

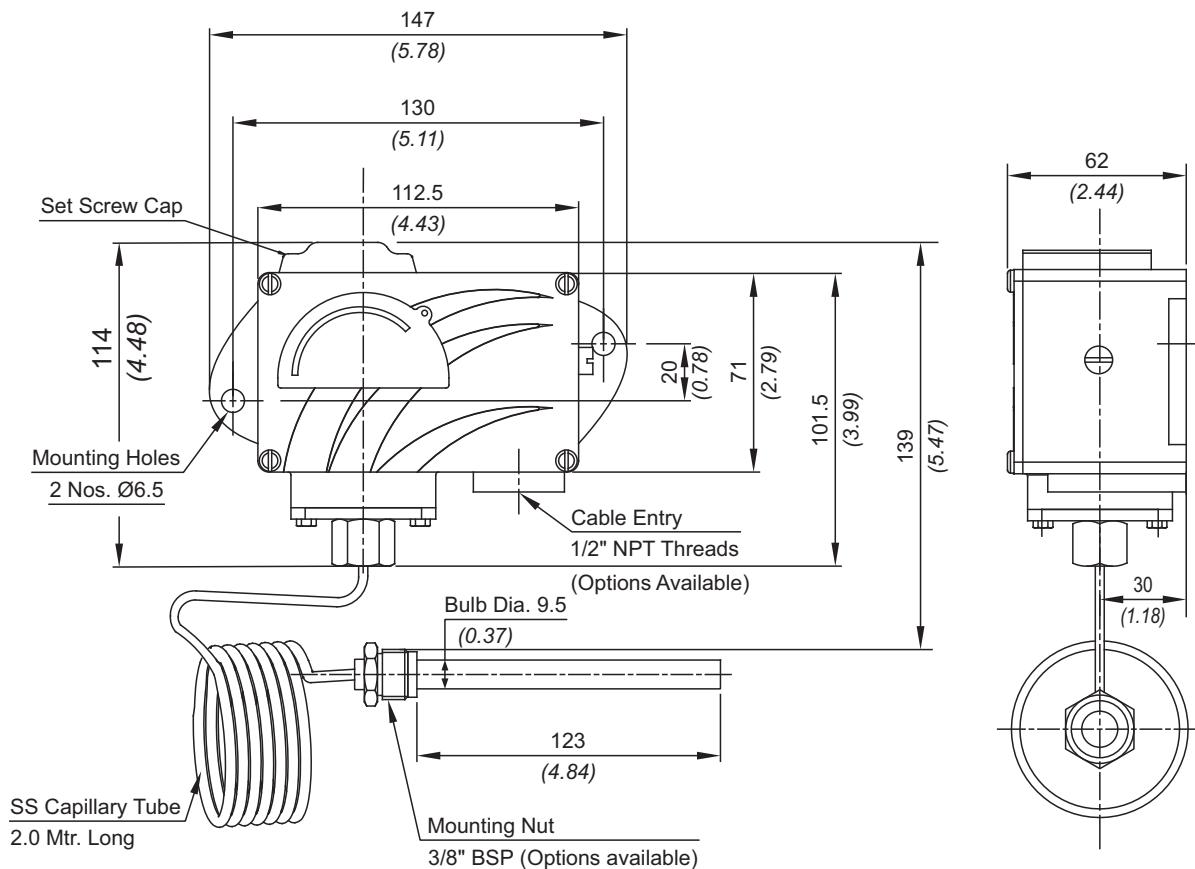


MD

CE

Orion[®]
INSTRUMENTS

INSTALLATION DRAWING

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

MD/MT TEMPERATURE SWITCHES

RANGE SELECTION TABLE

Range Code	Range °C (°F)	Differential* °C (°F)	Maximum Working Temperature °C (°F)
		Approximate Maximum for "A1" microswitch	
T1H	25 - 90 (77 - 194)	15 (59)	150 (302)
T2H	70 - 150 (158 - 302)	20 (68)	200 (392)
T3H	120 - 215 (248 - 419)	30 (86)	300 (572)

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 deactivate 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 TEMPERATURE 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 °C)	Microswitch Type	Temp. Bulb Material / Size	Capillary Material / Size
<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.	MD = Industrial temperature switch with IP66 rated enclosure as per IS/IEC 60529 MT = Industrial temperature switch with IP66 rated enclosure as per IS/IEC 60529	1 = Al. enclosure $\frac{1}{2}$ " NPT threads *2 = Al. enclosure $\frac{3}{4}$ " NPT threads 3 = Al. enclosure M20 X 1.5 threads 7 = SS enclosure, $\frac{1}{2}$ " NPT threads 8 = SS enclosure, $\frac{3}{4}$ " NPT threads 9 = SS enclosure, M20 X 1.5 threads	TF1 = Temperature Switch, fixed differential without scale TF2 = Temperature Switch, fixed differential with scale in °C *TA1 = temperature switch, adjustable differential without scale *TA2 = temperature switch, adjustable differential with scale in °C	T1H = 25 - 90 T2H = 70 - 150 T3H = 120 - 215	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 B1 = General purpose AC/DC	B1 = Brass / Dia. 9.5 mm, 123 mm length, with 3/8" BSP (M) thermowell connection B2 = Brass / Dia. 9.5 mm, 123 mm length, with 3/8" NPT (M) thermowell connection B3 = Brass / Dia. 9.5 mm, 123 mm length, with 1/2" NPT (M) thermowell connection B7 = 2SPDT Switching Elements *B9 = 2SPDT Switching Elements for adjustable differential	2 = SS316 / 2.0 meter

The prefix is subject to change as per specific requirement.

Approx. switch weight in Kgs

Enclosure	MD	MT
Aluminium	0.950	1.410
SS	2.530	3.050

*Not available for MT model For dual cable entry contact Sales Office

*Available with A6, A7, A9 & B9 (in group 6) only

E.g. An Industrial Temperature Switch, with 1/2"NPT cable entry in aluminum housing as 1 SPDT, fixed differential without scale, having 25°C to 90°C temperature range, with 15 Amp. microswitch, with Brass 9.5 mm diameter bulb, having length 123 mm with 3/8"BSP(M),with 2.0 meter SS316 capillary length shall be specified by

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<input type="checkbox"/>	MD	1	TF1	T1H	A1	B1	2

Please specify full model number to avoid ambiguity.

*Please refer to page nos. 290 & 291 for options and specifications of microswitches
Please contact sales office for additional information

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