Bi Stable Plug-in Cartridge Valve, DN 5

Product Information

Series 50.005.850 bi



A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

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Characteristics

- Servo-controlled
- Pretested functional unit
- Suitable for the thermal as well as chemical disinfection
- Long term performance capability
- Internal double pollution protection
- Compact, cylindrical design
- Optimized flow factor Kv for DN 5 (7,5 l/min at 1 bar)
- Optimized water hammer characteristic by low noise emission according to EN 60730 and EN 15091*
- Easy to assemble and service
- Low power consumption
- Any fitting position
- Suitable for spray and jet water
- High operating safety through the use of high quality material and hygiene benefit by 100% final testing with air

* Testing according EN 15091 and adjustment of the valve in the fitting upon request.

Description

2/2-way solenoid cartridge servo controlled valve of DN 5 in bi stable version, for the control of potable water. The valve is especially suitable for use in electronically controlled, battery driven sanitary fittings.

The power consumption is minimised by the use of impulse control (pwm) to increase long term performance, durability and battery life.

The design outline has been reduced so far that the integration of the functional component in the system is possible, while using a minimum amount of space.

The design of a separate valve seat by the customer is not required, as otherwise needed if a pilot valve will solely be used.

The rate of flow of the cartridge valve has been optimized in such a way, that the nominal diameter of DN 5 fulfils the standard requirements for sanitary tap ware.

Applications

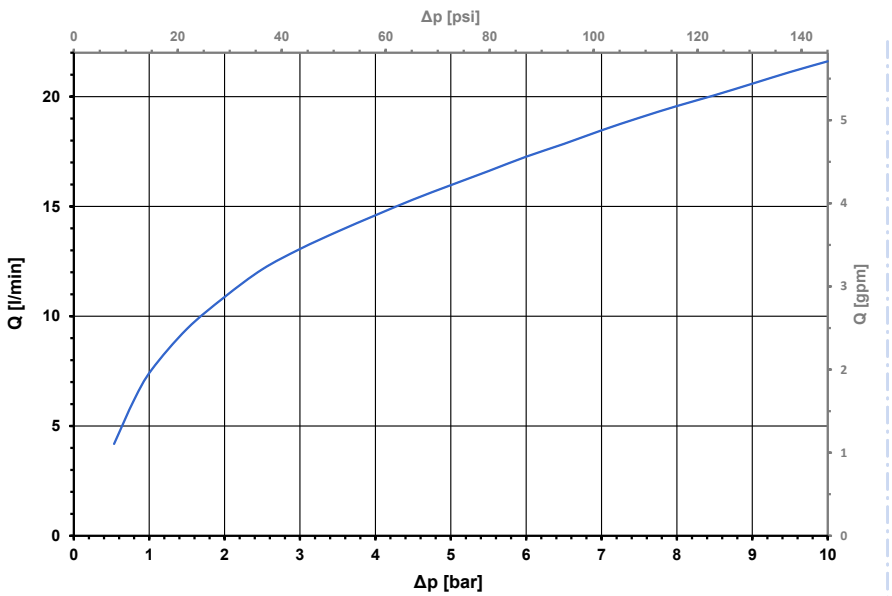
- Automatic fittings
- Sanitary fittings
- Pilot system for valves with a larger nominal diameter

Approvals

Approved versions available on request:

- KTW-BWGL System 1+
- ACS
- NSF 61
- Others on request (WRAS)

Typical Performance Curve

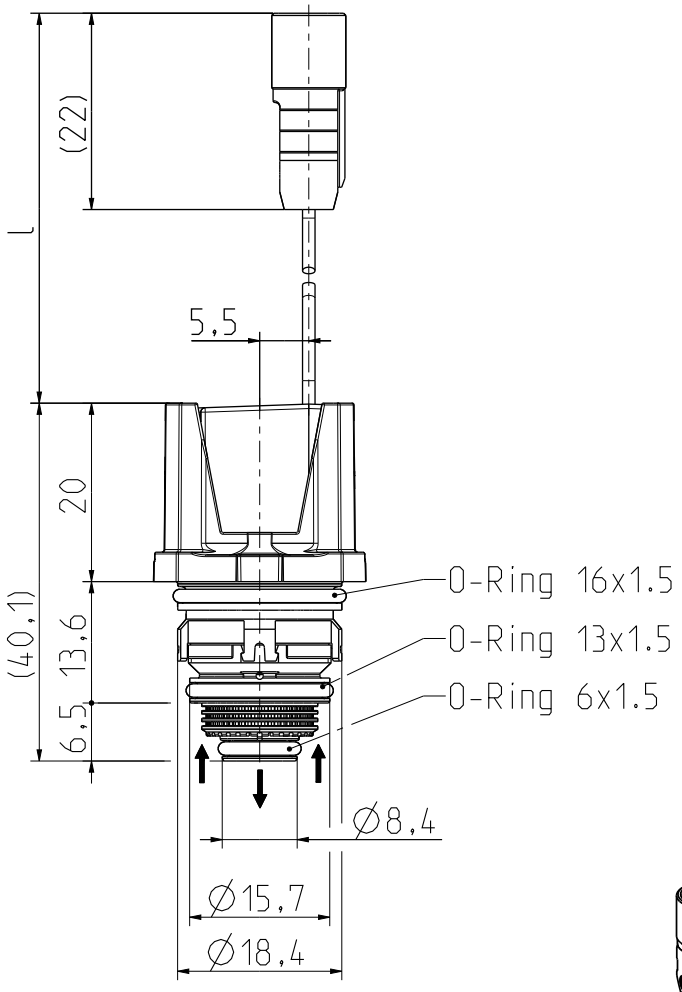


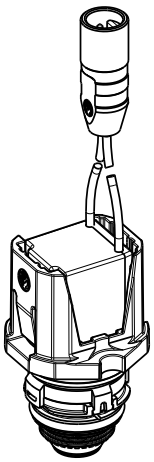
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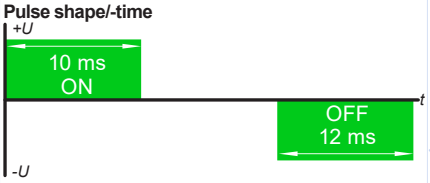
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Technical Data

Type	cartridge valve	
Construction	2/2-way, servo controlled	
Function	bi stable, pulse controlled	
Connection	plug mounted, secured with screws (M4) or clamped	
Fitting position	any	
Media	cold and heated potable water and physically and chemically similar media	
T-Medium	5 - 70	°C
T-Ambient	5 - 60	°C
DN	5	mm
p-Operating	0,5 - 10,0	bar
Flow factor Kv	7,5	l/min
Pressure surge	according to EN 60730	
Burst pressure	according to EN 60730	
Nominal voltage	6	V DC
Operating voltage	4,0 - 6,9 V DC open/close at T-ambient 25 °C	
Pulse shape/-time		
Nominal power	1,4 W	@ 6 V
Protection Type	IP 65	
Insulation class	B	according to EN 60730
Protection class	III	according to EN 60730

Good resistance to thermal (e.g., T-medium 80 °C / 10 minutes) and chemical disinfection.

Hygiene advantage by air testing prior to delivery.

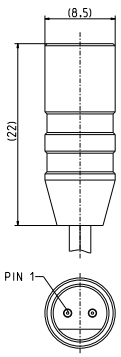
Materials

Valve body	PA 6/6
Seal support	PPSU
Plunger guide	LCP
Plunger	stainless steel
Membrane and sealings	EPDM
Filter	POM

Options

ID	Connection type	Standard cable length L
52900	with leads and connector	85 ± 5 mm

Others on request.



Male connector

Polarity of connector:

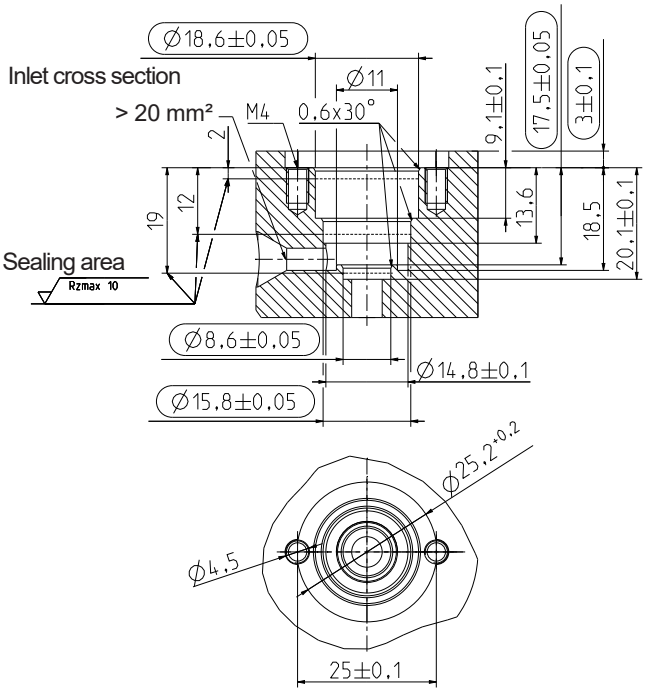
strand color RED Pin 1 — PLUS(+) pulse to open

strand color BLACK — MINUS(-)

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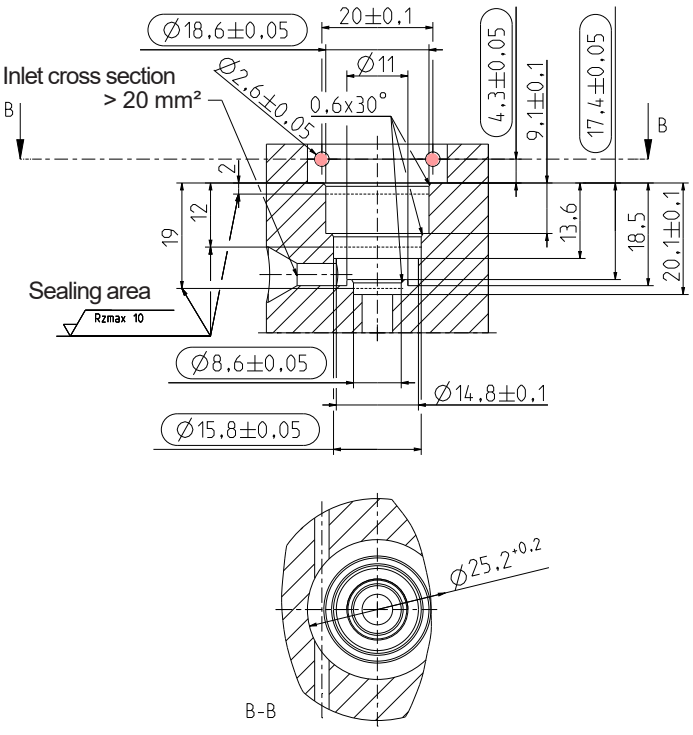
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Plug-in contour screwed

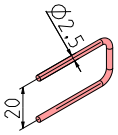


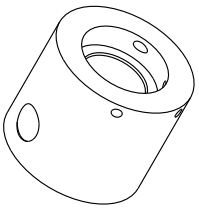


Plug-in contour clamped



Proposal for clamp





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