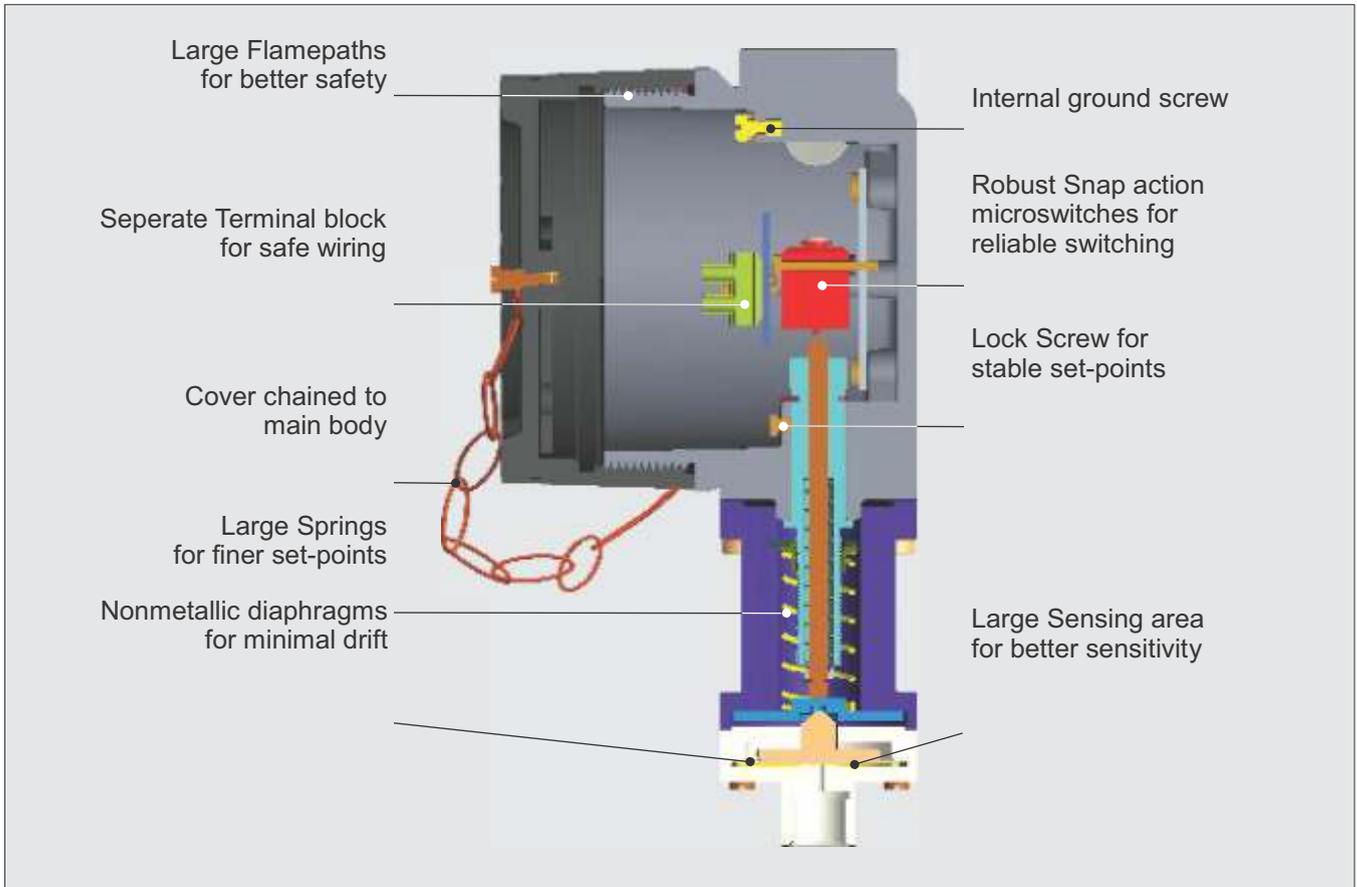


# FC HIGH PRESSURE RANGES



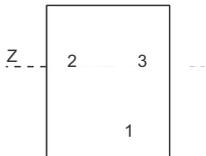
## Approximate Weight :

Pressure switches with Aluminium enclosure : 1.87 Kg.

Pressure switches with Grey CI enclosure : 4.27 Kg.

Pressure switches with SS enclosure : 4.42 Kg.

## Electrical Connection :



## Some Applications :

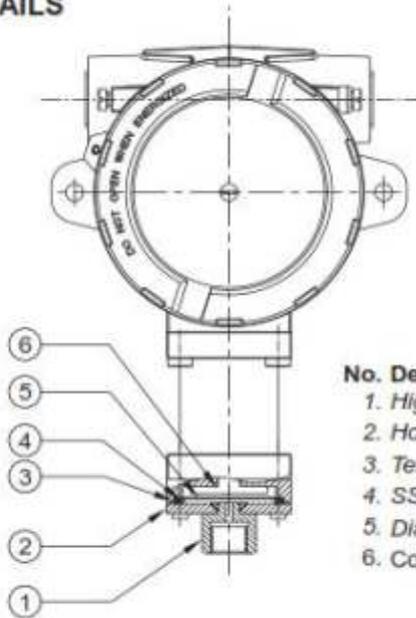
Used in hazardous areas for applications like fire fighting systems, LPG bottling plants, etc. For any type of corrosive and non-corrosive gases and fluids.

# FC

# HIGH PRESSURE RANGES



## PRESSURE CAPSULE DETAILS

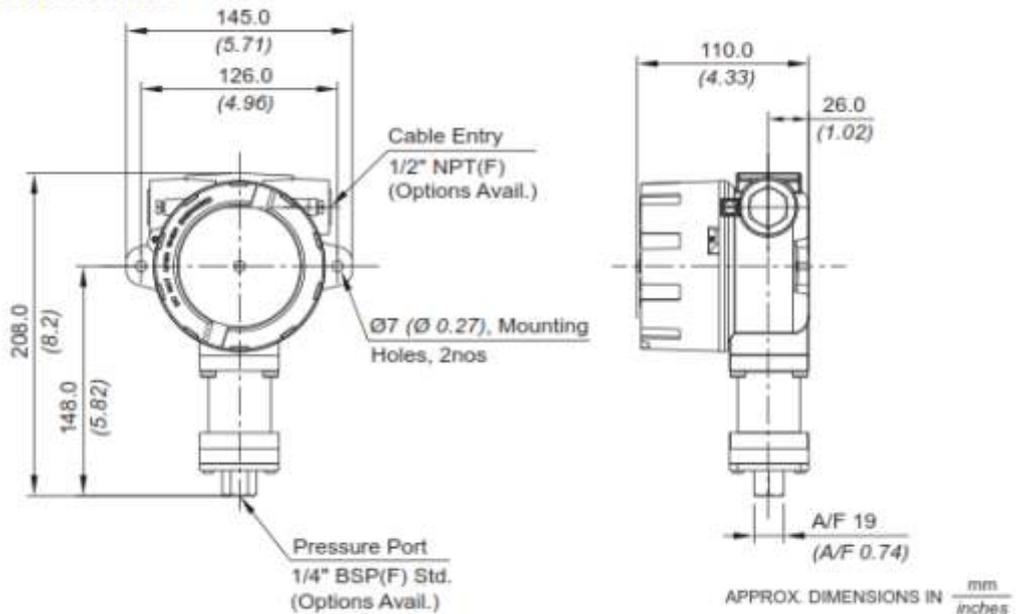


**No. Description**

- 1. High Pressure Port (SS316)
- 2. Housing Plate (SS316)
- 3. Teflon® O-Ring
- 4. SS 316 Ring
- 5. Diaphragm (Teflon®)
- 6. Conical Plunger

Note : wetted parts are mentioned in italics.

## INSTALLATION DRAWING



# FC HIGH PRESSURE RANGES

## RANGE SELECTION TABLE

Range Code	Range bar (psi)	Differential* bar (psi)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
LP	0.067 - 0.213 (0.97 - 3.09)	0.02 (0.29)	5 (72.52)
LP5	0.1 - 0.5 (1.45 - 7.25)	0.08 (1.16)	5 (72.52)
H01	0.1 - 1.0 (1.45 - 14.50)	0.10 (1.45)	12 (174.05)
H02	0.1 - 1.5 (1.45 - 21.76)	0.12 (1.74)	12 (174.05)
H03	0.2 - 2.6 (2.90 - 37.71)	0.15 (2.17)	12 (174.05)
H04	0.2 - 3.6 (2.90 - 52.21)	0.20 (2.90)	12 (174.05)
H07	0.5 - 7.0 (7.25 - 101.50)	0.20 (2.90)	12 (174.05)
H10	0.5 - 10.0 (7.25 - 145.037)	0.40 (5.80)	25 (362.6)
H15	1.0 - 15.0 (14.5 - 217.56)	0.50 (7.25)	25 (362.6)
H30	5.0 - 25.0 (72.52 - 362.6)	1.0 (14.5)	35 (507.63)

\*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 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
<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>P 1</b> = pressure switch, fixed differential without scale <b>P 2</b> = pressure switch, fixed differential with scale in bar <b>P 3</b> = pressure switch, fixed differential with scale in psi	<b>LP</b> = (0.067 - 0.213) <b>LP5</b> = (0.1 - 0.5) <b>H01</b> = (0.1 - 1.0) <b>H02</b> = (0.1 - 1.5) <b>H03</b> = (0.2 - 2.6) <b>H04</b> = (0.2 - 3.6) <b>H07</b> = (0.5 - 7.0) <b>H10</b> = (0.5 - 10.0) <b>H15</b> = (1.0 - 15.0) <b>H30</b> = (5.0 - 25.0)	<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) <b>H1</b> = Hastelloy C / ¼" BSP(F) <b>H2</b> = Hastelloy C / ¼" NPT(F) <b>N1</b> = Monel / ¼" BSP(F) <b>N2</b> = Monel / ¼" NPT(F) Please refer page no. 226 & 227 for more pressure port options	<b>0</b> = Neoprene <b>1</b> = Teflon <b>2</b> = SS 316L <b>3</b> = Hastelloy C <b>4</b> = Monel <b>5</b> = Titanium <b>6</b> = Tantalum <b>7</b> = Inconel

eg. A flameproof switch for gas group IIC, with ½" NPT cable entry in aluminium housing as 1SPDT pressure switch, having 0.1 bar to 1 bar pressure range, with 15Amp. Micro switch, 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	H01	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.

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

Authorised Dealer

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	<p>Telefax Nos.: 91-22-25301330 / 31 / 32            Web: http://www.nkstruments.com            Gtalk: nkstruments2006</p>	

HIGH PRESSURE RANGES

FC