Force Pilot Operated Solenoid Valve NC, DN 10

Product Information

Series 31.010.126



A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

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Possible approvals

Approved versions available on request:

- KTW/W270
- ACS
- NSF 61
- Others on request

Description

2/2-way solenoid valve of nominal diameter DN 10 for use with cold and heated potable water and physically and chemically similar media. The valve is servo-controlled with assisted lift and normally closed (NC).

Valves of this design are single chamber straight valves and can be manufactured with various fluid connectors. As the function is independent from a differential pressure between in- and outlet the valve exhibits a high operational safety.

Coil systems for common voltage and frequency ranges are available.

The electrical operational safety is guaranteed by the electrical insulation coordination, which corresponds to the VDE 110 regulations. The manufacturing process includes a 100% electrical safety test in accordance with the VDE 0631 Part 1000 regulations.

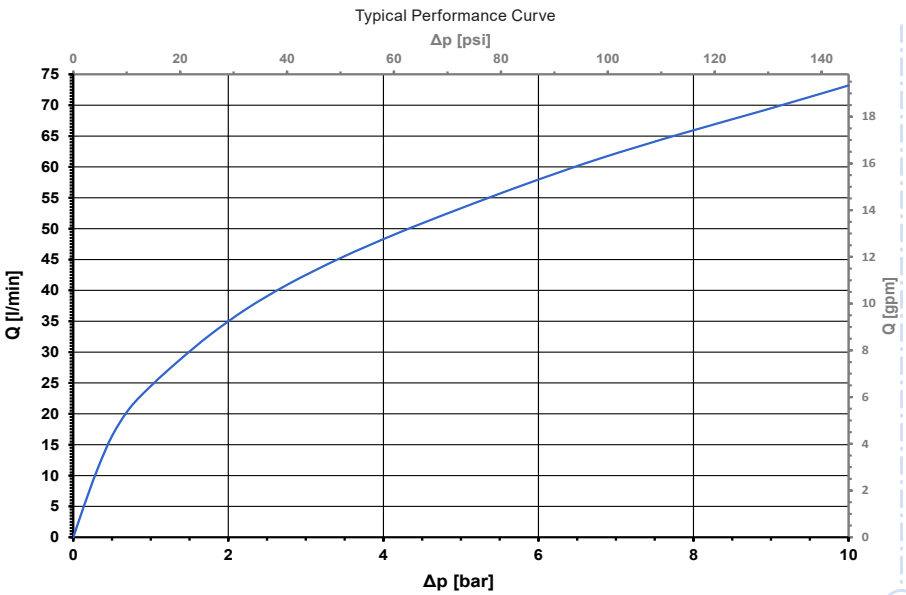
By using high quality insulation materials, continuous duty (100 % ED) at higher medium temperatures is possible. The glass fibre reinforced polyamide valve body resists hot water. Protection against corrosion of inner parts exposed to the medium is achieved by using stainless steel.

Applications

- Industrial equipment
- Pollution equipment
- Temperature equalisers
- Dish washers
- Washing machines
- Water treatment
- Cooling and water circuits
- Tank discharge

Characteristics

- Servo-controlled
- Normally closed (NC)
- Solenoid replaceable while medium circuit remains untouched
- Suitable for hot water up to 90 °C
- Similar hydraulic performance for AC or DC types
- Optimized water hammer characteristic by low noise emission according to EN 60730
- Long term performance capability
- High operating safety through the use of high quality materials and 100% final testing of the products

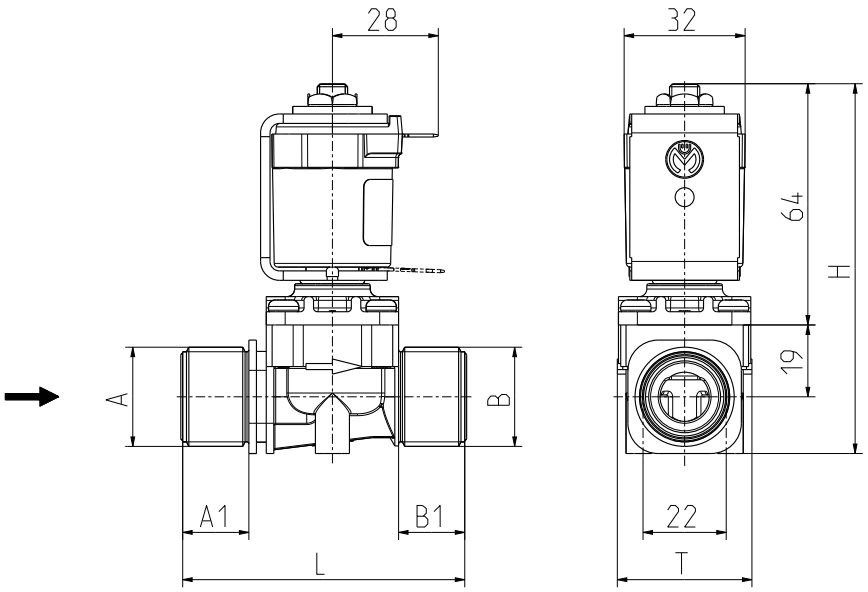


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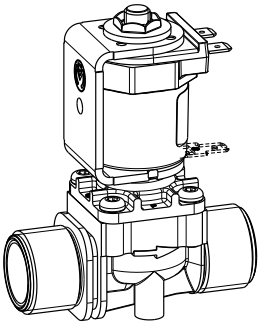


Technical Data

Type	solenoid valve	
Construction	2/2-way single chamber straight valve assisted lift	
Function	NC (normally closed)	
Fitting position	any, preferably with coil upwards	
Media	cold and heated potable water and physically and chemically similar media	
T-Medium	90	°C max.
T-Ambient	70	°C max.
DN	10	mm
p-Operating	0 - 10	bar
Cv-value	24	l/min
Flow regulator	on request	
Pressure surge	according to EN 60730	
Coil type	MS 41, MS 42, MS 43	
Nominal voltages	24 230	V DC V AC 50-60 Hz
	other voltages on request	
Voltage tolerance	+10% -15%	
Duty cycle	100%	
Nominal power	11 W	15 VA (AC)
Protection Type	see coils	
Coil connections	plug socket according to EN 175301-803 (IP65),	
Insulation class	H	according to EN 60730
Protection class	see Coils	according to EN 60730

Materials

Valve body	PA 66 glass fibre reinforced PPE on request PPO on request
Plunger guide	stainless steel
Plunger and spring	stainless steel
Membrane and sealings	EPDM VMQ (on request) NBR (on request)
Coil coating	Epoxy resin
Filter (inlet)	stainless steel (in inlet) POM (on request)



Coils

MS 41 (IP00) Protection class II Protection class I*	
MS 42 (IP65) Protection class II	
MS 43 (IP65) (IPX7) Protection class II	

* on request with protective conductor contact

Options

Valve body without fixing groove

Valve body with fixing groove



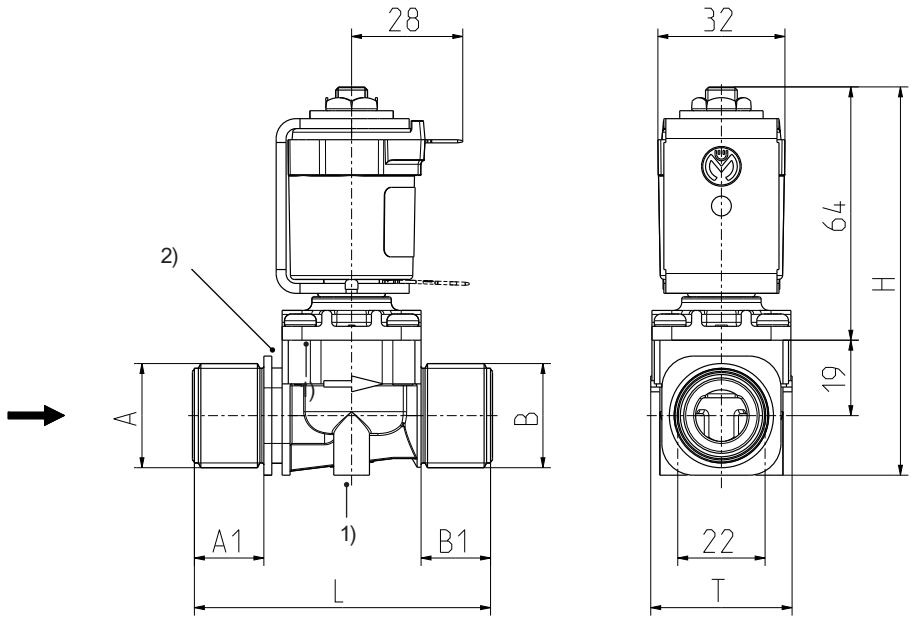
The flange is not included in the delivery (see product information flange).

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1) Mounting option for tapping screw Ø 4.2 mm
2) Flange mount

Options

Material	Inlet		Fixing Groove	Outlet		Length	Height	Depth
	Ø A	A1		Ø B	B1	L	H	T
		[mm]			[mm]	[mm]	[mm]	[mm]
PA 66 or PA 6/6 or PPO black	G 3/4	18	yes	G 3/4	18	76	98	36
PA 66 or PA 6/6 or PPO black	G 1/2	15	yes	G 1/2	15	70	98	36
PA 66 or PA 6/6 or PPO	G 3/8	13	yes	G 3/8	13	66	98	36
PA 66 or PA 6/6	G 3/4	18	yes	G 1/2	15	73	98	36
PA 66 or PA 6/6	G 3/4	18	yes	G 3/8	13	71	98	36
PA 66	G 1/2	15	yes	G 3/4	18	73	98	36
PA 66	G 1/2	15	yes	G 3/8	13	68	98	36
PA 66	G 3/8	13	yes	G 3/4	18	71	98	36
PA 66	G 3/8	13	yes	G 1/2	15	68	98	36
PA 66 or PA 6/6	G 3/4	10	no	G 3/4	10	55	98	36
PPO or PA 66	nozzle Ø 12	17	yes	nozzle Ø 12	17	74	98	36
PA 6/6	G 3/8	13	yes	nozzle Ø 12	17	74	98	36
PA 66	G 3/4	18	yes	G 3/4	10	68	98	36
PA 66 or PA 6/6	G 3/4	14,5	yes	G 3/4	14,5	69	98	36
PA 66	G 3/4 swivel nut	10,5	yes	G 3/4	18	87	98	36
PA 66	G 3/4	18	yes	nozzle Ø 15,0 *	30	90	98	36
PA 66	3/8" JG**	10	yes	3/8" JG**	10	60	98	36
PA 66	G 3/4	18	yes	G 3/4 swivel nut	10,5	87	98	36

* Compatible to modular fitting system, series 11.000 or for John Guest

**John Guest cartridge in valve body

Other variants on request.

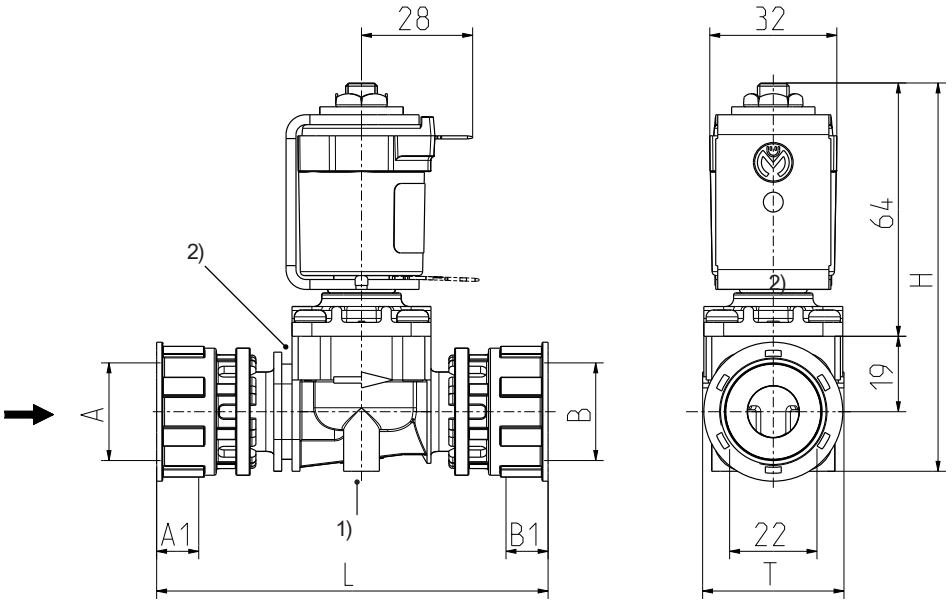
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Valve housing variants with swivel nut



Options

Material	Inlet		Fixing Groove	Outlet		Length	Height	Depth
	Ø A	A1		Ø B	B1	L	H	T
		[mm]			[mm]	[mm]	[mm]	[mm]
PA 6/6	G 3/4 swivel nut	10,5	yes	G 3/4 swivel nut	10,5	99	98	36
PA 6/6	G 1/2 swivel nut	11,5	yes	G 1/2 swivel nut	11,5	99	98	36
Other variants on request								

Assembly Instruction for Swivel Nuts

In order to avoid damage to the swivel nuts or leaks in the screw connections, please follow these assembly instructions.

- Place the swivel nut straight onto the thread of the male counterpart.
- Tighten the swivel nut to a torque of 3 Nm.
- Only use original seals and spare parts from A. u. K. Müller.

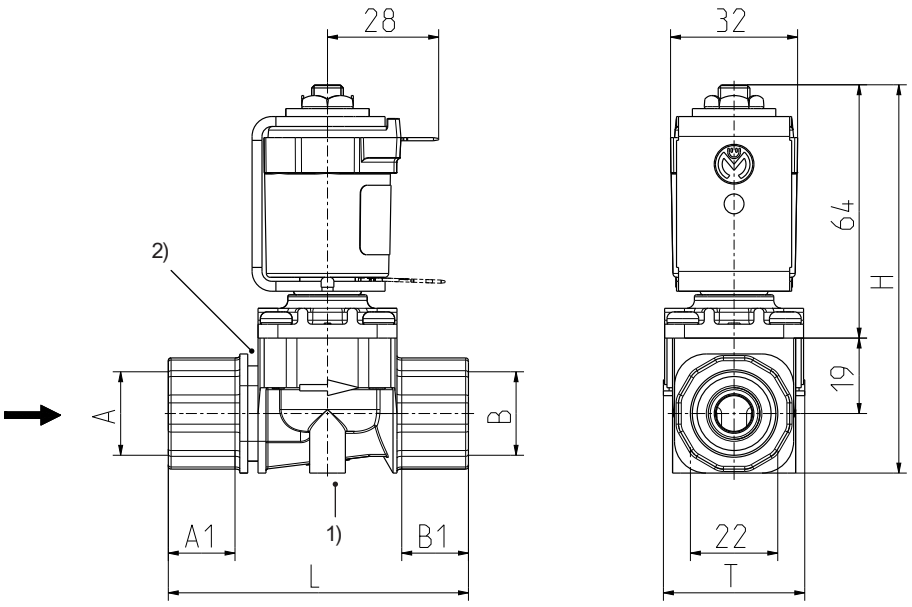
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Valve housing variants with female thread



Options

Material	Inlet		Fixing Groove	Outlet		Length	Height	Depth
	Ø A	A1		Ø B	B1	L	H	T
		[mm]			[mm]	[mm]	[mm]	[mm]
PA 6/6	G 1/2 inside	16	Ja	G 1/2 inside	16	76	98	36
Other variants on request								

Pipe thread according to DIN EN ISO 228 - 1 with gasket

⚠ Do not use additional sealing material such as hemp or Teflon tape.

⚠ Note minimum thread length of 17 mm

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