

# Sanitary Bimetal Thermometer – Process Version per ASME B40.200 and ASME BPE Model TG58SA

Datasheet TM58.01

## Applications

- Accurate temperature measurement for biotechnology, life sciences, pharmaceutical, food, beverage, cosmetic and water industries
- Sanitary Tri-Clamp® process connection for fast installation and removal
- Processes requiring cleaning by SIP, CIP
- Washdowns requiring hermetic seal

## Product features

- Sanitary Tri-Clamp® process connection 3/4" through 2" in accordance with ASME BPE (Hygienic clamp)
- All stainless steel construction
- 316L stainless steel process wetted surfaces, Ra ≤ 20µm (Ra ≤ 0.51µm), in accordance with ASME BPE designation SF1
- 3-A approved
- Hermetically sealed per ASME B40.200
- Accuracy of ±1% of full scale
- External zero adjustment
- 7 year warranty

## Specifications

### Dial Sizes

3" nominal (76mm) or 5" nominal (127mm)

### Accuracy

±1% of full scale per ASME B40.3 Grade A

### Process Connection:

3/4" Tri-Clamp® up to 2" Tri-Clamp® per ASME BPE (3/4"=Type A & 1" and larger=Type B)

### Temperature Ranges:

-100 °F (-70 °C) to +400 °F (+200 °C)

### Standard Scales:

Single; Fahrenheit, °F or Celsius °C - Dual °F/°C; Fahrenheit (outer scale) and Celsius (inner scale)

### Working Range:

Steady: Full scale value  
Short time: 110% of full scale value

### Over/Under Range Protection:

≤ +500 F (+260 C): Temporary up to 50% of total span  
≥ +500 F (+260 C): Continuous to +800 F (+427 C) or intermittent up to +1000 F (+538 C)



Thermometer TG58SA

### Clamp Connection:

316L stainless steel, Ra ≤ 20µm (Ra ≤ 0.51µm)

### Maximum Pressure Rating:

365 psig (static or dynamic) or process connection clamp rating, lower of these two values

### Measuring Element:

Bi-metal helix

### Stem:

316L stainless steel, Ra ≤ 20µm (Ra ≤ 0.51µm), Ø 0.25", length from 2.5" up to 15"

### Case:

304 stainless steel, hermetically sealed, NEMA 4X (IP 66)

### Window:

Polycarbonate (LEXAN w/trademark logo)

### Pointer:

Black aluminum

### External Zero Adjustment:

Slotted hex head on back of case

### Dial:

White aluminum with black markings, anti-parallax

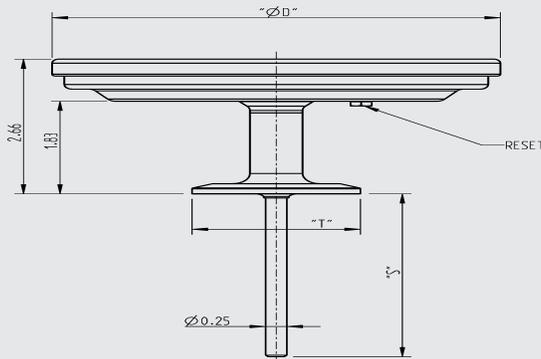
## Optional Extras

- Window material: Instrument glass or safety glass
- Special scales and dial markings
- Min/Max pointer
- Longer stem lengths, approx. Ra ≤ 32µin (Ra ≤ 0.80µm) compliant with 3-A sanitary standards
- Certificates
  - Calibration, NIST
  - Material traceable w/ mill certificates, wetted surfaces
  - Surface finish

STANDARD RANGES	
Fahrenheit Single Scale	Celsius Single Scale
-100/150 °F	-50/50 °C
-40/120 °F	-20/120 °C
0/140 °F	0/50 °C
0/200 °F	0/100 °C
0/250 °F	0/150 °C
20/240 °F	0/200 °C
25/125 °F	
50/300 °F	
50/400 °F	

## Dimensions

### Model Types: Back Mount 3" and 5"

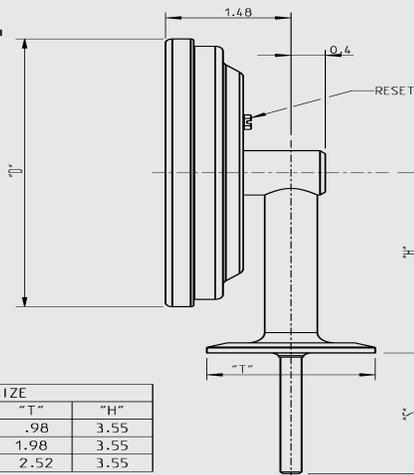


5" DIAL SIZE		
TRI CLAMP	"D"	"T"
.75"	5.25	.98
1.5"	5.25	1.98
2"	5.25	2.52

3" DIAL SIZE		
TRI CLAMP	"D"	"T"
.75"	3.25	.98
1.5"	3.25	1.98
2"	3.25	2.52

Stem Lengths
2½" (63.5 mm)
4" (101.6 mm)
6" (152.4 mm)
9" (228.6 mm)
12" (304.8 mm)
15" (381.0 mm)

### Model Types: Lower Mount 3" and 5"



5" DIAL SIZE			
TRI CLAMP	"D"	"T"	"H"
.75"	5.25	.98	3.55
1.5"	5.25	1.98	3.55
2"	5.25	2.52	3.55

3" DIAL SIZE			
TRI CLAMP	"D"	"T"	"H"
.75"	3.25	.98	2.55
1.5"	3.25	1.98	2.55
2"	3.25	2.52	2.55

