

Product Information

Push-in Cartridge, DN 5, Height-optimised, bi- or monostable



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 51.005.101



Characteristics

- Servo-controlled
- Pretested functional unit
- Long term performance capability
- Internal triple pollution protection
- Compact design
- Optimized water hammer characteristic by low noise emission according to EN 60730
- Easy to assemble and service
- Low power consumption
- Any fitting position
- High operating safety through the use of high quality and 100% final testing of the products

Description

2/2-way solenoid servo controlled valve of DN 5, to be used particularly in electronically controlled sanitary fittings as bi-stable (latching) and monostable version.

The power consumption is minimised by the use of impulse control 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.

In addition, there is no need for the user to design a valve main seat, which is otherwise required when using exclusive pilot valves.

Applications

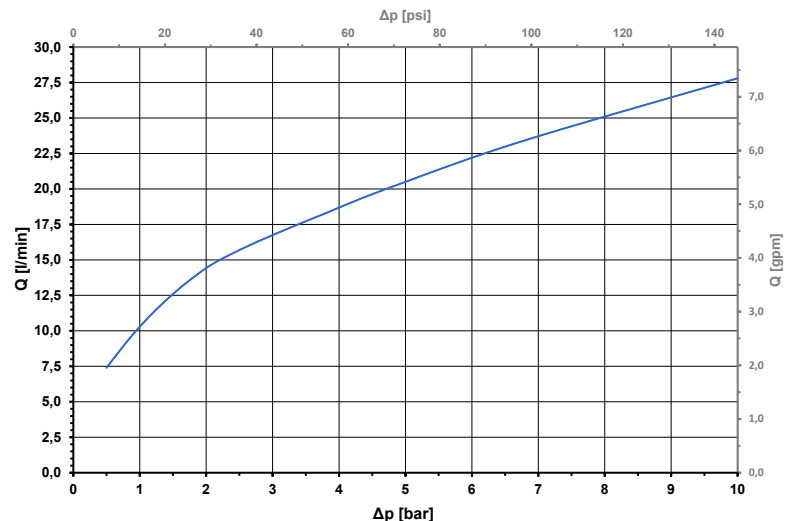
- Sanitary tap-ware

Approvals

KTW - BWGL  ACS

- KTW-BWGL
- ACS
- NSF 61
- Others on request

Typical Performance Curve



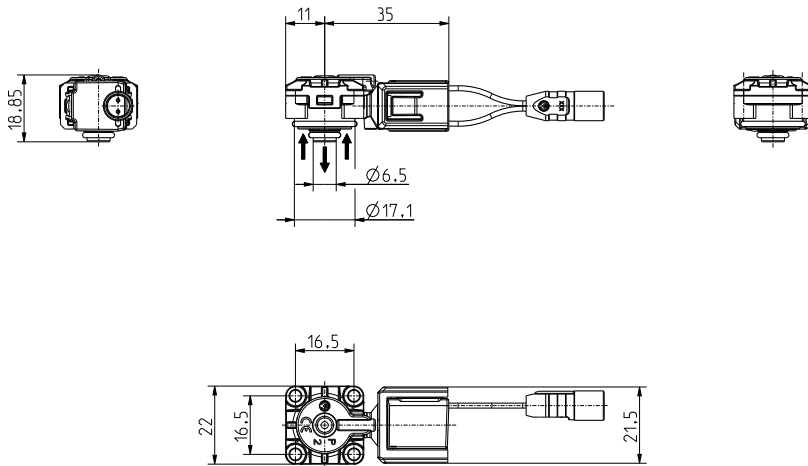
Product Information

Push-in Cartridge, DN 5, Height-optimised, bi- or monostable



A. u. K. Müller

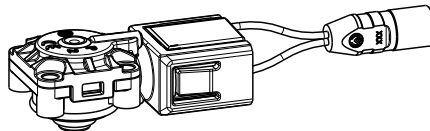
Series 51.005.101



O-Rings are to be greased before screw-in.

Materials

Valve body	PA 6/6 glass fibre reinforced
Plunger guide	LCP
Plunger and spring	stainless steel
Membrane and sealings	EPDM
Membrane insert	PPSU
Filter	stainless steel
Coil coating	Hotmelt



Connection

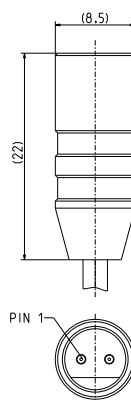
Pin plug

Polarity of plug / bistable, pulse controlled:

Wire colour **RED** Pin 1 PLUS(+) for opening pulse
Wire colour **BLACK** MINUS(-)

Polarity of plug / monostable (NC):

Wire colour **RED** Pin 1 PLUS(+)
Wire colour **BLUE** MINUS(-)



Technical Data

Type	Push-in Cartridge	
Bauart	2/2-way single valve, servo-controlled	
Connection	4x M3	
Fitting position	any	
Media	cold and heated potable water and physically and chemically similar media	
T-Medium	5 - 70 °C	(5 - 80 °C max 10 min)
T-Ambient	5 - 60 °C	
DN	5 mm	
p-Operating	0,5 - 10,0 bar	
Flow factor KV	10 l/min	
Pressure surge	according to EN 60730 / EN 15091*	
Burst pressure (5x PN)	according to EN IEC 60730-2-8	
Function	bistable (latching) pulse controlled	
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
Function	monostable (NC)	
Nominal voltage	12	V DC
	24	V DC
	other voltages on request	
Voltage tolerance	-15 % / +10 %	
Optional voltage reduction		
	$t_{start} : 100 \text{ ms}$ dutycycle $\geq 33\%$ [$>100\text{Hz}$] PWM $t_{start} : 100 \text{ ms}$ dutycycle $\geq 25\%$ [$>1\text{kHz}$] PWM	
Nominal power	12 V DC	1,7 W
	24 V DC	1,8 W
Protection class	II for PELV power supply	
Protection type	IP 65	according to EN 60529
	higher on request	
Insulation class	B	according to EN 60730

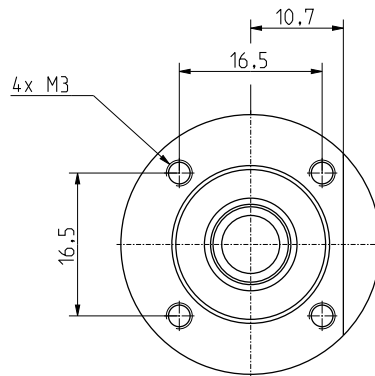
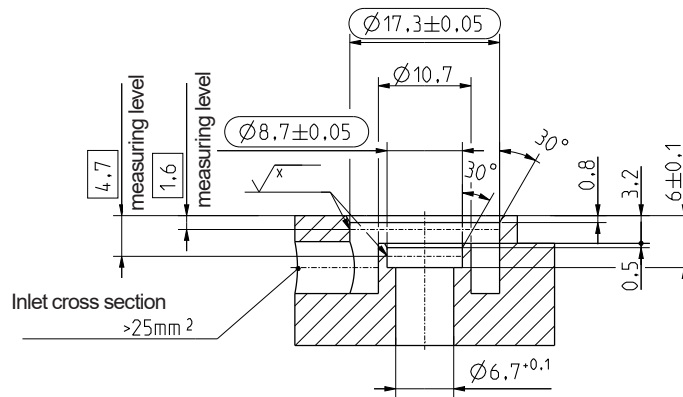
Good resistance to thermal (e.g., T-medium 80 ° C/10 minutes) and chemical disinfection.

Hygiene advantage by air testing prior to delivery.

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



Series 51.005.101



roughness (DIN EN ISO 1302)	
\sqrt{x}	sealing surface $\sqrt{U'Gau8^* -2.5/Rz1max 5max 10}$



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