

MD/MT

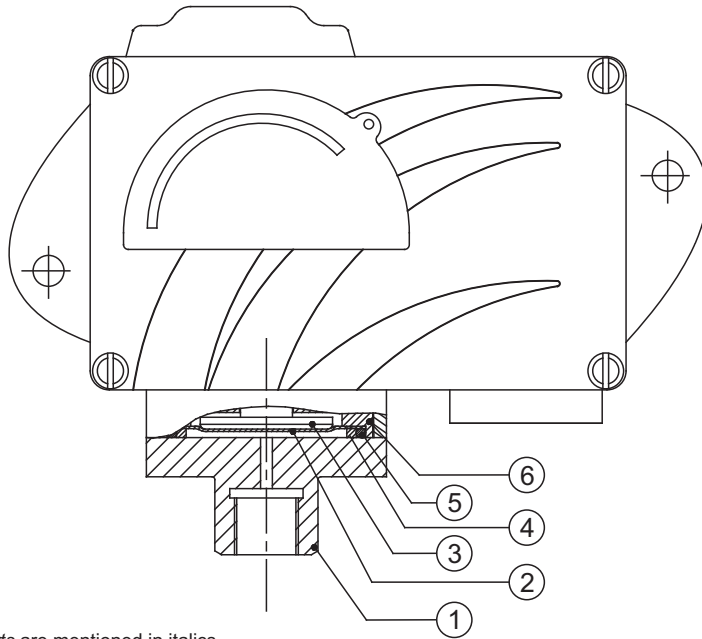
HIGH PROOF HIGH RANGE PRESSURE SWITCHES



MD



PRESSURE CAPSULE DETAILS

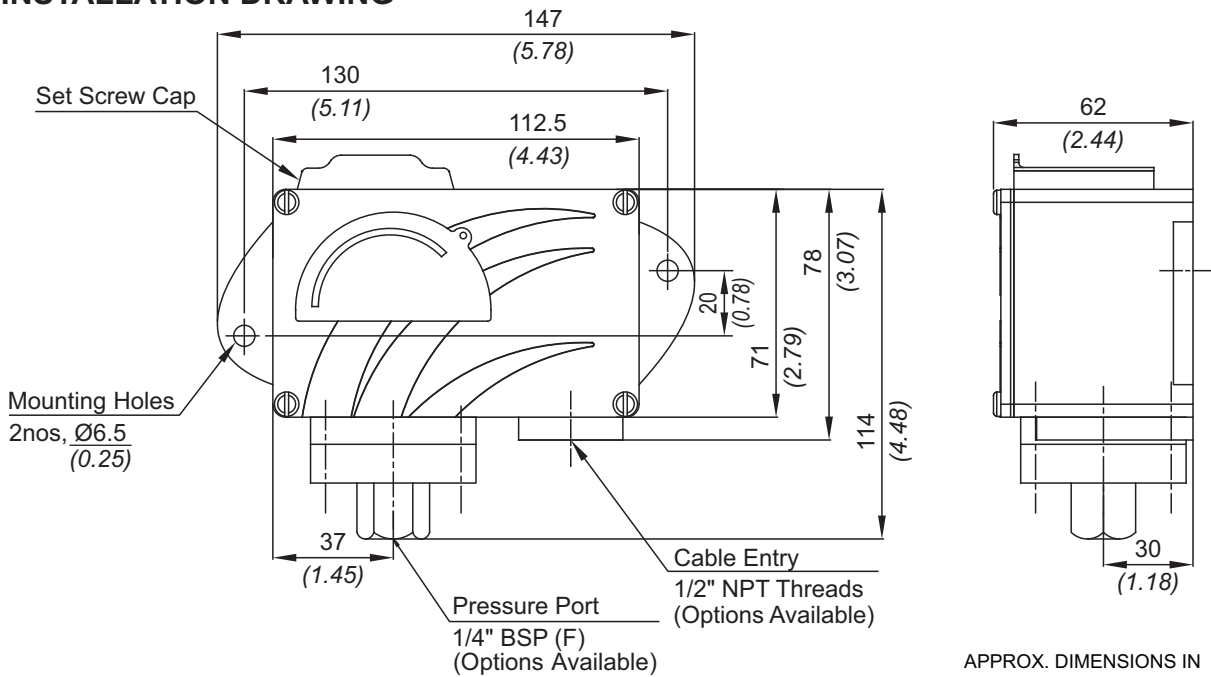


No. Description

1. *Pressure Housing (SS316)*
2. *Diaphragm (PTFE[®])*
3. *Plunger (SS)*
4. *Steel Ring (SS316)*
5. *O-Ring (PTFE[®])*
6. *Disc (Al)*

Note : *wetted parts* are mentioned in italics.

INSTALLATION DRAWING



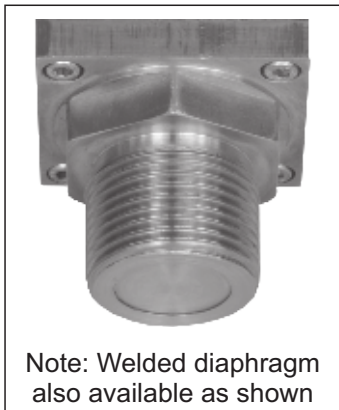
MD/MT HIGH PROOF HIGH RANGE PRESSURE SWITCHES

RANGE SELECTION TABLE

Range Code	Range bar (psi)	Differential* bar (psi)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
P01	0.1 - 1.0 (1.45 - 14.50)	0.20 (2.90)	70 (1015.27)
P02	0.2 - 1.5 (2.90 - 21.76)	0.20 (2.90)	70 (1015.27)
P03	0.2 - 2.6 (2.90 - 37.71)	0.30 (4.35)	70 (1015.27)
P04	0.2 - 3.6 (2.90 - 52.21)	0.40 (5.80)	70 (1015.27)
P07	0.5 - 7.0 (7.25 - 101.50)	0.60 (8.70)	70 (1015.27)
P10	0.5 - 10.0 (7.25 - 145.04)	0.80 (11.60)	70 (1015.27)
P15	1.0 - 15.0 (14.5 - 217.6)	1.50 (23.21)	70 (1015.27)
P30	5.0 - 25.0 (72.52 - 362.5)	2.00 (29.00)	70 (1015.27)

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.



Note: Welded diaphragm also available as shown

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.

HIGH PROOF HIGH RANGE PRESSURE SWITCHES

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HOW TO ORDER INDUSTRIAL HIGH PROOF HIGH RANGE PRESSURE SWITCHES

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8									
<p>Non standard allocation</p> <p><input type="checkbox"/> 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.</p> <p>The prefix is subject to change as per specific requirement.</p>	<p>Model</p> <p>MD = Industrial pressure switch with IP66 rated enclosure as per IS/IEC 60529</p> <p>MT = Industrial pressure switch with IP66 rated enclosure as per IS/IEC 60529</p>	<p>Cable Entry Size</p> <p>1 = Al. enclosure 1/2" NPT threads *2 = Al. enclosure 3/4" NPT threads 3 = Al. enclosure M20 X 1.5 threads 7 = SS enclosure, 1/2" NPT threads *8 = SS enclosure, 3/4" NPT threads 9 = SS enclosure, M20 X 1.5 threads</p>	<p>Switch Type</p> <p>PF1 = pressure switch, fixed differential without scale PF2 = pressure switch, fixed differential with scale in bar PF3 = pressure switch, fixed differential with scale in psi *PA1 = pressure switch, adjustable differential without scale *PA2 = pressure switch, adjustable differential with scale in bar *PA3 = pressure switch, adjustable differential with scale in psi</p>	<p>Range Code (values in bar)</p> <p>P01 = (0.1 - 1.0) P02 = (0.2 - 1.5) P03 = (0.2 - 2.6) P04 = (0.2 - 3.6) P07 = (0.5 - 7.0) P10 = (0.5 - 10.0) P15 = (1.0 - 15.0) P30 = (5.0 - 25.0)</p>	<p>Microswitch Type</p> <p>A1 = General purpose microswitch, rated at 15 A; 250 VAC *A6 = Adjustable deadband *A7 = 2SPDT switching elements *A8 = General purpose microswitch *A9 = General purpose microswitch *B7 = 2SPDT Switching Elements *B9 = 2SPDT Switching Elements for adjustable differential</p>	<p>Pressure Port Material / Size</p> <p>S1 = SS316 / 1/4" BSP(F) S2 = SS316 / 1/4" NPT(F) S3 = (welded diaphragm) SS316 / 1" BSP(M) S4 = SS316 / 1/2" NPT(F) S5 = SS316 / 1/2" NPT(M) H1 = Hastelloy C / 1/4" BSP(F) H2 = Hastelloy C / 1/4" NPT(F) N1 = Monel / 1/4" BSP(F) N2 = Monel / 1/4" NPT(F)</p>	<p>Diaphragm</p> <p>0 = Neoprene 1 = PTFE 2 = SS 316L 3 = Hastelloy C 4 = Monel</p>									
		<p>*Please refer to page nos. 290 & 291 for options and specifications of microswitches Please contact sales office for additional information</p>				<p>More options available, please contact sales office</p>										
		<p>*Not available for MT model For dual cable entry contact Sales Office</p>														
		<p>Approx. switch weight in Kgs</p> <table border="1"> <thead> <tr> <th>Enclosure</th> <th>MD</th> <th>MT</th> </tr> </thead> <tbody> <tr> <td>Aluminium</td> <td>1.200</td> <td>1.780</td> </tr> <tr> <td>SS</td> <td>2.710</td> <td>3.780</td> </tr> </tbody> </table>		Enclosure	MD	MT	Aluminium	1.200	1.780	SS	2.710	3.780				
Enclosure	MD	MT														
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SS	2.710	3.780														

eg. A high proof high range industrial switch with 1/2" NPT cable entry in aluminium housing as 1SPDT pressure switch, fixed differential without scale, 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

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<input type="checkbox"/>	MD	1	PF1	P01	A1	S1	0

Please specify full model number to avoid ambiguity.