COMPREHENSIVE EXPANDED RANGE OF PRODUCTS.
Approximately 100 commercial vehicle water pumps in proven quality for the first time.

www.behrhellaservice.com
WATER PUMPS AND WATER PUMP KITS
MORE FREEDOM FOR PERFECT SERVICE

Water pumps are indispensable for water-cooled internal combustion engines. After all, these assemblies are the ones that maintain the cooling circuit by continually circulating the coolant. This is why water pumps are among the most frequently required spare parts and have therefore enjoyed a very well established position in Behr Hella Service’s product offering for years. Included in our product range are water pumps available as individual spare parts as well as the particularly “assembly-friendly” complete kits.

NEW! Water pumps for commercial vehicles.
We have now optimised our service in this area by greatly expanding our product portfolio: For the first time, we are offering customers water pumps for commercial vehicles. The new product range currently encompasses approximately 100 water pumps in traditional Behr Hella Service quality. We are confident that you will profit from this attractive enhanced product range both now and in the future.
Cooling through continuous circulation

WITHOUT A WATER PUMP, NOTHING WORKS

As central parts of the cooling circuit, water pumps are among the most widely demanded spare parts. The reason for this is that almost all of today’s internal combustion engines are cooled with coolant and therefore rely on a continuous supply of recirculating coolant fluid.
Protection from heat damage

High temperatures develop in the engine block due to the gases that ignite in the combustion chamber. This heat must be dissipated to prevent the seals from combusting as well and to avoid causing material damage. Although the engine oil lubricates and cools hot mechanical parts, the heat continues to reach the engine block.

Continuous circulation

The engine block is permeated with ducts. The water pump moves a continuous supply of cold water through these ducts to ensure ongoing circulation and engine cooling.

Ensures optimal operating temperature

The water heated during circulation is channeled through a heat exchanger. The fins of this exchanger cool down the water, which is then drawn in by the water pump and pumped again into the hot engine block. It is in this way that the water pump significantly contributes to ensuring that the optimal operating temperature of the engine is quickly reached and reliably maintained so that the engine does not overheat.

Cooling only as required

As the engine is warming up, water is channeled through the engine block. When the engine block is hot enough, a valve is opened and the radiator is integrated in the circuit. This active control reduces fuel consumption and reduces environmental impact.

Conventional drives

Today’s water pumps are generally driven by a timing belt or a V-ribbed belt. Their operating speed is determined by the gear ratio between the crankshaft drive wheel and the water pump impeller. In other words, pump output is directly related to the engine speed.

Electronic control

Electronically controlled water pumps operate independently of engine speed. As such, they can be more precisely regulated and their output adapted to meet critical cooling requirements. Since these water pumps also have better efficiency and therefore help to lower fuel consumption, their market share continues to grow.
The service life of a water pump primarily depends on proper installation, regular maintenance of the cooling system and quality of the coolant used. Belt-driven ancillary assemblies must also be fully functional and in technically perfect condition.

Water pumps comprise of five major component assemblies

1. Axial mechanical seal
2. Impeller
3. Housing
4. Drive wheel
5. Antifriction bearing

The drive wheel and impeller are installed on a common (drive) shaft. A mechanical seal seals the shaft towards the outside. The rotary motion of the impeller causes coolant to be transported through the cooling system.

Highest demands
Water pumps make a considerable contribution to the reliability and efficient operation of a vehicle. The technical demands placed on these pumps are therefore particularly high:

➔ Extremely large bandwidth between cold start and operating temperature: Max. -40 °C in the winter to approx. +120 °C
➔ Pressure differentials of 0.5 bar vacuum to 3 bar overpressure
➔ Pump speeds of approx. 1,000 rpm to approx. 8,000 rpm
➔ Coolant throughput at 60,000 km: Approx. 7.7 million litres (more than 48,000 bathtubs)

Stop for defects
Lack of maintenance, improper use of coolants, corrosion and similar factors can irreversibly damage the water pump. A malfunctioning water pump can be recognised by noises, leaks and engine overheating. If the water pump is defective, the engine must be shut off immediately.

Completely replace (best option)
Most of today’s passenger cars are equipped with mechanically driven water pumps that connect to the drive via belt assemblies. To ensure fault-free operation, all of the drive-specific parts of the water pump are optimally coordinated with each other. This carefully coordinated balance is questioned in the event of a repair during which only those components that were directly affected are replaced.
Almost 200 complete water pump kits
Replacing the entire water pump assembly automatically rules out potential risks, ensures correct operation of the water pump and avoids expensive subsequent repair work. To this end, Behr Hella Service offers more than 180 complete kits that can be installed as replacement units in approximately 90 percent of all Western European passenger cars whose coolant pumps are belt driven. The kits include the water pump (poss. also O-rings or other seals) and all spare parts required for the drive (e.g. the timing, tensioning, deflection and guide pulleys as well as dampers), which are perfectly coordinated with each other.

Complete kits from Behr Hella Service offer clear benefits
➔ All spare parts required from a single source
➔ Perfectly coordinated components in original equipment manufacturer (OEM) quality
➔ No need to search for suitable spare parts
➔ Errors and incorrect purchase orders are avoided
➔ Increased customer satisfaction by saving time
➔ Number of replacements is minimised
➔ Best possible protection from follow-up repairs and warranty coverage as all components are replaced at the same time

Behr Hella Service also offers around 500 water pumps as stand-alone spare parts.

WATER PUMPS FOR COMMERCIAL VEHICLES. NEW IN THE PRODUCT RANGE!

Behr Hella Service’s previous product offering, which was restricted to passenger cars only, has now been expanded to include water pumps for commercial vehicles.
This is what it encompasses:
➔ Diversified range of approximately 100 water pumps at present
➔ For all common vehicle brands
➔ Proven Behr Hella Service quality

All relevant information about our new product range for commercial vehicles can now be found in TecDoc, and starting in the spring of 2016, also in the new “Thermal Management for Commercial Vehicles and Transporters” catalog.
Sales and further information via:

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