

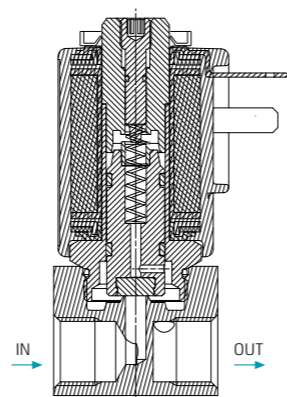
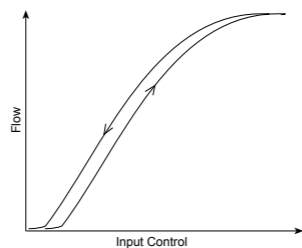
SOLENOID VALVES | Special Purpose

Proportional

GEM-PR | Proportional 2 Way NC



Stainless Steel



Technical Data

Function	2 Way NC
Ports size	1/8", 1/4" BSP & NPT
Orifice size	See table
Pressure range	See table
Kv (l/min)	See table
Temperature range	Fluid : -10°C to 80°C (no freezing) Ambient : -10°C to 55°C
Materials in contact with media	Main Valve: Aluminium, Brass, Stainless Steel AISI 316 Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: NBR, FPM (Viton®), EPDM, polyurethane, PTFE Guide rings: PTFE
Media	Neutral gases, water, oil Max. viscosity 2lmm ² /s
The control parameter is the current in the coil.	
Operating current	100-500[mA] standard voltage 24V DC(=)
Electrical connection	Per DIN 43650-a, or 2 flying leads 18AWG (0.75mm ²) 300 mm length
Standard protection class	IP65 with connector * Option : IP68 (please refer to GEM-BP Coil)

Guidelines for selection

- The pressure drop (ΔP) on the valve should be 30-50% or higher, of the total pressure drop in the system.
- 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.
- To achieve better regulation performance when working without a control unit, the maximum pressure should be 1.1 times the working pressure. The maximum pressure can be adjusted using the upper screw.
- Inlet pressure should be kept constant during operation.

Standard calibration pressure (bar)

	Orifice size (mm)						
	0.8	1.2	1.6	2.0	2.4	3.0	4.0
Pressure rating(bar) ⁽¹⁾	16	12	10	8	6	3.5	2
Flow factor Kv(l/min)	0.6	1.1	1.7	2.5	3.5	4.5	5

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

Flow regulation :

With control unit PWM 500[Hz] measured at constant ΔP (delta P).
 Hysteresis <5% of FS
 Repeatability <3% of FS
 Sensitivity <2% of FS

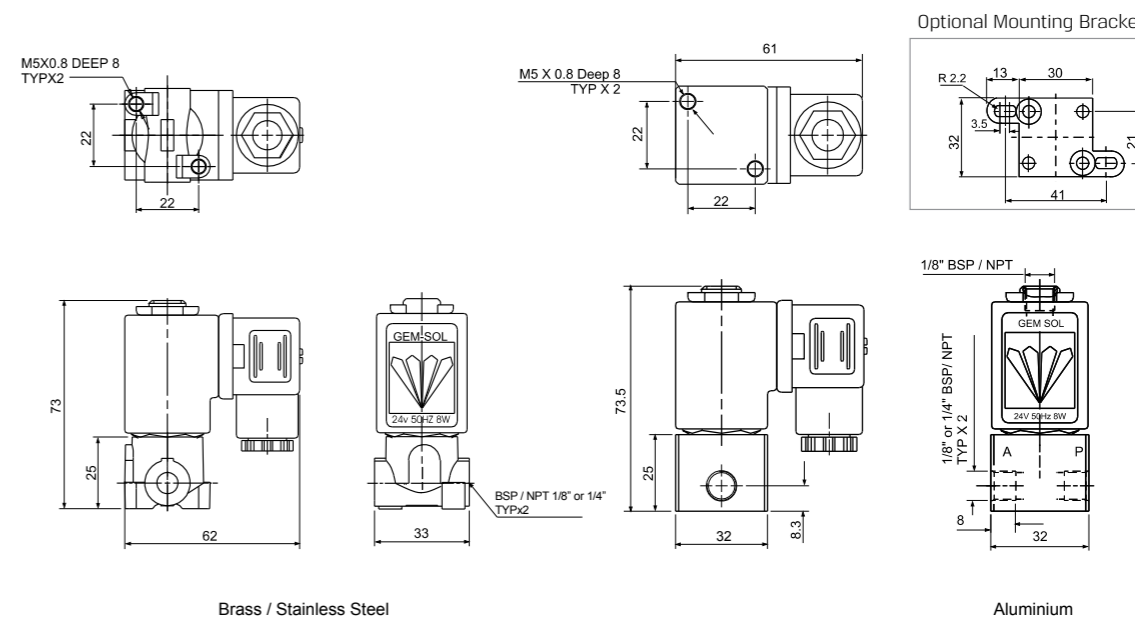
Voltage & Power Consumption

V	DC (W)		
	10	5.5	3.5
6			
12			
24	•		
48			
110			
120			
220			
230			
240			

• Available options

Proportional | GEM-SOL | Proportional 2 Way NC

Dimensions



How to Order

GEM-PR	-	BODY	PORT	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	-	CONNECTOR
Brass	2	1/8" BSP	10	2W NC 1	0.8 1	NBR N	None 0	without	0
Stainless Steel	3	1/8" NPT	11		1.2 2	FPM (Viton®) V		with	1
Aluminium	5	1/4" BSP	20		1.6 3	EPDM E			
		1/4" NPT	21		2.0 4	Polyurethane P			
					2.4 5	PTFE T			
					3.0 6				
					4.0 7				

Example : GEM-PR-21015N0-1

GEM-SOL proportional direct operated, brass, 1/8"BSP, 2W NC, 2.4 orifice, NBR, without manual override, with connector.

GEM-PR - 2 10 1 5 N 0 - 1

* Please specify the working pressure range when placing an order

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