

# inert gas filled thermometers for remote readings

## all stainless steel construction

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

# TG8



These instruments are designed for use in food, beverage, pharmaceutical, cryogenics, chemical and petrochemical processing industries, and in conventional and nuclear 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:** -13...+149 °F (-25...+65 °C).

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

**Protection degree:** IP 55 as per 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, ø 0.31" (8 mm)	Flexible extension code, ø 0.1" (2,5 mm)	bulb length "S"	
			capillary ≤ 49 ft (15 mt)	capillary 52...98 ft (16...30 mt)
0.31" (8 mm)	<b>S22</b>	<b>S12</b>	5.63...39.37" (143...1000 mm)	7.56...39.37" (192...1000 mm)
0.38" (9,6 mm)	<b>S21</b>	<b>S11</b>	4.41...39.37" (112...1000 mm)	5.98...39.37" (152...1000 mm)
0.45" (11,5 mm)	<b>S20</b>	<b>S10</b>	3.34...39.37" (85...1000 mm)	4.41...39.37" (112...1000 mm)

#### 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	(2)
<b>C40</b> - Case and ring AISI 316 st.st.		<b>R11</b> - Silicone filling	(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

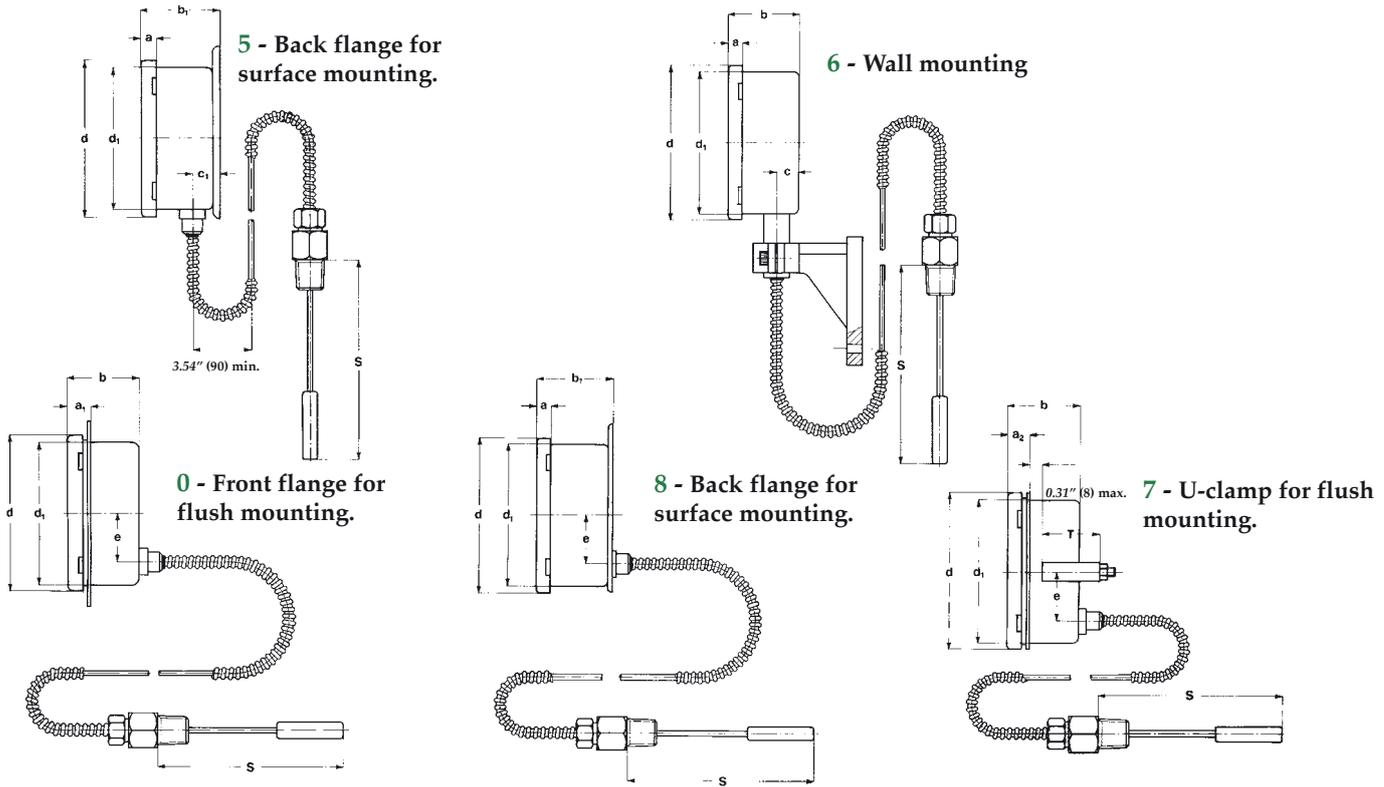
(3) Codes, description and wiring on data sheet MN14.



For use in potentially explosive atmospheres, instruments must be designed in conformity to ATEX 94/9/CE. This version is shown on separate data sheet available on request.

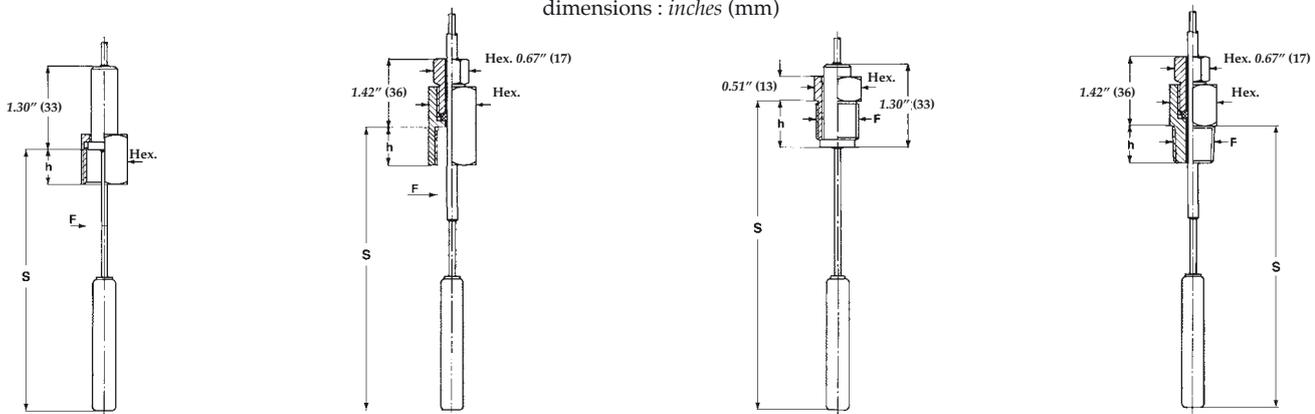
**inert gas filled thermometers, for remote reading**  
**all stainless steel construction DS 4", 6" (100-150 mm)**

**TG8**



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> 4" (100)	2.72" (69)	2.36" (60)	0.57" (14,5)	0.83" (21)	0.79" (20)	1.99" (50,5)	2.15" (54,5)	0.61" (15,5)	0.77" (19,5)	4.41" (112)	3.98" (101)	5.12" (130)	4.57" (116)	4.65" (118)	1.36" (34,5)	2.05" (52)		1.63" (41,5)	2.76" (70)	4.41" (112)
<b>G</b> 6" (150)	3.78" (96)	2.36" (60)	0.65" (16,5)	0.83" (21)	0.79" (20)	2.11" (53,5)	2.26" (57,5)	0.61" (15,5)	0.77" (19,5)	6.54" (166)	5.91" (150)	7.48" (190)	6.89" (175)		1.36" (34,5)	3.35" (85)	3.35" (85)	1.77" (45)	4.17" (106)	6.10" (155)

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> G 1/2 A	0.94" (24)	0.63" (16)
<b>51M</b> G 3/4 A	1.18" (30)	0.63" (16)

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

dimensions : inches (mm)

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

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

**"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**  
**9**