

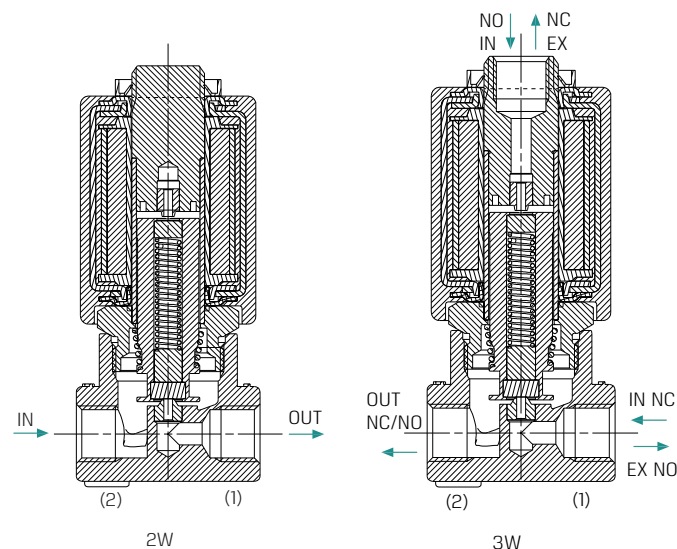
# SOLENOID VALVES | Special Purpose

## Latch

### GEM-A3P | Latch 3 positioning manual override 2 Way, 3 Way NC, NO



Brass | 1/8"



#### Technical Data

Function	2 Way, 3 Way NC, NO
Ports size	1/8" and 1/4" BSP & NPT
Orifice size	See table
Pressure range	See table
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
Materials in contact with media	<b>Manual override:</b> Plastic <b>Main Valve:</b> Brass <b>Solenoid Operator:</b> Stainless Steel AISI 300 & 400 series <b>Seals:</b> NBR, FPM (Viton®), EPDM, FFKM (Kalrez®) or PTFE
Media	Air, water, oil
Coil type	Latch
Standard protection class	IP65 with connector * Option : IP68 (please refer to GEM-BP Coil)

#### Max. Pressure (bar) 2W NC table

Orifice (mm)	0.8	1.2	1.6	2.0	2.4	3.0	4.0
Pressure (bar)	16	16	16	16	16	16	8
Flow factor Kv(l/min)	0.5	1.1	1.7	2.5	3.5	4.5	5

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

Orifice (mm)	0.8	1.2	1.6	2.0	2.4	3.0
Pressure (bar)	16	16	16	16	15	10
Flow factor Kv(l/min)	0.5	1.1	1.7	2.5	3.5	4.5

#### Max. Pressure (bar) 3W NC table

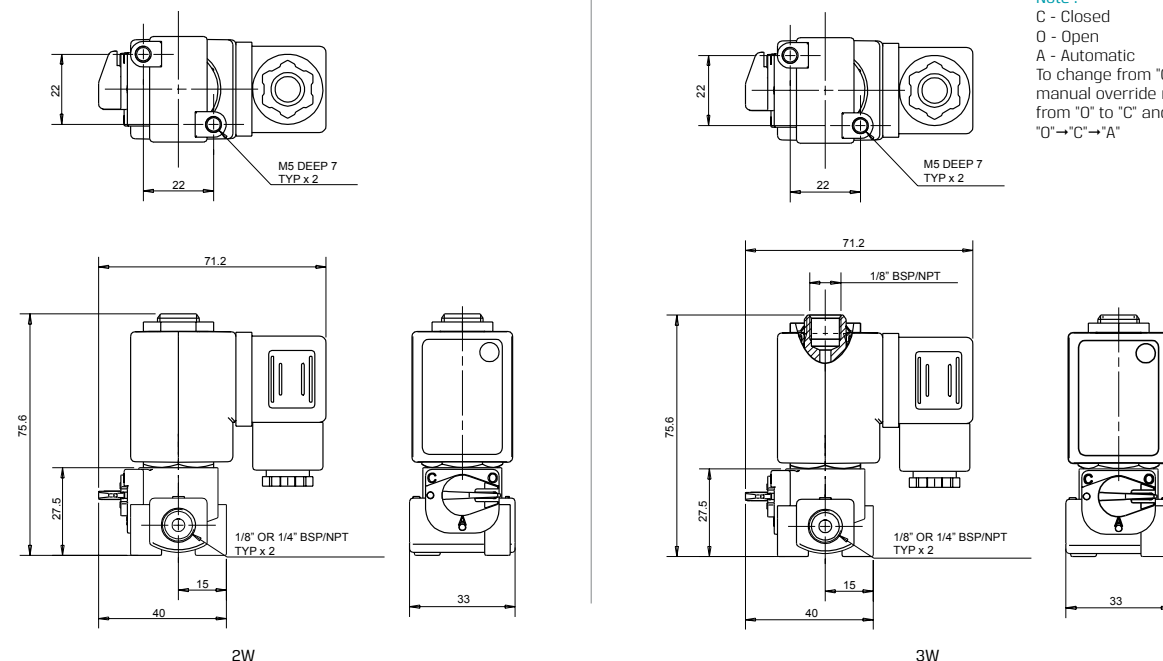
Orifice (mm)	0.8	1.2	1.6	2.0	2.4	3.0
Pressure (bar)	16	16	16	14	10	6
Flow factor Kv(l/min)	0.5	1.1	1.7	2.5	3.5	4.5

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

Orifice (mm)	0.8	1.2	1.6	2.0	2.4	3.0
Pressure (bar)	16	16	16	12	10	7
Flow factor Kv(l/min)	0.5	1.1	1.7	2.5	3.5	4.5

### Latch | GEM-SOL | 3 positioning manual override 2, 3 Way NC, NO

#### Dimensions



Note:  
C - Closed  
O - Open  
A - Automatic  
To change from "O" to "A", the manual override must be turned from "O" to "C" and then to "A":  
"O" → "C" → "A"

#### How to Order

GEM-A3P	BODY	PORT	FUNCTION	ORIFICE	SEALS	LATCH TYPE <sup>(1)</sup>	CONNECTOR						
Brass	2	1/8" BSP	10	2W NC	1	0.8	1	NBR	N	2Ω	LDO	without	0
		1/8" NPT	11	2W NO	2	1.2	2	FPM (Viton®)	V	5Ω	IL	with	1
		1/4" BSP	20	3W NC	3	1.6	3	EPDM	E	13Ω	EL	flying leads coil	4
		1/4" NPT	21	3W NO	4	2.0	4	FFKM (Kalrez®)	K	20Ω	OL	with 1/2" Hub	5
						2.4	5	PTFE	T	53Ω	DL	connector with moulded cable	7
						3.0	6					other	9
						4.0	7						

Example : GEM-A3P-21015N-LD01

GEM-SOL latch 3 positioning manual override, brass, 1/8"BSP, 2W NC, 2.4 orifice, NBR, 2Ω latch with connector.

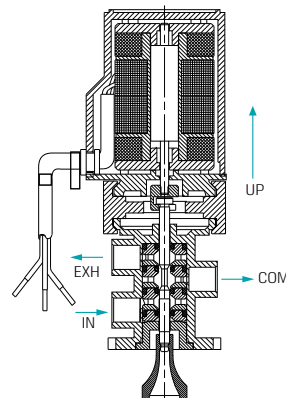
GEM-A3P - 2 10 1 5 N - LD0 1

(1) Choose latch type according to which latch system you have.

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

## Latch

### G60 | 1/8" Latch, pulse operated 3 Way

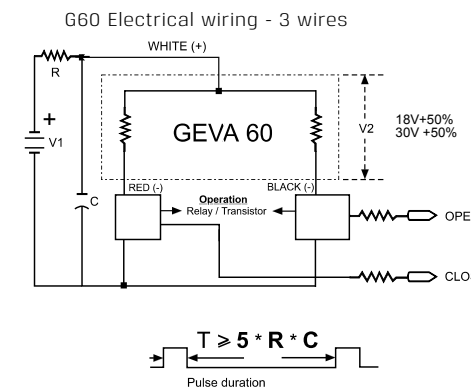
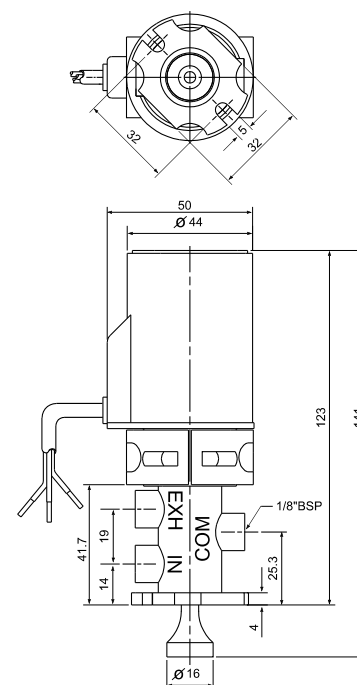


#### Technical Data

Function	3 Way
Ports size	1/8" BSP & NPT
Orifice size	3mm
Pressure range	0 to 10 bar max.
Kv (l/min)	3.2 l/min
Temperature range	<b>Fluid :</b> 5°C to 50°C (no freezing) <b>Ambient :</b> -10°C to 50°C
Materials in contact with media	<b>Manual override:</b> Push/pull - plastic <b>Main Valve:</b> Plastic <b>Seals:</b> NBR <b>Spool:</b> Stainless Steel AISI 303
Media	Water
Min. pulse duration	30 ms
Max. pulse duration	100 ms
Electric connection	Cable embedded in plastic
Coil resistance	• 5.6 - 24V • 2.5 - 12V • 5 - 24V • 3.4 - 12V
Assembly	• <b>Valve assembly:</b> In upright position only, with coil facing upwards and valve below. The cable exiting from the coil must face downwards. • <b>Tube assembly:</b> Only as marked on valve body. • <b>Filtering:</b> The fluid must be filtered at level of 120 mesh at least.
Coil voltage	• All Baccara coil voltages are ± 10% of nominal
Standard protection class	IP65

### Latch | G60 | Pulse operated 3 Way

#### Dimensions



- Voltage V2 is the voltage drop on the coil.
- R must be calculated so that the valve will not be operational when capacitor C is not fully charged. Minimal time between operations T must meet the following conditions :  $T \geq 5 * R * C$
- Voltage value V2 and capacitor C are represented in the following table, minimum values :

		C(µF)	V2(V)
2 & 3 wires	G60 12V	4700	18
2 & 3 wires	G60 24V	2200	30

The G60 latch operates correctly only when activated according to the above scheme.

Please note : Driving the open and close coils of the G60 valve by switches which are connected between red or black to positive supply, or connecting free wheeling diode between red or black wire to white wire, reduces the magnetic force of the valve.

#### How to Order

G60	-	BASE	PORT	VOLTAGE	ELECTRIC CONNECTOR
		Plastic 4	1/8" BSP 10 1/8" NPT 11	12V DC 2 24V DC 3	2 wires 1 3 wires 2

#### Example : G60-41031

G60 latch solenoid valve, plastic, 1/8" BSP, 24V DC with 2 wires.

G60	-	4	10	3	1
-----	---	---	----	---	---

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