

# Product Information

Pinch valve, 2/2-way, NO



A.u.K. Müller

Series 16.002.216



## Description

The 16.002.216 pinch valve series is normally open in operation and is designed for flexible tubes up to an outer diameter of 3,2 mm and a shore hardness of 50 - 60.

The flow of the medium is controlled by pinching the inserted tube. This design avoids using the traditional valve seat and membrane which can cause turbulence in the fluid flow and create dead areas in the valve housing where medium or dirt can collect. The valve is particularly suitable for applications where a high level of hygiene is required.

The resistance against chemicals depends on the selected material of the tube.

Solenoid valves  
Control valves  
Special valves and systems

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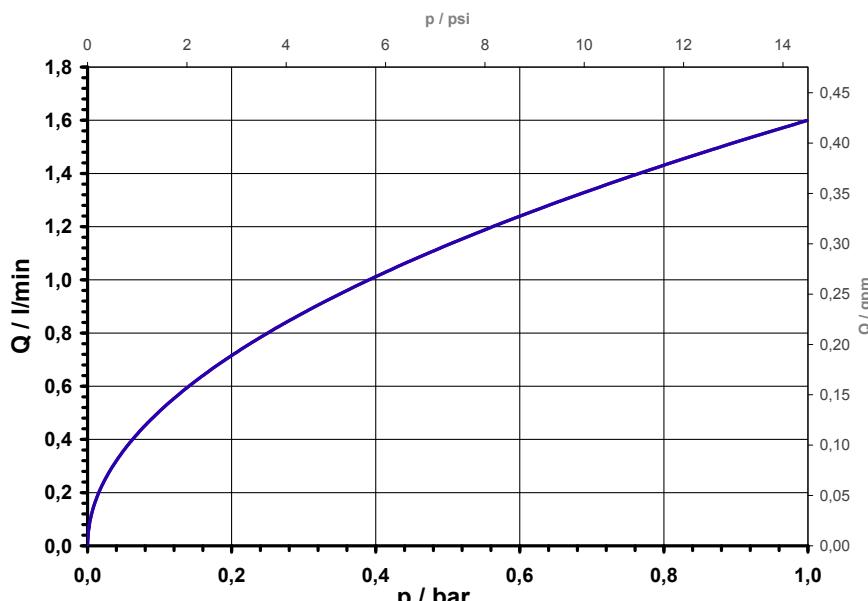
## Characteristics

- medium completely separated from valve parts
- chemical resistance depends on the material of the tube selected
- tube can easily be changed
- no dead areas as in usual valve body
- flow in either direction
- coil can be fixed in any position through 360°
- minimum 1 million cycles (dry, without medium)

## Applications

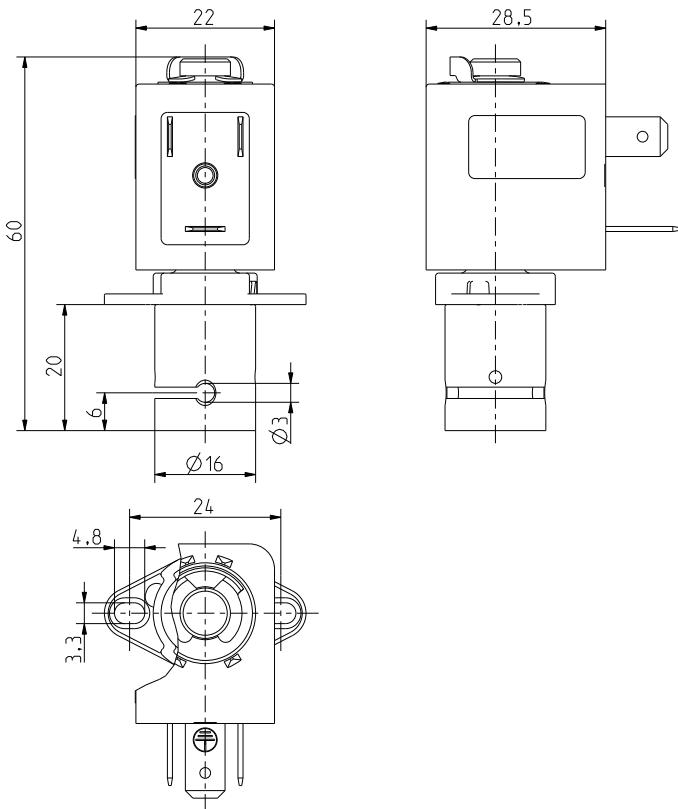
- dosage systems
- laboratory analysis
- medical equipment
- vending machines

Typical performance curve  
Silicone tube 2x0,4; 60°Sh; length 30cm  
Medium: Water at 25°C; Free Outlet





### Series 16.002.216



### Technical Data

|                   |   |                          |
|-------------------|---|--------------------------|
| Type              | pinch valve   |                          |
| Construction      | 2/2-way solenoid valve, direct acting                         |                          |
| Function          | NO (normally open)  |                          |
| Fitting position  | any   |                          |
| Media             | depends on tube   |                          |
| T-Medium          | 90<br>(194)   | °C max.<br>°F max.)      |
| T-Ambient         | -10 – +50<br>(14 – 122)                                       | °C<br>°F)                |
| p-Operating       | 0 - 1 bar<br>(0 - 14.5 psi)<br>(depending on tube)            |                          |
| Coil type         | MS.037-22   |                          |
| Nominal voltages  | 24  | V DC                     |
|                   | other voltages on request                                     |                          |
| Voltage tolerance | ±10%  |                          |
| Duty cycle        | 100%  |                          |
| Protection Type   | IP 65   |                          |
| Coil connections  | plug socket<br>flat tap 6.3 x 0.8 mm<br>model B-industry form |                          |
| Insulation class  | F   | according to<br>EN 60730 |

### Materials

|                    |                                |
|--------------------|--------------------------------|
| Valve body         | aluminium<br>(surface refined) |
| Fixing flange      | PA 66, glass fibre reinforced  |
| Plunger guide      | aluminium                      |
| Plunger and spring | stainless steel                |
| Coil coating       | PA 6, glass fibre reinforced   |



### Options

| I.D. Ø | O.D. Ø | Wall Thickness | Shore-Hardness | Clamping-Force / N | Nominal power consumption / W |
|--------|--------|----------------|----------------|--------------------|-------------------------------|
| 2,0    | 2,8    | 0,4            | 60 $\pm$ 5°    | 2,0                | 6,0                           |
|        |        |                |                |                    |                               |

Range of possible outer diameter (O.D. Ø) of tube: 2,2 - 3,2 mm.  
The wall thickness should not deviate from the one given in the upper table.  
The valve may only be operated with inserted tube.

