

WITH ADDITIONAL PWM AND CAN VERSIONS

# SPUMP FAMILY

NEW  
SPUMP S200



## SPEED PUMPING – INTELLIGENT AND FLEXIBLE

New versions with PWM and CAN feature variable speed control, save energy, reduce noise emission and always provide outstanding performance required for electrically powered vehicles. The SPump S120 and S200 are the lightest weight and most compact circulation pumps of their kind within the product family. The 500 W variant convinces with a high flow rate at high counter pressure. With an extended ambient temperature range of up to 95 °C at the highest level of reliability, the SPump is the best solution for water pumps in comfort application and component cooling worldwide.



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## HIGHLIGHTS



### Low Life-Cycle Costs

- Leak-free, wear-resistant and maintenance-free due to the magnetic drive
- Brushless EC-motor allows a long service lifetime of up to 40,000 h
- With the IP6k9k classification, the pump is dust and waterproof - ideal for demanding environmental conditions and other applications



### Comfort

- Intelligent function - Error diagnosis and function monitoring of CAN versions



### Environmentally friendly

- Noise-optimized and ideally suited for use in electric or hybrid buses
- Optimized power consumption, high efficiency and energy savings through variable speed control in the PWM & CAN SPump versions
- Increased operational safety and comfort while reducing operating costs



### Reliability & durability

- The extended temperature range up to 95 °C allows operation under hot ambient conditions in the bus
- Full Protection Package in CAN versions
- High EMC level

	SPump S120	SPump S200	SPump 260	SPump 500
Power Consumption (W)	120	200	260	500
Flow Rate (l/h)	3,500 at 0,4 bar 1,000 at 0,5 bar	6,000 at 0,5 bar 1,000 at 1,0 bar	6,000 at 0,5 bar 1,000 at 1,0 bar	10,000 at 0,5 bar 1,500 at 1,5 bar
Rated Voltage (V)	12/24	24	24	24
Operating Voltage Range (V)	8...16 V (12 V) 16...32 V (24 V)	16...32	16.5...32	16.5...32
Temperature Range in Operation (°C)	-40 to +95	-40 to +85	-40 to +95	-40 to +85
Protection Class	IP6K9K <sup>1)</sup> IP67 <sup>2)</sup> (whole pump)	IP6K9K <sup>1)</sup> IP67 <sup>2)</sup> (whole pump)	IP6K9K (whole pump depending on the plug)	IP6K9K (whole pump)
Dimensions D / L (diameter / length in mm)	127/170	127/170	172 / 212	172 / 212
Weight (kg)	2.2	2.2	2.3 / 2.6 (CAN)	2.6
Lifetime (h)	40,000 <sup>2)</sup>	35,000 <sup>3)</sup>	40,000 <sup>2)</sup>	40,000 <sup>2)</sup>
Noise Level (dB), approx.	53 (in a distance of 1 m)	57 (in a distance of 1 m)	60 / 65 (CAN)	~ 65
Motor concept	canned motor	canned motor	magnetic coupling	magnetic coupling
Control	ON / OFF PWM (universal) CAN	ON / OFF  CAN	ON / OFF PWM (active low) CAN	CAN
CAN-interface	Acc. to SAE J1939	Acc. to SAE J1939	Acc. to SAE J1939	Acc. to SAE J1939
Plug	integrated MOLEX MX150	integrated MOLEX MX150	watertight Plug on demand (ON/OFF)	watertight
Brine	at least 30 % commercial radiator antifreeze <sup>4)</sup>	at least 30 % commercial radiator antifreeze <sup>4)</sup>	at least 30 % commercial radiator antifreeze <sup>4)</sup>	at least 30 % commercial radiator antifreeze <sup>4)</sup>

<sup>1)</sup> with connected mating plug

<sup>2)</sup> 40,000 h @ Tmax < 55 °C | 30,000 h @ Tmax < 65 °C | 10,000 h @ Tmax < 85 °C

<sup>3)</sup> 35,000 h @ Tmax < 55 °C | 25,000 h @ Tmax < 65 °C | 10,000 h @ Tmax < 85 °C. Higher values possible under other conditions.

<sup>4)</sup> 52 % at -40 °C