

# 3/2-way lever valve, DN 4

# Product Information



**A. u. K. Müller**

Solenoid valves  
Control valves  
Special valves and systems

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**Series 47.004.103**



## Characteristics

- direct acting
- medium separated
- long term performance capability
- works from zero pressure
- easy to assemble and service
- low power consumption
- any position of installation
- minimised dead areas
- high operating safety through the use of high quality and 100% final testing of the products

## Applications

- hot / cold drink dispensers
- tank or boiler draining
- medical engineering
- industrial appliances
- laboratory / analysis equipment

## Description

Direct acting 3/2 way solenoid change over valve with different orifice sizes for control of neutral gases and liquids. The plunger of the magnetic system is protected by spatial separation from the medium .

Valves of this design are single chamber valves with nozzles connections. The coil system can be customised for common voltage and frequency ranges on request.

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

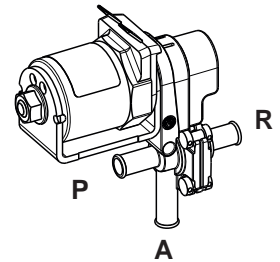
Due to the use of high quality materials, the valve is applicable for high ambient and medium temperatures.

Highly suitable for using in laboratory and analysis equipment.

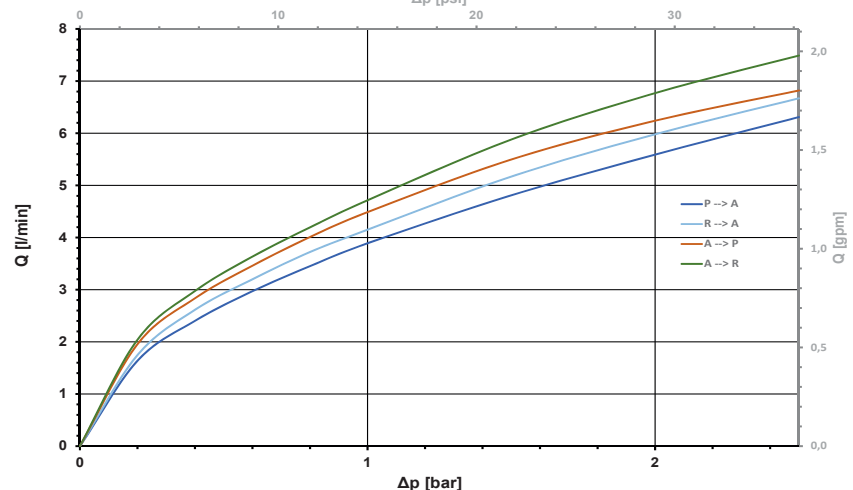
## Possible approvals

Approved versions available on request:

- WRAS
- UL
- Others on request



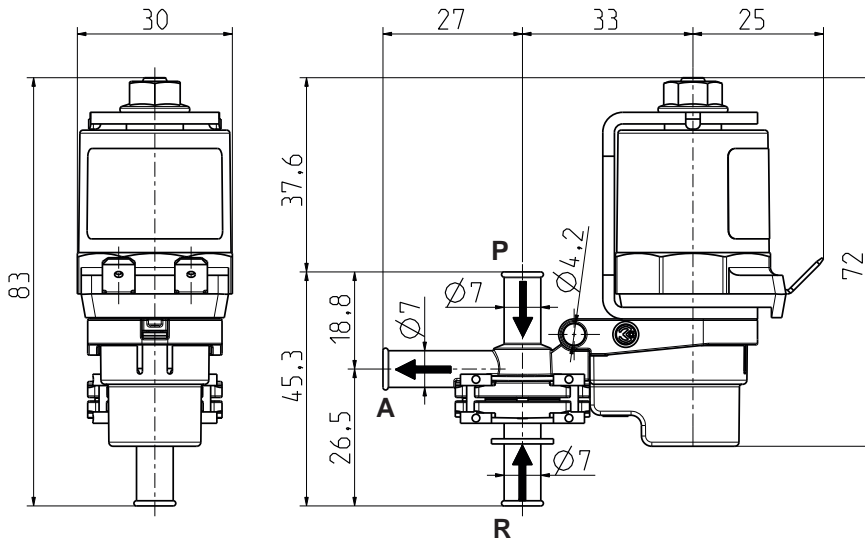
typical performance curve



silicone tubing 12,0 mm OD x 3,0 mm wall thickness;  
length 100 mm; fluid: water at 25°C; free outlet

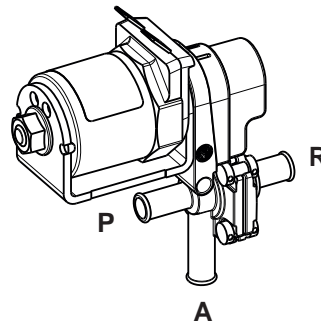
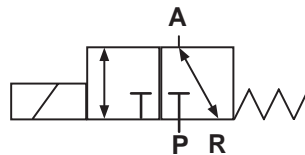


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Flow direction (→) also reversed possible.

| Materials     |                                   |
|---------------|-----------------------------------|
| Valve body    | PEI<br>other materials on request |
| Plunger guide | stainless steel                   |
| Plunger       | stainless steel                   |
| Membrane      | EPDM<br>VMQ (on request)          |
| Coil coating  | PBT or epoxy resin                |



| Options                     |                 |            |
|-----------------------------|-----------------|------------|
| ID                          | Nominal voltage | Duty cycle |
| 90302                       | 12 V DC         | 70 %       |
| 90300                       | 24 V DC         | 70 %       |
| 90303                       | 24 V DC         | 100 %      |
| Other variants on request.. |                 |            |

Tubes are to be installed in a way that enduring mechanical tension on in- and outlet connections remain as low as possible!

**Technical Data**

|                           |   |  |
|---------------------------|---|--|
| Type                      | lever solenoid valve  |  |
| Construction              | 3/2-way valve, direct acting  |  |
| Function                  | flow path R - A normally open   |  |
| Fitting position          | any   |  |
| Media                     | cold and heated potable water and physically and chemically similar media                                       |  |
| T-Medium                  | 98  | °C max.  |
| T-Ambient                 | 70<br>(60)  | °C max.<br>°C max.<br>(USA and coils MS.024, MS.025) |
| DN                        | 4   | mm   |
| p-Operating               |   |  |
| a)                        | 0 - 2,5   | bar  |
| b)                        | 0 - 2,5   | bar  |
| c)                        | 0 - 2,0   | bar  |
| Cv-value                  | 3,5   | l/min  |
| Coil type                 | MS.006, MS.024, MS.025  |  |
| Nominal voltages          |   |  |
| a)                        | 12  | V DC   |
| b)                        | 24  | V DC   |
| c)                        | 24  | V DC   |
| other voltages on request |   |  |
| Voltage tolerance         | +10% -15%   |  |
| Duty cycle                |   |  |
| a)                        | ON: 3,5 min. OFF: 1,5 min.  |  |
| b)                        | ON: 3,5 min. OFF: 1,5 min.  |  |
| c)                        | ON: continuously  |  |
| Nominal power             |   |  |
| a)                        | 9,5   | W (UL approval)                                      |
| b)                        | 10,0  | W  |
| c)                        | 8,6   | W  |
| Protection type           | IP 00 up to IP 68   |  |
| Coil connections          | flat tabs 6,3 x 0,8 mm<br>plug socket according to EN 175301-803 (IP65), several cable connections (IP67, IP68) |  |
| Insulation class          | F   | according to EN 60730                                |
| Protection class          | I   | according to EN 60730 (for incorporation in class I) |

