

GEM-FLOW™ | G75-S & G75-S2

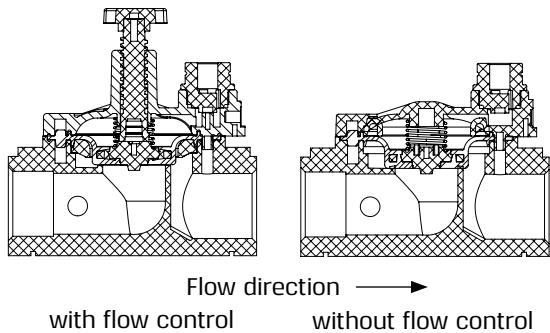
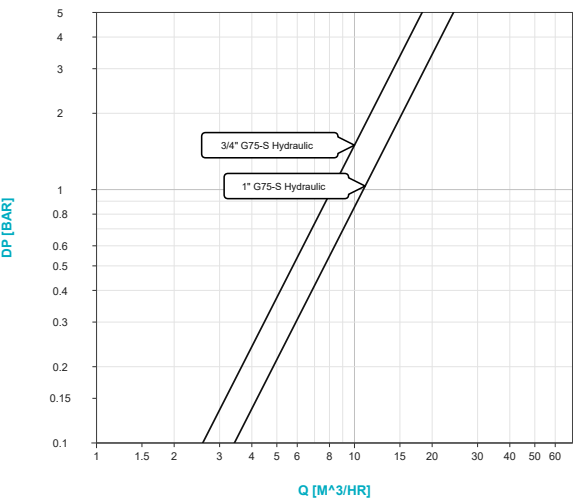
Hydraulic 2 Way | G75-S: 3/4"-1" | G75-S2: 1-1/2"-2"

Technical Data

Function	2 Way
Ports size	3/4", 1", 1-1/2", 2" BSPT & NPT
Pressure range	3/4", 1": 0.4 to 10bar 1-1/2", 2": 0.3 to 10bar
Temperature range	Fluid: 5°C to 50°C (no freezing)
Materials in contact with media	Main Valve: Plastic (Reinforced Nylon) Diaphragm: NR : 3/4", 1" EPDM : 1-1/2", 2" Seals: Buna - N Spring: Stainless Steel AISI 300 series

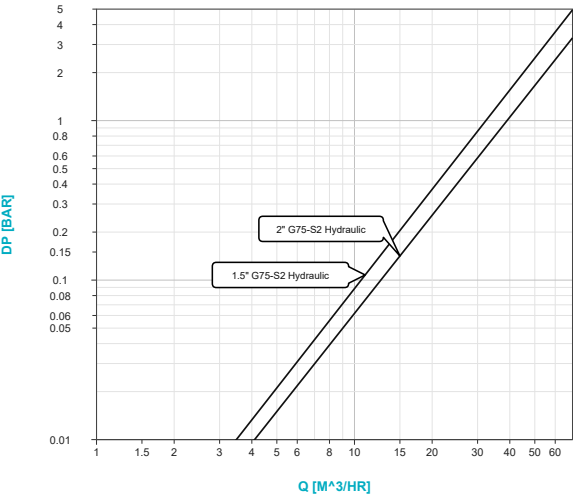


Head Loss for Fully Open Valve



Note:
For Electric valve
below 0.6 m/s,
an additional 0.3 bar
should be added to
the measured ΔP.

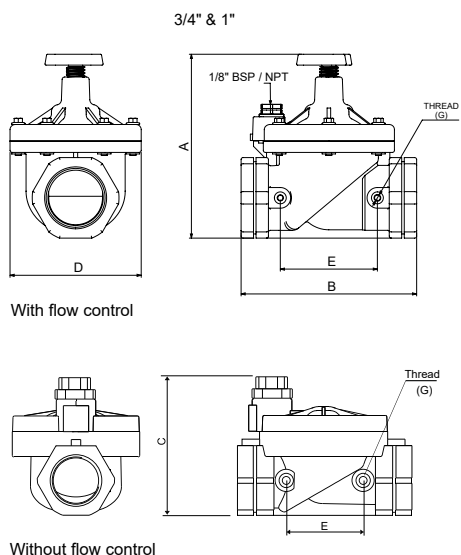
Head Loss for Fully Open Valve



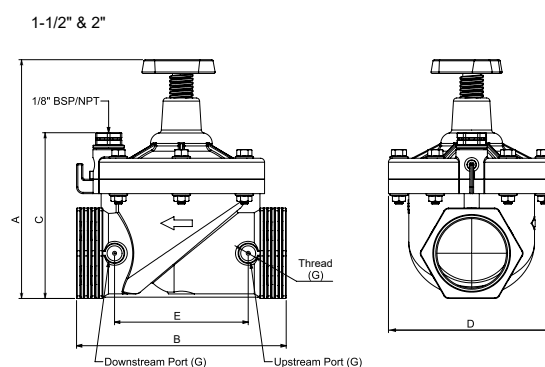
Note:
For Electric valve
below 2 m/s ,
an additional 0.3 bar
should be added to
the measured ΔP.

GEM-FLOW™ | G75-S & G75-S2 | Hydraulic 2 Way | G75-S: 3/4"-1" | G75-S2: 1-1/2"-2"

Dimensions



Size	A	B	C	D	E	ØG	Weight (gr.)
3/4"	105	110	77	81	52.5	1/8"NPT/BSP	230
1"	112	110	84	81	48.5	1/8"NPT/BSP	230
1-1/2"	177	145	121	127	89	1/4"NPT/BSP	780
2"	182	160	127	127	102	1/48"NPT/BSP	790



How to Order

G75-S	PORT		FUNCTION INLINE PILOT PORTS		FLOW CONTROL	
	3/4" BSPT	50	none	0	with	5
	3/4" NPT	51	upstream only	1	without	6
	1" BSPT	60	downstream only	2		
	1" NPT	61	both	3		

Example: G75-S-5015

GEM-FLOW™ G75-S Hydraulic valve, 3/4" BSPT, 1/8" upstream inline pilot port, with flow control

G75-S2	PORT		FUNCTION INLINE PILOT PORTS		FLOW CONTROL	
	1-1/2" BSPT	70	none	0	with	5
	1-1/2" NPT	71	upstream only	1		
	2" BSPT	80	downstream only	2		
	2" NPT	81	both	3		

Example: G75-S2-7015

GEM-FLOW™ G75-S2 Hydraulic valve, 1-1/2" BSPT, 1/8" upstream inline pilot port, with flow control

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

GEM-FLOW™ | G75-S & G75-S2

Electric 2 Way NC | G75-S: 3/4"-1" | G75-S2: 1-1/2"-2"

Technical Data

Function	2 Way NC
Ports size	3/4", 1", 1-1/2", 2" BSPT & NPT
Pressure range	3/4", 1": 0.4 to 10bar 1-1/2", 2": 0.3 to 10bar
Temperature range	Fluid: 5°C to 50°C (no freezing) Ambient: -10°C to 50°C
Materials in contact with media	Manual override: Plastic (Reinforced Nylon) Main Valve: Plastic (Reinforced Nylon) Solenoid Operator: Stainless Steel AISI 300 & 400 series Diaphragm: NR : 3/4", 1" EPDM : 1-1/2", 2" Seals: NBR Spring: Stainless Steel AISI 300 series
Solenoid	• G75, 2W NC solenoids, all voltages. • AC, DC and Latch
Coil voltage	• Voltage and power consumption-see table • All Baccara coil voltages are ± 10% of nominal

Voltage & Current

AC & DC

Solenoid	Voltage	Inrush [A]	Holding [A]
2 Way 50 Hz	$V^{+10\%}_{n-20\%}$	0.3	0.19
2 Way 60 Hz		0.2	0.14
3 Way 50/60 Hz *		0.125	0.125
3 Way NC 50Hz		0.6	0.36
3 Way NO 50Hz		0.53	0.36
DC		4.5W	

Voltage & Power Consumption

	AC (W)	DC (W)
V	2	4.5
12	•	•
24	•	•
110	• 2 Way only	

Available options

- Standard
- Special

Latch Coil Resistance vs Input Voltage

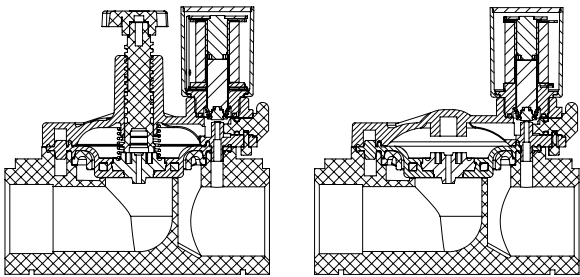
Recommendations chart

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



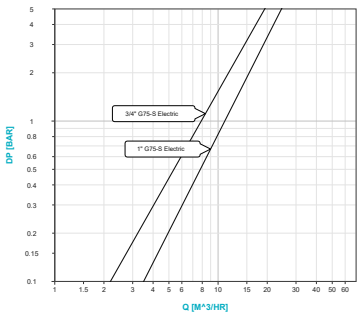
G75-S | 3/4"-1" | NC with plastic manual override

G75-S2 | 1-1/2"-2" | NC with plastic manual override



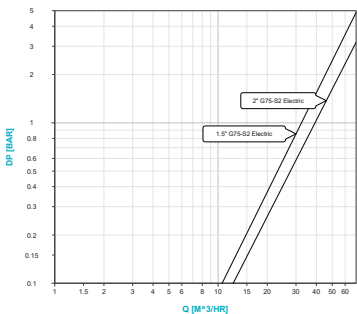
Flow direction →
with flow control without flow control

Head Loss for Fully Open Valve



Note:
For Electric valve below 0.6 m/s, an additional 0.3 bar should be added to the measured ΔP.

Head Loss for Fully Open Valve

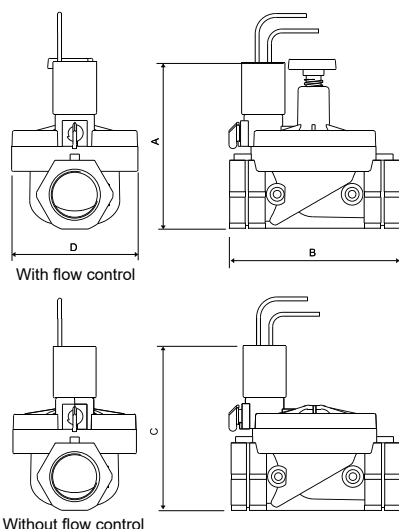


Note:
For Electric valve below 2 m/s, an additional 0.3 bar should be added to the measured ΔP.

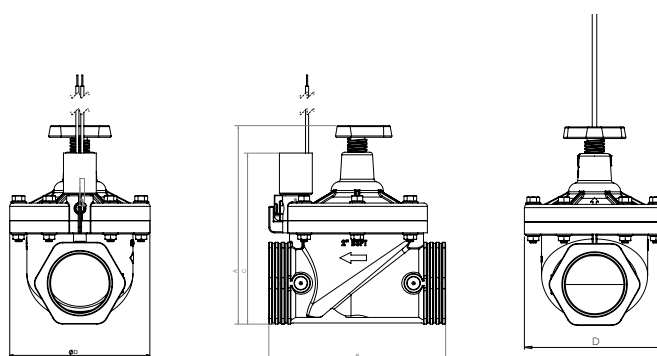
GEM-FLOW™ | G75-S & G75-S2 | Electric 2 Way NC | G75-S: 3/4"-1" | G75-S2: 1-1/2"-2"

Dimensions

3/4" & 1" with integrated solenoid



1-1/2" & 2" with integrated solenoid



Size	A	B	C	D	Weight (gr)
3/4"	105	110	105	81	230
1"	112	110	112	81	230
1-1/2"	177	145	146	127	865
2"	182	160	152	127	875

How to Order

G75-S	-	PORT	FUNCTION	MANUAL OVERRIDE	FLOW CONTROL	VOLTAGE ⁽²⁾	WIRES
		3/4" BSPT 50	2W NC 1	None 0	with 5	24V AC 1	two null
		3/4" NPT 51		Plastic 1	without 6	12V AC 3	three ⁽¹⁾ a
		1" BSPT 60		Handle ⁽¹⁾ 2		12V DC 4	
		1" NPT 61				24V DC 5	
						23Ω 6	
						110V AC* ⁽³⁾ 7	
						4Ω B	
						9Ω C	
						12Ω D	

Example: G75-S-501051

GEM-FLOW™ G75-S electric valve, 3/4" BSPT, 2W NC, no manual override, with flow control, 24V AC, two wires

(1) For Latch only

(2) For Latch: Refer to Latch Coil Resistance vs Input Voltage | Recommendations chart

(3) 110V AC Available in 2W.

G75-S2	-	PORT	FUNCTION	MANUAL OVERRIDE	FLOW CONTROL	VOLTAGE ⁽²⁾	WIRES
		1-1/2" BSPT 70	2W NC 1	None 0	with 5	24V AC 1	two null
		1-1/2" NPT 71		Plastic 1		12V AC 3	three ⁽¹⁾ a
		2" BSPT 80		Handle ⁽¹⁾ 2		12V DC 4	
		2" NPT 81				24V DC 5	
						23Ω 6	
						110V AC* ⁽³⁾ 7	
						4Ω B	
						9Ω C	
						12Ω D	

Example: G75-S2-701051

GEM-FLOW™ G75-S2 electric valve, 1-1/2" BSPT, 2W NC, no manual override, with flow control, 24V AC, two wires

(1) For Latch only

(2) For Latch: Refer to Latch Coil Resistance vs Input Voltage | Recommendations chart

(3) 110V AC Available in 2W.

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GEM-FLOW™ | G75-S & G75-S2

3 Way Integral Solenoid Pilot Control 3/4" - 2" NC

Technical Data

Solenoid	Supplied with 3 Way NO 12mm G75 operator
Assembly	Upstream pilot control valve is supplied with finger filter and accessories

- For technical information, refer to G75-S & G75-S2 | Electric 3/4" - 2" 2 Way NC

Voltage & Current

AC & DC

Solenoid	Voltage	Inrush [A]	Holding [A]
2 Way 50 Hz	V +10% n-20%	0.3	0.19
2 Way 60 Hz		0.2	0.14
3 Way 50/60 Hz *		0.125	0.125
3 Way NC 50Hz		0.6	0.36
3 Way NO 50Hz		0.53	0.36
DC		4.5W	

Voltage & Power Consumption

	AC (W)	DC (W)
V	2	4.5
12	•	•
24	•	•
110	•	
	2 Way only	

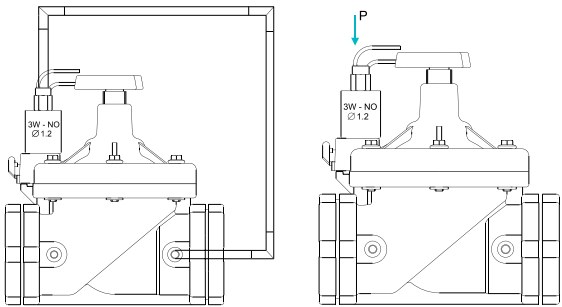
Available options

- Standard
- Special



Upstream pilot control

External pilot control



Upstream pilot control

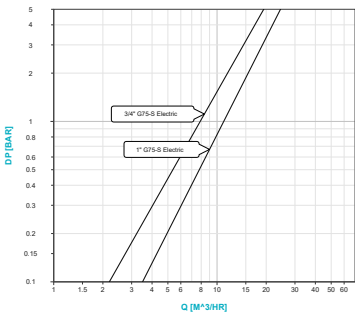
External pilot control

Latch Coil Resistance vs Input Voltage

Recommendations chart

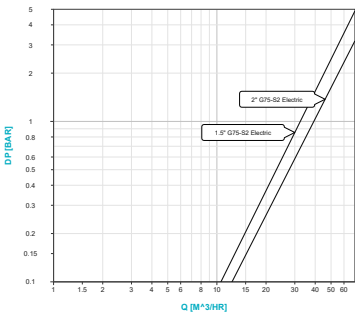
Resistance [Ω]	Input voltage range [V]
4	6 - 9
9	12 - 14
12	14 - 16
23	18 - 21

Head Loss for Fully Open Valve



Note:
For Electric valve below 0.6 m/s, an additional 0.3 bar should be added to the measured ΔP.

Head Loss for Fully Open Valve

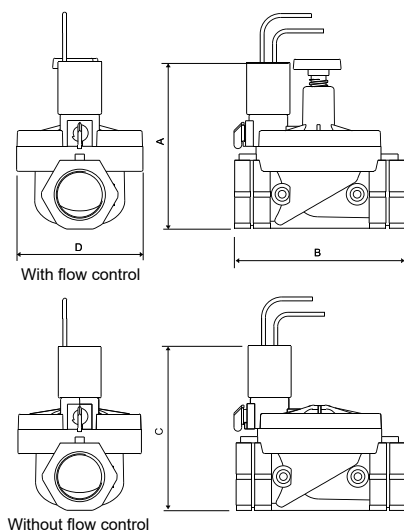


Note:
For Electric valve below 2 m/s, an additional 0.3 bar should be added to the measured ΔP.

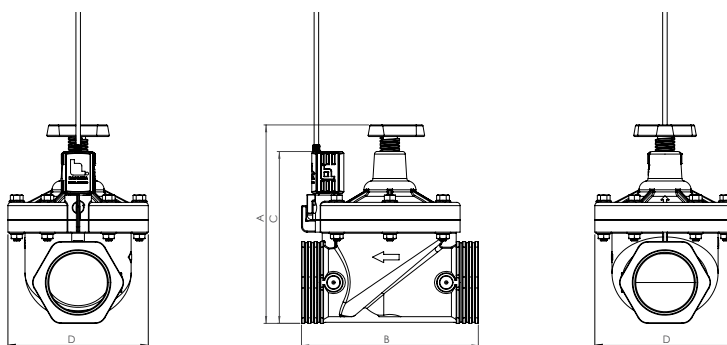
GEM-FLOW™ | G75-S & G75-S2 | 3 Way Integral Solenoid Pilot Control 3/4" - 2" NC

Dimensions

3/4" & 1" with integrated solenoid



1-1/2" & 2" with integrated solenoid



Size	A	B	C	D	Weight (gr)
3/4"	105	110	105	81	230
1"	112	110	112	81	230
1-1/2"	177	145	146	127	865
2"	182	160	152	127	875

How to Order

G75-S	PORT	FUNCTION	MANUAL OVERRIDE	FLOW CONTROL	VOLTAGE ⁽³⁾	WIRES
	3/4" BSPT 50	External pilot 4	None 0	with 5	24V AC 1	two null
	3/4" NPT 51	Upstream pilot 4H	Plastic 1	without ⁽¹⁾ 6	24V AC w/out Diode 1R	three ⁽²⁾ a
	1" BSPT 60		Handle ⁽²⁾ 2		12 V AC 3	
	1" NPT 61				12 V DC 4	
					24V DC 5	
					23Ω 6	
					4Ω B	
					9Ω C	
					12Ω D	

Example: G75-S-704151

GEM-FLOW™ G75-S 1-1/2" BSPT, external pilot, plastic manual override, with flow control, 24V AC, two wires

G75-S2	PORT	FUNCTION	MANUAL OVERRIDE	FLOW CONTROL	VOLTAGE ⁽³⁾	WIRES
	1-1/2" BSPT 70	External pilot 4	None 0	with 5	24V AC 1	two null
	1-1/2" NPT 71	Upstream pilot 4H	Plastic 1		24V AC w/out Diode 1R	three ⁽²⁾ a
	2" BSPT 80		Handle ⁽²⁾ 2		12 V AC 3	
	2" NPT 81				12 V DC 4	
					24V DC 5	
					23Ω 6	
					4Ω B	
					9Ω C	
					12Ω D	

Example: G75-S2-7015

GEM-FLOW™ G75-S2 Hydraulic valve, 1-1/2" BSPT, 1/8" upstream inline pilot port, with flow control

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