

ELECTRICAL COOLANT PUMPS WUP FAMILY



WUP 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 WUP series comprises compact, electrically commutated coolant pumps for auxiliary and subsystem cooling and is considered the market-leading solution in its class. With millions of units in service, it reliably cools and heats turbochargers, EGR systems, electronics, as well as passenger compartments and parking heaters. A brushless motor and hermetically separated hydraulics and electronics ensure low wear, smooth operation and long service life. Its compact design, modular interfaces, and flexible installation orientation enable seamless integration into tight spaces and thermal systems. In EV applications, lower coolant temperatures unlock higher power outputs, delivering the flow and pressure capabilities demanded by advanced electrified platforms.

BENEFITS

- Market-leading field experience – first BLDC auxiliary coolant pump in series production millions of units confirm proven field performance
- Rare-earth-free magnets – sustainable, cost-stable magnet technology without critical materials
- Thermal-module integration – direct installation capability for compact thermal modules
- Cost-optimized architecture – competitive cost structure for high-volume applications and strong price positioning
- Flow & pressure reserves – increased hydraulic capability in low-temperature EV coolant circuits
- 48 V variant targeted for 2027 (WUP 5)

TECHNICAL DATA

	WUP 3evo		WUP 5	
Operating voltage [V]	12.0		12.0	
Flow rate [m³/h]	0.5	0.7	0.5	1.2
Pressure [bar]	0.2	0.3	0.5	0.5
Coolant temperature [°C]	125	80	125	80
Current consumption [A]	< 1.6	< 2.3	< 2.3	< 4.5
Communication	LIN 2.x or PWM			

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.

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