

The Bimetal thermometer employs a bimetal strip in the form of helix (it works on the principle of thermal expansion - two metals having different coefficient of expansions are joined to form a bimetal. The resultant expansion of bimetal is proportional to temperature). Bimetal dial thermometers are simple in construction, yet rugged. They are used for measurement of temperature in most of the industrial applications. They are offered in the range of (-) 50°C to 600°C. With rigid stem having bottom or back entry. It can also be offered in every angle rotatable construction.

## Features

- Rugged construction
- Bottom/Back entry, every angle construction
- Fast response
- Protection class IP-67
- Accuracy  $\pm 1\%$  FSD
- High repeatability, low hysteresis
- Hermetically sealed case

## Specifications

<b>Ref. Standard</b>	ASME B 40.200, EN 13190
<b>Dial</b>	100 mm or 150 mm in aluminium white background, black markings
<b>Case</b>	SS304 with bayonet bezel / SS316 optional
<b>Protection</b>	Weatherproof to IP - 67 (IS/IEC : 60947 / IEC : 60529)
<b>Window</b>	Shatterproof glass
<b>Pointer</b>	Aluminium, black, micrometer adjustable
<b>Stem</b>	SS304 or SS316 in 6 mm, 8 mm, 10 mm, 12 mm dia and length from 100 mm to 1000 mm as standard
<b>Connection</b>	1/2" NPT (M) as standard in SS304 or SS316 adjustable three piece compression fitting
<b>Range</b>	(-) 50°C to 600°C with a minimum span of 60°C
<b>Accuracy</b>	$\pm 1\%$ FSD
<b>Over range</b>	125% FSD (upto max temp range of 500°C )
<b>Reset</b>	Micrometer Pointer (standard) External (optional)
<b>Optional</b>	1) Silicon Oil Filled Case (Suitable upto 339°C Max) 2) Contacts: Single SPST, normally open to close on rise / fall in temperature (specify action required) adjustable over the entire range, rating 30 VA @ 230 V AC (100 mm dial, back entry only )
<b>Note</b>	1) For minimum insertion length essential for proper sensing, contact our design department. 2) Three point calibration certificate accompanies each thermometer.



## Ordering Information

### MODEL : BDT



**MOUNTING**  
 V Bottom Entry, Local Mounting  
 C Back Entry, Local Mounting  
 E Every Angle, Local Mounting

**DIAL**  
 10 - 100 mm    15 - 150 mm

**CASE**  
 S4 SS304  
 S6 SS316

**STEM-OD**  
 A 6 mm            C 10 mm  
 B 8 mm            D 12 mm

**STEM LENGTH**  
 Specify in mm

**STEM MATERIAL**  
 S4 - SS304    S6 - SS316

CONNECTION			
SIZE	TYPE	MALE / FEMALE	METRIC THREADS
6	1/4"	NT NPT	M Male
10	3/8"	BP BSP	F Female
15	1/2"	BT BSPT	
20	3/4"	PF PF	
25	1"	GS Gas	
		NS NPS	
			18 M - M 18 x 1.5
			20 M - M 20 x 1.5
			24 M - M 24 x 1.5
			XX - Any other

**OPTION**  
 A Thermowell  
 C Colour Band  
 D Dual Scale  
 E 1 SPST Electrical contact  
 S Silicon Oil Filled Case \*

**UNIT**  
 C Deg C            F Deg F

**RANGE \*\***

(-) 50 to (+) 30	0 to 200
(-) 30 to (+) 50	0 to 250
(-) 20 to (+) 60	0 to 300
0 to 60	0 to 350
0 to 80	0 to 400
0 to 100	0 to 500
0 to 120	0 to 600
0 to 160	

\* Silicon Oil Filled Case shall be suitable up to maximum temperature of 339°C only.

\*\* Ranges mentioned are in °C. Equivalent unit in °F can be provided on request.