



\* Available on selected models only

### GEM-V/VL | Modular Manifold Installation



Brass | 5 valves



Mazak | 6 valves

### Technical Data

Function	2 Way, 3 Way NC, NO
Pressure range	<ul style="list-style-type: none"> <li>See table</li> <li>Valves for pressure higher than 25 bar cannot be supplied with manual override.</li> </ul>
Kv (l/min)	See table
Temperature range	<b>Fluid</b> : -10°C to 80°C (no freezing) <b>Ambient</b> : -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 2/2, 3 Way NC or NO valves may be grouped together. <b>* Standard valve orientation : Manual override and base port on the same side</b>
Materials in contact with media	<b>Manual override:</b> Plastic, Brass screw or finger knob. NOa* - manual override is not available. <b>*pressure is supplied through the base</b> <b>Main Valve:</b> Mazak, Brass <b>Solenoid Operator:</b> Stainless Steel AISI 300 & 400 series <b>Seals:</b> NBR, FKM, EPDM
Media	Air, water, oil
Coil voltage	<ul style="list-style-type: none"> <li>Voltage and power consumption - see table</li> <li>All Baccara coil voltages are ± 10% of nominal</li> </ul>
Standard / Certification	<ul style="list-style-type: none"> <li>UL 429</li> <li>* Available on selected models only. Please contact our technical sales department for details.</li> </ul>
Standard protection class	IP65 with connector * Option : IP68 (please refer to GEM-BP Coil)

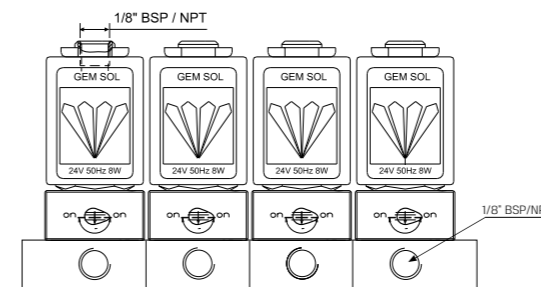
- Latch valves are available upon request.
- Pressure separation plug is available.

#### Two types of NO valves :

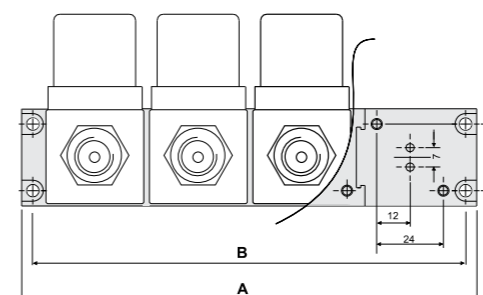
- Supply pressure is through the base like NC valves. These valves can be combined in a standard manifold. They are not supplied with manual override.
- Supply pressure is through the tube. These valves cannot be combined in a standard manifold. They are supplied with manual override.

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

### Dimensions



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



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

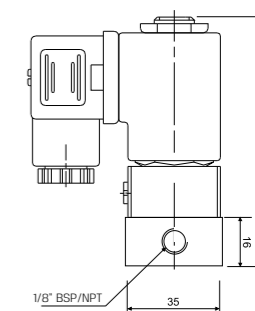
$$B = 72 + (n - 2) \times 33$$

n = the number of valves

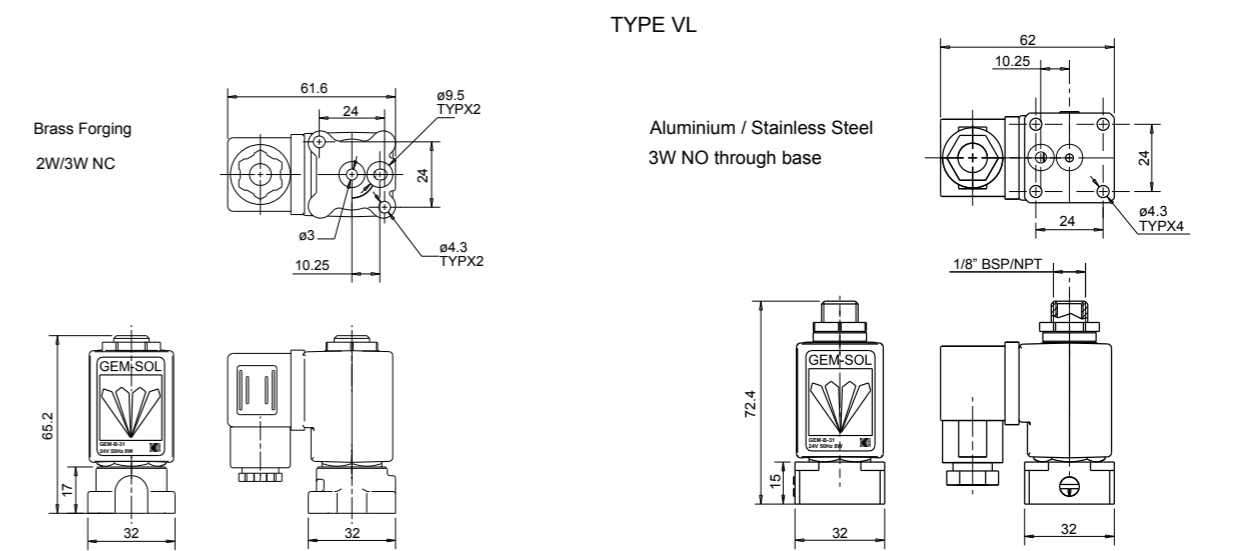
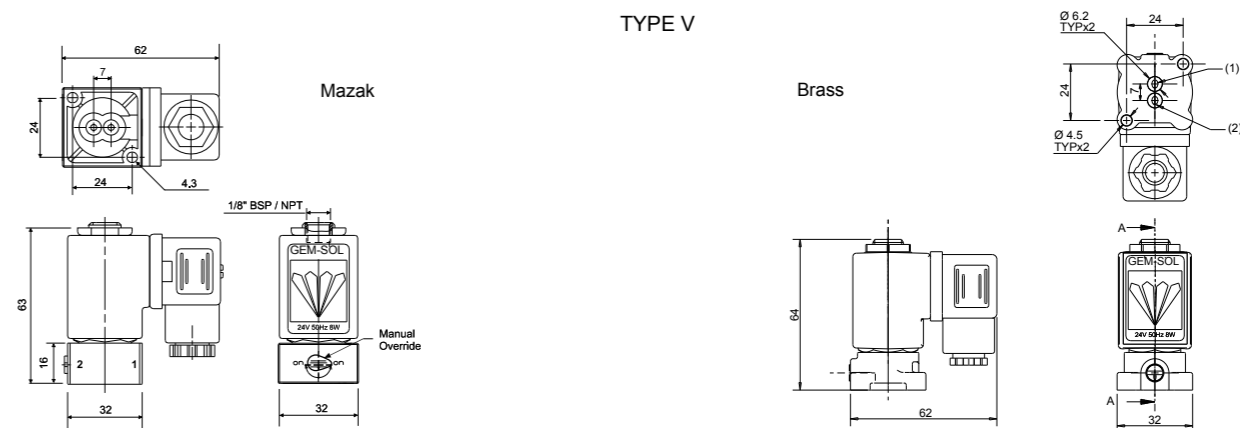
**Example : For 6 Valves**

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

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



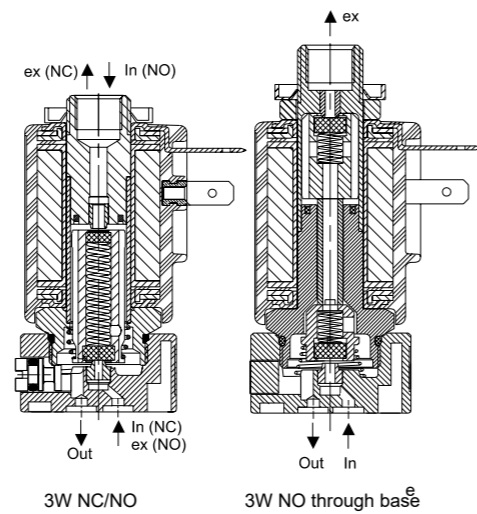
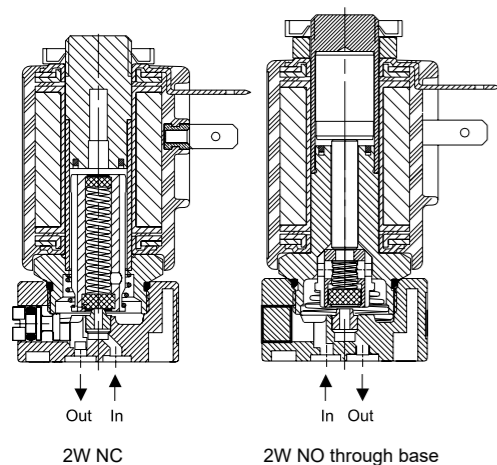
\*Pressure separation plug can be ordered on request.



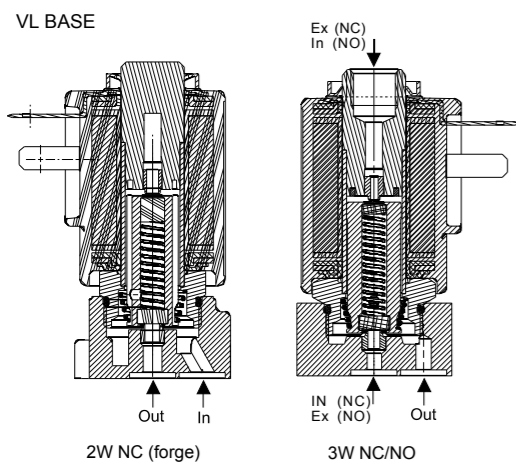
# SOLENOID VALVES | General Purpose

## Direct Operated | Manifolds | GEM-SOL

### Type V 2 Way, 3 Way NC, NO



### Type 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 : Mazak, Brass

### How to Order manifold components

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

Example : GEM-V-1021

GEM-SOL V type manifold 1/8" BSP, right component, Mazak body.

GEM-V	-	10	2	1
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### Max. Pressure (bar) 2W, 3W NC table

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

### Max. Pressure (bar) 2W, 3W NO table

Coil Current/Power	Orifice (mm)					
	0.8	1.2	1.6	2.0	2.4	3.0
ADC •	25	20	15	11	8	6
*AC8W, DC10W	30	22	17	12	10	7
*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

\* These are not applicable for NO through base valves  
 • ADC valves are only suitable for use with AC8W or DC10W coils.

### Voltage & Power Consumption

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

• Available options

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

## Direct Operated | Manifolds | GEM-SOL

### How to Order | GEM-V manifold | all valves having identical functions

GEM-V	No. of VALVES / specify quantity	No. of STATIONS / specify quantity without manifold	PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR
	10	0	1/8" BSP	Mazak	2W NC	0.8	NBR	None	W/out coil	No coil	without
	11	0	1/8" NPT	Brass	2W NO	1.2	FKM	Plastic	6	1	AC8W 50Hz
					2W NO <sup>(1)</sup> 2a	1.6	EPDM	E	12	2	AC8W 60Hz
					3W NC	2.0			24	3	DC10W
					3W NO	2.4			48	4	AC5.5W 50Hz
					3W NO <sup>(1)</sup> 4a	2.4			110	5	AC5.5W 60Hz
								Knob	24	3	DC10W
								Push	48	4	AC5.5W 50/60Hz
								Push lock	110	5	AC5.5W 60Hz
									220	7A	DC5.5W
									230	7	DC3.5W
									240	8	Latch/other <sup>(2)</sup>
											9

Example : GEM-V-6/6-10132V2-220  
 GEM-SOL direct operated sub-base V type, 1/8" BSP with Mazak body, 3WNC, 1.2, FKM, slot M/O, 12V AC 8W 60Hz without connector.

GEM-V	-	6	/	6	-	10	1	3	2	V	2	2	2	0
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(1) Supply pressure through base  
 (2) For specifying Latch type coil, please refer to GEM-A3P valve - How to Order table.

### How to Order | GEM-V | individual valves with independent functions

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

GEM-SOL direct operated sub-base V type of which :  
 Example : GEM-V-2/6-10132NO-221 : 2/6 stations with 1/8" BSP Mazak, 3WNC, 1.2, NBR, no M/O, 12V AC 8W 60Hz with connector  
 Example : GEM-V-3/6-10142NO-221 : 3/6 stations with 1/8" BSP Mazak, 3WNO, 1.2, NBR, no M/O, 12V AC 8W 60Hz with connector  
 Example : GEM-V-1/6-10112NO-221 : 1/6 stations with 1/8" BSP Mazak, 2WNC, 1.2, NBR, no M/O, 12V AC 8W 60Hz with connector

### How to Order | GEM-V body

GEM-V-BODY	PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR
1/8" BSP	10	Mazak	2W NC	0.8	NBR	None	W/out coil	No coil	without
1/8" NPT	11	Brass	2W NO	1.2	FKM	Plastic	6	1	AC8W 50Hz
			2W NO <sup>(1)</sup> 2a	1.6	EPDM	E	12	2	AC8W 60Hz
			3W NC	2.0			24	3	DC10W
			3W NO	2.4			48	4	AC5.5W 50Hz
			3W NO <sup>(1)</sup> 4a	2.4			110	5	AC5.5W 60Hz
						Knob	24	3	DC10W
						Push	48	4	AC5.5W 50/60Hz
						Push lock	110	5	AC5.5W 60Hz
							120	6	AC2.5W 50/60Hz
							220	7A	DC5.5W
							230	7	DC3.5W
							240	8	Latch/other <sup>(2)</sup>
									9

Example : GEM-V-BODY-10132V2-220  
 GEM-SOL direct operated V type valve, 1/8" BSP with Mazak body, 3WNC, 1.2, FKM, slot M/O, 12V AC 8W 60Hz without connector.

GEM-V-BODY	-	10	1	3	2	V	2	2	2	0
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(1) Supply pressure through base  
 (2) For specifying Latch type coil, please refer to GEM-A3P valve - How to Order table.

### How to Order | GEM-VL

GEM-VL	PORT	BODY	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR
1/8" BSP	10	Mazak	2W NC	0.8	NBR	None	W/out coil	No coil	without
1/8" NPT	11	Brass	2W NO	1.2	FKM	Plastic	6	1	AC8W 50Hz
			2W NO <sup>(1)</sup> 2a	1.6	EPDM	E	12	2	AC8W 60Hz
			3W NC	2.0			24	3	DC10W
			3W NO	2.4			48	4	AC5.5W 50Hz
			3W NO <sup>(1)</sup> 4a	2.4			110	5	AC5.5W 60Hz
				3.0			120	6	AC2.5W 50/60Hz
						Knob	24	3	DC10W
						Push	48	4	AC5.5W 50/60Hz
						Push lock	110	5	AC5.5W 60Hz
							120	6	AC2.5W 50/60Hz
							220	7A	DC5.5W
							230	7	DC3.5W
							240	8	Latch/other <sup>(2)</sup>
									9

Example : GEM-VL-1021V0-221  
 GEM-SOL direct operated VL type valve, 1/8" BSP with brass body, 2WNC, 0.8, FKM, no M/O, 12V AC 8W 60Hz with connector.

GEM-VL	-	10	2	1	1	V	0	2	2	1
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(1) Supply pressure through base  
 (2) For specifying Latch type coil, please refer to GEM-A3P valve - How to Order table.

\*Note: Manifolds are not available for VL valves