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	HA	91-09222-000 1 1,200  NT St 2 1,200  P 3 2,000  NiP St	Ø 73,400 Ø 73,900	31-03913-000 31-03913-050

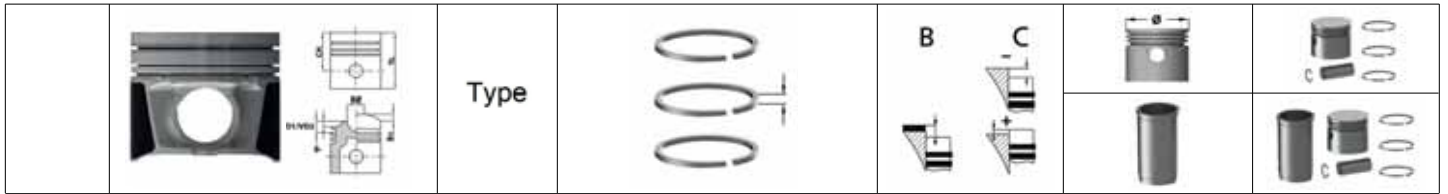
Chevrolet ve Opel ile Ortak Motor

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	HA	91-09222-000 1 1,200  NT St 2 1,200  P 3 2,000  NiP St	Ø 73,400 Ø 73,900	31-04196-000 31-04196-050

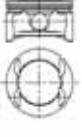




Chevrolet ve Opel ile Ortak Motor








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)		

 <p>11-02214-000 CH 23,000 VD1 1,330 VD2 1,350 B- 1,250 BØ 53,500 TL 44,000</p>  <p>18,00x51,00</p>			91-09222-000					Ø 73,400 Ø 73,900 Ø 74,400	31-04214-000 31-04214-050 31-04214-100
			1 1,200	 NT					
			2 1,200	 P					
			3 2,000	 NT/P	St				

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)		

 <p>11-02222-000 CH 24,000 VD1 1,460 VD2 1,490 B+ 0,530 TL 45,530</p>  <p>18,00x51,00</p>			91-09222-000					Ø 73,400 Ø 73,900 Ø 74,400	31-04222-000 31-04222-050 31-04222-100
			1 1,200	 NT					
			2 1,200	 P					
			3 2,000	 NT/P	St				






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)		

 <p>11-01801-000 CH 35,800 VD1 5,400 B- 3,600 BØ 63,000 TL 62,400</p> <p>*CH 35,500 *VD1 5,400 *B- 3,600 *BØ 63,000 *TL 62,100</p> <p>* For Oversize Piston Dimensions</p>  <p>20,00x65,00</p>	CP		91-09801-000					Ø 75,000 Ø 75,500 Ø 75,750 Ø 76,000	31-03801-000 31-03801-050 31-03801-075 31-03801-100
			1 1,500	 CrP					
			2 1,500	 P					
			3 4,000	 CrP					

	Type				
---	------	---	--	---	---






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	AP	99-09976-000 1 2,000  CrP St 2 1,500  P 3 3,000  CrP		Ø 76,020 Ø 76,520 Ø 77,020	39-04391-000 39-04391-050 39-04391-100
 25,00x60,00		CP				
Isuzu ve Opel ile Ortak Motor						






77,600


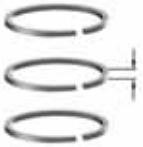
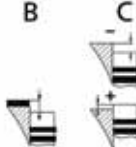

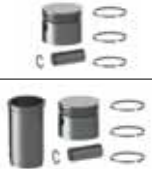
X14XE	Astra F / G 1.4i 16V	B 04 1996 > 02 1998	4 Cyl	1389cc	66kW	(90ps)
X14XE	Combo 1.4i 16V	B 08 1999 > 10 2001	4 Cyl	1389cc	66kW	(90ps)
X14XE	Corsa B 1.4i 16V	B 09 1994 > 08 1999	4 Cyl	1389cc	66kW	(90ps)
X14XE	Tigra 1.4i 16V	B 09 1994 > 08 1999	4 Cyl	1389cc	66kW	(90ps)

	11-01808-000 CH 32,050 B+ 1,000 B- 0,570 TL 57,050	CP	91-09808-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP		Ø 77,600 Ø 78,100 Ø 78,600	31-03808-000 31-03808-050 31-03808-100
 18,00x55,00						

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		91-09808-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP		Ø 77,600 Ø 78,100 Ø 78,600	31-03819-000 31-03819-050 31-03819-100
 18,00x55,00						

	Type				
---	------	---	--	---	---






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	CP	91-09230-000	Ø 77,600 Ø 78,100 Ø 78,600	31-04230-000 31-04230-050 31-04230-100
					1 1,200  CR St		
					99-09230-000		39-04230-000 39-04230-050 39-04230-100
					1 1,200  NT St		
					2 1,500  P		
					3 2,000  CrP St		












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 VD1 4,200 B- 4,400 TL 65,000		20,00x65,00	CP	91-09203-000	Ø 77,800 Ø 78,300 Ø 78,800	31-04203-000 31-04203-050 31-04203-100
					1 1,500  CR		
					2 1,500  P		
					3 4,000  CrP St		
					*CH 35,500		
					*VD1 4,200		
					*B- 4,400		
					*TL 64,700		
					* For Oversize Piston Dimensions		

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 B+ 0,400 B- 2,700 BØ 64,000 TL 48,400		18,00x55,00	CP	91-09803-000	Ø 79,000 Ø 79,500 Ø 80,000	31-03803-000 31-03803-050 31-03803-100
					1 1,200  CrP		
					2 1,500  P		
					3 3,000  CrP		
					98-09803-000		38-03803-000 38-03803-050 38-03803-100
					1 1,200  CrP St		
					2 1,500  P		
					3 3,000  CrP St		
					99-09803-000		39-03803-000 39-03803-050 39-03803-100
					1 1,200  CrP St		
					2 1,500  P		
					3 3,000  CrP St		



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)

	<p>11-01817-000</p> <p>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</p> <p>* For Oversize Piston Dimensions</p> <p>18,00x55,00</p>	<p>CP</p>	<p>91-09817-000</p> <p>1 1,200 CrP 2 1,500 P 3 2,500 CrP St</p>	<p>Ø 79,000 Ø 79,500 Ø 80,000</p>	<p>31-03817-000 31-03817-050 31-03817-100</p>
			<p>98-09817-000</p> <p>1 1,200 CrP St 2 1,500 P 3 2,500 CrP St</p>	<p>38-03817-000 38-03817-050 38-03817-100</p>	
	<p>K=82,00 L=130,00 H=5,00 D=83,50</p>	<p>DS</p>		<p>51-65776-000</p>	

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)

	<p>11-01912-000</p> <p>CH 27,500 B+ 1,750 BØ 66,500 TL 44,500</p> <p>19,00x53,00</p>	<p>HA</p>	<p>91-09216-000</p> <p>1 1,200 NT St 2 1,200 P 3 2,000 NiP St</p>	<p>Ø 79,000 Ø 79,500</p>	<p>31-03912-000 31-03912-050</p>
			<p>Opel ve Saab ile Ortak Motor</p>		
	<p>K=82,00 L=125,00 H=5,00 D=83,50</p>	<p>DS</p>		<p>51-65777-000</p>	



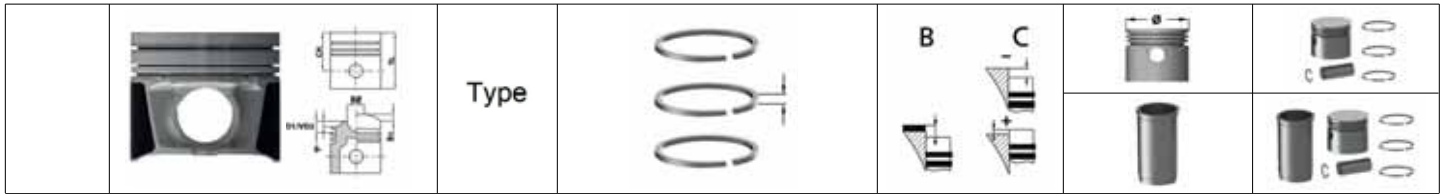
79,000									
1.2S	Ascona B 1.2	B	09 1975	>	02 1979	4 Cyl	1196cc	40-44kW	(54-60ps)
1.2S	Kadett D 1.2	B	08 1979	>	08 1984	4 Cyl	1196cc	40-44kW	(54-60ps)
1.2S	Kadett E 1.2	B	09 1984	>	08 1988	4 Cyl	1196cc	40-44kW	(54-60ps)
1.2S	Manta B 1.2	B	09 1975	>	08 1981	4 Cyl	1196cc	40-44kW	(54-60ps)

<p>11-02204-000 CH 38,000 VD1 2,000 TL 76,000</p> <p>20,00x65,00</p>	CP	<p>91-09813-000</p> <p>1 2,000 CrP</p> <p>2 2,000 P</p> <p>3 5,000 P</p>	<p>Ø 79,000</p> <p>Ø 79,500</p> <p>Ø 80,000</p>	<p>31-04204-000</p> <p>31-04204-050</p> <p>31-04204-100</p>

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)

<p>11-02210-000 CH 39,750 VD1 1,100 B- 14,000 BØ 38,700 TL 84,000</p> <p>27,00x64,00</p>	AP	<p>91-09419-000</p> <p>1 2,000 CR</p> <p>2 1,500 P</p> <p>3 3,000 CrP</p>	<p>1,45mm Conta ile (+0,63/+0,70) 1,50mm Conta ile (+0,70/+0,76) 1,55mm Conta ile (+0,76/+0,83)</p>	<p>Ø 79,000</p> <p>Ø 79,500</p>	<p>31-04210-000</p> <p>31-04210-050</p>

Honda ve Opel ile Ortak Motor					
<p>K=82,00 L=137,00 H=5,00 D=83,50</p>	DS				51-65814-000



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 18,00x55,00		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
		98-09817-000 1 1,200 CrP St 2 1,500 P 3 2,500 CrP St			

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 18,00x52,00		91-09216-000 1 1,200 NT St 2 1,200 P 3 2,000 NiP St		Ø 79,000 Ø 79,500 Ø 80,000	31-04216-000 31-04216-050 31-04216-100



79,000






X17TD 1.7TD Vectra B 1.7 TD D 09 1995 > 09 1996 4 Cyl 1686cc 60kW (82ps)

 <p>11-02227-000 CH 39,700 VD1 0,400 B- 1,200 TL 79,800</p>  <p>25,00x60,00</p>	AP	<p>91-09419-000</p> <p>1 2,000  CR</p> <p>2 1,500  P</p> <p>3 3,000  CrP</p>	<p>STD Conta ile (+0,58/+0,64) 1 Delik Conta ile (+0,65/+0,70) 2 Delik Conta ile (+0,70/+0,78)</p>	<p>Ø 79,000 Ø 79,500 Ø 80,000</p>	<p>31-04227-000 31-04227-050 31-04227-100</p>
	CP				

 <p>K=82,00 L=151,00 H=5,00 D=83,50</p>	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)

 <p>11-02231-000 CH 26,800 B+ 1,250 TL 48,750</p>  <p>19,00x46,00</p>	HA	<p>91-09216-000</p> <p>1 1,200  NT St</p> <p>2 1,200  P</p> <p>3 2,000  NiP St</p>		<p>Ø 79,000 Ø 79,500 Ø 80,000</p>	<p>31-04231-000 31-04231-050 31-04231-100</p>

79,000

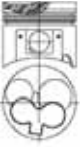




Z17DTH Astra H 1.7 CDTi 16V D 03 2004 > 03 2004 4 Cyl 1686cc 74kW (100ps)
 Z17DTH Combo 1.7 CDTi 16V D 09 2004 > 09 2004 4 Cyl 1686cc 74kW (100ps)
 Z17DTH Corsa C 1.7 CDTi 16V D 06 2003 > 06 2003 4 Cyl 1686cc 74kW (100ps)
 Z17DTH Meriva A 1.7 CDTi 16V D 03 2003 > 03 2003 4 Cyl 1686cc 74kW (100ps)

 <p>11-02233-000 CH 39,750 VD1 1,300 B- 14,000 BØ 41,800 TL 64,750</p>  <p>27,00x64,00</p>	AP YS	<p>91-09822-000</p> <p>1 2,000  CrP St</p> <p>2 1,500  P</p> <p>3 3,000  CrP</p>		<p>Ø 79,000 Ø 79,500 Ø 80,000</p>	<p>31-04233-000 31-04233-025</p>



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)

 <p>11-02419-000 CH 39,700 VD1 1,200 B- 1,900 TL 69,600</p>  <p>27,00x63,50</p>	AP	<p>91-09419-000</p> <p>1 2,000  CR</p> <p>2 1,500  P</p> <p>3 3,000  CrP</p>			<p>Ø 79,000</p> <p>Ø 79,500</p> <p>Ø 80,000</p>	<p>31-04419-000</p> <p>31-04419-050</p> <p>31-04419-100</p>
	CP					
Isuzu, Mazda ve Opel ile Ortak Motor						

 <p>K=82,00 L=137,00 H=5,00 D=83,50</p>	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)

 <p>11-01800-000 CH 44,950 B- 1,500 TL 76,950</p>  <p>26,00x65,00</p>	AP	<p>91-09800-000</p> <p>1 2,000  MoP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,30mm Conta ile 0/+0,75 1,40mm Conta ile +0,75/+0,85 1,50mm Conta ile +0,85/+1,05</p>		<p>Ø 80,000</p> <p>Ø 80,500</p> <p>Ø 81,000</p>	<p>31-03800-000</p> <p>31-03800-050</p> <p>31-03800-100</p>
	CP					

 <p>K=83,05 L=143,50 H=4,50 D=84,95</p>	DS				51-65800-000	
---	----	--	--	--	---------------------	--

 <p>K=84,05 L=143,50 H=5,00 D=85,95</p>	DS +1,00				51-65800-100	
---	-------------	--	--	--	---------------------	--


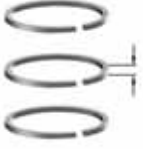
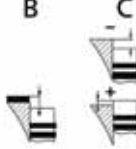




80,000											
1.6 S	Ascona A / B / C 1.6	B	10	1970	>	08	1975	4 Cyl	1598cc	55-60kW	(75-82ps)
1.6 S	Kadett C / E 1.6	B	08	1973	>	07	1979	4 Cyl	1598cc	55-60kW	(75-82ps)
1.6 S	Manta A / B 1.6	B	09	1970	>	08	1975	4 Cyl	1598cc	55-60kW	(75-82ps)
1.6 SH	Ascona C 1.6	B	09	1981	>	08	1986	4 Cyl	1598cc	66kW	(90ps)
1.6 SH	Kadett D 1.6	B	09	1981	>	08	1984	4 Cyl	1598cc	66kW	(90ps)

<p>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</p> <p>* For Oversize Piston Dimensions</p> <p>23,00x70,00</p>	CP	<p>91-09810-000</p> <p>1 1,500 CrP 2 1,750 P 3 4,000 CrP</p>				<p>Ø 80,000 Ø 80,500 Ø 80,750 Ø 81,000</p>	<p>31-03810-000 31-03810-050 31-03810-075 31-03810-100</p>
<p>K=83,05 L=143,50 H=4,50 D=84,95</p>	DS					51-65800-000	
<p>K=84,05 L=143,50 H=5,00 D=85,95</p>	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)




<p>11-02165-000 CH 47,100 VD1 0,750 B- 17,700 BØ 38,000 TL 77,000</p> <p>28,00x60,00</p>	AP	<p>91-09165-000</p> <p>1 2,500 Mo 2 2,000 CR 3 3,000 CR</p>				<p>(+0,60/+0,80)</p> <p>Ø 80,000 Ø 80,250 Ø 80,500</p>	<p>31-04165-000 31-04165-025 31-04165-050</p>
Nissan, Opel ve Renault ile Ortak Motor							
<p>K=83,05 L=154,00 H=5,00 D=85,00</p>	DS					51-65903-000	
<p>K=83,50 L=154,00 H=5,50 D=85,50</p>	DS +0,50					51-65903-050	
<p>K=84,05 L=154,00 H=6,00 D=86,00</p>	DS +1,00					51-65903-100	

	Type				
---	------	---	--	---	---

80,000






F8Q 606 Arena 1.9 D D 03 1998 > 4 Cyl 1870cc 44-48 kW (60-65 ps)

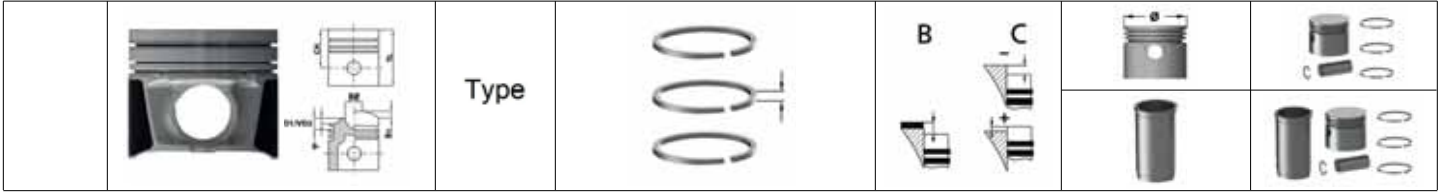
	11-02170-000 CH 42,500 B- 0,700 TL 70,500	AP	91-09800-000 1 2,000  MoP 2 2,000  P 3 3,000  CrP		Ø 80,000 Ø 80,500 Ø 80,800	31-04170-000 31-04170-050 31-04170-080
	24,00x63,00	CP				
Dacia, Opel ve Renault ile Ortak Motor						

	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	AP YS	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
	27,00x63,00	CP				
Bmw, Opel ve Rover ile Ortak Motor						




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

91-09219-000

- 1 1,200  CR St
- 2 1,200  P
- 3 2,000  CrP St

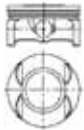
Ø 80,500
Ø 81,000
Ø 81,500

31-04219-000
31-04219-050
31-04219-100


Opel ve Saab ile Ortak Motor

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
Ø 81,000
Ø 81,500

31-04229-000
31-04229-050
31-04229-100



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)

<p>11-02218-000 CH 30,450 VD1 0,630 B+ 2,000 TL 51,050</p> <p> 21,00x56,00</p>			91-09218-000				Ø 81,600 Ø 82,100 Ø 82,600	31-04218-000 31-04218-050 31-04218-100
			1	1,500				
			2	1,500		P		
			3	3,000		CrP	St	

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)

<p>11-02223-000 CH 30,400 VD1 1,790 B- 1,840 BØ 50,800 TL 50,400</p> <p> 21,00x56,00</p>			91-09218-000				Ø 81,600 Ø 82,100 Ø 82,600	31-04223-000 31-04223-050 31-04223-100
			1	1,500				
			2	1,500		P		
			3	3,000		CrP	St	


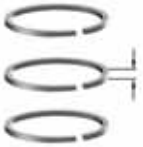
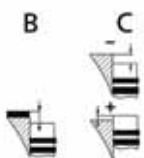
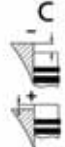

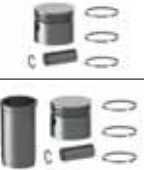
82,000

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)

<p>11-02281-000 CH 46,500 VD1 0,500 B- 17,500 BØ 37,500 TL 72,500</p> <p> 26,00x61,00</p>	AP	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

<p>K=85,00 L=155,00 H=5,00 D=86,00</p>	DS				51-65268-000
--	----	--	--	--	--------------

	Type		B 	C 		
---	-------------	---	--	---	---	---

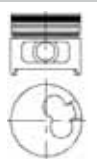




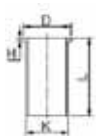

82,000

Z 19 DTH Euro4	Astra H / Vectra C 1.9 CDTI	04 2004 >	(150ps)
Z 19 DTJ	Astra H	06 2003 > 10 2010	(120ps)

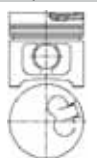




 11-02293-000 CH 46,500 VD1 0,400 VD2 0,600 B- 15,400 BØ 41,500 TL 73,500  26,00x61,00	AP YS PDB	91-09399-000 1 2,000  CrP 2 2,000  P 3 2,000  NT St	Ø 82,000 Ø 82,400 Ø 82,600	31-04293-000 31-04293-040 31-04293-060
Alfa Romeo ve Opel ile Ortak Motor				

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 Ø 83,000 Ø 83,500	31-03799-000 31-03799-050 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	

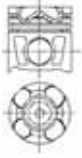
82,500

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 Ø 83,000 Ø 83,500	31-03807-000 31-03807-050 31-03807-100	



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 CrP
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

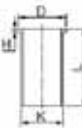
1 1,500 CrP St
2 1,500 P
3 2,000 CR St

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



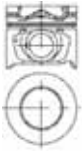
K=86,00
L=155,00
H=5,00
D=87,50

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 CrP
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

	Type				
---	------	---	--	---	---






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		91-09225-000 1 1,200  CR St 2 1,500  CrP St 3 3,000 		Ø 83,200 Ø 83,700	31-03797-000 31-03797-050
	21,00x56,00					

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	AP	91-09820-000 1 2,000  CkP 2 1,750  P 3 3,000  CrP		Ø 83,975 Ø 84,475 Ø 84,975	31-04201-000 31-04201-050 31-04201-100
	29,00x68,00					

	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	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 Ø 84,475 Ø 84,975	31-04217-000 31-04217-050 31-04217-100
	29,00x68,00					

	Type				
---	------	---	--	---	---

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	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
 32,00x65,00						
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)

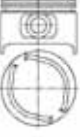




	11-01804-000 CH 33,650 *CH 33,350 B- 4,000 *B- 4,000 BØ 41,800 *BØ 41,800 TL 53,650 *TL 53,350	CP	91-09804-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP		Ø 84,800 Ø 85,300 Ø 85,800	31-03804-000 31-03804-050 31-03804-100
 21,00x61,50 * For Oversize Piston Dimensions						

	K=89,00 L=154,50 H=5,50 D=90,00	DS			51-65804-000	
--	--	----	--	--	---------------------	--

	Type				
---	------	---	--	---	---

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)

	<p>11-01811-000 CH 40,000 B- 2,800 BØ 69,000 TL 72,000</p> <p>*CH 39,700 *B- 2,800 *BØ 69,000 *TL 71,700</p> <p>* For Oversize Piston Dimensions</p> <p> 23,00x70,00</p>	CP	<p>91-09811-000 1 1,500  CrP 2 1,750  P 3 4,000  CrP</p>		<p>Ø 84,800 Ø 85,300 Ø 85,800</p>	<p>31-03811-000 31-03811-050 31-03811-100</p>
--	--	----	--	--	---	--

	<p>K=89,00 L=154,50 H=5,50 D=90,00</p>	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)

	<p>11-02209-000 CH 33,650 B- 5,000 BØ 55,700 TL 53,650</p> <p>*CH 33,350 *B- 5,000 *BØ 55,700 *TL 53,350</p> <p>* For Oversize Piston Dimensions</p> <p> 21,00x61,50</p>	CP	<p>91-09804-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP</p>		<p>Ø 84,800 Ø 85,300 Ø 85,800</p>	<p>31-04209-000 31-04209-050 31-04209-100</p>
--	--	----	--	--	---	--

	<p>K=88,00 L=139,00 H=5,00 D=89,50</p>	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)
--------------------------------	-------------------	-------------	-------	--------	----------	-------------

	<p>11-02187-000 CH 48,000 VD1 0,450 B- 16,200 BØ 50,000 TL 76,000</p> <p> 32,00x65,00</p>	AP YS	<p>91-09173-000 1 2,500  CrP 2 2,000  CrP 3 2,000  CrP</p>		<p>Ø 85,010 Ø 85,510</p>	<p>31-04187-000 31-04187-050</p>
--	---	----------	--	--	------------------------------	--

Nissan, Opel ve Renault ile Ortak Motor

	<p>K=88,00 L=168,00 H=5,00 D=89,50</p>	DS			51-65779-000	
--	--	----	--	--	--------------	--



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)

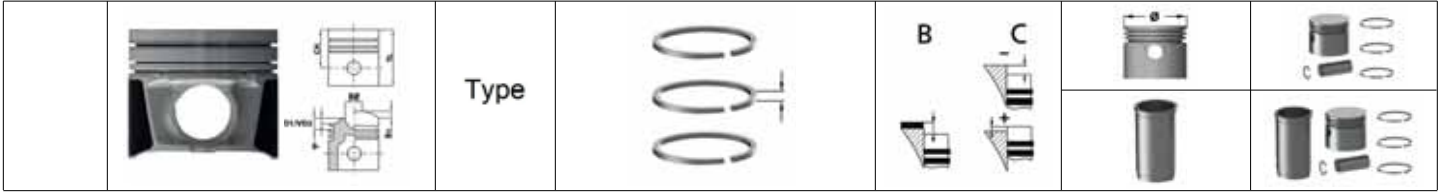
<p>11-01805-000 CH 30,400 *CH 30,100 B- 5,000 *B- 5,000 BØ 55,700 *BØ 55,700 TL 50,400 *TL 50,100</p> <p>* For Oversize Piston Dimensions</p> <p> 21,00x61,50</p>	CP	<p>91-09805-000</p> <p>1 1,500 CrP 2 1,500 P 3 3,000 CrP</p>		<p>Ø 86,000 Ø 86,500 Ø 87,000</p>	<p>31-03805-000 31-03805-050 31-03805-100</p>

<p>K=90,00 L=138,00 H=5,50 D=91,00</p>	DS			51-65806-000	
<p>K=91,00 L=138,00 H=6,00 D=92,00</p>	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)

<p>11-01812-000 CH 30,450 *CH 30,150 B- 1,970 *B- 1,970 TL 50,450 *TL 50,150</p> <p>* For Oversize Piston Dimensions</p> <p> 21,00x61,50</p>		<p>91-09805-000</p> <p>1 1,500 CrP 2 1,500 P 3 3,000 CrP</p>		<p>Ø 86,000 Ø 86,500 Ø 87,000</p>	<p>31-03812-000 31-03812-050 31-03812-100</p>



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)

<p>11-01818-000 CH 30,400 VD1 2,000 B- 3,160 BØ 60,000 TL 55,400</p>	<p>21,00x61,50</p>	<p>91-09805-000</p> <p>1 1,500 CrP</p> <p>2 1,500 P</p> <p>3 3,000 CrP</p>	<p>+0,25/+0,30</p>	<p>Ø 86,000 Ø 86,500 Ø 87,000</p>	<p>31-03818-000 31-03818-050 31-03818-100</p>

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)

<p>11-02221-000 CH 26,750 B- 0,610 BØ 70,000 TL 48,900</p>	<p>20,00x62,84</p>	<p>91-09221-000</p> <p>1 1,200 CR St</p> <p>2 1,500 P</p> <p>3 2,500 CrP St</p>	<p>HA</p>	<p>Ø 86,000 Ø 86,500 Ø 87,000</p>	<p>31-04221-000 31-04221-050 31-04221-100</p>



86,000


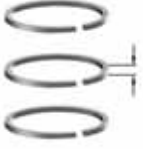
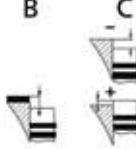


C20XE	Astra F 2.0i 16V	B	09 1991 > 02 1998	4 Cyl	1998cc	110kW	(150ps)
C20XE	Calibra 2.0i 16V	B	06 1990 > 03 1997	4 Cyl	1998cc	110kW	(150ps)
C20XE	Kadett E 2.0i 16V	B	03 1988 > 08 1991	4 Cyl	1998cc	110kW	(150ps)
C20XE	Vectra A 2.0i 16V	B	09 1989 > 08 1995	4 Cyl	1998cc	110kW	(150ps)

<p>11-02225-000 CH 30,430 VD1 1,930 B- 0,850 BØ 70,000 TL 55,430</p> <p> 21,00x61,50</p>	<p>91-09805-000 1 1,500 CrP 2 1,500 P 3 3,000 CrP</p>	<p>Ø 86,000 Ø 86,500 Ø 87,000</p>	<p>31-04225-000 31-04225-050 31-04225-100</p>

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)

<p>11-02226-000 CH 30,400 VD1 2,680 B- 6,500 BØ 63,180 TL 55,400</p> <p> 21,00x61,50</p>	<p>91-09805-000 1 1,500 CrP 2 1,500 P 3 3,000 CrP</p>	<p>Ø 86,000 Ø 86,500 Ø 87,000</p>	<p>31-04226-000 31-04226-050 31-04226-100</p>

	Type				
---	------	---	--	---	---






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		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
	21,00x61,50					

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	YS HA	99-09823-000 1 1,200  NT St 2 1,500  P 3 2,000  NiP St		Ø 86,000 Ø 86,500	39-04234-000 39-04234-050
	23,00x54,70					

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	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
	31,00x65,00					






Nissan, Opel ve Renault ile Ortak Motor

	K=90,00 L=167,00 H=5,00 D=91,50	DS			51-65955-000	
--	--	----	--	--	---------------------	--

	Type				
---	------	---	--	---	---

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		91-09814-000 1 1,200  NT St 2 1,500  P 3 2,500  NiP St		Ø 87,500 Ø 88,000	31-04232-000 31-04232-050
	21,00x61,70					
Chevrolet ve Opel ile Ortak Motor						

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	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
	22,00x65,00					

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	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
	31,00x65,00					
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

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)

<p>11-02159-000 CH 53,030 VD1 1,650 VD2 1,900 B- 17,850 BØ 43,200 TL 83,090</p> <p> 31,00x65,00</p>	AP	<p>91-09159-000</p> <p>1 2,500 MoP 2 1,750 P 3 2,500 CrP</p>	(+0,35/+0,60)	<p>Ø 89,000 Ø 89,500</p>	<p>31-04159-000 31-04159-050</p>

<p>K=92,50 L=164,00</p>	DS				51-65152-000
-----------------------------	----	--	--	--	---------------------

<p>K=92,00 L=168,00 H=5,00 D=93,50</p>	DS				51-65807-000
--	----	--	--	--	---------------------

89,000

Strok Boyu 0,20mm Kısa Piston	/ Stroke Length 0,20mm Shorter	D 09 2002 >	4 Cyl	2463cc	99kW	(135ps)
----------------------------------	--------------------------------	-------------	-------	--------	------	---------






<p>11-02159-001 CH 52,830 VD1 1,650 VD2 1,900 B- 17,850 BØ 43,200 TL 83,090</p> <p> 31,00x65,00</p>	AP	<p>91-09159-000</p> <p>1 2,500 MoP 2 1,750 P 3 2,500 CrP</p>	(+0,35/+0,60)	<p>Ø 89,000 Ø 89,500</p>	<p>31-04159-001 31-04159-051</p>

90,000

XD4.90	Blitz 2.1 D	D 01 1969 > 02 1972	4 Cyl	2112cc	43-48kW	(59-65ps)
--------	-------------	---------------------	-------	--------	---------	-----------






<p>11-01891-000 CH 57,200 B- 2,000 TL 96,350</p> <p> 28,00x77,00</p>	WF	<p>91-09891-000</p> <p>1 2,000 CrP 2 2,000 P 3 2,000 P 4 4,500 CrP</p>		<p>Ø 90,000 Ø 90,500 Ø 91,000</p>	<p>31-03891-000 31-03891-050 31-03891-100</p>

<p>K=96,00 L=173,00 H=7,00 D=106,30</p>	WF				51-05891-000	71-07891-000
---	----	--	--	--	---------------------	---------------------

	Type		B 	C 		
						






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	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	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	



93,000

4JA1 Campo 2.5 D 02 1989 > 08 1997 (73-76ps)

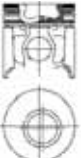




 <p>11-02386-000 CH 47,800 VD1 0,500 B- 14,600 BØ 44,300 TL 87,800</p>  <p>31,00x76,00</p> <p>Isuzu ve Opel ile Ortak Motor</p>	AP	<p>91-09389-000</p> <p>1 2,000  P</p> <p>2 2,000  P</p> <p>3 4,000  CrP</p>	<p>1,60mm Conta ile (+0,718/+0,773) 1,65mm Conta ile (+0,773/+0,819) 1,70mm Conta ile (+0,819/+0,874)</p>	<p>Ø 93,000</p>	<p>31-04386-000</p>
	CP				

 <p>K=95,00 L=156,30 H=0,90 D=101,00</p>	DF-CR-ST			<p>51-35720-000</p>	<p>71-08386-000</p> <p>71-98386-000</p>
--	----------	--	--	----------------------------	--


 <p>K=95,00 L=181,00 H=0,90 D=101,00</p>	DF-CR-ST			<p>51-35721-000</p>	<p>71-08387-000</p> <p>71-98387-000</p>
---	----------	--	--	----------------------------	--

94,400

S9W 700 / 702 Euro2 Movano 2.8 DTI D 06 1998 > 09 2002 4 Cyl 2798cc 84kW (114ps)

 <p>11-01690-000 CH 58,750 B- 19,450 BØ 39,300 TL 96,750</p>  <p>32,00x78,00</p> <p>Fiat / Iveco, Opel ve Renault ile Ortak Motor</p>	AP YS	<p>91-09690-000</p> <p>1 3,000  CR</p> <p>2 2,000  P</p> <p>3 3,000  CR</p>	<p>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)</p>	<p>Ø 94,400 Ø 94,800 Ø 95,000</p>	<p>31-03690-000 31-03690-040 31-03690-060</p>

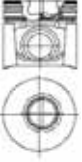




 <p>K=97,50 L=167,00 H=5,10 D=100,90</p>	DS			<p>51-65453-000</p>	
--	----	--	--	----------------------------	--


 <p>K=98,00 L=167,00 H=6,00 D=101,35</p>	DS +0,50			<p>51-65453-050</p>	
--	-------------	--	--	----------------------------	--



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
--	---	----	--	--	---------------------

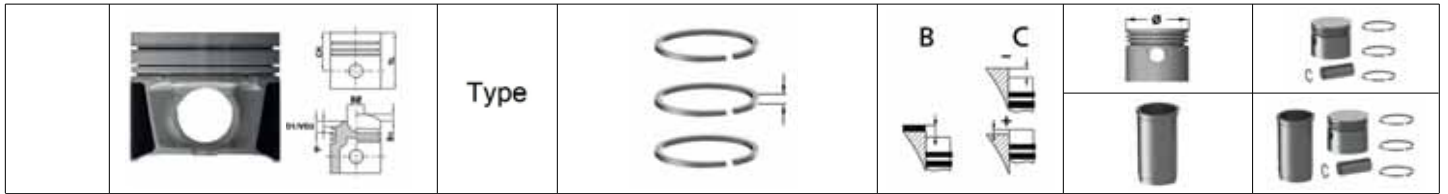
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			51-65453-050
---	---	-------------	--	--	---------------------

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
--	---	----	--	--	---------------------



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)

	<p>11-01815-000 CH 31,500 VD1 4,000 B- 2,250 BØ 81,000 TL 61,000</p>  22,00x65,00	CP	<p>91-09815-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP</p>	<p>Ø 95,000 Ø 95,500 Ø 96,000</p>	<p>31-03815-000 31-03815-050 31-03815-100</p>
	<p>K=99,05 L=139,00 H=5,00 D=100,00</p>	DS		<p>51-65805-000</p>	


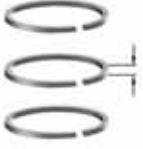
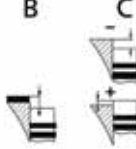

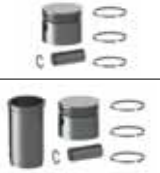


70,000									
TU9M	106 1.0i		B	07	1992	> 05	2005	4 Cyl	(45-50ps)
TU9M	205 1.0i		B	07	1992	> 09	1998	4 Cyl	(45-50ps)
TU9M / Z	205 1.0		B	10	1987	> 09	1998	4 Cyl	(42-45ps)

	11-02907-000 CH 33,900 B+ 0,800 TL 58,000	Type		91-09207-000 1 1,500 CR 2 1,500 P 3 3,000 CrP St	Ø 70,000	31-04907-000
	18,00x53,00					
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	Type	91-09100-000 1 1,500 CR 2 2,000 3 3,000	Ø 72,000	31-04100-000
	19,50x62,00				
K=79,45 L=122,50 H=85,00 D=89,20		WF		51-05872-000	71-08100-000

	Type				
---	------	---	--	---	---

72,000

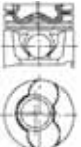




TU1 / JP	106 1.1i	B	03 2000 > 05 2005	4 Cyl	1124cc	44kW	(60ps)
TU1 / JP	206 1.1i	B	06 1998 >	4 Cyl	1124cc	44kW	(60ps)
TU1 / JP	206+ 1.1i	B	03 2009 >	4 Cyl	1124cc	44kW	(60ps)
TU1 / JP	Partner 1.1i	B	07 1996 >	4 Cyl	1124cc	44kW	(60ps)

	11-02927-000 CH 27,700 B+ 7,120 B- 0,100 TL 47,500		91-09927-000 1 1,500  CR 2 1,500  P 3 2,500  NiP St		Ø 72,000 Ø 72,500	31-04927-000 31-04927-050
	18,00x54,80					

	K=79,45 L=122,50 H=85,00 D=89,20	WF			51-05872-000	71-08926-000
--	---	----	--	--	---------------------	---------------------


73,700

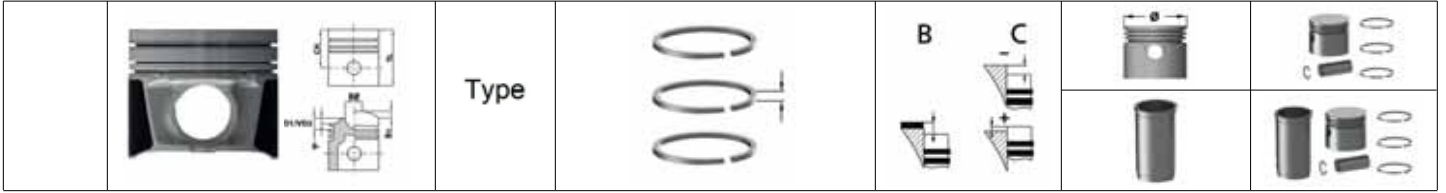
DV4TD	1007 1.4 HDI	D	10 2004 > 03 2008	4 Cyl	1399cc	40-50kW	(54-68ps)
DV4TD	107 1.4 HDI	D	06 2005 > 03 2008	4 Cyl	1399cc	40-50kW	(54-68ps)
DV4TD	207 1.4 HDi	D	02 2006 >	4 Cyl	1399cc	40-50kW	(54-68ps)
DV4TD	307 1.4 HDI	D	01 2002 > 02 2005	4 Cyl	1399cc	40-50kW	(54-68ps)
DV4TD / 8 HX	206 1.4 HDi	D	09 2001 >	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	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
	25,00x60,00					

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 Kısa / Stroke Length 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






73,700


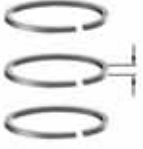
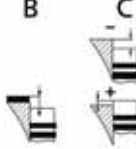

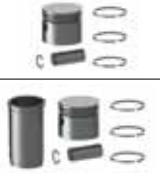
Strok Boyu 0,40mm Kısa / Stroke Length 0,40mm Shorter > (ps)

 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

73,700






9HV (DV6ATED4),9HV (DV6TED4),9HX (DV6ATED4)	307 1.6 HDI	04 2005 >	(90ps)
9HV (DV6ATED4),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






	Type				
---	------	---	--	---	---

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	AP	91-09882-000 1 2,500  CK 2 1,950  CR 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
	25,00x60,00	Citroen ve Peugeot ile Ortak Motor				

73,700

Strok Boyu 0,20mm Kısa Piston	/ Stroke Length 0,20mm Shorter	>	Cyl	cc	kW	(ps)
	11-02494-001 CH 42,744 B- 12,500 BØ 45,000 TL 65,240	AP	91-09882-000 1 2,500  CK 2 1,950  CR 3 2,000  CR		Ø 73,700 Ø 74,200	31-04494-001 31-04494-051
	25,00x60,00	CH -0,20 mm	Citroen ve Peugeot ile Ortak Motor			






73,700

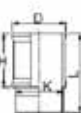
Strok Boyu 0,40mm Kısa Piston	/ Stroke Length 0,40mm Shorter	>				(ps)
	11-02494-002 CH 42,544 B- 12,500 BØ 45,000 TL 65,040	AP	91-09882-000 1 2,500  CK 2 1,950  CR 3 2,000  CR		Ø 73,700 Ø 74,200	31-04494-002 31-04494-052
	25,00x60,00	CH -0,40 mm	Citroen ve Peugeot ile Ortak Motor			

	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	91-09299-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP			Ø 75,000	31-03888-000
	19,50x62,00					
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
--	---	-----------	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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		91-09889-000 1 1,500  CR 2 1,500  P 3 2,500  P		Ø 75,000	31-03889-000
	18,00x55,00					

	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	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
	17,00x51,00					

Citroen, Peugeot ve Toyota ile Ortak Motor

	Type				
---	------	---	--	---	---






75,000

KFU (ET3J4) 1007, 206, 207, 307 D 10 2003 > 4 Cyl 1360cc 65kW (88ps)

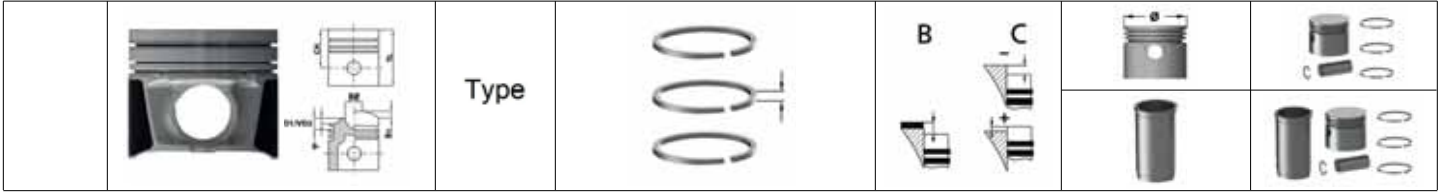
	11-02127-000 CH 28,250 VD1 3,100 B+ 1,300 TL 52,330		91-09963-000 1 1,200  MoP 2 1,500  P 3 2,500  P		Ø 75,000	31-04127-000
	17,98x44,50					
Citroen ve Peugeot ile Ortak Motor						

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)

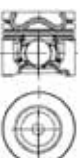




	11-02154-000 CH 40,500 TL 65,500		91-09154-000 1 1,750  CR 2 2,000  P 3 4,000  CR		Ø 75,000	31-04154-000
	19,50x65,00					
Citroen, Peugeot ve Renault ile Ortak Motor						

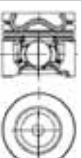




	K=79,45 L=134,50 H=90,00 D=89,20	WF			51-05873-000	71-08154-000
--	---	----	--	--	---------------------	---------------------



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

75,000									
Strok Boyu 0,20mm Kisa / Stroke Length 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	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				
						CH -0,20 mm Citroen, Ford ve Peugeot ile Ortak Motor			

75,000									
Strok Boyu 0,40mm Kisa / Stroke Length 0,40mm Shorter > (ps)									
 11-02496-002 CH 41,350 B- 13,850 BØ 45,000 TL 64,800  26,00x61,00	AP YS	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				
						CH -0,40 mm Citroen, Ford ve Peugeot ile Ortak Motor			




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

Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor

AP
YS

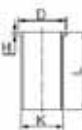
91-09168-000

- 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

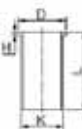
31-04498-000
31-04498-050
31-04498-060



K=78,05
L=142,00
H=5,00
D=79,45

DS

51-65826-000

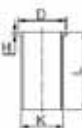


K=78,55
L=142,00
H=6,00
D=79,95

DS

+0,50

51-65826-050

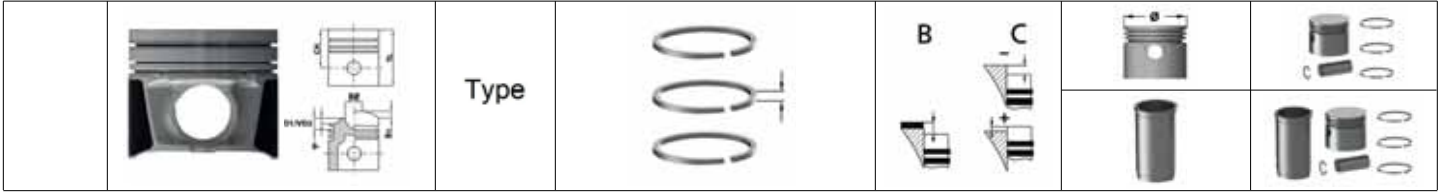


K=79,05
L=142,00
H=6,00
D=80,45

DS






+1,00

51-65826-100








75,000

Strok Boyu 0,20mm Kisa / Stroke Length 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	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
	CH -0,20 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				






75,000

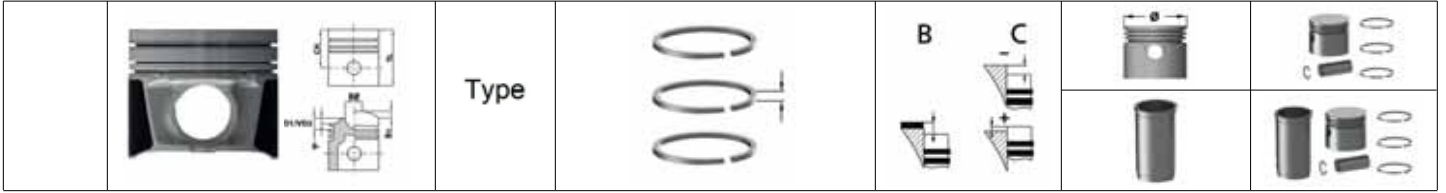
Strok Boyu 0,40mm Kisa / Stroke Length 0,40mm Shorter > (ps)

 11-02498-002 CH 41,300 VD1 1,200 B- 13,250 BØ 41,800 TL 64,900  26,00x61,00	AP YS	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
	CH -0,40 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				

75,000






Strok Boyu 0,60mm Kisa / Stroke Length 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	91-09168-000 1 3,000  CkP 2 1,950  P 3 2,500  CrP	Ø 75,000	31-04498-003
	CH -0,60 mm			
Citroen, Fiat / Iveco, Ford, Mazda, Mini (BMW) ve Peugeot ile Ortak Motor				








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) / KVV(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)

 <p>11-02500-000 CH 27,800 B+ 0,180 TL 49,800</p>  18,00x55,00		<p>91-09889-000</p> <p>1 1,500  CR</p> <p>2 1,500  CR</p> <p>3 2,500  P</p>		Ø 75,000	31-04500-000
Citroen ve Peugeot ile Ortak Motor					

 <p>K=79,45 L=134,50 H=90,00 D=89,20</p>	WF			51-05873-000	71-08500-000
--	----	--	--	---------------------	---------------------






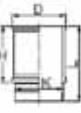
75,000

TU3JP	106 / 206 / 306 1.4	B	>	4 Cyl	1361cc	kW	(ps)
 <p>11-02501-000 CH 27,800 TL 49,800</p>  18,00x55,00		<p>91-09889-000</p> <p>1 1,500  CR</p> <p>2 1,500  CR</p> <p>3 2,500  P</p>		Ø 75,000	31-04501-000		

	Type				
---	------	---	--	---	---

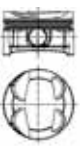




76,000

XL3	304 1,3	B	10	1969	>	09	1975	4 Cyl	(58ps)
XL3S	304 1,3	B	03	1972	>	07	1976	4 Cyl	(75ps)

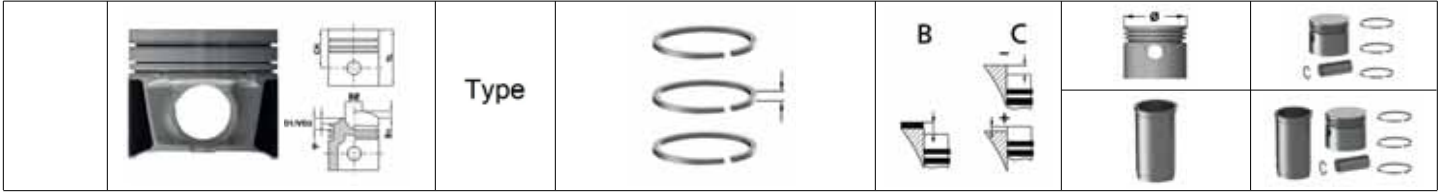
	11-01874-000 CH 40,300 B- 0,900 TL 73,500	CP	91-09904-000 1 1,750  CR 2 2,000  P 3 4,000  CrP St		Ø 76,000	31-03874-000
	20,50x63,40					
	K=81,00 L=128,30 H=87,96 D=89,20	WF			51-05875-000	71-07874-000

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		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
	18,00x43,00					

Citroen ve Peugeot ile Ortak Motor








77,000

Strok Boyu 0,40mm Kısa / Stroke Length 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

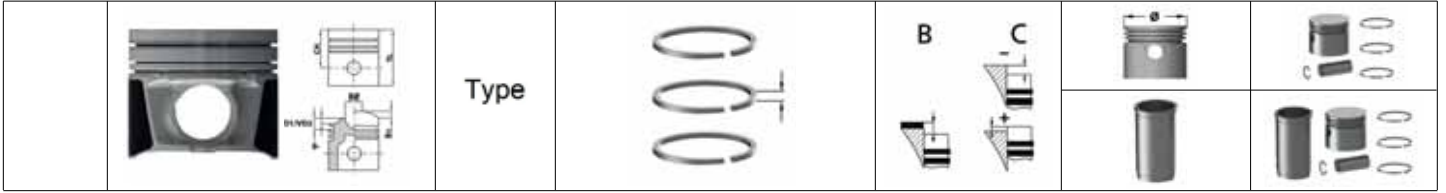
5FV (EP6CDT) Euro 5	207/207CC/308/308CC/RCZ	B 05 2010 >	4 Cyl	1598cc	115kW	(156ps)
5FV (EP6CDT) Euro 5	208 1.6 THP 155	B 03 2012 >	4 Cyl	1598cc	115kW	(156ps)
5FV (EP6CDT) Euro 5	3008 / 5008 1.6i THP 16V	B 06 2009 >	4 Cyl	1598cc	115kW	(156ps)
5FV (EP6CDT) Euro 5	508 1.6i 16V THP 155	B 03 2011 >	4 Cyl	1598cc	115kW	(156ps)

 11-02106-000 CH 30,200 VD1 1,900 B- 3,630 BØ 31,000 TL 48,450  20,00x47,90	CH -0,20 mm	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 Kısa / Stroke Length 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		








77,000

Strok Boyu 0,40mm Kısa / Stroke Length 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	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

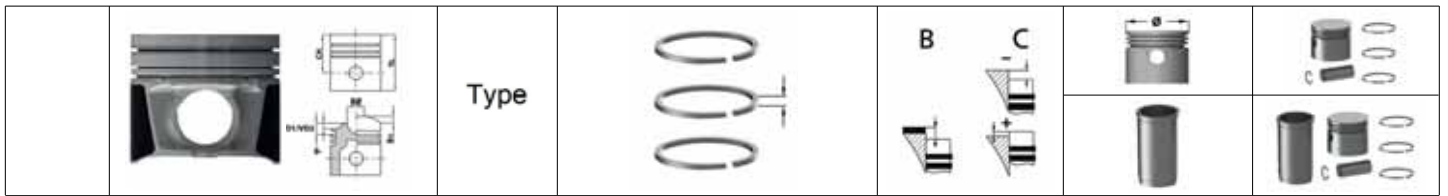
TUD5 (VJX) 106 II 1.5D / 106 Van 1.5D D 10 2000 > 4 Cyl 1527cc 42kW (57ps)
 TUD5 (VJY) 106 I 1.5D / 106 II 1.5D / 106 Van 1.5D 06 1994 > 4 Cyl 1527cc 42kW (57ps)

 11-02107-000 CH 40,370 *CH 40,100 B- 1,650 *B- 1,650 TL 66,320 *TL 66,320  23,00x60,00 * For Oversize Piston Dimensions	CH -0,40 mm	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

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	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		



78,000							
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
--	--	----	--	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---






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  NiP		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			

Citroen ve Peugeot ile Ortak Motor

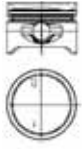
78,500

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  NiP		Ø 78,500 Ø 78,750 Ø 79,000	31-04102-000 31-04102-025 31-04102-050		

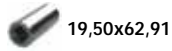


78,500

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



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

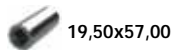
Citroen ve Peugeot ile Ortak Motor

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



91-09929-000

- 1 1,200  MoP
- 2 1,500  P
- 3 2,500  NiP

Ø 78,500
Ø 78,900
Ø 79,000

31-04929-000
31-04929-040
31-04929-050

Citroen ve Peugeot ile Ortak Motor



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)


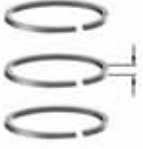
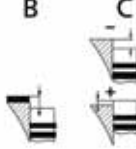

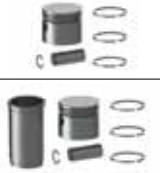
<p>11-01876-000 CH 46,800 B- 2,000 TL 84,300</p> <p>25,00x69,80</p>	<p>91-09800-000</p> <p>1 2,000 MoP 2 2,000 P 3 3,000 CrP</p> <p>1,61mm Conta ile +0,54/+0,77 1,73mm Conta ile +0,77/+0,82</p>	<p>Ø 80,000 Ø 80,200 Ø 80,500 Ø 80,800</p>	<p>31-03876-000 31-03876-020 31-03876-050 31-03876-080</p>

<p>K=83,05 L=154,00 H=4,50 D=86,00</p>	DS				51-65876-000
--	----	--	--	--	---------------------

80,000






40318	403/8	B	00	1967	>			4 Cyl	1468cc	kW	(ps)
-------	-------	---	----	------	---	--	--	-------	--------	----	------

<p>11-02110-000 CH 41,500 TL 72,000</p> <p>22,00x67,20</p>	CP	<p>91-09110-000</p> <p>1 2,000 CR 2 2,000 P 3 4,500 CrP</p>			Ø 80,000	31-04110-000

	Type				
---	------	---	--	---	---

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)


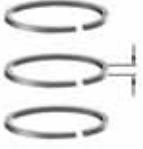
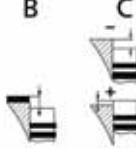





	11-01878-000 CH 46,700 B- 1,200 TL 78,000		25,00x65,50	91-09878-000 1 2,000  CR 2 2,000  CR 3 3,000  CR	1,26mm Conta ile +0,51/+0,55 1,30mm Conta ile +0,55/+0,59 1,34mm Conta ile +0,59/+0,63	Ø 82,200 Ø 82,700 Ø 82,800 Ø 83,000	31-03878-000 31-03878-050 31-03878-060 31-03878-080
Fiat / Iveco ve Peugeot 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






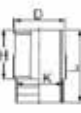
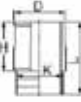
Strok Boyu 0,20mm Kısa Piston	/ Stroke Length 0,20mm Shorter	D 06 1998 >	4 Cyl	1868cc	51kW	(69ps)
----------------------------------	--------------------------------	-------------	-------	--------	------	--------

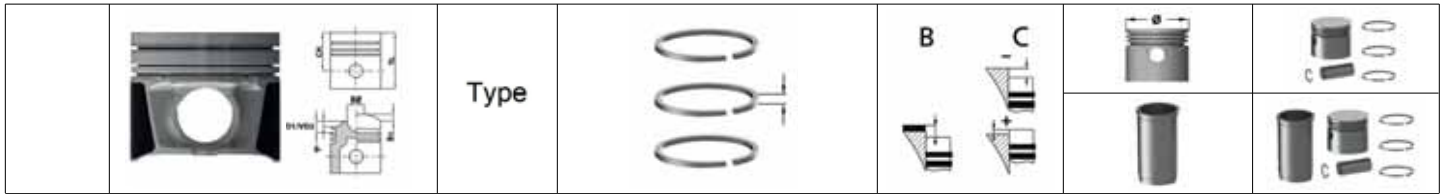
	11-01878-001 CH 46,500 B- 1,200 TL 78,000		25,00x65,50	91-09878-000 1 2,000  CR 2 2,000  CR 3 3,000  CR	1,26mm Conta ile +0,51/+0,55 1,30mm Conta ile +0,55/+0,59 1,34mm Conta ile +0,59/+0,63	Ø 82,200	31-03878-001
Fiat / Iveco ve Peugeot ile Ortak Motor							

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

83,000

XU5S 305 1.6 B 10 1982 > 07 1990 4 Cyl 1560cc 66-71kW (90-97ps)

	<p>11-01877-000 CH 37,500 B- 2,100 TL 67,500</p>  22,00x66,20		<p>91-09877-000 1 1,750  CR 2 1,750  CR 3 4,000  CrP St</p>		<p>Ø 83,000</p>	<p>31-03877-000</p>
<p>Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor</p>						
	<p>K=88,60 L=141,00 H=95,19 D=97,00</p>	<p>WF</p>			<p>51-05881-000</p>	<p>71-07877-000</p>
	<p>K=88,60 L=141,00 H=95,14 D=97,00</p>	<p>WF</p>			<p>51-05882-000</p>	<p>71-07878-000</p>

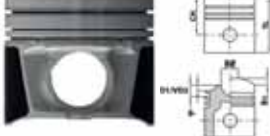
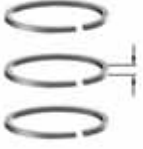
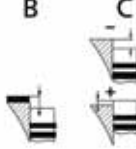

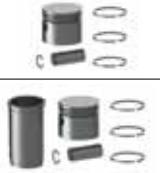
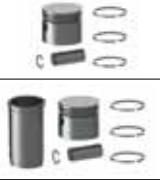


83,000

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)







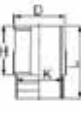
<p>11-01879-000 CH 46,800 B- 2,200 TL 84,300</p>	<p>25,00x72,00</p>	<p>91-09879-000</p> <p>1 2,000 CR</p> <p>2 2,000 CR</p> <p>3 3,000 CR</p>	<p>1,49mm Conta ile (+0,54/+0,35) 1,61mm Conta ile (+0,65/+0,77) 1,73mm Conta ile (+0,77/+0,82)</p>	<p>Ø 83,000 Ø 83,200 Ø 83,500 Ø 83,800 Ø 84,000</p>	<p>31-03879-000 31-03879-020 31-03879-050 31-03879-080 31-03879-100</p>


<p>K=86,00 L=153,50 H=4,80 D=89,00</p>	DS			51-65820-000	
<p>K=86,04 L=153,50</p>	DS			51-65879-000	
<p>K=86,54 L=153,50</p>	DS +0,50			51-65879-050	
<p>K=85,66 L=153,50 H=3,90 D=88,45</p>	DS			51-65885-000	
<p>K=86,15 L=153,50 H=3,90 D=88,45</p>	DS +0,50			51-65885-050	

	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	CP	91-09885-000 1 1,500  CR 2 1,500  CR 3 4,000  CR		Ø 83,000	31-03885-000
	22,00x66,20					
Citroen ve Peugeot ile Ortak Motor						
	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

	Type					
---	------	---	--	---	---	---

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	CP	91-09887-000 1 1,500  Mo 2 1,500  Mo 3 3,000  CR		Ø 83,000	31-03887-000
 22,00x62,00						
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

	Type				
---	------	---	--	---	---

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	CP	91-09887-000 1 1,500  Mo 2 1,500  Mo 3 3,000  CR		Ø 83,000	31-04103-000
	22,00x62,00					

	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		91-09877-000 1 1,750  CR 2 1,750  CR 3 4,000  CrP St		Ø 83,000	31-04116-000
	22,00x66,20					

Citroen ve Peugeot ile Ortak Motor

	K=88,60 L=141,00 H=95,19 D=97,00	WF			51-05881-000	71-08116-000
--	---	----	--	--	---------------------	---------------------



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		91-09877-000 1 1,750 CR 2 1,750 3 4,000 CrP St		Ø 83,000	31-04118-000
	22,00x66,20					

	K=88,60 L=141,00 H=95,14 D=97,00	WF			51-05878-000	71-08118-000
--	---	----	--	--	---------------------	---------------------


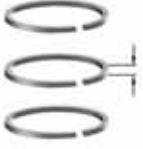
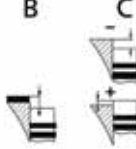

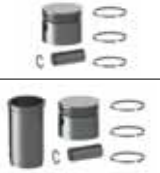
	K=88,60 L=141,00 H=95,19 D=97,00	WF			51-05881-000	71-08119-000
--	---	----	--	--	---------------------	---------------------

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		91-09885-000 1 1,500 CR 2 1,500 3 4,000 CR		Ø 83,000	31-04120-000
	22,00x66,20					

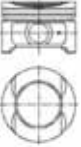




Citroen ve Peugeot ile Ortak Motor

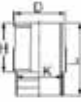
	K=88,60 L=141,00 H=95,19 D=97,00	WF			51-05881-000	71-08120-000
--	---	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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	CP	91-09887-000 1 1,500  Mo 2 1,500  Mo 3 3,000  CR		Ø 83,000	31-04924-000
 22,00x62,00						
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	CP	91-09885-000 1 1,500  CR 2 1,500  CR 3 4,000  CR		Ø 83,000	31-04925-000
 22,00x66,20						






	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
--	---	----	--	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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	CP	91-09881-000 1 1,500  CrP 2 2,000  P 3 4,000  CrP St		Ø 84,000	31-03880-000
	23,00x70,00					

	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	CP	91-09881-000 1 1,500  CrP 2 2,000  P 3 4,000  CrP St		Ø 84,000	31-03881-000
	23,00x70,00					

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
--	---	----	--	--	---------------------	---------------------

		Type				
--	--	------	--	--	--	--

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	CP	91-09128-000 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	31-03883-000
	22,00x70,00					

	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	CP	91-09128-000 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	31-03884-000
	23,00x70,00					

	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	CP	91-09128-000 1 2,000 CR 2 2,000 P 3 4,500 CR		Ø 84,000	31-04128-000
	23,00x70,00					






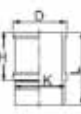
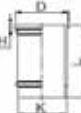
	K=92,95 L=136,20 H=90,00 D=99,20	WF			51-05880-000	71-08128-000
--	---	----	--	--	---------------------	---------------------

	K=89,00 L=135,70 H=6,50 D=99,20	WF			51-05883-000	71-08129-000
--	--	----	--	--	---------------------	---------------------

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						






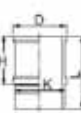

84,000

XC6 404 1,6 B 11 1967 > 12 1971 4 Cyl 1616cc 51kW (69ps)

 <p>11-02132-000 CH 45,550 B+ 3,400 TL 81,900</p>  <p>23,00x70,00</p>	CP	<p>91-09128-000</p> <p>1 2,000  CR</p> <p>2 2,000  P</p> <p>3 4,500  CR</p>			Ø 84,000	31-04132-000
 <p>K=92,95 L=136,20 H=90,00 D=99,20</p>	WF				51-05880-000	71-08133-000
 <p>K=89,00 L=135,70 H=6,50 D=99,20</p>	WF				51-05883-000	71-08132-000







84,000

XM / KFS / KP6 504 B > 4 Cyl 1796cc 56kW (76ps)






 <p>11-02923-000 CH 38,800 B+ 1,450 TL 71,750</p>  <p>23,00x70,00</p>	CP	<p>91-09881-000</p> <p>1 1,500  CrP</p> <p>2 2,000  P</p> <p>3 4,000  CrP St</p>			Ø 84,000	31-04923-000
 <p>K=92,95 L=136,20 H=90,00 D=99,20</p>	WF				51-05880-000	71-07079-000
 <p>K=89,00 L=135,70 H=6,50 D=99,20</p>	WF				51-05883-000	71-08923-000



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)

 <p>11-02115-000 CH 48,700 VD1 1,200 B- 17,700 BØ 42,000 TL 77,700</p> <p> 30,00x68,00</p>	AP	<p>91-09799-000</p> <p>1 3,500  CK</p> <p>2 2,000  CR</p> <p>3 3,000  CR</p>	<p>Ø 85,000</p> <p>Ø 85,600</p>	<p>31-04115-000</p> <p>31-04115-060</p>
 <p>K=88,60 L=163,00</p>	DS		<p>51-65164-000</p>	







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)

 <p>11-02117-000 CH 29,000 B- 0,750 BØ 48,000 TL 51,000</p> <p> 21,00x58,00</p>		<p>91-09145-000</p> <p>1 1,200  Mo</p> <p>2 1,500  CR</p> <p>3 2,500  CR</p>	<p>Ø 85,000</p> <p>Ø 85,200</p> <p>Ø 85,400</p> <p>Ø 85,600</p> <p>Ø 85,800</p>	<p>31-04117-000</p> <p>31-04117-020</p> <p>31-04117-040</p> <p>31-04117-060</p> <p>31-04117-080</p>
---	--	--	---	--



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)

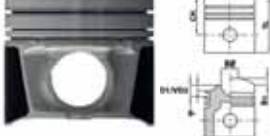
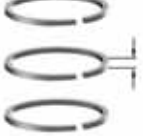
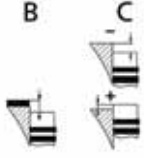
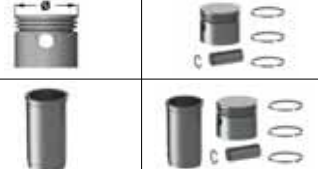
DW10 TD Boxer II 2.0 HDI D 02 2002 > 4 Cyl 2000cc 66kW (90ps)

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)

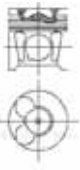
 11-02495-000 CH 46,750 VD1 1,000 B- 18,300 BØ 38,000 TL 80,750   28,00x70,00	AP	91-09799-000 1 3,500  CK 2 2,000  3 3,000  CR	1,25mm conta ile (+0,55/+0,60) 1,30mm conta ile (+0,61/+0,65) 1,35mm conta ile (+0,66/+0,70) 1,40mm conta ile (+0,71/+0,75)	Ø 85,000 Ø 85,500 Ø 85,600	31-04495-000 31-04495-050 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
--	--	----	--------------

	Type			
---	-------------	---	--	---

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  CR
3 3,000 

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

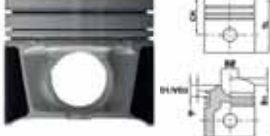
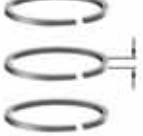
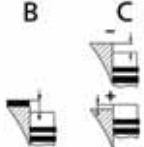

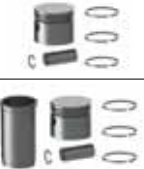
91-09499-000

1 1,500  Mo
2 1,750 
3 3,000 

Ø 86,000
Ø 86,500






31-04499-000
31-04499-050

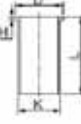

Citroen, Fiat / Iveco, Lancia ve Peugeot ile Ortak Motor

	Type				
---	------	---	--	---	---

86,010






QWFB V347 DURATORQ YENI BOXER HDI D 01 2008 > 4 Cyl 2200cc 88kW (120ps)


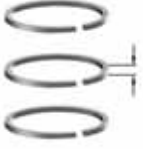
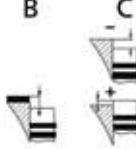





	11-01461-000 CH 43,420 B- 15,850 BØ 46,900 TL 69,820	AP YS	91-09425-000 1 2,000  CkP 2 2,000  P 3 2,000  NT St	1,10mm Conta ile (+0,38/+0,47) 1,20mm Conta ile (+0,48/+0,58) 1,30mm Conta ile (+0,59/+0,68)	Ø 86,010 Ø 86,510	31-03461-000 31-03461-050
	30,00x66,85					
Citroen, Ford ve Peugeot ile Ortak 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 / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

	11-01461-001 CH 43,220 B- 15,850 BØ 46,900 TL 69,620	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	31-03461-001 31-03461-051
	30,00x66,85	CH-0,20 mm				
Citroen, Ford ve Peugeot ile Ortak Motor						

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

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

Citroen, Fiat / Iveco, Ford ve Peugeot ile Ortak Motor

AP
YS

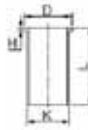
91-09425-000

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

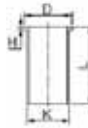
31-04034-000
31-04034-050



K=89,00
L=156,00
H=5,00
D=90,50

DS

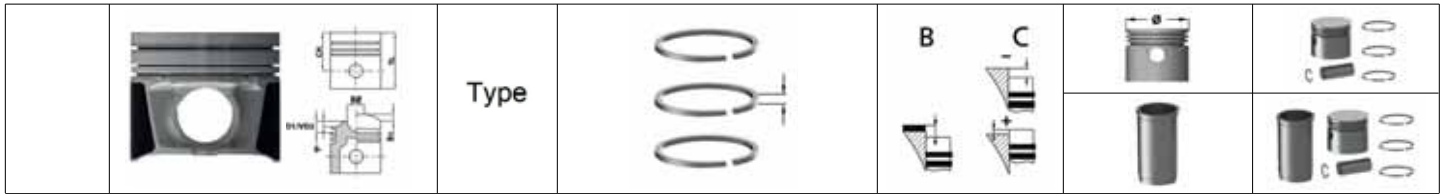
51-65496-000



K=89,50
L=156,00
H=5,50
D=91,00






DS
+0,50


51-65496-050



86,400

220 A2.000 Expert 1.6i B 09 1995 > 4 Cyl 1580cc 58kW (79ps)

 <p>11-01395-000 CH 33,300 VD1 3,000 B- 2,500 TL 72,800</p>  <p>22,00x63,00</p>	<p>CP</p>	<p>91-09395-000 1 1,500  CrP 2 1,750  P 3 3,000  CrP</p>		<p>Ø 86,400 Ø 86,800 Ø 87,000 Ø 87,200 Ø 87,400</p>	<p>31-03395-000 31-03395-040 31-03395-060 31-03395-080 31-03395-100</p>
<p>Citroen, Fiat / Iveco ve Peugeot ile Ortak Motor</p>					






	<p>K=90,05 L=127,00 H=5,00 D=91,00</p>	<p>DS</p>		<p>51-65270-000</p>	
--	--	-----------	--	----------------------------	--

	<p>K=90,50 L=127,00 H=6,00 D=91,50</p>	<p>DS +0,50</p>		<p>51-65270-050</p>	
---	--	---------------------	--	----------------------------	--

	<p>K=91,05 L=127,00 H=6,00 D=92,00</p>	<p>DS +1,00</p>		<p>51-65270-100</p>	
--	--	---------------------	--	----------------------------	--

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)






 <p>11-02140-000 CH 37,900 B+ 2,550 TL 73,600</p>  <p>23,00x74,00</p>	<p>CP</p>	<p>91-09140-000 1 1,500  CR 2 2,000  CR 3 4,000  CR</p>		<p>Ø 88,000</p>	<p>31-04140-000</p>
---	-----------	---	--	-----------------	----------------------------

	<p>K=93,00 L=136,20 H=90,00 D=101,90</p>	<p>WF</p>		<p>51-05889-000</p>	<p>71-08140-000</p>
--	--	-----------	--	----------------------------	----------------------------

	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		91-09140-000 1 1,500  CR 2 2,000  CR 3 4,000  CR		Ø 88,000	31-04142-000
	23,00x74,00					


	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		91-09140-000 1 1,500  CR 2 2,000  CR 3 4,000  CR		Ø 88,000 Ø 88,500 Ø 88,750	31-04148-000 31-04148-050 31-04148-075
	23,00x74,00					

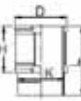
	K=93,00 L=136,20 H=90,00 D=101,90	WF			51-05889-000	71-08148-000
--	--	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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		91-09160-000 1 1,750  CR 2 2,000  St 3 4,000  CrP		Ø 88,000	31-04160-000
 23,00x75,00						
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
---	--	----	--	--	--	---------------------	---------------------

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		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
 28,00x72,00						
Ford ve Peugeot ile Ortak Motor						

	K=96,00 L=173,00 H=7,00 D=106,30	WF				51-05890-000	71-08220-000
--	---	----	--	--	--	---------------------	---------------------

	Type			
---	------	---	--	---

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		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
	28,00x77,00	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	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
	34,00x68,00	Citroen ve Peugeot ile Ortak Motor				

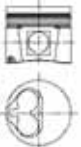




	K=96,00 L=160,00 H=5,00 D=97,00	DS			51-65886-000	
--	--	----	--	--	---------------------	--

	Type				
---	------	---	--	---	---










92,000


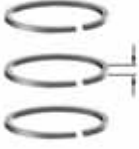
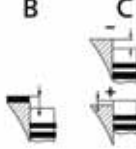

DJ5	Boxer 2.5 D	D	02	1994	>	02	2002	4 Cyl	2446cc	63kW	(86ps)
	11-02131-000 CH 49,740 B- 2,800 TL 79,900		91-09131-000 1 2,250  CrP 2 2,000  P 3 3,000  CrP				+0,40/+0,60		Ø 92,000 Ø 92,500 Ø 92,750 Ø 93,000	31-04131-000 31-04131-050 31-04131-075 31-04131-100	
	34,00x58,00										
	K=96,00 L=160,00 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	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	
	34,00x68,00										

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	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	
	31,00x76,00		99-09389-000 1 2,000  FeP 2 2,000  FeP 3 4,000  TeF							39-04385-000	
Isuzu ve Opel ile Ortak Motor											
	K=95,00 L=181,00 H=0,90 D=101,00	DF-CR-ST							51-35721-000	71-08385-000 71-98385-000	

	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)
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
- 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

	Type				
---	------	---	--	---	---

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	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
	30,00x78,80				
Daf, Ford ve Peugeot ile Ortak Motor					

	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



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)






<p>11-01894-000 CH 57,420 B- 2,000 TL 99,920</p> <p>30,00x78,80</p>	<p>91-09895-000 1 2,000 CrP 2 2,000 P 3 4,000 CrP</p>	<p>Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000</p>	<p>31-03894-000 31-03894-040 31-03894-060 31-03894-100</p>







<p>K=97,05 L=170,60 H=3,90 D=99,50</p>	DS			51-65892-000
<p>K=98,05 L=170,60 H=5,00 D=100,50</p>	DS +1,00			51-65892-100
<p>K=97,05 L=170,60 H=5,00 D=99,50</p>	DS			51-65893-000
<p>K=97,50 L=170,60 H=6,00 D=100,00</p>	DS +0,50			51-65893-050


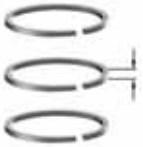
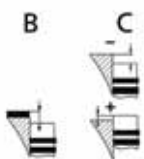

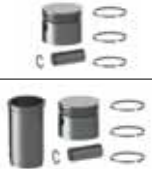
	Type				
---	------	---	--	---	---

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)

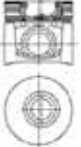




	11-01895-000 CH 53,920 B- 1,750 TL 91,420	91-09895-000 1 2,000  CrP 2 2,000  P 3 4,000  CrP	1,56mm Conta ile 0/+0,84 1,70mm Conta ile 0/+0,84	Ø 94,000 Ø 94,400 Ø 94,600 Ø 95,000	31-03895-000 31-03895-040 31-03895-060 31-03895-100
	30,00x78,80	Daf, Ford ve Peugeot ile Ortak Motor			

	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

	Type				
---	------	---	--	---	---

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	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
	32,00x72,00	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
--	---	----	--	--	--	---------------------

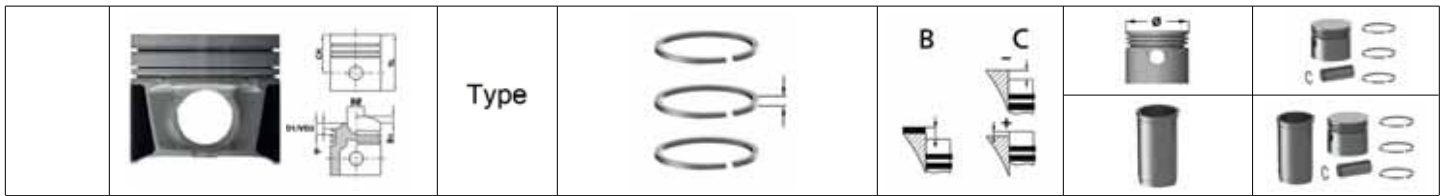
	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50				51-65453-050
---	---	-------------	--	--	--	---------------------

95,800

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	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
	36,00x81,00	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
--	---	----	--	--	--	---------------------








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 Ø 89,360 Ø 89,860	31-03556-000 31-03556-020 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 Ø 89,360 Ø 89,860	31-03557-000 31-03557-020 31-03557-040








69,000	
D7F 700 / 710 / 720 / 722 / 726 / 746 / 766	Clio II 1.2i
D7F 700-704	Twingo 1.2i
D7F 701 / 710 / 720 / 722 / 726 / 746 / 766	Kangoo 1.2i
D7F 730	Clio I 1.2i

 <p>11-02155-000 CH 27,150 TL 50,500</p>  17,50x53,70	<p>91-09150-000</p> <p>1 1,500  CrP</p> <p>2 1,500  P</p> <p>3 2,500  CrP</p>	<p>Ø 69,000</p> <p>Ø 69,250</p> <p>Ø 69,500</p> <p>Ø 70,000</p>	<p>31-04155-000</p> <p>31-04155-025</p> <p>31-04155-050</p> <p>31-04155-100</p>

 <p>K=72,00 L=120,00 H=4,00 D=74,00</p>	DS	51-65934-000
--	----	--------------

69,000	
D4F 740	Clio II
D4F 740	Clio III
D4F 740	Modus
D4F 740	Twingo

 <p>11-02184-000 CH 26,700 B- 1,100 BØ 60,300 TL 44,700</p>  17,50x53,90	<p>91-09151-000</p> <p>1 1,200  CrP St</p> <p>2 1,500  P</p> <p>3 2,500  CrP St</p>	<p>Ø 69,000</p> <p>Ø 69,500</p>	<p>31-04184-000</p> <p>31-04184-050</p>



70,000

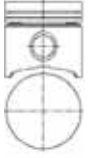




688.01	Estafette 1.1	B 02 1962 > 12 1981	4 Cyl	25kW	(34ps)
688.01 / 11 / 12	R 4 1.1	B 00 1965 >	4 Cyl	25kW	(34ps)
688.10	Rodeo 5 1.1	B 07 1971 > 04 1980	4 Cyl	26kW	(35ps)
688.10 / 12 / 13	R 6 1.1	B 09 1971 > 08 1980	4 Cyl	26-33kW	(35-45ps)
688.13	R 5 1.1	B 10 1979 > 03 1985	4 Cyl	33kW	(45ps)
688.13	R 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)

<p>11-01901-000 CH 40,000 TL 68,000</p> <p>18,00x62,00</p> <p>Daf, Renault ve Volvo ile Ortak Motor</p>	<p>91-09901-000</p> <p>1 1,750 CR</p> <p>2 2,000 P</p> <p>3 3,500 CrP St</p>	<p>Ø 70,000</p> <p>31-03901-000</p>
<p>K=75,50 L=135,00 H=94,85 D=86,00</p>	<p>WF</p>	<p>51-05901-000</p> <p>71-07901-000</p>



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		91-09152-000 1 1,750  CR 2 2,000  P 3 4,000  CR		Ø 71,500	31-04152-000
	20,00x64,00					

	K=78,00 L=134,00 H=94,85 D=87,57	WF			51-05895-000	71-08152-000
--	---	----	--	--	---------------------	---------------------

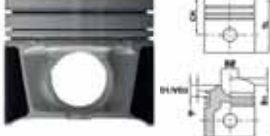
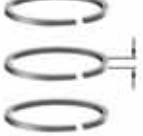
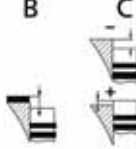

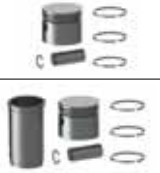
73,000

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		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03902-000
	20,00x62,00					






Dacia, Daf, Renault ve Volvo ile Ortak Motor

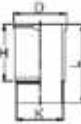
	K=78,50 L=134,00 H=94,85 D=87,65	WF			51-05902-000	71-07902-000
--	---	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

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)
B 7 / 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		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03903-000
	20,00x62,00					
Dacia, Daf, Renault ve Volvo ile Ortak Motor						

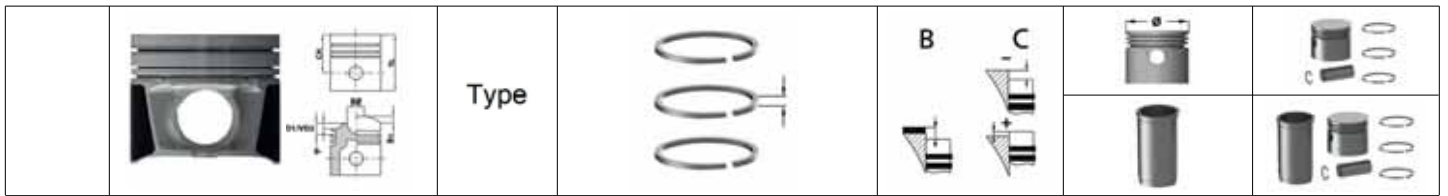
	K=78,50 L=134,00 H=94,85 D=87,65	WF			51-05902-000	71-07903-000
--	---	----	--	--	---------------------	---------------------



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		91-09154-000 1 1,750 CR 2 2,000 P 3 4,000 CR		Ø 75,000	31-04154-000
	19,50x65,00					
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
--	---	----	--	--	---------------------	---------------------



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)

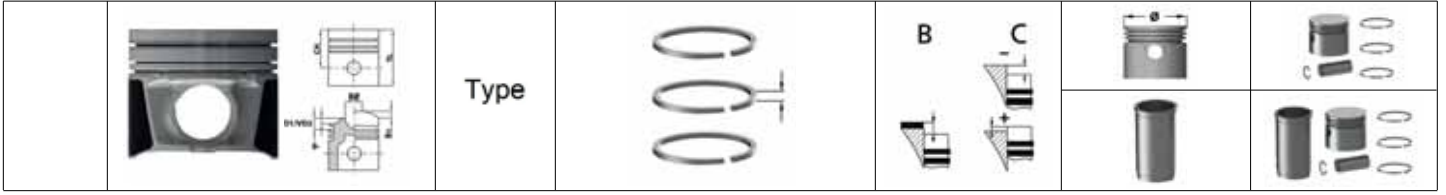
	11-01909-000 CH 31,700 TL 52,600	CP	91-09909-000 1 1,500 CR 2 1,750 3 3,000 CrP St			Ø 75,800	31-03909-000

	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	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	
--	---	----	--	--	--	--------------	--

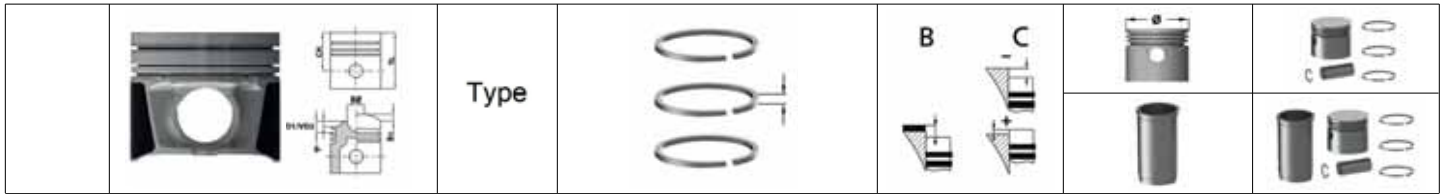


76,000

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)

<p>11-01904-000 CH 37,500 TL 64,000</p> <p>20,00x64,00</p>	<p>91-09904-000</p> <p>1 1,750 CR 2 2,000 P 3 4,000 CrP St</p>	<p>Ø 76,000</p>	<p>31-03904-000</p>
<p>Renault ve Volvo ile Ortak Motor</p>			

<p>K=80,55 L=134,00 H=95,00 D=90,20</p>	<p>WF</p>	<p>51-05904-000</p>	<p>71-07904-000</p>
---	-----------	----------------------------	----------------------------



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)

<p>11-02162-000 CH 41,750 VD1 0,250 VD2 0,400 B- 14,000 BØ 39,700 TL 66,000</p> <p>25,00x60,00</p>	AP	<p>91-09148-000</p> <p>1 2,000 CrP 2 2,000 P 3 2,500 CrP</p>	<p>Ø 76,000 Ø 76,500 Ø 77,000</p>	<p>31-04162-000 31-04162-050 31-04162-100</p>
Dacia, Nissan, Renault, Suzuki ile Ortak Motor				
<p>K=79,10 L=142,00 H=5,00 D=81,00</p>	DS			51-65936-000
<p>K=79,60 L=142,00 H=5,00 D=81,00</p>	DS +0,50			51-65936-050



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)

<p>11-02164-000 CH 41,700 VD1 0,200 B- 13,950 BØ 39,700 TL 66,000</p> <p>26,00x60,00</p>	AP	<p>91-09148-000</p> <p>1 2,000 CkP 2 2,000 P 3 2,500 CrP</p>	(+0,25/+0,30)	<p>Ø 76,000 Ø 76,500 Ø 77,000</p>	<p>31-04164-000 31-04164-050 31-04164-100</p>

<p>K=79,10 L=142,00 H=5,00 D=81,00</p>	DS				51-65936-000
<p>K=79,60 L=142,00 H=5,00 D=81,00</p>	DS +0,50				51-65936-050

76,000									
Strok Boyu 0,20mm Kısa / Stroke Length 0,20mm Shorter					>	Cyl	cc	kW	(ps)
<p>11-02164-001 CH 41,500 VD1 0,200 B- 13,950 BØ 39,700 TL 65,800</p> <p>26,00x60,00</p>	AP	<p>91-09148-000</p> <p>1 2,000 CkP 2 2,000 P 3 2,500 CrP</p>				<p>Ø 76,000 Ø 76,500 Ø 77,000</p>	<p>31-04164-001 31-04164-051 31-04164-101</p>		
								Dacia, Nissan, Renault, Suzuki ile Ortak Motor	

	Type				
---	------	---	--	---	---






76,000

Strok Boyu 0,40mm Kısa
Piston

/ Stroke Length 0,40mm Shorter







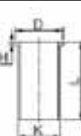
>

(ps)

	11-02164-002 CH 41,300 VD1 0,200 B- 13,950 BØ 39,700 TL 65,600	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	31-04164-002 31-04164-052 31-04164-102
	26,00x60,00	CH -0,40 mm				
Dacia, Nissan, Renault, Suzuki ile Ortak Motor						

76,000

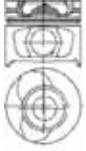




K9K 728 Euro3	Clio II 1.5 DCI	00 2004	>	(100ps)
K9K 728 Euro3	Kango II 1.5 DCI	00 2004	>	(100ps)
K9K 728 Euro3	Megane II 1.5 DCI	00 2004	>	(100ps)
K9K 728 Euro3	Scenic 1.5 DCI	00 2004	>	(100ps)

	11-02175-000 CH 41,700 VD1 0,250 VD2 0,430 B- 14,000 BØ 39,700 TL 66,000	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
	26,00x60,00					
	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	



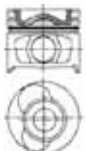




76,000

Strok Boyu 0,20mm Kısa / Stroke Length 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	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
	CH -0,20 mm			

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
--	-------------	--	--------------

	Type				
---	------	---	--	---	---






76,000

Strok Boyu 0,20mm Kisa / Stroke Length 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	AP YS	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
	26,00x60,00	CH -0,20 mm				

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	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
	26,00x60,00					


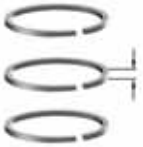

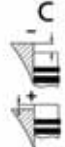

	K=79,10 L=142,00 H=5,00 D=81,00	DS			51-65936-000	
--	--	----	--	--	---------------------	--

	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 / Stroke Length 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	AP YS	91-09148-000 1 2,000  CkP 2 2,000  P 3 2,500  CrP		Ø 76,000	31-04185-001
	26,00x60,00	CH -0,20 mm				

	Type				
---	------	---	--	---	---

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	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
	26,00x60,00				




	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






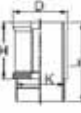
Strok Boyu 0,20mm Kisa / Stroke Length 0,20mm Shorter > Cyl cc kW (ps)

	11-02186-001 CH 41,467 VD1 0,250 VD2 0,430 B- 13,500 BØ 47,000 TL 66,000	AP	91-09148-000 1 2,000  CkP 2 2,000  P 3 2,500  CrP	Ø 76,000	31-04186-001
	26,00x60,00	CH -0,20 mm			

	Type				
					






77,000


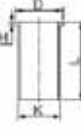
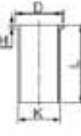
C2L	R 11 Rainbow	00 1985 > 00 1995	(94ps)
C2L	R 21 Optima	00 1985 > 00 1995	(94ps)

	11-02202-000 CH 34,000 B- 1,950 BØ 65,000 TL 60,500		91-09202-000 1 1,750  CR 2 2,000  P 3 4,000  CrP St		Ø 77,000	31-04202-000
	20,00x64,00					
	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		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
	24,00x66,50					
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	

	Type			
---	------	---	--	---

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

91-09906-000

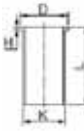
- 1 2,000  CR
- 2 2,000  P
- 3 3,000  CR

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

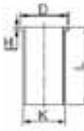
Renault ve Volvo ile Ortak Motor



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

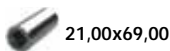
79,000

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



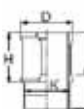
21,00x69,00

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

	Type				
---	------	---	--	---	---

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		91-09156-000 1 1,750  CR 2 2,000  P 3 4,000  CR		Ø 79,000	31-04224-000
	21,00x69,00					






	K=83,95 L=144,00 H=92,60 D=95,90	WF			51-05899-000	71-08224-000
--	---	----	--	--	---------------------	---------------------

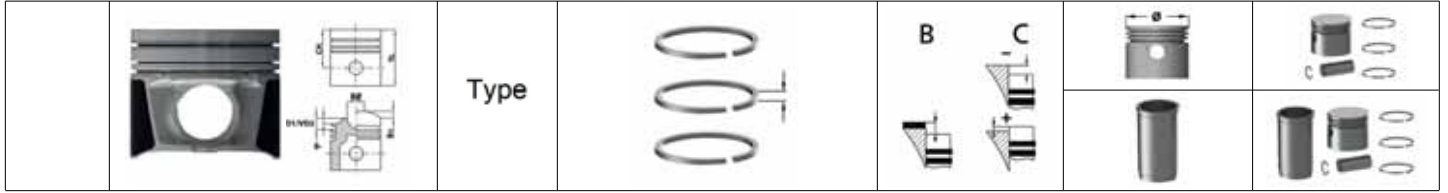
79,500

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	CP	91-09166-000 1 1,500  Mo 2 1,500  Mo 3 2,500  Mo		Ø 79,500 Ø 80,000	31-04166-000 31-04166-050
	19,00x62,00	Cyl.3/4 to be used with 2167 000				

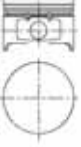




79,500

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	CP	91-09166-000 1 1,500  Mo 2 1,500  Mo 3 2,500  Mo		Ø 79,500 Ø 80,000	31-04167-000 31-04167-050
	19,00x62,00	Cyl.1/2 to be used with 2166 000				



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 31-04169-050
				Ø 80,000	

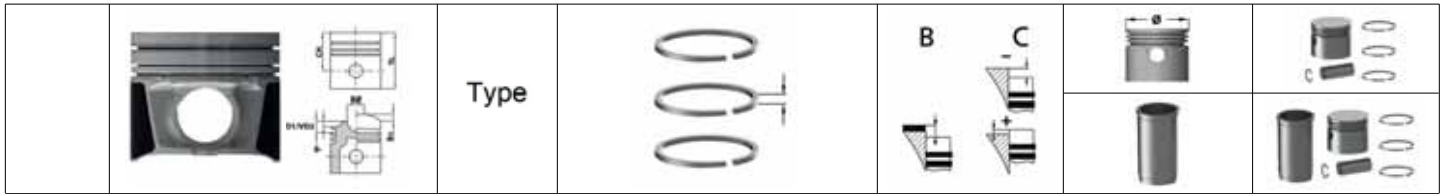
Dacia ve Renault ile Ortak Motor

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 31-04171-025 31-04171-050 31-04171-100
				Ø 79,750	
Ø 80,000					
Ø 80,500					

Dacia, Nissan ve Renault ile Ortak Motor



79,500

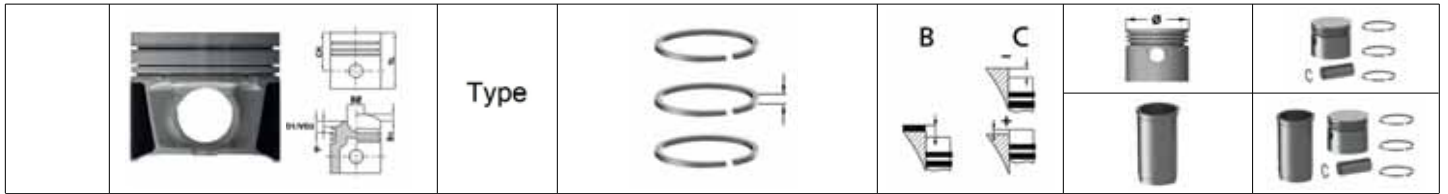
K4M 760	Mégane Grandtour II 1.6i 16V	B	08	2003	>	4 Cyl	1598cc	82-85kW	(110-116ps)
K4M 760	Mégane II 1.6i 16V	B	11	2002	>	4 Cyl	1598cc	82-85kW	(110-116ps)
K4M 760	Scénic II 1.6i 16V	B	05	2003	>	4 Cyl	1598cc	82-85kW	(110-116ps)

<p>11-02174-000 CH 31,700 VD1 4,000 B- 1,500 TL 55,000</p> <p>20,00x62,00</p>	HA	<p>91-09174-000</p> <p>1 1,200 CrP</p> <p>2 1,500 P</p> <p>3 2,500 CrP St</p>			<p>Ø 79,500</p> <p>Ø 80,000</p>	<p>31-04174-000</p> <p>31-04174-050</p>

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)

<p>11-02177-000 CH 37,200 VD1 1,300 VD2 2,100 TL 64,500</p> <p>20,00x62,00</p>		<p>91-09175-000</p> <p>1 1,500 Mo</p> <p>2 1,500 P</p> <p>3 2,500 CrP St</p>			<p>Ø 79,500</p> <p>Ø 80,000</p>	<p>31-04177-000</p> <p>31-04177-050</p>



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						
								DS			51-65903-000	
								DS +0,50			51-65903-050	
								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						
								DS			51-65903-000	
								DS +0,50			51-65903-050	
								DS +1,00			51-65903-100	



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)

<p>11-02165-000 CH 47,100 VD1 0,750 B- 17,700 BØ 38,000 TL 77,000</p> <p>28,00x60,00</p>	AP	<p>91-09165-000</p> <p>1 2,500 Mo</p> <p>2 2,000 CR</p> <p>3 3,000 CR</p>	(+0,60/+0,80)	<p>Ø 80,000</p> <p>Ø 80,500</p> <p>Ø 81,000</p>	<p>31-04165-000</p> <p>31-04165-050</p> <p>31-04165-100</p>

<p>K=83,05 L=154,00 H=5,00 D=85,00</p>	DS			51-65903-000	
<p>K=83,50 L=154,00 H=5,50 D=85,50</p>	DS +0,50			51-65903-050	
<p>K=84,05 L=154,00 H=6,00 D=86,00</p>	DS +1,00			51-65903-100	



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)

<p>11-02170-000 CH 42,500 B- 0,700 TL 70,500</p> <p>24,00x63,00</p>	AP	<p>91-09800-000</p> <p>1 2,000 MoP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>Ø 80,000</p> <p>Ø 80,500</p> <p>Ø 80,800</p>	<p>31-04170-000</p> <p>31-04170-050</p> <p>31-04170-080</p>
	CP			
Dacia, Opel ve Renault ile Ortak Motor				

<p>K=83,05 L=154,00 H=5,00 D=85,00</p>	DS			51-65903-000
<p>K=83,50 L=154,00 H=5,50 D=85,50</p>	DS +0,50			51-65903-050
<p>K=84,05 L=154,00 H=6,00 D=86,00</p>	DS +1,00			51-65903-100



80,000

R9M 402 Euro5	Scenic III 1.6 dCi 16V	D	01	2011	>	4 Cyl	1598cc	96kW	(130ps)
R9M 402 Euro5	Mégane 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)

<p>11-02189-000 CH 46,000 VD1 0,300 VD2 1,160 B- 12,430 BØ 46,400 TL 70,500</p> <p>30,00x60,00</p>	<p>AP YS</p>	<p>91-09147-000 1 2,000 PvD 2 1,750 3 2,000 Nt St</p>	<p>Ø 80,000 Ø 80,500</p>	<p>31-04189-000 31-04189-050</p>

80,000

F9Q 803-804 EURO4	Mégane / Laguna / Scenic 1.9 dci	D	00	1999	>	00	2009	4 Cyl	1870cc	81- 96kW	(110-130ps)
-------------------	----------------------------------	---	----	------	---	----	------	-------	--------	----------	-------------


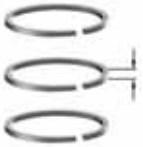
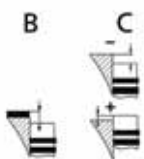

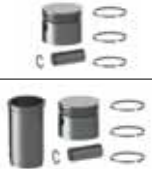
<p>11-02190-000 CH 47,040 VD1 0,750 VD2 0,750 B- 17,800 BØ 40,000 TL 77,000</p> <p>28,00x64,00</p>	<p>AP YS</p>	<p>91-09165-000 1 2,500 Mo 2 2,000 3 3,000 CR</p>	<p>Ø 80,000 Ø 80,500</p>	<p>31-04190-000 31-04190-050</p>

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)






<p>11-02183-000 CH 47,040 VD1 0,750 B- 17,800 BØ 38,000 TL 77,000</p> <p>28,00x60,00</p>	<p>AP YS</p>	<p>91-09165-000 1 2,500 Mo 2 2,000 3 3,000 CR</p>	<p>Ø 80,010 Ø 80,510 Ø 80,760</p>	<p>31-04183-000 31-04183-050 31-04183-075</p>

Nissan ve Renault ile Ortak Motor

	Type				
---	------	---	--	---	---

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)


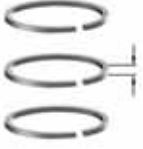
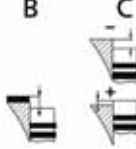


	11-02158-000 CH 44,200 B- 14,260 BØ 60,000 TL 70,200		91-09158-000 1 1,750  CrP 2 2,000  P 3 3,000 		Ø 81,000 Ø 81,250 Ø 81,500	31-04158-000 31-04158-025 31-04158-050
	21,00x65,00	Renault ve Volvo ile Ortak Motor				

	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		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
	21,00x65,00	Renault ve Volvo ile Ortak Motor				
	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	


	Type				
---	------	---	--	---	---

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	Mégane Classic 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 2.0i Turbo 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

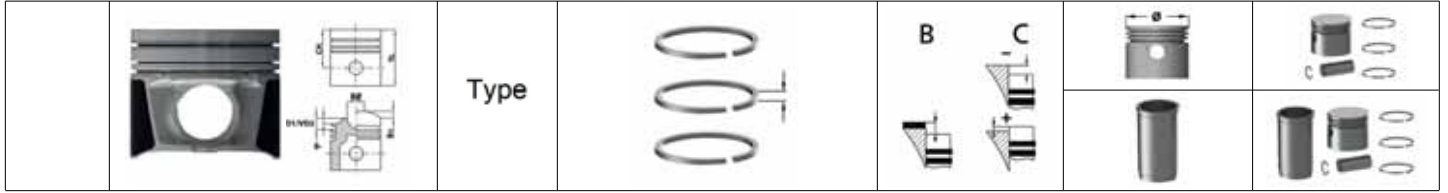
Ø 82,700
Ø 83,200

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








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)

 <p>11-02179-000 CH 35,900 VD1 1,300 B- 0,750 TL 60,650</p>  <p>23,00x61,00</p>	CP	<p>99-09161-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,500  NiP St</p>	<p>Ø 83,000</p> <p>Ø 83,500</p>	<p>39-04179-000</p> <p>39-04179-050</p>

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)






 <p>11-02182-000 CH 47,916 VD1 0,420 VD2 0,460 B- 14,900 BØ 49,070 TL 76,000</p>  <p>32,00x65,00</p>	AP YS	<p>91-09171-000</p> <p>1 2,500  CK</p> <p>2 2,000  P</p> <p>3 2,000  CR</p>	<p>Ø 84,000</p> <p>Ø 84,500</p>	<p>31-04182-000</p> <p>31-04182-050</p>

 <p>K=88,00 L=169,50 H=5,00 D=91,00</p>	DS				51-65782-000
---	----	--	--	--	---------------------

	Type				
---	-------------	---	--	---	---

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	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
Nissan, Opel ve Renault ile Ortak Motor					

	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		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 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	AP	91-09908-000 1 2,500  Mo 2 2,500  3 4,000  CR		Ø 86,000	31-03908-000
 28,00x75,00						
Chrysler ve Renault ile Ortak Motor						

	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	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
 31,00x65,00						
Nissan, Opel ve Renault ile Ortak Motor						

	K=90,00 L=167,00 H=5,00 D=91,50	DS			51-65955-000	
--	--	----	--	--	---------------------	--



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)

<p>11-02188-000 CH 54,530 VD1 1,600 VD2 2,000 B- 17,500 BØ 40,400 TL 84,200</p> <p>31,00x65,00</p>	AP YS	<p>91-09170-000</p> <p>1 3,000 MoP</p> <p>2 1,750 P</p> <p>3 2,500 P</p>	0.06 to 0.4mm	<p>Ø 87,010</p> <p>Ø 87,510</p>	<p>31-04188-000</p> <p>31-04188-050</p>
---	----------	--	---------------	---------------------------------	---

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)

<p>11-02160-000 CH 40,500 B+ 1,500 TL 67,000</p> <p>23,00x75,00</p>		<p>91-09160-000</p> <p>1 1,750 CR</p> <p>2 2,000 P</p> <p>3 4,000 CrP St</p>		<p>Ø 88,000</p>	<p>31-04160-000</p>
--	--	--	--	-----------------	----------------------------

Citroen, Peugeot ve Renault ile Ortak Motor

<p>K=93,60 L=148,50 H=93,06 D=104,00</p>	WF			<p>51-05888-000</p>	<p>71-07097-000</p>
<p>K=93,53 L=140,50 H=93,10 D=104,00</p>	WF			<p>51-05909-000</p>	<p>71-08160-000</p>



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)	

<p>11-02153-000 CH 53,075 VD1 1,500 VD2 2,000 B- 16,130 BØ 48,000 TL 83,090</p> <p>31,00x65,00</p>	AP	<p>91-09149-000 1 3,000 CrP 2 1,750 P 3 2,500 CrP</p>			<p>Ø 89,000 Ø 89,500</p>	<p>31-04153-000 31-04153-050</p>

<p>K=92,50 L=164,00</p>	DS				<p>51-65152-000</p>


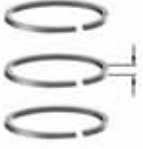
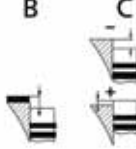

<p>K=92,00 L=168,00 H=5,00 D=93,50</p>	DS				<p>51-65807-000</p>

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)	

<p>11-02159-000 CH 53,030 VD1 1,650 VD2 1,900 B- 17,850 BØ 43,200 TL 83,090</p> <p>31,00x65,00</p>	AP	<p>91-09159-000 1 2,500 MoP 2 1,750 P 3 2,500 CrP</p>		<p>(+0,35/+0,60)</p>	<p>Ø 89,000 Ø 89,500</p>	<p>31-04159-000 31-04159-050</p>

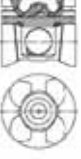




<p>K=92,50 L=164,00</p>	DS				<p>51-65152-000</p>

<p>K=92,00 L=168,00 H=5,00 D=93,50</p>	DS				<p>51-65807-000</p>

	Type			
---	------	---	--	---






89,000




Strok Boyu 0,20mm Kısa / Stroke Length 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	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	31-04159-001 31-04159-051
	31,00x65,00	CH -0,20 mm				
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	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
	32,00x68,00					
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	



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)

<p>11-01685-000 CH 58,750 B- 18,000 BØ 38,000 TL 96,750</p> <p>32,00x78,00</p>	AP	<p>91-09689-000</p> <p>1 3,000 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	Ø 93,000	<p>31-03685-000 31-03685-040 31-03685-060</p>
	PDB		Ø 93,400 Ø 93,600	
Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor				

<p>K=96,00 L=167,00 H=5,00 D=98,90</p>	DS		51-65400-000
<p>K=96,10 L=167,00 H=5,00 D=98,90</p>	DS +0,10		51-65400-010
<p>K=96,20 L=167,00 H=5,00 D=98,90</p>	DS +0,20		51-65400-020
<p>K=96,06 L=171,00 H=5,00 D=98,90</p>	DS		51-65401-000
<p>K=96,50 L=171,00 H=6,00 D=99,40</p>	DS +0,50		51-65401-050



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)

<p>11-01686-000 CH 55,000 B- 2,200 TL 90,000</p> <p>32,00x75,00</p> <p>Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor</p>	AP	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
	HA CP	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
<p>K=96,00 L=167,00 H=5,00 D=98,90</p>	DS			51-65400-000	
<p>K=96,10 L=167,00 H=5,00 D=98,90</p>	DS +0,10			51-65400-010	
<p>K=96,20 L=167,00 H=5,00 D=98,90</p>	DS +0,20			51-65400-020	
<p>K=96,06 L=167,30</p>	DS			51-65452-000	


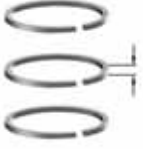
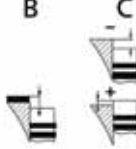







93,000

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)






<p>11-01687-000 CH 58,750 B- 18,400 BØ 38,000 TL 96,750</p> <p>32,00x78,00</p>	<p>AP</p> <p>YS</p> <p>PDB</p>	<p>91-09689-000</p> <p>1 3,000 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>Ø 93,000</p> <p>Ø 93,400</p> <p>Ø 93,600</p>	<p>31-03687-000</p> <p>31-03687-040</p> <p>31-03687-060</p>
	<p>Fiat / Iveco ve Renault ile Ortak Motor</p>			

<p>K=96,00 L=167,00 H=5,00 D=98,90</p>	DS			51-65400-000
<p>K=96,10 L=167,00 H=5,00 D=98,90</p>	DS +0,10			51-65400-010
<p>K=96,20 L=167,00 H=5,00 D=98,90</p>	DS +0,20			51-65400-020
<p>K=96,06 L=171,00 H=5,00 D=98,90</p>	DS			51-65401-000
<p>K=96,50 L=171,00 H=6,00 D=99,40</p>	DS +0,50			51-65401-050

	Type		 		
					

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	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	31-03688-000 31-03688-040 31-03688-060
	32,00x75,20	CP				
Alfa Romeo, Fiat / Iveco ve Renault ile Ortak Motor						

	K=96,06 L=171,00 H=5,00 D=98,90	DS			51-65401-000	
--	--	----	--	--	---------------------	--

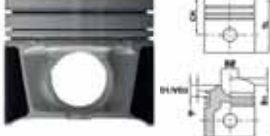
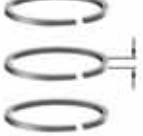
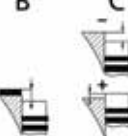


	K=96,50 L=171,00 H=6,00 D=99,40	DS +0,50			51-65401-050	
---	--	-------------	--	--	---------------------	--



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)

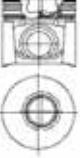




	<p>11-01690-000 CH 58,750 B- 19,450 BØ 39,300 TL 96,750</p>	<p>AP YS</p>	<p>91-09690-000</p>			<p>1,20mm conta ile (+0,40/+0,50) 1,30mm conta ile (+0,51/+0,60) 1,40mm conta ile (+0,61/+0,70) 1,50mm conta ile (+0,71/+0,80)</p>	<p>Ø 94,400 Ø 94,800 Ø 95,000</p>	<p>31-03690-000 31-03690-040 31-03690-060</p>
			<p>1 3,000 CR</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>					
<p>Fiat / Iveco, Opel ve Renault ile Ortak Motor</p>								

	<p>K=97,50 L=167,00 H=5,10 D=100,90</p>	<p>DS</p>			<p>51-65453-000</p>
	<p>K=98,00 L=167,00 H=6,00 D=101,35</p>	<p>DS +0,50</p>			<p>51-65453-050</p>

	Type				
---	-------------	---	--	---	---


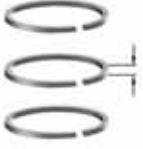
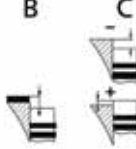

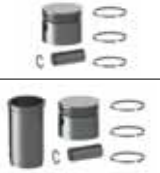
94,400

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	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
	32,00x72,00	Fiat / Iveco, Opel ve Renault ile Ortak Motor				

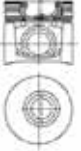




	K=97,50 L=167,00 H=5,10 D=100,90	DS			51-65453-000	
---	---	----	--	--	---------------------	--

	K=98,00 L=167,00 H=6,00 D=101,35	DS +0,50			51-65453-050	
--	---	-------------	--	--	---------------------	--

	Type				
---	------	---	--	---	---

94,400

8140.43S.2585 Euro2 Mascott 130 D 10 2001 > 07 2004 4 Cyl 2798cc 92 kW (125 ps)

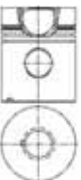




	11-01692-000 CH 58,750 B- 21,350 BØ 39,300 TL 87,600	AP YS	91-09691-000 1 2,500  CR 2 2,000  P 3 2,500  CrP	1,20 Conta ile +0,40/+0,50 1,30 Conta ile +0,51/+0,60 1,40 Conta ile +0,61/+0,70 1,50 Conta ile +0,71/+0,80	Ø 94,400 Ø 94,800 Ø 95,000	31-03692-000 31-03692-040 31-03692-060
	32,00x72,00	Citroen, 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	
---	---	-------------	--	--	---------------------	--

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	AP	91-09942-000 1 3,000  MoP 2 2,500  P 3 5,000  CrP		Ø 102,000	31-03943-000
	36,00x86,00	Man, Renault, Renault Trucks (RVI) ve Saviem ile Ortak Motor				






	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
--	---	----	--	--	---------------------	---------------------

	Type			
---	------	---	--	---

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 vI 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		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
	18,00x52,60					

	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 Kısa / Stroke Length 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		91-09544-000 1 1,000  CrP St 2 1,200  P 3 2,000  CrP St		Ø 80,000	31-03544-001
	18,00x52,60	CH -0,20 mm				

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	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
	27,00x63,00					



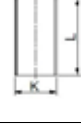
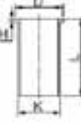

Bmw, Opel ve Rover ile Ortak Motor


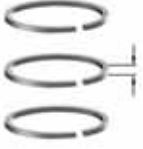
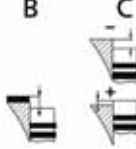





	Type			
---	------	---	--	---

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		91-09879-000 1 2,000  CR 2 2,000  CR 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
	25,00x72,00					
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

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

84,000

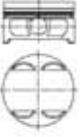




M57D30 Range Rover III 3.0 Td6 D 03 2002 > 6 Cyl 2926cc 135kW (184ps)

	<p>11-02615-000 CH 47,000 VD1 1,360 B- 16,500 BØ 41,550 TL 71,000</p>  <p>30,00x68,00</p>	<p>AP YS</p>	<p>91-09606-000 1 3,000  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1. Kertik conta ile +0,80/+0,90 2. Kertik conta ile +0,90/+1,00</p>	<p>Ø 84,000 Ø 84,250 Ø 84,500</p>	<p>31-04615-000 31-04615-025 31-04615-050</p>

	<p>K=87,00 L=149,00 H=6,00 D=88,50</p>	<p>DS</p>			<p>51-65158-000</p>	
--	--	-----------	--	--	----------------------------	--

92,000






M62 B44 Range Rover III 4.4i B 09 2002 > 8 Cyl 4395cc 210kW (286ps)

	<p>11-02611-000 CH 31,300 VD1 2,700 TL 53,300</p>  <p>22,00x60,00</p>	<p>HA</p>	<p>91-09611-000 1 1,500  CR 2 1,500  P 3 2,000  CR</p>		<p>Ø 92,000 Ø 92,250 Ø 92,500</p>	<p>31-04611-000 31-04611-025 31-04611-050</p>

	Type				
---	------	---	--	---	---

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	HA	91-09216-000 1 1,200  NT St 2 1,200  P 3 2,000  NiP St		Ø 79,000 Ø 79,500	31-03912-000 31-03912-050
	19,00x53,00					
Opel ve Saab ile Ortak Motor						

	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		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
	18,00x55,00					
Opel ve Saab ile Ortak Motor						

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		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
	21,00x56,00					
Opel ve Saab ile Ortak Motor						



82,000












Z19 DT 9-3 1.9 TiD 16V D 09 2004 > 4 Cyl 1910cc 88kW (120ps)

 <p>11-02281-000 CH 46,500 VD1 0,500 B- 17,500 BØ 37,500 TL 72,500</p>  <p>26,00x61,00</p> <p>Alfa Romeo, Fiat / Iveco, Lancia, Opel, Saab ve Suzuki ile Ortak Motor</p>	AP	<p>91-09399-000</p> <p>1 2,000  CkP</p> <p>2 2,000  P</p> <p>3 2,000  NT St</p>	<p>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)</p>	<p>Ø 82,000 Ø 82,400 Ø 82,600</p>	<p>31-04281-000 31-04281-040 31-04281-060</p>
	PDB				

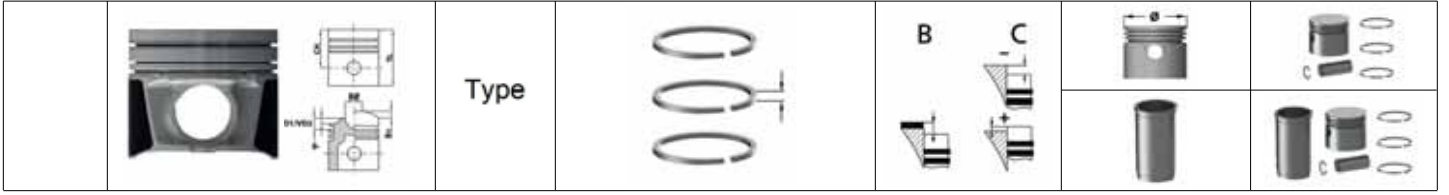
 <p>K=85,00 L=155,00 H=5,00 D=86,00</p>	DS			51-65268-000	
---	----	--	--	---------------------	--

83,000

A 20 DTH 9-5 II 2.0 TiD 16V D 09 2010 > 4 Cyl 1956cc 118kW (160ps)

 <p>11-02197-000 CH 46,630 VD1 1,170 VD2 1,220 B- 15,800 BØ 43,500 TL 72,630</p>  <p>29,98x67,00</p> <p>Alfa Romeo, Fiat / Iveco, Jeep, Lancia, Nissan, Opel ve Saab ile Ortak Motor</p>	AP YS	<p>91-09790-000</p> <p>1 1,500  CkP</p> <p>2 1,500  P</p> <p>3 2,000  NT St</p>	<p>0,95mm conta ile (0,11/0,23) 1,02mm conta ile (0,24/0,33) 1,15mm conta ile (0,34/0,43)</p>	<p>Ø 83,000 Ø 83,400</p>	<p>31-04197-000 31-04197-040</p>		
		<p>98-09790-000</p> <p>1 1,500  CrP St</p> <p>2 1,500  P</p> <p>3 2,000  CR St</p>					<p>38-04197-000 38-04197-040</p>
		<p>99-09790-000</p> <p>1 1,500  NtPvD St</p> <p>2 1,500  P</p> <p>3 2,000  NT St</p>					<p>39-04197-000</p>

 <p>K=86,00 L=155,00 H=5,00 D=87,50</p>	DS			51-65778-000	
---	----	--	--	---------------------	--



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

	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)


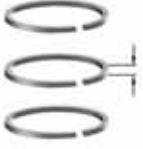
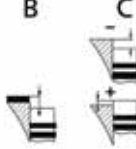

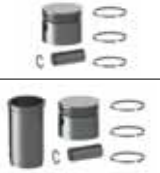
	11-01390-000 CH 30,750 TL 61,250	91-09390-000 1 1,750  CrP 2 2,000  P 3 3,947  CrP		Ø 65,000 Ø 65,200 Ø 65,400 Ø 65,600 Ø 65,800	31-03390-000 31-03390-020 31-03390-040 31-03390-060 31-03390-080
	20,00x54,00				
Fiat / Iveco, Lada ve Seat ile Ortak Motor					

	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	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
	17,00x48,00	AA=20,25 mm			
Seat ve Volkswagen ile Ortak Motor					

	Type				
---	------	---	--	---	---







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	HA	91-09106-000 1 1,200  Nt St 2 1,200  CrP 3 2,000  NiP St	\varnothing 71,010 \varnothing 71,260 \varnothing 71,510	31-03959-000 31-03959-025 31-03959-050
	 19,00x42,00				
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	CP	91-09299-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	\varnothing 75,010 \varnothing 75,260 \varnothing 75,510 \varnothing 75,760	31-03299-000 31-03299-025 31-03299-050 31-03299-075
	 20,00x54,00				
Seat ve Volkswagen ile Ortak Motor					

	K=78,00 L=133,00 H=4,50 D=81,00	DS		51-65277-000	
--	--	----	--	---------------------	--

76,500

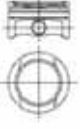




CFNA	Toledo 1.6 MPI	B 07 2012 >	4 Cyl	1598cc	77kW	(105ps)
------	----------------	-------------	-------	--------	------	---------

	11-02339-000 CH 29,300 VD1 2,760 B- 4,130 BØ 64,350 TL 47,200	HA	99-09313-000 1 1,200  NT St 2 1,200  NT St 3 2,000  NiP St	\varnothing 76,500	39-04339-000
	 17,00x45,80				
Seat, Skoda ve Volkswagen ile Ortak Motor					








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)

 <p>11-01282-000 CH 28,920 B- 2,280 TL 47,920</p>  <p>17,00x46,00</p>	HA	<p>99-09313-000</p> <p>1 1,200  NT St</p> <p>2 1,200  NT St</p> <p>3 2,000  NiP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>39-03282-000 39-03282-050</p>
		<p>Seat, Skoda ve Volkswagen ile Ortak Motor</p>		






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)

 <p>11-01284-000 CH 29,200 VD1 0,800 VD2 3,580 B+ 2,000 B- 4,600 TL 50,210</p>  <p>19,00x52,00</p>	HA	<p>91-09313-000</p> <p>1 1,200  NT St</p> <p>2 1,200  NT St</p> <p>3 2,000  NiP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>31-03284-000 31-03284-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		

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)

 <p>11-01287-000 CH 28,970 B+ 2,000 B- 4,570 TL 49,970</p>  <p>19,00x54,00</p>	AP	<p>99-09326-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  NiP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>39-03287-000 39-03287-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		

	Type				
---	------	---	--	---	---






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	CP	91-09300-000 1 1,500  CR St 2 1,500  P 3 2,500  CrP St		Ø 76,510 Ø 76,760 Ø 77,010 Ø 77,260 Ø 77,510	31-03300-000 31-03300-025 31-03300-050 31-03300-075 31-03300-100
	17,00x52,00					
Seat ve Volkswagen ile Ortak Motor						

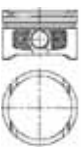




76,510


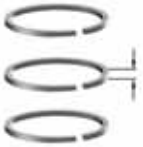
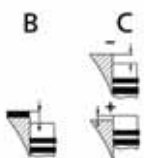

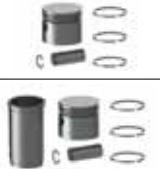
AFH / AQQ / AUB / BBZ	Cordoba 1.4i 16V	B	06 1997	> 06 1999	4 Cyl	1390cc	74kW	(101ps)
AFH / AQQ / AUB / BBZ	Ibiza 1.4i 16V	B	06 1997	> 06 1999	4 Cyl	1390cc	74kW	(101ps)
AFK / AQQ / AUB	Arosa 1.4i 16V	B	02 2000	> 09 2000	4 Cyl	1390cc	74kW	(101ps)
AHW / APE / AUA / AXP / BCA	Leon 1.4i 16V	B	01 2000	> 06 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	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
	17,00x54,00					
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	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
	17,00x54,00					
Seat ve Volkswagen ile Ortak Motor						

	Type				
---	-------------	---	--	---	---

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	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
	 17,00x51,85				
Seat, Skoda ve Volkswagen ile Ortak Motor					

	K=79,50 L=142,00 H=4,70 D=82,50	DS		51-65313-000	
---	--	----	--	---------------------	--

79,500

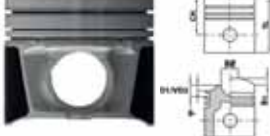
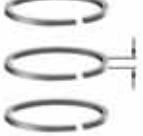






AMF	Arosa 1.4 TDI	D	10	1999	>	06	2004	3 Cyl	1422cc	55kW	(75ps)
AMF	Cordoba 1.4 TDI	D	10	2002	>			3 Cyl	1422cc	55kW	(75ps)
AMF	Ibiza 1.4 TDI	D	05	2002	>	12	2005	3 Cyl	1422cc	55kW	(75ps)

	11-02311-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800	AP PDB	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
	 26,00x63,00	Cyl.1/2 to be used with 2312 000				
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor						






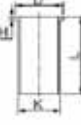
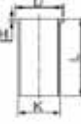

	K=82,57 L=151,80 H=4,70 D=85,40	DS			51-65303-000	
--	--	----	--	--	---------------------	--

	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
--	--	-----------------	--	--	---------------------	--

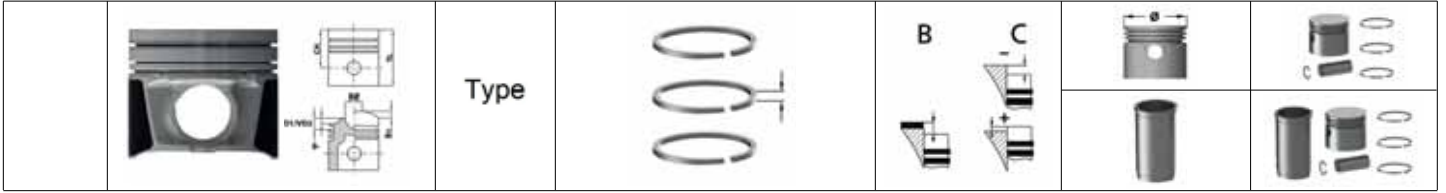
	K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			51-65303-100	
--	--	-----------------	--	--	---------------------	--

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,500

Silindir 3 de Kullanılacak / To Cylinder 3				>	Cyl	cc	kW	(ps)
 <p>11-02312-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800</p>  <p>26,00x63,00</p>	<p>AP</p> <p>PDB</p> <p>Cyl.3 to be used with 2311 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03</p>		<p>Ø 79,500</p> <p>Ø 80,000</p>	<p>31-04312-000</p> <p>31-04312-050</p>		
 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>				<p>51-65303-000</p>			
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS</p> <p>+0,50</p>				<p>51-65303-050</p>			
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS</p> <p>+1,00</p>				<p>51-65303-100</p>			

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor



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



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)

<p>11-01302-000 CH 45,650 B- 1,900 TL 71,700</p> <p>26,00x66,00</p>	AP	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1. Centik 1,53mm (+0,66/+0,86) 2. Centik (1,57mm +0,87/+0,90) 3. Centik 1,61mm (+0,91/+1,02)</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p> <p>Ø 80,510</p>	<p>31-03302-000</p> <p>31-03302-025</p> <p>31-03302-050</p> <p>31-03302-100</p>
	HA				
Audi, Seat ve Volkswagen ile Ortak Motor					

<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	


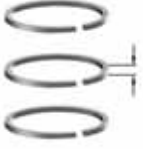
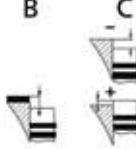



79,510

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)






<p>11-01309-000 CH 39,650 B- 1,900 TL 65,650</p> <p>24,00x64,00</p>	AP	<p>91-09309-000</p> <p>1 1,750 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>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)</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-03309-000 31-03309-025 31-03309-050 31-03309-100</p>
	CP				
<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>					

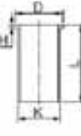


<p>K=82,50 L=155,00 H=5,10 D=85,60</p>	DS			51-65157-000	
<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	

	Type			
---	------	---	--	---

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	AP	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
	26,00x66,00	PDB				
Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor		Cyl.1/2 to be used with 2302 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	



79,510

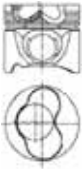




Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

 <p>11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP</p> <p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p> <p>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)</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-04302-000 31-04302-025 31-04302-050 31-04302-100</p>
	<p>PDB</p> <p>Cyl.3/4 to be used with 2301 000</p>		

 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>	<p>51-65303-000</p>	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>	<p>51-65303-050</p>	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>	<p>51-65303-100</p>	






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)

 <p>11-02305-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP</p> <p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-04305-000 31-04305-025 31-04305-050 31-04305-100</p>
	<p>Cyl.1/2 to be used with 2306 000</p>		








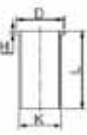
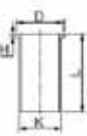

79,510


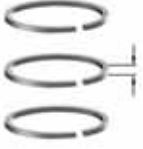
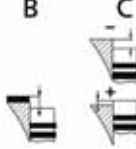





Silindir 3 / 4 de Kullanılacak / To Cylinder 3 / 4	>	Cyl	cc	kW	(ps)
 <p>11-02306-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800</p> <p> 26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	AP	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>		<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p> <p>Ø 80,510</p>	<p>31-04306-000</p> <p>31-04306-025</p> <p>31-04306-050</p> <p>31-04306-100</p>

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)







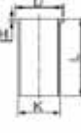
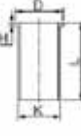
 <p>11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p> <p> 26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP</p> <p>YS</p> <p>PDB</p> <p>Cyl. 1/2 to be used with 2314 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00</p> <p>1,53mm +1,01/+1,10</p> <p>1,61mm +1,11/+1,20</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p>	<p>31-04313-000</p> <p>31-04313-025</p> <p>31-04313-050</p>
--	---	---	---	---	--

 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS	+0,50		51-65303-050	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS	+1,00		51-65303-100	

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

 <p>11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>PDB</p> <p>Cyl. 3/4 to be used with 2313 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04314-000 31-04314-025 31-04314-050</p>
 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	


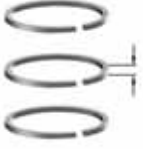
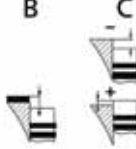




79,510

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)






<p>11-02319-000 CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800</p> <p>26,00x66,00</p>	<p>AP</p> <p>YS</p> <p>PDB</p> <p>Cyl. 1/2 to be used with 2320 000</p>	<p>91-09309-000</p> <p>1 1,750 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p>	<p>31-04319-000</p> <p>31-04319-025</p> <p>31-04319-050</p>
	<p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000
<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050
<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100

	Type				
---	------	---	--	---	---

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	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
 26,00x66,00		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	
--	--	-------------	--	--	---------------------	--

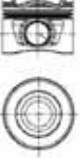










81,000






CRLB Leon 2.0 TDI 12 2013 > (150ps)

	11-01283-000 CH 45,810 B- 12,900 BØ 50,900 TL 68,800	AP YS PDB	91-09628-000 1 1,750  CK 2 2,000  P 3 2,000  CR		Ø 81,000	31-03283-000
 26,00x66,00		Audi, Seat ve Volkswagen ile Ortak Motor				



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)

 <p>11-02344-000 CH 45,800 B- 13,100 BØ 50,880 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>PDB</p>	<p>91-09298-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)</p>	<p>Ø 81,000 Ø 81,500</p>	<p>31-04344-000 31-04344-050</p>
		<p>98-09298-000</p> <p>1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>			<p>38-04344-000 38-04344-050</p>
		<p>99-09298-000</p> <p>1 1,750  CrP St 2 2,000  Fe 3 3,000  CR</p>			<p>39-04344-000 39-04344-050</p>

81,010									
AJH / AWC	Alhambra 1.8i Turbo 20V	B	05	1998	> 02 2000	4 Cyl	1751cc	110kW	(150ps)
 <p>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</p> <p>* For Oversize Piston Dimensions</p>  <p>20,00x59,00</p> <p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		<p>91-09296-000</p> <p>1 1,500  MoP 2 1,750  P 3 2,000  CR</p>		<p>Ø 81,010 Ø 81,260 Ø 81,510</p>	<p>31-03296-000 31-03296-025 31-03296-050</p>				



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)

<p>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</p> <p>* For Oversize Piston Dimensions</p> <p>20,00x57,00</p>	<p>91-09307-000</p> <p>1 1,500 CrP 2 1,750 P 3 3,000 CrP</p>	<p>CP</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010</p>	<p>31-03307-000 31-03307-025 31-03307-050 31-03307-100</p>

<p>K=84,00 L=146,00 H=4,70 D=86,00</p>	<p>DS</p>	<p>51-65307-000</p>
---	-----------	---------------------

<p>K=84,50 L=146,00 H=6,00 D=86,50</p>	<p>DS +0,50</p>	<p>51-65307-050</p>
---	--------------------------------------	---------------------



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)

<p>11-01308-000 CH 35,600 B+ 2,200 B- 2,300 BØ 62,600 TL 66,800</p> <p>*CH 35,300 *B+ 2,200 *B- 2,300 *BØ 62,600 *TL 66,500</p> <p>* For Oversize Piston Dimensions 20,00x57,00</p>	CP	<p>91-09307-000 1 1,500 CrP 2 1,750 P 3 3,000 CrP</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510 Ø 81,760 Ø 82,010</p>	<p>31-03308-000 31-03308-025 31-03308-050 31-03308-075 31-03308-100</p>

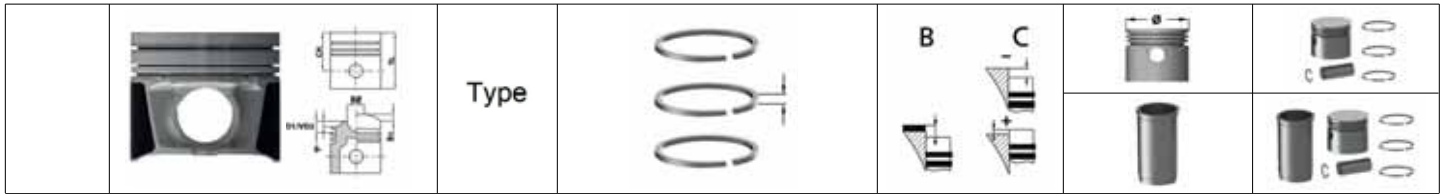
<p>K=84,00 L=146,00 H=4,70 D=86,00</p>	DS			51-65307-000
--	----	--	--	---------------------

<p>K=84,50 L=146,00 H=6,00 D=86,50</p>	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)

<p>11-02298-000 CH 45,800 B- 17,800 BØ 38,000 TL 68,800</p> <p>26,00x66,00</p> <p>Audi, Mitsubishi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	AP YS PDB	<p>91-09298-000 1 1,750 CrP 2 2,000 P 3 3,000 CrP</p>	<p>1,55mm conta ile (0,91/1,00) 1,63mm conta ile (1,01/1,10) 1,71mm conta ile (1,11/1,20)</p>	<p>Ø 81,010 Ø 81,510</p>	<p>31-04298-000 31-04298-050</p>		
						<p>98-09298-000 1 1,750 CrP St 2 2,000 P 3 3,000 CrP</p>	<p>38-04298-000 38-04298-050</p>
						<p>99-09298-000 1 1,750 CrP St 2 2,000 Fe 3 3,000 CR</p>	<p>39-04298-000 39-04298-050</p>








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)

 <p>11-02299-000 CH 32,700 B- 1,900 BØ 68,000 TL 53,700</p>  <p>19,00x50,00</p>	HA	<p>91-09296-000</p> <p>1 1,500  MoP</p> <p>2 1,750  P</p> <p>3 2,000  CR</p>		<p>Ø 81,010</p> <p>Ø 81,260</p> <p>Ø 81,510</p>	<p>31-04299-000</p> <p>31-04299-025</p> <p>31-04299-050</p>

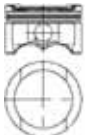







81,010

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)

 <p>11-02307-000 CH 32,700 VD1 0,700 B- 2,300 BØ 61,400 TL 53,700</p> <p>*CH 32,400 *VD1 0,700 *B- 2,300 *BØ 61,400 *TL 53,400</p> <p>* For Oversize Piston Dimensions</p>  <p>20,00x57,00</p>		<p>91-09107-000</p> <p>1 1,200  CR St</p> <p>2 1,500  P</p> <p>3 2,000  CrP St</p>	+0,700/+0,900	<p>Ø 81,010</p> <p>Ø 81,260</p> <p>Ø 81,510</p> <p>Ø 82,010</p>	<p>31-04307-000</p> <p>31-04307-025</p> <p>31-04307-050</p> <p>31-04307-100</p>

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)

 <p>11-02316-000 CH 29,780 VD1 0,700 B- 2,700 BØ 62,300 TL 50,700</p>  <p>19,00x42,00</p>		<p>91-09303-000</p> <p>1 1,000  CR</p> <p>2 1,200  P</p> <p>3 2,000  CrP St</p>	+0,60/+0,65	<p>Ø 81,010</p> <p>Ø 81,510</p> <p>Ø 82,010</p>	<p>31-04316-000</p> <p>31-04316-050</p> <p>31-04316-100</p>
		<p>99-09303-000</p> <p>1 1,000  CR</p> <p>2 1,200  P</p> <p>3 2,000  CrP St</p>			
<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>					



81,010






AMK Leon 1.8i Cupra R 20V B 05 2002 > 05 2003 4 Cyl 1781cc 154kW (210ps)

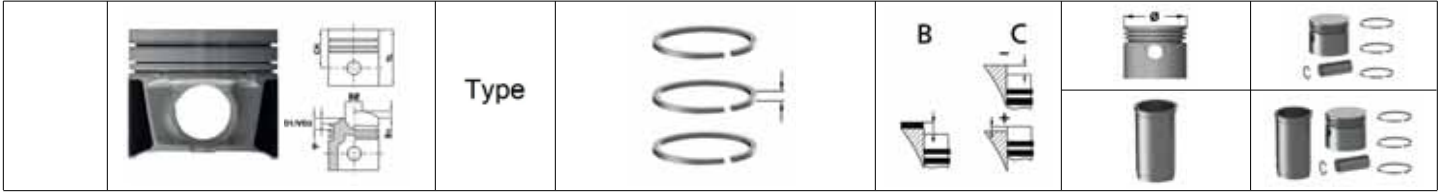
 <p>11-02329-000 CH 32,700 B- 2,100 BØ 70,300 TL 53,700</p>  <p>20,00x62,00</p>	HA	<p>91-09294-000</p> <p>1 1,500  CR</p> <p>2 1,750  P</p> <p>3 2,000  CR St</p>	<p>Ø 81,010</p> <p>Ø 81,510</p>	<p>31-04329-000</p> <p>31-04329-050</p>
		<p>99-09294-000</p> <p>1 1,500  CrP St</p> <p>2 1,750  Fe</p> <p>3 2,000  NiP St</p>		

81,010

AGN Leon 1.8i 20V B 11 1999 > 12 2003 4 Cyl 1781cc 92kW (125ps)

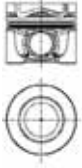
AGN Toledo 1.8i 20V B 10 1998 > 12 2003 4 Cyl 1781cc 92kW (125ps)

 <p>11-02336-000 CH 32,550 *CH 32,250 VD1 3,600 *VD1 3,600 TL 56,550 *TL 56,250</p> <p>* For Oversize Piston Dimensions</p>  <p>20,00x59,00</p>		<p>91-09296-000</p> <p>1 1,500  MoP</p> <p>2 1,750  P</p> <p>3 2,000  CR</p>	<p>1.Conta ile +0.80/+0.90 2.Conta ile +0.90/+1.00 3.Conta ile +1.00/+1.10</p> <p>Ø 81,010</p> <p>Ø 81,510</p>	<p>31-04336-000</p> <p>31-04336-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		



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  CrP
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

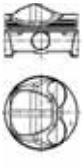
99-09298-000

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  NiP St

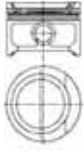
Ø 82,510
Ø 83,010

31-03285-000
31-03285-050

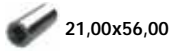
		Type				
---	---	------	---	--	---	---



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



91-09311-000
1 1,200  NT St
2 1,500  P
3 2,000  NiP St

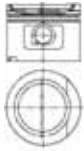
Ø 82,510
Ø 83,010
Ø 83,510

31-03303-000
31-03303-050
31-03303-100

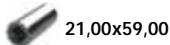
Audi ve Seat ile Ortak Motor

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



CP

91-09311-000
1 1,200  NT St
2 1,500  P
3 2,000  NiP St

Ø 82,510
Ø 83,010
Ø 83,510

31-03311-000
31-03311-050
31-03311-100

Audi, Seat ve Volkswagen ile Ortak Motor

82,510

CDA	Alhambra 1.8i TFSI	B 11 2012 >	4 Cyl	1798cc	118kW	(160ps)
CDA	Altea 1.8 TSFI 16V	B 03 2009 >	4 Cyl	1798cc	118kW	(160ps)
CDA	Leon 1.8 TFSI 16V	B 05 2008 > 07 2012	4 Cyl	1798cc	118kW	(160ps)
CDA	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



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

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)

 <p>11-02342-000 CH 29,800 B+ 4,750 B- 6,000 BØ 67,000 TL 55,980</p>  <p>21,00x53,00</p>	AP	<p>91-09329-000</p> <p>1 1,200  CrP St</p> <p>2 1,500  P</p> <p>3 2,000  CR St</p>	<p>Ø 82,510</p> <p>Ø 82,765</p> <p>Ø 83,015</p>	<p>31-04342-000</p> <p>31-04342-025</p> <p>31-04342-050</p>






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)

 <p>11-02343-000 CH 29,600 VD1 3,000 B- 6,200 BØ 50,000 TL 50,100</p>  <p>21,00x56,00</p>	AP	<p>91-09329-000</p> <p>1 1,200  CrP St</p> <p>2 1,500  P</p> <p>3 2,000  CR St</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p>	<p>31-04343-000</p> <p>31-04343-025</p> <p>31-04343-050</p>

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)

 <p>11-02587-000 CH 29,600 VD1 3,500 B- 6,200 TL 50,100</p>  <p>23,00x53,00</p>	AP	<p>99-09327-000</p> <p>1 1,200  NT St</p> <p>2 1,200  St</p> <p>3 2,000  CR</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>31-04587-000</p> <p>31-04587-050</p>

	Type				
---	------	---	--	---	---

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	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
 22,00x69,00						
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	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
 22,00x69,00						
Fiat / Iveco, Lancia ve Seat ile Ortak Motor						

	Type			
---	-------------	---	--	---

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	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
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

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	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








93,000
 8144.61.200 131 2.4 D D 00 1981 > 00 1985 4 Cyl 2445cc 53kW (72ps)

<p>11-01686-000 CH 55,000 B- 2,200 TL 90,000</p> <p>32,00x75,00</p> <p>Alfa Romeo, Fiat / Iveco, Renault ve Seat ile Ortak Motor</p>	<p>AP</p> <p>HA</p> <p>CP</p>	<p>91-09686-000</p> <p>1 3,000 CR</p> <p>2 2,000 P</p> <p>3 4,000 CR</p> <hr/> <p>98-09686-000</p> <p>1 3,000 CrP</p> <p>2 2,000 P</p> <p>3 4,000 CrP</p> <hr/> <p>99-09686-000</p> <p>1 3,000 CR St</p> <p>2 2,000 Fe</p> <p>3 4,000 CR</p>		<p>Ø 93,000</p> <p>Ø 93,400</p> <p>Ø 93,600</p>	<p>31-03686-000</p> <p>31-03686-040</p> <p>31-03686-060</p> <hr/> <p>38-03686-000</p> <p>38-03686-040</p> <p>38-03686-060</p> <hr/> <p>39-03686-000</p> <p>39-03686-040</p> <p>39-03686-060</p>
<p>K=96,00 L=167,00 H=5,00 D=98,90</p>	<p>DS</p>			<p>51-65400-000</p>	
<p>K=96,10 L=167,00 H=5,00 D=98,90</p>	<p>DS</p> <p>+0,10</p>			<p>51-65400-010</p>	
<p>K=96,20 L=167,00 H=5,00 D=98,90</p>	<p>DS</p> <p>+0,20</p>			<p>51-65400-020</p>	
<p>K=96,06 L=167,30</p>	<p>DS</p>			<p>51-65452-000</p>	

	Type				
---	------	---	--	---	---







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	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
	19,00x42,00	Audi, Seat, Skoda ve Volkswagen ile Ortak Motor				






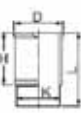
75,500

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	CP	91-09953-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP St		Ø 75,500	31-03952-000
	20,00x54,00					
	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	CP	91-09953-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP St		Ø 75,500	31-03953-000
	20,00x54,00					
	K=79,95 L=135,00 H=95,10 D=87,95	WF			51-05952-000	71-07953-000

	Type				
---	------	---	--	---	---

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		91-09953-000 1 1,500  CrP 2 1,500  P 3 3,000  CrP St		Ø 75,500	31-03955-000
	17,00x52,00					

	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	HA	99-09313-000		Ø 76,500	39-04339-000
	17,00x45,80					
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	HA	99-09313-000		Ø 76,510 Ø 77,010	39-03282-000 39-03282-050
	17,00x46,00					
Seat, Skoda ve Volkswagen ile Ortak Motor						



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)

<p>11-01284-000 CH 29,200 VD1 0,800 VD2 3,580 B+ 2,000 B- 4,600 TL 50,210</p> <p>19,00x52,00</p>	HA	91-09313-000		<p>1 1,200 NT St</p> <p>2 1,200 NT St</p> <p>3 2,000 NiP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>31-03284-000</p> <p>31-03284-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

76,510


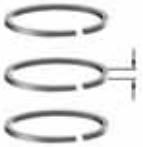
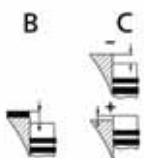


CTHE / CAVE	Fabia 1.4 TSI RS 16V	B	03	2010	>			4 Cyl	1390cc	132kW	(180ps)
-------------	----------------------	---	----	------	---	--	--	-------	--------	-------	---------

<p>11-01287-000 CH 28,970 B+ 2,000 B- 4,570 TL 49,970</p> <p>19,00x54,00</p>	AP	99-09326-000		<p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,000 NiP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>39-03287-000</p> <p>39-03287-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

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)

<p>11-02304-000 CH 28,920 VD1 2,323 B- 1,980 BØ 61,900 TL 49,920</p> <p>17,00x54,00</p>	AA=20,40 mm	91-09306-000		<p>1 1,200 CR St</p> <p>2 1,500 P</p> <p>3 2,500 CrP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>31-04304-000</p> <p>31-04304-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

	Type				
---	-------------	---	--	---	---

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	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
	17,00x51,85				
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











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	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
	26,00x58,00 * For Oversize Piston Dimensions	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		
Audi, Skoda ve Volkswagen ile Ortak Motor					
			99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP		39-04331-000 39-04331-050








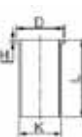

78,310

Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl cc kW (ps)

 <p>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</p> <p>* For Oversize Piston Dimensions 26,00x58,00</p> <p>Audi, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>Cyl.4/5/6 to be used with 2331 000</p>	<p>91-09331-000</p> <p>1 1,750  CK 2 2,000  P 3 3,000  CR</p>	<p>Ø 78,310 Ø 78,810</p>	<p>31-04332-000 31-04332-050</p>	
		<p>98-09331-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>			<p>38-04332-000 38-04332-050</p>
		<p>99-09331-000</p> <p>1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>			<p>39-04332-000 39-04332-050</p>






79,500




AMF Fabia 1.4 TDI 04 2003 > 10 2005 (75ps)

 <p>11-02311-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800</p> <p>26,00x63,00</p> <p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP PDB</p> <p>Cyl.1/2 to be used with 2312 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03</p>	<p>Ø 79,500 Ø 80,000</p>	<p>31-04311-000 31-04311-050</p>
 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	








79,500

Silindir 3 de Kullanılacak / To Cylinder 3		>	Cyl	cc	kW	(ps)
 <p>11-02312-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800</p>  <p>26,00x63,00</p>	<p>AP</p> <p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p> <p>PDB</p> <p>Cyl.3 to be used with 2311 000</p>		<p>1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03</p>	<p>Ø 79,500 Ø 80,000</p>	<p>31-04312-000 31-04312-050</p>	
	<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>					

 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	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)

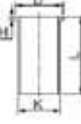



 <p>11-01286-000 CH 45,300 B- 11,000 BØ 49,000 TL 68,130</p>  <p>26,00x66,00</p>	<p>AP</p> <p>YS</p> <p>91-09627-000 1 1,750  CkP 2 2,000  P 3 2,000  CrP</p>		<p>Ø 79,510 Ø 80,010</p>	<p>31-03286-000 31-03286-050</p>	
	<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

	Type				
---	------	---	--	---	---

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	AP	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
	24,00x64,00					
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	


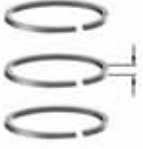
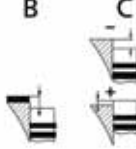

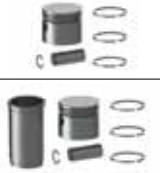


79,510

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)

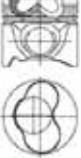




   26,00x66,00	11-02301-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800	AP	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	1. centik 1,45mm conta ile (+0,91/+1,00) 2. centik 1,53mm conta ile (+1,00/+1,10) 3. centik 1,61mm conta ile (+1,10/+1,20)	Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	31-04301-000 31-04301-025 31-04301-050 31-04301-100
		PDB				
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				
---	------	---	--	---	---

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	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
 26,00x66,00		Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor				

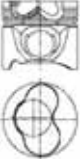




	K=82,57 L=151,80 H=4,70 D=85,40	DS			51-65303-000	
--	--	----	--	--	---------------------	--

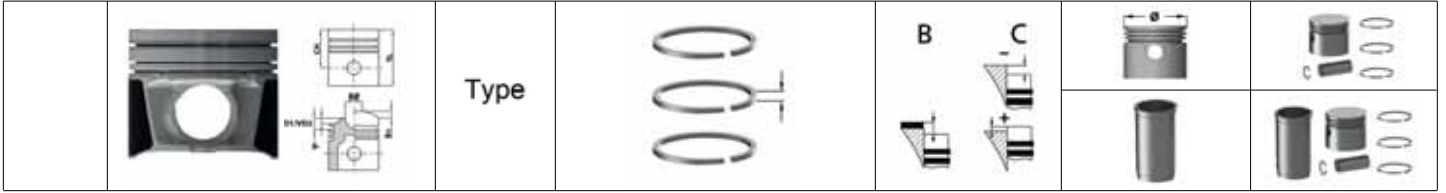
	K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
---	--	-------------	--	--	---------------------	--

	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	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
 26,00x66,00		Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor				











79,510


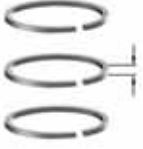
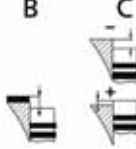





Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4	>	Cyl	cc	kW	(ps)
 <p>11-02306-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	AP	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>		<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p> <p>Ø 80,510</p>	<p>31-04306-000</p> <p>31-04306-025</p> <p>31-04306-050</p> <p>31-04306-100</p>

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)







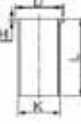

 <p>11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	AP YS PDB	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00</p> <p>1,53mm +1,01/+1,10</p> <p>1,61mm +1,11/+1,20</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p>	<p>31-04313-000</p> <p>31-04313-025</p> <p>31-04313-050</p>

 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

 <p>11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>PDB</p> <p>Cyl. 3/4 to be used with 2313 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04314-000 31-04314-025 31-04314-050</p>
 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	


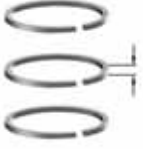
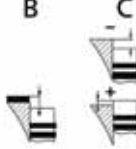




79,510

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)






<p>11-02319-000 CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800</p> <p>26,00x66,00</p>	<p>AP</p> <p>YS</p>	<p>91-09309-000</p> <p>1 1,750 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04319-000 31-04319-025 31-04319-050</p>
	<p>PDB</p> <p>Cyl. 1/2 to be used with 2320 000</p>				
<p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>					

	<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>
	<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS</p> <p>+0,50</p>			<p>51-65303-050</p>
	<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS</p> <p>+1,00</p>			<p>51-65303-100</p>

	Type				
---	-------------	---	--	---	---

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	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
 26,00x66,00		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	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
 26,00x66,00		Audi, Skoda ve Volkswagen ile Ortak Motor				








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)

 <p>11-02344-000 CH 45,800 B- 13,100 BØ 50,880 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>PDB</p>	<p>91-09298-000</p> <p>1 1,750  CkP 2 2,000  P 3 3,000  CrP</p>	<p>1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)</p>	<p>Ø 81,000 Ø 81,500</p>	<p>31-04344-000 31-04344-050</p>
		<p>98-09298-000</p> <p>1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>		<p>38-04344-000 38-04344-050</p>	
		<p>99-09298-000</p> <p>1 1,750  CrP St 2 2,000  Fe 3 3,000  CR</p>		<p>39-04344-000 39-04344-050</p>	

81,010











AGU / ARZ	Octavia 1.8i Turbo 20V	B 05 1998 > 12 2010	4 Cyl	1751cc	110kW	(150ps)
-----------	------------------------	---------------------	-------	--------	-------	---------

 <p>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</p> <p>* For Oversize Piston Dimensions</p>  <p>20,00x59,00</p> <p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		<p>91-09296-000</p> <p>1 1,500  MoP 2 1,750  P 3 2,000  CR</p>		<p>Ø 81,010 Ø 81,260 Ø 81,510</p>	<p>31-03296-000 31-03296-025 31-03296-050</p>







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)

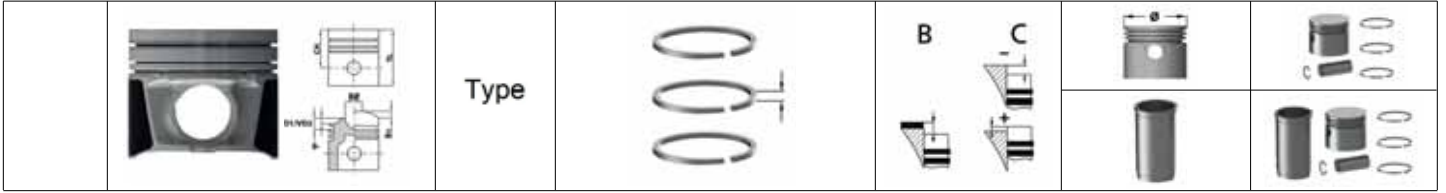
<p>11-02298-000 CH 45,800 B- 17,800 BØ 38,000 TL 68,800</p>  26,00x66,00	AP YS PDB	<p>91-09298-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	1,55mm conta ile (0,91/1,00) 1,63mm conta ile (1,01/1,10) 1,71mm conta ile (1,11/1,20)	Ø 81,010 Ø 81,510	31-04298-000 31-04298-050
		<p>98-09298-000</p> <p>1 1,750  CrP St</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>			38-04298-000 38-04298-050
		<p>99-09298-000</p> <p>1 1,750  CrP St</p> <p>2 2,000  Fe</p> <p>3 3,000  CR</p>			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)

<p>11-02299-000 CH 32,700 B- 1,900 BØ 68,000 TL 53,700</p>  19,00x50,00	HA	<p>91-09296-000</p> <p>1 1,500  MoP</p> <p>2 1,750  P</p> <p>3 2,000  CR</p>		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 / 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


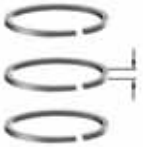
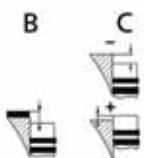


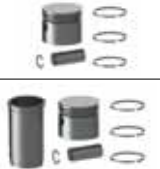
1 1,500  MoP
2 1,750  P
3 2,000  CR

1.Conta ile +0.80/+0.90
2.Conta ile +0.90/+1.00
3.Conta ile +1.00/+1.10

Ø 81,010
Ø 81,510

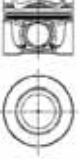










31-04336-000
31-04336-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor

	Type		B 	C 		
---	-------------	---	---	--	---	---

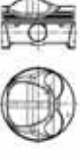




81,010

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  CrP 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  NiP St		Ø 82,510 Ø 83,010	31-03285-000 31-03285-050
---	----	---	--	----------------------	--






82,510

CDA A / CDAB	Octavia 1.8 TSI 16V	B	11	2008	>	02 2013	4 Cyl	1798cc	112-118kW	(152-160ps)
CDA A / CDAB	Superb 1.8 TSI 16V	B	09	2008	>		4 Cyl	1798cc	112-118kW	(152-160ps)
CDA A / 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
---	--------------------------------------	--	--	----------------------	--



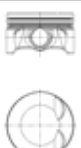




82,510											
BYJ / BZB	Octavia 1.8 TSI 16V	B	04	2007	>	02	2013	4 Cyl	1798cc	118kW	(160ps)
BZB	Superb 1.8 TSI 16V	B	03	2008	>	05	2009	4 Cyl	1798cc	118kW	(160ps)

 <p>11-02342-000 CH 29,800 B+ 4,750 B- 6,000 BØ 67,000 TL 55,980</p>  <p>21,00x53,00</p>	AP	<p>91-09329-000</p> <p>1 1,200  CrP St</p> <p>2 1,500  P</p> <p>3 2,000  CR St</p>	<p>Ø 82,510</p> <p>Ø 82,765</p> <p>Ø 83,015</p>	<p>31-04342-000</p> <p>31-04342-025</p> <p>31-04342-050</p>

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)

 <p>11-02343-000 CH 29,600 VD1 3,000 B- 6,200 BØ 50,000 TL 50,100</p>  <p>21,00x56,00</p>	AP	<p>91-09329-000</p> <p>1 1,200  CrP St</p> <p>2 1,500  P</p> <p>3 2,000  CR St</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p>	<p>31-04343-000</p> <p>31-04343-025</p> <p>31-04343-050</p>

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)

 <p>11-02587-000 CH 29,600 VD1 3,500 B- 6,200 TL 50,100</p>  <p>23,00x53,00</p>	AP	<p>99-09327-000</p> <p>1 1,200  NT St</p> <p>2 1,200  St</p> <p>3 2,000  CR</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>31-04587-000</p> <p>31-04587-050</p>



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)

	<p>11-02791-000 CH 42,950 B- 1,900 TL 68,500</p>	AP	<p>91-09791-000 1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>1. Conta ile +0,45/+0,55 2. Conta ile +0,55/+0,65 3. Conta ile +0,65/+0,75</p>	<p>Ø 75,000 Ø 75,500</p>	<p>31-04791-000 31-04791-050</p>
	<p>K=78,10 L=136,50 H=5,10 D=79,60</p>	DS			51-65982-000	

83,000






4DLTTD I	PICKUP TELCOLINE	D	>	4 Cyl	1948cc	kW	(90ps)
----------	------------------	---	---	-------	--------	----	--------

	<p>11-02799-000 CH 47,000 B- 3,200 TL 72,900</p>	AP		<p>1. Centik conta ile (+0,45/+0,55) 2. Centik conta ile (+0,56/+0,65) 3. Centik conta ile (+0,66/+0,75)</p>	<p>Ø 83,000</p>	<p>31-04799-000</p>
	<p>K=86,10 L=149,60 H=5,10 D=87,50</p>	DS			51-65985-000	

	Type				
---	-------------	---	--	---	---






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	91-09312-000 1 1,000  CR St 2 1,200  P 3 2,000  CR	AA=20,25 mm	Ø 67,100 Ø 67,600	31-04322-000 31-04322-050
 17,00x48,00					
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	91-09106-000 1 1,200  Nt St 2 1,200  CrP 3 2,000  NtP St	HA	Ø 71,010 Ø 71,260 Ø 71,510	31-03959-000 31-03959-025 31-03959-050
 19,00x42,00					
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					

	Type				
---	------	---	--	---	---

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

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

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	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

HA

99-09313-000

Ø 76,500

39-04339-000

Seat, Skoda ve Volkswagen ile Ortak Motor



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)

<p>11-01282-000 CH 28,920 B- 2,280 TL 47,920</p> <p>17,00x46,00</p>	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)

<p>11-01284-000 CH 29,200 VD1 0,800 VD2 3,580 B+ 2,000 B- 4,600 TL 50,210</p> <p>19,00x52,00</p>	HA	91-09313-000 1 1,200 NT St 2 1,200 NT St 3 2,000 NiP St		Ø 76,510 Ø 77,010	31-03284-000 31-03284-050
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					



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)

<p>11-01287-000 CH 28,970 B+ 2,000 B- 4,570 TL 49,970</p> <p>19,00x54,00</p>	AP	<p>99-09326-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,000 NiP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>39-03287-000</p> <p>39-03287-050</p>

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)

<p>11-01300-000 CH 32,000 B- 8,700 TL 54,000</p> <p>17,00x52,00</p>	CP	<p>91-09300-000</p> <p>1 1,500 CR St</p> <p>2 1,500 P</p> <p>3 2,500 CrP St</p>	<p>Ø 76,510</p> <p>Ø 76,760</p> <p>Ø 77,010</p> <p>Ø 77,260</p> <p>Ø 77,510</p>	<p>31-03300-000</p> <p>31-03300-025</p> <p>31-03300-050</p> <p>31-03300-075</p> <p>31-03300-100</p>



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)

<p>11-01301-000 CH 41,700 B- 1,600 TL 71,700</p> <p>24,00x64,00</p>	AP	<p>91-09301-000</p> <p>1 1,750 CrP</p> <p>2 2,000 CrP</p> <p>3 3,000 CrP</p>	<p>1. Centik 1,53mm (+0,66/+0,80) 2. Centik 1,57mm (+0,81/+0,90) 3. Centik 1,61mm (+0,91/+1,02)</p>	<p>Ø 76,510 Ø 77,010 Ø 77,510</p>	<p>31-03301-000 31-03301-050 31-03301-100</p>
	CP				
Audi, Nissan, Volkswagen ve Volvo ile Ortak Motor					

<p>K=79,50 L=145,00 H=4,70 D=81,50</p>	DS			51-65301-000	
<p>K=80,00 L=145,00 H=6,00 D=82,00</p>	DS +0,50			51-65301-050	
<p>K=80,50 L=145,00 H=6,00 D=82,50</p>	DS +1,00			51-65301-100	
<p>K=79,50 L=142,00 H=4,70 D=82,50</p>	DS			51-65313-000	

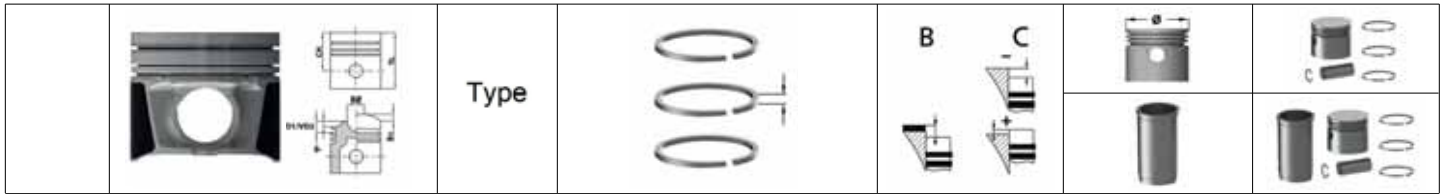


76,510

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)

<p>11-01305-000 CH 41,700 B- 1,600 TL 71,700</p> <p>24,00x64,00</p>	AP	<p>91-09301-000</p> <p>1 1,750 CrP</p> <p>2 2,000 CrP</p> <p>3 3,000 CrP</p>	<p>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)</p>	<p>Ø 76,510 Ø 77,010 Ø 77,510</p>	<p>31-03305-000 31-03305-050 31-03305-100</p>
	CP				
<p>Audi, Volkswagen ve Volvo ile Ortak Motor</p>					

<p>K=79,50 L=145,00 H=4,70 D=81,50</p>	DS			51-65301-000	
<p>K=80,00 L=145,00 H=6,00 D=82,00</p>	DS +0,50			51-65301-050	
<p>K=80,50 L=145,00 H=6,00 D=82,50</p>	DS +1,00			51-65301-100	
<p>K=79,50 L=142,00 H=4,70 D=82,50</p>	DS			51-65313-000	



76,510

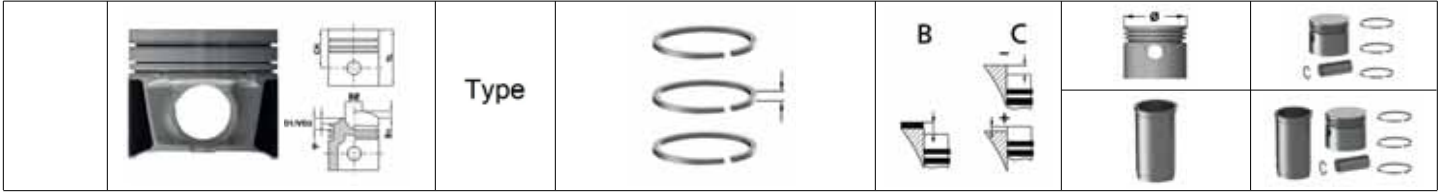
BAG / BLF / BLP	Golf 5	D	00	2003	>	4 Cyl	1600cc	kW	(115ps)
BAG / BLF / BLP	Jetta	D	00	2003	>	4 Cyl	1600cc	kW	(115ps)
BAG / BLF / BLP	Passat	D	00	2003	>	4 Cyl	1600cc	kW	(115ps)

 	<p>11-01956-000 CH 29,300 VD1 2,800 B- 6,000 TL 49,300</p> <p>17,00x47,00</p>	HA	<p>99-09313-000</p>			<p>Ø 76,510 Ø 77,010</p>	<p>39-03956-000 39-03956-050</p>	
			1	1,200	NT			St
			2	1,200	NiP			St

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)

 	<p>11-02297-000 CH 29,000 VD1 1,100 VD2 3,900 B- 5,900 TL 48,200</p> <p>19,00x52,00</p>	AA=20,50 mm	<p>91-09292-000</p>			<p>Ø 76,510 Ø 77,010</p>	<p>31-04297-000 31-04297-050</p>	
			1	1,200	NT			St
			2	1,500	P			








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)

 <p>11-02304-000 CH 28,920 VD1 2,323 B- 1,980 BØ 61,900 TL 49,920</p>  <p>17,00x54,00</p>	<p>AA=20,40 mm</p>	<p>91-09306-000</p> <p>1 1,200  CR St</p> <p>2 1,500  P</p> <p>3 2,500  CrP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>31-04304-000</p> <p>31-04304-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		

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)

 <p>11-02315-000 CH 29,270 B- 2,350 BØ 64,600 TL 50,270</p>  <p>17,00x54,00</p>	<p>AA=20,40 mm</p>	<p>91-09306-000</p> <p>1 1,200  CR St</p> <p>2 1,500  P</p> <p>3 2,500  CrP St</p>	<p>Ø 76,510</p> <p>Ø 77,010</p>	<p>31-04315-000</p> <p>31-04315-050</p>
		<p>Seat ve Volkswagen ile Ortak Motor</p>		



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)

 <p>11-02321-000 CH 30,850 B- 8,000 TL 60,400</p>  <p>17,00x51,85</p>	<p>91-09302-000 1 1,200  NT 2 1,500  P 3 2,500  CrP St</p>	<p>AA=20,40 mm</p>	<p>Ø 76,510 Ø 77,010</p>	<p>31-04321-000 31-04321-050</p>

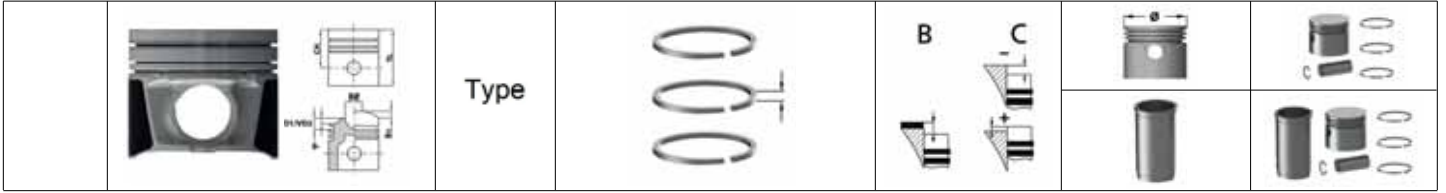
 <p>K=79,50 L=142,00 H=4,70 D=82,50</p>	<p>DS</p>	<p>51-65313-000</p>
--	-----------	---------------------

78,310

BAU	Passat 2.5 TDI 24V	D	01	2003	>	05	2005	6 Cyl	2499cc	132kW	(179ps)
-----	--------------------	---	----	------	---	----	------	-------	--------	-------	---------











 <p>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</p> <p>* For Oversize Piston Dimensions</p>  <p>26,00x58,00</p>	<p>AP YS</p> <p>Cyl.1/2/3 to be used with 2332 000</p>	<p>91-09331-000 1 1,750  CK 2 2,000  P 3 3,000  CR</p>	<p>Ø 78,310 Ø 78,810</p>	<p>31-04331-000 31-04331-050</p>
		<p>98-09331-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>38-04331-000 38-04331-050</p>	
		<p>99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>	<p>39-04331-000 39-04331-050</p>	

Audi, Skoda ve Volkswagen ile Ortak Motor













78,310

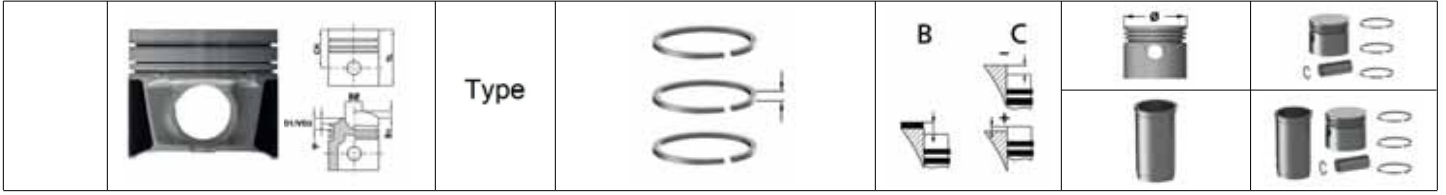
Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6 > Cyl cc kW (ps)

 <p>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</p> <p>* For Oversize Piston Dimensions 26,00x58,00</p> <p>Audi, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>Cyl.4/5/6 to be used with 2331 000</p>	<p>91-09331-000 1 1,750  CK 2 2,000  P 3 3,000  CR</p>	<p>Ø 78,310 Ø 78,810</p>	<p>31-04332-000 31-04332-050</p>
		<p>98-09331-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>38-04332-000 38-04332-050</p>	
		<p>99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>	<p>39-04332-000 39-04332-050</p>	












78,310

AFB / AKN Passat 2.5 TDI 08 1998 > 08 2000 (150ps)

 <p>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</p> <p>* For Oversize Piston Dimensions 26,00x65,50</p> <p>Audi ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>Cyl.1/2/3 to be used with 2334 000</p>	<p>91-09331-000 1 1,750  CK 2 2,000  P 3 3,000  CR</p>	<p>Ø 78,310 Ø 78,810</p>	<p>31-04333-000 31-04333-050</p>
		<p>98-09331-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>38-04333-000 38-04333-050</p>	
		<p>99-09331-000 1 1,750  CrP St 2 2,000  P 3 3,000  CrP</p>	<p>39-04333-000 39-04333-050</p>	








78,310




Silindir 4/5/6 da Kullanilacak / To Cylinder 4 / 5 / 6		>	Cyl	cc	kW	(ps)
 <p>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</p> <p>* For Oversize Piston Dimensions  26,00x65,50</p> <p>Audi ve Volkswagen ile Ortak Motor</p>	AP YS Cyl.4/5/6 to be used with 2333 000	<p>91-09331-000</p> 1 1,750  CK 2 2,000  P 3 3,000  CR			Ø 78,310 Ø 78,810	31-04334-000 31-04334-050
		<p>98-09331-000</p> 1 1,750  CrP 2 2,000  P 3 3,000  CrP			38-04334-000 38-04334-050	
		<p>99-09331-000</p> 1 1,750  CrP St 2 2,000  P 3 3,000  CrP			39-04334-000 39-04334-050	


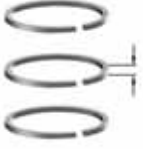
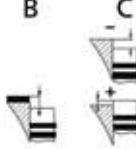





	Type				
---	------	---	--	---	---

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	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
	PDB Cyl.1/2 to be used with 2312 000				
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					

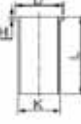
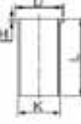

 K=82,57 L=151,80 H=4,70 D=85,40	DS			51-65303-000	
 K=83,07 L=151,80 H=6,00 D=85,90	DS +0,50			51-65303-050	
 K=83,57 L=151,80 H=6,00 D=86,40	DS +1,00			51-65303-100	

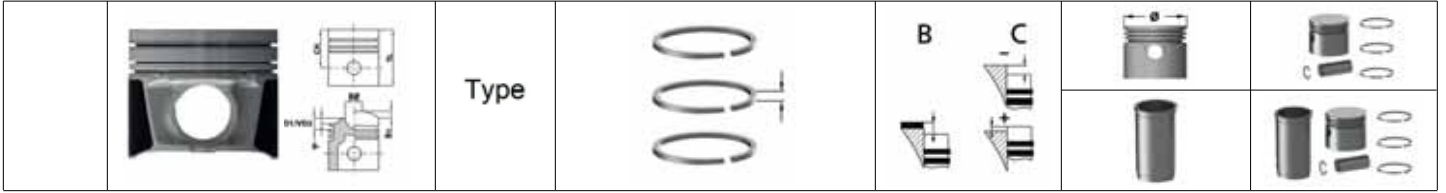
	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,500

Silindir 3 de Kullanilacak / To Cylinder 3 > Cyl cc kW (ps)

	<p>11-02312-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 69,800</p>  <p>26,00x63,00</p>	<p>AP</p> <p>PDB</p> <p>Cyl.3 to be used with 2311 000</p>	<p>91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1,53mm +0,81/+0,96 1,57mm +0,96/+1,01 1,61mm +1,01/+1,03</p>	<p>Ø 79,500 Ø 80,000</p>	<p>31-04312-000 31-04312-050</p>

	<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
	<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
	<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	



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



79,510

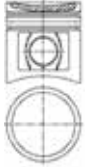




AAZ	Golf 1.9 TD	D	11	1991	>	12	1997	4 Cyl	1896cc	55kW	(75ps)
AAZ	Jetta 1.9 TD	D	08	1992	>	12	1998	4 Cyl	1896cc	55kW	(75ps)
AAZ	Passat 1.9 TD	D	03	1991	>	12	1996	4 Cyl	1896cc	55kW	(75ps)
AAZ	Vento 1.9 TD	D	01	1992	>	12	1997	4 Cyl	1896cc	55kW	(75ps)
AAZ / ABL	Gol 1.9 TD	D	06	1998	>	05	2002	4 Cyl	1896cc	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)


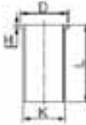

<p>11-01302-000 CH 45,650 B- 1,900 TL 71,700</p> <p>26,00x66,00</p>	<p>AP</p> <p>HA</p> <p>CP</p>	<p>91-09309-000</p> <p>1 1,750 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>1. Centik 1,53mm (+0,66/+0,86) 2. Centik (1,57mm +0,87/+0,90) 3. Centik 1,61mm (+0,91/+1,02)</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p> <p>Ø 80,510</p>	<p>31-03302-000</p> <p>31-03302-025</p> <p>31-03302-050</p> <p>31-03302-100</p>

<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	

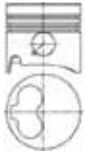






79,510											
EE / EF / EJ / YG / YH / YK / YM / YV / YP	Golf	B	00	1975	>	00	1984	4 Cyl	1588cc	60-63kW	(82-85ps)
EE / EF / EJ / YG / YH / YK / YM / YV / YP	Jetta	B	00	1975	>	00	1983	4 Cyl	1588cc	60-63kW	(82-85ps)
EE / EF / EJ / YG / YH / YK / YM / YV / YP	Passat	B	00	1975	>	00	1983	4 Cyl	1588cc	60-63kW	(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	CP	91-09304-000 1 1,750  CrP 2 2,000  P 3 4,000  CrP			Ø 79,510	31-03304-000 31-03304-025 31-03304-050 31-03304-100
						Ø 79,760	
Ø 80,010							
Ø 80,510							
	22,00x55,00						

	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											
KY	TRANSPORTER T3 1.7 D	D	00	1984	>			4 Cyl	1716cc	42kW	(57ps)

	11-01306-000 CH 41,700 B- 1,600 TL 71,700	*CH 41,450 *B- 1,600 *TL 71,700	AP CP	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP			Ø 79,510	31-03306-000 31-03306-050 31-03306-100
							Ø 80,010	
Ø 80,510								
	24,00x64,00	* For Oversize Piston Dimensions						



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)

<p>11-01309-000 CH 39,650 B- 1,900 TL 65,650</p> <p>24,00x64,00</p>	AP	<p>91-09309-000</p> <p>1 1,750 CrP</p> <p>2 2,000 P</p> <p>3 3,000 CrP</p>	<p>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)</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-03309-000 31-03309-025 31-03309-050 31-03309-100</p>
	CP				
<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>					

<p>K=82,50 L=155,00 H=5,10 D=85,60</p>	DS			51-65157-000	
<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	




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

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

PDB

Cyl.1/2 to be used with 2302 000

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

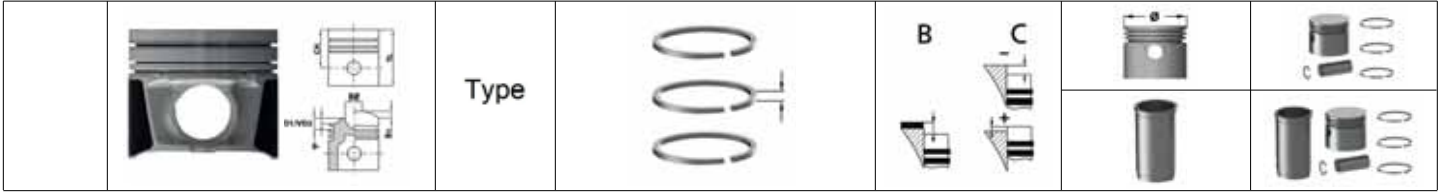


K=83,57
L=151,80
H=6,00
D=86,40

DS

+1,00

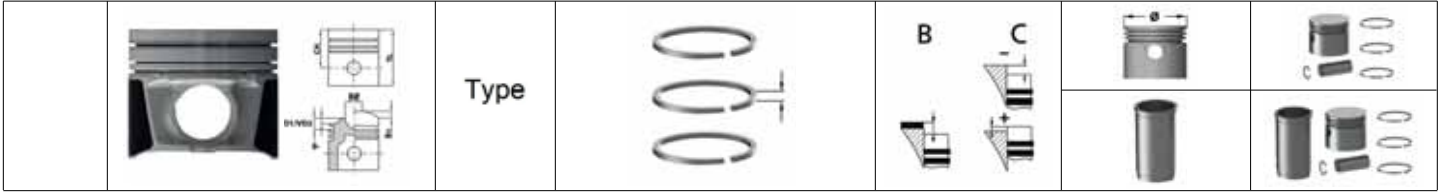
51-65303-100



79,510

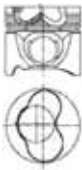
Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

	<p>11-02302-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800</p> <p> 26,00x66,00</p>	<p>AP</p> <p>PDB</p> <p>Cyl.3/4 to be used with 2301 000</p>	<p>91-09309-000</p> <p>1 1,750 CrP 2 2,000 P 3 3,000 CrP</p>	<p>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)</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510</p>	<p>31-04302-000 31-04302-025 31-04302-050 31-04302-100</p>
<p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>						
	<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
	<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
	<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	



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

91-09309-000


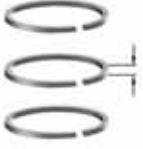
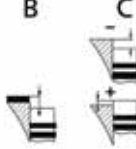

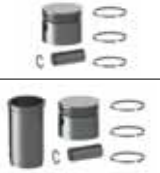
1 1,750  CrP
2 2,000  P
3 3,000  CrP

Cyl.1/2 to be used with 2306 000






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				
---	------	---	--	---	---




79,510


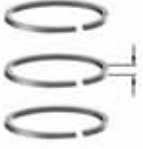
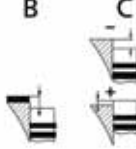

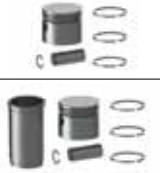


Silindir 3 / 4 de Kullanılacak / To Cylinder 3 / 4	>	Cyl	cc	kW	(ps)
 11-02306-000 CH 45,800 VD1 1,100 B- 17,650 BØ 37,900 TL 71,800  26,00x66,00	AP	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP		Ø 79,510 Ø 79,760 Ø 80,010 Ø 80,510	31-04306-000 31-04306-025 31-04306-050 31-04306-100
Cyl.3/4 to be used with 2305 000					
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)






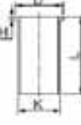
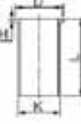

 11-02313-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800  26,00x66,00	AP YS PDB Cyl. 1/2 to be used with 2314 000	91-09309-000 1 1,750  CrP 2 2,000  P 3 3,000  CrP	1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20	Ø 79,510 Ø 79,760 Ø 80,010	31-04313-000 31-04313-025 31-04313-050
Audi, Ford, 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

	Type				
					

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

	<p>11-02314-000 CH 45,800 VD1 1,100 B- 17,900 BØ 38,000 TL 68,800</p> <p> 26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP YS</p> <p>PDB</p> <p>Cyl. 3/4 to be used with 2313 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP 2 2,000  P 3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04314-000 31-04314-025 31-04314-050</p>
	<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	DS			51-65303-000	
	<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	DS +0,50			51-65303-050	
	<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	DS +1,00			51-65303-100	




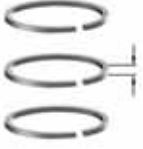
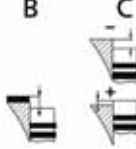





79,510

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)

<p>11-02319-000 CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800</p> <p>26,00x66,00</p>	<p>AP YS</p>	<p>91-09309-000 1 1,750 CrP 2 2,000 P 3 3,000 CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510 Ø 79,760 Ø 80,010</p>	<p>31-04319-000 31-04319-025 31-04319-050</p>
	<p>PDB</p> <p>Cyl.1/2 to be used with 2320 000</p>				






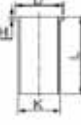
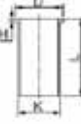

Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor

<p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
<p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS +0,50</p>			<p>51-65303-050</p>	
<p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS +1,00</p>			<p>51-65303-100</p>	

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

79,510

Silindir 3 / 4 de Kullanilacak / To Cylinder 3 / 4 > Cyl cc kW (ps)

 <p>11-02320-000 CH 45,800 VD1 0,650 B- 17,100 BØ 38,000 TL 68,800</p>  <p>26,00x66,00</p> <p>Audi, Ford, Seat, Skoda ve Volkswagen ile Ortak Motor</p>	<p>AP</p> <p>YS</p> <p>PDB</p> <p>Cyl.3/4 to be used with 2319 000</p>	<p>91-09309-000</p> <p>1 1,750  CrP</p> <p>2 2,000  P</p> <p>3 3,000  CrP</p>	<p>1,45mm +0,91/+1,00 1,53mm +1,01/+1,10 1,61mm +1,11/+1,20</p>	<p>Ø 79,510</p> <p>Ø 79,760</p> <p>Ø 80,010</p>	<p>31-04320-000</p> <p>31-04320-025</p> <p>31-04320-050</p>
 <p>K=82,57 L=151,80 H=4,70 D=85,40</p>	<p>DS</p>			<p>51-65303-000</p>	
 <p>K=83,07 L=151,80 H=6,00 D=85,90</p>	<p>DS</p> <p>+0,50</p>			<p>51-65303-050</p>	
 <p>K=83,57 L=151,80 H=6,00 D=86,40</p>	<p>DS</p> <p>+1,00</p>			<p>51-65303-100</p>	



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)

<p>11-02340-000 CH 45,300 B- 10,700 BØ 49,000 TL 67,900</p> <p>26,00x66,00</p>	<p>AP YS</p>	<p>91-09625-000</p> <p>1 1,750 CR</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>	<p>1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)</p>	<p>Ø 79,510 Ø 80,010</p>	<p>31-04340-000 31-04340-050</p>
		<p>Audi, Skoda ve Volkswagen ile Ortak Motor</p>			

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)

<p>11-01283-000 CH 45,810 B- 12,900 BØ 50,900 TL 68,800</p> <p>26,00x66,00</p>	<p>AP YS</p>	<p>91-09628-000</p> <p>1 1,750 CK</p> <p>2 2,000 P</p> <p>3 2,000 CR</p>	<p>Ø 81,000</p>	<p>31-03283-000</p>
		<p>PDB</p> <p>Audi, Seat ve Volkswagen ile Ortak Motor</p>		



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 2.0 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 Cyl. 1/2 to be used with 1958 000	91-09298-000 1 1,750 CrP 2 2,000 P 3 3,000 CrP	Ø 81,000 Ø 81,500	31-03957-000 31-03957-050
		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 2.0 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 Cyl. 3/4 to be used with 1957 000	91-09298-000 1 1,750 CrP 2 2,000 P 3 3,000 CrP	Ø 81,000 Ø 81,500	31-03958-000 31-03958-050
		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	



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)

<p>11-02344-000 CH 45,800 B- 13,100 BØ 50,880 TL 68,800</p> <p>26,00x66,00</p>	<p>AP YS</p> <p>PDB</p>	<p>91-09298-000</p> <p>1 1,750 CkP 2 2,000 P 3 3,000 CrP</p>	<p>1 kertik conta ile (0,91/1,00) 2 kertik conta ile (1,01/1,10) 3 kertik conta ile (1,11/1,20)</p>	<p>Ø 81,000 Ø 81,500</p>	<p>31-04344-000 31-04344-050</p>
		<p>98-09298-000</p> <p>1 1,750 CrP St 2 2,000 P 3 3,000 CrP</p>			<p>38-04344-000 38-04344-050</p>
		<p>99-09298-000</p> <p>1 1,750 CrP St 2 2,000 Fe 3 3,000 CR</p>			<p>39-04344-000 39-04344-050</p>

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor



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)

<p>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</p> <p>* For Oversize Piston Dimensions 20,00x59,00</p>	<p>91-09296-000</p> <p>1 1,500 MoP 2 1,750 P 3 2,000 CR</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510</p>	<p>31-03296-000 31-03296-025 31-03296-050</p>

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)

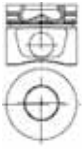
<p>11-01307-000 CH 32,200 *CH 31,900 B+ 1,300 *B+ 1,300 B- 4,400 *B- 4,400 BØ 56,000 *BØ 56,000 TL 62,500 *TL 62,200</p> <p>* For Oversize Piston Dimensions 20,00x57,00</p>	<p>91-09307-000</p> <p>1 1,500 CrP 2 1,750 P 3 3,000 CrP</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010</p>	<p>31-03307-000 31-03307-025 31-03307-050 31-03307-100</p>

<p>K=84,00 L=146,00 H=4,70 D=86,00</p>	DS				51-65307-000
<p>K=84,50 L=146,00 H=6,00 D=86,50</p>	DS +0,50				51-65307-050




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

 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	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)

<p>11-02299-000 CH 32,700 B- 1,900 BØ 68,000 TL 53,700</p> <p>19,00x50,00</p>	HA	<p>91-09296-000</p> <p>1 1,500 MoP</p> <p>2 1,750 P</p> <p>3 2,000 CR</p>	<p>Ø 81,010</p> <p>Ø 81,260</p> <p>Ø 81,510</p>	<p>31-04299-000</p> <p>31-04299-025</p> <p>31-04299-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		



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)

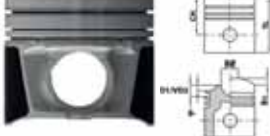
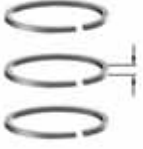
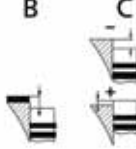

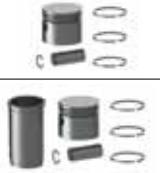
<p>11-02307-000 CH 32,700 *CH 32,400 VD1 0,700 *VD1 0,700 B- 2,300 *B- 2,300 BØ 61,400 *BØ 61,400 TL 53,700 *TL 53,400</p> <p>* For Oversize Piston Dimensions</p> <p>20,00x57,00</p>	<p>91-09107-000</p> <p>1 1,200 CR St 2 1,500 P 3 2,000 CrP St</p>	<p>+0,700/+0,900</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010</p>	<p>31-04307-000 31-04307-025 31-04307-050 31-04307-100</p>



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)

	<p>11-02308-000 CH 45,750 VD1 1,350 B- 17,200 BØ 39,600 TL 69,750</p> <p>26,00x68,00</p>	AP	<p>91-09318-000</p> <p>1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>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)</p>	Ø 81,010	<p>31-04308-000 31-04308-025 31-04308-050 31-04308-100</p>
		HA			<p>Cyl. 1/2 to be used with 2309 000 AA=27,00</p>	
	<p>K=84,55 L=157,00 H=4,50 D=85,55</p>	DS			51-65319-000	
		DS			51-65319-050	
	<p>K=85,05 L=157,00 H=5,00 D=86,05</p>	DS				
		+0,50				

	Type				
---	------	---	--	---	---









81,010

Silindir 3/4/5 de Kullanilacak / To Cylinder 3 / 4 / 5 > Cyl cc kW (ps)

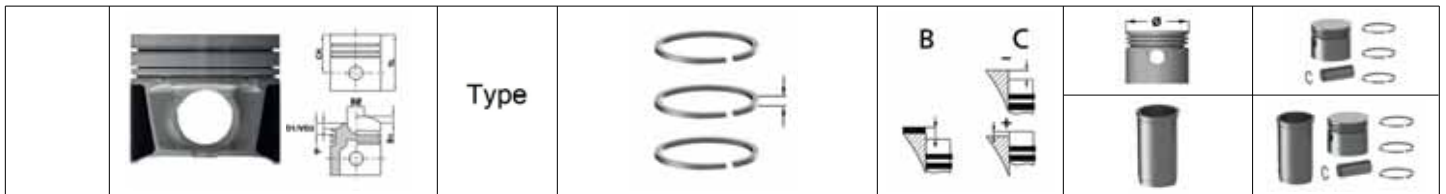
	11-02309-000 CH 45,750 VD1 1,350 B- 17,200 BØ 39,600 TL 69,750	AP HA PDB Cyl.3/4/5 to be used with 2308 000 AA=27,00	91-09318-000 1 2,500  CkP 2 2,000  P 3 3,000  CrP	1. centik 1,53mm conta ile (+0,80/+0,90) 2. centik 1,57mm conta ile (+0,90/+1,00) 3. centik 1,61mm conta ile (+1,00/+1,10)	Ø 81,010 Ø 81,260 Ø 81,510 Ø 82,010	31-04309-000 31-04309-025 31-04309-050 31-04309-100
	26,00x68,00					
	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)

	11-02316-000 CH 29,780 VD1 0,700 B- 2,700 BØ 62,300 TL 50,700		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
	19,00x42,00		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)

	<p>11-02317-000 CH 45,750 VD1 1,400 B- 18,200 BØ 37,800 TL 69,750</p> <p>26,00x66,00</p>	<p>AP YS</p> <p>PDB</p> <p>Cyl.1/2 to be used with 2318 000</p>	<p>91-09318-000</p> <p>1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>1. Conta ile +0,80/+0,90 2. Conta ile +0,90/+1,00 3. Conta ile +1,00/+1,10</p>	<p>Ø 81,010</p>	<p>31-04317-000 31-04317-040 31-04317-050</p>
					<p>Ø 81,410</p> <p>Ø 81,510</p>	

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)

	<p>11-02318-000 CH 45,750 VD1 1,400 B- 18,200 BØ 37,800 TL 69,750</p> <p>26,00x66,00</p>	<p>AP YS</p> <p>PDB</p> <p>Cyl.3/4/5 to be used with 2317 000</p>	<p>91-09318-000</p> <p>1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>Ø 81,010</p> <p>Ø 81,410</p> <p>Ø 81,510</p>	<p>31-04318-000 31-04318-040 31-04318-050</p>
--	---	---	--	---	--

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)

	<p>11-02328-000 CH 38,350 VD1 1,100 B- 10,500 BØ 62,000 TL 65,450</p> <p>24,00x56,00</p>	<p>91-09158-000</p> <p>1 1,750 CrP 2 2,000 P 3 3,000 </p>	<p>1,1</p>	<p>Ø 81,010</p>	<p>31-04328-000 31-04328-025 31-04328-050</p>
				<p>Ø 81,260</p> <p>Ø 81,510</p>	



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)


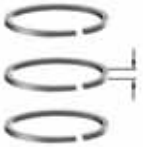
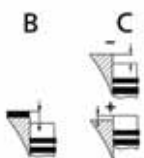


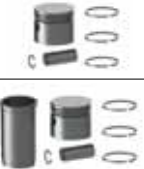


<p>11-02336-000 CH 32,550 *CH 32,250 VD1 3,600 *VD1 3,600 TL 56,550 *TL 56,250</p> <p>20,00x59,00</p>	<p>91-09296-000</p> <p>1 1,500 MoP 2 1,750 P 3 2,000 CR</p>	<p>1.Conta ile +0.80/+0.90 2.Conta ile +0.90/+1.00 3.Conta ile +1.00/+1.10</p>	<p>Ø 81,010 Ø 81,510</p>	<p>31-04336-000 31-04336-050</p>

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)





<p>11-02337-000 CH 45,750 VD1 1,350 B- 16,600 BØ 45,900 TL 69,750</p> <p>26,00x66,00</p>	<p>AP YS PDB</p>	<p>91-09318-000</p> <p>1 2,500 CkP 2 2,000 P 3 3,000 CrP</p>	<p>0/+0,75 1. Conta ile +0,87/+0,96 2. Conta ile +0,97/+1,01 3. Conta ile +1,02/+1,10</p>	<p>Ø 81,010 Ø 81,510</p>	<p>31-04337-000 31-04337-050</p>

<p>K=84,00 L=158,00 H=5,00 D=85,00</p>	<p>DS</p>			<p>51-65785-000</p>	
--	-----------	--	--	----------------------------	--

	<p>Type</p>		<p>B</p> 	<p>C</p> 		
						

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)

	<p>11-02338-000 CH 45,800 VD1 1,350 B- 16,800 BØ 46,000 TL 69,800</p>	AP	<p>91-09318-000 1 2,500  CkP 2 2,000  P 3 3,000  CrP</p>	<p>1 kertik conta ile +0,87/+0,96 2 kertik conta ile +0,97/+1,01 3 kertik conta ile +1,02/+1,10</p>	<p>Ø 81,010 Ø 81,510</p>	<p>31-04338-000 31-04338-050</p>
		PDB				



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)
BMV / 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 / CBAA/CFFA/CBDA/CFHB / CBAB/CFFB/CBDB/CFHC / CLCB	T5 2.0 TDI	D	05	2010	>		4 Cyl	1998cc	100-103kW	(136-140ps)
CBAB / CFFB	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



82,510

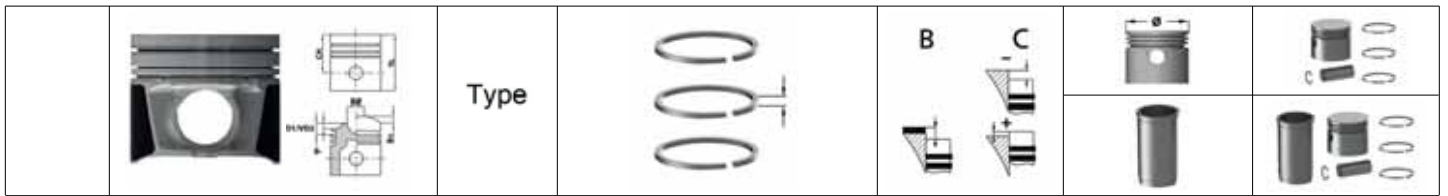
BLR / BLX / BLY / BVY / BVZ	Golf 2.0 FSI 16V	B	12	2004	>	07	2007	4 Cyl	1984cc	110kW	(150ps)
BLR / BLX / BLY / BVY / BVZ	Jetta 2.0 FSI 16V	B	05	2005	>	06	2008	4 Cyl	1984cc	110kW	(150ps)
BLR / BLX / BLY / BVY / BVZ	Passat 2.0 FSI 16V	B	03	2005	>	05	2007	4 Cyl	1984cc	110kW	(150ps)
BLR / BLX / BLY / BVY / 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	HA	91-09311-000 1 1,200 NT St 2 1,500 P 3 2,000 NiP St		Ø 82,510 Ø 83,010	31-03285-000 31-03285-050
Audi, Seat, Skoda ve Volkswagen ile Ortak Motor					






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	CP	91-09311-000 1 1,200 NT St 2 1,500 P 3 2,000 NiP St		Ø 82,510 Ø 83,010 Ø 83,510	31-03311-000 31-03311-050 31-03311-100
Audi, Seat ve Volkswagen ile Ortak Motor					








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)

 <p>11-02295-000 CH 29,800 B+ 5,680 B- 4,750 TL 55,980</p>  <p>23,00x51,00</p>	<p>AP</p> <p>Trapezoidal Connecting Rod</p>	<p>99-09327-000</p> <p>1 1,200  NT St</p> <p>2 1,200  St</p> <p>3 2,000  CR</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>39-04295-000</p> <p>39-04295-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>		

82,510											
ALT	Passat 2.0i 20V	B	11	2001	>	05	2005	4 Cyl	1984cc	96kW	(131ps)

 <p>11-02327-000 CH 29,600 VD1 2,510 B- 1,200 BØ 64,000 TL 50,600</p>  <p>19,00x44,00</p>	<p>99-09311-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  NtP St</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p>	<p>31-04327-000</p> <p>31-04327-025</p> <p>31-04327-050</p>
		<p>Audi ve Volkswagen ile Ortak Motor</p>	

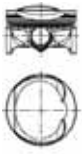
82,510											
ACK	Passat 2.8i VR6 30V	B	05	1997	>	12	1998	6 Cyl	2771cc	142kW	(193ps)
ALG	Passat 2.8i VR6 30V	B	06	1997	>	12	1998	6 Cyl	2771cc	142kW	(193ps)

 <p>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</p>  <p>21,00x56,00</p> <p>* For Oversize Piston Dimensions</p>	<p>99-09330-000</p> <p>1 1,200  NT St</p> <p>2 1,500  P</p> <p>3 2,000  NtP St</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>39-04330-000</p> <p>39-04330-050</p>
		<p>Audi ve Volkswagen ile Ortak Motor</p>	



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

AP

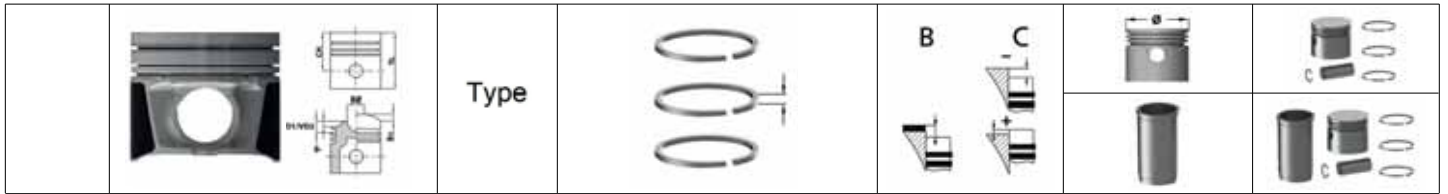
91-09329-000

1 1,200  CrP St
2 1,500  P
3 2,000  CR St

Ø 82,510
Ø 82,765
Ø 83,015

31-04342-000
31-04342-025
31-04342-050

Audi, Seat, Skoda ve Volkswagen ile Ortak Motor



82,510

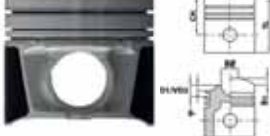
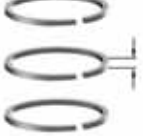
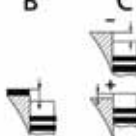

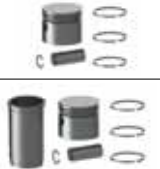
CAWB	Scirocco 2.0 TFSI 16V	B	05 2008 > 11 2009	4 Cyl	1984cc	147kW	(200ps)
CAWB	Scirocco 2.0 TSI 16V	B	05 2008 > 11 2009	4 Cyl	1984cc	147kW	(200ps)
CBFA / CAWB	Vento 2.0 TSI 16V	B	07 2006 >	4 Cyl	1984cc	147kW	(200ps)
CBFA / CAWB / CGM / CCZA	Golf 2.0 TSI 16V	B	03 2008 > 11 2008	4 Cyl	1984cc	147kW	(200ps)
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)

<p>11-02343-000 CH 29,600 VD1 3,000 B- 6,200 BØ 50,000 TL 50,100</p> <p>21,00x56,00</p>	AP	91-09329-000		<p>1 1,200 CrP St</p> <p>2 1,500 P</p> <p>3 2,000 CR St</p>	<p>Ø 82,510</p> <p>Ø 82,760</p> <p>Ø 83,010</p>	<p>31-04343-000</p> <p>31-04343-025</p> <p>31-04343-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

82,510






CAWA/CCZC/CJKB/CCZD	Tiguan / 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)

<p>11-02587-000 CH 29,600 VD1 3,500 B- 6,200 TL 50,100</p> <p>23,00x53,00</p>	AP	99-09327-000		<p>1 1,200 NT St</p> <p>2 1,200 St</p> <p>3 2,000 CR</p>	<p>Ø 82,510</p> <p>Ø 83,010</p>	<p>31-04587-000</p> <p>31-04587-050</p>
		<p>Audi, Seat, Skoda ve Volkswagen ile Ortak Motor</p>				

	Type				
---	------	---	--	---	---

70,000






B10E 66 1.1 B 08 1975 > 08 1978 4 Cyl 1108cc 33-35 kW (45-47 ps)

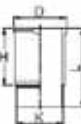
	11-01901-000 CH 40,000 TL 68,000  18,00x62,00		91-09901-000 1 1,750  CR 2 2,000  P 3 3,500  CrP St		Ø 70,000	31-03901-000
Daf, Renault ve Volvo ile Ortak Motor						

	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		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03902-000
Dacia, Daf, Renault ve Volvo ile Ortak Motor						

	K=78,50 L=134,00 H=94,85 D=87,65	WF			51-05902-000	71-07902-000
--	---	----	--	--	---------------------	---------------------

	Type				
---	------	---	--	---	---

73,000






B13E 66 DL B > 00 1975 4 Cyl 1289cc 42kW (57ps)

	11-01903-000 CH 37,500 TL 62,500		91-09903-000 1 1,750  CR 2 2,000  P 3 4,000  CR St		Ø 73,000	31-03903-000
	20,00x62,00					
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		91-09904-000 1 1,750  CR 2 2,000  P 3 4,000  CrP St		Ø 76,000	31-03904-000
	20,00x64,00					
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
--	---	----	--	--	---------------------	---------------------



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)

<p>11-01301-000 CH 41,700 B- 1,600 TL 71,700</p>	AP	<p>91-09301-000</p> <p>1 1,750 CrP</p> <p>2 2,000 CrP</p> <p>3 3,000 CrP</p>	<p>1. Centik 1,53mm (+0,66/+0,80) 2. Centik 1,57mm (+0,81/+0,90) 3. Centik 1,61mm (+0,91/+1,02)</p>	<p>Ø 76,510 Ø 77,010 Ø 77,510</p>	<p>31-03301-000 31-03301-050 31-03301-100</p>
	CP				
<p>24,00x64,00</p>	<p>Audi, Nissan, Volkswagen ve Volvo ile Ortak Motor</p>				

<p>K=79,50 L=145,00 H=4,70 D=81,50</p>	DS			51-65301-000	
<p>K=80,00 L=145,00 H=6,00 D=82,00</p>	DS +0,50			51-65301-050	
<p>K=80,50 L=145,00 H=6,00 D=82,50</p>	DS +1,00			51-65301-100	
<p>K=79,50 L=142,00 H=4,70 D=82,50</p>	DS			51-65313-000	



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)




<p>11-01305-000 CH 41,700 B- 1,600 TL 71,700</p> <p>24,00x64,00</p>	AP	<p>91-09301-000</p> <p>1 1,750 CrP</p> <p>2 2,000 CrP</p> <p>3 3,000 CrP</p>	<p>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)</p>	<p>Ø 76,510 Ø 77,010 Ø 77,510</p>	<p>31-03305-000 31-03305-050 31-03305-100</p>
	CP				
Audi, Volkswagen ve Volvo ile Ortak Motor					




<p>K=79,50 L=145,00 H=4,70 D=81,50</p>	DS			51-65301-000	
<p>K=80,00 L=145,00 H=6,00 D=82,00</p>	DS +0,50			51-65301-050	
<p>K=80,50 L=145,00 H=6,00 D=82,50</p>	DS +1,00			51-65301-100	
<p>K=79,50 L=142,00 H=4,70 D=82,50</p>	DS			51-65313-000	

	Type				
---	-------------	---	--	---	---

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		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
	24,00x66,50					
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	



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)

<p>11-01906-000 CH 47,250 B- 1,500 TL 74,500</p> <p>24,00x66,50</p>	<p>91-09906-000</p> <p>1 2,000 CR</p> <p>2 2,000 P</p> <p>3 3,000 CR</p>	<p>1,65mm Conta ile 0/+0,885 1,75mm Conta ile +0,885/+0,985 1,85mm Conta ile +0,985/+1,085</p>	<p>Ø 78,000 Ø 78,250 Ø 78,500 Ø 79,000</p>	<p>31-03906-000 31-03906-025 31-03906-050 31-03906-100</p>

<p>K=81,00 L=149,00 H=4,50 D=83,50</p>	DS				51-65905-000
<p>K=81,50 L=149,00 H=5,00 D=84,00</p>	DS +0,50				51-65905-050
<p>K=82,00 L=149,00 H=6,00 D=84,50</p>	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)

<p>11-01168-000 CH 29,800 VD1 1,000 TL 55,300</p> <p>21,00x57,00</p>	<p>99-09351-000</p> <p>1 1,200 NT St</p> <p>2 1,500 P</p> <p>3 2,500 NTP St</p>	<p>Ø 81,000</p>	<p>39-01168-000</p>



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)

<p>11-02158-000 CH 44,200 B- 14,260 BØ 60,000 TL 70,200</p>	<p>21,00x65,00</p>	<p>91-09158-000 1 1,750 CrP 2 2,000 P 3 3,000</p>	<p>Ø 81,000 Ø 81,250 Ø 81,500</p>	<p>31-04158-000 31-04158-025 31-04158-050</p>

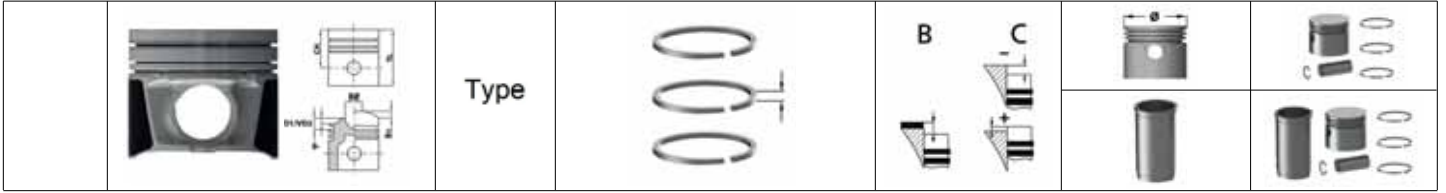
<p>K=85,05 L=151,00 H=5,00 D=86,05</p>	DS			51-65906-000
--	----	--	--	---------------------

<p>K=85,50 L=151,00 H=5,50 D=86,50</p>	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)





<p>11-01297-000 CH 45,750 VD1 1,350 B- 17,200 BØ 39,600 TL 69,750</p>	<p>*CH 45,500 *VD1 1,350 *B- 17,200 *BØ 39,600 *TL 69,500</p>	AP	<p>91-09297-000 1 2,500 CrP 2 2,000 P 3 3,000 CR</p>	<p>Ø 81,010 Ø 81,260 Ø 81,510</p>	<p>31-03297-000 31-03297-025 31-03297-050</p>
		PDB			
<p>26,00x68,00</p>					
<p>Audi ve Volvo ile Ortak Motor</p>					







81,010

Silindir 3/4/5 de Kullanilacak / To Cylinder 3 / 4 / 5		>	Cyl	cc	kW	(ps)
 <p>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</p> <p>* For Oversize Piston Dimensions 26,00x68,00</p>	AP	<p>91-09297-000 1 2,500  CrP 2 2,000  P 3 3,000  CR</p>		Ø 81,010 Ø 81,260 Ø 81,510		<p>31-03298-000 31-03298-025 31-03298-050</p>
	PDB					
<p>Audi ve Volvo ile Ortak Motor</p>						

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)
 <p>11-02176-000 CH 36,120 B- 9,080 BØ 67,000 TL 60,000</p> <p>21,00x57,00</p>	CP	<p>91-09176-000 1 1,500  CrP 2 1,750  P 3 3,000  CrP</p>		Ø 82,700 Ø 82,950 Ø 83,200		<p>31-04176-000 31-04176-025 31-04176-050</p>
	<p>Renault ve Volvo ile Ortak Motor</p>					






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)
 <p>11-01166-000 CH 27,000 VD1 2,900 TL 49,000</p> <p>21,00x57,00</p>		<p>99-09161-000 1 1,200  NT St 2 1,500  P 3 2,500  NTP St</p>		Ø 83,000 Ø 83,400		<p>39-03166-000 39-03166-040</p>

	Type				
---	------	---	--	---	---






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		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
	21,00x57,00					






83,000

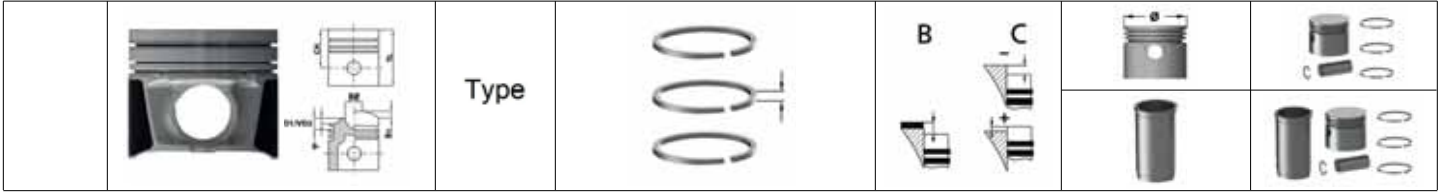
B 4204 S	S40 2.0i 16V	B 00 1996 > 00 1999	4 Cyl	(140ps)
B 4204 S	V46 2.0i 16V	B 00 1996 > 00 1999	4 Cyl	(140ps)

	11-02179-000 CH 35,900 VD1 1,300 B- 0,750 TL 60,650	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
	23,00x61,00					
Renault ve Volvo ile Ortak Motor						

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	AP YS	91-09799-000 1 3,500  CK 2 2,000  CR 3 3,000  CR		Ø 85,000 Ø 85,600	31-04497-000 31-04497-060
	28,00x70,00					
Citroen, Fiat / Iveco, Ford, Lancia, Peugeot ve Volvo ile Ortak Motor						



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

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

Product Indexes

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	

Product Indexes

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	

Product Indexes

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					

Product Indexes

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					

Product Indexes

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							

Product Indexes

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						

Product Indexes

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	

Product Indexes

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	



Download on the
Mac App Store

GET IT ON
Google Play

 **TecAlliance**
Data Supplier





Sales & Marketing
Satış & Pazarlama

Yıldız Posta Cd. Vefa Bey Sk. No:9
Yeşil Apt. A Blok Kat:5 Daire 10/11
Beşiktaş - İstanbul / Türkiye
Tel : +90 212 267 06 13
Fax : +90 212 267 05 74

www.yenmak.com.tr



Head Office & Logistics
Genel Merkez & Lojistik



Piston & Piston Pin Production Facility
Piston & Pim Fabrikası



Cylinder Liner Production Facility
Motor G mleđi Fabrikası

