

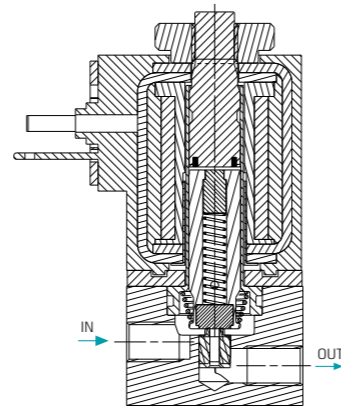
SOLENOID VALVES | General Purpose

Direct Operated | 2W

G65-A | 2 Way NC



Brass | 2W NC



Technical Data

Function	2 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, Stainless Steel AISI 316, Brass 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 NC table

Coil Current/Power	Orifice (mm)				
	0.8	1.0	1.2	1.6	2.0
AC - 3.6VA	30	25	20	12	8
DC - 3W	30	25	20	9	5
Flow factor Kv(l/min)	0.4	0.5	0.65	1.2	1.6

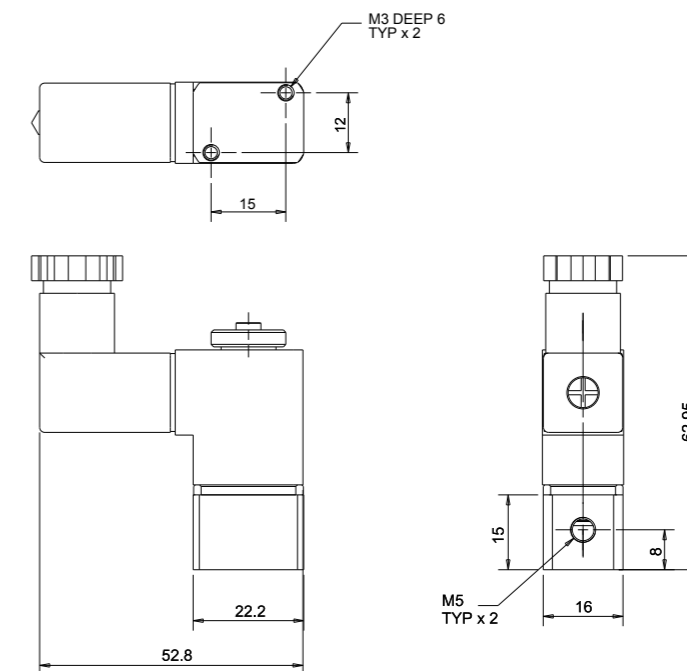
Voltage & Power Consumption

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

• Available options

Direct Operated | 2W | G65 | NC

Dimensions



How to Order

G65-A	BODY ⁽¹⁾	PORT	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	VOLTAGE	POWER	CONNECTOR								
Aluminium	1	M5	00	2W NC	1	0.8	1	NBR	N	None	0	W/out coil	0	No coil	0	without	0
Brass	2	#10UNF	01			1.0	2	FPM (Viton®)	V			12	2	AC 3.6VA ⁽²⁾ 50Hz	1	with	1
Stainless Steel	3					1.2	3	EPDM	E			24	3	DC 3W	3	other	9
						1.6	4					110	5				
						2.0	5					230	7				

Example : G65-A-10012V0-310

G65 direct operated, aluminium, M5, 2W NC, 1mm orifice, FPM (Viton®), without manual override, 24V, AC 3.6VA 50Hz without connector.

G65-A - 1 00 1 2 V 0 - 3 1 0

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

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

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

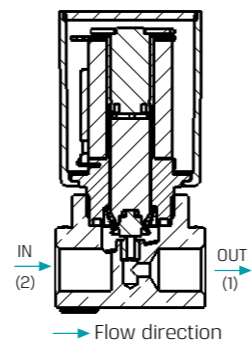
SOLENOID VALVES | General Purpose

Direct Operated | 2W

G75-A | 1/8", 1/4" 2 Way NC



Brass | 1/4"



Technical Data

Function	2 Way NC
Ports size	1/8" and 1/4" BSP & NPT
Orifice size	See table
Pressure range	See table
Temperature range	Fluid : 5°C to 50°C (no freezing) Ambient : -10°C to 50°C
Materials in contact with media	Manual override: Reinforced Nylon Main Valve: Brass Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: EPDM
Coil voltage	• Voltage and power consumption - see table • All Baccara coil voltages are ± 10% of nominal
Standard protection class	IP66

• Available with brass adaptor upon request.

Max. Pressure (bar) table

Function	Orifice (mm)	AC	DC	DC Latch
2W NC	up to 2.0	12	12	12

Voltage & Power Consumption

V	AC (W) 50 Hz	DC (W)
	2	4.5
12	•	•
24	•	•
110	•	

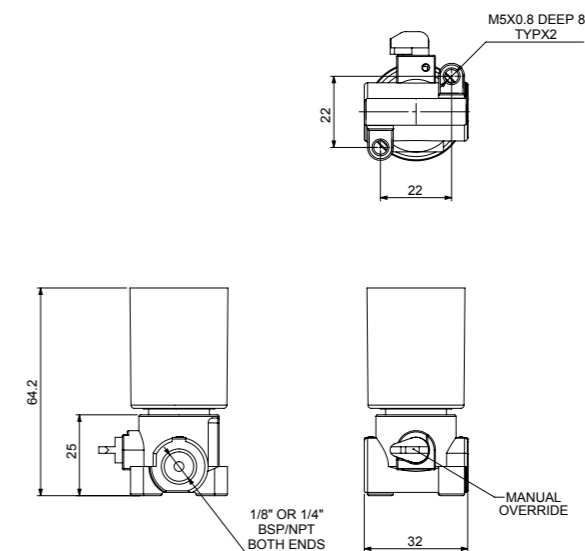
• Available options

Voltage & Current table

Solenoid	Voltage	Inrush [A]	Holding [A]
2W 50 Hz	V +10% n-20%	0.3	0.19
2W 60 Hz		0.2	0.14
3W 50/60 Hz		0.125	0.125
DC		4.5W	

Direct Operated | 2W | G75 | 1/8", 1/4" NC

Dimensions



How to Order

G75-A	-	TYPE ⁽¹⁾	PORT	FUNCTION	MANUAL OVERRIDE	ORIFICE	-	VOLTAGE ⁽⁴⁾	WIRES				
Brass	3	1/8" BSP	10	2W NC	1	None	0	1.0	1	24V AC	1	two	Null
		1/8" NPT	11			Plastic ⁽²⁾	1	1.2	2	12V AC	3	three ⁽³⁾	a
		1/4" BSP	20					1.6	3	12V DC	4		
		1/4" NPT	21					2.0	4	24V DC	5		
										23Ω	6		
										110V AC	7		
										4Ω	B		
										9Ω	C		
										12Ω	D		

Coil resistance vs input voltage range

Resistance [Ω]	Suitable input voltage range [V]
4	6 - 9
9	12 - 14
12	14 - 16
23	18 - 21

Example : G75-A-310102-1

G75 Brass, 1/8" BSP, 2W NC, no manual override, 1.2 orifice, 24V AC coil, two wires

G75-A - 3 10 1 0 2 - 1

- (1) G75-A valves are also available in plastic
- (2) Recommended for AC and continuous DC only
- (3) For Latch only
- (4) For Latch : Refer to coil resistance vs input voltage table

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

SOLENOID VALVES | General Purpose

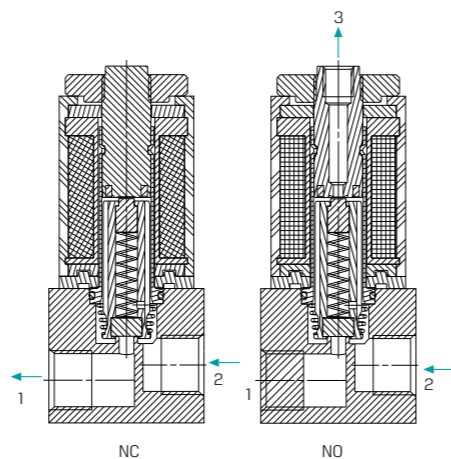
Direct Operated | 2W

G80-A | 2 Way NC, NO



Brass | #10UNF

Aluminium | plastic manual override



Technical Data

Function	2 Way NC, NO
Ports size	1/8" BSP, NPT, #10UNF, M5
Orifice size	See table
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
Materials in contact with media	Manual override * : Plastic * Maximum pressure : 16 bar 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	<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 NC table

Coil Current/Power	Orifice (mm)					
	1.0	1.2	1.6	2.0	2.4	3.0
AC - 75W	40	35	35	12	10	8
AC - 4W	40	30	15	8	6	5
DC - 6.5W	40	35	20	12	10	7
DC - 3W	40	30	15	5	4	2.5
Flow factor Kv(l/min)	0.5	0.65	1.2	1.6	2	4

Max. Pressure (bar) 2W NO table

Coil Current/Power	Orifice (mm)	
	1.2	1.6
AC - 4W	15	10
DC - 3W	15	10
Flow factor Kv(l/min)	0.4	0.7

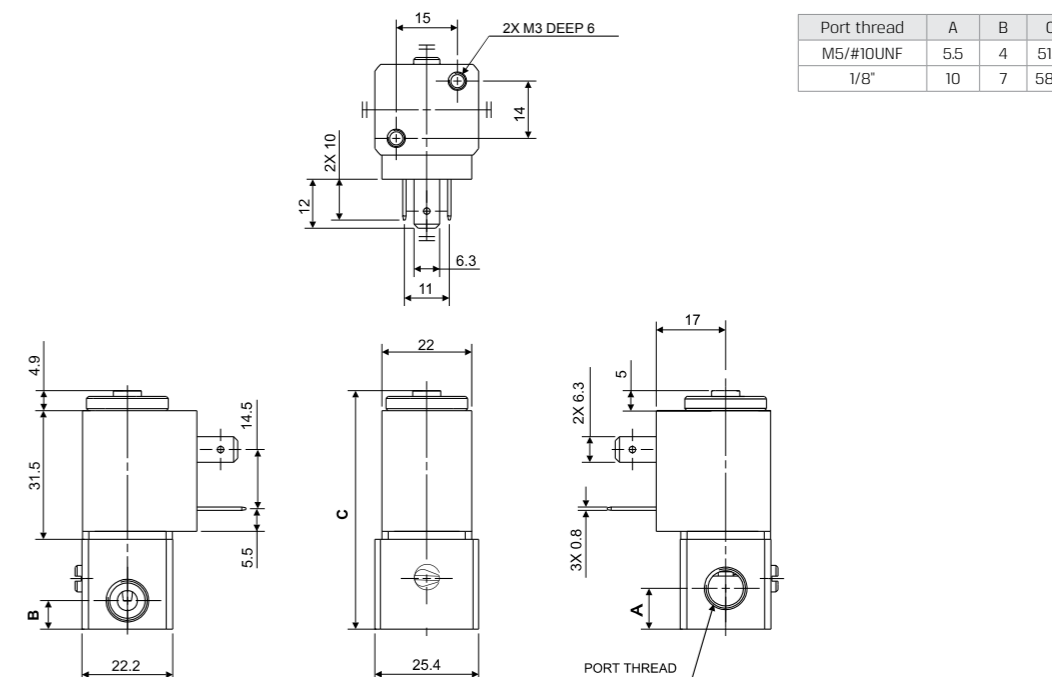
Voltage & Power Consumption

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

• Available options

Direct Operated | 2W | G80 | NC, NO

Dimensions



Port thread	A	B	C
M5/#10UNF	5.5	4	51.5
1/8"	10	7	58.5

How to Order

G80-A	BODY ⁽¹⁾	PORT	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE	* When ordering without coil, please define what current and pressure rating is needed (DC, AC)								
							VOLTAGE	POWER	CONNECTOR						
Aluminium	1	M5	00	2W NC 1	1.0 1	NBR N	None	0	W/out coil	0	No coil	0	without	0	
Brass	2	#10UNF	01	2W NO 2	1.2 2	FPM (Viton®)	V	Plastic ⁽⁴⁾	1	6	1	AC75W 50Hz	1	with	1
Stainless Steel	3	1/8" BSP	10		1.6 3	EPDM	E			12	2	AC6W 60Hz	2	with bi-color LED	2
		1/8" NPT	11		2.0 ⁽²⁾ 4	FFKM ⁽³⁾ (Kalrez®)	K			24	3	DC6.5W	3	surge protection with LED	3
					2.4 ⁽²⁾ 5					110	5	AC4W 50Hz	4	flying leads coil	4
					3.0 ⁽²⁾ 6					230	7	AC3W 60Hz	5	other	9
										other	9	DC3W	7		

Example : G80-A-10011V0-320

G80 direct operated, aluminium, M5 port, 2W NC, 1.0mm orifice, FPM (Viton®), without manual override, 24V, AC 6W 60Hz, without connector.

G80-A - 1 00 1 1 V 0 - 3 2 0

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

(2) NC only

(3) FFKM (Kalrez®) O-ring is available only upon request. When ordering FFKM (Kalrez®) seals, please consult with our technical sales department about O-ring compound.

(4) Maximum pressure : 16 bar

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

SOLENOID VALVES | General Purpose

Direct Operated | 2W

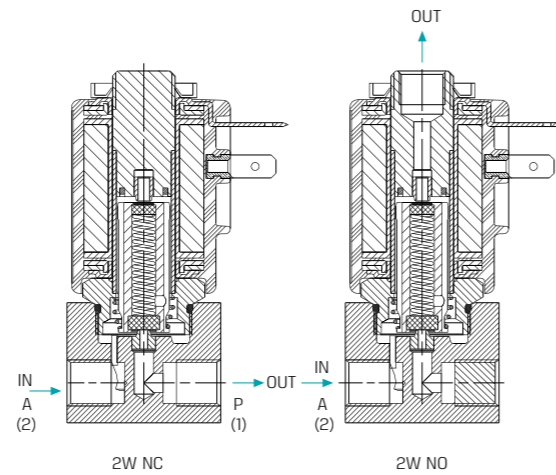
GEM-A | 1/8", 1/4" 2 Way NC, NO



Stainless Steel



Brass



Technical Data

Function	2 Way NC, NO
Ports size	1/8" and 1/4" BSP & NPT
Orifice size	See table
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
Materials in contact with media	Manual override: Plastic, Brass screw or Brass finger knob, Stainless Steel for Stainless Steel valves (1) Plastic manual override : Maximum pressure : 16 bar (2) Manual override is unavailable in 2W NO through base applications Main Valve: Brass or Stainless Steel AISI 316 Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: NBR, FPM (Viton®), EPDM, FFKM (Kalrez®), 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

Max. Pressure (bar) 2W NC table

Coil Current/Power	Orifice (mm)						
	0.8	1.2	1.6	2.0	2.4	3.0	4.0
ADC *	60	50	35	20	15	10	5
AC8W/DC10W	80	80	60	38	30	18	10
AC5.5W	80	60	40	28	20	15	6
AC2.5W	60	50	35	20	15	9	5
DC5.5W	60	30	18	12	9	6	3
DC3.5W	40	20	12	8	6	4	2
Flow factor Kv(l/min)	0.5	1.1	1.7	2.5	3.5	4.5	5

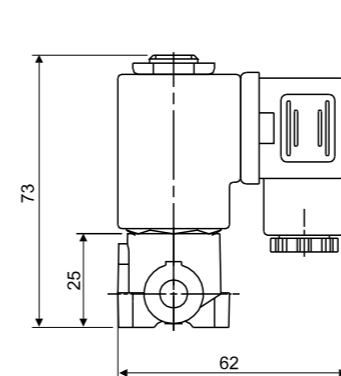
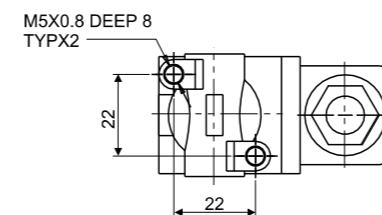
Max. Pressure (bar) 2W NO table

Coil Current/Power	Orifice (mm)					
	0.8	1.2	1.6	2.0	2.4	3.0
ADC *	25	25	25	20	15	10
Flow factor Kv(l/min)	0.5	1.1	1.4	2.5	3.0	3.5

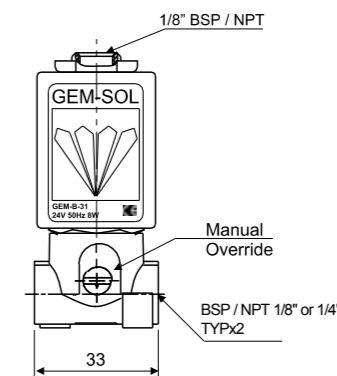
* ADC valves are only suitable for use with AC8W or DC10W coils

Direct Operated | 2W | GEM-SOL | 1/8", 1/4" NC, NO

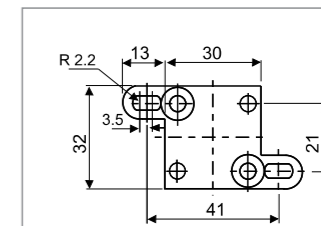
Dimensions



Brass / Stainless Steel



Optional Mounting Bracket



SOLENOID VALVES | General Purpose

Direct Operated | 2W

GEM-A | 1/8", 1/4" 2 Way NC, NO

Three Product Ordering Categories available

- STANDARD** | Reduced lead times, No MOQ
- SEMI-STANDARD** | Normal lead times, No MOQ
- SPECIAL** | Extended lead times, Non-stock items, MOQ may be applicable

Ordering Chart

STANDARD ITEMS | Reduced lead times, No MOQ
ADC operator only

MODEL	PORT	FUNCTION	ORIFICE (mm)	SEAL MATERIAL	MANUAL OVERRIDE	CONNECTOR	MOPD (bar)	PART NO. PER VOLTAGE & POWER			
								24VDC 10W	24VAC 8W 50Hz	110VAC 8W 60Hz	230VAC 8W 50Hz
GEM-A BRASS	1/8" BSP	2W NC	1.6	NBR	Slot	with	35	1253820062 GEM-A-21013N2-331 ADC	1253820063 GEM-A-21013N2-311 ADC	1253820064 GEM-A-21013N2-521 ADC	1253820065 GEM-A-21013N2-711 ADC
							20	1253820218 GEM-A-21014N2-331 ADC	1253820203 GEM-A-21014N2-311 ADC	1253820219 GEM-A-21014N2-521 ADC	1253820220 GEM-A-21014N2-711 ADC
							15	1253830041 GEM-A-21015N2-331 ADC	1253830048 GEM-A-21015N2-311 ADC	1253830049 GEM-A-21015N2-521 ADC	1253830050 GEM-A-21015N2-711 ADC
							35	1253820066 GEM-A-21113N2-331 ADC	1253820067 GEM-A-21113N2-311 ADC	1253820068 GEM-A-21113N2-521 ADC	1253820069 GEM-A-21113N2-711 ADC
							20	1253820221 GEM-A-21114N2-331 ADC	1253820222 GEM-A-21114N2-311 ADC	1253820223 GEM-A-21114N2-521 ADC	1253820224 GEM-A-21114N2-711 ADC
							15	1253830051 GEM-A-21115N2-331 ADC	1253830052 GEM-A-21115N2-311 ADC	1253830053 GEM-A-21115N2-521 ADC	1253830054 GEM-A-21115N2-711 ADC
	1/4" BSP	2W NC	2.0	NBR	Slot	with	35	1255820108 GEM-A-22013N2-331 ADC	1255820031 GEM-A-22013N2-311 ADC	1255820109 GEM-A-22013N2-521 ADC	1255820110 GEM-A-22013N2-711 ADC
							20	1255820301 GEM-A-22014N2-331 ADC	1255820302 GEM-A-22014N2-311 ADC	1255820303 GEM-A-22014N2-521 ADC	1255820304 GEM-A-22014N2-711 ADC
							15	1255830201 GEM-A-22015N2-331 ADC	1255830202 GEM-A-22015N2-311 ADC	1255830203 GEM-A-22015N2-521 ADC	1255830580 GEM-A-22015N2-711 ADC
							35	1255820111 GEM-A-22113N2-331 ADC	1255820112 GEM-A-22113N2-311 ADC	1255820113 GEM-A-22113N2-521 ADC	1255820114 GEM-A-22113N2-711 ADC
							20	1255820305 GEM-A-22114N2-331 ADC	1255820306 GEM-A-22114N2-311 ADC	1255820307 GEM-A-22114N2-521 ADC	1255820308 GEM-A-22114N2-711 ADC
							15	1255830205 GEM-A-22115N2-331 ADC	1255830206 GEM-A-22115N2-311 ADC	1255830207 GEM-A-22115N2-521 ADC	1255830208 GEM-A-22115N2-711 ADC

MODEL	PORT	FUNCTION	ORIFICE (mm)	SEAL MATERIAL	MANUAL OVERRIDE	CONNECTOR	MOPD (bar)	PART NO. PER VOLTAGE & POWER			
								24VDC 10W	24VAC 8W 50Hz	110VAC 8W 60Hz	230VAC 8W 50Hz
GEM-A SST	1/4" BSP	2W NC	2.4	FFKM (Viton®)	Slot	with	35	1255820311 GEM-A-32013V2-331 ADC	1255820312 GEM-A-32013V2-311 ADC	1255820313 GEM-A-32013V2-521 ADC	1255820314 GEM-A-32013V2-711 ADC
							20	1255820315 GEM-A-32014V2-331 ADC	1255820316 GEM-A-32014V2-311 ADC	1255820317 GEM-A-32014V2-521 ADC	1255820318 GEM-A-32014V2-711 ADC
							15	1255830211 GEM-A-32015V2-331 ADC	1255830531 GEM-A-32015V2-311 ADC	1255830213 GEM-A-32015V2-521 ADC	1255830214 GEM-A-32015V2-711 ADC
	1/4" NPT	2W NC	2.0	FFKM (Viton®)	Slot	with	35	1255820321 GEM-A-32113V2-331 ADC	1255820322 GEM-A-32113V2-311 ADC	1255820323 GEM-A-32113V2-521 ADC	1255820324 GEM-A-32113V2-711 ADC
							20	1255820325 GEM-A-32114V2-331 ADC	1255820326 GEM-A-32114V2-311 ADC	1255820327 GEM-A-32114V2-521 ADC	1255820328 GEM-A-32114V2-711 ADC
							15	1255830215 GEM-A-32115V2-331 ADC	1255830216 GEM-A-32115V2-311 ADC	1255830217 GEM-A-32115V2-521 ADC	1255830218 GEM-A-32115V2-711 ADC

Direct Operated | 2W | GEM-SOL | 1/8", 1/4" NC, NO

Model Selection

- STANDARD** | Reduced lead times, No MOQ. Please refer to **Standard Items Ordering Chart**
- SEMI-STANDARD** | Normal lead times, No MOQ
- SPECIAL** | Extended lead times, Non-stock items, MOQ may be applicable
For a quote, please contact our sales department

GEM-A	BODY	PORT	FUNCTION	ORIFICE	SEALS	MANUAL OVERRIDE																
Brass	2	1/8" BSP	10	2W NC	1	0.8	1	NBR	N	None	0											
												1/8" NPT	11	2W NO	2	1.2	2	FFKM(Viton®)	V	Plastic (3)	1	
																						1/4" BSP
		1/4" NPT	21	2W NO	2	2.0	4	FFKM(Kalrez®)(2)	K	Knob	3											
												2.4	5	PTFE	T							
		SST	3	1/8" BSP	10	2W NC	1	0.8	1	NBR	N	None	0									
	1/8" NPT													11	2W NO	2	1.2	2	FFKM(Viton®)	V	Plastic (3)	1
	1/4" NPT		21	2W NO	2	2.0	4	FFKM(Kalrez®)(2)	K	Knob	3											
												2.4	5	PTFE	T							
	SST		3	1/4" BSP	20	2W NO	2	1.2	2	FFKM(Viton®)	V	Plastic (3)	1									
		1/4" NPT												21	2W NO	2	2.0	4	FFKM(Kalrez®)(2)	K	Knob	3
2.4																						
1/4" NPT		21	2W NO	2	3.0	6	FFKM(Kalrez®)(2)	K	Knob	3												
											4.0	7	FFKM(Kalrez®)(2)	K	Knob	3						
																	4.0	7	FFKM(Kalrez®)(2)	K	Knob	3

* For available options, please refer to **VOLTAGE & POWER CONSUMPTION** table below

VOLTAGE	POWER	CONNECTOR
No coil	0	None
6	1	AC8W 50Hz
12	2	AC8W 60Hz
24	3	DC10W
48	4	AC5.5W50Hz
110	5	AC5.5W60Hz
120	6	AC2.5W 50/60Hz
220	7A	DC5.5W
230	7	DC3.5W
240	8	
Latch/other(4)	9	

Voltage & Power Consumption

V	AC (W)						DC (W)		
	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 :
 ▲ STANDARD
 ● SEMI-STANDARD
 ■ SPECIAL

Example : GEM-A-21015N2-311

GEM-SOL direct operated brass, 1/8"BSP, 2W NC, 2.4 orifice, NBR, slot manual override, 24V AC8W 50Hz with connector

GEM-A	-	2	10	1	5	N	2	-	3	1	1
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- Option 2a : manual override is not available
- FFKM (Kalrez®) O-ring is available only upon request. When ordering FFKM (Kalrez®) seals, please consult with our technical sales department about O-ring compound
- Maximum pressure : 16 bar
- 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.

SOLENOID VALVES | General Purpose

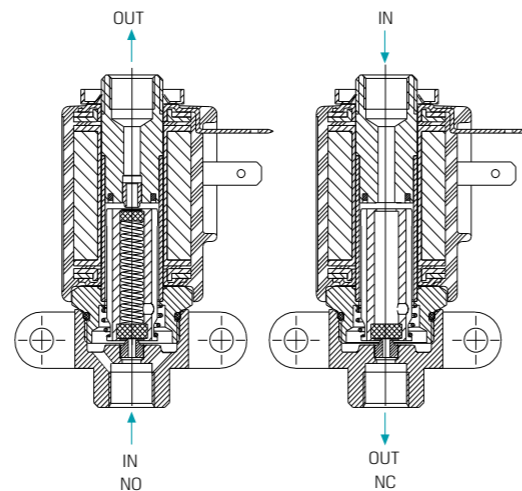
Direct Operated | 2W

GEM-I | Inline 1/8", 1/4" 2 Way NC, NO



Inline

Hex. Brass



IN NO

OUT NC

Technical Data

Function	2 Way NC, NO
Ports size	1/8", 1/4" BSP & NPT
Orifice size	See table
Pressure range	See table • Higher pressures are available
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 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)

• Latch valves are available upon request.

Max. Pressure (bar) 2W NC table

Coil Current/Power	Orifice (mm)					
	0.8	1.6	2.4	3.0	4.0	6.0
ADC *	40	30	17	10	5	1.1
AC8W, DC10W	45	37	20	12	6	1.8
AC5.5W	40	32	16	8	2	0.5
DC5.5W	35	30	12	6	2	0.5
Flow factor Kv(l/min)	0.5	1.7	3.5	4.5	5	6

Max. Pressure (bar) 2W NO table

Coil Current/Power	Orifice (mm)			
	0.8	1.6	2.4	3.0
ADC *	32	27	13	9
AC8W, DC10W	35	32	18	12
Flow factor Kv(l/min)	0.5	1.6	3.2	3.8

* ADC valves are only suitable for use with AC8W or DC10W coils.

Voltage & Power Consumption

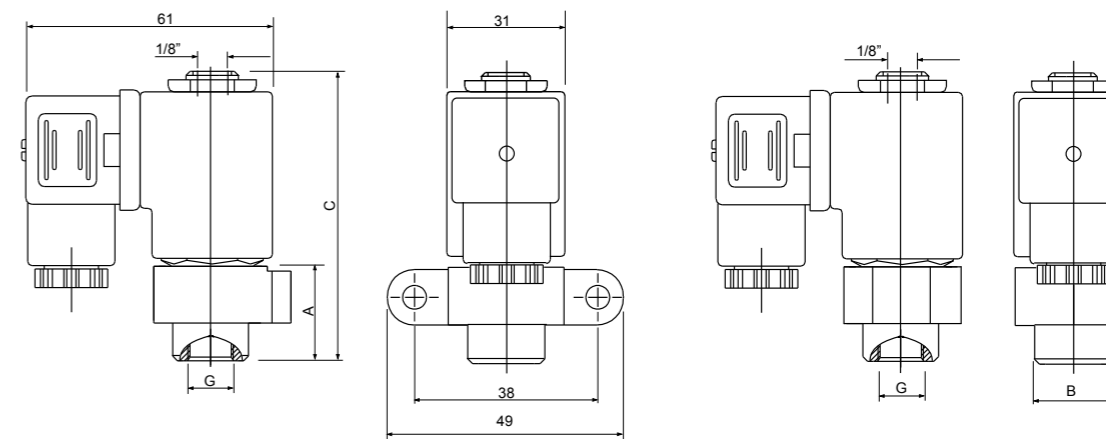
V	AC (W)						DC (W)		
	50 Hz			60 Hz			10	5.5	3.5
	8	5.5	2.5	8	5.5	2.5			
6							•	•	•
12	•			•			•	•	•
24	•	•		•	•		•	•	
48	•			•			•		
110	•			•	•		•		
120	•			•					
220	•	•		•			•		
230	•	•							
240	•			•			•		

• Available options

Direct Operated | 2W | GEM-SOL | Inline 1/8", 1/4" NC, NO

Dimensions

Size (G)	A	ØB	C
1/8"	20	16	68
1/4"	23	18	88



"INLINE" Mounting

Hexagon Body

How to Order

GEM-I	BODY	PORT	FUNCTION	ORIFICE (1)	SEALS	VOLTAGE	POWER	CONNECTOR	
Hex. Brass	4	1/8" BSP	10	2W NC	1	0.8	1	NBR N	
"Inline" mounting	5	1/8" NPT	11	2W NO	2	1.2	2	FPM (Viton®) V	
		1/4" BSP	20			1.6	3	EPDM E	
		1/4" NPT	21			2.0	4		
						2.4	5		
						3.0	6		
						4.0 (3)	7		
						6.0 (2)(3)	8		
						W/out coil	0	No coil	0
						6	1	AC8W 50Hz	1
						12	2	AC8W 60Hz	2
						24	3	DC10W	3
						48	4	AC5.5W 50Hz	4
						110	5	AC5.5W 60Hz	5
						120	6	DC5.5W	7
						220	7A		
						230	7		
						240	8		
						Latch/other (4)	9		

Example : GEM-I-41015N-311

GEM-SOL direct operated inline, hex. brass, 1/8" BSP, 2W NC, 2.4 orifice, NBR, 24V AC8W 50Hz with connector.

GEM-I - 4 10 1 5 N - 3 1 1

(1) For NO, the maximum orifice size is 3mm

(2) 6mm orifice - for DC only

(3) Hex. body

(4) 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.

SOLENOID VALVES | General Purpose

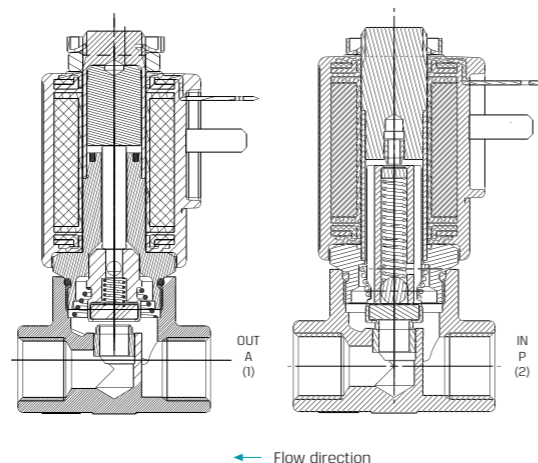
Direct Operated | 2W

GEM-A | Large orifice 1/4" 2 Way NC, NO (pressure & vacuum)



Stainless Steel

Brass



Technical Data

Function	2 Way NC, NO
Ports size	1/4" BSP & NPT
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: Brass or Stainless Steel AISI 316 Solenoid Operator: Stainless Steel AISI 300 & 400 series Seals: FPM (Viton®), EPDM, FFKM (Kalrez®), PTFE
Recommended use	Vacuum application
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)

• Latch valves are available upon request.

Max. Pressure (bar) 2W NC table

Coil Current/Power	Orifice (mm)		
	4.5	6.0	8.0
AC8W	4.5	3.8	2.5
AC5.5W	3.8	3	2
DC10W	4.5	3.8	1.5
DC5.5W	3.2	2	1
Flow factor Kv(l/min)	5	6	10

Max. Pressure (bar) 2W NO table

Coil Current/Power	Orifice (mm)	
	4.5	6.0
ADC *	4	2
AC8W, DC10W	4	2
Flow factor Kv(l/min)	5	6

* ADC valves are only suitable for use with AC8W or DC10W coils.

Voltage & Power Consumption

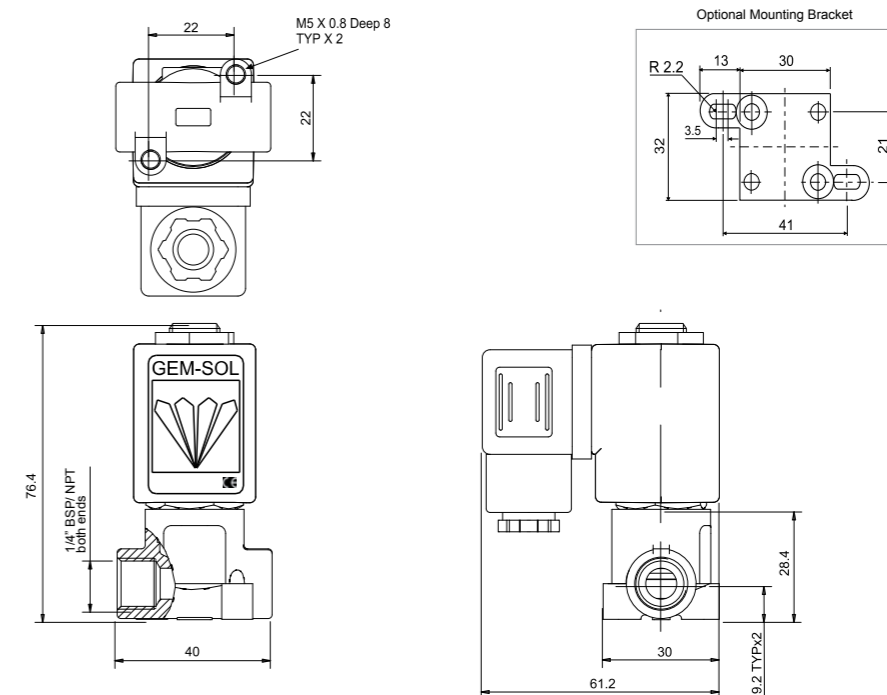
V	AC (W)						DC (W)		
	50 Hz			60 Hz			10	5.5	3.5
6							•	•	•
12	•	•		•	•		•	•	•
24	•	•	•	•	•	•	•	•	
48	•	•		•	•		•	•	
110	•	•		•	•	•	•	•	
120	•	•		•	•		•	•	
220	•	•	•	•	•		•	•	
230	•	•	•						
240	•	•		•	•		•	•	

Available options :

- NC valves
- NO valves

Direct Operated | 2W | GEM-SOL | Large orifice 1/4" NC, NO

Dimensions



How to Order

GEM-A	BODY	PORT	FUNCTION	ORIFICE	SEALS	VOLTAGE	POWER	CONNECTOR							
Brass	2	1/4" BSP	20	2W NC	1	6.0	8	FPM (Viton®)	V	W/out coil	0	No coil	0	without	0
Stainless Steel	3	1/4" NPT	21	2W NO	2	4.5	9	EPDM	E	6	1	AC8W 50Hz	1	with	1
						8.0 ⁽¹⁾	a	FFKM ⁽²⁾ (Kalrez®)	K	12	2	AC8W 60Hz	2	with LED	2
								PTFE	T	24	3	DC10W	3	with bi-color LED	3
										48	4	AC5.5W 50Hz	4	flying leads coil	4
										110	5	AC5.5W 60Hz	5	with 1/2" Hub	5
										120	6	DC5.5W	7	surge protection with LED	6
										220	7A			connector with moulded cable	7
										230	7			other	9
										240	8				
										Latch/other ⁽³⁾	9				

Example : GEM-A-2201aV-311

GEM-SOL direct operated brass, 1/4" BSP, 2W NC, 8.0 orifice, FPM (Viton®), 24V AC 8W 50Hz with connector.

GEM-A - 2 20 1 a V - 3 1 1

(1) Not available in NO valve

(2) FFKM (Kalrez®) O-ring is available only upon request. When ordering FFKM (Kalrez®) seals, please consult with our technical sales department about O-ring compound

(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.

SOLENOID VALVES | General Purpose

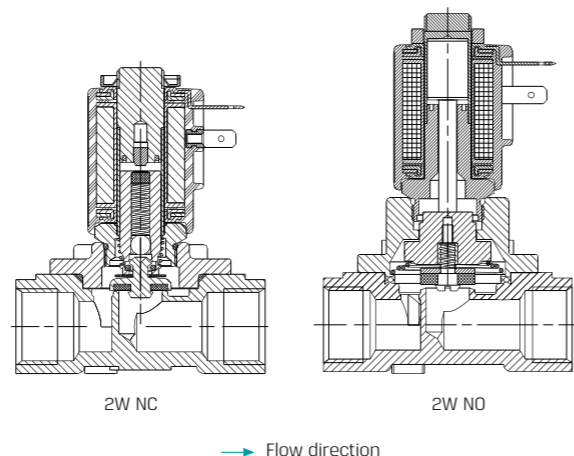
Direct Operated | 2W

GEM-L | Low pressure flows (LPF) 1/4" - 1/2" 2 Way NC, NO



Brass

Stainless Steel



→ Flow direction

Technical Data

Function	2 Way NC, NO
Ports size	1/4", 3/8", 1/2" 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, FPM (Viton®), EPDM
Media	Designed for use in LP gas systems. Also in air, water and vacuum systems : (high flow at low pressure)
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)

• Latch valves are available upon request.

Pressure (bar) & Flow table NC, NO

Size	Orifice (mm)	Pressure (bar)			Kv (l/min)
		AC	DC	NO	
1/4"	8	1.5	0.7	0.5	12
3/8"	8	1.5	0.7	0.5	16
1/2"	12	0.8	0.4	0.3	35

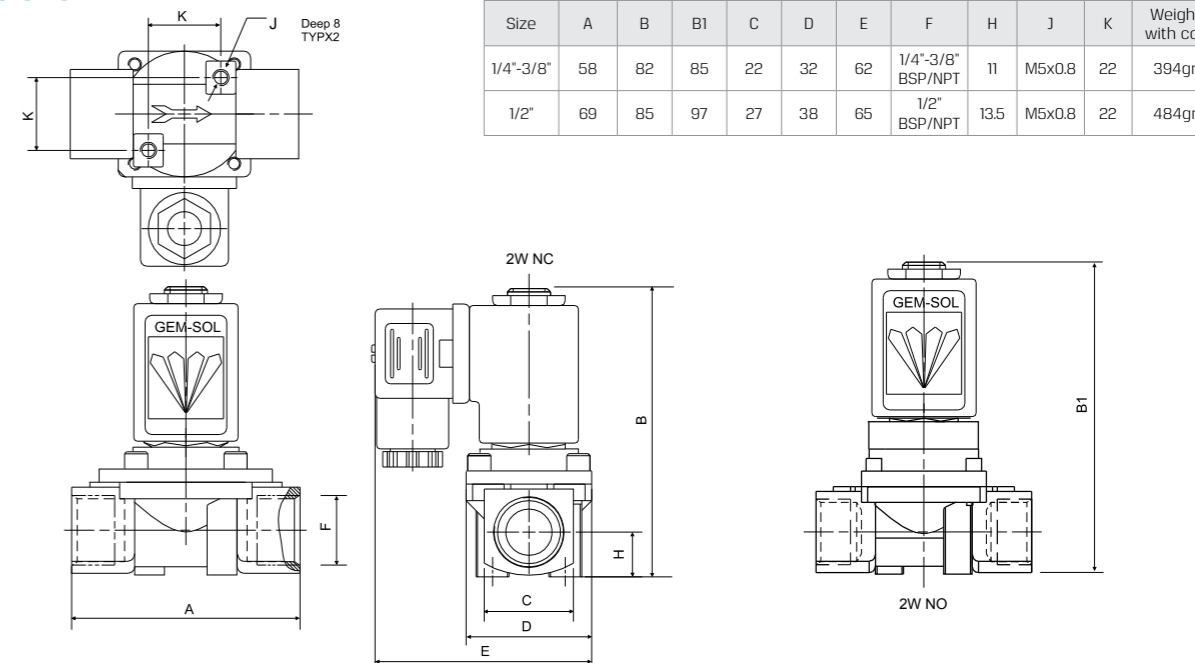
Voltage & Power Consumption

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

Direct Operated | 2W | GEM-SOL | Low pressure flows 1/4" - 1/2" NC, NO

Dimensions



Size	A	B	B1	C	D	E	F	H	J	K	Weight with coil
1/4"-3/8"	58	82	85	22	32	62	1/4"-3/8" BSP/NPT	11	M5x0.8	22	394gr
1/2"	69	85	97	27	38	65	1/2" BSP/NPT	13.5	M5x0.8	22	484gr

How to Order

GEM-L	BODY	PORT	FUNCTION	SEALS	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	3	1/4" NPT	21	2W NO 2 FPM (Viton®) V EPDM E	6	1	AC8W 50Hz 1 with 1
		3/8" BSP	30		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 surge protection with LED 5
					120	6	connector with LED 6
					220	7A	connector with moulded cable 7
					230	7	other 9
					240	8	
					Latch/other (1)	9	

Example : GEM-L-220IN-321
GEM-SOL LPF brass, 1/4"BSP, 2W NC, NBR seals, 24V AC 8W 60Hz with connector.

GEM-L - 2 20 1 N - 3 2 1

(1) 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.

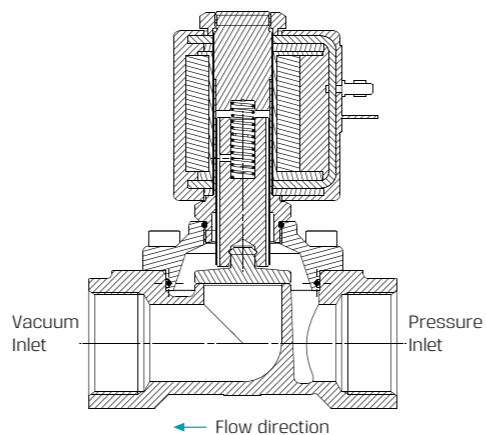
SOLENOID VALVES | General Purpose

Direct Operated | 2W

GEM-L | Low pressure flows (LPF) 3/4", 1" 2 Way NC



Brass | 1"



Technical Data

Function	2 Way NC
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	Designed for use in LP gas systems. Also in air, water and vacuum systems : (high flow at low pressure)
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)

Pressure (bar) & Flow table NC

Size	Orifice (mm)	Pressure (bar)	Kv (l/min)
3/4"	20	-1 to 1	80
1"	25		125

Voltage & Power Consumption

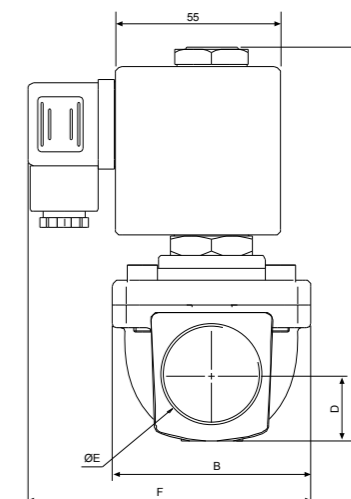
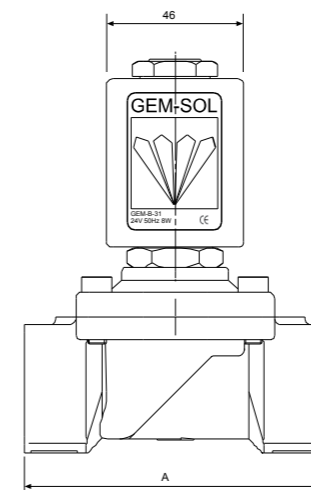
V	AC (W)		DC (W)
	50 Hz	60 Hz	
12			•
24	•		•
120		•	•
230	•		•

• Available options

Direct Operated | 2W | GEM-SOL | Low pressure flows 3/4", 1" NC

Dimensions

Size	A	B	C	D	E	F	Weight with coil
3/4"	90	55	119.5	17	3/4" BSP/NPT	87.7	87.7
1"	100	65	128.5	21	1" BSP/NPT	92.7	92.7



How to Order

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

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

VOLTAGE	POWER	CONNECTOR
W/out coil	0 No coil	0 without
12	2 AC38W 50Hz	E with
24	3 AC38W 60Hz	F with LED
120	6 DC38W	J with bi-color LED
230	7	with 1/2" Hub surge protection with LED connector with moulded cable
		other

Example : GEM-L-2501N-3E1
GEM-SOL LPF brass, 3/4" BSP, 2W NC, NBR seals, 24V AC 38W 50Hz with connector.

GEM-L - 2 50 1 N - 3 E 1

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