

# Product Information

## Bi stable cartridge valve, DN 7



## 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 50.009.101 M29



### 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 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 in urinals or wellness showers
- Irrigation systems
- Industrial appliances

### Description

2/2-way solenoid cartridge servo controlled valve of DN 9 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.

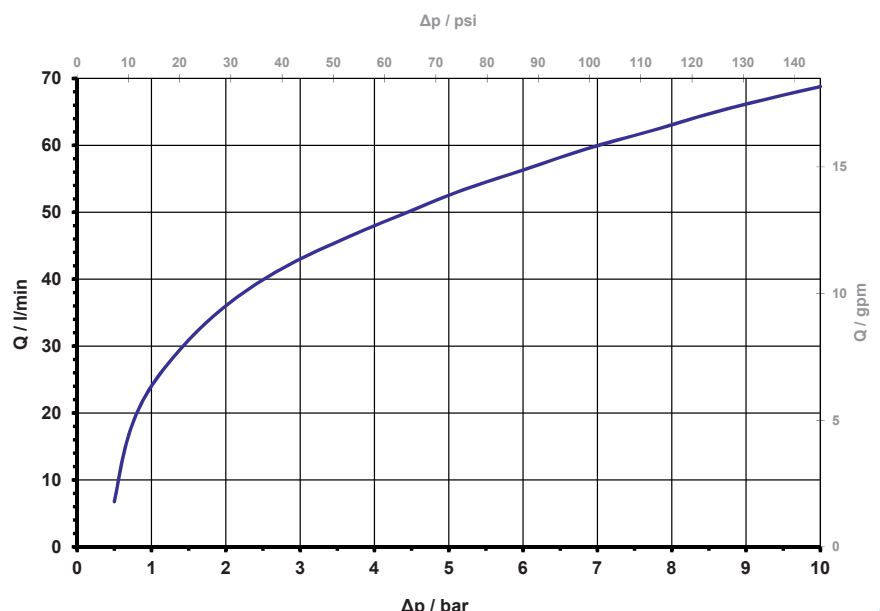
Positive properties are extended due to the simple "screw in" version, which supports easy assembly, service and tests by the customer.

The design of a separate valve seat by the customer is not required, as otherwise needed when solely using a pilot valve.

The rate of flow of the cartridge valve has been optimised in such a way, that the nominal diameter of DN 9 fulfils the standard requirements for sanitary tap ware.

By using our special valve bodies, an extended variety of attachment combinations can be achieved (see data sheet 50.009.126).

typical performance curve

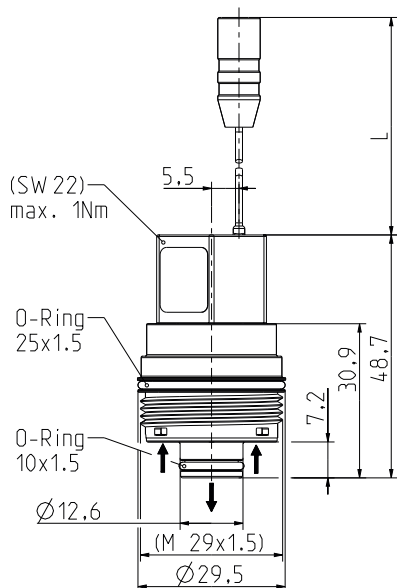


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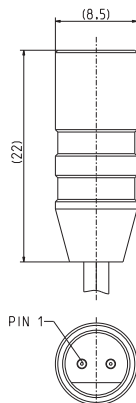
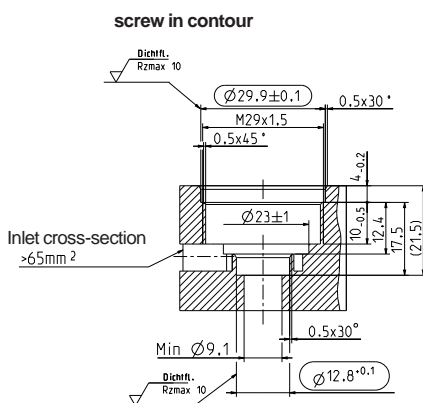
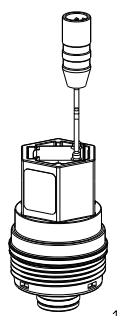
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- Before screw in o-rings are to be greased with silicone grease.
- Max. Torque for screw in: 1Nm

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 PLUS(+) pulse to open  
strand color BLACK MINUS(-)

## Technical Data

Type	2/2-way-cartridge valve
Construction	screw-in, servo controlled
Function	bi stable, pulse controlled
Connection	thread M29 x 1,5
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	9 mm
p-Operating	0,5 - 10,0 bar
Cv-value	24 l/min
pressure surge	according to EN 60730
Nominal voltages	6 V DC
	other voltage 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.