

# SOLENOID VALVES | GEM-SOL® | Special Purpose Proportional

## GEM-SOL® | PR16 (G65-PR)

Special

### Proportional 2 Way NC

#### Technical Data

Function	2 Way NC
Ports size	M5, #10UNF, 1/8" BSP & NPT
Orifice size	See table
Pressure range	Vacuum - see table
Kv (l/min)	See table
Temperature range	<b>Fluid</b> : -10°C to 80°C (no freezing) <b>Ambient</b> : -10°C to 55°C
Materials in contact with media	<b>Main Valve:</b> Aluminium, Brass, Stainless Steel AISI 316 <b>Solenoid Operator:</b> Stainless Steel AISI 300 & 400 series, Brass <b>Seals:</b> NBR, FKM, EPDM (other seals on request) <b>Guide rings:</b> PTFE
Media	Air, water, oil
The control parameter is the current in the coil! Operating current	Max. 1500[mA] standard voltage 24V DC(=)
Electrical connection	Per DIN 43650-b, or 2 flying leads 18AWG (0.75mm²) 300 mm length
Standard protection class	IP65 with connector

• Media : Max. viscosity 21mm²/s

#### Guidelines for selection :

1. The pressure drop ( $\Delta P$ ) on the valve should be 30-50% or higher, of the total pressure drop in the system.
2. Special consideration should be taken in choosing the right Kv of the valve as this factor determines the flow and pressure drop of the valve.
3. To achieve better regulation performance when working without a control unit, the maximum pressure should be 1.2 times the working pressure. The maximum pressure can be adjusted using the upper screw.
4. Inlet pressure should be kept constant during operation.

#### Standard calibration pressure (bar)

	Orifice size (mm)			
	0.8	1.0	1.2	1.6
Pressure rating [bar] <sup>(1)</sup>	10	8	6	4
Flow factor Kv(l/min)	0.4	0.5	0.65	1.2

- (1) From technical vacuum to max. rating  
(2) Other calibration pressures on request

#### Flow regulation :

With control unit PWM 500[Hz] measured at constant  $\Delta P$  (delta P)

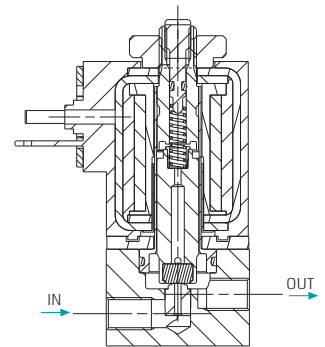
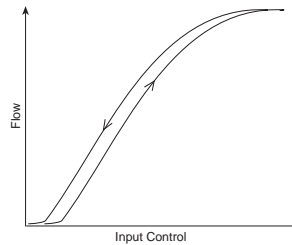
Hysteresis	<5% of FS
Repeatability	<3% of FS
Sensitivity	<2% of FS

#### Voltage & Power Consumption

V	AC 50Hz		DC (W)
	3.2VA	3.6VA	3
12			•
24			•
110			
230			

• Available options

\* To order valves manufactured according to your specific requirements, please contact our technical sales department.



#### Dimensions

