

# FP ULTRA LOW RANGE PRESSURE DIFFERENCE SWITCHES

Ultra Low Range Pressure Difference Switches with User Adjustable Knob



## Salient Features

### Easy to See, Easy to Use!

Set Point easily user adjustable with visible scale in Pascal. (no need of pressure gauge)

### Enclosure

Robust Gravity Die Cast Aluminum

### Long Lasting!

10<sup>6</sup> switching operations

### Trusted all over!

Tested and Proven

## Technical Specifications

**Media:** Air, non-flammable gases and non-aggressive gases

**Housing Material:** IP 66 Gravity Die Cast Aluminium

**Protection Category:** IP66 with cover.

**Ranges:** 20 Pa to 4000 Pa

**Maximum Working Pressure:** 0.1 bar

**Electrical Rating:** Maximum 1.0A (.4 A) / 250VAC

**Electrical Connection:** Standard Terminal Strip provided

**Cable Entry:** ½" NPT

**High Pressure and Low Pressure Port:** 1/8" BSP(F)

**Media Temperature:** 80°C max.

**Ambient Temperature:** -5°C to 60°C



Range Selection Table

Range Code (Orion)	Adjustment Range for Upper Switching Pressure Pa (mm wg)	Switching Differential Set to Pa (mm wg)
FP80	20-200 (2.039-20.395)	10 (1.020)
FP81	40 - 100 (4.079 - 10.197)	20 (2.039)
FP82	40 - 200 (4.0479 - 20.395)	20 (2.039)
FP83	50 - 500 (5.099 - 50.987)	20 (2.039)
FP85	200 - 1000 (20.395 - 101.974)	100 (10.197)
FP86	500 - 2500 (50.987 - 254.935)	150 (15.296)
FP87	1000 - 4000 (101.974 - 407.896)	250 (25.494)

## How to order FP series Low Range Pressure Difference Switches

Please specify the Range Code e.g.. FP82 or FP85 as per range selection table.

## INSTALLATION AND OPERATING INSTRUCTIONS

### Principle of Operation

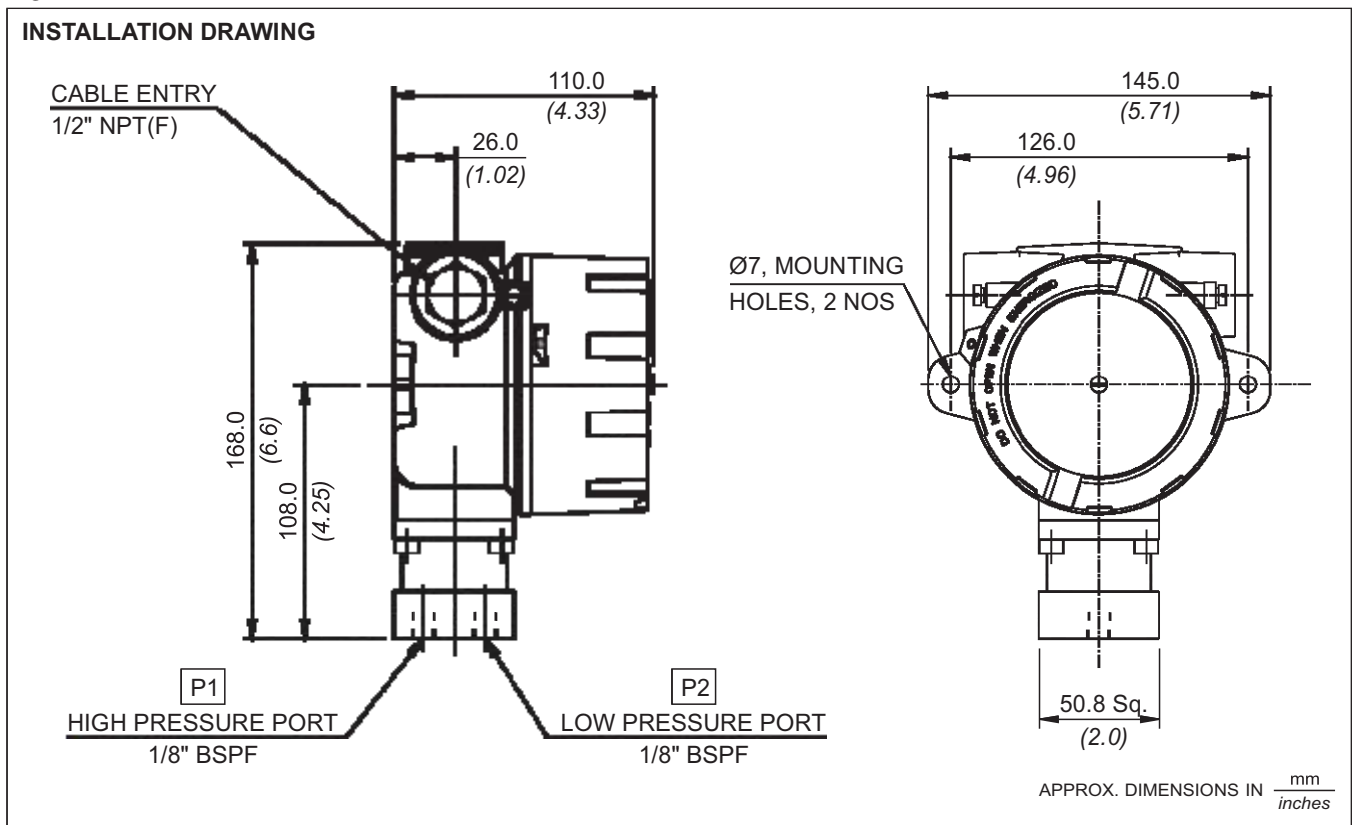
When the effective force generated by the pressure difference in the lower and upper chamber of the pressure capsule exceeds/falls beyond the balancing spring forces, an electrical element is actuated.

### Mounting

The detailed mounting dimensions are shown in Fig. 1.

- 1) Pressure Switches can be mounted on a plate/inside a panel using  $\varnothing 7$  mounting holes provided.
- 2) For any other process connection, please use an adaptor.

Fig. 1



P1 = High Pressure Port  
P2 = Low Pressure Port

- Note :
1. Use two screws only, for mounting
  2. Remove transport protection from P1 and P2

### CAUTION :

Install pressure switch vertically. Installing it at an angle more than  $30^\circ$  to vertical may result in malfunction.

#### Authorised Dealer



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