

Product Information

Pump with magnetic drive



A.u.K. Müller

Solenoid valves
Control valves
Special valves and systems

A. u. K. Müller GmbH & Co. KG
Dresdener Str. 162
D-40595 Düsseldorf/Germany

Tel.: +49(0)211-7391-0
Fax: +49(0)211-7391-281

e-mail: info@akmueller.de
Internet: www.akmueller.de

Series 41.008.200



Characteristics

- Low running noise
- Suitable for food and hot water appliances
- Basic interference suppression integrated into motor
- Suitable for dry run (max. 5 minutes)

Applications

- Hot / cold drink dispensers
- Increase output pressure on low water level boilers
- Tank or boiler draining

Description

This pump is designed to increase pressure to enable a higher flow rate and improved dispense accuracy. It is ideal for applications where a low water level in a boiler causes an insufficient flow rate through traditional boiler dispense valves.

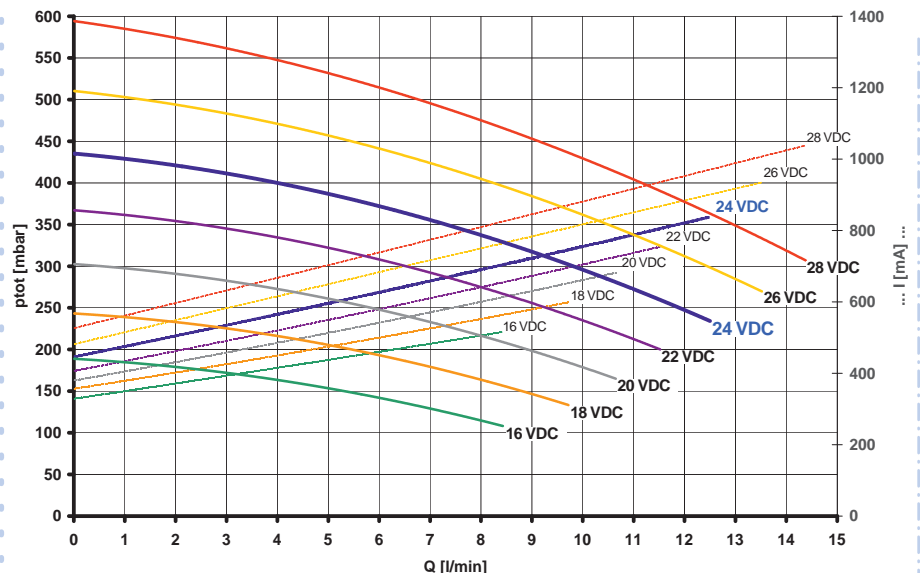
Use of the pump allows for flexible siting of dispense valves inside the machine, including up to 3 meter above the water level in the boiler.

Varying the voltage supplied to the pump will change its speed and thus vary the flow rate output.

The impeller is driven by a non-contact magnetic connection which avoids the use of additional seals preventing potential leak paths.

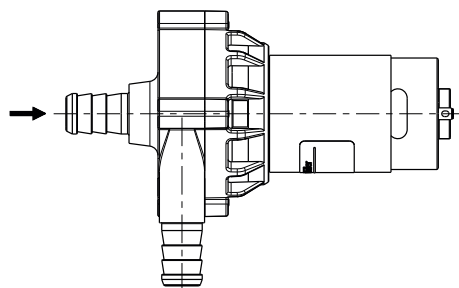
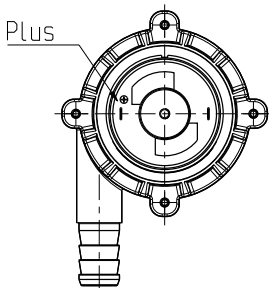
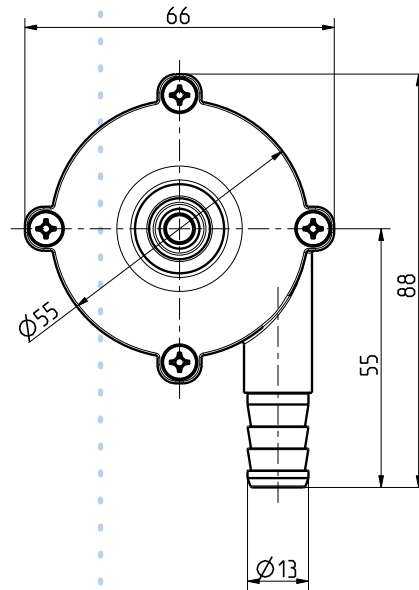
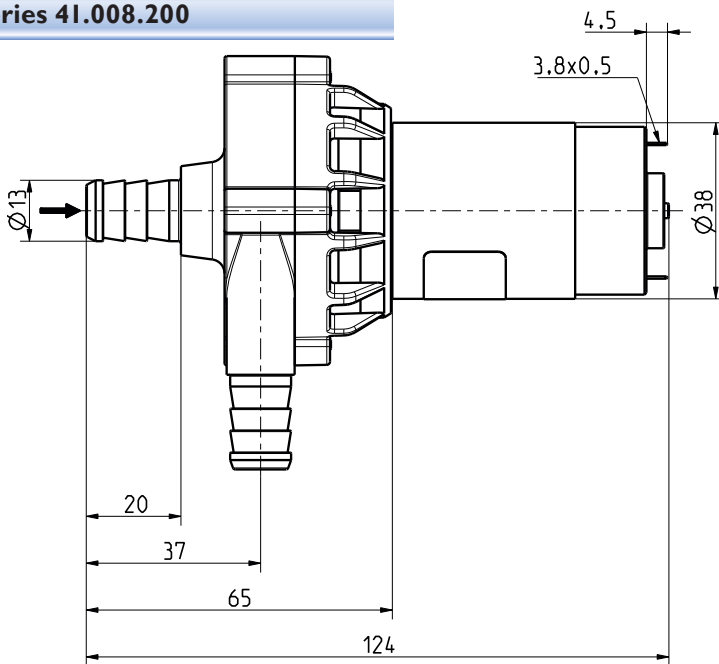
The pumps body housing is suitable for use with hot water.

typical performance curves





Series 41.008.200



Technical Data

Type	pressure increasing pump	
Construction	centrifugal pump (not self-priming)	
Fitting position	any, preferably with motor upwards	
Media	cold and heated potable water and physically and chemically similar media	
T-Medium	95	°C max.
T-Ambient	70	°C max.
DN	8	mm
p-max (24 VDC)	430	mbar
Q-max	12	l/min
Motor type	direct current motor	
Nominal voltage	24	V DC
Voltage range	16 - 28 VDC	
Duty cycle	100%	
Protection Type	IP 00 according to EN 60529	
Motor connections	soldering lug 3,8 x 4,5 x 0,5	
Basic interference suppression	ring varistor	
Insulation class	B	according to EN 60730
Protection class	III	according to EN 60730

Materials

Motor support	PA 66
Pump housing	PA 6T/6I
Impeller	PVDF
Bearing	PTFE slip ring
Seal	EPDM
magnetic clutch of impeller	NdFeB

Notes for customers using the pump 41.005.300 without the circuit board

If the pump is used without the overload circuit board, the customer should take appropriate safety measures in the event of motor blockage. For this purpose an overcurrent protection should be provided on the system electronics to prevent overheating of the motor and possible damage to the control circuit by an excessive current. This can for, example, be carried out by a PTC thermistor or a fuse. Further measures for interference suppression should be taken.

The nominal currents of the motors are as follows:
24 V motor: 590 mA

For the protection circuit board the following PTC thermistors can be used:
24 V Motor: MF-R090 (holding current : 900 mA, release current: 1800 mA @ 23 °C)

In order to achieve the intended direction of the impeller, the correct polarity has to be obeyed when connecting the motor.



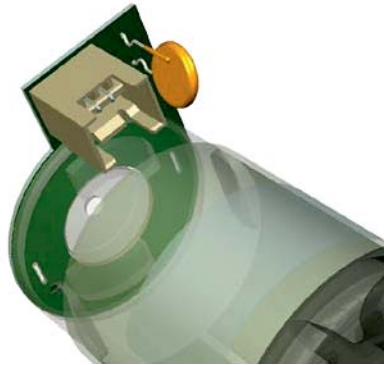
Series 41.008.200

Pump with thermal motor protection

An additional circuit board located on the terminal side of the motor prevented by means of a PTC a temperature critical current of the motor and therefore satisfies the requirements of EN 60335-1.

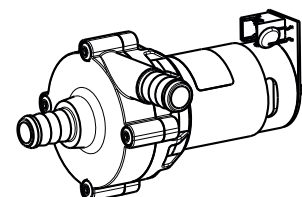
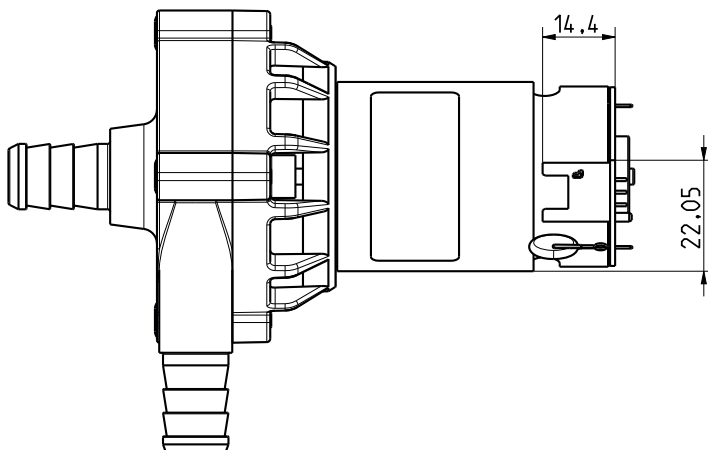
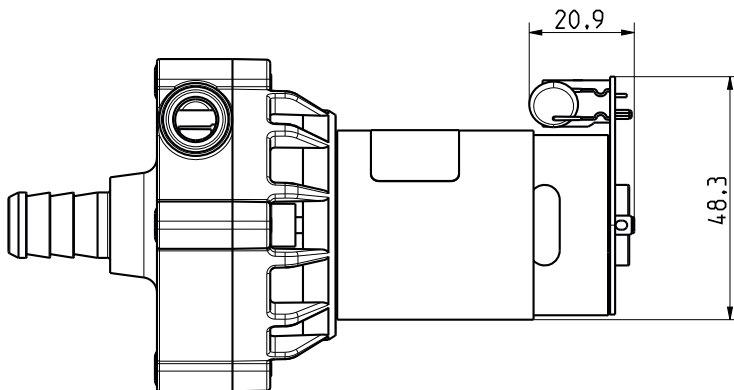
The thermal overload of the motor, caused by a blocked motor for example, will effectively be avoided.

The electrical connection of the motor is even more simplified by a RAST 2.5 connector.



Technical Data

Duty cycle	70% SD 5 min ON: 3,5 min OFF: 1,5 min	
Protection Type	IP 00 according to EN 60529	
Motor connections	soldering lug 3,8 x 4,5 x 0,5	
Basic interference suppression		ring varistor
Overload protection	PTC	
Insulation class	B	according to EN 60730
Protection class	III	according to EN 60730





Series 41.008.200

Typical pump mounting options

