

ELECTRIC/HYDRAULIC VALVES | GEM & G75

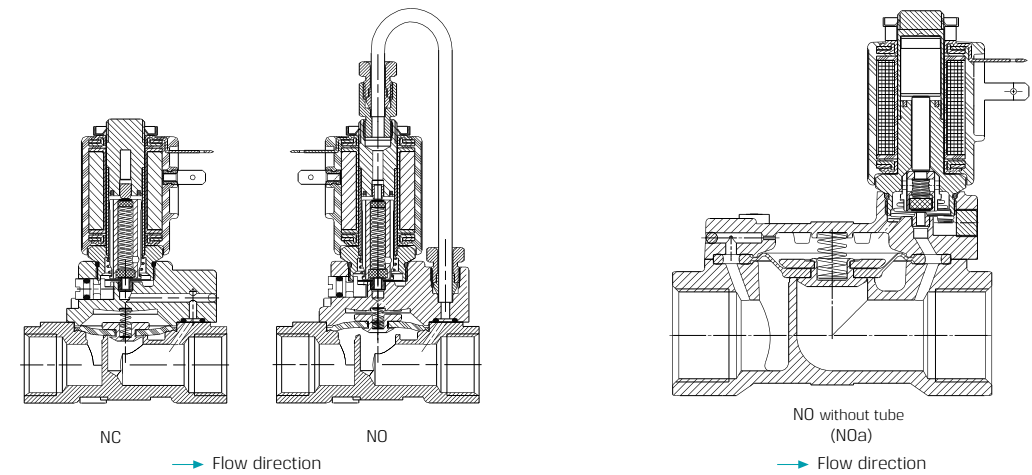
GEM-S | 1/4" - 1" 2 Way NC, NO



* Available on selected models only



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



Technical Data

Function	2 Way NC, NO
Ports size	1/4", 3/8", 1/2", 3/4", 1" 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
Coil voltage	• Voltage and power consumption - see table • All Baccara coil voltages are ± 10% of nominal
Standard / Certification	• UL 429 * Available on selected models only. Please contact our technical sales department for details.
Standard protection class	IP65 with connector * Option : IP68 (please refer to GEM-BP Coil)

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

Pressure (bar) & Flow table NO/NC GEM-S-□-20...41

Size	Orifice (mm)	Pressure (bar)	Kv (l/min)
1/4"	8	0.5 to 20	12
3/8"	8		16
1/2"	12		35

Pressure (bar) & Flow table NO/NC GEM-S-□-□r

Size	Orifice (mm)	Pressure (bar)	Kv (l/min)
1/2"	16	0.5 to 20	60
3/4"	16		80

Pressure (bar) & Flow table NO/NC GEM-S-□-50...60

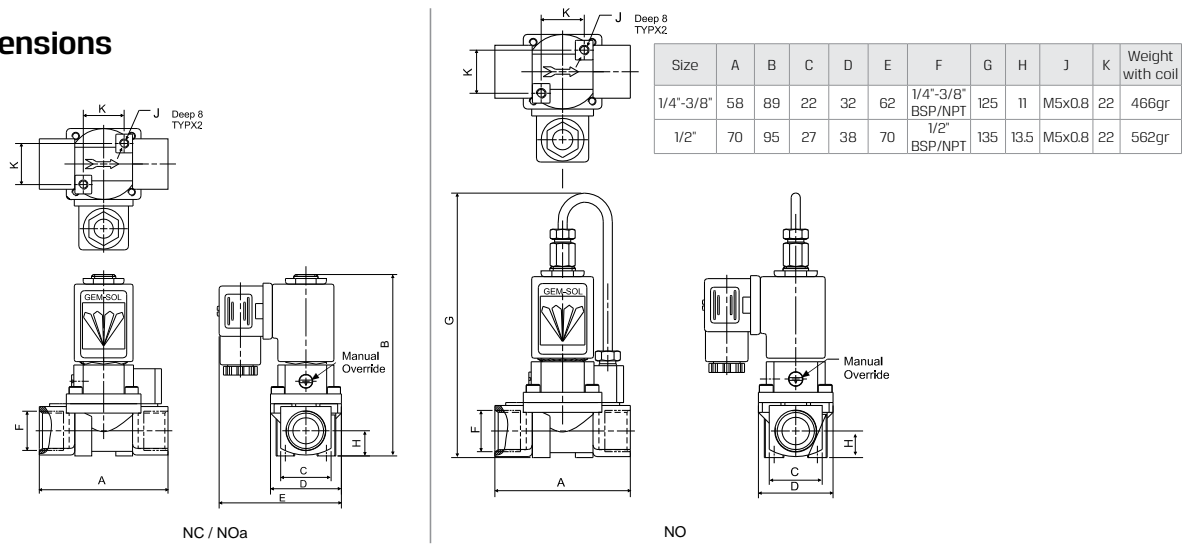
Port Connection	Orifice (mm)	Pressure (bar)		Kv (l/min)
		AC	DC	
3/4"	20	0.3 to 15	0.3 to 15	130
1"	25	0.5 to 15	0.5 to 15	200

• Slow closing system to prevent water hammer effect

ELECTRIC/HYDRAULIC VALVES | GEM & G75

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

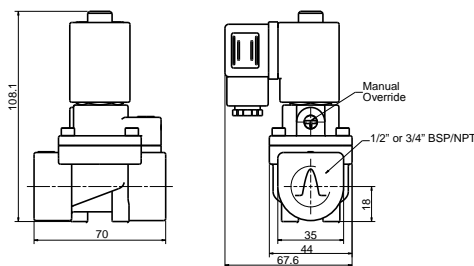
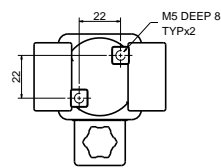
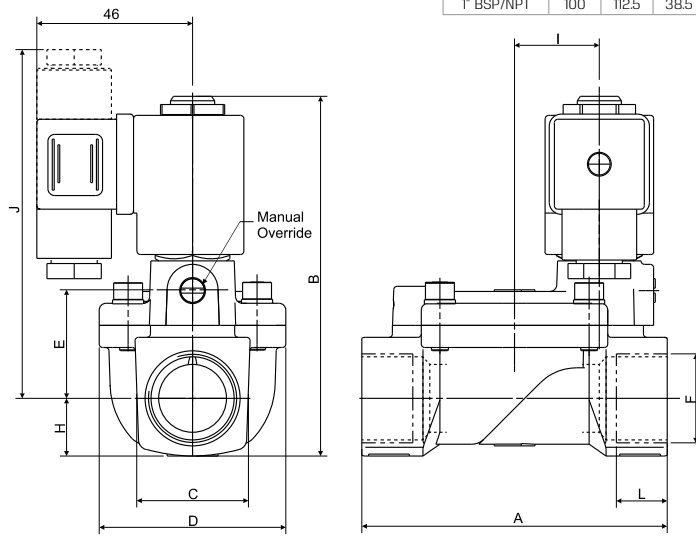
Dimensions



NC / NOa

NO

Size	A	B	C	D	E	H	L	I	J
3/4" BSP/NPT	90	106	32	55	32	17	15	25	103
1" BSP/NPT	100	112.5	38.5	65	34	21	16	29.5	109.5



GEM - □ r 16mm orifice
NC / NOa

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

How to Order

GEM-S	BODY	PORT	FUNCTION	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR							
Brass	2	1/4" BSP	20	2W NC	1	NBR	N	None	0	W/out coil	0	No coil	0	without	0
Stainless Steel	3	1/4" NPT	21	2W NO ⁽¹⁾	2	FPM (Viton®)	V	Slot	2	6	1	AC8W 50Hz	1	with	1
										12	2	AC8W 60Hz	2	with LED	2
										24	3	DC10W	3	with bi-color LED	3
										48	4			flying leads coil	4
										110	5			with 1/2" Hub	5
										120	6			surge protection with LED	6
										220	7A			connector with moulded cable	7
										230	7			other	9
										240	8				
										Latch/other ⁽³⁾	9				

Example : GEM-S-2202V2-321

GEM-SOL pilot operated, brass, 1/4"BSP, 2W NO, FPM (Viton®) seals, slot manual override, 24V AC8W 60Hz with connector

GEM-S - 2 20 2 V 2 3 2 1

(1) Option available in 1/4" - 1/2"

(2) Without manual override

(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

How to Order

GEM-S	BODY	PORT	FUNCTION	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR							
Brass	2	1/2" BSP	40r	2W NC	1	NBR	N	None	0	W/out coil	0	No coil	0	without	0
Stainless Steel	3	1/2" NPT	41r	2W NO	2	FPM (Viton®)	V	Slot	2	6	1	AC8W 50Hz	1	with	1
										12	2	AC8W 60Hz	2	with LED	2
										24	3	DC10W	3	with bi-color LED	3
										48	4			flying leads coil	4
										110	5			with 1/2" Hub	5
										120	6			surge protection with LED	6
										220	7A			connector with moulded cable	7
										230	7			other	9
										240	8				
										Latch/other ⁽²⁾	9				

Example : GEM-S-240r1V2-321 (16mm orifice size)

GEM-SOL pilot operated, brass, 1/2"BSP, 2W NC, FPM (Viton®) seals, slot manual override, 24V AC8W 60Hz with connector

GEM-S - 2 40r 1 V 2 3 2 1

(1) Without manual override.

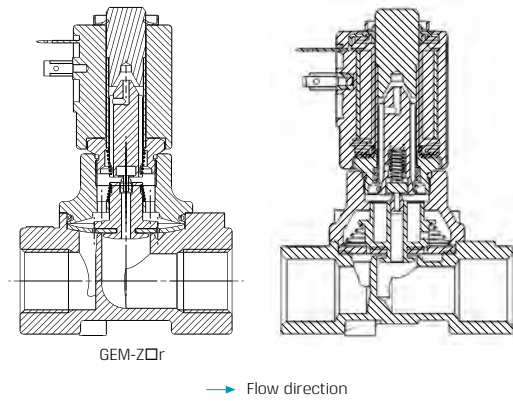
(2) For specifying Latch type coil, please refer to GEM-A3P valve - How to Order table

* 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

ELECTRIC/HYDRAULIC VALVES | GEM & G75

GEM-Z | Zero differential pressure 1/4" - 3/4" 2 Way NC, NO



Technical Data

Function	2 Way NC, NO
Ports size	1/4", 3/8", 1/2", 3/4" BSP & NPT
Pressure range	See table * For plastic body, maximum working pressure is 4 bar
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: Brass, Stainless Steel AISI 316, Nylon Solenoid Operator: Stainless Steel AISI 300 & 400 series 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 * Option : IP68 (please refer to GEM-BP Coil)

- When switching from an AC to a DC coil, the solenoid operator must be changed as well.
- Can be used in vacuum application from -1 bar to maximum pressure - see tables.

Pressure (bar) & Flow table NC (GEM-Z)

Size	Orifice (mm)	Pressure (bar)		Kv (l/min)
		AC	DC	
1/4"	8	0 to 14	0 to 7	12
3/8"	12	0 to 14	0 to 8	17
1/2"	12	0 to 14	0 to 8	18

Pressure (bar) & Flow table NC (GEM-Z-□□r)

Size	Orifice (mm)	Pressure (bar)		Kv (l/min)
		AC	DC	
1/2"	16	0 to 10	0 to 6	60
3/4"	16	0 to 10	0 to 6	80

Pressure (bar) & Flow table NO (GEM-Z)

Size	Orifice (mm)	Pressure (bar)		Kv (l/min)
		AC	DC	
1/4"	8	0 to 8	0 to 8	12
3/8", 1/2"	12	0 to 8	0 to 8	20

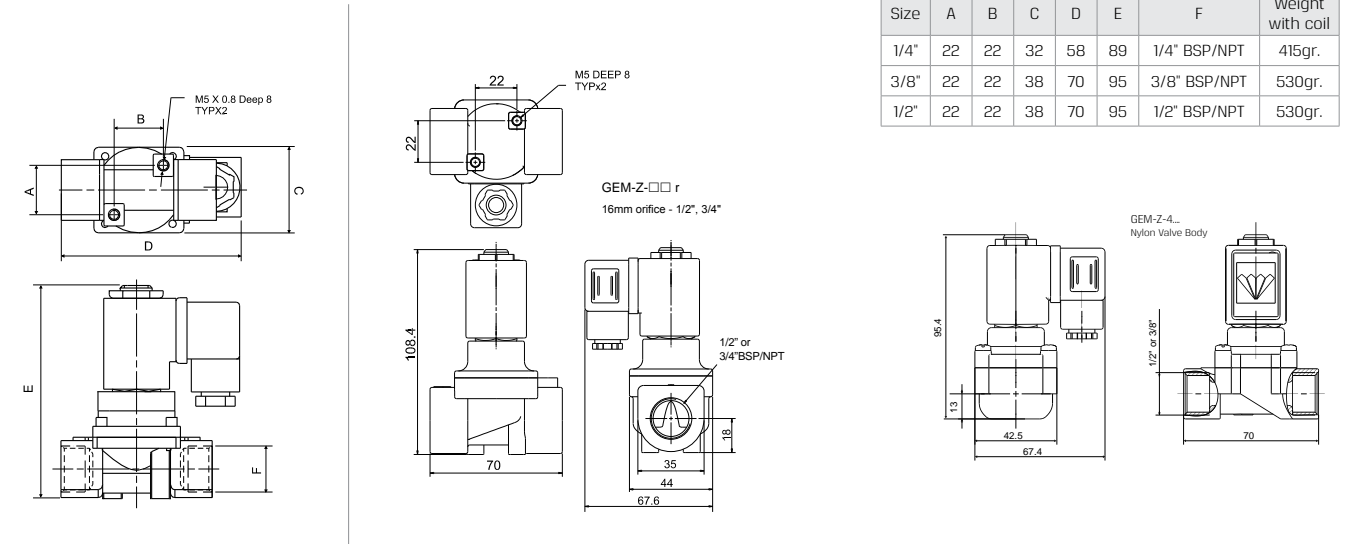
Voltage & Power Consumption

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

GEM-Z | Zero differential pressure 1/4" - 3/4" 2 Way NC, NO

Dimensions



How to Order

GEM-Z	-	BODY	PORT	FUNCTION	SEALS	* When ordering without coil, please define what current and pressure rating is needed (DC, AC)			
						VOLTAGE	POWER	CONNECTOR	
Brass	2	1/4" BSP	20	2W NC 1	NBR N	W/out coil 0	No coil 0	without	0
Stainless Steel (1)	3	1/4" NPT	21	2W NO (3) 2a	FPM (Viton®) V	6 1	AC8W 50Hz	1 with	1
Plastic	4	3/8" BSP	30		EPDM E	12 2	AC8W 60Hz	2 with LED	2
		3/8" NPT	31			24 3	DC10W	3 with bi-color LED	3
		1/2" BSP	40			48 4		4 flying leads coil	4
		1/2" NPT	41			110 5		5 with 1/2" Hub	5
		1/2" BSP	40r			120 6		6 surge protection with LED	6
		1/2" NPT	41r			220 7A		7 connector with moulded cable	7
		3/4" BSP	50r			230 7		8 other	9
		3/4" NPT (2)	51r			240 8			
						Latch/other (4) 9			

Example : GEM-Z-2401N-221
GEM-SOL zero differential, brass, 1/2" BSP, 2W NC, NBR, 12V AC8W 60Hz with connector



- (1) Not available for GEM-Z-□□r
- (2) 16mm orifice
- (3) NO function without M/O, not available for GEM-Z-□□r
- (4) For specifying Latch type coil, please refer to GEM-A3P valve - How to Order table

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

ELECTRIC/HYDRAULIC VALVES | GEM & G75

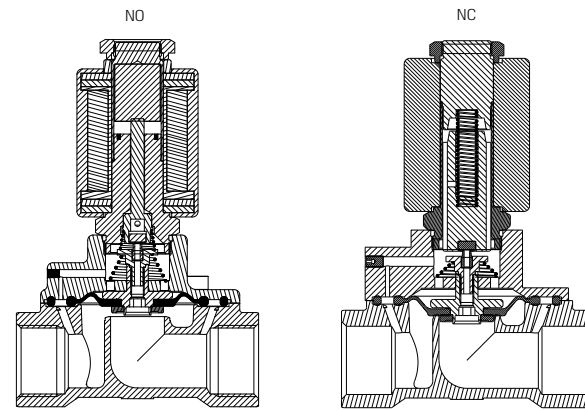
GEM-Z | Zero differential pressure 3/4", 1" 2 Way NC, NO



Brass | 3/4" | NC



Stainless Steel | 1" | NC



Flow direction →

Technical Data

Function	2 Way NC, NO
Ports size	3/4", 1" BSP & NPT
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: Brass, Stainless Steel AISI 316 Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: NBR
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 * Option : IP68 (please refer to GEM-BP Coil)

- When switching from an AC to a DC coil, the solenoid operator must be changed as well.
- Can be used in vacuum application from -1 bar to maximum pressure - see tables.

Pressure (bar) & Flow table NC

Size	Orifice (mm)	Pressure (bar)		Kv(l/min)
		AC	DC	
3/4"	20	0 to 14	0 to 10	125
1"	25	0 to 14	0 to 10	180

Pressure (bar) & Flow table NO

Size	Orifice (mm)	Pressure (bar) AC/DC		Kv(l/min)
		AC	DC	
3/4"	20	0 to 10		125
1"	25	0 to 8		180

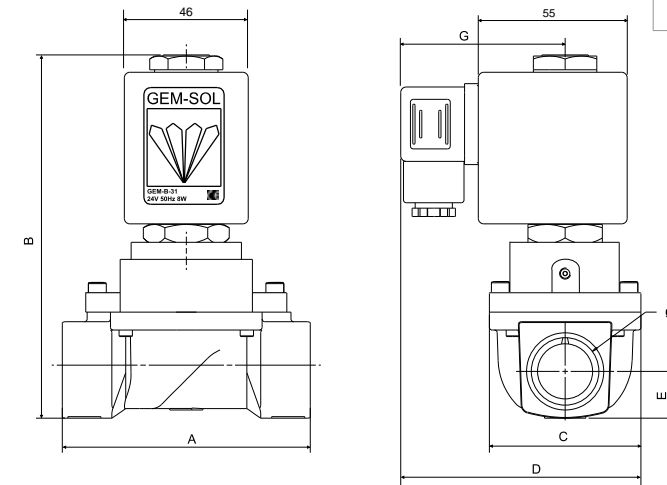
Voltage & Power Consumption

V	AC (W)		DC (W)
	50 Hz	60 Hz	
12	38	38	38
24	•	•	•
120	•	•	•
230	•	•	•

- Available options

GEM-Z | Zero differential pressure 3/4", 1" 2 Way NC, NO

Dimensions



Size	A	B	C	D	E	F	G
3/4"	90	131.8	55	87.2	17	3/4" BSP/ NPT	49
1"	100	141.9	65	92.2	21	1" BSP/ NPT	59.7

How to Order

GEM-Z	BODY	PORT	FUNCTION	SEALS	* When ordering without coil, please define what current and pressure rating is needed (DC, AC)									
					VOLTAGE	POWER	CONNECTOR							
	Brass	2	3/4" BSP	50	2W NC	1	NBR	N	W/out coil	0	No coil	0	without	0
	Stainless Steel	3	3/4" NPT	51	2W NOa	2			12	2	AC38W 50Hz	E	with	1
			1" BSP	60					24	3	AC38W 60Hz	F	with LED	2
			1" NPT	61					120	6	DC38W	J	with bi- color LED	3
									230	7			with 1/2" Hub surge protection with LED	5
													connector with moulded cable	6
													other	7
														9

Example : GEM-Z-2601N-2J1
GEM-SOL zero differential, brass, 1" BSP, 2W NC, NBR, 12V DC 38W with connector

GEM-Z	-	2	60	1	N	-	2	J	1
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* To order valves manufactured according to your specific requirements, please contact our technical sales department