

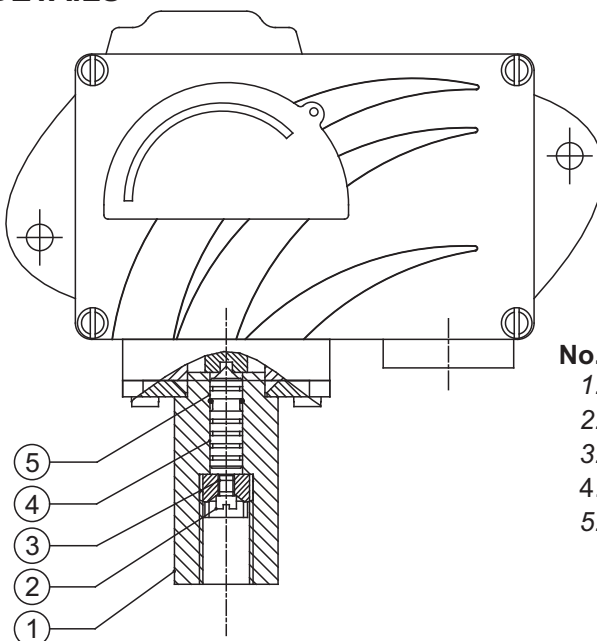
MD/MT HYDRAULIC RANGE PRESSURE SWITCHES



MD



PRESSURE CAPSULE DETAILS

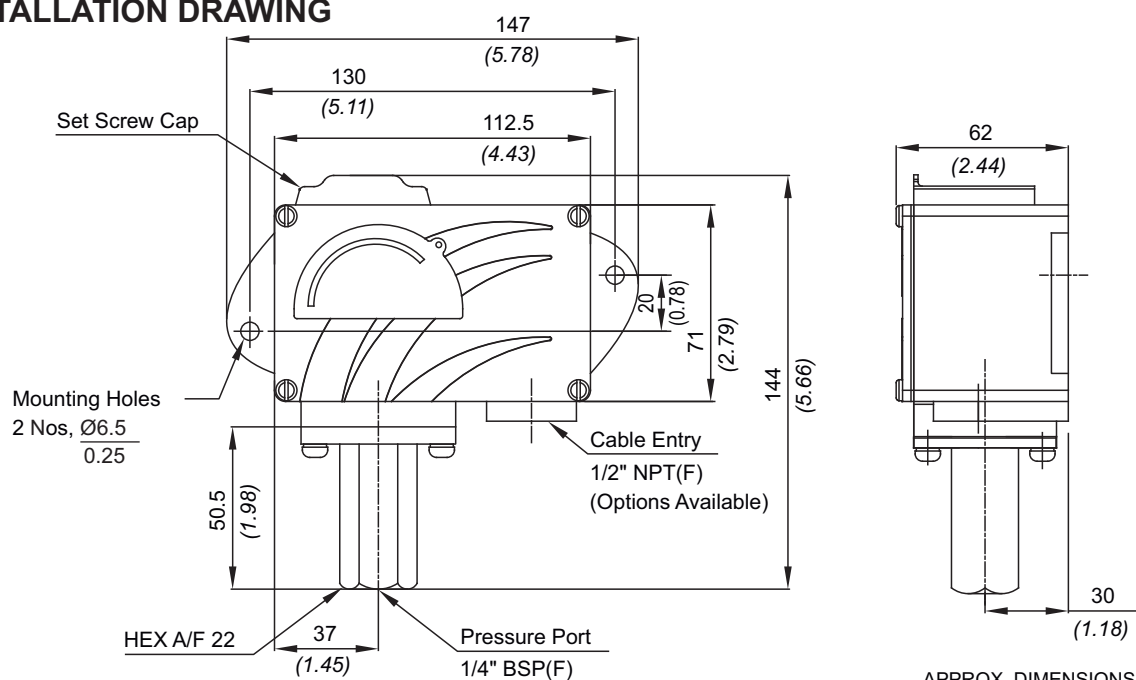


No. Description

1. Pressure Housing (SS316)
2. Surge Arrestor (SS)
3. Surge Reducer (Brass)
4. Piston (SS)
5. O-Ring (Viton)
(Options Available)

Note : wetted parts are mentioned in italics.

INSTALLATION DRAWING



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

MD/MT HYDRAULIC RANGE PRESSURE SWITCHES

RANGE SELECTION TABLE

Range Code	Range bar (psi)	Differential* bar (psi)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
040	5 - 40 (72.52 - 580.15)	5 (72.52)	80 (1160.30)
100	10 - 100 (145.04 - 1450.38)	12 (174.05)	120 (1740.45)
200	10 - 200 (145.03 - 2900.76)	24 (348.09)	300 (4351.13)
350	35 - 350 (507.63 - 5076.33)	30 (435.11)	400 (5801.52)
400	100 - 400 (1450.38 - 5801.52)	40 (580.15)	500 (7251.9)
700	100 - 700 (1450.38 - 10152.64)	70 (1015.26)	800 (11603.00)

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 INDUSTRIAL HYDRAULIC RANGE PRESSURE 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	Piston									
☐ 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. The prefix is subject to change as per specific requirement.	MD = Industrial pressure switch with IP66 rated enclosure as per IS/IEC 60529 MT = Industrial pressure switch with IP66 rated enclosure as per IS/IEC 60529	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	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	040 = (5 - 40) 100 = (10 - 100) 200 = (10 - 200) 350 = (35 - 350) 400 = (100 - 400) 700 = (100 - 700)	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 * Please refer to page nos. 290 & 291 for options and specifications of microswitches Please contact sales office for additional information	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) More options available, please contact sales office	2 = SS 316L									
	Approx. switch weight in Kgs		<table><tr><td>Enclosure</td><td>MD</td><td>MT</td></tr><tr><td>Aluminium</td><td>0.850</td><td>1.310</td></tr><tr><td>SS</td><td>2.360</td><td>2.920</td></tr></table>						Enclosure	MD	MT	Aluminium	0.850	1.310	SS	2.360
Enclosure	MD	MT														
Aluminium	0.850	1.310														
SS	2.360	2.920														

eg. A hydraulic industrial switch, with 1/2" NPT cable entry in aluminium housing as 1SPDT pressure switch, fixed differential without scale, having 5 bar to 40 bar pressure range, with 15Amp. microswitch, SS316 pressure housing with 1/4" BSP port size shall be specified by

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
☐	MD	1	PF1	040	A1	S1	2

Please specify full model number to avoid ambiguity.

HYDRAULIC RANGE PRESSURE SWITCHES

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