



ELECTRICAL WATER PUMPS

PARTS EXPERTISE FROM BEHR HELLA SERVICE

Behr Hella Service water pumps form part of a modern thermal management system that encompasses the full spectrum of cooling, air conditioning and ventilation. Behr Hella Service thus offers an exceptional performance package: thanks to our partner BEHR, we can provide superior OEM expertise combined with a complete product portfolio. Furthermore, the aftermarket and workshops in the independent aftermarket sector benefit from the HELLA global logistics network, which guarantees high parts availability.

WATER PUMPS: TOUGH DEMANDS

Water pumps are absolutely essential for coolant-cooled engines and they make an important contribution to the safety and smooth functioning of a vehicle. Consequently the technical demands placed on them are particularly high, a situation partly caused by vast temperature differences, fluctuations in pressure and high coolant flow.

ELECTRICAL WATER PUMPS: THEIR PROPERTIES

The vast majority of today's passenger cars is currently still equipped with mechanically driven water pumps, which are connected with the drive via belts.

Modern electrical water pumps operate very differently: these regulate the coolant flow in the cooling circuit electronically and independently of the rotation speed of the engine. Therefore no direct engine power is required for the drive.

GENERAL TECHNICAL DATA

- Operating voltage: 12 – 360 volt
(can vary depending on the water pump)
- Power: 15 – 1,000 watts
(can vary depending on the water pump)
- Control: infinitely variable, by means of a pulse width modulated signal
- Dependence on engine speed: no
- Conveying of coolant: as required
- Diagnostic capability: following integration in the electronics of the onboard electrical system
- Suitable for the following drive types: internal combustion engine, hybrid, electric
- Cooling of the water pump's electric motor using coolant

ELECTRICAL WATER PUMPS: PRODUCT ADVANTAGES

- **Fuel savings & reduction of exhaust emissions**
Adjusting quantities to the amount of coolant actually required results in lower power consumption and reduces emissions, especially under cold start conditions.
- **Engine-independent cooling performance**
Independence from a belt drive also allows coolant to flow in and out irrespective of the operating of the engine.
- **Accelerated heating effect**
Faster reacting of the heating system following a cold start brings about an enhanced feel-good factor and more safety for the passengers.
- **Installation flexibility**
It is possible to fix the pump in any position as required within the engine compartment, thus enabling increased scope and benefit of application, e.g. integration in other elements of the coolant circuit.
- **Diagnostic capability**
By linking up to the onboard electronics, electrical water pumps can be easily integrated into the fault diagnosis system.

ELECTRICAL WATER PUMPS: APPLICATIONS

Currently electrical pumps are only very seldom installed in the main cooling circuit by OE manufacturers on account of the technical complexity. However, electrical water pumps make a very wide range of applications possible apart from engine cooling:

- Indirect charge air cooling
- Cooling of the exhaust gas recirculation
- Cooling of drive, power electronics and/or battery in hybrid and electric vehicles
- Transmission cooling
- Cooling of diverse power take-offs

Depending on the drive type (internal combustion engine, hybrid, electric) and the system, one or even several pumps can be installed in the vehicle.

PRODUCT OVERVIEW

Part number	Description	Vehicle Application	VERSION	PREMIUM LINE*	OE numbers**
8MP 376 830-001	E-water pump	Smart / Renault Zoe	produced by Visteon	■	A4535000000 4535000000 A4535000200 4535000200 A4535000400 4535000400 A4535060300 144B03428R 144B03731R 210101348R 210102785R 210103413R 210103417R 210106749R 210109473R
8MP 376 830-011	E-water pump	Peugeot 3008 / Citroen	produced by Visteon	■	9807176880 9812011380
8MP 376 830-021	E-water pump	BWM 3 (E90), BMW 5 (F10)		■	1151758885 758885
8MP 376 830-031	E-water pump	BMW 3 (F30), BMW 5 (F10)		■	11517597715 7597715
8MP 376 830-041	E-water pump	Toyota Yaris		■	161A029015
8MP 376 807-561	E-water pump	BMW 3 (E90), BMW 5 (E60)		■	11517546994 7546994

For further differentiation, please see information in the Behr Hella Service catalogs, TecDoc and also the manufacturer's specifications.

This list is not exhaustive and may contain errors.

* More information can be found online at www.behrhellaservice.com/premiumline

** OE numbers are only for comparative purposes