

# **Orion INSTRUMENTS MT Series Industrial Temperature Switches Instructions**

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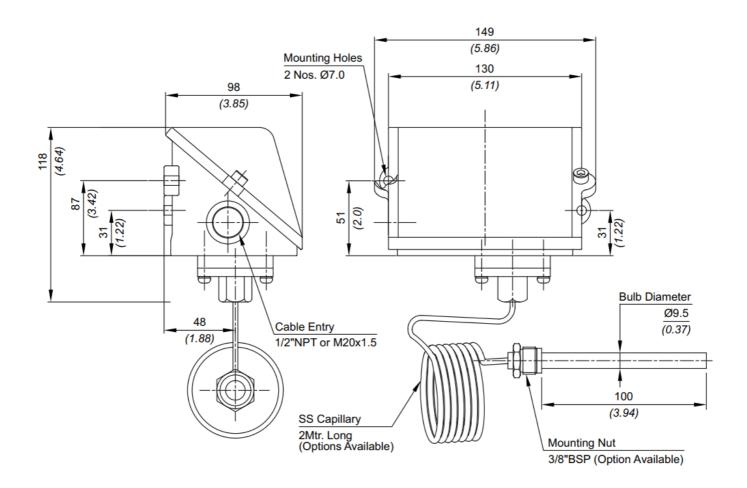




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# **INSTALLATION DRAWING**



APPROX. DIMENSIONS IN mm inches

# **MD/MT TEMPERATURE SWITCHES**

#### **RANGE SELECTION TABLE**

Range Code	Range °C (F)	Differential' `C (`F)	Maximum Working Tempe rature C('F)	
		Approximate Maximum for "Al" microswitch		
т1 н	25 – 90 (77- 194)	15 (59)	150 (302)	
T2H	70 – 150 (158 – 302)	20 (68)	200 (392)	
ТЗН	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 deactuate at the same point. A small stage gap, normally up to +/- 5% FSR (depending on range code) may be observed. The On-Off

differential (hysterisis) typically tends to be at least 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
Reserved for Non-standard Options not covered in Catalogue. 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 ½" NPT threads  *2 = Al. enclosure ¾" NPT threads  3 = Al. enclosure M20 X 1.5 threads  7 = SS enclosure, ½" NPT threads  *8 = SS enclosure, ¾" NPT threads  9 = SS enclosure, M20 X 1.5 threads  *Not available for MT model For dual cable entry contact Sales Office	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  *Available with A6, A7, A9 & B9 (in group 6) only		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  *B7 = 2SPDT Switching Elements  *B9 = 2SPDT Switching Elements for adjustable differential  *For detailed specifications of microswitches, please refer note under Range Selection Table	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	2 = SS316 / 2.0 meter

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

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
	MD	1	TF1	T1H	A1	B1	2

Please specify full model number to avoid ambiguity.
Bulletin No. KA220802 75

#### **Documents / Resources**



Orion INSTRUMENTS MT Series Industrial Temperature Switches [pdf] Instructions MT Series, MT Series Industrial Temperature Switches, Industrial Temperature Switches, Temperature Switches, Switches

# References

# • User Manual

#### Manuals+, Privacy Policy

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