

Powerful new Bosch PDE coolant pump with significantly longer service life

Compact pump from the automotive sector also suitable for other vehicle types

June, 2024

PI 11982 BBM

- ▶ Delivery rate of 1,200 liters per hour at 1.7 bar
- ▶ Lifespan of up to 41,000 hours
- ▶ Developed for electric powertrain systems, especially in passenger cars

Karlsruhe, Germany – To meet the increasing demands for fast charging and efficient thermal management in vehicles, Bosch is expanding its portfolio to include the even more powerful PDE coolant pump. This can be used for cooling electronic components, e-axes, electric motors, or batteries, as well as for various heating applications such as interior and auxiliary heating.

The right amount of coolant at the right time: powerful coolant pumps

The PDE coolant pump circulates a glycol-water mixture in a temperature range of -40 to +80 degrees Celsius. The pump can be used for precise speed control to regulate the coolant flow rate and optimize the efficiency of the circuit. With a delivery volume of 1,200 liters per hour, the newly developed pump now achieves a pressure of up to 1.7 bar instead of the previous 1 bar. This increase in performance makes it suitable not only for passenger cars but also for use in construction machinery and commercial vehicles.

Durability and reliable performance for the requirements of electrification

With increasing electrification, coolant pumps face new requirements as a result of additional operating hours during the charging process. As the battery also needs to be cooled during charging, the pumps' operating time increases considerably. Inefficient cooling of a vehicle battery can lead to a loss of efficiency and a shortened service life, which is why effective thermal management is essential.

The new Bosch PDE coolant pump offers an impressively long service life up to 41,000 hours. The tests for 100 percent leak tightness and performance in the manufacturing process ensure high product quality and reliability. The brushless pump already plays a central role in the thermal management of cars by ensuring that the battery can operate within the optimum temperature range of 20–35°C. The PDE is also suitable for use in electrified construction machinery, such as excavators, ensuring high performance over the entire service life.

For any further information, please contact:

Press photos and infocharts are available on the Bosch Media Service at www.bosch-press.com.

Contact person for press inquiries:

Carolin Lüdecke

phone: +49 721 942 3417

E-Mail: Carolin.Luedecke@bosch.com

The Mobility Aftermarket division (MA) provides the aftermarket and repair shops worldwide with modern diagnostic and repair shop equipment and a wide range of spare parts – from new and exchange parts to repair solutions – for passenger cars and commercial vehicles. Its product portfolio includes products made as Bosch original equipment, products developed in-house and specifically manufactured for the aftermarket, as well as services. About 16,000 associates, as well as a global logistics network, ensure that spare parts reach customers quickly and on time. MA supplies testing and repair-shop technology, diagnostic software, service training, and information services. In addition, the division is responsible for the “Bosch Service” repair-shop franchise, one of the world’s largest independent chains of repair-shops, with some 13,000 workshops, and more than 1,000 “AutoCrew” partners in over 100 countries. In addition, with Bosch Classic, MA supports owners of classic cars with a wide range of spare parts and services.

Additional information can be accessed at www.boschaftermarket.com

The Bosch Group is a leading global supplier of technology and services. It employs roughly 418,000 associates worldwide (as of December 31, 2024). The company generated sales of 90.3 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch’s broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is “Invented for life,” Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 490 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch’s global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch’s innovative strength is key to the company’s further development. At 136 locations across the globe, Bosch employs some 87,000 associates in research and development.

Additional information is available online at www.bosch.com, www.iot.bosch.com, www.bosch-press.com.