

Special valves

A439999

Motor-controlled seat valve 100299 G1/2", DN11, 24 VDC Hot water application

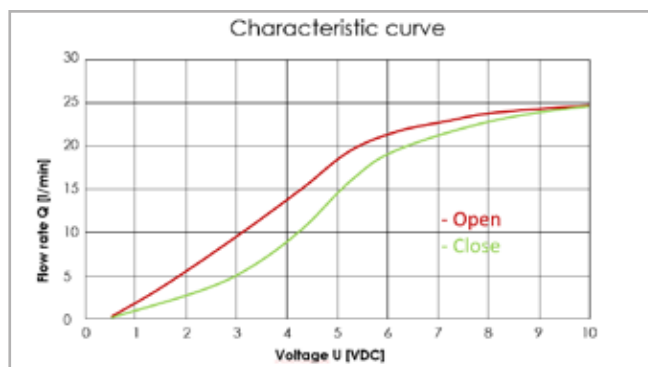
Beschreibung

The A439999 valve is a direct acting, stepper motor-controlled 2-way seat valve. It is specially designed for applications under harsh operating conditions in which the flow of hot water must be continuously controlled. Thanks to its nominal width of 11 mm, it is possible to achieve a wide range of flow rates, from 0 to 38 l/min.

It can be connected to a control loop thanks to its simple control at 0 to 10 VDC. Thanks to the control cone contour, which has been adapted to the requirements, the flow rate can be aligned to a customer-specific characteristic curve (control signal-based flow rate).

Only the supply and control voltage must be connected during commissioning. The integrated stepper motor driver takes care of the rest. In the event of a power failure, the valve will remain in the current position. When applying the supply and control voltage, the valve closes and performs a reference run. Following the reference run, the control signal position is automatically assumed. It is recommended that regular reference runs are performed, since the driver is unable to detect possible step losses.

Depending on the installation situation, the drive can be turned in the middle position, with the signal at 5 VDC and in a depressurised state.



Characteristic curve

**Applications**

- Temperature control units
- Heating systems
- Cleaning systems
- Dishwashers
- Washing machines
- Industrial equipment

Properties

- Directly controlled 2-way seat valve
- Stepper motor drive with integrated driver
- Medium temperature up to 160°C
- Does not cause water hammer in systems
- Plug connection 3 pin M8x1
- Easy handling
- Drive can be rotated to the desired position
- Maintenance-free
no retightening of seal packings

Materials

- Wetted parts manufactured from brass, stainless steel; seals manufactured from PTFE
- Upper parts manufactured from anodised aluminium, PA and PPS

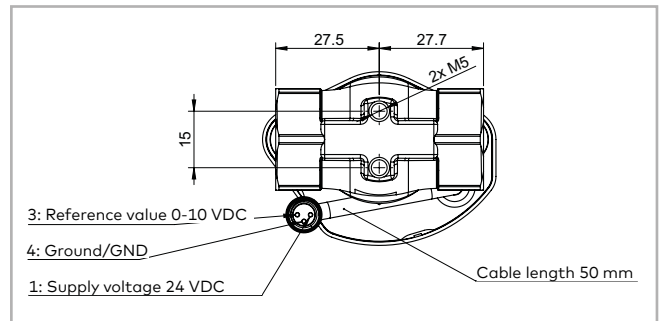
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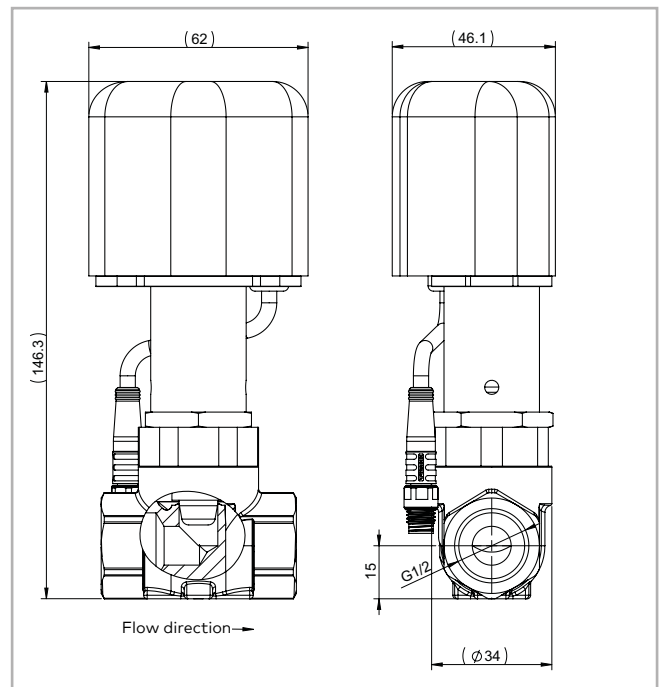
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Technical data

Type	Stepper motor-controlled valve
Design	2-way, directly controlled
Function	Adjustable stroke
Mounting position	Preferably drive on top
Media	Water, hot water, neutral liquids
Temp. of medium	-10°C to 160°C
Ambient temp.	-10°C to 70°C
Diameter nominal DN	Ø 11 mm
Operating pressure	0 - 7 bar
Flow factor KV	38.0 l/min
Drive	Stepper motor incl. driver
Plug connection	3 pin M8x1
Operating voltage	24 VDC ±10%
Power consumption	5 VA
Current consumption	max. 250 mA
Duty cycle	25%
Quiescent current	6 mA
Control signal	0 - 10 VDC (0 - 0.5 VDC not used)
Speed	approx. 4 mm/s Open/close in approx. 2 s

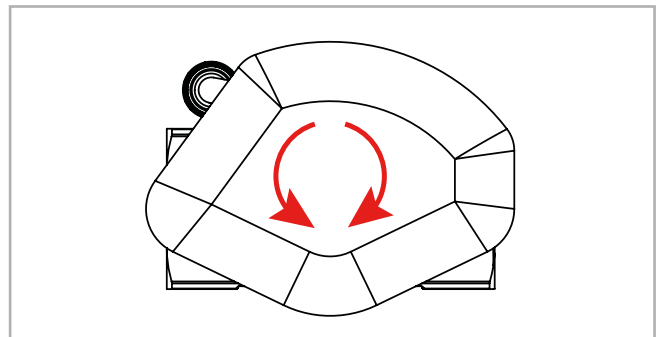


Dimension drawing

**Aligning the drive**

The drive can be aligned to meet the requirements in just a few steps.

1. Depressurise the system
2. Valve in middle position, signal 5 VDC
3. Turn housing towards drive



Aligning the drive