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



* Available on selected models only





Brass | 1/2" | NO

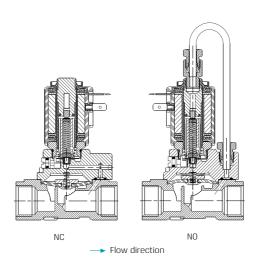


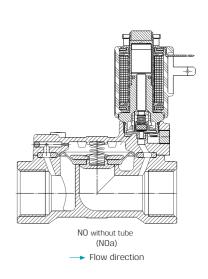


Stainless Steel | 3/4" | NC

Stainless Steel | 1" | NC

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





Technical Data

Brass | 1/4" | NC

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)

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

Voltage & Power Consumption

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

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

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

Size	Orifice (mm)	Pressure (bar)	Kv (I/min)
1/2"	16	0.5 to 20	60
3/4"	16	0.5 10 20	80

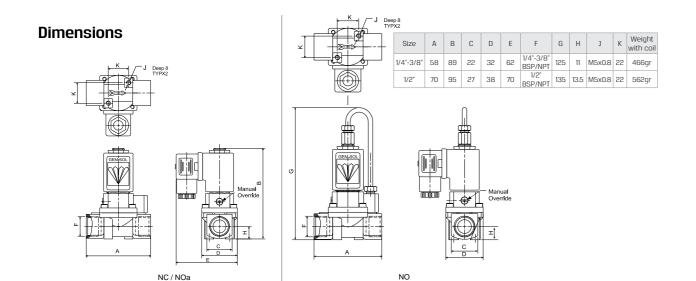
Pressure (bar) & Flow table NO/NC GEM-S-□-50....60

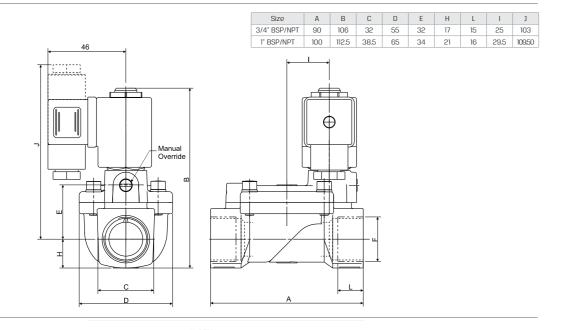
Port Connection	Orifice (mm)	Pressu AC	re (bar) DC	Kv (I/min)
3/4"	20	0.3 to 15	0.3 to 15	130
1"	25	0.5 to 15	0.5 to 15	200

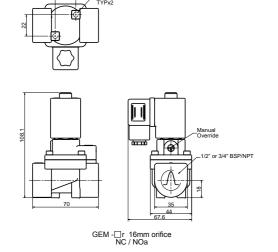
 \bullet Slow closing system to prevent water hammer effect

Available options

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







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

How to Order

GEM-S	-	BODY		PORT		FUNCTION	I	SEALS		MANUA OVERRID		-	VOLTAG	GE	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
				3/8" BSP	30	2W NO ⁽²⁾ w/out tube	2a	EPDM	Ε	Knob	3		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			flying leads coil	4
				1/2" NPT	41								110	5			with 1/2" Hub	5
				3/4" BSP	50								120	6			surge protec- tion with LED	6
				3/4" NPT	51								220	7A			connector with moulded cable	7
				1" BSP	60								230	7			other	9
				1" NPT	61								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

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	1	SEALS	6	MANU. OVERRI	_	VOLTAG	Е	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
			3/4" BSP	50r	2W NO (1) w/out tube	2a	EPDM	E	Knob	3	12	2	AC8W 60Hz	2	with LED	2
			3/4" NPT	51r							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 protec- tion with LED	6
cample : GEI EM-SOL pilot			•		size) NC, FPM (Vito	on®) seals,				220	7A			connector with moulded cable	7
ot manual o	override, 24	/ A0	C8W 60Hz	with	connector						230	7			other	9
EM-S - 2	40r	1	V	2	- 3 2		1				240	8				
											Latch/	9				

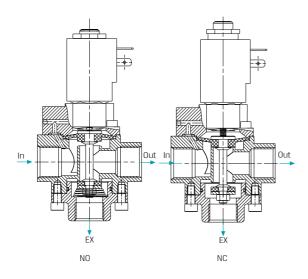
- (1) Without manual override.
- (2) For specifying Latch type coil, please refer to GEM-A3P valve How to Order table
- * Note: When ordering without coil, please define what current and pressure rating is needed (DC, AC or ADC), otherwise an ADC valve will be supplied



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

GEM-S | 1/4" - 1/2" 3 Way NC, NO





Technical Data

Ports size 1/4", 3/8", 1/2" BSP & NPT	
Pressure range See table	
Kv (I/min) See table	
Temperature range Fluid: -10°C to 80°C (no freezi Ambient: -10°C to 50°C	ing)
Manual override: NC: Push in lock hydraulic by NO: Brass screw or finger kn Main Valve: Brass Solenoid Operator: Stainless Steel AISI 300 & 400 Seals: NBR, FPM (Viton®), EPDM	iob
Media Air, water, light oil	
Coil voltage • Voltage and power consum; • All Baccara coil voltages are ±	
Standard protection class IP65 with connector * Option : IP68 (please refer to	o GEM-BP Coil)

Pressure (bar) & Flow table

Size	Orifice (mm)	Pressure (bar)	Kv(l/min)
1/4"	8	0.0 += 10	18
3/8", 1/2"	12	0.8 to 12	50

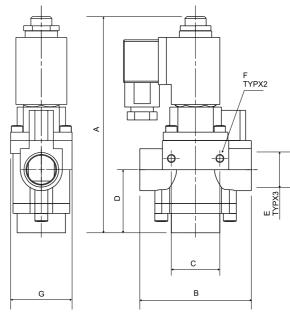
Voltage & Power Consumption

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

Available options

GEM-S | 1/4" - 1/2" 3 Way NC, NO

Dimensions

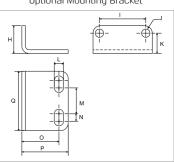


Size	А	В	С	D	Е	F	G	Weight with coil
1/4"	124.5	58	25	32.5	1/4"	M4x0.7 Deep 6	32	540gr.
3/8" 1/2"	134	69	30	32.5	1/2"	M5x0.8 Deep 7	38	758gr.

Optional Mounting Bracket

			_							
Size	Н	-1	J	K	L	M	N	0	Р	Q
1/4"	15	25	Ø4.5	11	5	14	4	20	25	32
3/8"	20	30	Ø6	13	6	22	4	25	33	40

Optional Mounting Bracket



How to Order

GEM-S	-	BODY	′	PORT		FUNCTI	ON	SEALS		MANUAL OVERRIDE		BRACKE	т -	VOLTAG	GE	POWER	₹
		Brass 2 1/4" BSP 20 3W NC 3 NBR N		None	0	without	0	W/out coil	0	No coil	0						
				1/4" NPT	21	3W NO	4	FPM (Viton®)	V	Slot (1)	2	with	1	6	1	AC8W 50Hz	1
				3/8" BSP	30			EPDM	Ε	Push lock (2)	5			12	2	AC8W 60Hz	2
				3/8" NPT	31									24	3	DC10W	3
				1/2" BSP	40									48	4		
				1/2" NPT	41									110	5		
														120	6		
														220	7A		
														230	7		
														040	0		

T	-	VOLTAG	Ε	POWER		CONNECTOR	
0		W/out coil	0	No coil	0	without	0
1		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 protec- tion with LED	6
		220	7A			connector with moulded cable	7
		230	7			other	9
		240	8				
		Latch/ other (3)	9				

Example: GEM-S-2204V21-311

GEM-SOL pilot operated, brass, 1/4"BSP, NO, FPM (Viton®), slot manual override with bracket, 24V AC 8W 50Hz with connector



- (1) For NO only
- (2) For NC only
- (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



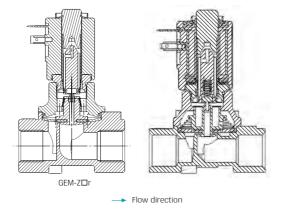
^{*} To order valves manufactured according to your specific requirements, please contact our technical sales department

Stainless Steel | 1/2" | NC

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



Plastic | 1/2" | NC



Technical Data

Brass | 1/2" | NC

Function	2 Way NC, NO
Ports size	1/4", 3/8", 1/2", 3/4" BSP & NPT
	See table
Pressure range	* For plastic body, maximum working
	pressure is 4 bar
Kv (I/min)	See table
Tomporatura ranga	Fluid: -10°C to 80°C (no freezing)
Temperature range	Ambient: -10°C to 50°C
	Main Valve:
	Brass, Stainless Steel AISI 316, Nylon
Materials in contact	Solenoid Operator:
with media	Stainless Steel AISI 300 & 400 series
	Seals:
	NBR, FPM (Viton®), EPDM
Media	Air, water, oil
Coil voltage	 Voltage and power consumption - see table
Coil voltage	• All Baccara coil voltages are ± 10% of nominal
Standard protection class	IP65 with connector
Stariuaru protection class	* 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)	Pressu	Kv (l/min)	
Size	Office (fillif)	AC	DC	KV (I/IIIIII)
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)	Pressu	Kv (l/min)			
SIZE	Office (fillif)	AC	DC	KV (I/IIIIII)		
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	Pressu	re (bar)	1/1/ /1/min	
SIZE	(mm)	AC	DC	Kv (l/min)	
1/4"	8	0 to 8	0 to 8	12	
3/8",1/2"	12	0 to 8	0 to 8	20	

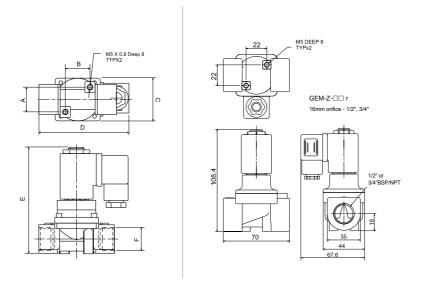
Voltage & Power Consumption

	5									
			DC (W)							
		50 Hz			60 Hz		DG (VV)			
V	8	5.5	2.5	8	5.5	2.5	10	5.5	3.5	
6							•			
12	•			•			•			
24	•			•			•			
48	•			•			•			
110	•			•			•			
120	•			•						
220	•			•			•			
230	•									
240	•			•			•			

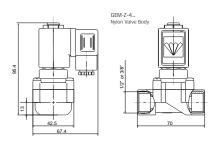
Available options

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

Dimensions



Size	А	В	С	D	Е	F	Weight with coil
1/4"	22	22	32	58	89	1/4" BSP/NPT	415gr.
3/8"	22	22	38	70	95	3/8" BSP/NPT	530gr.
1/2"	22	22	38	70	95	1/2" BSP/NPT	530gr.



How to Order

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

							·	urrent and	pic	Suic rating	, 13	ileeded (Do, Ao)			
GEM-Z -	BODY		PORT	PORT		N	SEALS		-	VOLTAGI	E	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	Е		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			flying leads coil	4
			1/2"NPT	41						110	5			with 1/2" Hub	5
			1/2"BSP	40r						120	6			surge protec- tion with LED	6
			1/2"NPT	/2"NPT 41r			220	7A			connector with moulded cable	7			
			3/4"BSP	50r			230	7			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

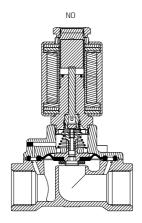
GEM-Z | Zero differential pressure 3/4", 1" 2 Way NC, NO

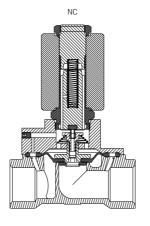


Brass | 3/4" | NC



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 (I/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)	Pressu	Kv(l/min)	
SIZE	Office (ffiff)	AC	DC	KV(I/111111)
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)	
3/4"	20	0 to 10	125	
1"	25	0 to 8	180	

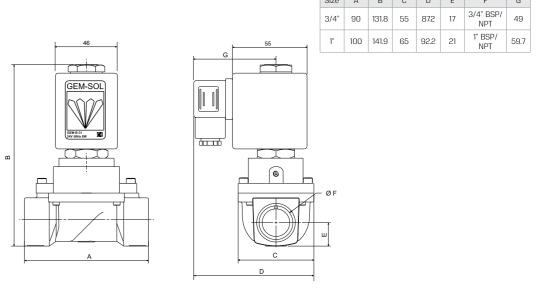
Voltage & Power Consumption

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

Available options

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

Dimensions



How to Order

GEM-Z -	BODY		PORT		FUNCTION	١	SEALS		
	Brass	2	3/4" BSP	50	2W NC	1	NBR	N	
	Stainless Steel	3	3/4" NPT	51	2W NOa	2			
			1" BSP	60					
			1" NPT	61					

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

current and pressure rating is needed (DC, AC)							
VOLTAGE		POWER		CONNECTOR			
W/out coil	0	No coil	0	without	0		
12	2	AC38W 50Hz	Ε	with	1		
24	3	AC38W 60Hz	F	with LED	2		
120	6	DC38W	J	with bi- color LED	3		
230	7			with 1/2" Hub	5		
				surge protection with LED	6		
				connector with moulded cable	7		
				other	9		

Example: GEM-Z-2601N-2J1

GEM-SOL zero differential, brass, 1"BSP, 2W NC,

NBR, 12V DC 38W with connector





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