

# 4-WAY SOLENOID VALVES

## Midget size

### for Air, Water and Light Oil 1/4" BSP/NPT

# FLOCON®

## SERIES FP 402

◀FLOCON▶ Midget valves are packless, solenoid pilot operated 4-way valves with forged brass bodies. These valves are extremely compact and are primarily used to control double acting cylinders, not larger than 4" in diameter.

#### SPECIFICATIONS :

##### OPERATION :-

When solenoid is energised pressure is applied to 'Cylinder B' and 'Cylinder A' is open to exhaust. When solenoid is de-energised pressure is applied to 'Cylinder A' and 'Cylinder B' is open to exhaust.

##### VALVE :

- 1) Forged brass body.
- 2) Resilient seating.
- 3) Pipe connections suitable for 1/4" BSP/NPT.
- 4) Operating pressures from 0.8 kg/cm<sup>2</sup> to 10 kg/cm<sup>2</sup> for AC Voltages
- 5) Inlet orifice 1/16", Cv-Flow factor 0.036.
- 6) Exhaust orifice 3/32", Cv-Flow factor 0.092.
- 7) Maximum A-C fluid temperature 95°C

##### SOLENOID :

- 1) General purpose solenoid enclosure NEMA Type 1.
- 2) All solenoid parts in contact with fluid are made from 300 and 400 series stainless steel.
- 3) Continuous duty moulded coil.
- 4) Class B insulation.
- 5) Coil voltages : 24, 48, 110, 220, 440 V A-C.  
24, 48, 110, 220 V D-C.  
(Pressure will differ from AC Pressure by 15%)

Inrush VA 60.  
Holding VA 24  
Watts 12.5

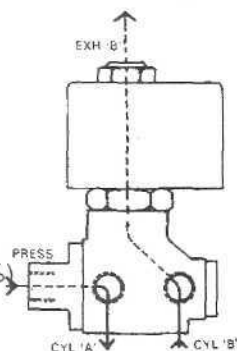
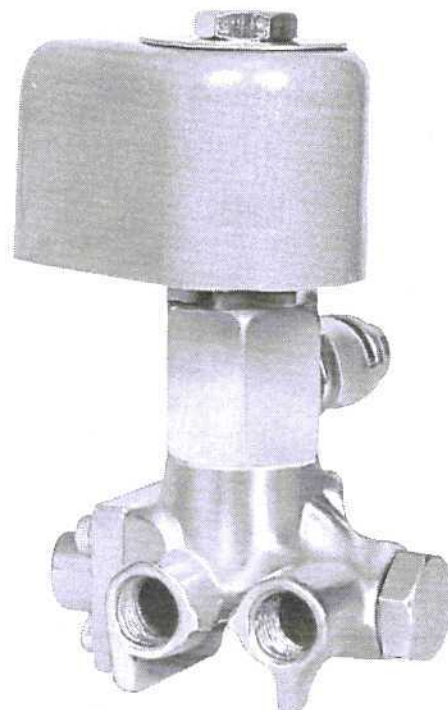
- 6) Ambient : 5°C to 50°C.

#### FREQUENCY OF OPERATION

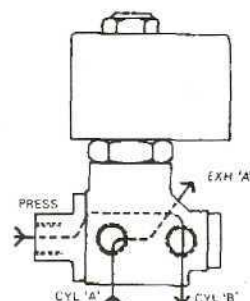
650 Cycles per minute

#### FEATURE :

- 4 way operation.
- Forged brass body
- Silent in operation.
- Solenoid capable of being turned 360°
- Continuous duty moulded coil.
- Compact size
- Can be mounted in any position without affecting performance.
- ▶FLOCON▶ valves are made from quality materials and rigorously tested for leakage and performance. Each valve is subjected to twice the rated voltage plus 1,000 volts at 50 c/s for 60 seconds for Insulation Test.
- ▶FLOCON▶ valves are guaranteed for free replacement against any manufacturing defect.

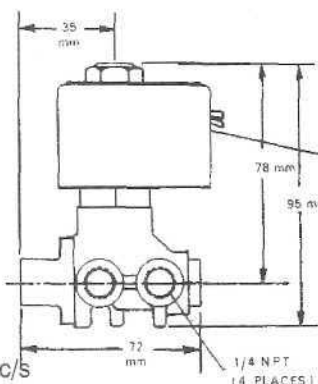


SOLENOID DE-ENERGIZED

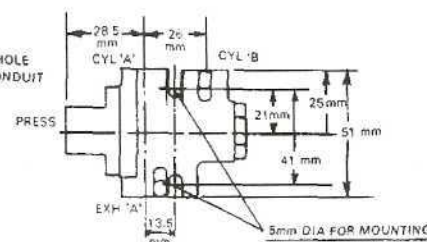


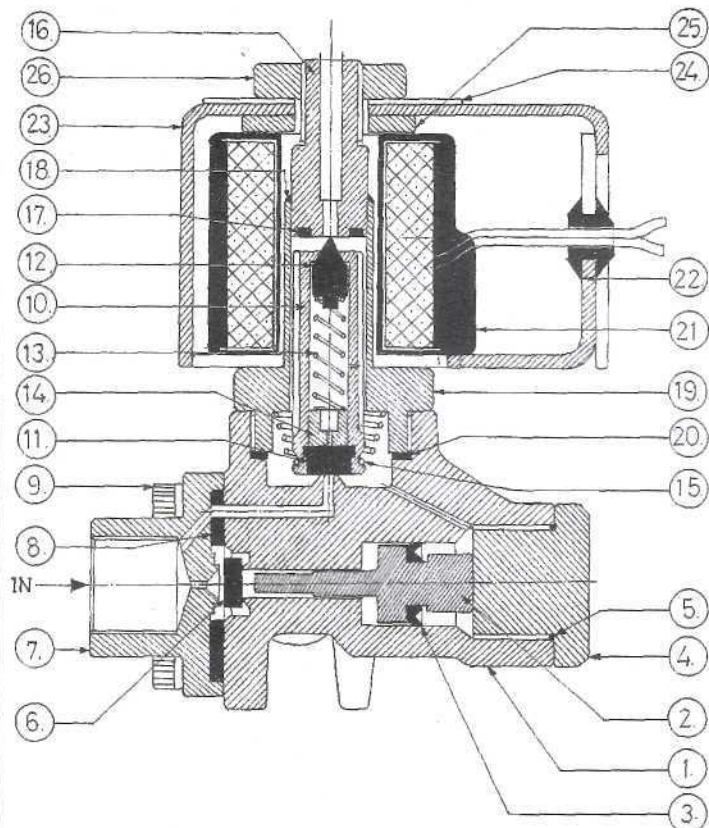
SOLENOID ENERGIZED

#### FLOW DIAGRAMS



DIMENSIONS





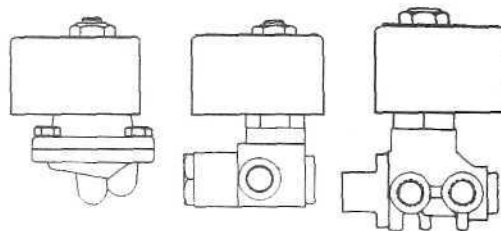
SR. NO.	NAME OF PART	PART NO.	MATERIAL	QTY.
1.	VALVE BODY	FP 40201	BRASS	1
2.	PISTON	FP 40202	S S 304	1
3.	U-CUP SEAL	FP 40203	NEOPRENE	1
4.	END PLUG	FP 40204	BRASS	1
5.	E. P. GASKET	FP 40205	NEOPRENE	1
6.	DISC	FP 40206	NEOPRENE	1
7.	INLET NUT	FP 40207	BRASS	1
8.	I. N. PACKING	FP 40208	NEOPRENE	1
9.	SCREWS	FP 40209	ALLOY STEEL	4
10.	PLUNGER	FP 40210	S S 410	1
11.	PLUNGER SEAT	FP 40211	NEOPRENE	1
12.	STOPPER SEAT	FP 40212	NYLON	1
13.	SPRING FOR '12'	FP 40213	SS 304	1
14.	SLEEVE	FP 40214	SS 304	1
15.	PLUNGER SPRING	FP 40215	SS 304	1
16.	STOPPER	FP 40216	SS 410	1
17.	SHADING RING	FP 40217	COPPER	1
18.	S. S. TUBE	FP 40218	S S 304	1
19.	HEX NUT FOR '18'	FP 40219	BRASS	1
20.	GASKET FOR '19'	FP 40220	NEOPRENE	1
21.	COIL	FP 40221	ENAMELLED C. W.	1
22.	BASE PLATE	FP 40222	C. R. C. A.	1
23.	COIL HOUSING (TOP)	FP 40223	C. R. C. A.	1
24.	NAME PLATE	FP 40224	ALUMINIUM	1
25.	SPRING WASHER	FP 40225	SPRING STEEL	1
26.	TOP NUT	FP 40226	BRASS	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.



ENGINEERS  
INDIA LIMITED

IS 2148



AGENCY APPROVALS FOR FLOCON® SOLENOID VALVES PRECISION INSTRUMENT CO. - MUM-43

ENGINEERS INDIA LIMITED	NEW DELHI	EIL	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	DHANBAD	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			
ADVISE SERVICE & LABOUR INSTITUTE	MUMBAI	DGFASLI	FLAMEPROOF SOLENOID VALVE ENCLOSURE
GENELEC LIMITED	MUMBAI	GENELEC	IP-55

#### MANUFACTURERS :

**PRECISION  
INSTRUMENT  
CO.**

#### WORKS :

124, A-Z INDUSTRIAL ESTATE,  
G. K. MARG, LOWER PAREL, MUMBAI - 400 013.  
PHONE : 2492 6384, 2492 4333  
FAX : 022-2497 4299.



Where the Quality goes in before the Name comes on.