

# Servo-controlled solenoid valve NC, DN 10

# Product Information



## A. u. K. Müller

Solenoid valves  
Control valves  
Special valves and systems

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### Series I.010.126



### 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 and normally closed (NC).

Valves of this design are single chamber straight valves and can be manufactured with various connections variants as male or female threads and swivel nuts.

Coil systems for common voltage and frequency ranges are available.

Electrical operating safety is achieved by insulation class F and can be supported by an integrated protective circuit.

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

### Applications

- Steam appliances
- Dental appliances
- Hot / cold drink dispensers
- Industrial appliances
- Air conditioning
- Agricultural implements
- Pollution equipment
- Temperature equalisers
- Dish washers
- Ice machines
- Washing machines
- Water treatment

### Characteristics

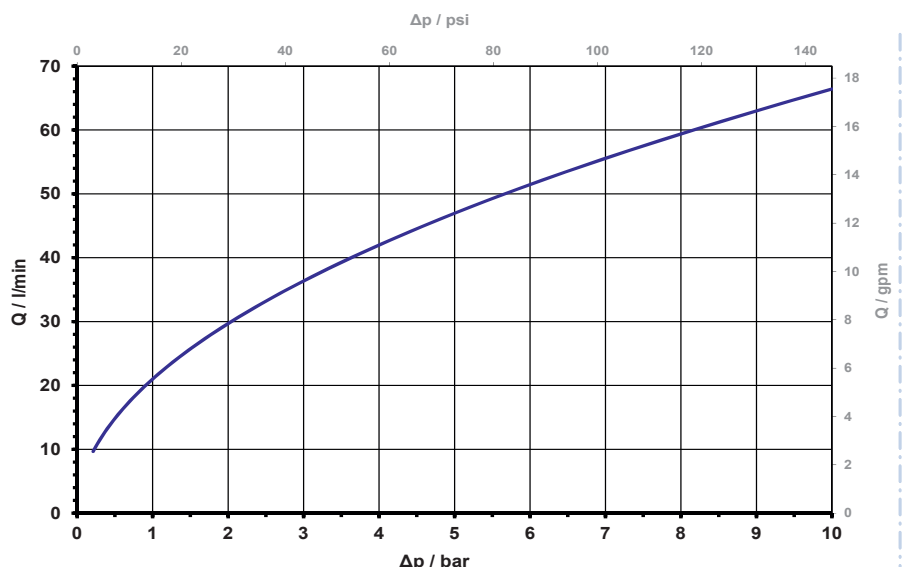
- Servo-controlled
- Normally closed (NC)
- Solenoid replaceable while medium circuit remains untouched, solenoid rotatable 4x90°
- Suitable for hot water up to 90 °C
- Similar performance for alternating or direct current
- Long term performance capability
- Optimized water hammer characteristic by low noise emission according to EN 60730
- High operating safety by the use of high quality materials and 100% final testing of the products

### Possible approvals

Approved versions available on request:

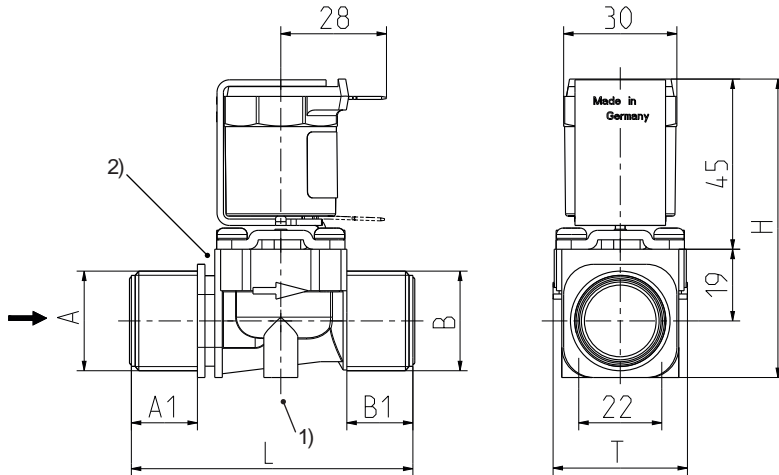
- KTW/W270
- NSF 169
- UL
- SVGW
- ACS
- WRAS
- Others on request

typical performance curve

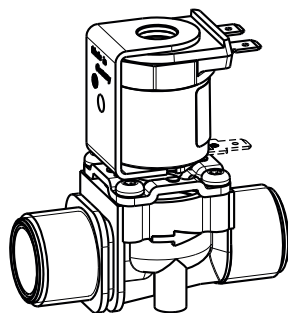




**Series I.010.I26**



- 1) Fixing possibility for self tapping screw  $\varnothing 4,2$
- 2) Fixing groove



**Technical Data**

|                          |   |   |
|--------------------------|---|---|
| <b>Type</b>              | solenoid valve  |   |
| <b>Construction</b>      | 2/2-way single chamber straight valve, servo-controlled   |   |
| <b>Function</b>          | NC (normally closed)  |   |
| <b>Fitting position</b>  | any, preferably with coil upwardly  |   |
| <b>Media</b>             | cold and heated potable water and physically and chemically similar media   |   |
| <b>T-Medium</b>          | 90  | °C max.   |
| <b>T-Ambient</b>         | 70<br>(60)  | °C max.<br>°C max. USA<br>and coils MS.024,<br>MS.025)                                      |
| <b>DN</b>                | 10  | mm  |
| <b>p-Operating</b>       | 0,2 - 10  | bar   |
| <b>Cv-value</b>          | 21  | l/min   |
| <b>Flow regulator</b>    | on request  |   |
| <b>Pressure surge</b>    | according to EN 60730   |   |
| <b>Coil type</b>         | MS.006, MS.024, MS.025  |   |
| <b>Nominal voltages</b>  | 220 - 240<br>110<br>110 - 127<br>24<br>12<br>24<br>12   | V AC 50-60 Hz<br>V AC 50 Hz<br>V AC 60 Hz<br>V AC 50/60 Hz<br>V AC 50/60 Hz<br>V DC<br>V DC |
|                          | other voltages on request   |   |
| <b>Voltage tolerance</b> | +10% -15%   |   |
| <b>Duty cycle</b>        | 100%  |   |
| <b>Nominal power</b>     | 8,5 W   | 13 VA (AC only)   |
| <b>Protection Type</b>   | IP 00 up to IP 68<br>according to EN 60529  |   |
| <b>Coil connections</b>  | flat tabs 6,3 x 0,8 mm<br>plug socket<br>according to EN 175301-803<br>(IP65),<br>several cable connections<br>(IP67, IP68) |   |
| <b>Insulation class</b>  | F   | according to<br>EN 60730  |
| <b>Protection class</b>  | I   | according to<br>EN 60730<br>(for incorporation in<br>class I)                               |

**Materials**

|                              |   |
|------------------------------|---|
| <b>Valve body</b>            | PA 66 glass fibre reinforced<br>PA 66 glass fibre reinforced<br>PPE on request<br>PEI on request (T-medium<br>max. 30 °C) |
| <b>Plunger guide</b>         | stainless steel   |
| <b>Plunger and spring</b>    | stainless steel   |
| <b>Membrane and sealings</b> | EPDM<br>NBR (on request)<br>VMQ (on request)  |
| <b>Coil coating</b>          | PBT, PET or epoxy resin   |
| <b>Filter<br/>(Inlet)</b>    | stainless steel<br>POM on request<br>(T <sub>m</sub> : 65 °C; 90 °C / 1 h)  |

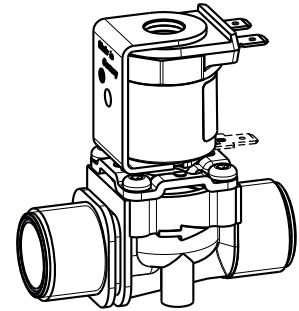
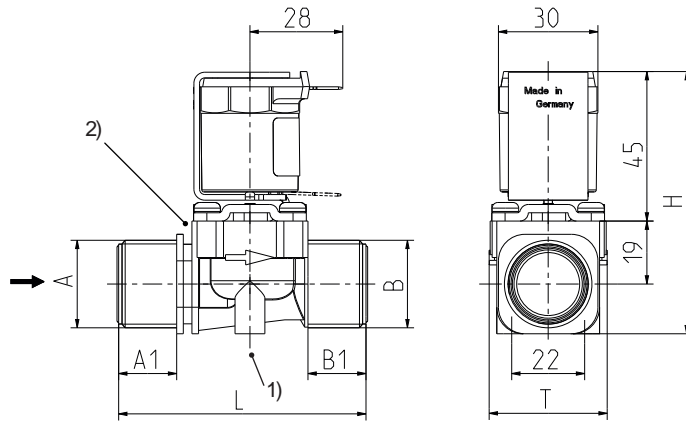




# Product Information

**Series I.010.126**

**Valve housing variants with male thread**



- 1) Fixing possibility for self tapping screw Ø 4,2
- 2) Fixing groove

**Options**

| Material       | Inlet<br>Ø A                    | A1   | Outlet<br>Ø B    | B1   | Length<br>L | Height<br>H | Depth<br>T |
|----------------|---------------------------------|------|------------------|------|-------------|-------------|------------|
| PA 66 or PA6/6 | G 3/4                           | 18   | G 3/4            | 18   | 76          | 79          | 36         |
| PA 66 or PA6/6 | G 1/2                           | 15   | G 1/2            | 15   | 70          | 79          | 36         |
| PA 66 or PA6/6 | G 3/8                           | 13   | G 3/8            | 13   | 66          | 79          | 36         |
| PA 66 or PA6/6 | G 3/4                           | 18   | G 1/2            | 15   | 73          | 79          | 36         |
| PA 66 or PA6/6 | G 3/4                           | 18   | G 3/8            | 13   | 71          | 79          | 36         |
| PA 66          | G 1/2                           | 15   | G 3/4            | 18   | 73          | 79          | 36         |
| PA 66          | G 1/2                           | 15   | G 3/8            | 13   | 68          | 79          | 36         |
| PA 66          | G 3/8                           | 13   | G 3/4            | 18   | 71          | 79          | 36         |
| PA 66          | G 3/8                           | 13   | G 1/2            | 15   | 68          | 79          | 36         |
| PA 66 or PA6/6 | G 3/4 (no fixing clip possible) | 10   | G 3/4            | 10   | 55          | 79          | 36         |
| PPE            | G 3/8                           | 13   | G 3/8            | 13   | 66          | 79          | 36         |
| PA 66          | G 3/4                           | 18   | G 3/4            | 10   | 68          | 79          | 36         |
| PA 66 or PA6/6 | G 3/8                           | 13   | 12,0 nozzle      | 17   | 70          | 79          | 36         |
| PPE            | 12,0 nozzle                     | 17   | 12,0 nozzle      | 17   | 74          | 79          | 36         |
| PA 66 or PA6/6 | G 3/4                           | 14,5 | G 3/4            | 14,5 | 69          | 79          | 36         |
| PA 66          | G 3/4                           | 18   | G 3/4 swivel nut | 10,5 | 87          | 79          | 36         |
| PA 66          | G 3/4 swivel nut                | 10,5 | G 3/4            | 18   | 87          | 79          | 36         |
| PA 66          | G 3/8                           | 13   | G 3/4 swivel nut | 10,5 | 82          | 79          | 36         |
| PA 66          | G 3/4                           | 18   | 12,0 nozzle      | 17   | 75          | 79          | 36         |
| PA 66          | G 3/4                           | 18   | 15,0 nozzle*     | 30   | 90          | 79          | 36         |
| PA 66          | 15,0 nozzle*                    | 30   | G 3/4            | 18   | 88          | 79          | 36         |
| PPE            | G 1/2                           | 15   | G 1/2            | 15   | 70          | 79          | 36         |
| PPE            | G 3/4                           | 18   | G 3/4            | 18   | 76          | 79          | 36         |
| PA 66          | 3/8" JG**                       | 10   | 3/8" JG**        | 10   | 60          | 79          | 36         |

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

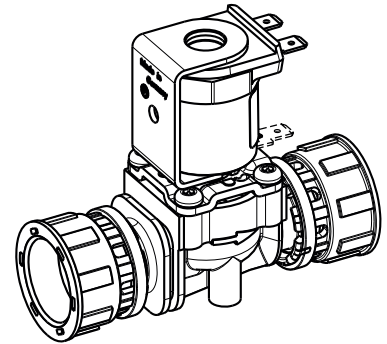
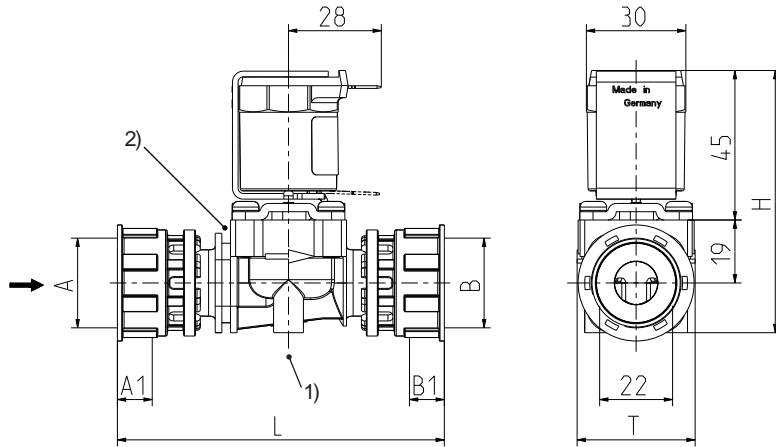
\*\*John Guest cartridge in valve body

Other variants on request.



**Series I.010.I26**

**Valve housing variants with swivel nut**



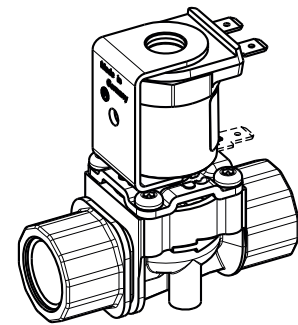
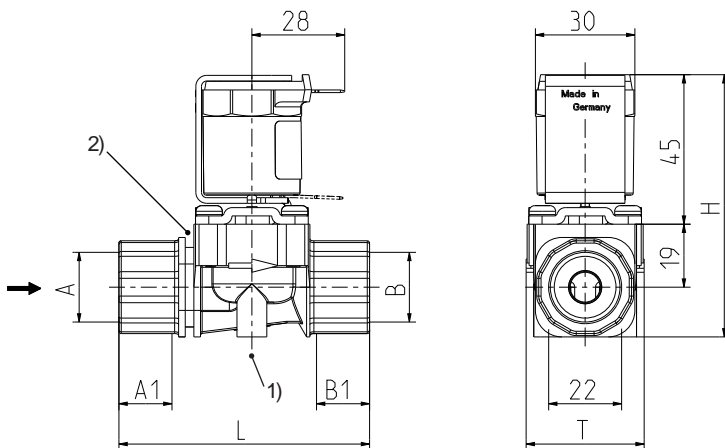
- 1) Fixing possibility for self tapping screw  $\varnothing 4,2$
- 2) Fixing groove

**Options**

| Material | Inlet<br>$\varnothing A$ | A1   | Outlet<br>$\varnothing B$ | B1   | Length<br>L | Height<br>H | Depth<br>T |
|----------|--------------------------|------|---------------------------|------|-------------|-------------|------------|
| PA 6/6   | G 3/4 swivel nut         | 10,5 | G 3/4 swivel nut          | 10,5 | 99          | 79          | 36         |
| PA 6/6   | G 1/2 swivel nut         | 11,5 | G 1/2 swivel nut          | 11,5 | 99          | 79          | 36         |

Other variants on request.

**Valve housing variants with female thread**



- 1) Fixing possibility for self tapping screw  $\varnothing 4,2$
- 2) Fixing groove

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.

**Options**

| Material | Inlet<br>$\varnothing A$ | A1 | Outlet<br>$\varnothing B$ | B1 | Length<br>L | Height<br>H | Depth<br>T |
|----------|--------------------------|----|---------------------------|----|-------------|-------------|------------|
| PA 6/6   | G 1/2 female             | 16 | G 1/2 female              | 16 | 76          | 79          | 36         |

Other variants on request.