2/2-Way Direct Acting Solenoid Valves NC

Product Information

Series 18.00x.000









A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

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Characteristics

- Direct acting
- Compact design
- Long term performance capability
- Suitable for food and hot water appliances
- Works from zero pressure
- Easy to assemble and service
- Coil change without opening of medium circuit, coil can be mounted 4 x 90°
- High operating safety by the use of high quality materials and 100% final testing of the products

Description

Direct acting 2/2-way solenoid valve of several nominal diameters for use with neutral gases and liquids. This valve is direct acting and normally closed (NC).

Valves of this design are single chamber straight through valves, with threaded tube clamp or push-fit connections at outlet and inlet.

The valve body is made of PPSU, which is suitable for hot water applications and saturated steam.

This valve is designed for continuous operation (duty cycle 100%).

Electrical operating safety is achieved by using high quality materials of insulation class H.

Applications

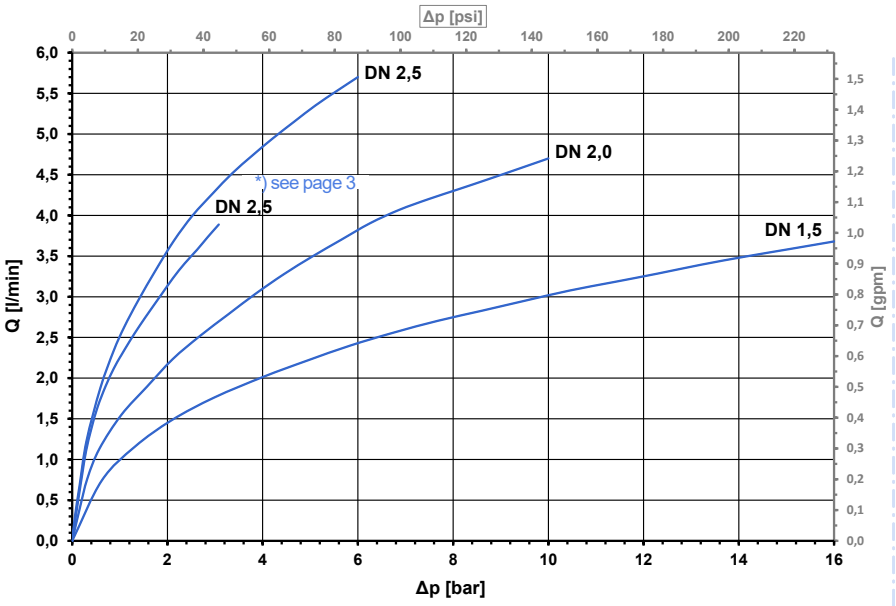
- Saturated steam applications up to 143° C
- Steam cleaners and ironing machines
- Hot / cold drink dispensers (espresso makers)
- Medical equipment
- Industrial applications

Possible Approvals

- Regulation (EC) No. 1935/2004
- NSF 169 (Only: DC)
- UL (Only: 24 VDC)
- Other approved versions available on request

Type	DN
18.003.000	1,5
18.004.000	2,0
18.005.000	2,5

Typical Performance Curve

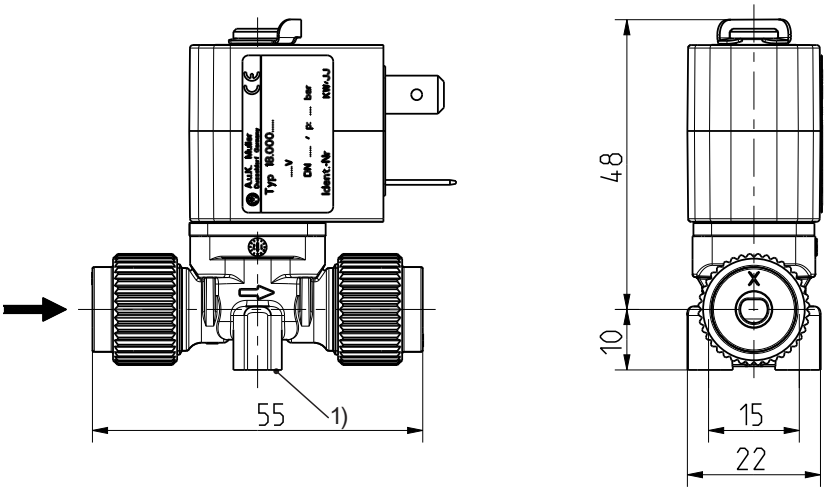


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Series 18.00x.000



1) Fixing possibility for self tapping screw Ø 3,8 x 9 mm

Technical Data

Type	Solenoid valve	
Construction	2/2-way single chamber straight valve, direct acting	
Function	NC (normally closed)	
Fitting position	Any	
Media	Neutral gases, cold and heated potable water and physically and chemically similar media	
T-Medium **Saturated steam**	98 143 (3bar)	°C max. °C max.
T-Ambient	60	°C max.
DN	See page 3	
Cv-value		
p-Operating		
Coil type	MS 039, MS 040	
Nominal voltage	24	V DC
	Other voltages on request	
Voltage tolerance	+10% -15%	
Duty cycle **Saturated steam** **Coil 8,0 W**	100% 50% (ON:0,5 min OFF:0,5 min)	
Nominal power	8,0 W	
Protection Type **MS 39** **MS 40**	 IP 00 IP 65	
Coil connections	Flat tap 6,3 x 0,8 mm Plug and socket - model B industry form	
Insulation class	H	according to EN 60730
Protection class	I	according to EN 60730 (for incorporation in class I)

Materials

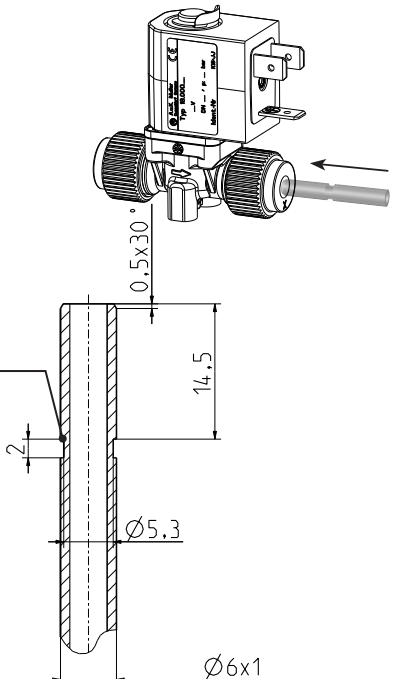
Valve body	PPSU
Plunger guide	Stainless steel
Plunger	Stainless steel
Seal	EPDM
Coil coating	PET

MS 39 (IP00)	
MS 40 (IP65)	

Options

Tube material	Tube dimension outer Ø x wall thickness	
Flexible plastic tubes	6 x 1 mm	
Metal tubes	6 x 1 mm	special groove to be cut by user

Other tube dimensions are in preparation



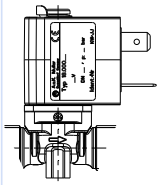
⚠ PPSU valve bodies may not come in contact with:

acetone, ethers, ketones, aromatic hydrocarbons, chlorinated hydrocarbons, acids and oxidizing anaerobic adhesives.

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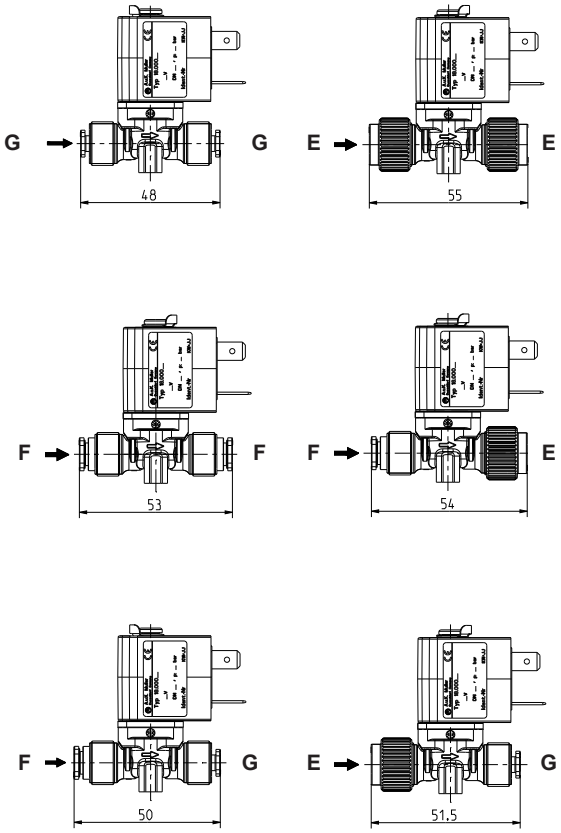
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Please refer to our Fitsys 18 datasheet for additional valve connection options.

Type		Inlet		Outlet
G	Push-Fit connection Ø 4 mm			
F	Push-Fit connection Ø 6 mm			
E	Clamp connection Ø 6 mm			

Inlet and outlet connections can be combined

Alternative Connections



Each Inlet and Outlet can be configured

ID	DN	Cv-value	Inlet	Outlet	p-Operating		Coil type	Voltage
	mm	l/min	Ø mm	Ø mm	bar in flow direction	bar against flow direction		V
087714	1,5	0,9	F	G	0 - 16,0	0 - 12,0	MS 40	24
087712			G	G				
087733			F	G				
087717			F	F				
087719			F	E				
087723			F	F		0 - 7,5		12
087736			F	F		0 - 2,5		230 / 50 Hz
087730			F	F		0 - 12,0	MS 39	24
087728			F	G				
087724	2	1,5	G	G	0 - 6,0	0	MS 40	24
087734			F	F	0 -10,0	0 - 1,0		12
087735			F	F				24
087726	2,5	2,1	F	F	0 - 3,0 *)	0 - 5,0	MS 39	
087727		2,5	F	F	0 - 6,0	0		
087701		2,1	E	E	0 - 3,0	0 - 5,0	MS 40	
087702			F	F	0 - 3,0	0 - 5,0		
087706		2,5	F	F	0 - 6,0	0		

*) For saturated steam up to 143°C (refer to performance curve for fluids on page 1)

additional versions on request

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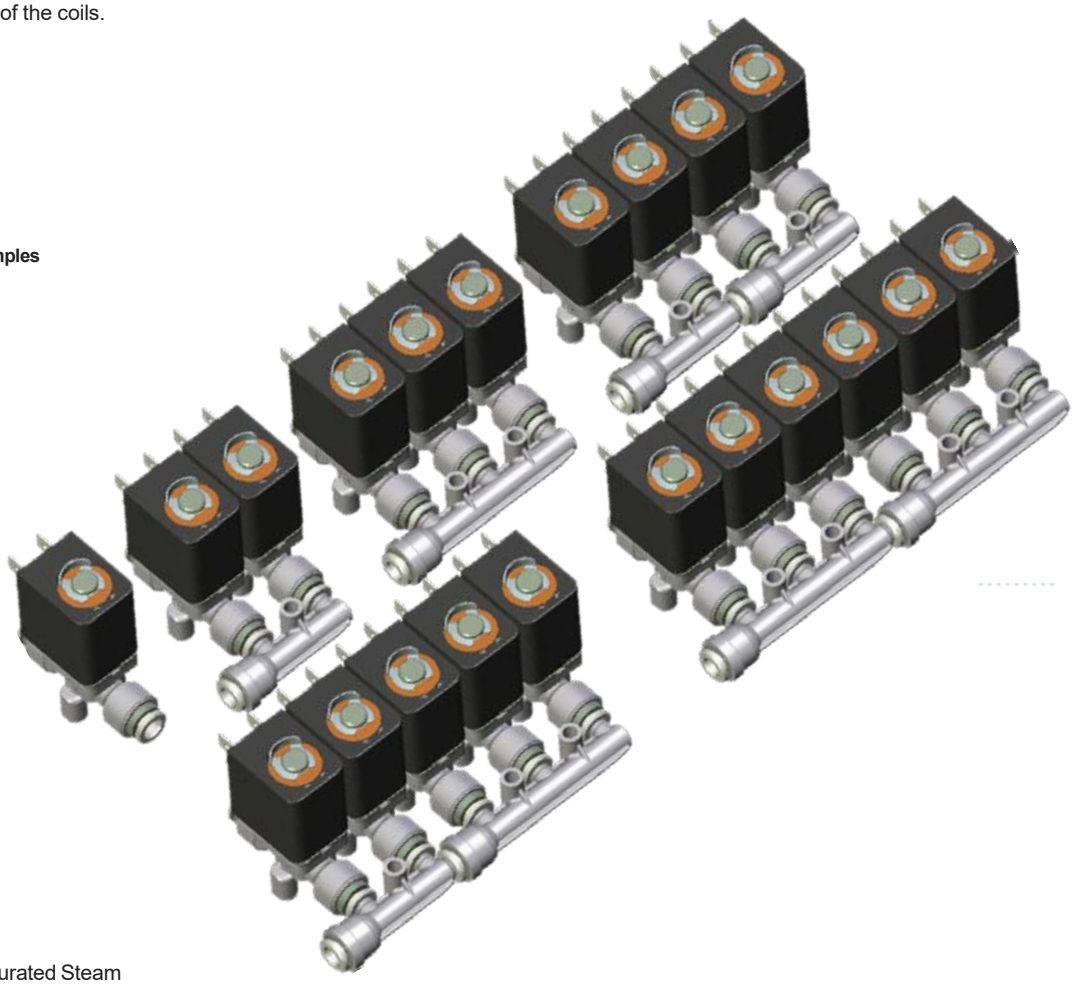
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Manifold System with Ø 6 mm Push-fit Connection

Just four different Ø 6mm push fit manifold pieces enable unlimited bank valve combinations.

⚠ Please provide a sufficient ventilation of the coils.

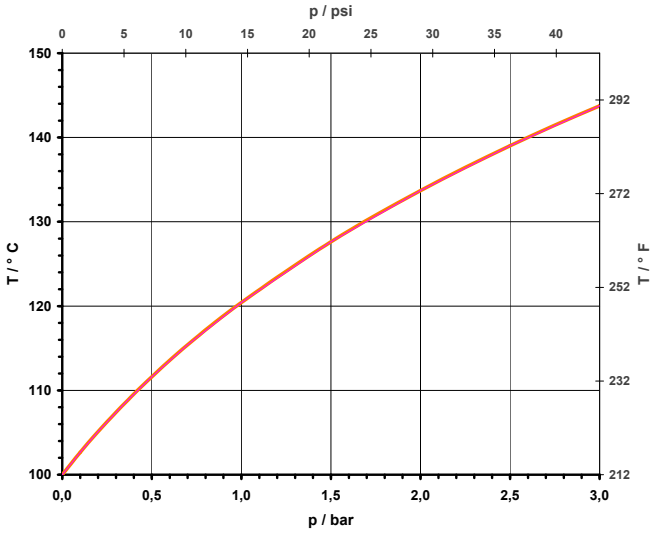
Configuration examples



In addition to hot water the system is also suitable for saturated steam applications up to a temperature of 143° C.

A fixed relation between pressure and temperature exists for saturated steam, as is shown in the adjacent diagram.

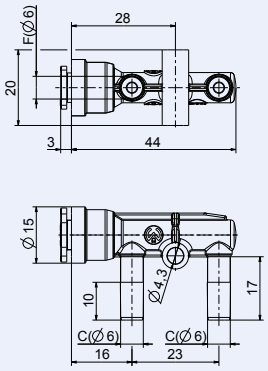
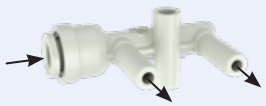
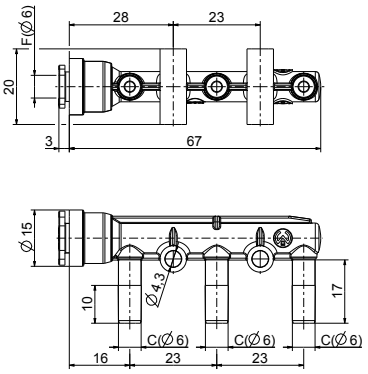
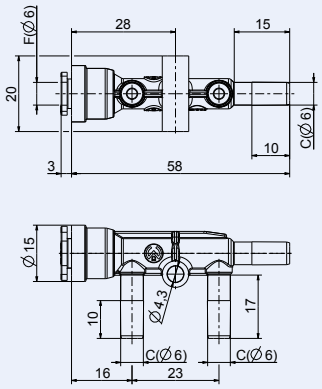
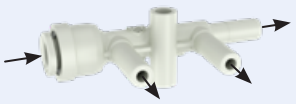
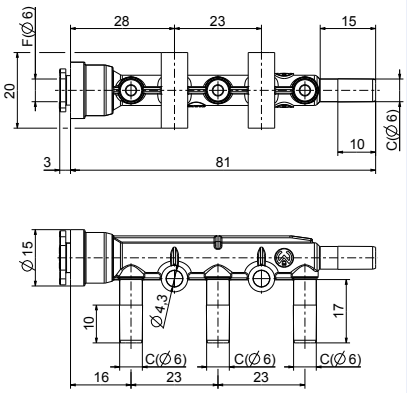
Pressure-temperature Diagram for saturated Steam



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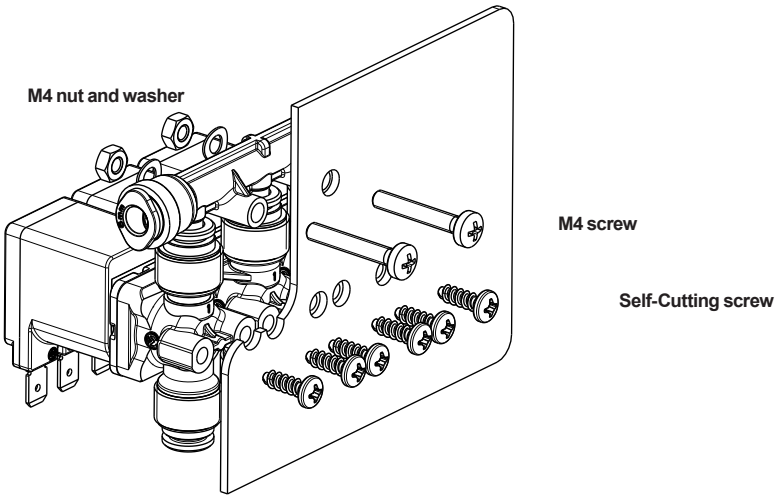
Manifold system with Ø 6 mm Push-fit Connection

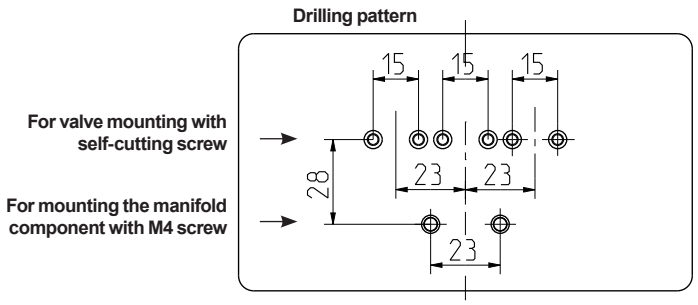
Type	Figures		ID
	* Area of o-ring seal	Flow direction (→) can also be reversed.	
MC-F.C.C			008948
MC-F.C.C.C			008949
MO-F.C.C.C			008946
MO-F.C.C.C.C			008947

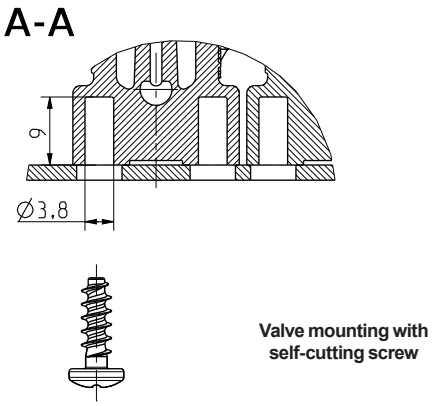
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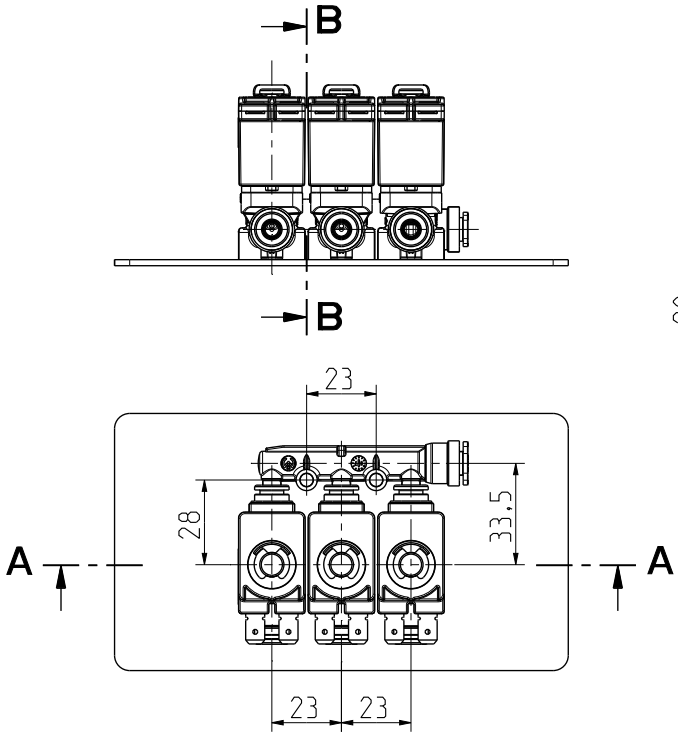
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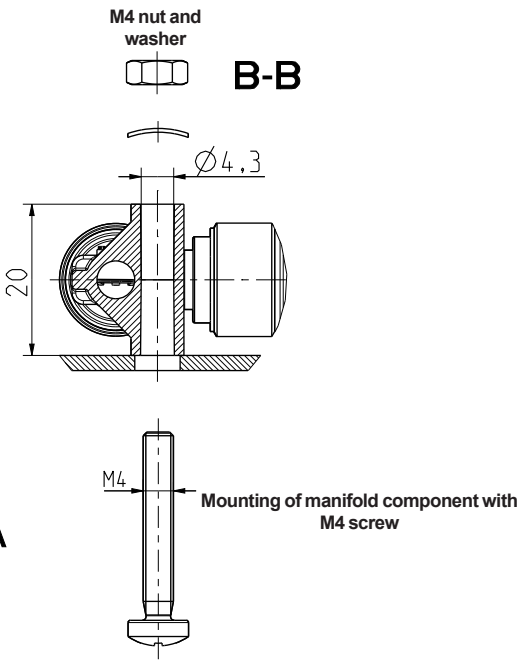
Example of mounting for valves and manifold components on a mounting plate











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