

# **inert gas filled thermometers for remote readings**

## **all stainless steel construction**

### **DS 4", 6" (100-150 mm)**



ATEX 2014/34/UE



These instruments are designed for use in chemical and petrochemical processing industries, and in conventional power plants. They are built to resist the most severe operating conditions created by the ambient environment and the process medium. An TIG welded case/bulb and capillary strengthens the whole construction. A leak tight fit is ensured if the instrument is filled with a dampening fluid to prevent damage due to vibration.

#### **6.TG8 - Standard Model**

**Designation:** EN 13190.

**Indication ranges:** -320...+1200 °F (-200...+600 °C).

**Measuring ranges:** -280...+1100 °F (-170...+500 °C).

**Accuracy class:** 1 as per EN 13190, measuring range.

**Overtemperature limit:** 25% of full scale range for temperature ≤ 750 °F (400 °C); max 1100 °F (600 °C).

**Ambient temperature:** +32...+149 °F (0...+65 °C).

**Max working pressure:** 360 psi - 25 bar (without thermowell).

**Protection degree:** IP 55 as per EN 60529/IEC 529.

**Process connection:** AISI 316 st.st.

**Stainless steel capillary:** 1 - uncovered, ø 0.10" (2,5 mm);

9 - covered with stainless steel flexible armour, ø 0.24" (6 mm);

6 - covered with st.st. PVC coated flexible armour, ø 0.24" (6 mm).

**Measuring element:** inert gas filled expansion system.

**Case:** stainless steel.

**Ring:** stainless steel bayonet lock.

**Window:** tempered glass.

**Movement:** stainless steel.

**Internal compensation device:** by a bimetallic linkage.

**Dial:** aluminium, white with black markings.

**Pointer:** adjustable, aluminium, black.

#### **BULB**

| ø bulb          | Rigid extension code,<br>ø 0.31" (8 mm) | Flexible extension code,<br>ø 0.1" (2,5 mm) | sensible part length "b" (mm) |                      | bulb length "S" (mm) |
|-----------------|---|---|-------------------------------|----------------------|----------------------|
|                 |   |   | capillary ≤ 15 mt             | capillary 16...30 mt |                      |
| 0.31" (8 mm)    | <b>S22</b>                              | <b>S12</b>                                  | 118                           | 167                  | ("b"+25)...1000      |
| 0.38" (9,6 mm)  | <b>S21</b>                              | <b>S11</b>                                  | 87                            | 127                  | ("b"+25)...1000      |
| 0.45" (11,5 mm) | <b>S20</b>                              | <b>S10</b>                                  | 60                            | 87                   | ("b"+25)...1000      |

#### **OPTIONS**

|  |         |                                       |     |
|--|---------|---------------------------------------|-----|
| <b>2G3</b> - ATEX version II 2G c                      | (1) (2) | Electric contacts                     | (3) |
| <b>2D3</b> - ATEX version II 2GD c                     | (1) (2) | <b>R10</b> - Glycerine filling - IP67 | (2) |
| <b>C40</b> - Case and ring AISI 316 st.st.             |         | <b>R11</b> - Silicone filling - IP67  | (2) |
| <b>E65</b> - Protection degree IP65                    | (2)     | <b>T01</b> - Tropicalization          |     |
| <b>L22</b> - Maximum pointer IP 65 on plexiglas window | (2)     | <b>T32</b> - Safety glass window      | (2) |

(1) See the ATEX temperature gauges data-sheet for technical details.

(2) Not available with electric contacts

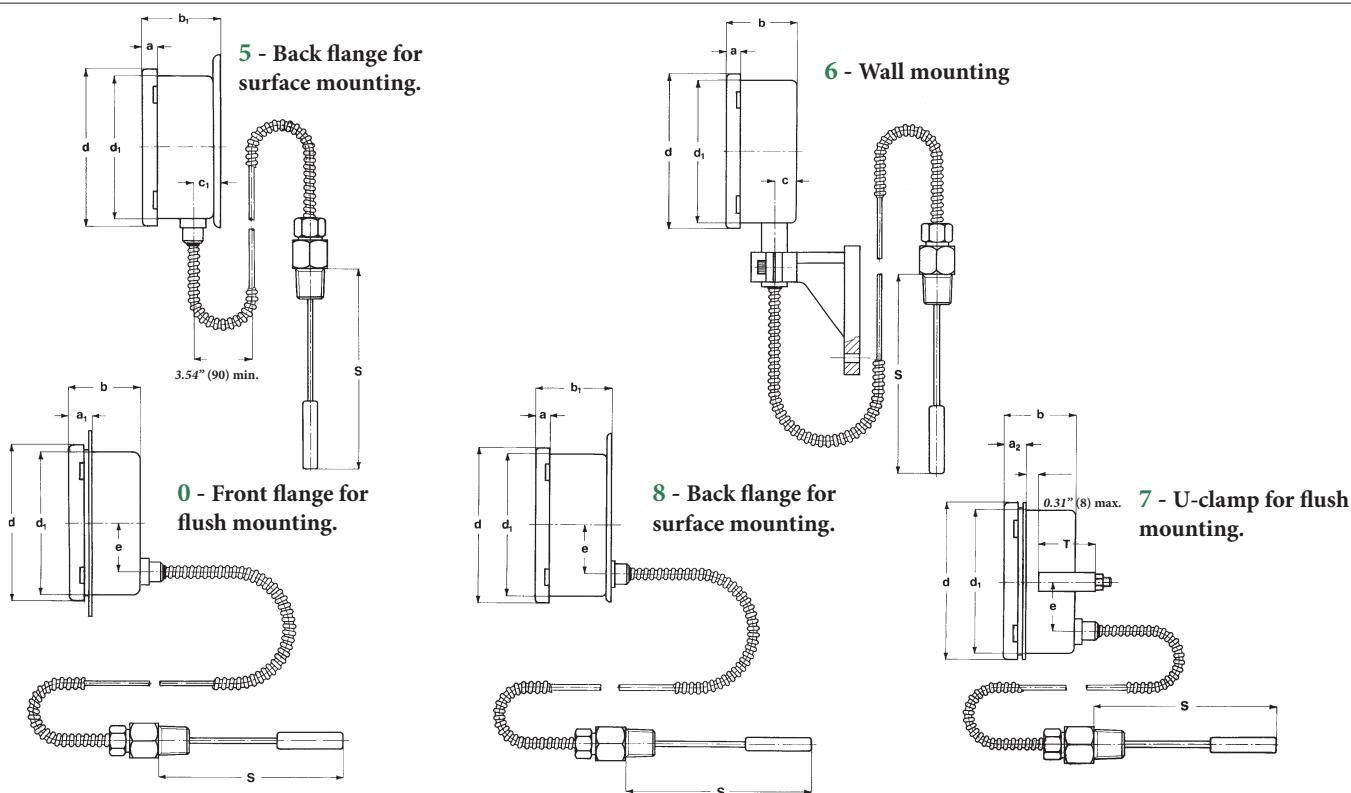
(3) Codes, description and wiring on data sheet MN14.



# inert gas filled thermometers, for remote reading all stainless steel construction DS 4", 6" (100-150 mm)

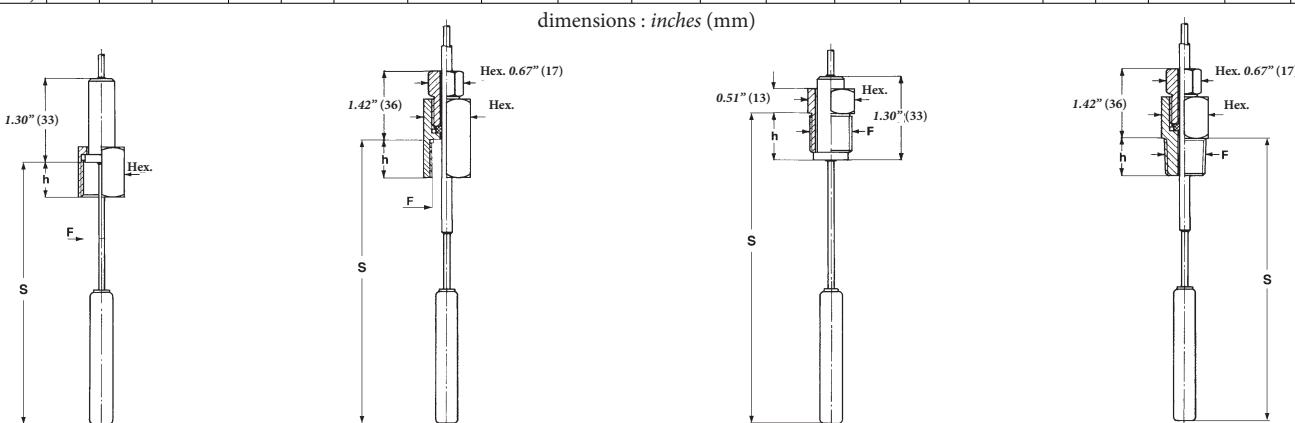
**TG8**

RC8 - 08/16



| DS                      | A     | B     | a     | a <sub>1</sub> | a <sub>2</sub> | b     | b <sub>1</sub> | c     | c <sub>1</sub> | d     | d <sub>1</sub> | D     | E     | E <sub>1</sub> | e     | h     | h <sub>1</sub> | T     | V     | Z     |
|-------------------------|-------|-------|-------|----------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|-------|
| <b>E</b><br>4"<br>(100) | 2.72" | 2.36" | 0.57" | 0.83"          | 0.79"          | 1.99" | 2.15"          | 0.61" | 0.77"          | 4.41" | 3.98"          | 5.12" | 4.57" | 4.65"          | 1.36" | 2.05" |                | 1.63" | 2.76" | 4.41" |
| <b>G</b><br>6"<br>(150) | 3.78" | 2.36" | 0.65" | 0.83"          | 0.79"          | 2.11" | 2.26"          | 0.61" | 0.77"          | 6.54" | 5.91"          | 7.48" | 6.89" |                | 1.36" | 3.35" | 3.35"          | 1.77" | 4.17" | 6.10" |

dimensions : inches (mm)



**8** - Female swivel nut.

**7** - Sliding female swivel nut.

**5** - Male swivel nut.

**9** - Sliding male swivel nut.

| F                     | Hex.          | h             |
|-----------------------|---------------|---------------|
| <b>41M</b><br>G 1/2 A | 0.94"<br>(24) | 0.63"<br>(16) |
| <b>51M</b><br>G 3/4 A | 1.18"<br>(30) | 0.63"<br>(16) |

| F                        | Hex.          | h             |
|--------------------------|---------------|---------------|
| <b>43M</b><br>1/2-14 NPT | 0.94"<br>(24) | 0.71"<br>(18) |
| <b>53M</b><br>3/4-14 NPT | 1.18"<br>(30) | 0.71"<br>(18) |

dimensions :  
inches (mm)

| F                     | Hex.          | h             |
|-----------------------|---------------|---------------|
| <b>41M</b><br>G 1/2 A | 0.87"<br>(22) | 0.55"<br>(14) |
| <b>51M</b><br>G 3/4 A | 1.06"<br>(27) | 0.63"<br>(16) |

| F                       | Hex.          | h             |
|-------------------------|---------------|---------------|
| <b>43M</b> - G 1/2 A    | 0.87"<br>(22) | 0.67"<br>(17) |
| <b>53M</b> - 3/4-14 NPT | 1.06"<br>(27) | 0.67"<br>(17) |
| <b>41M</b> - 1/2-14 NPT | 0.87"<br>(22) | 0.55"<br>(14) |
| <b>51M</b> - G 3/4 A    | 1.06"<br>(27) | 0.63"<br>(16) |

## "HOW TO ORDER" SEQUENCE

Section / Model /Mounting / Connection type / Diameter / Range / Process connection / Bulb / Capillary / Options

**6**   **TG8**   **0, 5, 6**   **5, 7**   **E**   **41M, 43M**   **S20...22**   **1**   **2G3...T32**  
**7, 8**              **8, 9**              **G**   **51M, 53M**   **S10...12**   **6**

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