

SOLENOID VALVES | GEM-SOL® | General Purpose Direct Operated

GEM-SOL® | V/VL32 (GEM-V/VL)

Modular Manifold Installation

Technical Data

Function	2 Way, 3 Way NC, NO
Pressure range	<ul style="list-style-type: none"> • See table • Valves for pressure higher than 25 bar cannot be supplied with manual override.
Kv (l/min)	See table
Temperature range	Fluid : -10°C to 80°C (no freezing) Ambient : -10°C to 50°C
Mounting	Vertical, on sub-base, 2 screws M4. Any number of valves on the same sub-base plate. Any combination of 2 Way, 3 Way NC or NO valves may be grouped together. * Standard valve orientation : Manual override and base port on the same side
Materials in contact with media	Manual override: Plastic (Reinforced Nylon), Brass screw or finger knob. NOa* - manual override is not available. *pressure is supplied through the base Main Valve: Brass Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: NBR, FKM, EPDM, FFKM, PTFE
Media	Air, water, oil
Coil voltage	<ul style="list-style-type: none"> • Voltage and power consumption - see table • All Baccara coil voltages are ± 10% of nominal
Standard protection class	IP65 with connector * Option : IP68 (please refer to GEM-BP Coil)

- Latch valves are available upon request.
- Pressure separation plug is available.

Two types of NO valves :

- Supply pressure is through the base like NC valves.
These valves can be combined in a standard manifold. They are not supplied with manual override.
- Supply pressure is through the tube. These valves cannot be combined in a standard manifold. They are supplied with manual override.

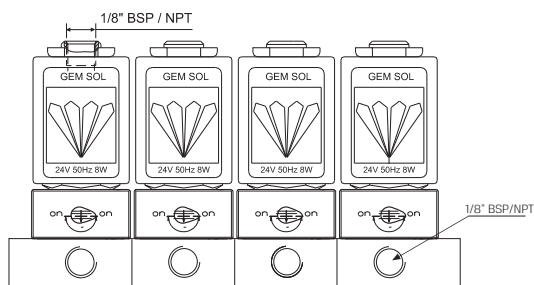
When using a manifold with more than 8 stations, it is advisable to use two air supplies, one at each end.



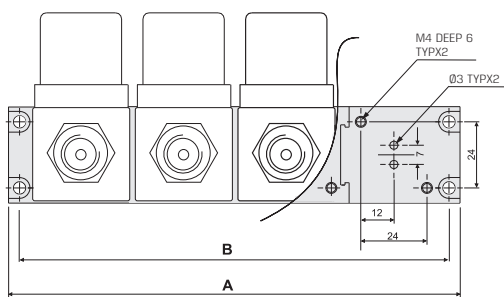
Brass | 5 valves

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Dimensions



*Standard valve orientation : Manual override and base port on the same side



$$A = 80 + (n - 2) \times 33$$

$$B = 72 + (n - 2) \times 33$$

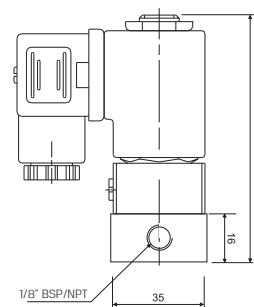
n = the number of valves

Example : For 6 Valves

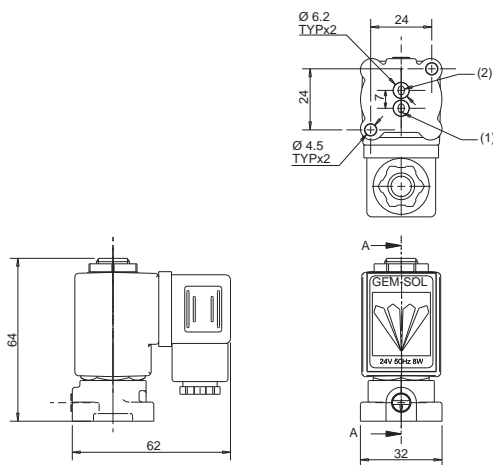
$$A = 80 + 4 \times 33 = 212$$

$$B = 72 + 4 \times 33 = 204$$

*Pressure separation plug can be ordered on request.

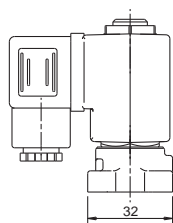
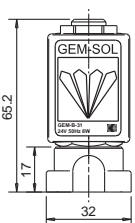
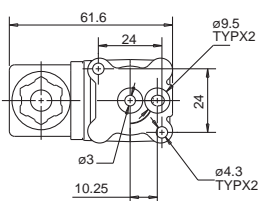


TYPE V32

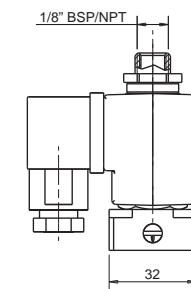
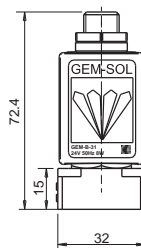
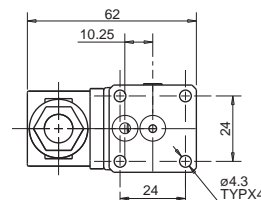


TYPE VL32

Brass Forging
2 Way / 3 Way NC



Aluminium / Stainless Steel
3 Way NO through base

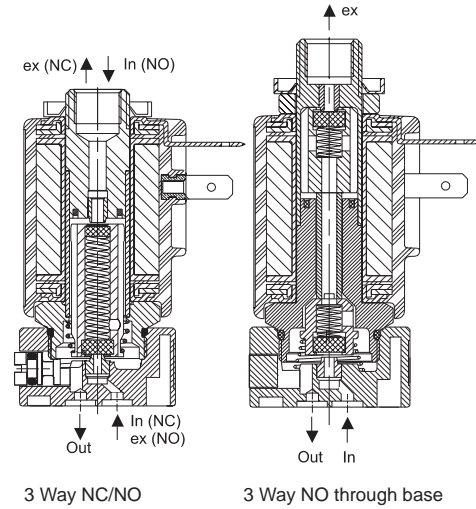
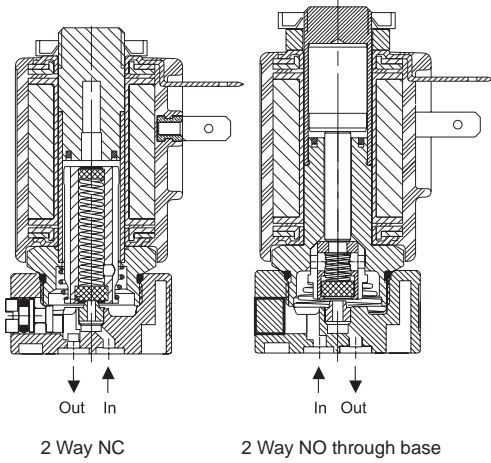


SOLENOID VALVES | GEM-SOL® | General Purpose

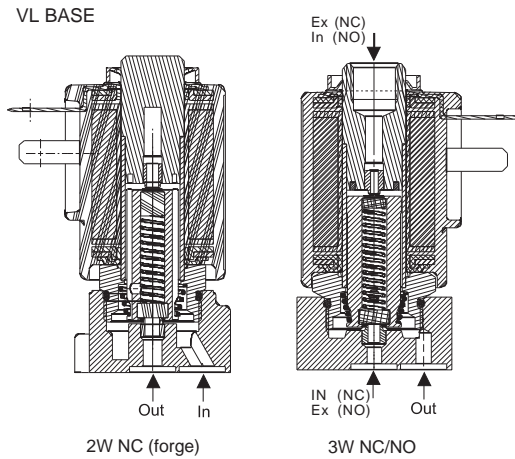
Direct Operated

GEM-SOL® | V/VL32 (GEM-V/VL) | Modular Manifold Installation

Type V32 (GEM-V) 2 Way, 3 Way NC, NO



Type VL32 (GEM-VL) 2 Way, 3 Way NC, NO



Size : Any number of stations, built from three basic components: left end section, right end section and middle section.
 Assembly : Push in and turn 90° clockwise
 Port size : 1/8" BSP or NPT
 Material : Brass

Max. Pressure (bar) 2 Way, 3 Way NC

Coil Current/Power	Orifice (mm)						
	0.8	1.2	1.6	2.0	2.4	3.0	4.0 ⁽¹⁾
• ADC	23	20	15	10	8	5.5	2.5
AC8W, DC10W	35	30	17	14	10	6	3
AC5.5W	23	20	15	10	8	5.5	2.5
AC2.5W, DC5.5W, DC3.5W	20	16	10	9	5	4	1.6
Flow factor Kv(l/min)	0.6	1.1	1.7	2.5	3.5	4.5	5

Max. Pressure (bar) 2 Way, 3 Way NO

Coil Current/Power	Orifice (mm)						
	0.8	1.2	1.6	2.0	2.4	3.0	4.0 ⁽¹⁾
• ADC	25	20	15	11	8	6	4.5
*AC8W, DC10W	30	22	17	12	10	7	4.5
*AC5.5W, DC5.5W	25	20	15	11	8	6	
*AC2.5W, DC3.5W	20	18	12	8	6	4	
Flow factor Kv(l/min)	0.6	1	1.4	2.2	3.0	3.5	5

(1) 4.0 - Bottom orifice only. Available in 2 Way only
 * These are not applicable for NO through base valves
 • ADC valves are only suitable for use with AC8W or DC10W coils.

How to Order manifold components

GEM-V	PORT	COMPONENT	BODY
1/8" BSP	10	Left 1	Brass 2
1/8" NPT	11	Right 2	
		Middle 3	

Example : GEM-V-1022

V32 (GEM-V) type manifold 1/8" BSP, right component, Brass body

Voltage & Power Consumption

V	AC (W)						DC (W)		
	50 Hz			60 Hz			10	5.5	3.5
8	8	5.5	2.5	8	5.5	2.5			
6							•	•	•
12	•			•			•	•	•
24	•	•	•	•	•	•	•	•	•
48	•			•			•		
110	•			•	•		•		
120	•			•	•				
220	•	•	•	•			•		
230	•	•	•	•	•				
240	•			•			•		

• Available options

GEM-SOL® | V/VL32 (GEM-V/VL) | Modular Manifold Installation

How to Order | V32 (GEM-V) Manifold | all valves having identical functions

GEM-V	No. of VALVES / No. of STATIONS		PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR							
	specify quantity	specify quantity without manifold																
	10	0	1/8" BSP	Brass	2W NC	1	0.8	1	NBR	N	None	0	without coil	0	No coil	0	with	1
			1/8" NPT		2W NO	2	1.2	2	FKM	V	Plastic *	1	6	1	AC8W 50Hz	1	with LED	2
					2W NO ⁽¹⁾	2a	1.6	3	EPDM	E	Slot	2	12	2	AC8W 60Hz	2	flying leads coil *	4
					3W NC	3	2.0	4	FFKM	K	Knob *	3	24	3	DC10W	3	with 1/2" Hub	5
					3W NO	4	2.4	5	PTFE *	T	Knob *	3	48	4	AC5.5W 50Hz	4	surge protection with LED *	6
					3W NO *⁽¹⁾	4a	4.0⁽²⁾	7			Push lock	5	110	5	AC5.5W 60Hz	5	connector with moulded cable	7
													120	6	AC2.5W 50/60Hz	6	other	9
													220	7A	DC5.5W	7		
													230	7	DC3.5W	8		
													240					
																	Latch/ other *⁽³⁾	9

Example : GEM-V-6/6-10232V2-331

GEM-SOL® V32 (GEM-V) direct operated 6/6 Stations, 1/8" BSP, Brass, 3WNC, 1.2, FKM, slot manual override, 24VDC 10W with connector

- (1) Supply pressure through base
- (2) 4.0 - Bottom orifice only. Available in 2 Way only
- (3) For specifying Latch type coil, please refer to A3P32 (GEM-A3P)valve - How to Order table

* **SPECIAL OPTIONS** | Extended lead times, Non-stock items, MOQ may be applicable

How to Order | V32 (GEM-V) | individual valves with independent functions

GEM-V	No. of VALVES / No. of STATIONS		PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	ADDITIONAL FEATURE	VOLTAGE	POWER	CONNECTOR
	specify quantity	specify quantity										
As above table												

V32 (GEM-V) Direct Operated sub-base :

Example : **GEM-V-3/6-10242NO-331** : 3/6 Stations with 1/8" BSP Brass, 3WNO, 1.2, NBR, no M/O, 24VDC 10W with connector
 Example : **GEM-V-1/6-10212NO-331** : 1/6 Stations with 1/8" BSP Brass, 2WNC, 1.2, NBR, no M/O, 24VDC 10W with connector

How to Order | V32 (GEM-V) Body

GEM-V-BODY	PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR									
										specify quantity	specify quantity							
	1/8" BSP	10	Brass	2	2W NC	1	0.8	1	NBR	N	None	0	without coil	0	No coil	0	with	1
	1/8" NPT	11			2W NO	2	1.2	2	FKM	V	Plastic *	1	6	1	AC8W 50Hz	1	with LED	2
					2W NO ⁽¹⁾	2a	1.6	3	EPDM	E	Slot	2	12	2	AC8W 60Hz	2	flying leads coil *	4
					3W NC	3	2.0	4	FFKM	K	Knob *	3	24	3	DC10W	3	with 1/2" Hub	5
					3W NO	4	2.4	5	PTFE *	T	Knob *	3	48	4	AC5.5W 50Hz	4	surge protection with LED *	6
					3W NO *⁽¹⁾	4a	4.0⁽²⁾	7			Push lock	5	110	5	AC5.5W 60Hz	5	connector with moulded cable	7
													120	6	AC2.5W 50/60Hz	6	other	9
													220	7A	DC5.5W	7		
													230	7	DC3.5W	8		
													240					
																	Latch/ other *⁽³⁾	9

Example : GEM-V-BODY-10232V2-331

GEM-SOL® V32-Body (GEM-V-BODY), direct operated, 1/8" BSP, Brass, 3WNC, 1.2, FKM, slot manual override, 24 VDC 10W with connector

- (1) Supply pressure through base
- (2) 4.0 - Bottom orifice only. Available in 2 Way only
- (3) For specifying Latch type coil, please refer to A3P32 (GEM-A3P)valve - How to Order table

* **SPECIAL OPTIONS** | Extended lead times, Non-stock items, MOQ may be applicable

How to Order | VL32 (GEM-VL)

GEM-VL	PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR									
										specify quantity	specify quantity							
	1/8" BSP	10	Brass	2	2W NC	1	0.8	1	NBR	N	None	0	without coil	0	No coil	0	with	1
	1/8" NPT	11			2W NO	2	1.2	2	FKM	V	Plastic *	1	6	1	AC8W 50Hz	1	with LED	2
					2W NO ⁽¹⁾	2a	1.6	3	EPDM	E	Slot	2	12	2	AC8W 60Hz	2	flying leads coil *	4
					3W NC	3	2.0	4	FFKM	K	Knob *	3	24	3	DC10W	3	with 1/2" Hub	5
					3W NO	4	2.4	5	PTFE *	T	Knob *	3	48	4	AC5.5W 50Hz	4	surge protection with LED *	6
					3W NO *⁽¹⁾	4a	4.0⁽²⁾	7			Push lock	5	110	5	AC5.5W 60Hz	5	connector with moulded cable	7
													120	6	AC2.5W 50/60Hz	6	other	9
													220	7A	DC5.5W	7		
													230	7	DC3.5W	8		
													240					
																	Latch/ other *⁽³⁾	9

Example : GEM-VL-10211V0-331

GEM-SOL® VL32 (GEM-VL) direct operated, 1/8" BSP, Brass, 2WNC, 0.8, FKM, no manual override, 24 VDC 10W with connector

- (1) Supply pressure through base
- (2) 4.0 - Bottom orifice only. Available in 2 Way only
- (3) For specifying Latch type coil, please refer to A3P32 (GEM-A3P)valve - How to Order table

* **SPECIAL OPTIONS** | Extended lead times, Non-stock items, MOQ may be applicable

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