



Solenoid valves  
Control valves  
Special valves and systems

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#### Series 16.002.116



#### 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°
- function provides high reliability and run time

#### Applications

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

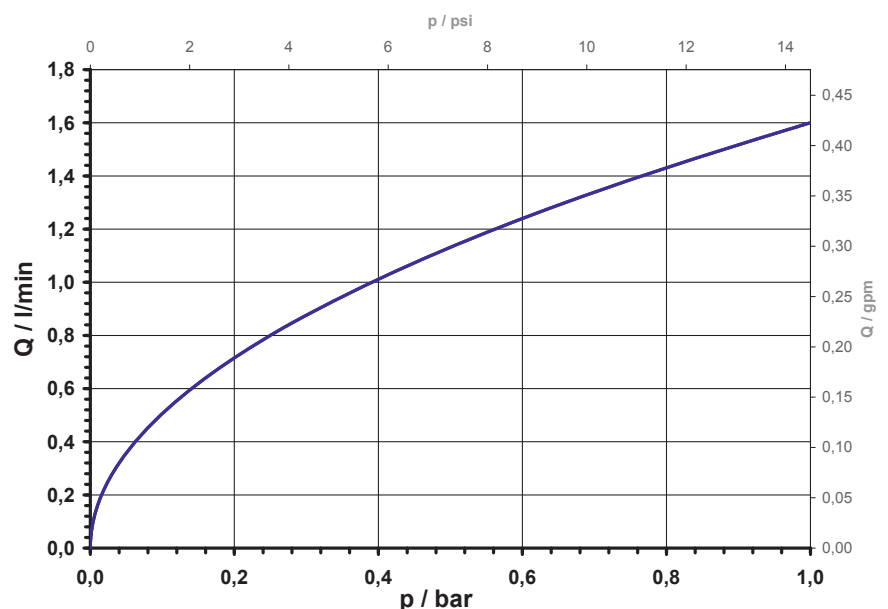
#### Description

The 16.002.116 pinch valve series is normally closed in operation and equipped with a 6 W solenoid coil. Therefore, it exhibits a clamping force of 2,0 N and is applicable for flexible tubes with an outer diameter from 3,2 mm and a shore hardness of 50-60°. With these tubing specifications, pressures up to 1 bar can be switched.

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.

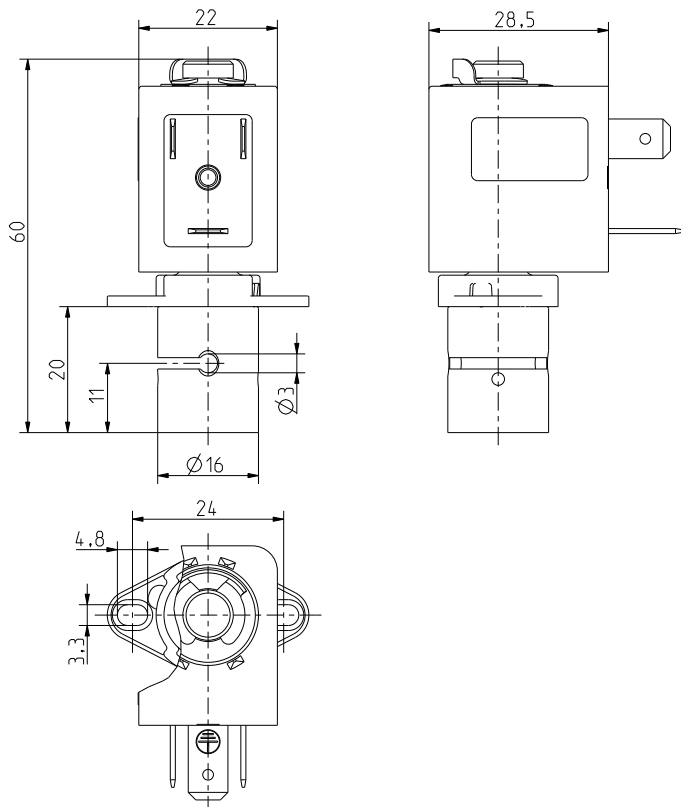
The resistance against chemicals depends on the selected material of the tube.

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

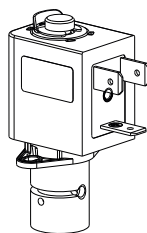




**Series I6.002.I16**



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



Technical Data	
Type	pinch valve
Construction	2/2-way solenoid valve, direct acting
Function	NC (normally closed)
Fitting position	any
Media	depends on tube
T-Medium	90 (194) °C max. °F max.)
T-Ambient	-10 – +50 °C (14 – 122 °F)
p-Operating	0 - 1 bar (0 - 14,5 psi) (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 flat tap 6,3 x 0,8 mm model B-industry form
Insulation class	F according to EN 60730

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°±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.

