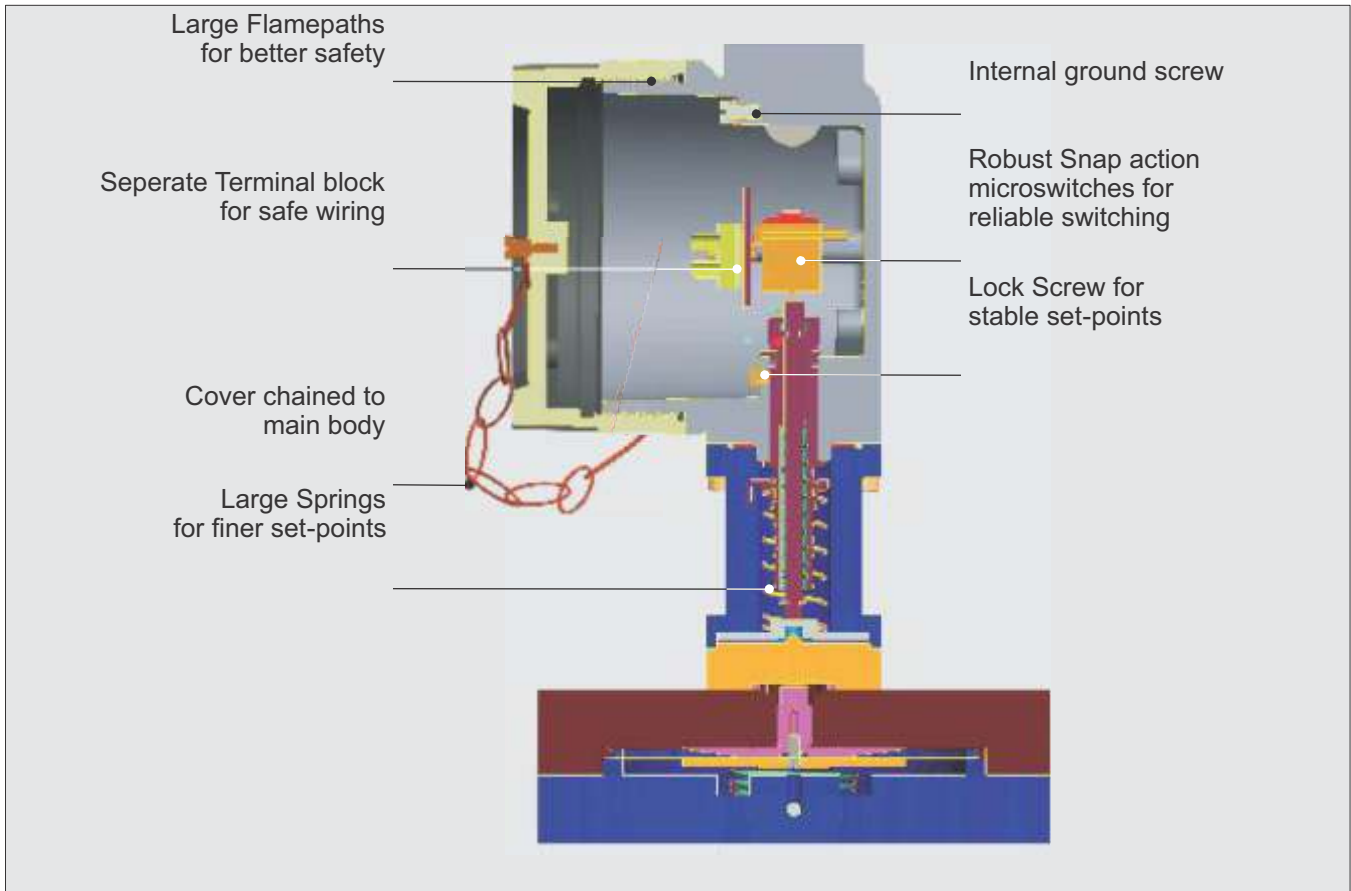


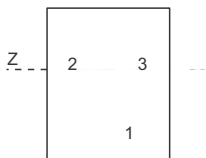
# FC LOW DP HIGH PROOF PRESSURE DIFFERENCE SWITCHES



## Approximate Weight :

Pressure switches with Aluminium enclosure : 7.87 Kg.  
 Pressure switches with Grey CI enclosure : 10.27 Kg.  
 Pressure switches with SS enclosure : 10.42 Kg.

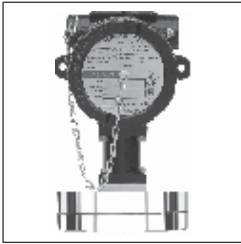
## Electrical Connection :



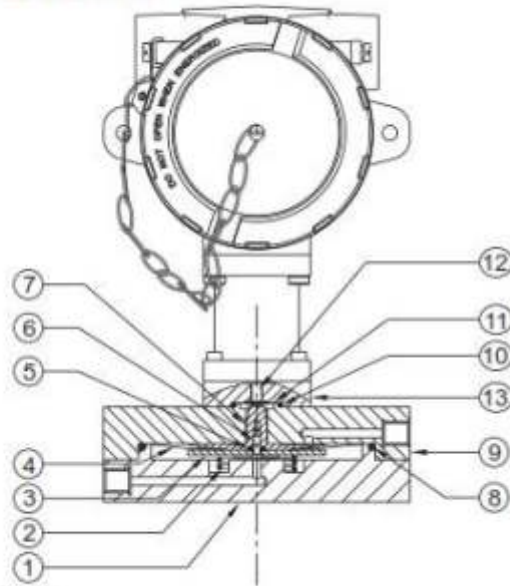
## Some Applications :

Used in gas skids, cooling systems, applications requiring very low pressure difference but high system/proof pressure like pressurization in cross country pipelines, etc.

# FC LOW DP HIGH PROOF PRESSURE DIFFERENCE SWITCHES



## PRESSURE CAPSULE DETAILS

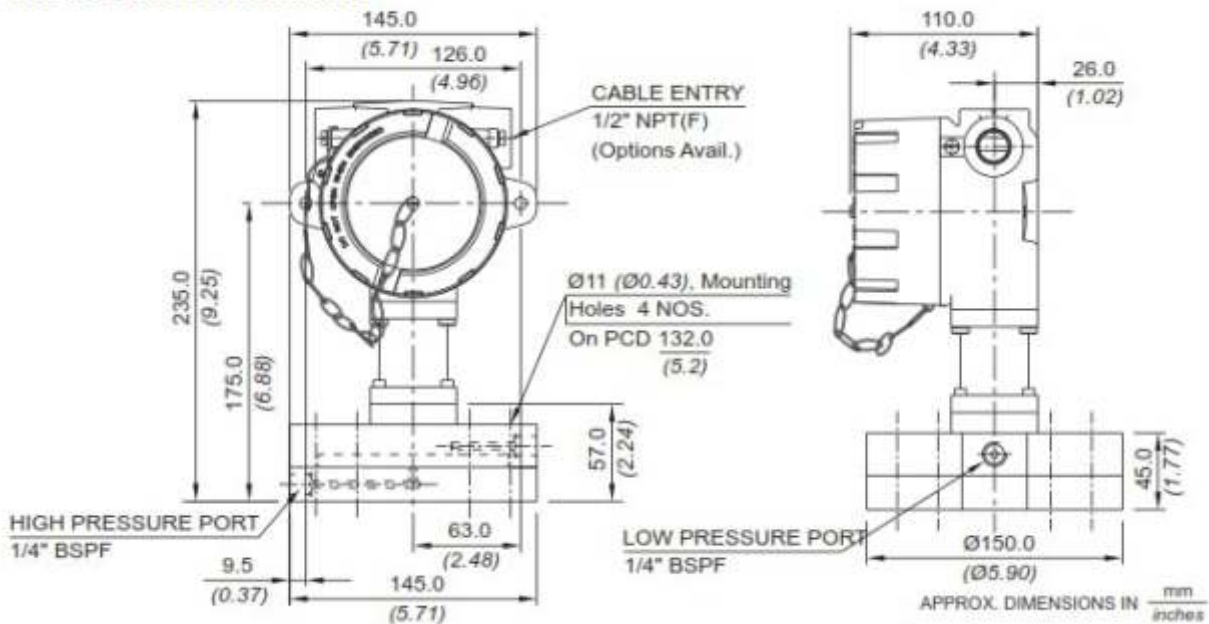


### No. Description

1. High Pressure Housing
2. Spring
3. H P Plunger
4. Diaphragm
5. Plunger 'O' ring
6. Plunger Screw
7. L P Plunger
8. Main Sealing 'O' ring
9. Low Pressure Housing
10. Sealing 'O' ring
11. Diaphragm
12. Small Plunger

Note : wetted parts are mentioned in italics.

## INSTALLATION DRAWING



# FC LOW ΔP HIGH PROOF PRESSURE DIFFERENCE SWITCHES

## RANGE SELECTION TABLE

Range Code	Range mbar ("wc)	Differential* mbar ("wc)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
M03	5 - 25 (2.007 - 10.037)	5 (2.007)	100 (1450.38)
M05	10 - 50 (4.015 - 20.073)	5 (2.007)	100 (1450.38)
M10	10 - 100 (4.015 - 40.150)	10 (4.015)	100 (1450.38)
M15	10 - 150 (4.015 - 60.22)	10 (4.015)	100 (1450.38)
M25	20 - 250 (8.029 - 100.366)	15 (6.022)	100 (1450.38)
M35	50 - 350 (20.073 - 140.52)	35 (14.05)	110 (1595.00)

\*Minimum differential increases with setpoint, values with neoprene diaphragm (Graphs available on request)

\* Differentials of microswitches A2 through A9 will vary. Differentials for A7 are typically twice that for A1 microswitch. Please indicate specifically the differential value in enquiry/order, when it is critical in your application.

Authorised Dealer



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# HOW TO ORDER FLAMEPROOF LOW ΔP HIGH PROOF RANGE PRESSURE DIFFERENCE SWITCHES

LOW ΔP HIGH PROOF PRESSURE DIFFERENCE SWITCHES

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
Non standard allocation	Gas Group Classification	Cable Entry Size	Switch Type	Range Code (values in mbar)	Microswitch Type	Pressure Port Material / Size	Diaphragm
<input type="checkbox"/> Reserved for non-standard options not covered in catalogue. Will be given by manufacturer, only after agreement of supply details with customer.	<b>FC</b> = Flameproof pressure switch, ATEX & IECEx approved, with Aluminium head as per IS/IEC 60079-1 for Gas Gr. IIC	<b>1</b> = Al. head ½" NPT threads <b>2</b> = Al. head ¾" NPT threads <b>3</b> = Al. head M20 x 1.5 threads <b>4</b> = Grey CI head ½" NPT threads <b>5</b> = Grey CI head ¾" NPT threads <b>6</b> = Grey CI head M20 x 1.5 threads <b>7</b> = SS head ½" NPT threads <b>8</b> = SS head ¾" NPT threads <b>9</b> = SS head M20 x 1.5 threads	<b>D1</b> = pressure difference switch, fixed differential without scale  <b>D2</b> = pressure difference switch, fixed differential with scale in mbar  <b>D3</b> = pressure difference switch, fixed differential with scale in "wc	<b>M03</b> = (5 - 25) <b>M05</b> = (10 - 50) <b>M10</b> = (10 - 100) <b>M15</b> = (10 - 150) <b>M25</b> = (20 - 250) <b>M35</b> = (50 - 350)	<b>A1</b> = General purpose microswitch rated at 15 A; 250 VAC <b>*A2</b> = Hermetically sealed for corrosive environments <b>*A3</b> = gold plated contacts for low voltage applications <b>*A4</b> = DPDT configuration <b>*A5</b> = for high DC ratings <b>*A6</b> = elements with adjustable deadband <b>*A7</b> = 2SPDT switching elements <b>*A9</b> = General purpose microswitch rated at 5 A; 250 VAC Please refer page no. 230 for more microswitch options  * Please refer note under Range Selection Table	<b>S1</b> = SS316 / ¼" BSP(F) <b>S2</b> = SS316 / ¼" NPT(F)           Please refer page no. 226 & 227 for more pressure port options	<b>0</b> = Neoprene <b>1</b> = Teflon

eg. A flameproof switch for gas group IIC, with ½" NPT cable entry in aluminium housing as 1SPDT pressure switch, having 20 mbar to 250 mbar pressure range, with 15Amp. microswitch, SS316 pressure housing with ¼" BSP port size & neoprene diaphragm shall be specified by

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
<input type="checkbox"/>	FC	1	P1	M25	A1	S1	0

Please specify full model number to avoid ambiguity. If only the first two groups are specified while ordering, un-calibrated switches with standard wetted parts and enclosures will be supplied.

Continous efforts for product development may necessitate changes in these details without notice

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FC