

# TP Series

# Bimetal Stainless Steel Thermometer



## Features

- Accuracy Class 1.6, \*Class 1.0
- Quick response and high accuracy
- External micro adjustment device
- All stainless steel material
- Hermetically sealed case structure
- Temperature range up to 600°C (1100 °F)
- Bowl cupped dial for easier reading
- Sliding connection standard
- Standard dia dual unit ranges (F & C)
- Sensor length up to 600 mm
- Sensor diameter 6 (standard), 6.3, 8 or 10 mm

## Technical Specification

- Nominal Size  
2½", 3", 4", 5" and 6"
- Accuracy Class  
Back / Angle Class 1.6, \*Class 1.0  
Bottom mount Class 2.0, \*Class 1.6
- Ingress Protection  
IP 65
- Connection Size  
Sliding connection standard  
Size G¼", G½" or NPT
- Temperature Scale Range  
-40°..+600 °C(-40°..+1100 °F)
- Sensing Element  
Coiled bimetal sensing
- Filling  
Dry, but fillable Glycerine/Silicone oil
- Operating Temperature  
Ambient temperature -50°.. +120 °C
- Bezel Ring Type  
Hermetically sealed fastening type  
External calibration device on back case
- Dial Graduation  
Standard in dual ranges F and C

## Design Material

- Casing and Bezel Ring  
Stainless steel 304
- Probe / Bulb Sensor  
Stainless steel 316
- Connection  
Stainless steel 304, sliding connection  
or \*Fixed welded connection
- Window  
plain instrument glass
- Pointer  
Black painted aluminum
- Dial Plate  
Aluminum alloy, bowl cupped type

## Ordering Code



**BT BRO THOTERM**  
GERMANY TECHNOLOGY

TP Dial<sup>①</sup> <Temperature range><sup>②</sup> Mounting<sup>③</sup> - Stem<sup>④</sup> - Connection<sup>⑤</sup> - Filling<sup>⑥</sup> \*Option<sup>⑦</sup>

①	Dial size
250	2½" / 63 mm
300	3" / 80 mm
500	4" / 100 mm
600	5" / 130 mm
750	6" / 150 mm

②	Temperature range (in dual)	
	°F	°C
	-40° .. +140°	-40° .. +60°
	-40° .. +180°	-40° .. +80°
	-32° .. +140°	0 .. 60°
	-32° .. +210°	0 .. 100°
	-32° .. +250°	0 .. 120°
	-32° .. +300°	0 .. 150°
	-32° .. +390°	0 .. 200°
	-32° .. +570°	0 .. 300°
	-32° .. +750°	0 .. 400°
	-32° .. +930°	0 .. 500°
	-32° .. +1100°	0 .. 600°

③	Mounting
D	Bottom connection
B	Center back connection
E	Everyangle connection

④	Stem Length in Inch (mm)
	Sensor length 2.5" (60mm) .. 24" (600 mm)

⑤	Connection size
G4	G ¼"
N4	¼" NPT
G2	G ½"
N2	½" NPT

⑥	Filling
D	Dry
G	Glycerine filled
S	Silicone oil filled

⑦	Option
CD	Custom dial layout
SS	SS316 material sliding connection
KL	Class 1.0 (back/angle), 1.6 (Bottom)
FC	Fixed connection
63	6.3 mm stem diameter
08	8 mm stem diameter
10	10 mm stem diameter
12	Stem dia 3/8" or other size
CS	Case in SS316

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Features

- Bottom, back and Everyangle mounting
- Hermetically sealed case bezel design
- Accuracy Class 1.0
- Quick response, high stability and accuracy
- External micro adjustment device at back case
- All stainless steel material construction
- Outfield application with IP65 protection
- Temperature range up to 600°C (1100 °F)
- Sliding connection standard
- Standard dial dual unit ranges (°F & °C)
- Sensor length up to 600 mm
- Sensor diameter 6 mm (standard), 6.3, 8 or 10 mm



Technical Specification



- Nominal Size  
2½", 4", 5" or 6"
- Accuracy Class  
Class 1.0 to EN 13190
- Ingress Protection  
IP 65
- Connection Size  
Sliding connection standard  
Size G¼", G½" or NPT
- Temperature Scale Range  
-40°..+600 °C (-40°..+1100 °F)
- Sensing Element  
Coiled bimetal sensing
- Filling  
Liquid fillable\*
- Operating Temperature  
Ambient temperature -50°.. +120 °C
- Maximum Pressure  
Maximum 25 Bar on stem
- Bezel Ring Type  
Hermetically sealed fastening type  
External calibration device on back case
- Dial Graduation  
Standard in dual ranges °F and °C
- Sensor Diameter  
Standard 6 mm, \*Optional 8 mm

Design Material



- Casing and Bezel Ring  
Stainless steel 304, hermetically sealed
- Probe / Bulb Sensor  
Stainless steel 316
- Connection  
SS 304, sliding connection standard  
or \*Union rotatable connection
- Window  
Tempered glass
- Pointer  
Black painted aluminium
- Dial Plate  
Aluminium alloy

Ordering Code



TP500 <Temperature range> ① Mounting ② - Stem ③ - Connection ④ - Filling ⑤ \*Option ⑥

①	Dial size
250	2½" / 63 mm
300	3" / 80 mm
500	4" / 100 mm
600	5" / 130 mm
750	6" / 150 mm

②	Temperature range (in dual)	
	°F	°C
	-40° .. +140°	-40° .. +60°
	-40° .. +180°	-40° .. +80°
	-32° .. +140°	0 .. 60°
	-32° .. +210°	0 .. 100°
	-32° .. +250°	0 .. 120°
	-32° .. +300°	0 .. 150°
	-32° .. +390°	0 .. 200°
	-32° .. +570°	0 .. 300°
	-32° .. +750°	0 .. 400°
	-32° .. +930°	0 .. 500°
	-32° .. +1100°	0 .. 600°

③	Mounting
D	Bottom connection
B	Center back connection
E	Everyangle connection

④	Stem Length in Inch (mm)
	Sensor length 2.5" (60mm) .. 40" (1000 mm)

⑤	Connection size
G4	G ¼"
N4	¼" NPT
G2	G ½"
N2	½" NPT

⑥	Filling
D	Dry
G	Glycerine filled
S	Silicone oil filled

⑦	Option
CD	Custom dial layout
SS	SS316 material sliding connection
KL	Class 1.0 (back/angle), 1.6 (Bottom)
FC	Fixed connection
63	6.3 mm stem diameter
08	8 mm stem diameter
10	10 mm stem diameter
CS	Case in SS316