Axial valve DN 5



A. u. K. Müller

Solenoid valves Control valves Special valves and systems

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Series 51.005.125



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

Applications

Sanitary tap-ware

Approvals

Approved versions available on request:

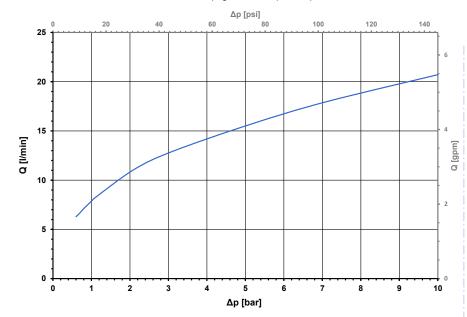
KTW-BWGL WRAS ACS





- KTW-BWGL System 1+
- **ACS**
- **WRAS**
- NSF 61

Typical Performance Curve Inlet/outlet: plug-in connector (ID 64561)



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. There is no need to design a valve seat by the user.

For easy integration various connection options are available. As inlet either a plug-in or flange connector with an integrated filter for pre-filtering are obtainable. Alternatively 6 or 8 mm push-fit connectors are offered, for which the pre-filtering has to be carried out on site. For the outlet either a plug-in connector or push-fit connectors with 6 or 8 mm are available.

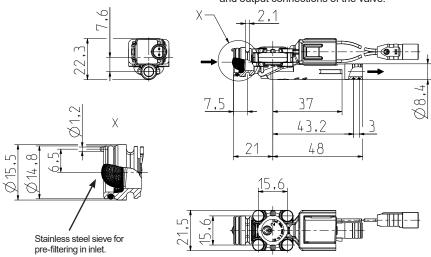
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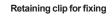
Series 51.005.125 Inlet/outlet: plug-in connector

Note: To avoid damage to the valve, make sure that the lines are exactly aligned with the input and output connections of the valve.



13.1±0.05 015.7±0.05 015.7±0.05 015.7±0.05 015.7±0.05

Inlet contour



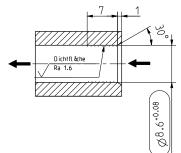


Due to the different installation conditions and resulting variations in length, the retaining clip is to be implemented by the customer.



Outlet contour

Materials		
Valve body, seal retainer	PA 6/6 glass fibre reinforced	
Plunger guide	LCP	
Plunger and spring	Stainless steel	
Membrane and sealings	EPDM	
Membrane insert	PSU/PEI	
Filter	Stainless steel	
Coil coating	Hotmelt	



Coil connection - Options						
ID	Inlet*	Outlet*	Flow factor Kv	Function	Nominal voltage	
64561	Plug-in connector Ø 14,8	Plug-in connector Ø 8,4 with 2 o-rings	7,6 l/min			
64551		Push-fit connector 6 mm	5,2 l/min			
64552	Flange connector	Push-fit connector 8 mm	7,5 l/min	bistable (latching)	6 V DC	
64554	Push-fit connector 6 mm	Push-fit connector 6 mm	4,6 l/min			
64555	Push-fit connector 8 mm	Push-fit connector 8 mm	7,3 l/min			on request

* Monostable versions and other connectors of	or combinations for inlet and outlet on request.
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Те	chnical	Data	
Туре	cartridge valve		
Construction	2/2-way screw-in, servo controlled		
Connection	Plug-in connection, flange or push-fit		
Fitting position	any, preferably with coil upward		
Media	cold and heated potable water and physically and chemically similar media		
T-Medium	5 - 70 (5 - 80	°C °C max 10 min)	
T-Ambient	5-60	°C	
DN	5	mm	
p-Operating	0,5 - 10,0 bar		
Flow factor Kv	see options		
pressure surge	according to EN 60730 / EN15091		
Function	bistable (latching) pulse controlled		
Nominal voltage	6	V DC	
	other voltag	es on request	
Operating voltage	4,0 - 6,9 V DC open/close		
.	at T-Ambient 25 °C		
Pulse shape/-time	е		
10 ms ON			
-U		OFF 12 ms	

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				
Nominal voltage 12	Nominal power	1,4	W	
24 V DC other voltages on request Voltage -15 % / +10 % tolerance Optional voltage reduction	Function	monostable (NC)		
Voltage -15 % / +10 % tolerance Optional voltage reduction	Nominal voltage			
tolerance Optional voltage reduction		other voltages on request		
t _p T -		-15 % / +10 %		

 t_{start} : 100 ms dutycycle \geq 33% [>100Hz] PWM t_{start} : 100 ms dutycycle \geq 25% [>1kHz] PWM

 Nominal power

 12 V DC
 1,7 W

 24 V DC
 1,8 W

Protection class III 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

Hygiene advantage by air testing prior to delivery.

80 ° C/10 minutes) and chemical disinfection.

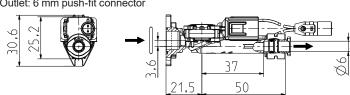
Axial valve DN 5

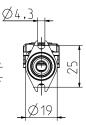


Series 51.005.125

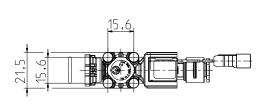
Optional connection variants

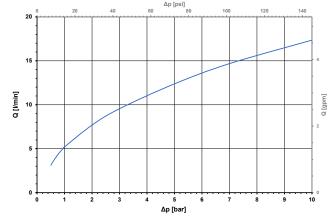
Inlet: flange with stainless steel sieve for pre-filtering Outlet: 6 mm push-fit connector



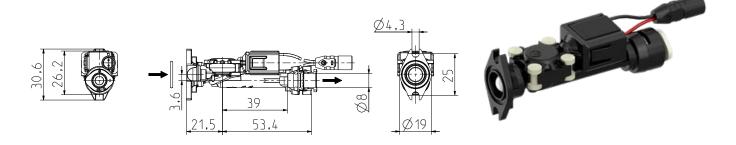


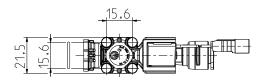


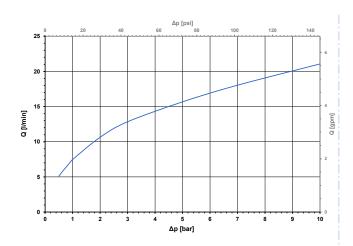




Inlet: flange with stainless steel sieve for pre-filtering Outlet: 8 mm push-fit connector







E1123

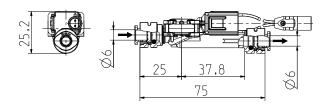
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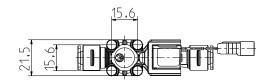


Series 51.005.125

Inlet/outlet: 6 mm push-fit connector

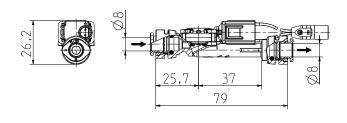
Measures for pre-filtering have to be carried out on site.

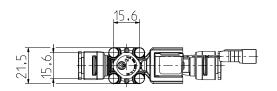




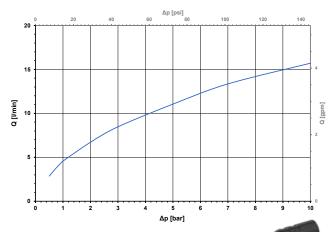
Inlet/outlet: 8 mm push-fit connector

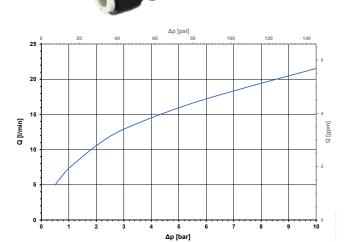
Measures for pre-filtering have to be carried out on site.











Coil connection

Pin plug

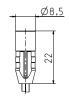
Polarity of plug / bistable, pulse controlled:

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(-)





(4)