Product Information

3/2-way Direct Acting Solenoid Valve

Series 18.00x.032



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 through the use of high quality and 100% final testing of the products

Description

3/2-way solenoid valve of several nominal diameters for use with neutral gases and liquids.

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.

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

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

Typ	DN
18.002	1,2
18.003	1,5
18.005	2,5

Applications

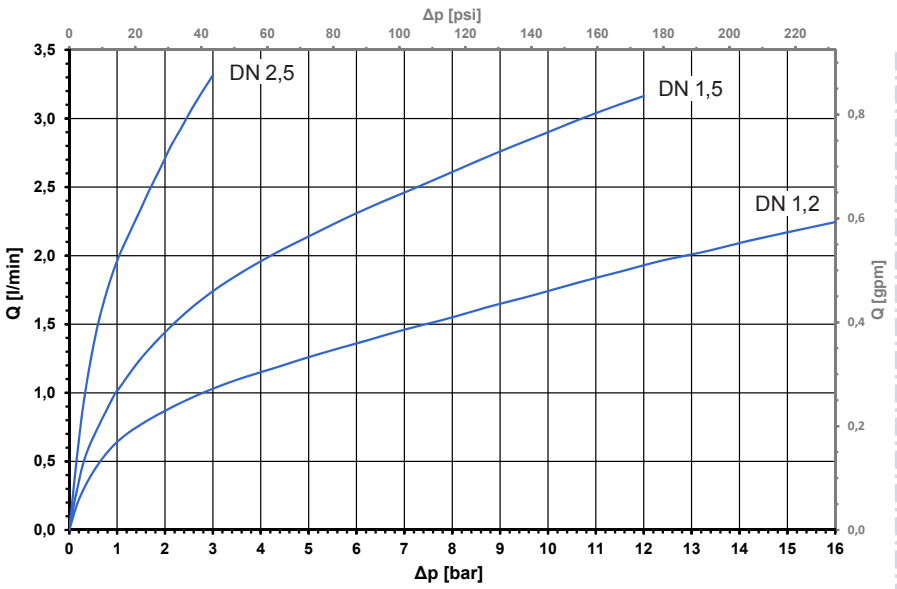
- Saturated steam applications up to 143 °C (3 bar)
- Steam cleaners and ironing machines
- Hot / cold drink dispensers (espresso makers)
- Medical equipment
- Industrial applications

Possible approvals

- EC 1935/2004
- NSF 169
- UL

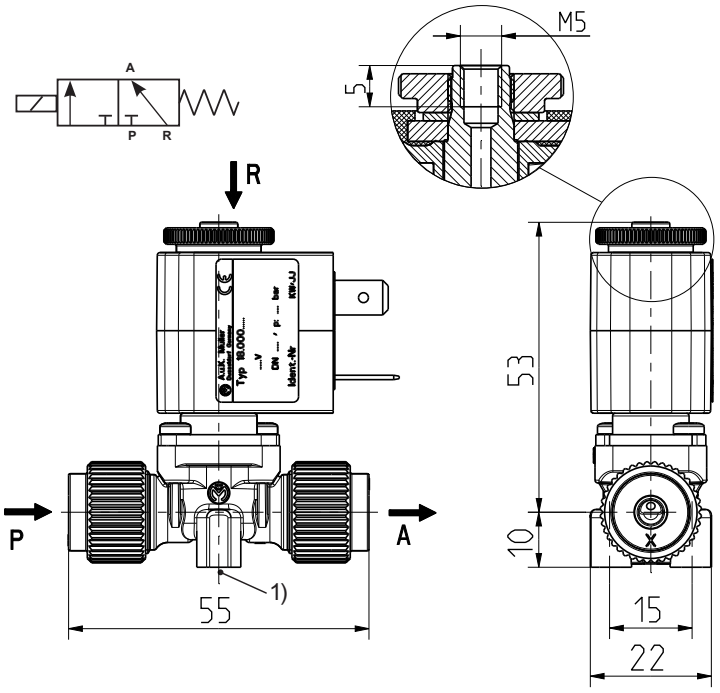
Other approved versions available on request:

typical performance curve (P - A)



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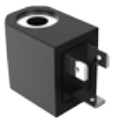
1) Fixing possibility for self tapping screw Ø 3,8 x 9

Technical Data

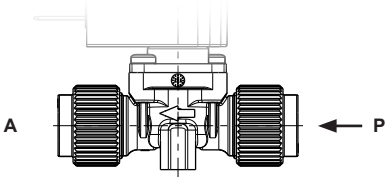
Type	Solenoid valve	
Construction	3/2-way single chamber valve, direct acting	
Function	NC (normaly closed)	
Fitting position	Any	
Media	Neutral gases, cold and heated potable water and physically and chemically similar media	
T-Medium **Saturated steam**	98 143 (3 bar)	°C max. °C max.
T-Ambient	60	°C max.
DN	See page 3	
Cv-value		
p-Operating		
Coil type	MS 39, MS 40	
Nominal voltage	24	V DC
	Other voltages on request	
Voltage tolerance	+10% -15%	
Duty cycle	100 %	
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)

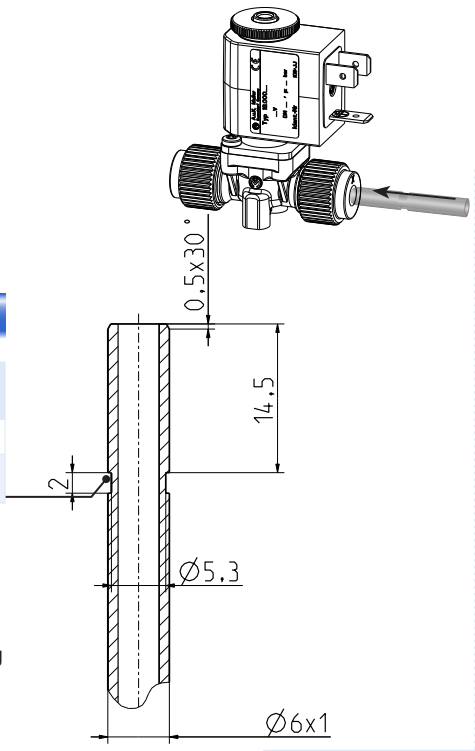
Materials

Valve body	PPSU
Plunger guide	Stainless steel
Plunger	Stainless steel
Seal	EPDM FKM on request
Coil coating	PA, EP or PPS

MS 39 (IP00)	
MS 40 (IP65)	

Flow according to printed flow arrow on the valve body.





Options

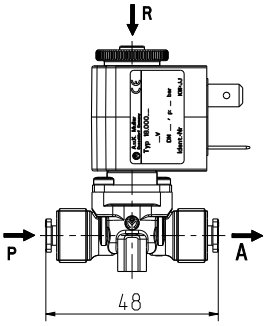
Tube material	Dimension outer Ø x wall thickness	
Flexible Plastic Tubes	6 x 1	
Metal tubes	6 x 1	to be equipped with special cut-in by user

Other orifice sizes (DN) are in preparation

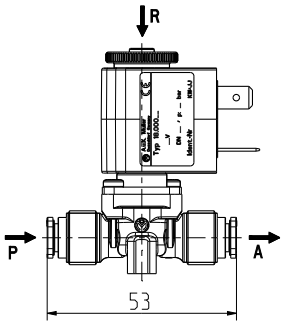
PPSU valve bodies may not come in contact with:
acetone, ethers, ketones, aromatic hydrocarbons, chlorinated hydrocarbons, acids and oxidizing anaerobic adhesives.

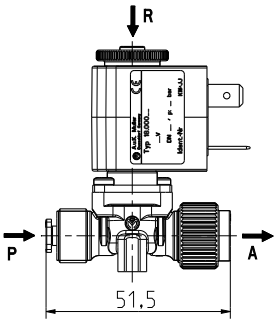
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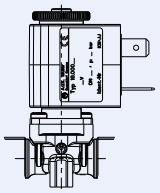


Alternative Connections





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 connectionØ 6 mm			

Connections can be combined arbitrarily

Each in- and outlet can be configured

ID	DN	Kv-value	Inlet	Outlet	p-Operating	T-Medium	Coil type	Connection port R
	mm	l/min	Ø mm	Ø mm	bar P - A	°C		
087710	1,2	0,6	F	F	0 - 16,0	98 143 (3 bar)	MS.040	Nozzle for hose connection
087718			G	G			MS.039	Female thread M5.
087725							MS.039	Connection type B for direct connection to the plug-in cartridge type G of the FitSys 18 system
087708	1,5	1,0	F	F	0 - 12,0	98 143 (3 bar)	MS.039	Female thread M5.
087709			G	G				
087721			F	F				Plug-in connector, type C**
*			E	E			-	-
087729	2,5	1,9	F	F	0 - 3,0	98 143 (3 bar)	MS.039	Connection type C for direct connection to the plug-in cartridge type F of the FitSys 18 system
*			E	E		98 143 (3 bar)	-	-

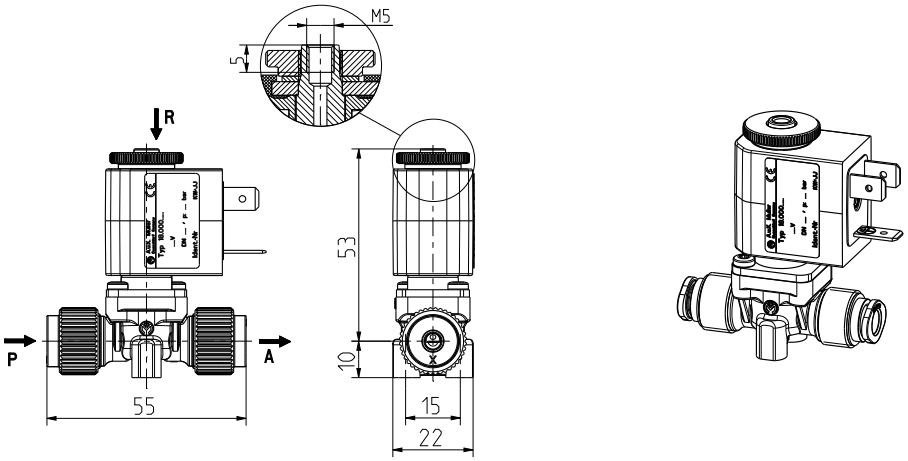
* on request
** Other connector types on request

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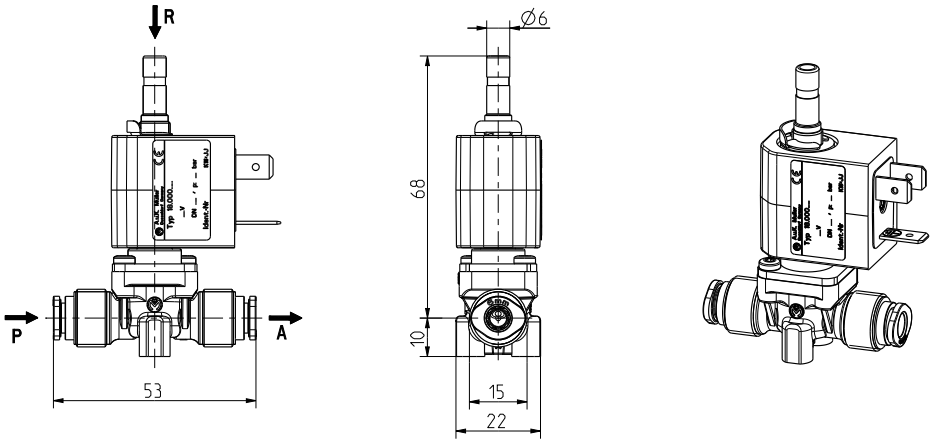
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Beside the female thread M5 for port "R", a connection to the FitSys 18 system and for a hose nozzle are available.

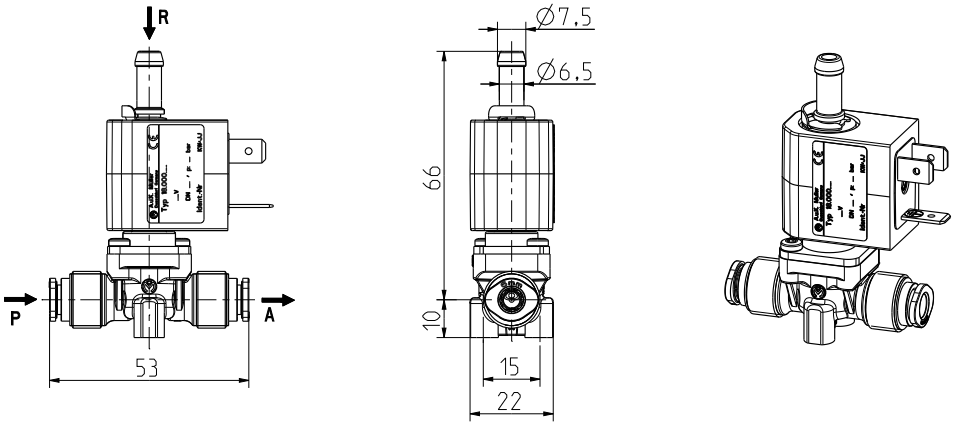
R: Female thread M5.



R: Complies with connection type C for direct connection to the plug-in cartridge type F of the FitSys 18 system.



R: Nozzle for hose connection.



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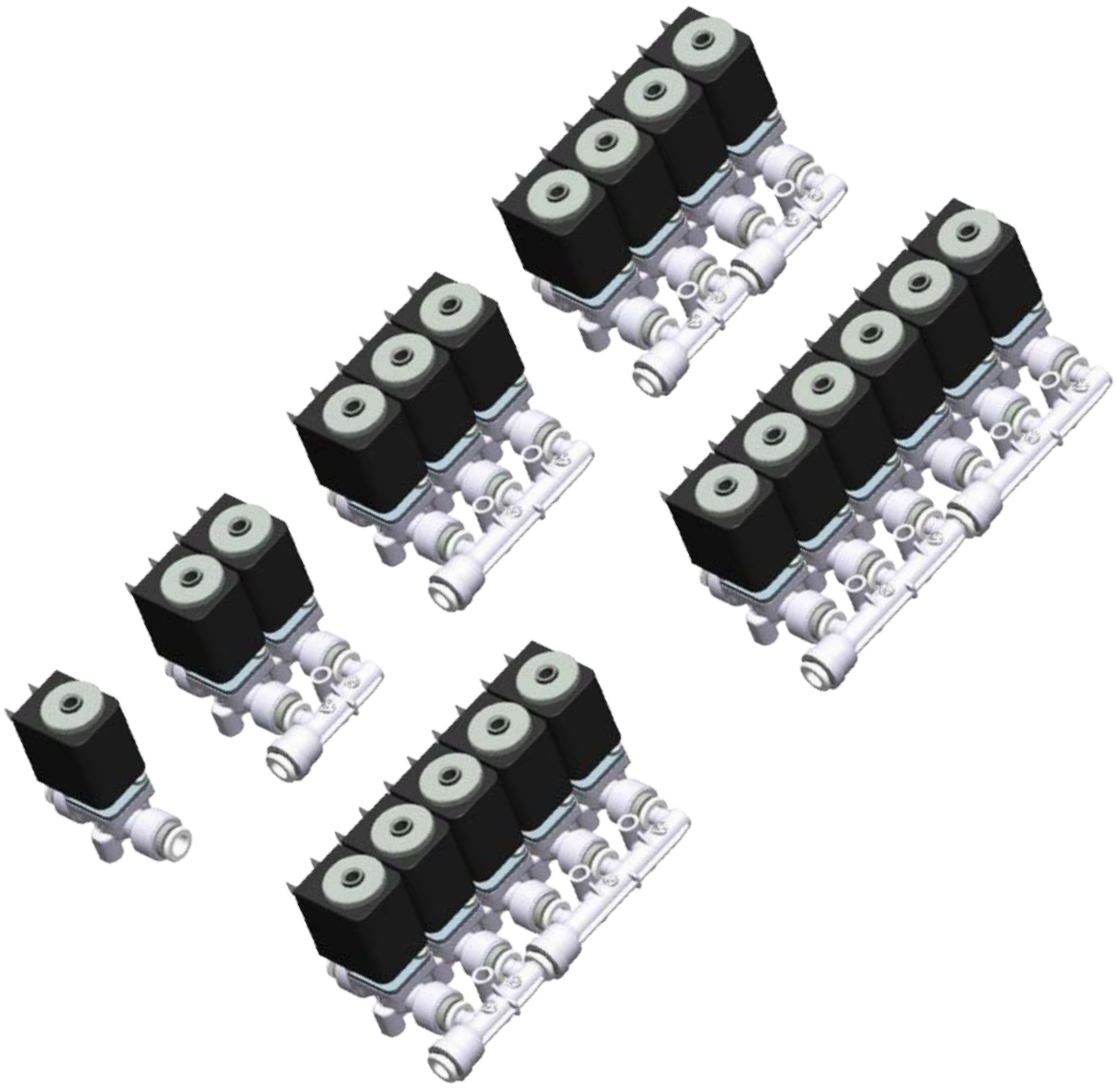
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Only four manifold versions using push-fit connection 6 mm Ø of the valve allow to configure any combination of bank valve.
No tools are necessary.

⚠ Please provided a sufficient ventilation of the coils.

Manifold system for Push-fit connection Ø6 mm

Configuration examples

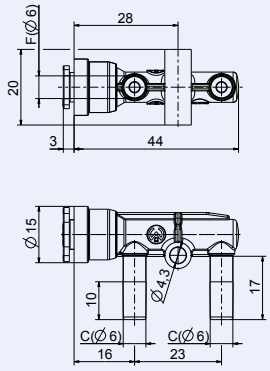
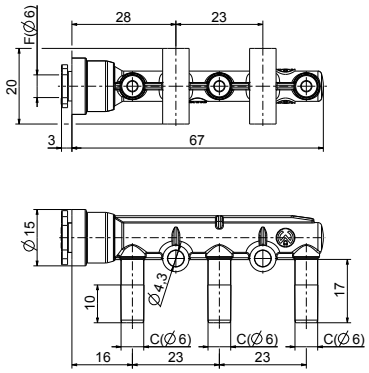
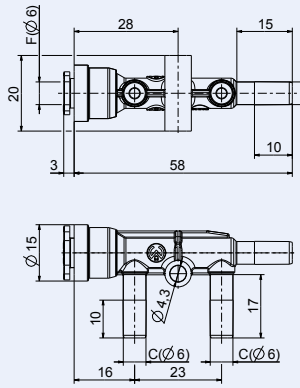
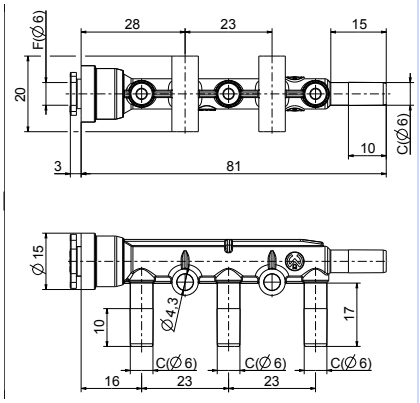


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Manifold components for Push-fit connection 6 mm Ø

Flow direction (⟶) also reversed possible.

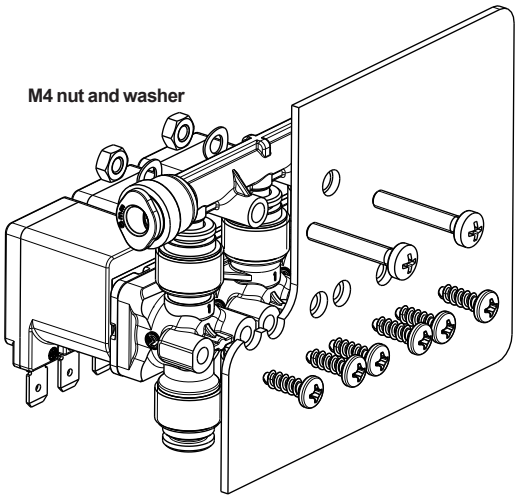
Type	Figures		ID
	* Area of o-ring seal	Flow direction (⟶) can also be reversed.	
MC-F.C.C			008948
MC-F.C.C.C			008949
MO-F.C.C.C			008946
MO-F.C.C.C.C			008947

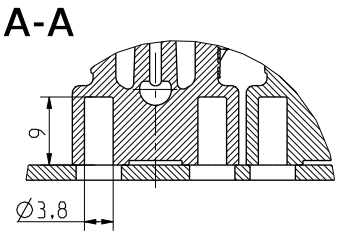
* Area of o-ring seal

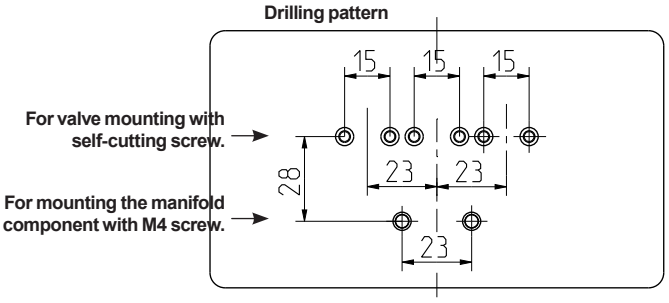
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Example of mounting for valves and manifold components on a mounting plate.

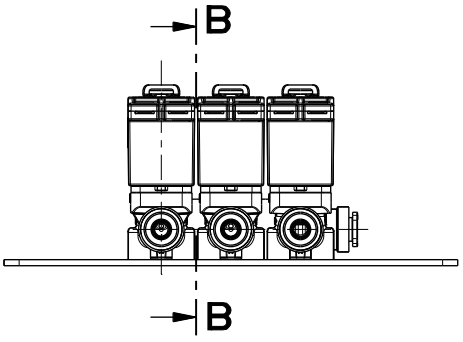


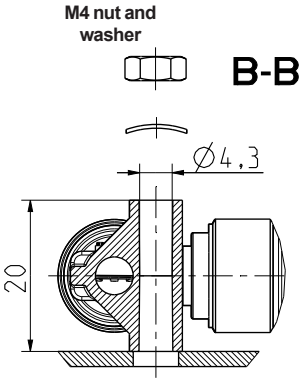


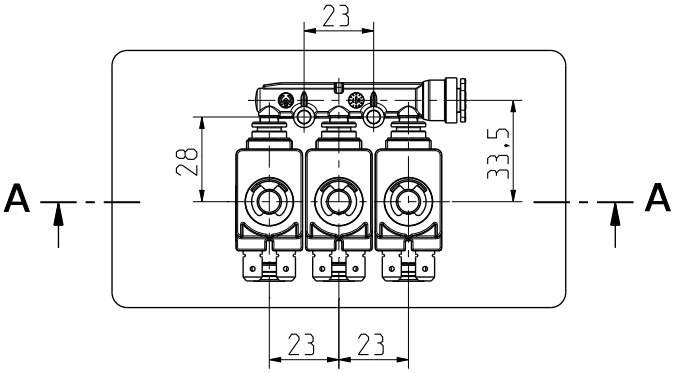


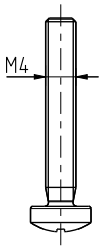


Valve mounting with self-cutting screw.









Mounting of manifold component with M4 screw.

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