

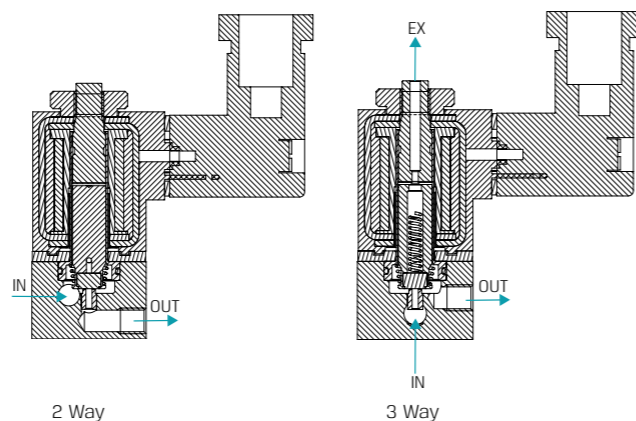
SOLENOID VALVES | General Purpose

Direct Operated | Manifolds

G65-M | Solenoid Valves Manifold



3 Stations



2 Way

3 Way

Technical Data

Function	2 Way, 3 Way NC
Ports size	M5, #10UNF
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 50°C
Materials in contact with media	Main Valve: Aluminium Solenoid Operator: Stainless Steel AISI 300 & 400 series, Brass Seals: NBR, FPM (Viton®), EPDM
Media	Air, water, oil
Coil voltage	• Voltage and power consumption - see table • All Baccara coil voltages are ± 10% of nominal
Standard protection class	IP65 with connector

Max. Pressure (bar) 2W, 3W NC table

Coil Current/Power	Orifice (mm)		
	0.8	1.0	1.2
AC - 3.6VA	10	8.5	5.5
DC - 3W	10	8.5	5.5
Flow factor Kv(l/min)	0.4	0.5	0.65

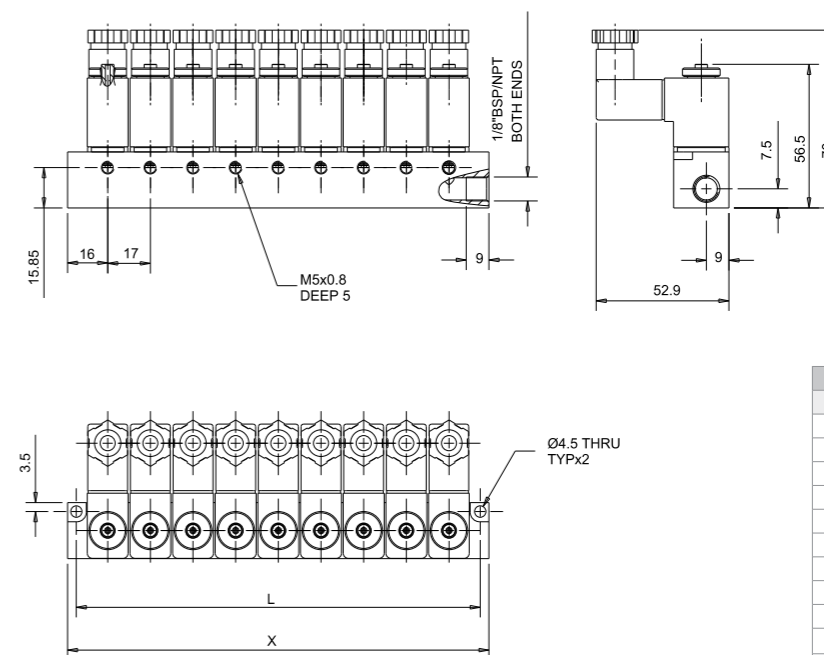
Voltage & Power Consumption

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

• Available options

Direct Operated | Manifolds | G65

Dimensions



Station		
Station	X(mm)	L(mm)
2	49	42
3	66	59
4	83	76
5	100	93
6	117	110
7	134	127
8	151	144
9	168	161
10	185	178
11	202	195
12	219	212

How to Order

G65-M	# STATIONS	BODY (1)	PORT	FUNCTION	ORIFICE	SEALS	VOLTAGE	POWER	CONNECTOR							
Specify 02 - 12	Aluminium	1	M5	00	2W NC	1	0.8	1	NBR	N	W/out coil	0	No coil	0	without	0
			#10UNF	01	3W NC	3	1.0	2	FPM (Viton®)	V	12	2	AC3.6VA (2) 50Hz	1	with	1
							1.2	3	EPDM	E	24	3	DC3W	3	other	9
							110	5								
							230	7								

Example : G65-M-0810133N-311

G65 direct operated manifold, 8 stations, aluminium, #10UNF, 3W NC, 1.2mm orifice, NBR, 24V AC 3.6VA 50 Hz with connector.

G65-M - 08 1 01 3 3 N - 3 1 1

(1) For Stainless Steel tube add "s" : e.g. G65-M - X Xs X X X X X X X X X

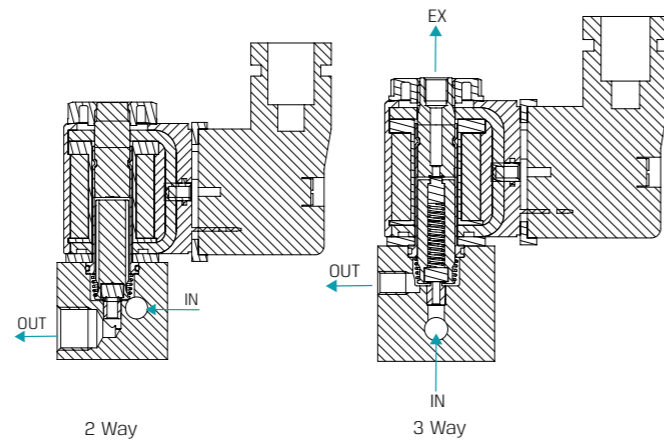
(2) When choosing 230V AC, the power is 3.2VA

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

SOLENOID VALVES | General Purpose

Direct Operated | Manifolds

G80-M | Solenoid Valves Manifold



Technical Data

Function	2 Way, 3 Way NC
Orifice size	See table
Ports size	1/8" BSP & NPT, M5, #10UNF
Pressure range	See table
Kv (l/min)	See table
Temperature range	Fluid : -10°C to 80°C (no freezing) Ambient : -10°C to 50°C
Mounting	Coil can be mounted in 2 positions at 180° apart and the coil plug can rotate to 2 positions at 180°.
Materials in contact with media	Main Valve: Aluminium, Stainless Steel AISI 316, Brass Solenoid Operator: Stainless Steel AISI 300 & 400 series, Brass Seals: NBR, FPM (Viton®), EPDM, FFKM (Kalrez®)
Media	Air, water, oil
Coil voltage	• Voltage and power consumption - see table • All Baccara coil voltages are ± 10% of nominal
Standard protection class	IP65 with connector

Max. Pressure (bar) 2W, 3W NC table

Coil Current/Power	Orifice (mm)	
	1.2	1.6
AC - 7.5W	12	10.5
AC - 4W	10	7
DC - 6.5W	12	10.5
DC - 3W	10	7
Flow factor Kv(l/min)	0.65	1

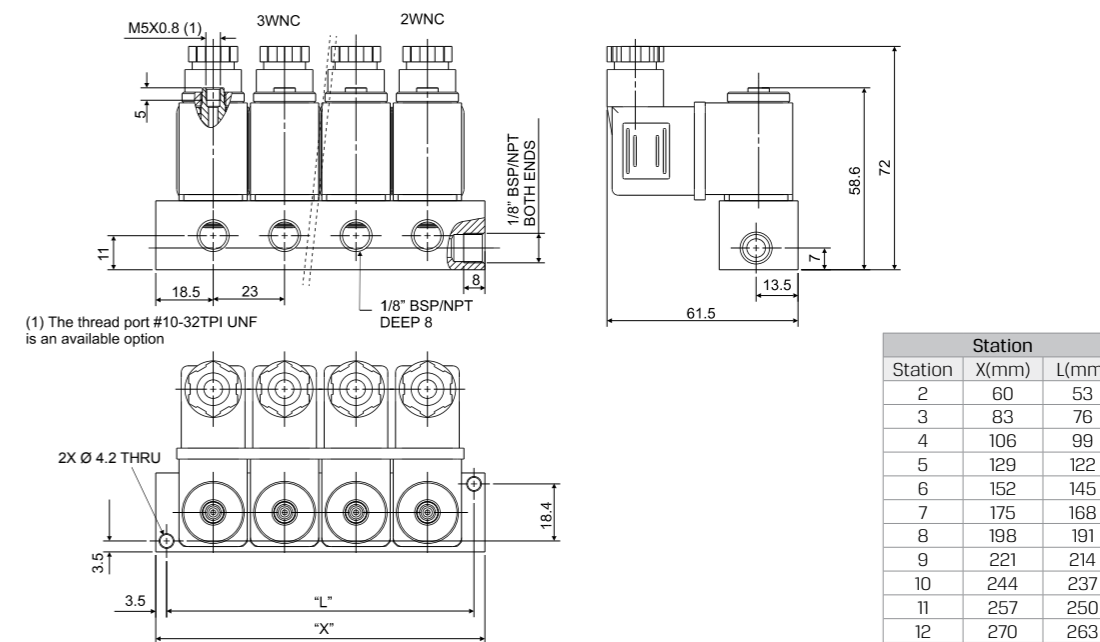
Voltage & Power Consumption

V	AC (W)				DC (W)	
	50 Hz		60 Hz		6.5	3
6					•	•
12	•	•	•	•	•	•
24	•	•	•	•	•	•
110	•	•	•	•		
230	•	•	•	•		

• Available options

Direct Operated | Manifolds | G80

Dimensions



How to Order

G80-M	# STATIONS	BODY (1)	PORT	FUNCTION	ORIFICE	SEALS	VOLTAGE	POWER	CONNECTOR
Specify 00-12	Aluminium	1	M5	00	2W NC	1 1.2 2 NBR N	W/out coil	0 No coil	0 without
	Brass	2	#10UNF	01	2W NO	2 1.6 3 FPM (Viton®) V	6	1 AC7.5W 50Hz	1 with
	Stainless Steel	3	1/8" BSP	10	3WNC	3 EPDM E	12	2 AC6W 60Hz	2 with bi-color LED
			1/8" NPT	11	3WNO	4 FFKM (Kalrez®) K	24	3 DC6.5W	3 surge protection with LED
							110	5 AC4W 50Hz	4 flying leads coil
							230	7 AC3W 60Hz	5 other
							other	9 DC3W	7

* When ordering without coil, please define what current and pressure rating is needed (DC, AC)

Example : G80-M-0811033N-311

G80, 8 station manifold, aluminium, 1/8" BSP, 3W NC, 1.6mm orifice, NBR, 24V AC 7.5W 50Hz with connector.

G80-M - 08 1 10 3 3 N - 3 1 1

(1) For Stainless Steel tube add "s" : e.g. G80-M - Xs X X X X X X X X

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

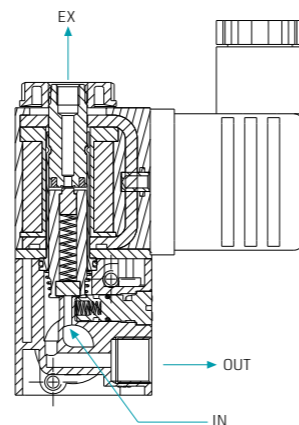
SOLENOID VALVES | General Purpose

Direct Operated | Manifolds

G80-C | Added-on Manifold



4 Station Manifold | plastic manual override



Technical Data

Function	2 Way, 3 Way NC
Orifice size	See table
Ports size	1/8" BSP & NPT
Pressure range	<ul style="list-style-type: none"> See table Valves for pressure higher than 12 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
Assembly	You can assemble your own manifold by adding segments. A set of two units can be connected by using two designated screws. For the first "stand" a different kit of screws is used.
Materials in contact with media	Manual override: Plastic Main Valve: Mazak Solenoid Operator: Brass, Stainless Steel AISI 300 & 400 series Seals: NBR, FPM (Viton®), EPDM
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

Max. Pressure (bar) 2W, 3W NC table

Coil Current/Power	Orifice (mm)		
	1.0	1.2	1.6
AC - 75W	15	12	10.5
AC - 4W	12	10	7
AC - 6.5W	15	12	10.5
DC - 3W	12	10	7
Flow factor Kv(l/min)	0.5	0.65	1

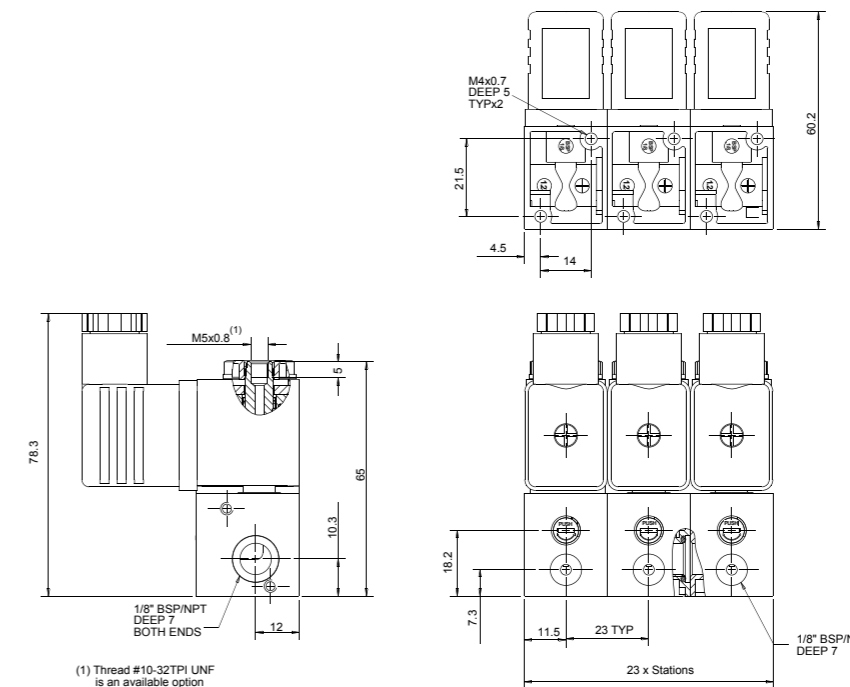
Voltage & Power Consumption

V	AC (W)				DC (W)	
	50 Hz		60 Hz		6.5	3
75	4	6	3	•	•	
12	•	•	•	•	•	
24	•	•	•	•	•	
110	•	•	•	•	•	
230	•	•	•	•	•	

• Available options

Direct Operated | Manifolds | G80

Dimensions



How to Order

G80-C	# STATIONS	BODY (1)	PORT	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR
	Specify number 00-99	Mazak 1	1/8" BSP 10	2W NC 1	1.0 1	NBR N	Plastic 1	W/out coil 0	No coil 0	without 0
			1/8" NPT 11	2W NO 2	1.2 2	FPM (Viton®) V		6 1	AC75W 50Hz 1	with 1
				3W NC 3	1.6 3	EPDM E		12 2	AC6W 60Hz 2	with bi-color LED 2
				3W NO 4				24 3	DC6.5W 3	surge protection with LED 3
								110 5	AC4W 50Hz 4	flying leads coil 4
								230 7	AC3W 60Hz 5	other 9
								other 9	DC3W 7	

* When ordering without coil, please define what current and pressure rating is needed (DC, AC)

Example : G80-C-0611032N1-311

G80, 6 stations added-on manifold, Mazak, 1/8" BSP, 3W NC, 1.2mm orifice, NBR, with plastic manual override, 24V AC 75W with connector.

G80-C - 06 1 10 3 2 N 1 - 3 1 1

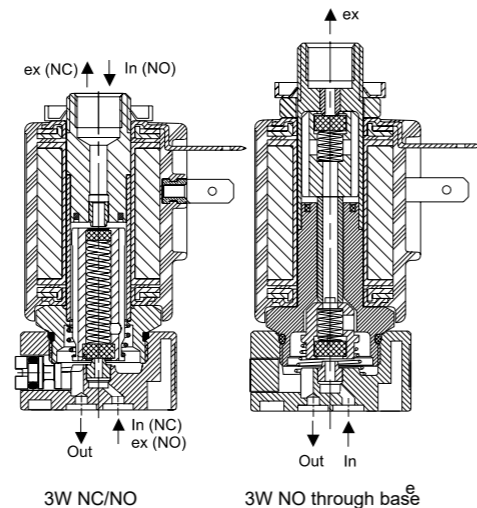
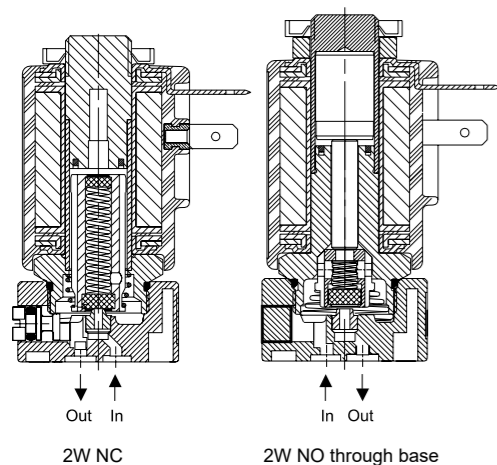
(1) For Stainless Steel tube add "s" : e.g. G80-C - X Xs X X X X X X X X

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

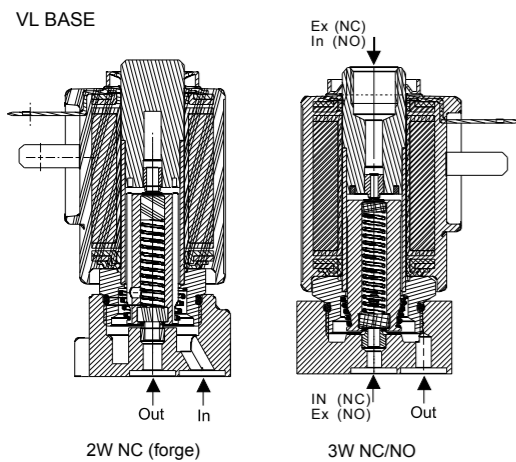
SOLENOID VALVES | General Purpose

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

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	5.5	2.5	8	5.5	2.5			
6							•	•	•
12	•			•			•	•	•
24	•	•		•	•	•	•		
48	•			•			•		
110	•			•	•		•		
120	•			•					
220	•	•		•			•		
230	•	•		•					
240	•			•			•		

• Available options

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

* 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
		0	1/8" BSP	10 Mazak	1 2W NC	0.8	1 NBR	N None	0	W/out coil	0
			1/8" NPT	11 Brass	2 2W NO	1.2	2 FPM (Viton®)	V Plastic	1	6	1 AC8W 50Hz
					2a 2W NO	1.6	3 EPDM	E Slot	2	12	2 AC8W 60Hz
					3 3W NC	2.0		Knob	3	24	3 DC10W
					4 3W NO	2.4		Push	4	48	4 AC5.5W 50Hz
					4a 3W NO	2.4		Push lock	5	110	5 AC5.5W 60Hz
										120	6 AC2.5W 50/60Hz
										220	7A DC5.5W
										230	7 DC3.5W
										240	8
											9 Latch/other

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

GEM-V - 6 6 10 1 3 2 V 2 2 2 0

(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	1 2W NC	0.8	1 NBR	N None	0	W/out coil	0
1/8" NPT	11	Brass	2 2W NO	1.2	2 FPM (Viton®)	V Plastic	1	6	1 AC8W 50Hz
			2a 2W NO	1.6	3 EPDM	E Slot	2	12	2 AC8W 60Hz
			3 3W NC	2.0		Knob	3	24	3 DC10W
			4 3W NO	2.4		Push	4	48	4 AC5.5W 50Hz
			4a 3W NO	2.4		Push lock	5	110	5 AC5.5W 60Hz
								120	6 AC2.5W 50/60Hz
								220	7A DC5.5W
								230	7 DC3.5W
								240	8
									9 Latch/other

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

GEM-V-BODY - 10 1 3 2 V 2 2 2 0

(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	1 2W NC	0.8	1 NBR	N None	0	W/out coil	0
1/8" NPT	11	Brass	2 2W NO	1.2	2 FPM (Viton®)	V Plastic	1	6	1 AC8W 50Hz
			2a 2W NO	1.6	3 EPDM	E Slot	2	12	2 AC8W 60Hz
			3 3W NC	2.0		Knob	3	24	3 DC10W
			4 3W NO	2.4		Push	4	48	4 AC5.5W 50Hz
			4a 3W NO	2.4		Push lock	5	110	5 AC5.5W 60Hz
				3.0				120	6 AC2.5W 50/60Hz
								220	7A DC5.5W
								230	7 DC3.5W
								240	8
									9 Latch/other

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

GEM-VL - 10 2 1 1 V 0 2 2 1

(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

SOLENOID VALVES | General Purpose

Pilot Operated | Manifolds

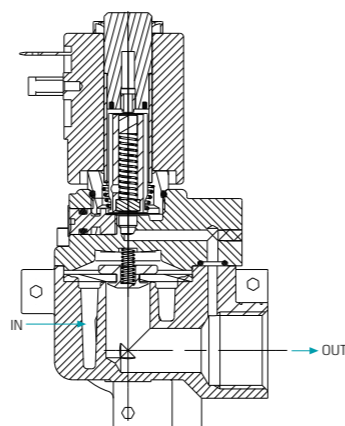
GEM-SM | Manifold 1/4", 1/2" 2 Way NC, NO



2 Station Manifold | Stainless Steel



4 Station Manifold | Brass



Technical Data

Function	2 Way NC, NO
Ports size	1/4", 1/2" BSP & NPT
Pressure range	See table *Minimum pressure differential of 0.3 or 0.5 is required
Kv (l/min)	See table
Temperature range	Fluid : -10°C to 80°C (no freezing) Ambient : -10°C to 50°C
Materials in contact with media	Manual override: NC/NO - Brass screw NOa* - manual override is not available *pressure is supplied through the base Main Valve: Brass Stainless Steel AISI 316 Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: NBR, FPM (Viton®), EPDM
Assembly	• Stations attached by 3 screws • End stations are either with ports or plugged
Coil voltage	• 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)

- When using a manifold with more than 8 stations, it is advisable to use two air supplies, one at each end
- It is possible to combine functions on one manifold
- Slow closing system to prevent water hammer effect
- Pressure separation plug between stations is available.

Pressure (bar) & Flow table

Size	Orifice (mm)	Pressure (bar)	Kv(l/min)
1/4"	8	0.5 to 20	12
1/2"	12		35

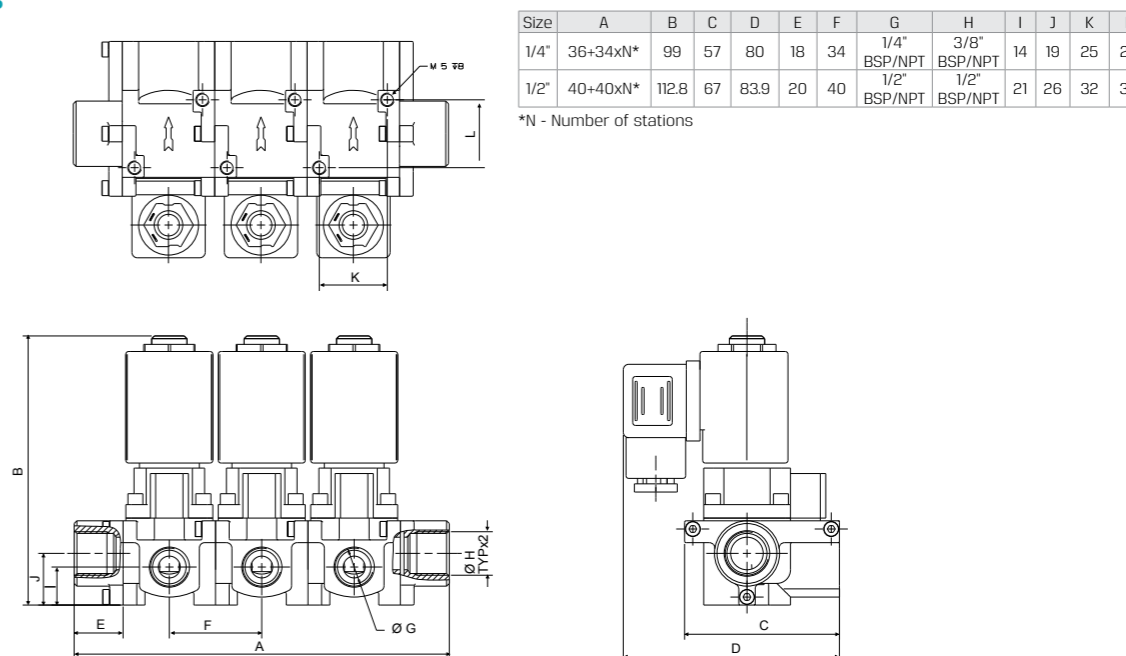
Voltage & Power Consumption

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

• Available options

Pilot Operated | Manifolds | GEM-SOL | 1/4", 1/2" 2 Way NC, NO

Dimensions



Size	A	B	C	D	E	F	G	H	I	J	K	L
1/4"	36+34xN*	99	57	80	18	34	1/4" BSP/NPT	3/8" BSP/NPT	14	19	25	25
1/2"	40+40xN*	112.8	67	83.9	20	40	1/2" BSP/NPT	1/2" BSP/NPT	21	26	32	32

*N - Number of stations

How to Order

GEM-SM	No. of STATIONS	BODY	PORT	FUNCTION	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR
specify quantity	2	Brass	1/4" BSP (1)	2W NC	NBR	N	W/out coil	0	without
	3	Stainless Steel	1/4" NPT (1)	2W NO	FPM (Viton®)	V	6	1	with
			1/2" BSP	2W NO(2) w/out tube	EPDM	E	12	2	with LED
			1/2" NPT				24	3	with bi-color LED
							48	4	flying leads coil
							110	5	with 1/2" Hub
							120	6	surge protection with LED
							220	7A	connector with moulded cable
							230	7	other
							240	8	
							Latch/other (3)	9	

Example : GEM-SM-022202V2-321

GEM-SOL pilot operated manifold, 2 stations, brass, 1/4"BSP, 2W NO, FPM (Viton®), slot manual override, 24V AC 8W 60Hz with connector.

GEM-SM - 02 2 20 2 V 2 - 3 2 1

(1) Available only in brass

(2) Manual override is not available

(3) For specifying Latch type coil, please refer to GEM-A3P valve - How to Order table.

* Note: When ordering without coil, please define what current and pressure rating is needed (DC, AC or ADC), otherwise an ADC valve will be supplied.

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