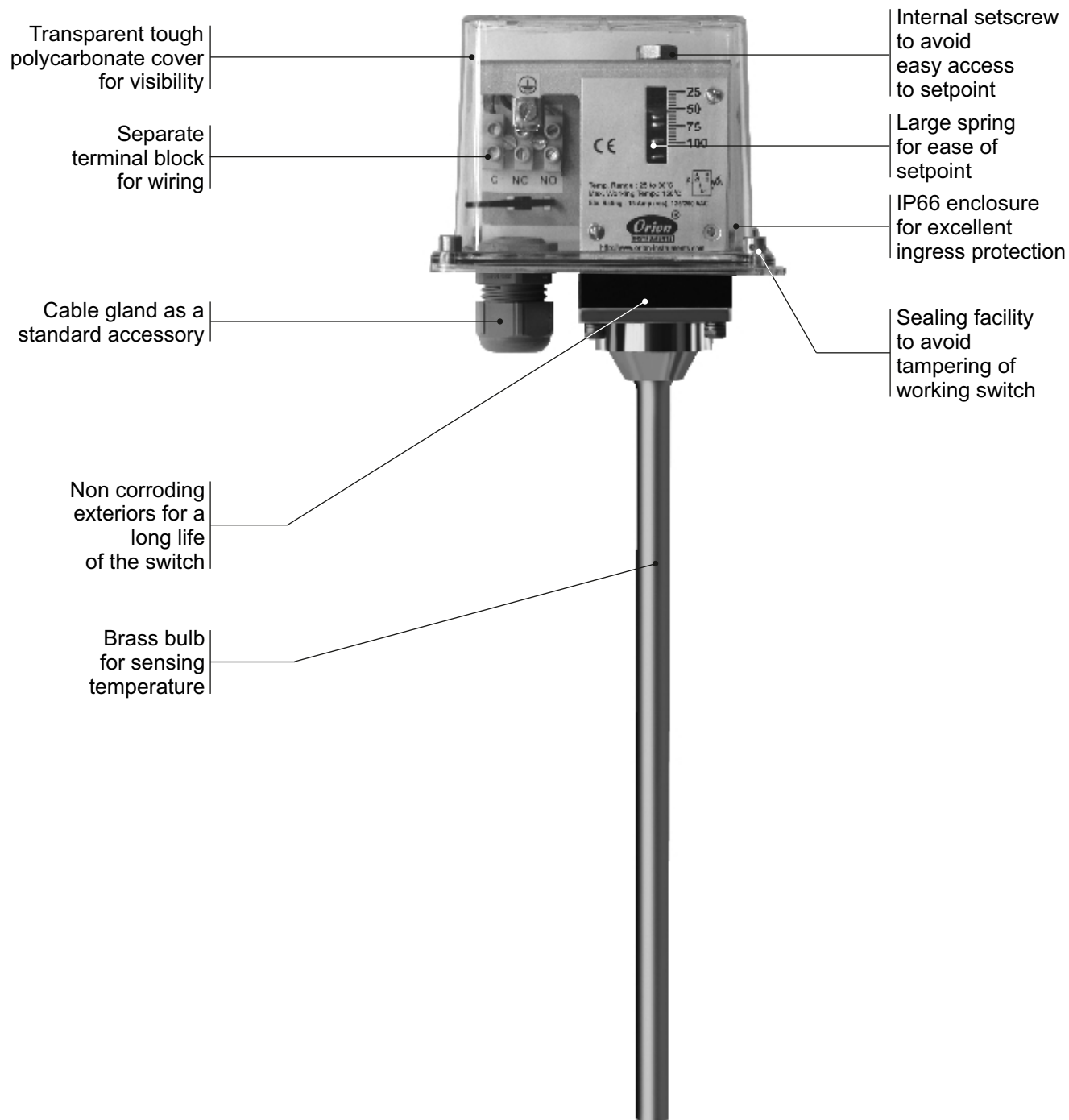


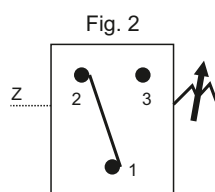


**Approximate Weight :** 0.700 Kg.

### Some Applications :

To detect limiting temperature levels in non-hazardous areas.

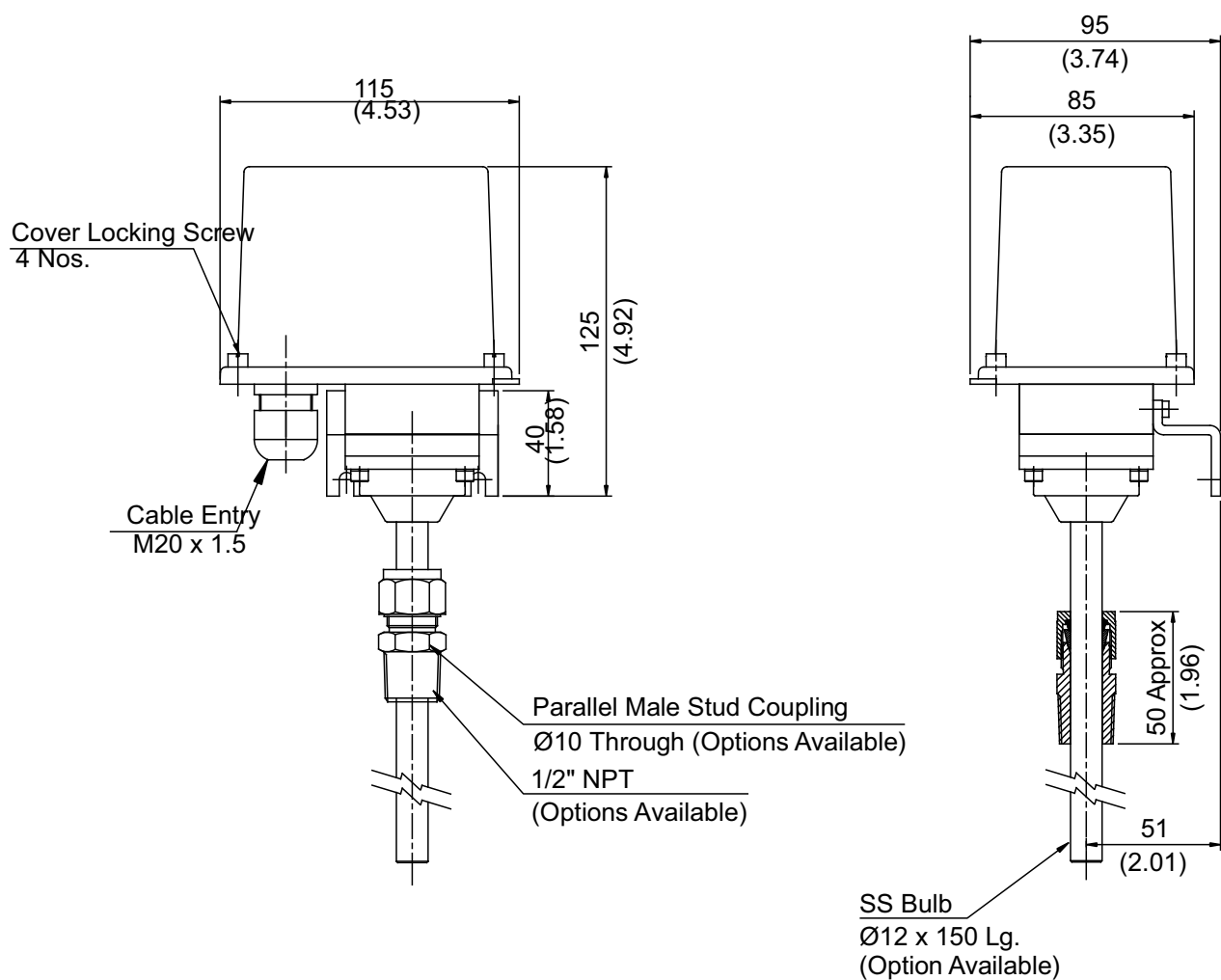
### Electrical Connection :



# MZ DIRECT MOUNTED TEMPERATURE SWITCHES



## INSTALLATION DRAWING



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

# MZ DIRECT MOUNTED TEMPERATURE SWITCHES

## RANGE SELECTION TABLE

| Range Code | Range °C<br>(°F)         | Differential* °C (°F)                             | Maximum<br>Working Temperature<br>°C<br>(°F) |
|------------|--------------------------|---------------------------------------------------|----------------------------------------------|
|            |                          | Approximate<br>Maximum<br>for "A8"<br>microswitch |                                              |
| T1H        | 35 - 90<br>(77 - 194)    | 15<br>(59)                                        | 150<br>(302)                                 |
| T2H        | 70 - 150<br>(158 - 302)  | 20<br>(68)                                        | 200<br>(392)                                 |
| T3H        | 120 - 215<br>(248 - 419) | 30<br>(86)                                        | 300<br>(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 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 FLAMEPROOF TEMPERATURE 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 Deg. Cen.)                                        | Microswitch Type                                                                                                      | Temp. Bulb Dia./Size                                                                                                                                                                                                                                                                                                                                  | MOC of the Bulb                                |
| <input type="checkbox"/> Reserved for Non-standard Options not covered in Catalogue. Will Be given by Manufacturer, Only after Agreement of Supply details With customer. | <b>MZ</b> = Process pressure switch with a weatherproof enclosure rated IP66/IP68 as per IS/IEC 60529 | <b>1</b> = Polycarbonate Enclosure<br>1/2" NPT threads<br><b>2</b> = Polycarbonate Enclosure<br>3/4" NPT threads<br><b>3</b> = Polycarbonate Enclosure<br>M20 x 1.5 threads<br><b>4</b> = Diecast Al.<br>Enclosure<br>1/2" NPT threads<br><b>5</b> = Diecast Al.<br>Enclosure<br>3/4" NPT threads<br><b>6</b> = Diecast Al.<br>Enclosure<br>M20 x 1.5 threads<br><b>7</b> = SS Enclosure<br>1/2" NPT threads<br><b>8</b> = SS Enclosure<br>3/4" NPT threads<br><b>9</b> = SS Enclosure<br>M20 x 1.5 threads | <b>TF1</b> = Temperature Switch, fixed differential without scale<br><b>TF2</b> = Temperature Switch, fixed differential with scale in °C<br><b>TA1</b> = temperature switch, adjustable differential without scale<br><b>TA2</b> = temperature switch, adjustable differential with scale in °C | <b>T1H</b> = 35 - 90<br><b>T2H</b> = 70 - 150<br><b>T3H</b> = 120 - 215 | <b>A8</b> = General purpose microswitch<br><b>A7</b> = 2SPDT microswitches<br><b>A9</b> = General purpose microswitch | <b>D1</b> = Direct mounted temperature switch with 150mm bulb length; 12mm bulb diameter; 3/8" BSPM connection.<br><b>D2</b> = Direct mounted temperature switch with 150mm bulb length; 12mm bulb diameter; 3/8" NPTM connection.<br><b>D3</b> = Direct mounted temperature switch with 150mm bulb length; 12mm bulb diameter; 1/2" NPTM connection. | <b>1</b> = Brass<br><b>2</b> = Stainless Steel |
| Note : Contact sales office for IP 68 enclosure                                                                                                                           |                                                                                                       | Note : For dual cable entries contact sales office                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                  | * Available only with option A7 and A9 in Group 6                       |                                                                                                                       | * Please refer to page nos. 290 & 291 for options and specifications of microswitches<br>Please contact sales office for additional information                                                                                                                                                                                                       |                                                |
| Note : Contact sales office for IP 68 enclosure                                                                                                                           |                                                                                                       | Note : For dual cable entries contact sales office                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                  | * Available only with option A7 and A9 in Group 6                       |                                                                                                                       | Please contact sales office for customised dimensions of the bulb and process connections                                                                                                                                                                                                                                                             |                                                |

E.g. A Direct Mounted process 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 15Amp. microswitch, with SS316 10mm diameter bulb of 100mm length with 1/2" NPT (M), shall be specified by

| Group 1                  | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | Group 7 | Group 8 |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|
| <input type="checkbox"/> | MZ      | 1       | TF1     | T1H     | A8      | D1      | 1       |

Please specify full model number to avoid ambiguity.

## DIRECT MOUNTED TEMPERATURE SWITCHES

**MZ**