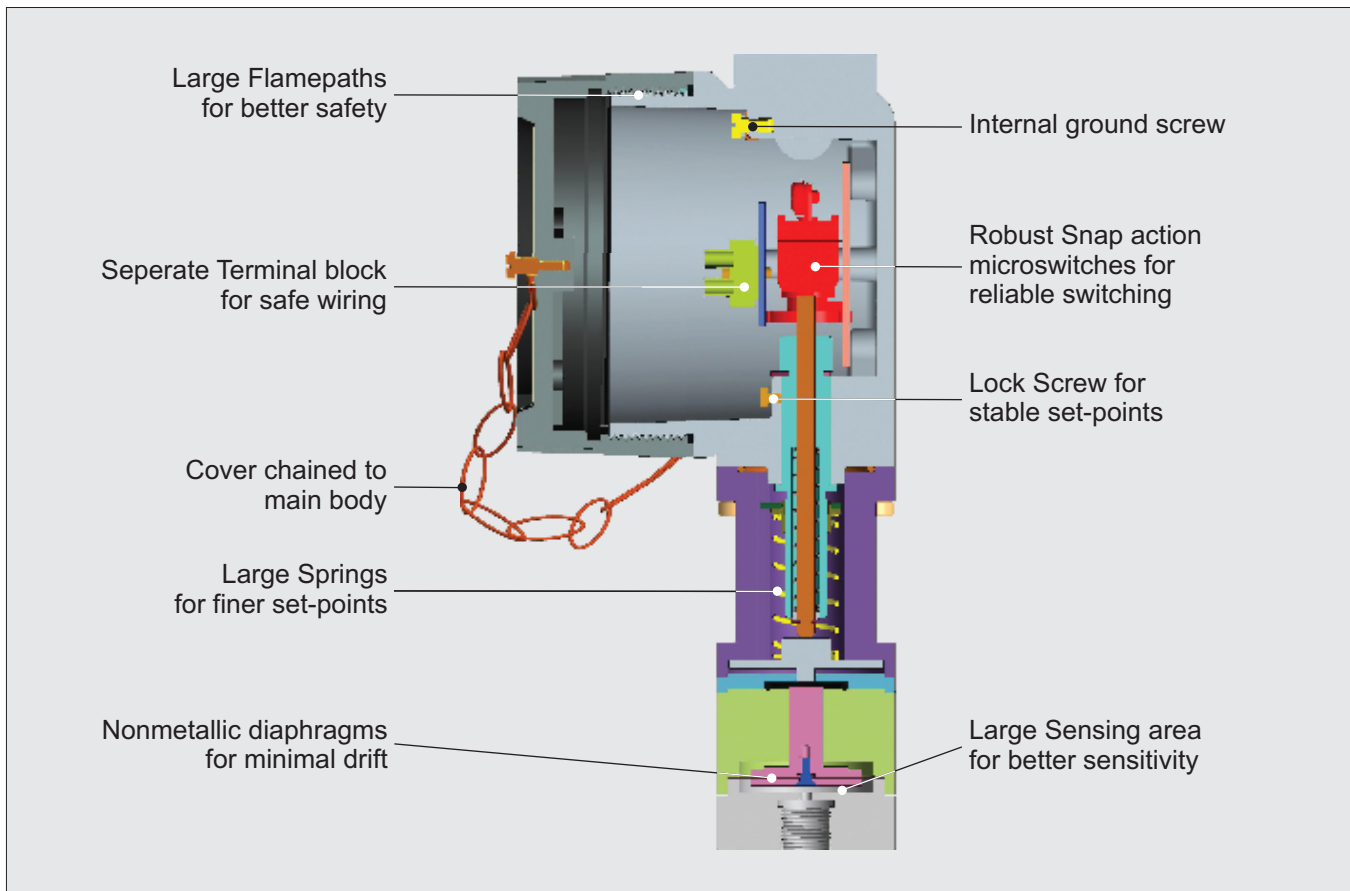


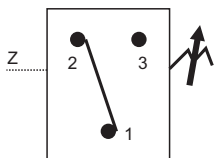
FC HIGH RANGE PRESSURE DIFFERENCE SWITCHES



Approximate Weight :

Pressure difference switches with Aluminium enclosure : 2.03 Kg.
 Pressure difference switches with Grey CI enclosure : 4.43 Kg.
 Pressure difference switches with SS enclosure : 4.56 Kg.

Electrical Connection :

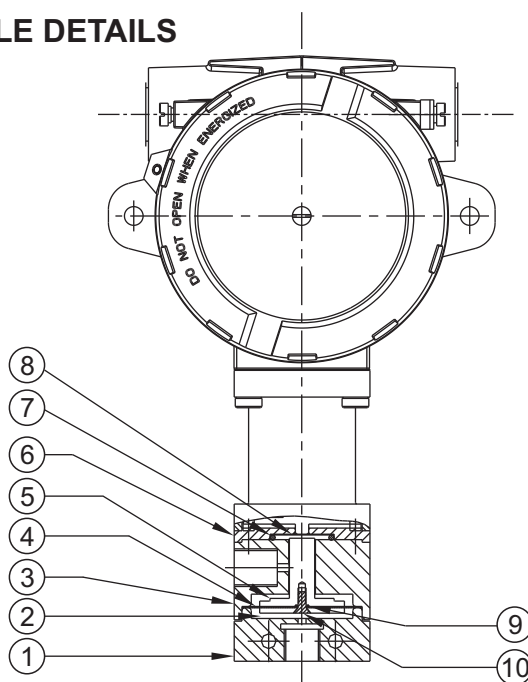


Some Applications :

For sensing clogged filters / strainers, sense low flow in cooling systems



PRESSURE CAPSULE DETAILS

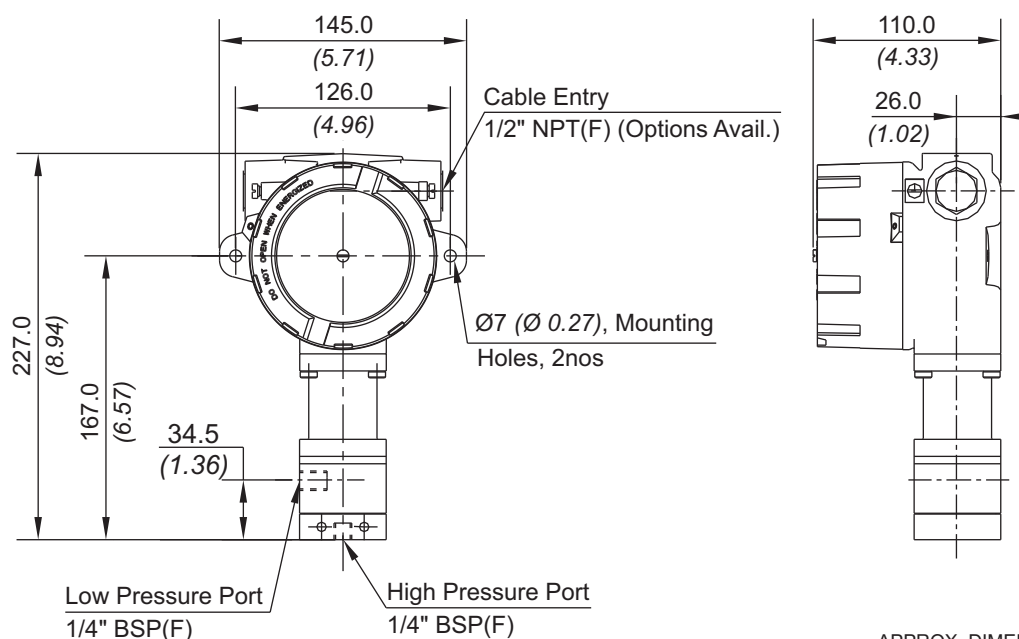


No. Description

1. Pressure Housing
2. HP Plunger (SS316)
3. Disc
4. Diaphragm
5. LP Plunger (SS316)
6. Junction Plate
7. Sealing 'O' Ring (Teflon)
8. Sealing diaphragms (Teflon)
9. 'O' ring (Teflon)
10. CSK screw (SS)

Note : wetted parts are mentioned in italics.

INSTALLATION DRAWING



APPROX. DIMENSIONS IN $\frac{\text{mm}}{\text{inches}}$

FC HIGH RANGE PRESSURE DIFFERENCE SWITCHES

RANGE SELECTION TABLE

Range Code	Range bar (<i>psi</i>)	Differential* bar (<i>psi</i>)	Maximum Working Pressure bar (<i>psi</i>)
		Approximate Maximum for "A1" microswitch	
H01	0.1 - 1.0 (1.45 - 14.50)	0.12 (1.74)	12 (174.05)
H02	0.1 - 1.5 (1.45 - 21.76)	0.20 (2.90)	12 (174.05)
H03	0.2 - 2.6 (2.90 - 37.71)	0.20 (2.90)	12 (174.05)
H04	0.2 - 3.6 (2.90 - 52.21)	0.30 (4.35)	12 (174.05)

*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.

HOW TO ORDER FLAMEPROOF HIGH RANGE 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 bar)	Microswitch Type	Pressure Port Material / Size	Diaphragm
☐ Reserved for non-standard options not covered in catalogue. Will be given by manufacturer, only after agreement of supply details with customer.	FC = Flameproof pressure switch, ATEX & IECEx approved, with Aluminium head as per IS/IEC 60079-1 for Gas Gr. IIC	1 = Al. head 1/2" NPT threads 2 = Al. head 3/4" NPT threads 3 = Al. head M20 x 1.5 threads 4 = Grey CI head 1/2" NPT threads 5 = Grey CI head 3/4" NPT threads 6 = Grey CI head M20 x 1.5 threads 7 = SS head 1/2" NPT threads 8 = SS head 3/4" NPT threads 9 = SS head M20 x 1.5 threads	D1 = pressure difference switch, fixed differential without scale D2 = pressure difference switch, fixed differential with scale in bar D3 = pressure difference switch, fixed differential with scale in psi	H01 = (0.1 - 1.0) H02 = (0.1 - 1.5) H03 = (0.2 - 2.6) H04 = (0.2 - 3.6)	A1 = General purpose microswitch rated at 15A; 250 VAC A2 = Hermetically sealed for corrosive environments A3 = gold plated contacts for low voltage applications A4 = DPDT configuration A5 = for high DC ratings A6 = elements with adjustable deadband A7 = 2SPDT switching elements A9 = General purpose microswitch rated at 5A; 250 VAC	S1 = SS316 / 1/4" BSP(F) S2 = SS316 / 1/4" NPT(F) Please refer page no. 230 & 231 for more pressure port options	0 = Neoprene 1 = Teflon For additional wetted parts please refer Pressure Capsule Details on Page 47

eg. A flameproof switch for gas group IIC, with 1/2" NPT cable entry in aluminium housing as 1SPDT pressure difference switch, having 0.1 bar to 1 bar pressure range, with 15Amp. microswitch, SS316 pressure housing with 1/4" BSP port size & neoprene diaphragm shall be specified by

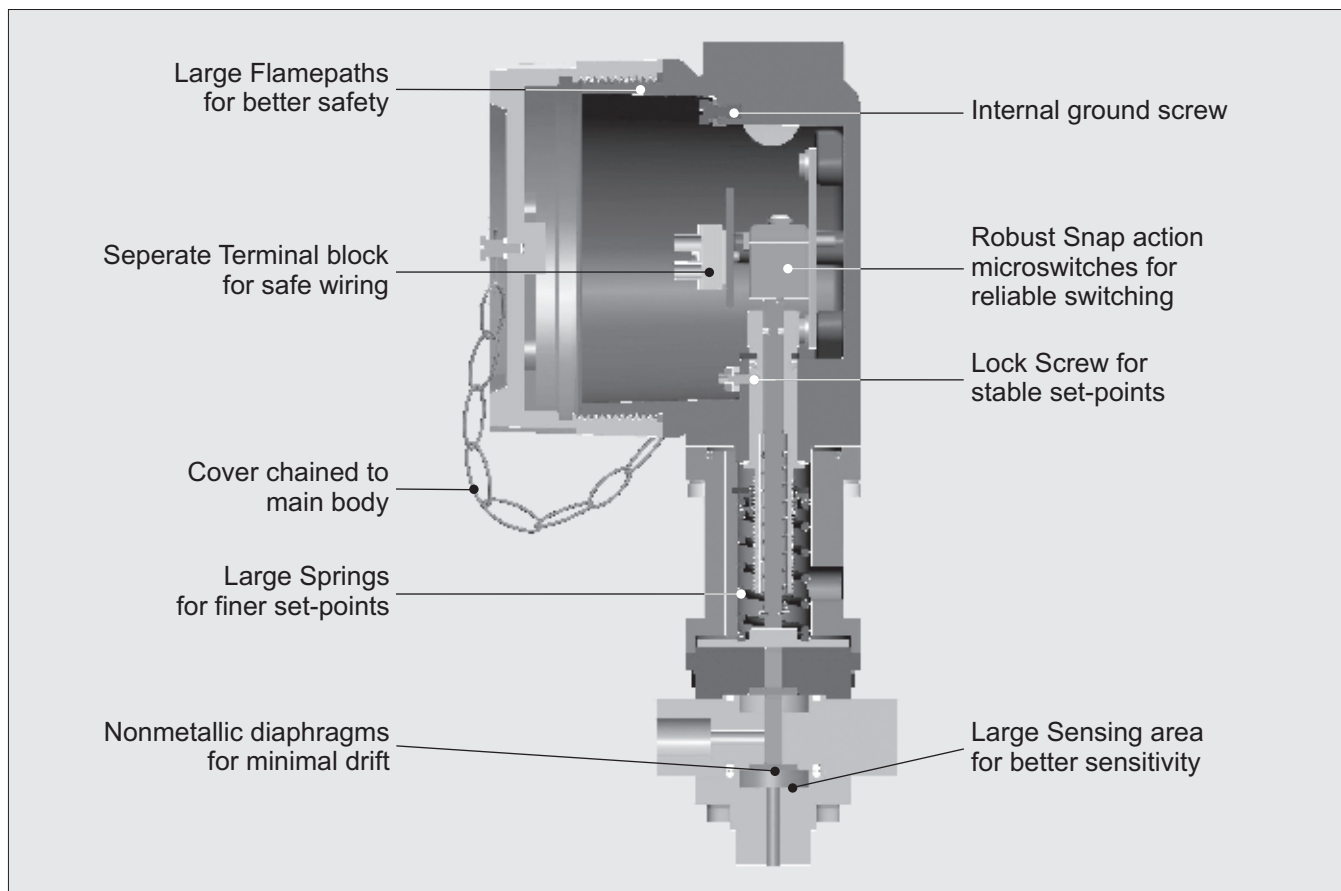
Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
☐	FC	1	D1	H01	A1	S1	0

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

HIGH RANGE PRESSURE DIFFERENCE SWITCHES

FC

FC HIGH PROOF HIGH RANGE PRESSURE DIFFERENCE SWITCHES



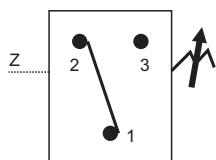
Approximate Weight :

Pressure difference switches with Aluminium enclosure : 2.43 Kg.

Pressure difference switches with Grey CI enclosure : 4.93 Kg.

Pressure difference switches with SS enclosure : 5.13 Kg.

Electrical Connection :

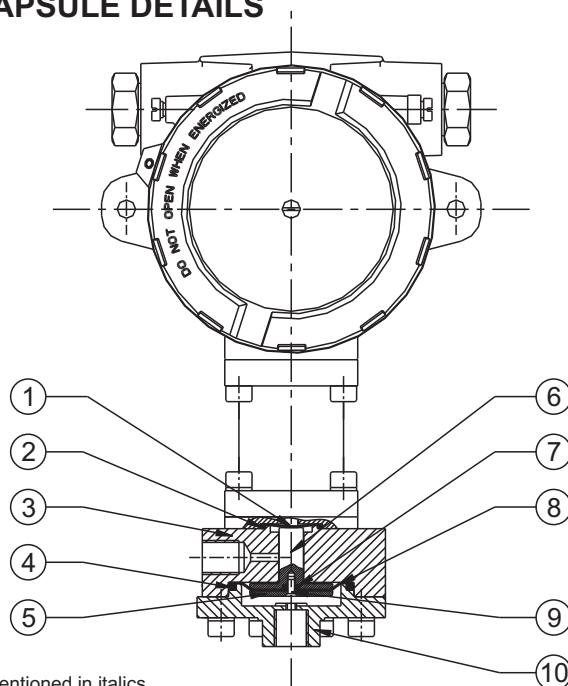


Some Applications :

Applications requiring high static/system pressure but low pressure difference.



PRESSURE CAPSULE DETAILS

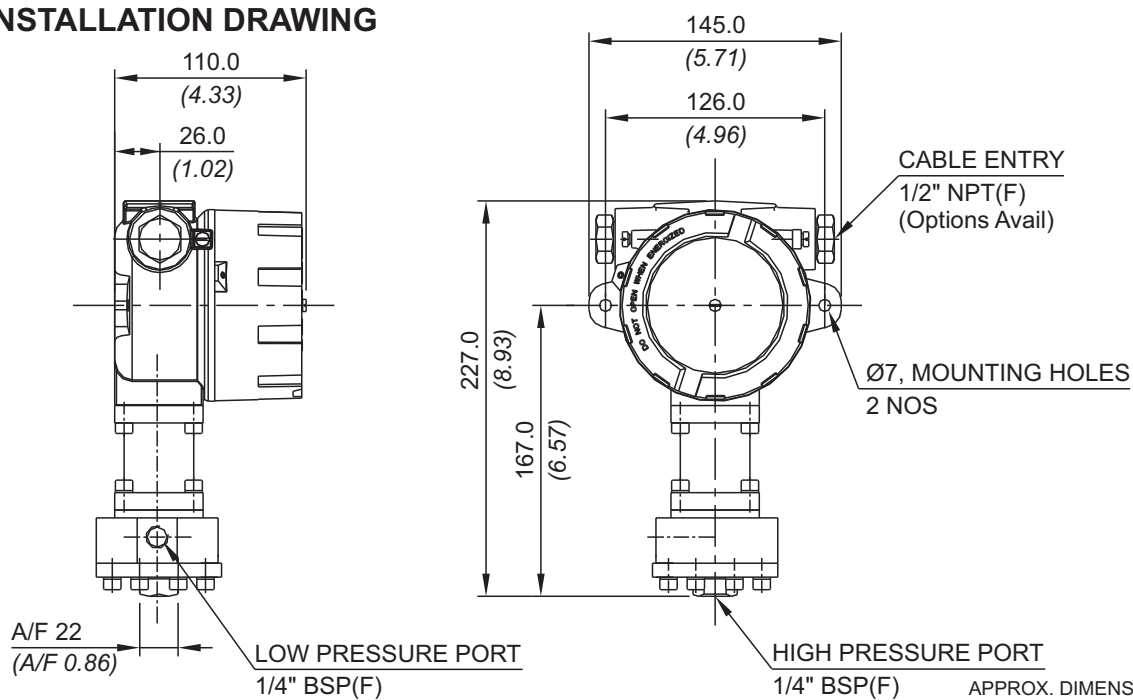


No. Description

1. *Sealing Diaphragm (Teflon)*
2. *Sealing O Ring (Teflon)*
3. *Disc*
4. *Sealing O Ring*
5. *HP Plunger*
6. *LP Plunger*
7. *O Ring*
8. *Diaphragm*
9. *Csk. Screw (S.S.)*
10. *Pressure Housing*

Note : *wetted parts* are mentioned in italics.

INSTALLATION DRAWING



FC HIGH PROOF HIGH RANGE PRESSURE DIFFERENCE SWITCHES

RANGE SELECTION TABLE

Range Code	Range bar (<i>psi</i>)	Differential* bar (<i>psi</i>)	Maximum Working Pressure bar (<i>psi</i>)
		Approximate Maximum for "A1" microswitch	
P01	0.1 - 1.0 (1.45 - 14.50)	0.24 (3.48)	200 (2900.76)
P02	0.1 - 1.5 (1.45 - 21.76)	0.40 (5.80)	200 (2900.76)
P03	0.2 - 2.6 (2.90 - 37.71)	0.40 (5.80)	200 (2900.76)
P04	0.2 - 3.6 (2.90 - 52.21)	0.60 (8.70)	200 (2900.76)

*Minimum differential increases with setpoint (Graphs available on request)

*** Note :**

Microswitches A2 through A9 can be supplied in some ranges and differentials will vary with microswitch used. Please contact sales office for details. Please check availability of adjustable differential with sales office.

HOW TO ORDER FLAMEPROOF HIGH PROOF HIGH RANGE 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 bar)	Microswitch Type	Pressure Port Material / Size	Diaphragm
☐ Reserved for non-standard options not covered in catalogue. Will be given by manufacturer, only after agreement of supply details with customer.	FC = Flameproof pressure switch, ATEX & IECEx approved, with Aluminium head as per IS/IEC 60079-1 for Gas Gr. IIC	1 = Al. head 1/2" NPT threads 2 = Al. head 3/4" NPT threads 3 = Al. head M20 x 1.5 threads 4 = Grey CI head 1/2" NPT threads 5 = Grey CI head 3/4" NPT threads 6 = Grey CI head M20 x 1.5 threads 7 = SS head 1/2" NPT threads 8 = SS head 3/4" NPT threads 9 = SS head M20 x 1.5 threads	D1 = pressure difference switch, fixed differential without scale D2 = pressure difference switch, fixed differential with scale in bar D3 = pressure difference switch, fixed differential with scale in psi	P01 = (0.1 - 1.0) P02 = (0.1 - 1.5) P03 = (0.2 - 2.6) P04 = (0.2 - 3.6)	A1 = General purpose microswitch rated at 15A; 250 VAC A2 = Hermetically sealed for corrosive environments A3 = gold plated contacts for low voltage applications A4 = DPDT configuration A5 = for high DC ratings A6 = elements with adjustable deadband A7 = 2SPDT switching elements A9 = General purpose microswitch rated at 5A; 250 VAC	S1 = SS316 / 1/4" BSP(F) S2 = SS316 / 1/4" NPT(F) Please refer page no. 226 & 227 for more pressure port options	0 = Neoprene 1 = Teflon For additional wetted parts please refer Pressure Capsule Details on Page 51

eg. A flameproof switch for gas group IIC, with 1/2" NPT cable entry in aluminium housing as 1SPDT pressure difference switch, having 0.1 bar to 1 bar pressure range, with 15Amp. microswitch, SS316 pressure housing with 1/4" BSP port size & neoprene diaphragm shall be specified by

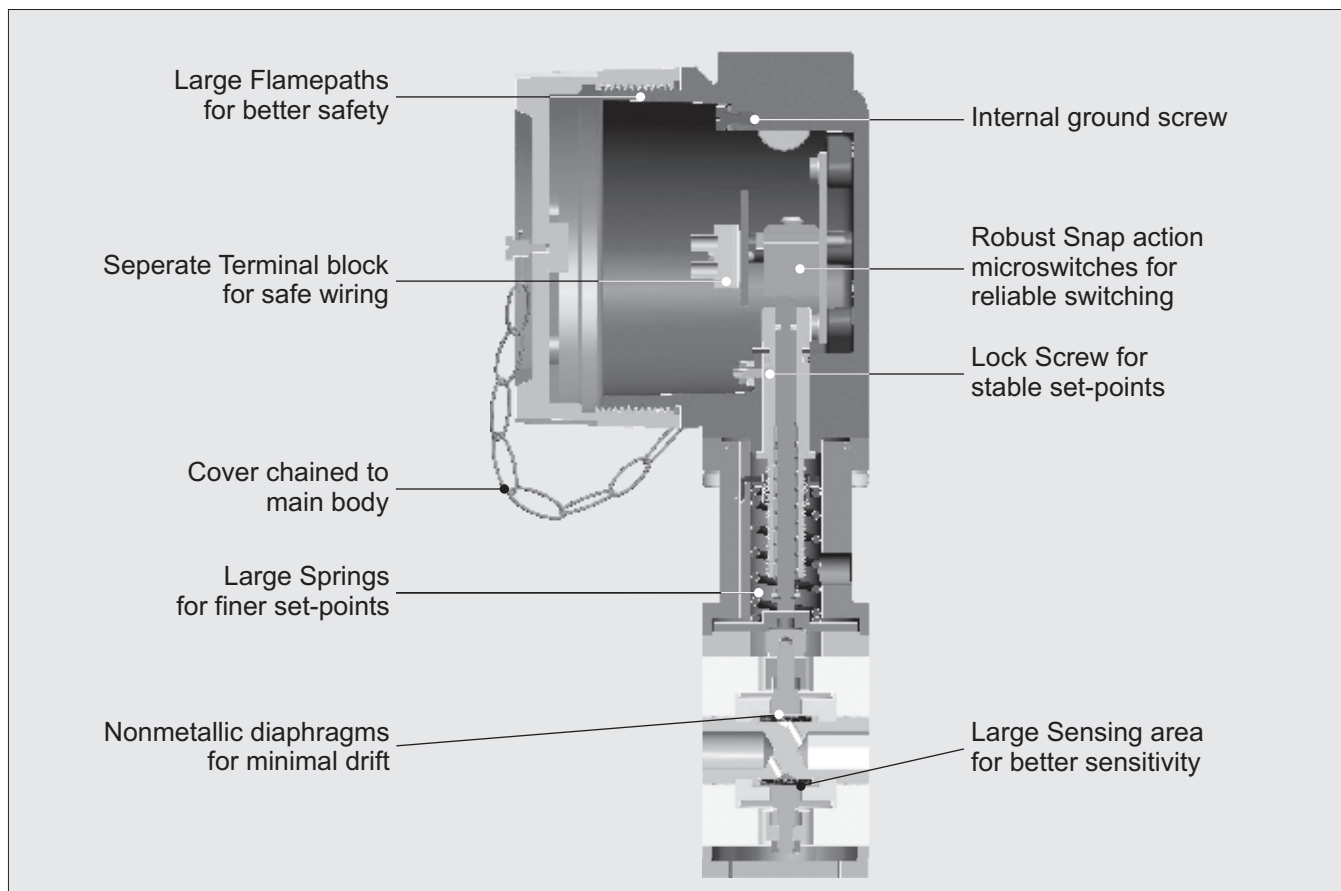
Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
☐	FC	1	D1	P01	A1	S1	0

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

HIGH PROOF HIGH RANGE PRESSURE DIFFERENCE SWITCHES

FC

FC HIGH RANGE DP



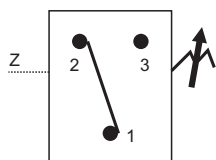
Approximate Weight :

Pressure difference switches with Aluminium enclosure : 2.70 Kg.

Pressure difference switches with Grey CI enclosure : 5.10 Kg.

Pressure difference switches with SS enclosure : 5.25 Kg.

Electrical Connection :

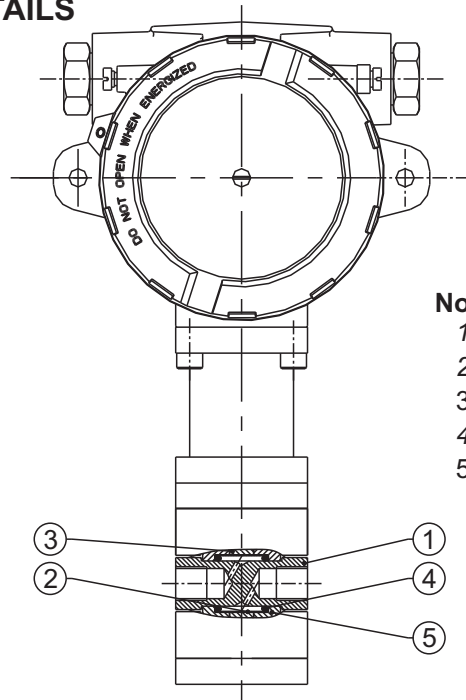


Some Applications :

Applications requiring high static/system pressure but low pressure difference.



PRESSURE CAPSULE DETAILS

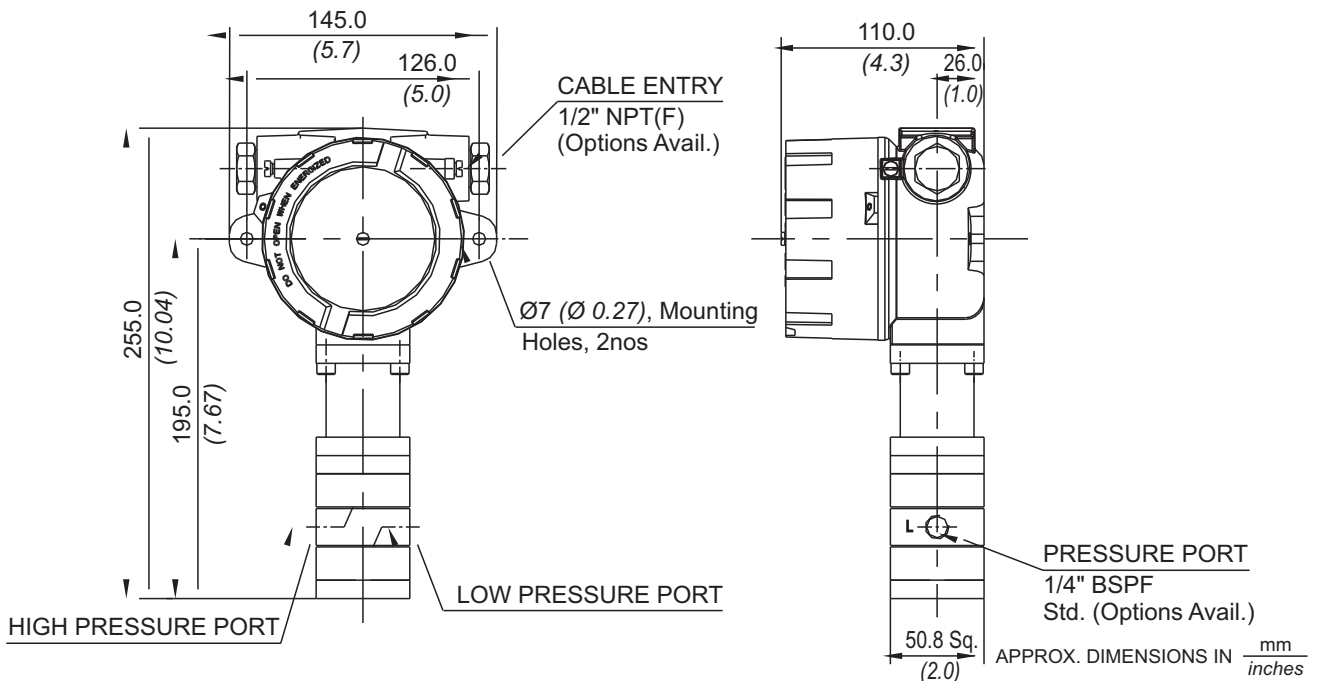


No. Description

1. Pressure Housing
2. Diaphragm
3. Plunger
4. O-Ring
5. Disc

Note : *wetted parts* are mentioned in italics.

INSTALLATION DRAWING



FC HIGH RANGE DP

RANGE SELECTION TABLE

Range Code	Range bar (psi)	Differential* bar (psi)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
D01	0.1 - 1.0 (1.45 - 14.50)	0.10 (1.45)	70 (1015.26)
D02	0.1 - 1.5 (1.45 - 21.76)	0.12 (1.74)	70 (1015.26)
D03	0.2 - 2.6 (2.90 - 37.71)	0.17 (2.46)	70 (1015.26)
D04	0.2 - 3.6 (2.90 - 52.21)	0.10 (1.45)	70 (1015.26)
D07	0.5 - 7.0 (7.25 - 101.50)	0.20 (2.9)	70 (1015.26)
D10	0.5 - 10.0 (7.25 - 145.037)	0.20 (2.9)	70 (1015.26)
D15	1.0 - 15.0 (14.50 - 217.56)	0.50 (7.25)	70 (1015.26)
D30	5.0 - 25.0 (72.52 - 362.59)	0.50 (7.25)	70 (1015.26)

*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.

HOW TO ORDER FLAMEPROOF HIGH RANGE DP 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 bar)	Microswitch Type	Pressure Port Material / Size	Diaphragm
☐ Reserved for non-standard options not covered in catalogue. Will be given by manufacturer, only after agreement of supply details with customer.	FC = Flameproof pressure switch, ATEX & IECEx approved, with Aluminium head as per IS/IEC 60079-1 for Gas Gr. IIC	1 = Al. head 1/2" NPT threads 2 = Al. head 3/4" NPT threads 3 = Al. head M20 x 1.5 threads 4 = Grey CI head 1/2" NPT threads 5 = Grey CI head 3/4" NPT threads 6 = Grey CI head M20 x 1.5 threads 7 = SS head 1/2" NPT threads 8 = SS head 3/4" NPT threads 9 = SS head M20 x 1.5 threads	D1 = pressure difference switch, fixed differential without scale D2 = pressure difference switch, fixed differential with scale in bar D3 = pressure difference switch, fixed differential with scale in psi	D01 = (0.1 - 1.0) D02 = (0.1 - 1.5) D03 = (0.2 - 2.6) D04 = (0.2 - 3.6) D07 = (0.5 - 7.0) D10 = (0.5 - 10.0) D15 = (1.0 - 15.0) D30 = (5.0 - 25.0)	A1 = General purpose microswitch rated at 15A; 250 VAC A2 = Hermetically sealed for corrosive environments A3 = gold plated contacts for low voltage applications A4 = DPDT configuration A5 = for high DC ratings A6 = elements with adjustable deadband A7 = 2SPDT switching elements A9 = General purpose microswitch rated at 5A; 250 VAC	S1 = SS316 / 1/4" BSP(F) S2 = SS316 / 1/4" NPT(F) N1 = Monel / 1/4" BSP(F) N2 = Monel / 1/4" NPT(F) I1 = Inconel / 1/4" BSP(F) I2 = Inconel / 1/4" NPT(F) Please refer page no. 226 & 227 for more pressure port options	0 = Neoprene 1 = Teflon 2 = SS316L 4 = Monel 7 = Inconel
Please refer page no. 230 for more microswitch options * Please refer note under Range Selection Table						For additional wetted parts please refer Pressure Capsule Details on Page 55	

eg. A flameproof switch for gas group IIC, with 1/2" NPT cable entry in aluminium housing as 1SPDT pressure difference switch, having 0.1 bar to 1 bar pressure range, with 15Amp. microswitch, SS316 pressure housing with 1/4" 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
☐	FC	1	D1	D01	A1	S1	0

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