Product Information

Servo-direct stepper motor controlled valve, DN 10

Series 10.010.126 - sds

A.u.K. Müller

Solenoid valves
Control valves
Special valves and systems

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Characteristics

- Servo-direct controlled valve
- Stepper motor, medium separated by PTFE bellows
- Long term performance capability
- Medium temperature up to 80°C
- continuous opertion
- No water hammer
- High operating safety by usage of high quality material and 100% final testing

Applications

- Thermostatically controlled heating system
- Instant flash heater
- Hot and cold vending machines
- Industrial equipment
- Air conditioning
- Agriculture equipment
- Cleaning equipment
- Temperature equalizers
- Dishwashers
- Washing machines
- Water treatment equipment

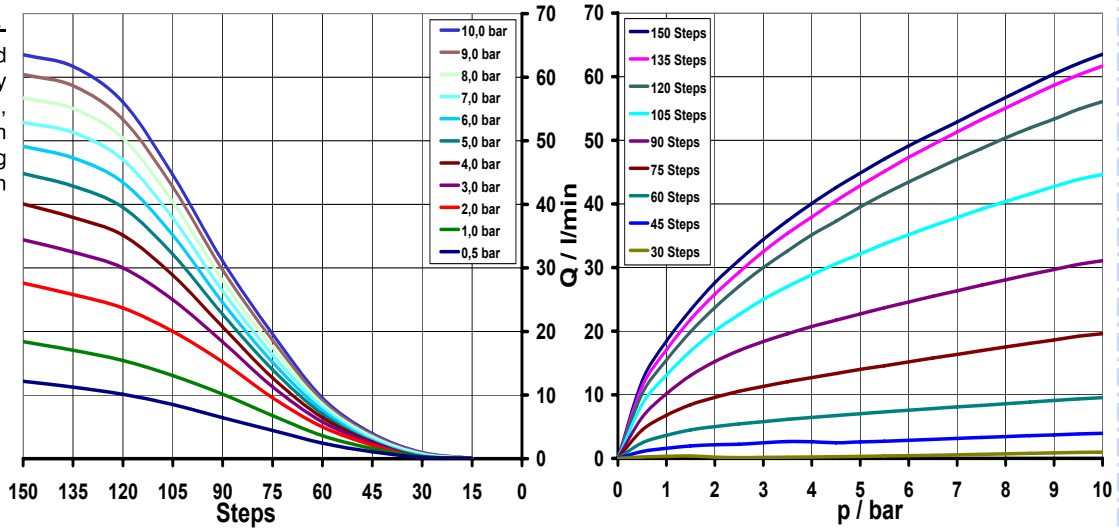
Description

The 2/2 way servo-direct motorized valve has a 10mm orifice, but a continuously variable stroke to accurately control the flow through the valve. It can function with low inlet pressures and flow rates, similar in nature to a direct acting valve without a complete shut off function.

The stepper motor drive part of the valve is completely separated from the medium by means of special PTFE bellows. This valve has been specifically developed for applications that require continuous adjustment of the flow rate. For example the flow through an instant flash heater can easily be regulated for maximum accuracy and efficiency.

Alternatively, by incorporating the motorized valve in thermostatically controlled heating systems, the flow rate into the system can be controlled according to ambient temperature in the room.

typical performance curve tolerance ±5%



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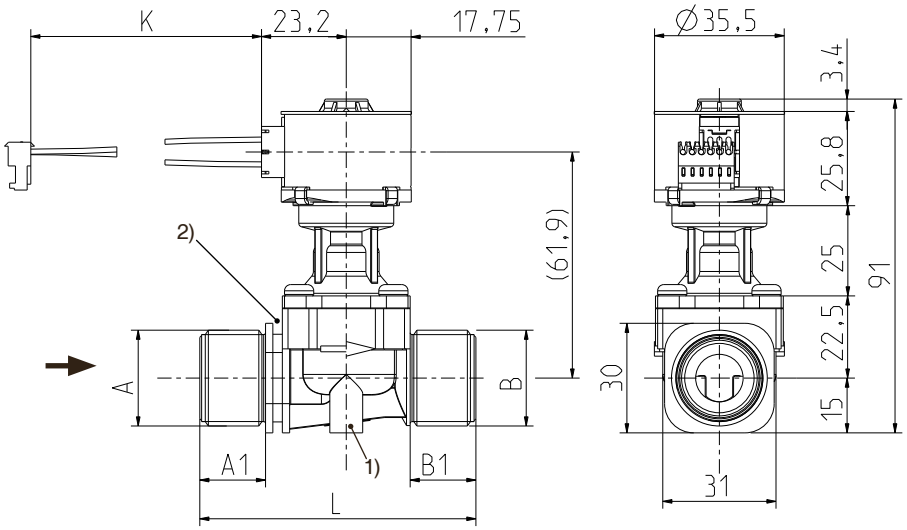


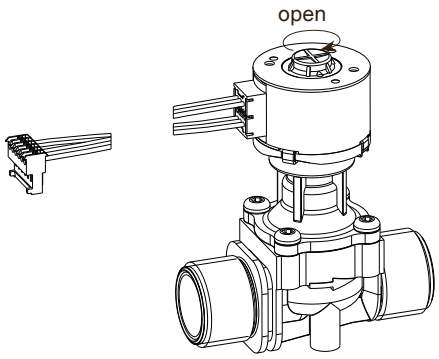
1) Fixing possibility for self tapping screw Ø 4,2
2) Fixing groove

Technical Data

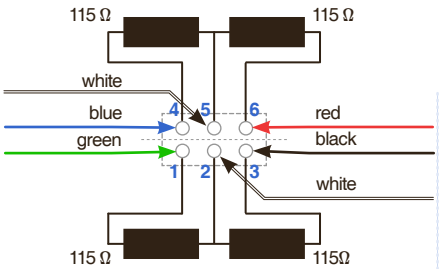
type	stepper motorized valve	
construction	2/2-way single chamber straight valve, servo-, direct controlled	
function	continuously adjustable stroke	
fitting position	any, preferably actor upwards	
media	potable water and physically and chemically similar media	
T-Medium	80	°C max.
T-Ambient	60	°C max.
DN	10	mm
p-Operating	0 - 10	bar
Cv-value	20	l/min (completely open)
actuator type	stepper motor unipolar	
steps (open - closed)	150	max.
nominal voltage	18 V DC	
Voltage tolerance	±5%	
duty cycle	100%	
Nominal power	6 W	
Protection Type	IP 00	
Motor connection leads	6 x 0,22² / AWG 24 (AWM Style 1007)	
plug	AMP Tyco MTA 100 3-644563-6	
Insulation class	B	according to EN 60730

Materials

Valve body	PA 66 glass fibre reinforced PPE on request PEI on request
Retention gland	PPE PA 66 glass fibre reinforced on request
Nozzle	PA6/6
Bellow and sealing cone	PTFE
Membrane	EPDM
Filter (inlet)	stainless steel POM on request



connections and lead colours of the stepper motor



Options

Material	Inlet		Outlet		Length	Strand
	Ø A	A1	Ø B	B1	L	K
PA 66	G 3/4	18,0	G 3/4	18,0	76,0	
PA 66	G 1/2	15,0	G 1/2	15,0	70,0	
PA 66	G 3/8	13,0	G 3/8	13,0	66,0	
PA 66	G 3/4	18,0	G 1/2	15,0	73,0	115 mm
PA 66	G 3/4	18,0	G 3/8	13,0	71,0	other lengths on request
PA 66	G 1/2	15,0	G 3/4	18,0	73,0	
PA 66	G 1/2	15,0	G 3/8	13,0	68,0	
PA 66	G 3/8	13,0	G 3/4	18,0	71,0	
PA 66	G 3/8	13,0	G 1/2	15,0	68,0	

pulse scheme

	0	I	II	III	IV
1	+			+	+
2	-	-	-	-	-
3		+	+		
4			+	+	
5	-	-	-	-	-
6	+	+			+

open → close

step frequency ≤ 40 Hz