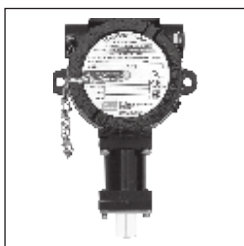


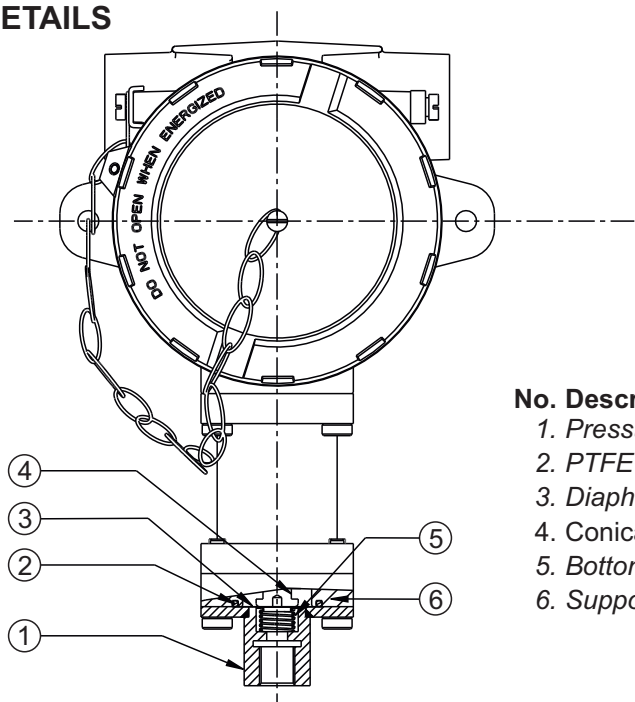
FC/FE HIGH RANGE COMPOUND SWITCHES



FC



PRESSURE CAPSULE DETAILS

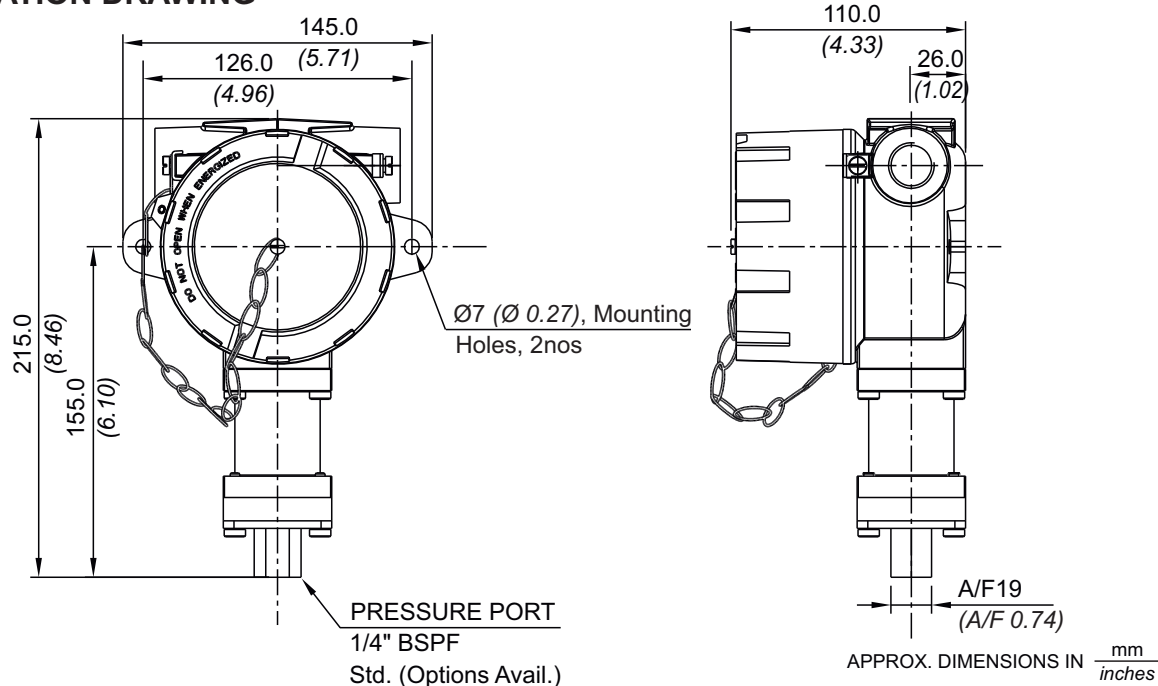


No. Description

1. Pressure Housing
2. PTFE O-Ring
3. Diaphragm
4. Conical Plunger
5. Bottom Spring
6. Support Plate

Note : *wetted parts* are mentioned in italics.

INSTALLATION DRAWING



FC/FE HIGH RANGE COMPOUND SWITCHES

RANGE SELECTION TABLE

Range Code	Range bar (psi)	Differential* bar (psi)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
C01	-1 to 1.0 (-14.50 to 14.50)	0.15 (2.17)	12.0 (174.05)
C02	-1 to 1.5 (-14.50 to 21.75)	0.2 (2.90)	12.0 (174.05)
C03	-1 to 2.6 (-14.50 to 37.71)	0.3 (4.35)	12.0 (174.05)
C04	-1 to 3.6 (-14.50 to 52.21)	0.4 (5.80)	12.0 (174.05)
C07	-1 to 7 (-14.50 to 101.53)	0.8 (11.603)	12.0 (174.05)

Note:

1. The minimum differential increases with the setpoint. The differential values mentioned in the above table are approximate maximum for FSR. The differential value will vary according to the pressure range selected and microswitch type. For actual values of differential please contact sales office.

2. When using 2SPDT switching arrangement, both microswitches may not actuate and/or deactuate at the same point. A small stage gap, normally upto +/- 5% FSR (depending on range code) may be observed. The On-Off differential (hysteresis) typically tends to be atleast double of those published for 1SPDT pressure switches.

If actuation and/or deactuation at same point is critical part of operation, then it can be achieved by using a separate DPDT relay. This relay will need a separate power supply for it's coil.

HOW TO ORDER FLAMEPROOF COMPOUND RANGE SWITCHES

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
Non standard allocation	Model	Cable Entry Size	Switch Type	Range Code (values in bar)	Microswitch Type	Pressure Port Material / Size	Diaphragm
☐ A prefix "N" is used in the model code in case of any non standard options / accessories that are provided with the switches. Will be given by manufacturer, only after agreement of supply details with customer.	FC = IP66 Flameproof pressure switch, ATEX, IECEx & PESO approved FE = IP66 Flameproof pressure switch, PESO approved	1 = Al. head ½" NPT threads 2 = Al. head ¾" NPT threads 3 = Al. head M20 x 1.5 threads *4 = Grey Cl head ½" NPT threads *5 = Grey Cl head ¾" NPT threads *6 = Grey Cl head M20 x 1.5 threads 7 = SS head ½" NPT threads 8 = SS head ¾" NPT threads 9 = SS head M20 x 1.5 threads	C1 = compound switch, fixed differential without scale	C01 = (-1 to 1.0) C03 = (-1 to 2.6) C04 = (-1 to 3.6) C07 = (-1 to 7.0)	A1 = General purpose microswitch rated at 15 A; 250 VAC *A6 = elements with adjustable deadband *A7 = 2SPDT switching elements A8 = General purpose microswitch rated at 5 A, 250 VAC; 5 A, 28 VDC *B7 = 2SPDT Switching Elements C6 = 1SPDT Adjustable Differential	S1 = SS316 / ¼" BSP(F) S2 = SS316 / ¼" NPT(F)	0 = Neoprene 1 = PTFE 2 = SS 316L
The prefix is subject to change as per specific requirement.							
Approx. switch weight in Kgs							
Enclosure	FC	FE					
Aluminium	2.110	1.510					
Grey Cl	4.520	3.920					
SS	4.610	4.110					
			For adjustable differential please select microswitches A6 or C6 in group 6				
			*Not available in FE models				
				Please refer to page nos. 120 & 121 for options and specifications of microswitches * Please contact sales office for additional information			
				More options available, please contact sales office			

eg. A flameproof switch for gas group IIC, with ½" NPT cable entry in aluminium housing as 1SPDT pressure switch, having -1 bar to +1 bar 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
☐	FC	1	C1	C01	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 COMPOUND SWITCHES

FC/FE