

# OPERATORS & COILS

## GEM-FLOW™ | G75-O

### AC/DC Operator 2 Way, 3 Way NC, NO

Applicable for G75-A, Galit, G75-S & G75-Z valves

#### Technical Data

Function	2 Way, 3 Way NC, NO
Orifice size	2 Way: No orifice 3 Way: See table
Pressure range (bars)	See solenoid valve performances
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>Housing:</b> Plastic (Reinforced Nylon 66) <b>Plunger &amp; pole:</b> Stainless Steel AISI 430F <b>Rubber Seals:</b> EPDM <b>Encapsulate:</b> Polyurethane <b>Spring:</b> Stainless Steel AISI 300 series
Media	Air, water, oil *
Threads on operator tube	G1/8" or 1/8" NPT female to connect exhaust, muffler etc
Operator assembly	By manually screwing 3/4" UNEF to valve body. • <b>Max. tightening torque: 2 N/m</b>
Electrical connection	Lead wires 35 cm, 18 AWG (0.75mm <sup>2</sup> ) * other lengths are available
Coil voltage	• Voltage and power consumption - see table
Standard protection class	IP66

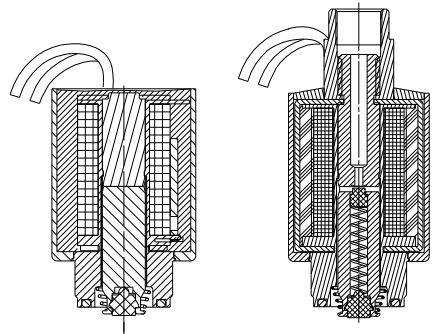
\* For other fluids and for use in abnormal conditions, please contact our technical sales department



2 Way Operator



3 Way Operator



2 Way NC

3 Way NC / 3 Way NO

#### Working Pressure (bar) 2 Way NC

Orifice (mm)	up to 2.0
Pressure (bar)	12

#### Working Pressure (bar) 3 Way NC

Orifice (mm)	1.0	1.2	1.6
AC Pressure (bar)	16	11	6
DC Pressure (bar)	12	9	5

#### Working Pressure (bar) 3 Way NO

Orifice (mm)	1.0	1.2	1.6
Pressure (bar)	16	12	10

#### Voltage & Current

##### AC & DC

Solenoid	Voltage	Inrush [A]	Holding [A]
2 Way 50 Hz	V	0.3	0.19
2 Way 60 Hz		0.2	0.14
3 Way 50/60 Hz *		0.125	0.125
DC		4.5W	

\* Except 24V AC without Diode

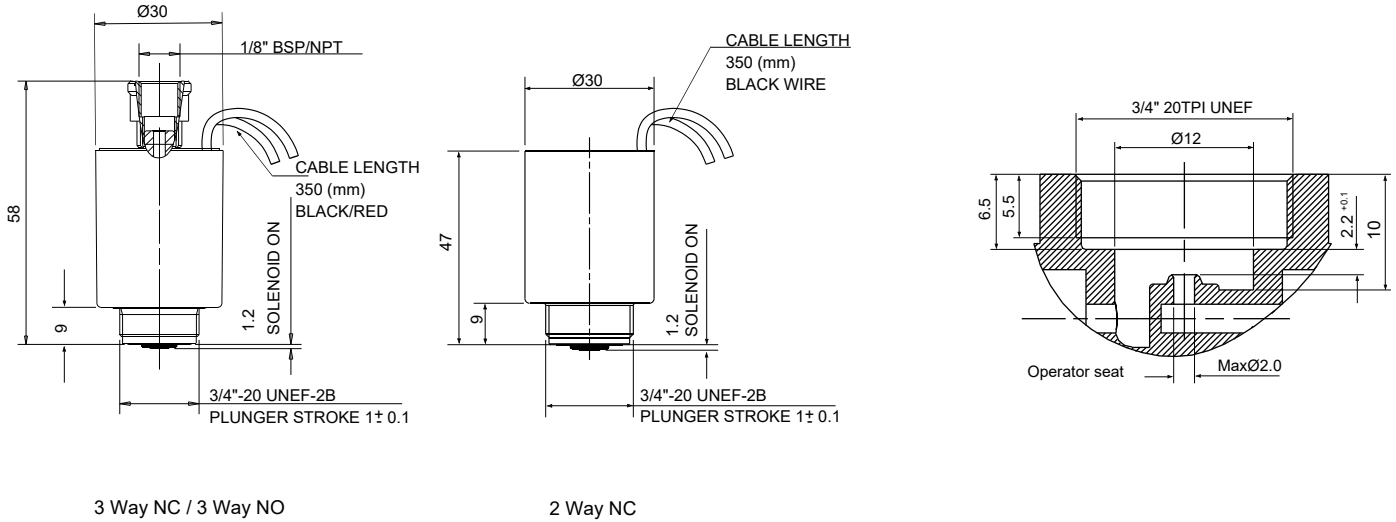
#### Voltage & Power Consumption

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

• Available options

# GEM-FLOW™ | G75-O | AC/DC Operator 2 Way, 3 Way NC, NO

## Dimensions



## How to Order

### 2 Way

G75-0	FUNCTION	VOLTAGE
2W NC	1	24V AC 1
		24V AC w/out Diode <sup>(1)</sup> 1R
		12V AC 3
		12V DC 4
		24V DC 5
		110V AC 7

G75-0	PORT	FUNCTION	ORIFICE
1/8" BSP	10	3W NC 3	1.0 1
1/8" NPT	11	3W NO 4	1.2 2
			1.6 3

**Example: G75-0-1-1**  
GEM-FLOW™ G75 Operator, 2W NC, 24V AC

**Example: G75-0-1032-1**  
GEM-FLOW™ G75 Operator, 1/8" BSP, 3W NC, 1.2 orifice, 24V AC

(1) 3W NO 1.6 mm: Max pressure is 8 bar

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

## GEM-FLOW™ | G75-0

### Latch Operator 2 Way, 3 Way NC, NO

Applicable for G75-A, Galit, G75-S & G75-Z valves

#### Technical Data

Function	2 Way, 3 Way NC, NO Latch
Orifice size	2 Way: No orifice 3 Way: See table
Pressure range (bars)	See solenoid valve performances
Capacitors	• 4700µF for 9V DC • 2200µF for 12V DC
Switching time	25-50 ms
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>Housing:</b> Plastic (Reinforced Nylon 66) <b>Plunger &amp; pole:</b> Stainless Steel AISI 430F <b>Rubber Seals:</b> EPDM <b>Encapsulate:</b> Polyurethane <b>Spring:</b> Stainless Steel AISI 300 series
Threads on operator tube	G1/8" or 1/8" NPT female to connect exhaust, muffler etc
Two wire operator	One coil with exit of 2 lead wires. To pull the plunger up, connect the black wire (-) and the green to the (+).
Three wire operator	One coil and an integrated electrical circuit. To pull plunger up, pulse is given to the red wire (-). To release the plunger, pulse is given to the black wire (-). Operate only by a controller.
Electrical connection	• Lead wires 35 cm, 18 AWG (0.75mm <sup>2</sup> ) (black/green) • Lead wires: red, white, black for 3 wires
Voltage	9, 12V DC (coils for other voltages available)
Standard protection class	IP66

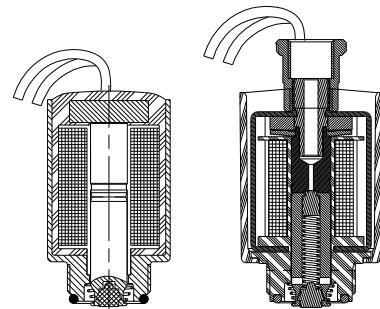
\* Available with brass adaptor



2 Way Operator



3 Way Operator



2 Way NC

3 Way NC / 3 Way NO

#### Working Pressure (bar) 2 Way NC

Orifice (mm)	up to 2.0
Pressure (bar)	12

#### Working Pressure (bar) 3 Way NC

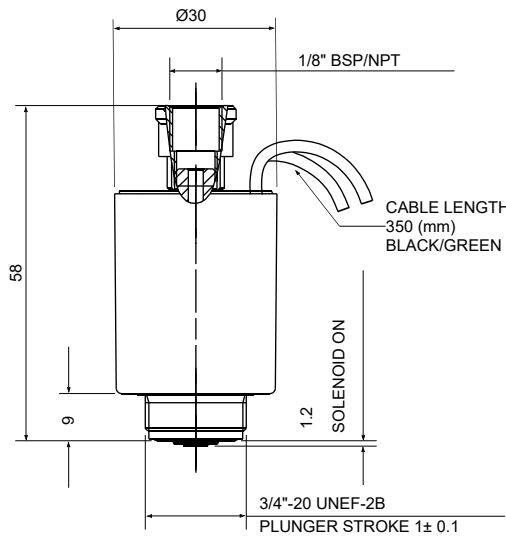
Orifice (mm)	1.0	1.2	1.6
AC Pressure (bar)	16	11	6

#### Working Pressure (bar) 3 Way NO

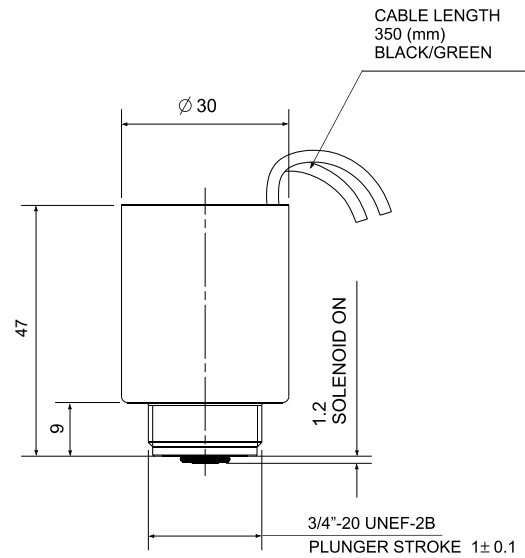
Orifice (mm)	1.0	1.2	1.6
Pressure (bar)	16	12	10

# GEM-FLOW™ | G75-O | Latch Operator 2 Way, 3 Way NC, NO

## Dimensions



3 Way NC / 3 Way NO



2 Way NC

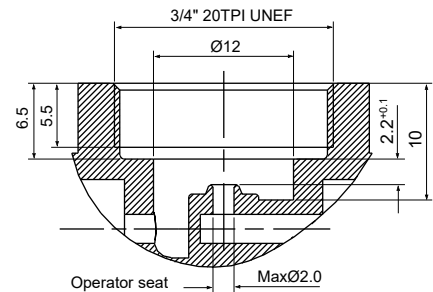
## How to Order

### 2 Way

G75-O	FUNCTION	VOLTAGE VDC <sup>(1)</sup>	WIRES
	2W NC 1	4Ω B	two null

### 3 Way

G75-O	PORT	FUNCTION	ORIFICE	VOLTAGE VDC <sup>(1)</sup>	WIRES
	1/8" BSP 10	3W NC 3	1.0 1	9Ω C	three a
	1/8" NPT 11	3W NO 4	1.2 2	12Ω D	
			1.6 3	23Ω 6	



## 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

#### Example: G75-O-1-B

GEM-FLOW™ G75 Latch solenoid operator, 2W NC, 4Ω, 2 wires

#### Example: G75-O-1042-Ca

GEM-FLOW™ G75 Latch solenoid operator, 1/8" BSP, 3W NO, 1.2 orifice, 9Ω, 3 wires

(1) Refer to Latch Coil Resistance vs Input Voltage | Recommendations chart

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