

# High Flow 3 - Way Solenoid Valves

## Normally Open and Closed Operation

### 3/8", 1/2", 3/4" BSP/NPT



**FLOCON** Three Way Internal Piloted diaphragm type Valves have gun metal valve bodies and soft seating for tight shut off. These valves have four main operating parts S.S. core, two diaphragms, insert and disc holder.

#### IMPORTANT :

10 PSI minimum operating pressure differential required. Valve vent to 0 PSI.

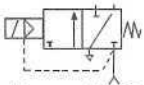
#### APPLICATION :

These valves are used in variety of applications such as pilots, compressor unloaders, cylinders and turbines.

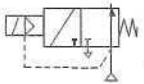
#### SPECIFICATIONS :

##### OPERATION :

A) Normally Closed : Valve opens when Solenoid is energised & closes when Solenoid is de-energised.



B) Normally Open: Valve opens when Solenoid is de-energised & closes when Solenoid is energised.



Please refer to flow diagram for direction of flow.

Valves parts in contact with fluid:

- Body-cast Bronze.
- Seat & Disc-Neoprene/Nitrile.
- Diaphragm-Neoprene with brass and S. Steel trim.
- Core & Plunger-410 S.S.
- Shading Coil-Copper.
- Pilot Seat and Disc holder-Acetal.

#### SOLENOID ENCLOSURE :

- 1) General purpose enclosure NEMA type 1/IP 20.
- 2) Watertight and dust proof NEMA type 2a, 3 R IP55, IP56, IP67.
- 3) Flameproof up to I, IIA & IIB-IS 2148.
- 4) Continuous duty moulded coil CLASS 'F' & 'H'.
- 5) Maximum temperature 80°C.
- 6) Electrical Voltage : 24, 48, 120, 240, 440 C/S AC.  
12, 24, 48, 120, 240, DC.
- 7) All Solenoid parts in contact with fluids are made of 300 & 400 series stainless steel.

#### INSTALLATION :

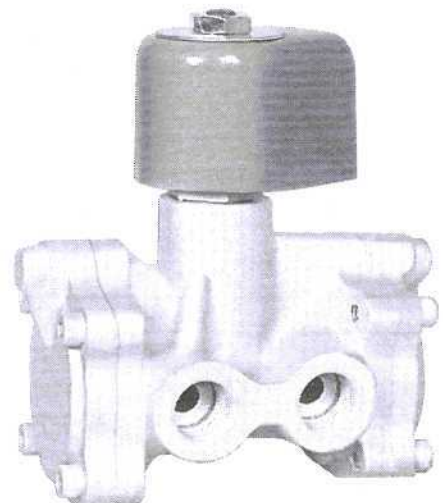
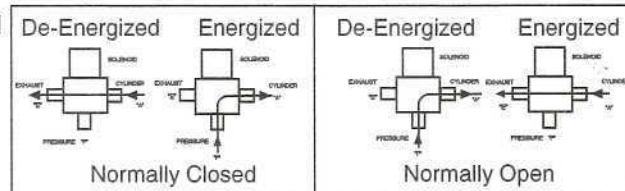
Valves may be mounted in any position.

#### FEATURES :

- 1) Packless.
- 2) Gun metal tight shut off.
- 3) Complete tight shut off.
- 4) Silent in operation.
- 5) Continuous duty moulded coils F/H insulation.
- 6) Solenoid capable of being turned 360°

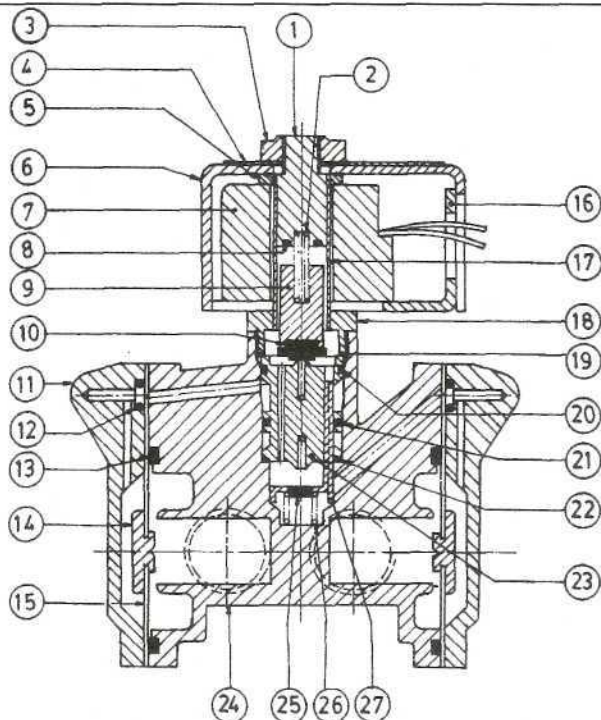
**IMPORTANT:** Minimum operating pressure differential must be maintained between the pressure and exhaust port, supply and piping must be full area, unrestricted.

**FLOCON** Valves are made from quality materials and tested for leakage and performance. Each valve is tested as per IS 8935.



**FLOCON** **PRECISION**  
**INSTRUMENT**  
**CO.**

124- A-Z INDUSTRIAL ESTATE, G. K. MARG, MUMBAI - 400 013. TEL. : 2492 6384 / 2492 4333 FAX : 2497 4299  
E-mail : flocon@bom3.vsnl.net.in Website : www.floconvalves.com



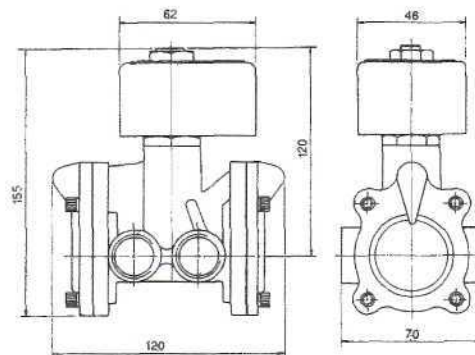
| SR. NO. | NAME OF PART    | PART NO. | MATERIAL              | QTY. |
|---------|-----------------|----------|-----------------------|------|
| 1       | STOPPER         | FSD 3001 | S.S. 410              | 1    |
| 2       | PLUNGER SPRING  | FSD 3002 | STAINLESS STEEL       | 1    |
| 3       | TOP NUT         | FSD 3003 | BRASS                 | 1    |
| 4       | NAME PLATE      | FSD 3004 | ALUMINIUM             | 1    |
| 5       | WASHER          | FSD 3005 | C. R. C. A.           | 1    |
| 6       | COIL HOUSING    | FSD 3006 | C. R. C. A.           | 1    |
| 7       | COIL            | FSD 3007 | ENAMELLED COPPER WIRE | 1    |
| 8       | SHADING COIL    | FSD 3008 | COPPER                | 1    |
| 9       | PLUNGER         | FSD 3009 | S.S. 410              | 1    |
| 10      | PLUNGER SEAT    | FSD 3010 | NEOPRENE              | 1    |
| 11      | COVER           | FSD 3011 | BRONZE                | 2    |
| 12      | O' RING         | FSD 3012 | NEOPRENE              | 2    |
| 13      | O' RING         | FSD 3013 | NEOPRENE              | 1    |
| 14      | DIAPHRAGM PLATE | FSD 3014 | S. S. 304             | 2    |
| 15      | DIAPHRAGM       | FSD 3015 | NEOPRENE              | 2    |
| 16      | L' BRACKET      | FSD 3016 | C. R. C. A.           | 1    |
| 17      | TUBE            | FSD 3017 | S. S. 304             | 1    |
| 18      | TUBE NUT        | FSD 3018 | BRASS                 | 1    |
| 19      | GASKET          | FSD 3019 | TEFLON                | 1    |
| 20      | O' RING         | FSD 3020 | NEOPRENE              | 1    |
| 21      | O' RING         | FSD 3021 | NEOPRENE              | 1    |
| 22      | O' RING         | FSD 3022 | NEOPRENE              | 1    |
| 23      | INSERT          | FSD 3023 | DELRIN                | 1    |
| 24      | BODY            | FSD 3024 | BRONZE                | 1    |
| 25      | SEAT            | FSD 3025 | NEOPRENE              | 1    |
| 26      | SPRING          | FSD 3026 | S. S. 304             | 1    |
| 27      | TRIPOD SEAT     | FSD 3027 | NEOPRENE              | 1    |

#### ORDERING INFORMATION :

We must have Type, Pipe size  
Operating Pressure, Operating  
Voltage and Media handled.




#### IMPORTANT :

Use Strainers with the valves. Use  
the valves only at pressure and  
voltage specified on the name plate.



#### NOTE :

*In line with their policy of continous product  
development, the manufacturer reserves the  
right to change specifications without notice.*

|   |           |         |                                      |
|---|-----------|---------|--------------------------------------|
|    |           |         | IS 2149                              |
| AGENCY APPROVALS FOR FLOCON SOLENOID VALVES PRECISION INSTRUMENT CO. - MUM-43   |           |         |                                      |
| ENGINEERS INDIA LIMITED   | NEW DELHI | ENL     | SOLENOID VALVES                      |
| ELECTRONICS REGIONAL TEST LABORATORY  | MUMBAI    | ERTL    | DAMP HEAT TEST REPORT                |
| ELECTRONICS REGIONAL TEST LABORATORY  | MUMBAI    | ERTL    | VIBRATION TEST REPORT                |
| INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS  | MUMBAI    | IDEMI   | IP-65 TEST REPORT                    |
| INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS  | MUMBAI    | IDEMI   | IP-65/67 TEST REPORT                 |
| CENTRAL MINING RESEARCH INSTITUTE   | DHARBAD   | CMRI    | FLAME PROOF SOLENOID VALVE ENCLOSURE |
| CHIEF CONTROLLER OF EXPLOSIVES  | NAGPUR    | CCE     | FLAMEPROOF SOLENOID VALVE ENCLOSURE  |
| BUREAU OF INDIAN STANDARDS  | MUMBAI    | BIS     | FLAMEPROOF SOLENOID VALVE ENCLOSURE  |
| DIRECTORS GENERAL FACTORY   |           |         |                                      |
| ADVICE SERVICE & LABOUR INSTITUTE   | MUMBAI    | DEFASLI | FLAMEPROOF SOLENOID VALVE ENCLOSURE  |
| GENELEC LIMITED   | MUMBAI    | GENELEC | IP-55                                |

#### MANUFACTURERS :

**PRECISION  
INSTRUMENT  
CO.**

#### WORKS :

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Where the Quality goes in before the Name comes on.