

Bi stable cartridge valve, DN 5

Product Information



A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

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Series 50.005.101



Characteristics

- Servo-controlled
- Pretested functional unit
- Suitable for the thermal as well as chemical disinfection
- Long term performance capability
- Internal triple pollution protection
- compact design
- Optimized Cv-value for DN 5 (8,5 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
- Standard connection
- Cylindrical design
- Low power consumption
- Any fitting position
- Suitable for spray and jet water
- High operating safety through the use of high quality material
- Hygiene benefit by 100% final testing with air

Applications

- Sanitary fittings, as electronic faucets
- Irrigation systems
- Industrial appliances

Description

2/2-way solenoid cartridge servo controlled valve of DN 5 in bi stable version, to be used particularly 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.

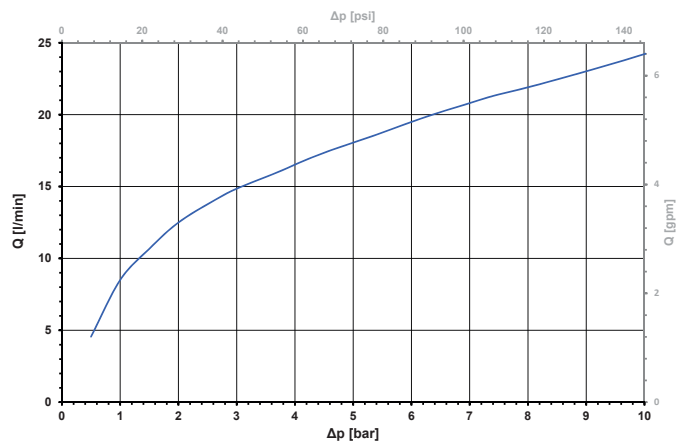
The design outline had been reduced so far that integration in appropriate components, while using a minimum amount of space, is given.

Positive properties are extended due to the simple "screw in" version, which supports easy assembly, service and tests by the customer.

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

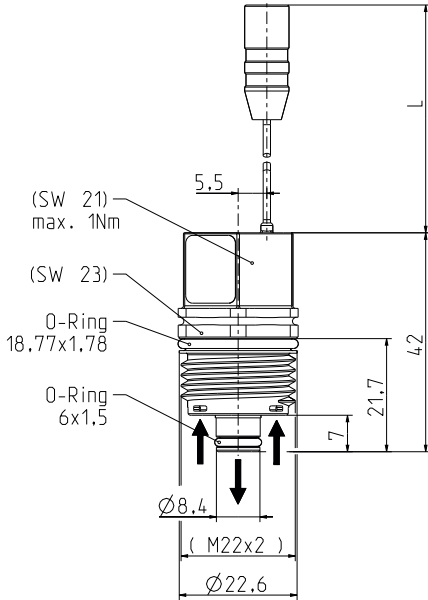
The rate of flow of the cartridge valve has been optimized in such a way, that the nominal diameter of DN 5 fulfils the standard requirements for sanitary tap ware.

typical performance curve





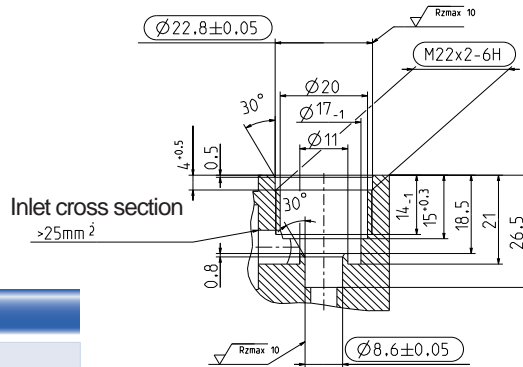
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⚠ Before screw in o-rings are to be greased with silicone grease.

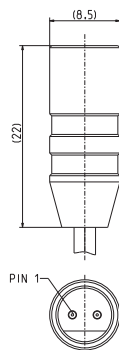
⚠ Max. Torque for screw in: 1Nm

Screw in contour



Materials	
Valve body	PA 6/6
Seal support	PPSU
Plunger guide	LCP
Plunger	stainless steel
Membrane and sealings	EPDM
Filter	stainless steel (in inlet)

Options	
Connection type	standard cable length L
with leads and connector	85 ± 5 mm
others	on request



Male connector

Polarity of connector:
strand color RED Pin 1
strand color BLACK

PLUS(+) pulse to open
MINUS(-)

Technical Data

Type	cartridge valve
Construction	2/2-way screw-in, servo controlled
Function	bi stable, pulse controlled
Connection	thread M22 x 2
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
Cv-value	8,5 l/min
Pressure surge	according to EN 60730
Burst pressure	according to EN 60730
Nominal voltage	6 V DC
	other voltages on request
Operating voltage	4,0 - 6,9 V DC open/close at T-Ambient 25 °C
Pulse shape/time	
Nominal power	1,4 W
Protection Type	IP 65 higher IP-classes on request
Insulation class	B 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.

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

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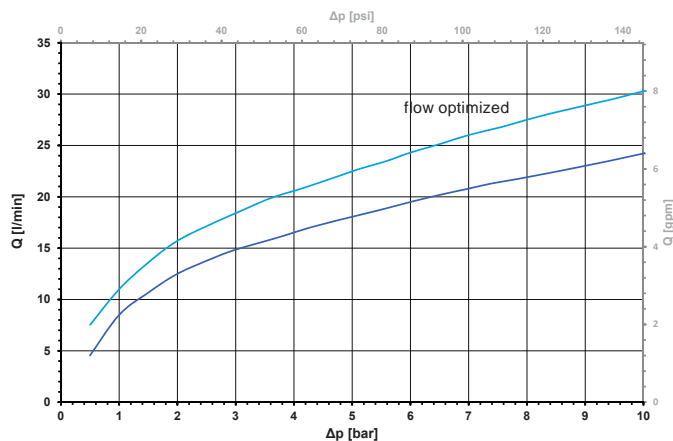
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Other variant on request

For use outside wash basin applications, a flow-optimized variant with a Kv value of 11 l / min is available on request.

The water hammer characteristics and noise emissions in accordance with DIN EN 15091 are to be tested in the corresponding faucet.

typical performance curve





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