

Bimetal Dial Thermometer

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

Reference standard : ASME B 40.3, EN 13190

Dial : 63 mm, 100 mm or 150 mm in aluminium white background, black markings

Case : Die cast aluminium with screwed bezel
SS304 with bayonet bezel

Protection : Weatherproof to IP - 67 (IS : 13947)

Window : Shatterproof glass

Pointer : Aluminium, black

Stem : SS304 or SS316 in 6 mm, 8 mm, 9.5 mm, 10 mm, 12 mm, 12.7 mm, 14 mm, 16 mm dia and length from 100 mm to 1000 mm as standard

Connection : 1/2" NPT (M) as standard in SS304 or SS316 adjustable three piece compression fitting

Range : (-) 50°C to 600°C with a minimum span of 80°C

Accuracy : $\pm 1\%$ FSD ($\pm 2\%$ FSD for 63 mm dial size)
(In accordance with EN 13190)

Overrange : 125% FSD
(130% on request upto 500°C)

Reset : External

Contact : Single SPST, normally open, closed on rise in temperature (specify action required) adjustable over the entire range, rating 30 VA @ 230 V AC (100 mm dial back entry model in SS case only)

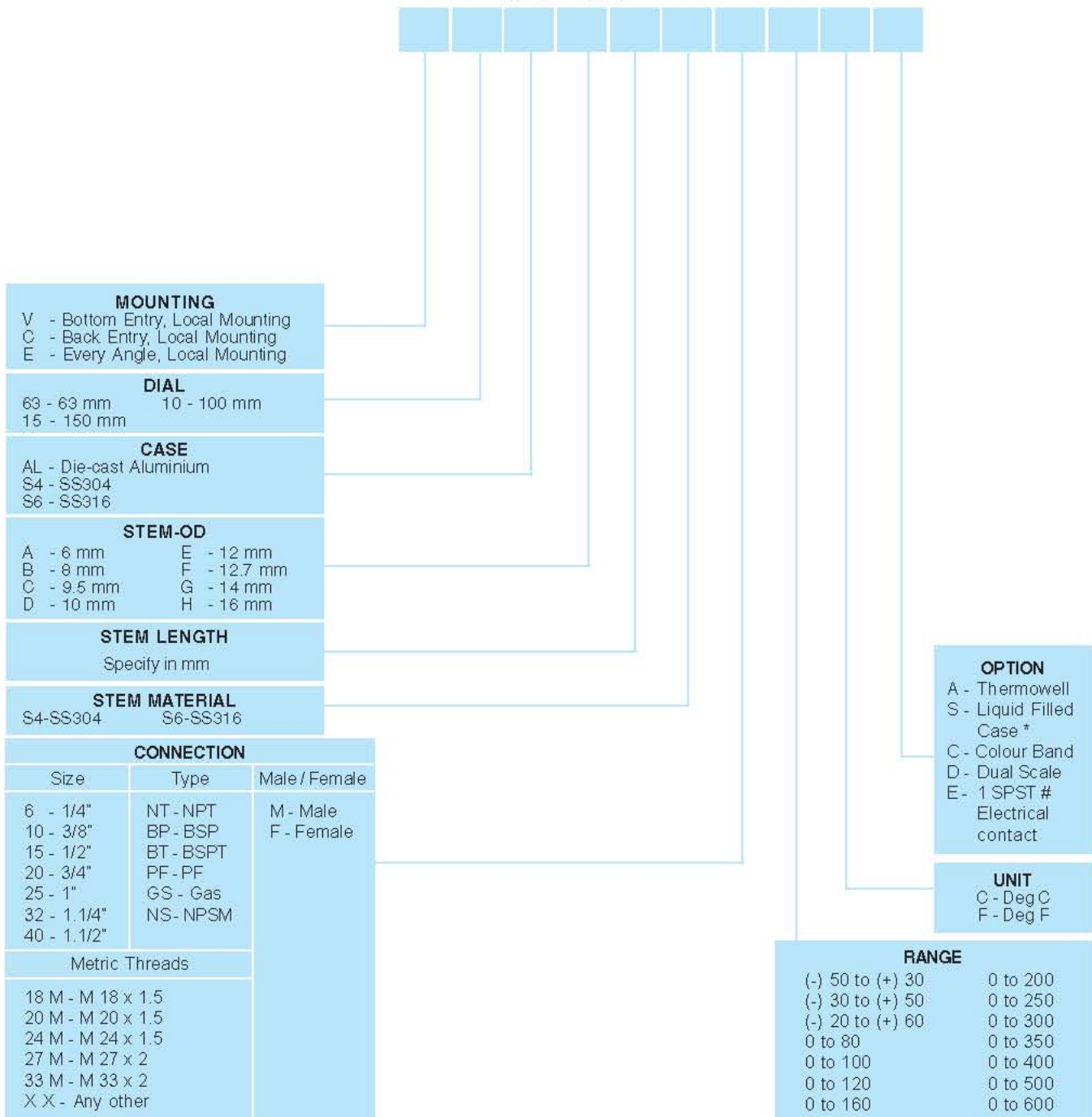
Note : 1) For minimum insertion length essential for proper sensing, contact our design department.
2) Three point calibration certificate accompanies each thermometer.



Bimetal Dial Thermometer

How to Order

TYPE : BDT



MOUNTING

- V - Bottom Entry, Local Mounting
- C - Back Entry, Local Mounting
- E - Every Angle, Local Mounting

DIAL

- 63 - 63 mm 10 - 100 mm
- 15 - 150 mm

CASE

- AL - Die-cast Aluminium
- S4 - SS304
- S6 - SS316

STEM-OD

- A - 6 mm E - 12 mm
- B - 8 mm F - 12.7 mm
- C - 9.5 mm G - 14 mm
- D - 10 mm H - 16 mm

STEM LENGTH

Specify in mm

STEM MATERIAL

- S4-SS304 S6-SS316

CONNECTION

| Size | Type | Male / Female |
|-------------------|-----------|------------------------|
| 6 - 1/4" | NT - NPT | M - Male F - Female |
| 10 - 3/8" | BP - BSP | |
| 15 - 1/2" | BT - BSPT | |
| 20 - 3/4" | PF - PF | |
| 25 - 1" | GS - Gas | |
| 32 - 1.1/4" | NS - NPSM | |
| 40 - 1.1/2" | | |
| | | |
| Metric Threads | | |
| 18 M - M 18 x 1.5 | | |
| 20 M - M 20 x 1.5 | | |
| 24 M - M 24 x 1.5 | | |
| 27 M - M 27 x 2 | | |
| 33 M - M 33 x 2 | | |
| XX - Any other | | |

OPTION

- A - Thermowell
- S - Liquid Filled Case *
- C - Colour Band
- D - Dual Scale
- E - 1 SPST # Electrical contact

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 80 0 to 350
- 0 to 100 0 to 400
- 0 to 120 0 to 500
- 0 to 160 0 to 600

* Suitable upto maximum temperature 339°C.

In 100 mm dial size, back entry, SS case.