KOLBENSCHMIDT

ENGINE BEARINGS

LESS FRICTION. LESS WEAR.

TAKING RESPONSIBILITY IN A CHANGING WORLD

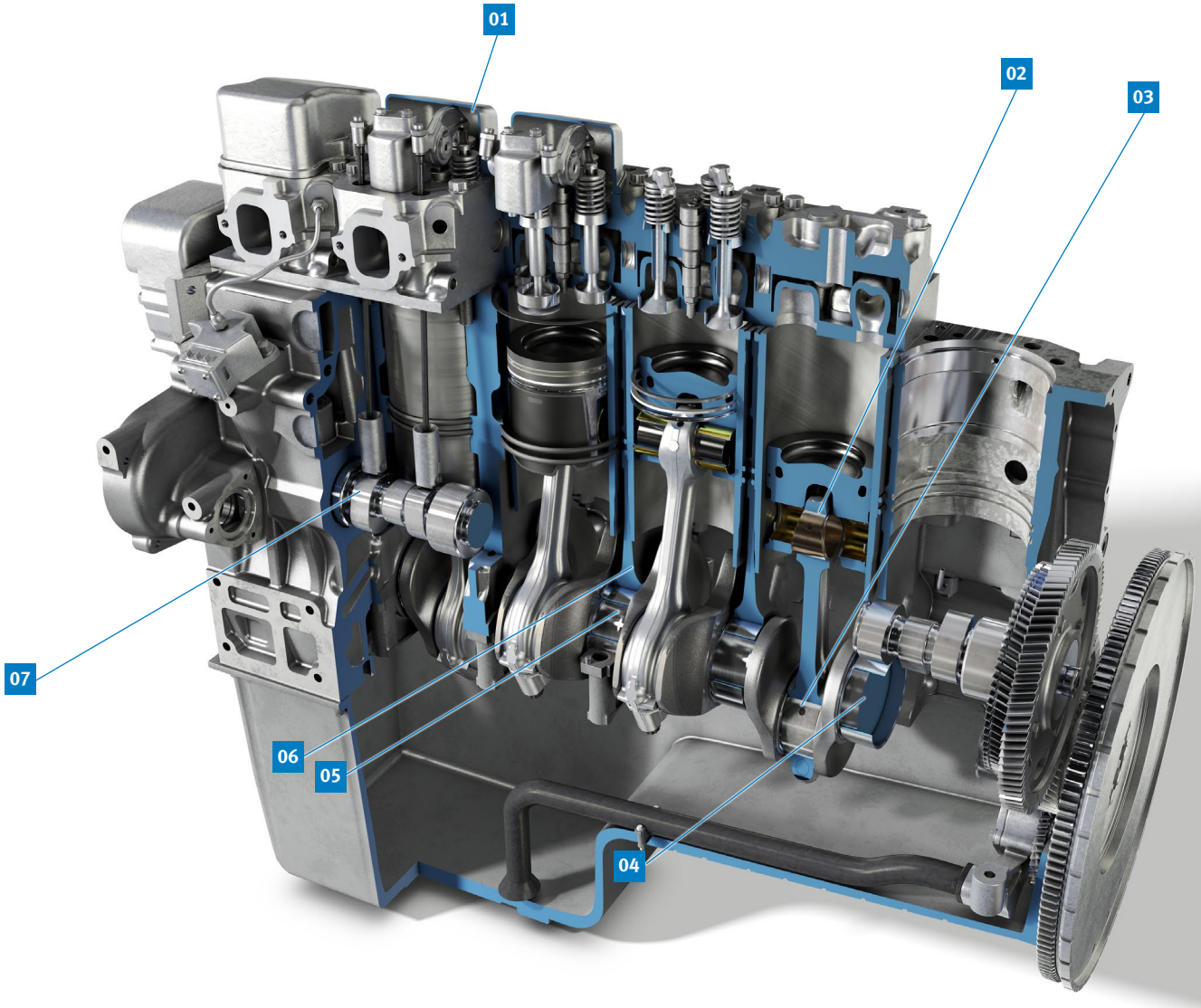
RHEINMETALL

ENGINE BEARINGS
LESS FRICTION.
LESS WEAR.

With their optimum sliding materials and perfect geometry, Kolbenschmidt engine bearings ensure less friction and more dynamics. In addition to a large range of standard and large sizes, Motorservice offers particular special solutions for repair.

PRODUCT RANGE

- Main and conrod bearing shells
- Flanged bearings and thrust washers
- Bearing bushes for camshafts
- Conrod bushes



03 04 BEARING SHELLS

Engine bearings are an important component for combustion engines. Due to the complex requirements and high loads facing the bearing points of moving engine parts, materials that have been meticulously adapted for the specific application need to be used.

06 THRUST WASHERS

In conjunction with half shell bearings, thrust washers replace flanged bearing halves in the engine. Engine cases are specifically configured to accommodate thrust washers. Rotation must be prevented, and reliable guidance along the outside diameter of the thrust washers must be guaranteed.

05 FLANGED BEARINGS

Flanged bearing halves (also known as collar bearing shells) are responsible for axially guiding the crankshaft.

“Installed” flanged bearings consist of half-shells and thrust washers. Normal flanged bearing halves are manufactured from one piece.

01 02 07 BEARING BUSHES

Camshaft and rocker arm bearings are usually offered in standard dimensions. Bearing bushes for connecting rods are semi-finished; in other words, they have to be machined to the required nominal dimension after being pressed into the connecting rods.

Kolbenschmidt engine bearings are available in a wide range of oversizes. This is frequently the last opportunity to perform professional engine reconditioning work.

Motorservice has a wide European and Asian product range for more than 13,800 engine applications and 50,000 engine types.

KOLBENSCHMIDT ENGINE BEARINGS – **LOW-FRICTION ENDURANCE PERFORMER**

Lower friction, higher strength and wear resistance thanks to the new combination of metal and polymer.

To reduce CO_2 emissions, various technologies have been developed, such as start-stop and coasting mode. These types of engine operation require engine mounts with a higher wear resistance. This is why the engine mounts have an additional polymer sliding layer. The bearing metal and the polymer layer meet the opposing requirements such as adaptability and wear resistance while simultaneous having a high load bearing capacity.

SOLID BEARINGS

Reliable endurance performer

Produced from a special bronze alloy, these bushes are primarily used in the connecting rod and for the mounting of the camshaft. They are characterised by a high fatigue strength.

TWO-COMPONENT BEARINGS

Tough all-rounder

Kolbenschmidt two-component bearings are characterised by their high resistance to wear and corrosion. Primary applications of two-component bearings are in low- to medium-load bearing positions.

Steel-aluminium

Back: Steel
Bearing material: Aluminium

THREE-COMPONENT BEARINGS

Withstand the greatest pressure

The sliding layers vary according to the place and type of installation to ensure a long service life – even under tough conditions. Bearings with galvanic, sputter or polymer layers are mainly used in high-load engines. They are primarily used as main bearings and connecting rod bearings.

Galvanic

Back: Steel
Bearing material: Bronze
Sliding layer: Galvanic

Polymer

Back: Steel
Bearing material: Aluminium or bronze
Sliding layer: Bonded coating

Sputter

Back: Steel
Bearing material: Brass or bronze
Sliding layer: Sputter

We offer a comprehensive product portfolio covering a large number of engines.
Here are some examples of our best-sellers for passenger cars and utility vehicles in the aftermarket.

Manufacturer	Engine	Product	Item no.	Repair grades
Mercedes-Benz	OM 651	Connecting rod bearings	77 972 600	STD
			77 972 610	0.25 mm
			77 972 620	0.50 mm
		Main bearings (including flanged bearings)	77 973 600	STD
			77 973 610	0.25 mm
			77 973 620	0.50 mm
		Main bearings (including flanged bearings) Outside oversize +0.50 mm	77 973 700	STD
			77 973 710	0.25 mm
			77 973 720	0.50 mm
		Conrod bushes	37 110 690	SEMI
BMW	N47	Connecting rod bearings	77 950 600	STD
			77 950 610	0.25 mm
			77 950 620	0.50 mm
		Main bearings (including flanged bearings)	77 951 600	STD
			77 951 610	0.25 mm
			77 951 620	0.50 mm
		Conrod bushes	37 172 690	SEMI
	N57	Connecting rod bearings	77 952 600	STD
			77 952 610	0.25 mm
			77 952 620	0.50 mm
		Main bearings (including flanged bearings)	77 953 600	STD
			77 953 610	0.25 mm
			77 953 620	0.50 mm
		Conrod bushes	37 261 690	SEMI
VW Group	2.0 TDI	Connecting rod bearings	77 555 600	STD
			77 555 610	0.25 mm
			77 555 620	0.50 mm
		Main bearings	77 553 600	STD
			77 553 610	0.25 mm
			77 553 620	0.50 mm
		Thrust washers	78 635 600	STD
		Camshaft bearings	77 913 600	STD
	1.8 / 2.0 TFSI	Connecting rod bearings	37 111 600	STD
			37 111 610	0.25 mm
			37 111 620	0.50 mm
		Main bearings	77 907 600	STD
			77 907 610	0.25 mm
			77 907 620	0.50 mm
		Thrust washers	79 418 600	STD
		Conrod bushes	77 909 690	SEMI
Dacia / Nissan / Renault	1.5 Diesel (K9K)	Connecting rod bearings	77 837 600	STD
			77 837 610	0.25 mm
			77 837 620	0.50 mm
		Main bearings	77 839 600	STD
			77 839 610	0.25 mm
			77 839 620	0.50 mm
		Thrust washers	79 359 600	STD

Manufacturer	Engine	Product	Item no.	Repair grades
Scania	DC 12	Connecting rod bearings	77 711 600	STD
			77 711 610	0.25 mm
			77 711 620	0.50 mm
		Main bearings	77 710 600	STD
			77 710 610	0.25 mm
			77 710 620	0.50 mm
		Thrust washers	79 279 600	STD
		Conrod bushes	77 722 690	SEMI
		Camshaft bearings	77 738 600	STD
Mercedes-Benz	OM541	Connecting rod bearings	79 229 600	STD
			79 229 610	0.25 mm
			79 229 620	0.50 mm
		Main bearings	79 231 600	STD
			79 231 610	0.25 mm
			79 231 620	0.50 mm
		Thrust washers	79 230 600	STD
		Conrod bushes	72 858 690	SEMI
		Camshaft bearings	77 590 690	SEMI
MAN	D2066 / D2676	Connecting rod bearings	37 280 600	STD
			37 280 610	0.25 mm
			37 280 620	0.50 mm
		Main bearings	77 682 600	STD
			77 682 610	0.25 mm
			77 682 620	0.50 mm
		Main bearings Outside oversize +0.50 mm	77 682 700	STD
			77 682 710	0.25 mm
		Thrust washers	79 261 600	STD
			79 261 610	0.40 mm
			79 261 620	0.80 mm
		Conrod bushes	77 928 690	SEMI
		Camshaft bearings	77 964 600	STD
DAF	MX13	Connecting rod bearings	77 968 600	STD
			77 968 610	0.25 mm
			77 968 620	0.50 mm
		Main bearings	77 969 600	STD
			77 969 610	0.25 mm
			77 969 620	0.50 mm
		Thrust washers	79 466 600	STD
		Camshaft bearings	37 004 600	STD
Volvo	D 13	Connecting rod bearings	77 898 600	STD
			77 898 610	0.25 mm
			77 898 620	0.50 mm
		Main bearings	77 751 600	STD
			77 751 610	0.25 mm
			77 751 620	0.50 mm
		Thrust washers	78 520 600	STD
			78 520 610	0.25 mm
		Conrod bushes	37 114 690	SEMI
		Camshaft bearings	37 150 600	STD

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