

# Product Information

## Mono stable cartridge valve, DN 7



**A. u. K. Müller**

Solenoid valves  
Control valves  
Special valves and systems

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### Series 50.007.101 M28



### Characteristics

- Servo-controlled
- Pre tested 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 7
- 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: urinal, shower or bidet
- Irrigation systems
- Industrial appliances

### Description

2/2-way solenoid cartridge servo controlled valve of DN 7 in monostable version, to be used particularly in electronically controlled sanitary fittings.

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

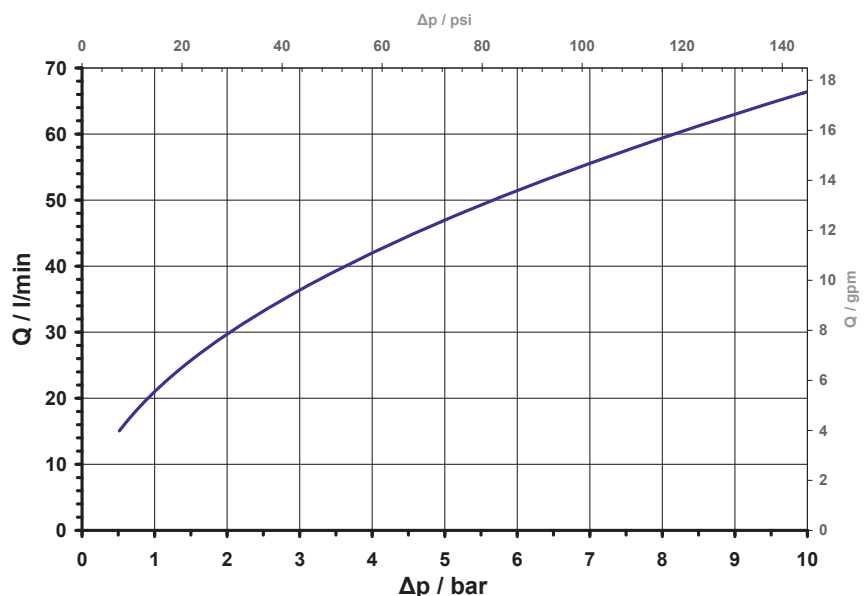
Positive properties are extended due to the simple "screw in" version, which supports easy assembly, service and tests by the customer.

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 7 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 50.007.126 or 50.007.52x).

typical performance curve



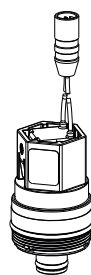
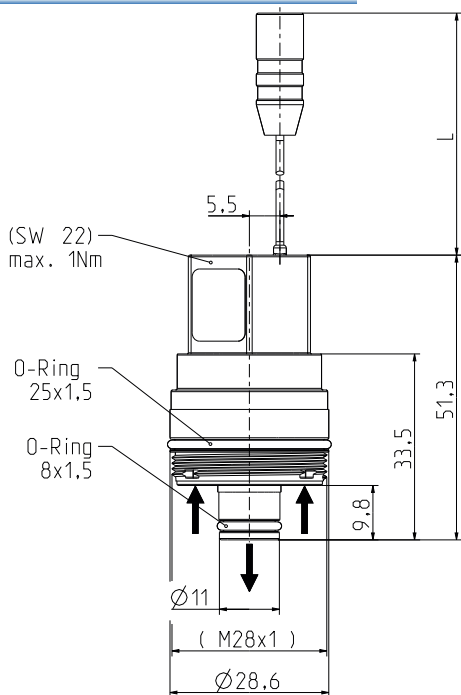
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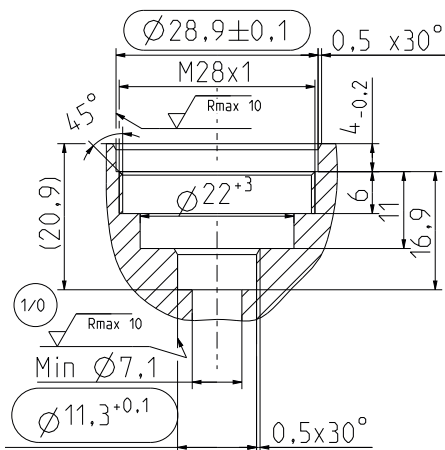
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⚠ Before screw in o-rings are to be greased with silicone grease.

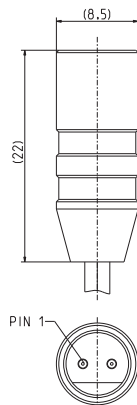
⚠ Max. Torque for screw in: 1Nm

#### 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	95 ± 5 mm
others	on request



#### Male connector

#### Polarity of connector:

strand color **RED** Pin 1 PLUS(+) pulse to open  
strand color **BLUE** MINUS(-)

### Technical Data

Type	Cartridge valve	
Construction	2/2-way screw-in, servo controlled	
Function	NC (normally closed)	
Connection	thread M28 x 1	
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	7	mm
p-Operating	0,5 - 10,0	bar
Cv-value	21	l/min
pressure surge	according to EN 60730	
Burst pressure	according to EN 60730	
Nominal voltage	12	V DC
	24	V DC
	other voltages on request	
Voltage tolerance	-15 % +10 %	
Optional voltage reduction		
	$t_{start} : 100 \text{ ms}$ $tp:T \geq 1:3$ [ $>100\text{Hz}$ ] PWM $t_{start} : 100 \text{ ms}$ $tp:T \geq 1:4$ [ $>1\text{kHz}$ ] PWM	
Nominal power	12 V DC	1,7 W
	24 V DC	1,8 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.