

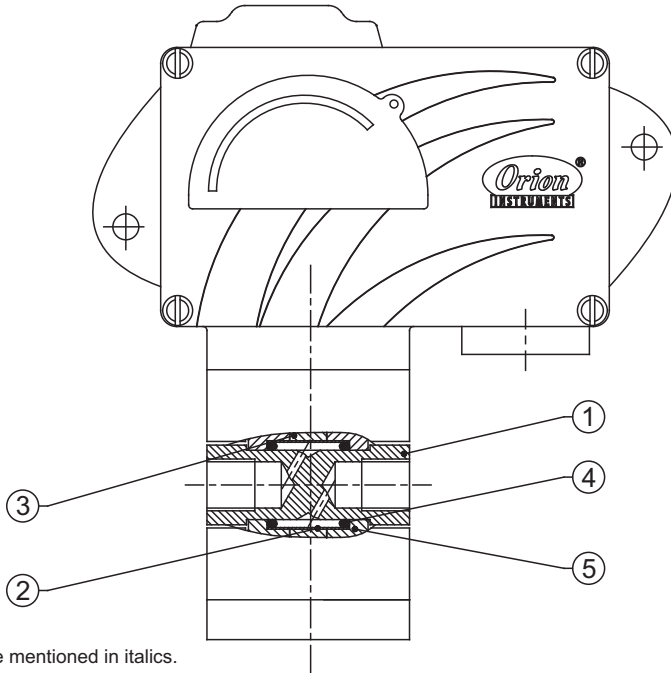
MD/MT HYDRAULIC RANGE DP



MD



PRESSURE CAPSULE DETAILS

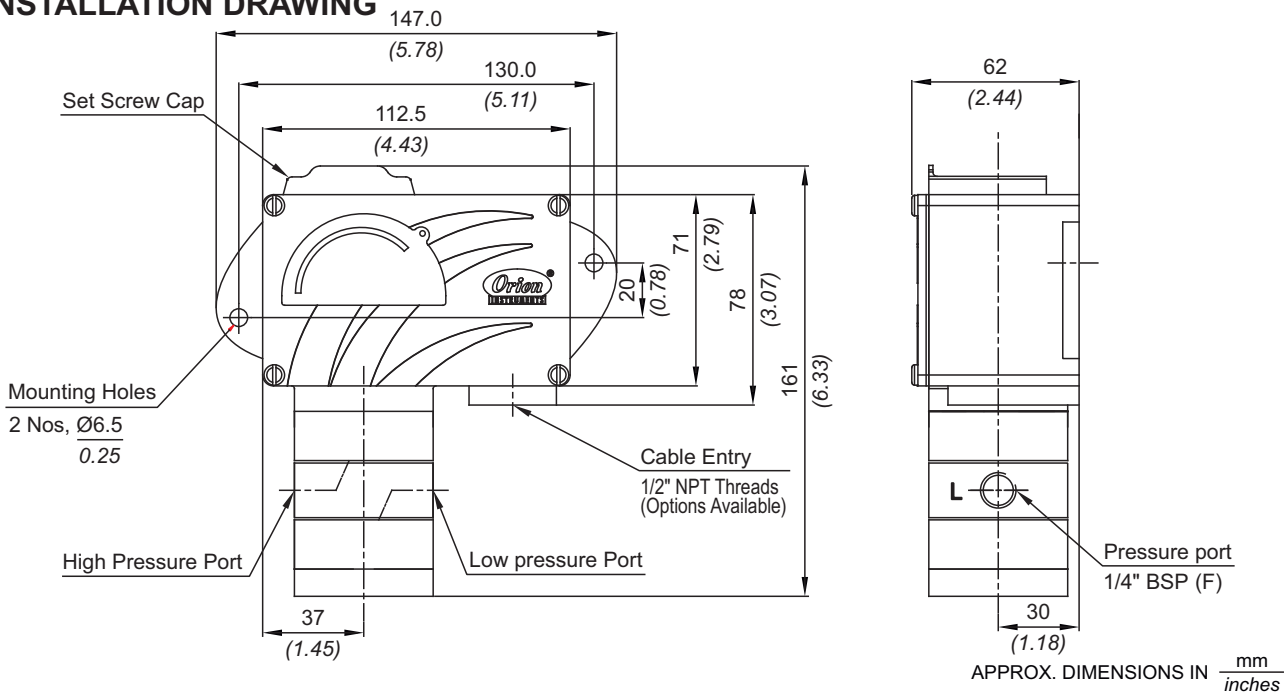


No. Description

1. Pressure Housing (SS)
2. Diaphragm (SS or PTFE®)
3. Plunger (SS)
4. O-Ring (Viton)
5. Disc (Al)

Note : *wetted parts* are mentioned in italics.

INSTALLATION DRAWING



MD/MT HYDRAULIC RANGE DP

RANGE SELECTION TABLE

Range Code	Range bar (psi)	Differential* bar (psi)	Maximum Working Pressure bar (psi)
		Approximate Maximum for "A1" microswitch	
H1U	0.1 - 1.0 (1.45 - 14.50)	0.30 (4.35)	150 (2175)
H2U	0.2 - 1.5 (2.90 - 21.75)	0.30 (4.35)	150 (2175)
H3U	0.2 - 2.6 (2.90 - 37.7)	0.40 (5.8)	150 (2175)
H4U	0.2 - 3.6 (2.90 - 52.2)	0.40 (5.8)	150 (2175)
H7U	0.5 - 7.0 (7.25 - 101.5)	0.80 (11.60)	150 (2175)
D1T	1.0 - 10.0 (14.50 - 145)	1.00 (14.50)	200 (2900)
D2T	2.0 - 20.0 (29.00 - 290.70)	2.00 (29.00)	200 (2900)
D3T	3.0 - 30.0 (43.51 - 435.11)	2.50 (36.25)	200 (2900)
D4T	5.0 - 40.0 (72.50 - 580)	4.00 (58)	400 (5800)
D1H	10 - 100 (145.00 - 1450)	10.00 (145)	400 (5800)
D2H	10.0 - 200 (145.00 - 2900)	20.00 (290)	400 (5800)

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 DP SWITCHES

HYDRAULIC RANGE DP

MD/MT

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									
<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. 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	DF1 = pressure difference switch, fixed differential without scale DF2 = pressure difference switch, fixed differential with scale in bar DF3 = pressure difference switch, fixed differential with scale in psi *DA1 = pressure difference switch, adjustable differential without scale *DA2 = pressure difference switch, adjustable differential with scale in bar *DA3 = pressure difference switch, adjustable differential with scale in psi *Available with A6, A7, A9 & B9 (in group 6) only	H1U = (0.1 - 1.0) H2U = (0.2 - 1.5) H3U = (0.2 - 2.6) H4U = (0.2 - 3.6) H7U = (0.5 - 7.0) D1T = (1 - 10.0) D2T = (2.0 - 20.0) D3T = (3.0 - 30.0) D4T = (5.0 - 40.0) D1H = (10.0 - 100.0) D2H = (10.0 - 200.0)	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) 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)	For additional wetted parts please contact sales office									
Approx. switch weight in Kgs <table border="1"> <thead> <tr> <th>Enclosure</th> <th>MD</th> <th>MT</th> </tr> </thead> <tbody> <tr> <td>Aluminium</td> <td>1.720</td> <td>2.120</td> </tr> <tr> <td>SS</td> <td>3.230</td> <td>3.710</td> </tr> </tbody> </table>	Enclosure	MD	MT	Aluminium	1.720	2.120	SS	3.230	3.710		*Not available for MT model For dual cable entry contact Sales Office					
Enclosure	MD	MT														
Aluminium	1.720	2.120														
SS	3.230	3.710														

eg. A high range pressure difference 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

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
<input type="checkbox"/>	MD	1	DF1	H1U	A1	S1	0

Please specify full model number to avoid ambiguity.