

# ELECTRICAL COOLANT PUMPS CWA FAMILY



## CWA FAMILY

Coolant pumps are key components of modern thermal management systems and ensure reliable temperature control in a wide variety of automotive and industrial applications. They ensure efficient heat dissipation, protect critical components, and enable energy-optimized operation of internal combustion, hybrid, and electric platforms.

The CWA series comprises high-performance, electrically commutated main coolant pumps designed for applications requiring high flow rates and pressure. Developed for the main cooling of internal combustion engines, large battery packs, electric motors and fuel-cell stacks, they are suitable for a wide range of thermal management tasks. Powerful BLDC drives, flow-optimized hydraulics and integrated power electronics enable advanced functions such as zero flow during engine start-up and controlled post-run operation. HRE-free permanent magnets, optionally sourced from non-Chinese regions, combined with a total efficiency of over 55%, ensure low power consumption and high operational efficiency. Comprehensive diagnostic and protection mechanisms enhance system reliability. The portfolio includes low- and high-voltage variants, with a dedicated 24 V version targeted for 2027, as well as scalable power levels for integration into complex thermal management architectures.

### BENEFITS

- High-performance BLDC drive – high power density, precise speed control, low NVH
- High-Flow and High-Pressure variants
- Zero-Flow during start & Post-Run function – supports efficient warm-up and cool-down strategies
- HRE-free magnets – sustainable magnet technology with optional non-Chinese sourcing

- High efficiency – low power consumption
- LIN diagnostics – reliable monitoring and protection
- Truck-ready 24V – heavy-duty variant coming soon
- Long-term reliability – durable under continuous load

### TECHNICAL DATA

|                          | CWA 400+ |        |
|--------------------------|----------|--------|
| Operating voltage [V]    | 12.5     | 12.5   |
| Flow rate [m³/h]         | 9.0      | 3.2    |
| Pressure [bar]           | 0.8      | 2.4    |
| Coolant temperature [°C] | 128 °C   | 80 °C  |
| Current consumption [A]  | < 32.0   | < 40.0 |
| Communication            | LIN 2.2  |        |

### PIERBURG

Pierburg, as a heritage brand, is a system provider for high-quality and innovative solutions and control technologies for the automotive and energy industries, among others.

With its Business Sections, Pierburg stands for outstanding expertise in the following areas: air management, thermal management, e-mobility and hydrogen technology.

### CONTACT

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