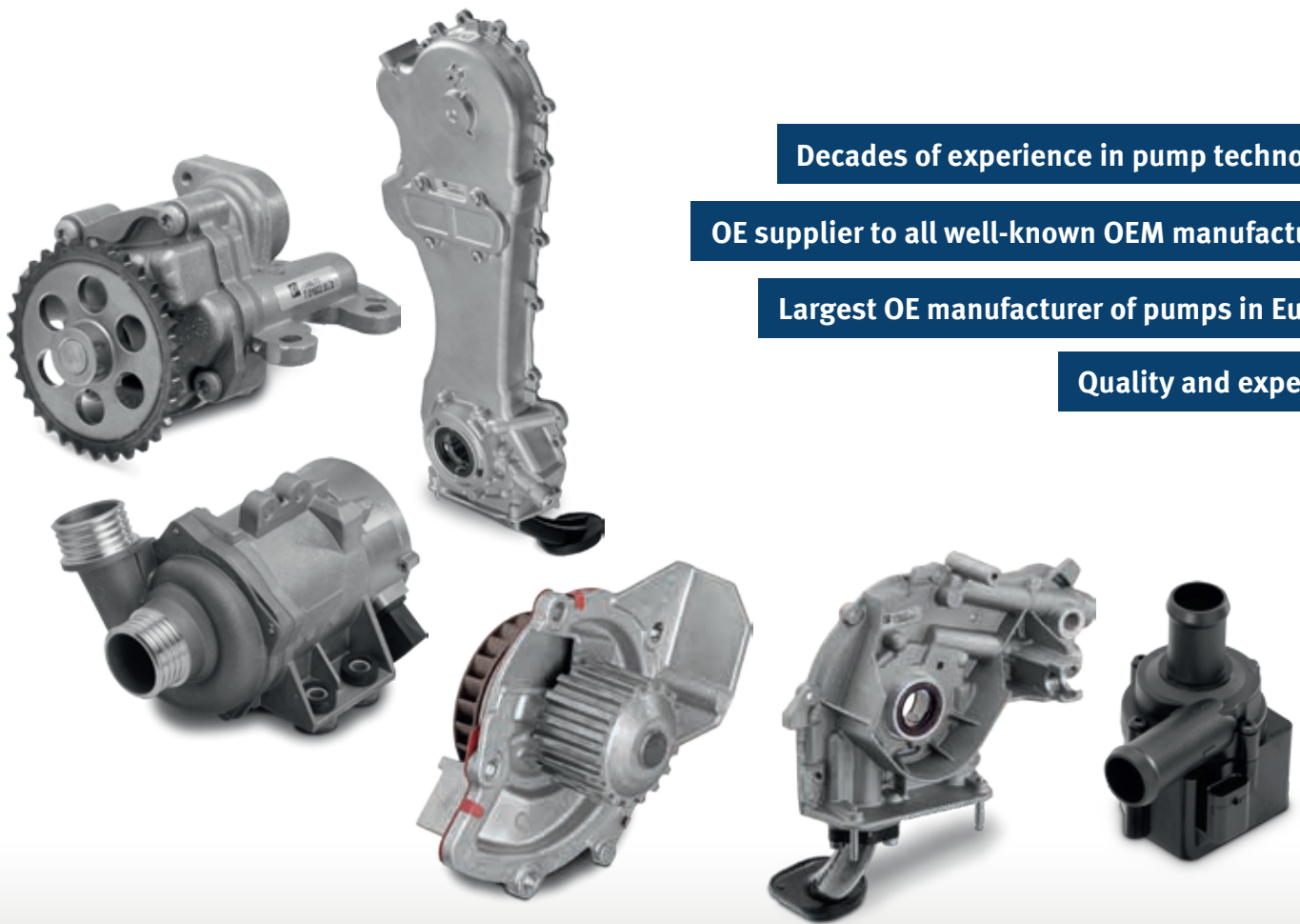


Oil and water pumps from PIERBURG

Now also available on the aftermarket

Motorservice extends its range of oil pumps and water pumps for KOLBENSCHMIDT with products from PIERBURG. Motorservice is thus able to offer the high-grade OE quality from the OEM PIERBURG on the aftermarket.

PIERBURG is regarded worldwide as a recognised specialist in innovative and pioneering pump technology and is one of the largest OE suppliers of oil pumps, water pumps and vacuum pumps. Decades of experience and expertise in development and manufacturing make PIERBURG an internationally recognised partner of the car manufacturer.

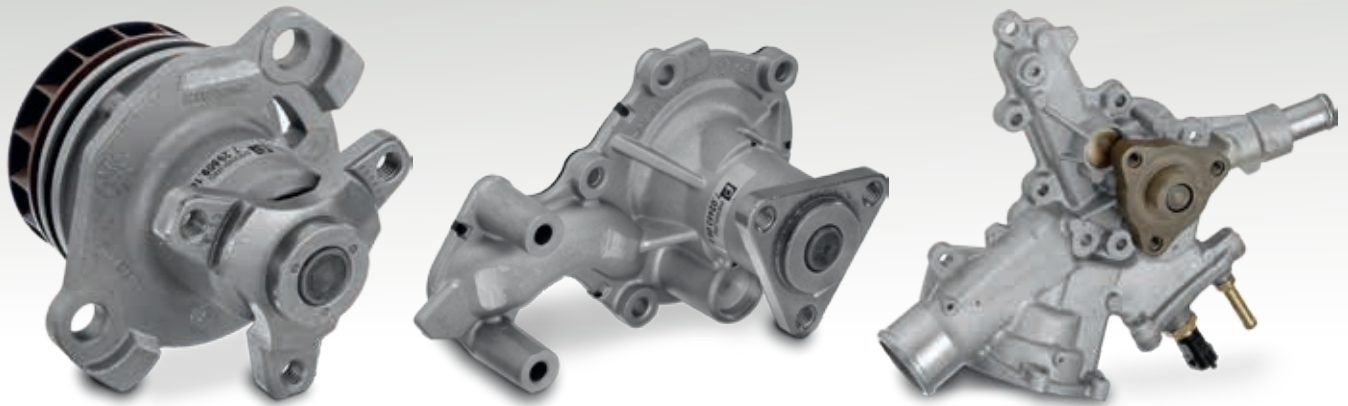


Decades of experience in pump technology

OE supplier to all well-known OEM manufacturers

Largest OE manufacturer of pumps in Europe

Quality and expertise



Mechanical water pumps

Combustion in the engine creates heat. The coolant absorbs the heat from the engine block and cylinder head and releases it into the ambient air through the cooler. The mechanical water pump¹⁾ circulates the coolant in the sealed engine cooling system.

Depending on their design, mechanical water pumps are located either externally on the engine in their own pump housing or are flanged directly on the crankcase. When water pumps fail, the engine overheats; this can result in serious engine failure. Therefore the water pump should

always be replaced when reconditioning due to operational safety.

PIERBURG produces over 6 million water pumps for motor vehicles and light utility vehicles every year.

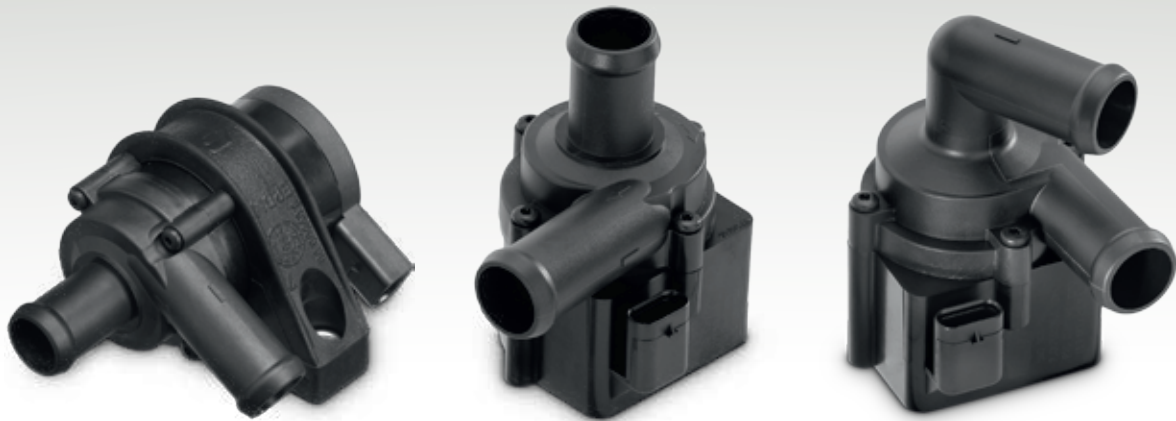
Manufacturer	Ref. no. *	Article number
Fiat	45804051	7.01890.08.0
Fiat	55209993; 46804051	7.01984.02.0
Fiat	55221397; 55218802	7.03645.01.0
Fiat	60814609; 17400-79J50	7.28503.02.0
Fiat	60811328; 60586222	7.28509.02.0
Fiat	55184080	7.28665.01.0
Fiat	46520401	7.28666.01.0
Fiat	60608898	7.28668.01.0
Fiat	7715242; 71713727	7.28669.01.0
Fiat	7762926	7.28673.01.0
Fiat	60811328; 60586222	7.28764.01.0
Ford	1 760 659; CM5Q-8201-FA	7.02453.05.0
Ford	1719125; BK3-8A558-CB	7.02676.02.0
Ford	1434347; 1S7G-8051-BD	7.28618.09.0
Opel	93189693	7.31983.01.0
Porsche	997 106 011 02; 997 016 011 05	7.28015.02.0
Porsche	997 106 011 70	7.29557.01.0

Manufacturer	Ref. no. *	Article number
Porsche	996 106 011 51	7.31081.02.0
Porsche	996 106 011 76; 996 106 011 75	7.31232.02.0
Renault	77 01 479 043; 82 00 693 167	7.01838.02.0
Renault	77 01 479 114; 82 00 693 173	7.01840.02.0
Renault	77 01 478 846; 77 01 478 846	7.03170.04.0
Renault	82 00 129 206; 82 00 729 976	7.28010.06.0
Renault	82 00 146 298; 82 01 033 237	7.28012.05.0
Renault	82 00 332 040; 93161595	7.29509.10.0
Renault	82 00 359 308; 82 00 558 733	7.29530.04.0
Renault	82 00 702 762; 82 01 190 682	7.29585.03.0
Renault	82 00 397 735; 82 00 702 755	7.29591.04.0
Renault	82 01 190 678; 82 00 108 750;	7.29593.03.0
Renault	82 00 332 040; 4431125	7.29594.03.0
Renault	77 00 736 091; 77 01 633 125	7.31737.01.0
Renault	77 00 866 518; 82 00 146 301	7.31741.01.0
Renault/Nissan	21010-00Q0M; 82 00 713 853	7.29611.06.0
Volvo/RVI	21615958; 74 85 000 763	7.03394.06.0

¹⁾ Other designations frequently used: Coolant pump

The right of changes and deviating pictures is reserved. For assignment and replacement parts, refer to the current catalogues, TecDoc CD or respective systems based on TecDoc.

* The reference numbers given are for comparison purposes only and must not be used on invoices to the consumer.



Water circulating pumps

PIERBURG has retained a leading market position since 1996 with its electronic water circulating pump. Water circulating pumps are used where cooling or heating functions need to be performed independently of the engine's coolant circuit.

The delivery rate of this water circulating pump does not depend on the vehicle's engine speed.

This gives rise to a whole host of application possibilities:

- For heating support, residual heat extraction and pre-heating
- As a cooling application for turbochargers, power electronics and exhaust gas recirculation
- For cooling drives and batteries in electric vehicles
- As a heating circuit pump in photovoltaics

Manufacturer	Ref. no. *	Article number
BMW	64 11 6 955 122	7.02078.37.0
BMW	64 11 6 988 960; 64 11 6 910 755	7.02078.38.0
BMW	64 11 9 197 085	7.02078.39.0
Opel	9152407	7.02058.50.0
Peugeot/Citroën	1201 N1; 1201 L8; 9806790780	7.04386.10.0
Porsche	997 62 251 01; 9A1 620 251 00	7.01218.04.0
VAG	059 121 012 A	7.01713.27.0
VAG	5N0 965 561	7.01713.28.0
VAG	7H0 965 561	7.02074.57.0
VAG	7H0 965 561 A	7.02074.58.0
VAG	1K0 965 561 B	7.02074.60.0
VAG	1K0 965 561 B	7.02074.61.0
VAG	1K0 965 561 G	7.02074.62.0

Manufacturer	Ref. no. *	Article number
VAG	078 121 601	7.02074.75.0
VAG	1K0 965 561 F	7.02074.88.0
VAG	1K0 965 561 J	7.02074.89.0
VAG	06H 965 561	7.02074.90.0
VAG	1K0 965 561 L	7.02074.91.0
VAG	06H 121 601 J; 06H 121 601 M	7.04071.65.0
VAG	5Q0 965 561 B	7.04071.71.0
VAG/Ford	3D0 965 561 D; 1101228	7.06740.00.0
Webasto	universal (24 V)	7.02058.04.0
Webasto	universal (12 V)	7.02058.05.0
Webasto	universal 86541 B	7.02073.13.0
Webasto	universal 87187 B	7.02073.14.0



Electrical coolant pumps

Mechanical water pumps are driven directly by the engine. When the engine is running, they pump coolant continuously – even if cooling is not required. The electrical coolant pump with integrated electronic control system is, however, continuously connected if a cooling capacity is required.

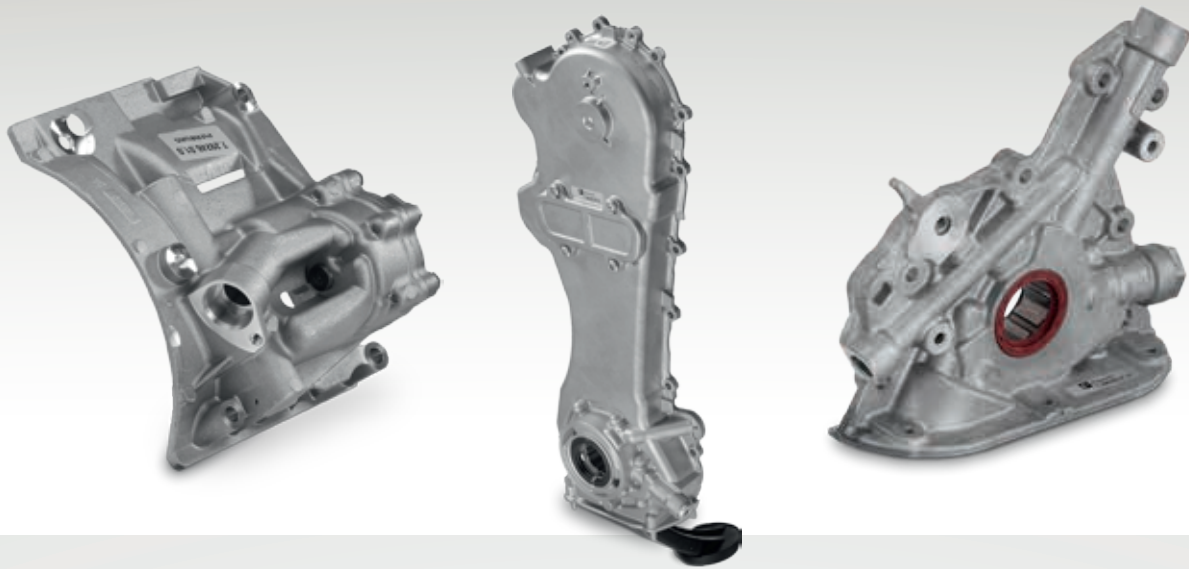
For cold starts, the electrical coolant pump does not pump to begin with. This enables the engine to reach its operating temperature more quickly. The electric coolant pump is also able to generate sufficient cooling capacity when idling or after the engine is switched off because it is not linked to the engine speed.

This on-demand cooling of the engine reduces power requirements whilst also cutting down on frictional loss, fuel consumption and pollutants.

PIERBURG was the world's first series-production supplier of electric coolant pumps to BMW.

Manufacturer	Ref. no. *	Article number	Type ¹⁾
Audi	4F0 965 569	7.06033.11.0	CWA 50
Audi	8K0 965 569	7.06033.15.0	CWA 50
BMW	11 51 7 583 836	7.02478.40.0	CWA 200
BMW	11 51 7 586 925	7.02851.20.8	CWA 200
BMW	11 51 7 586 929	7.02853.20.0	CWA 200
BMW	11 51 7 604 027	7.03665.66.0	CWA 400
BMW	11 51 7 566 335	7.06033.44.0	CWA 50
Mercedes-Benz	A 000 500 04 86 / universal application	7.06754.05.0	CWA 100
VAG/Porsche	7P0 965 567/958 606 567 00	7.06033.31.0	CWA 50

¹⁾ e. g. CWA 50: Cooling water aggregate, 50 W capacity



Oil pumps

Oil pumps suction the oil from the oil pan and pump it through the oil filter and oil cooler to the engine lubricating point. An oil pump can be driven by external teeth, interior teeth for crankshaft direct drives or auxiliary drives.

Oil pumps have a long service life, but this may be reduced by maintenance errors such as poor oil quality, oil dilution, dirt or engine failure. It is therefore necessary to change the oil pump early.

PIERBURG oil pumps are used by all well-known engine manufacturers in the automotive and light utility vehicle industry.

Manufacturer	Ref. no. *	Article number
BMW	11 41 7 836 993; 11 41 7 838 123	7.29140.02.0
BMW	11 41 7 501 568	7.29246.01.0
Fiat	55207179; 6 46 107	7.01700.02.0
Fiat	55222361; 6 46 109	7.01996.03.0
Fiat	46744430	7.29017.01.0
Fiat	55210178; 93191738	7.29190.02.0
Ford	1456883; 1C1Q-6600-AG	7.01831.02.0
Ford	1456885; 1S7Q-6600-AF	7.01832.02.0
Ford	1763922; BM5G-6600-GC	7.02801.09.0
Ford	1738483; BK2Q-6600-BA	7.03040.07.0
Ford	1697426; 98MM-6600-D2B	7.04274.02.0
Ford	1720867; 3M5Q-6600-AE	7.28048.07.0
Ford	1568324; XS4Q-6F008-BB	7.29125.02.0
Ford	1456884; 1C1Q-6600-CG	7.29621.05.0
Opel	55215401; 6 46 247	7.02166.01.0
Opel	55566000; 56 46 270	7.02266.01.0
Opel	93177337; 55232196; 6 46 100	7.04193.01.0

Manufacturer	Ref. no. *	Article number
Opel	93172703; 6 46 071	7.29013.01.0
Opel	93174209; 6 46 072	7.29029.01.0
Opel	90543924; 6 46 055	7.29231.01.0
Porsche	996 107 021 55; 997 107 021 54	7.28038.02.0
Renault	15 00 022 57R	7.04929.02.0
Renault	77 01 669 300; 77 01 693 575	7.06595.00.0
Renault	82 00 251 904; 82 00 674 801	7.29501.02.0
Scania	1730312; 1860961; 2105497	7.29543.11.0
Scania	1888025; 2028987; 2209509	7.31197.05.0
Scania	1440297; 1494372; 1888026	7.31214.04.0
VAG	021 115 105 B	7.31229.01.0
VAG	021 115 105 C	7.31230.01.0
VAG	071 115 105 C	7.31231.01.0
Volvo	20553753; 20553754	7.28039.02.0
Volvo/RVI	20567034; 74 20 567 034	7.05741.01.0
Volvo/RVI	20824906; 74 20 824 906	7.29532.04.0
Volvo/RVI	21736639; 74 21 736 639	7.29618.03.0

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Useful information on water pumps

- It is important to add coolant in order to protect the cooling system from corrosion.
- Never operate water pumps without coolant.
- Always comply with the change intervals specified by the vehicle/engine manufacturer, the type of coolant and the mix ratio with water.
- The water used should be of drinking water quality and not be too hard.
- The coolant should not be used undiluted even at very low temperatures.
- Always comply with the belt tension specified by the vehicle/engine manufacturer as this will otherwise lead to premature bearing failure and leaks.
- Replace and adjust tensioning rollers and automatic belt tensioners in accordance with the manufacturer's specifications.
- The mechanical face seals in mechanical water pumps are lubricated and cooled by the coolant.
- Minor leakage of coolant at the leakage bore is due to the design and does therefore not constitute reason for complaint.
- The pump shaft must not be turned with a dry mechanical face seal.
- Gasket residue must not get into the cooling system.
- When filling the cooling system, make sure the trapped air can escape.

More information can be found in our "Water pumps with mechanical drive" brochure.

Useful information on oil pumps

- Oil pump malfunctions are relatively rare. It is possible for the pump system to wear under high mileage. This is generally noticeable with a decrease in delivery rate.
- Oil pumps are generally replaced entirely. They are not intended to be reconditioned.
- Oil pumps are supplied with the required gaskets.
- Dirt or sealant must not get into the oil circuit.
- As a general rule, change the oil and oil filter before initial start-up and clean the sieve of the suction pipe.

Motorservice Partner:

Headquarters:

MS Motorservice International GmbH
Wilhelm-Maybach-Straße 14–18
74196 Neuenstadt, Germany
www.ms-motorservice.com

