



# Series 2511TG : BMT INDUSTRIAL THERMOMETER BIMETAL

#### **Features**

- Stainless steel case & stem
- Stem length available from 50 mm
- Bottom / back / every angle entry
- Silicon oil filled (optional)
- With or without thermowell
- External zero adjustment (optional)
- Standard followed EN 13190

### **Applications**

- Chemicals
- Refinery
- Fertilizer
- Petrochemicals
- Pulp Pharmaceutical

Sugar

Food

Beverages

- Power
- Cement
- Paper Allied process industries which are having
- corrosive media / environment

## **Specifications**

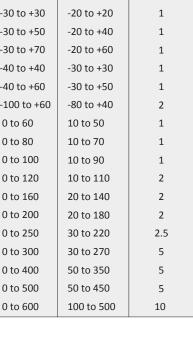
Nominal range, measuring ranges & limits 50 mm =Range up to 150°C Max, 63 mm = Range up to 300°C Max. **Standard Version:** 80mm, 100mm, 125mm & 150mm = Range up to 500°C Max. of error as per EN 13190 (For compound ranges, refer range table) Nominal Measuring Range (°C) Range (°C) -20 to +40 -10 to +30 Accuracy Class 1 as per EN 13190 -20 to +60 -10 to +50 Case, Bezel & Clamp AISI 304 SS -10 to +110 -20 to +120 Stem & Connection **AISI 316 SS** -30 to +30 -20 to +20 Joints TIG argon arc welding -30 to +50 -20 to +40 Sensing Element : Bi - metal strip coiled -20 to +60 Ambient Temperature -25°C to +65°C -30 to +70 : 15 kg/cm<sup>2</sup> (without thermowell) **Operating pressure** : -40 to +40 -30 to +30 110 % of full scale Over range limit : -40 to +60 -30 to +50 Stem Diameter : 8 mm -80 to +40 -100 to +60 ½"BSP (M) fixed **Process connection** : 0 to 60 10 to 50 Protection IP 65 : 10 to 70 0 to 80 Aluminum, black graduation on white background Dial : 0 to 100 10 to 90 Aluminum, black coloured, Slotted zero adjustable Pointer 0 to 120 10 to 110 & Fixed for NS 50 mm & 63 mm 0 to 160 20 to 140 Zero adjustment : Externally for mounting code EA & BMEL 0 to 200 20 to 180 (Except NS 50 mm & 63 mm) 0 to 250 30 to 220 Window : Sheet Glass 0 to 300 30 to 270 Gasket Neoprene : 0 to 400 50 to 350 0 to 500 50 to 450

## Silicon oil filled Version

Accuracy	: Class 1 as per EN 13190
Ambient Temperature	: Maximum 65°C
Window	: Plexi Glass
Dampening Liquids	: Silicon Oil (Option DS & QZ)
Gasket & filling Plug*	: Viton
Other Features	: Refer Specification of Standard Version

\*Gasket & Filling plug of Viton.

Note: Design and Specifications subject to change without prior notice.



Limits of Error (± °C)

1

1

2



# Series 2511TG : BMT INDUSTRIAL THERMOMETER BIMETAL

Bayo

CODE - EA

NS А В

80 11 17

100 12.5 19

125

150

15 23

15

23

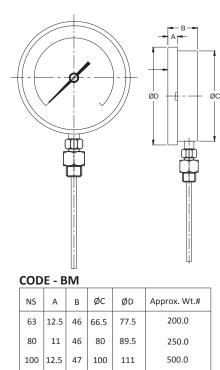
Ф-\_**0**} ¢/

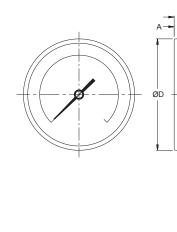
øс

ØD

**Dimensions - Standard Version** 

**Diagram and Code indicates Type of Mounting** 





_											
(	CODE - CBK										
	NS	А	в	øс	ØD	Approx. Wt.#					
	50	6.5	12	51.5	57.5	115.0					
	63	9.5	16	60	69.5	150.0					
	80	11	16	80	89.5	250.0					
	100	9.5	18	100	111	350.0					
	125	10	20	119	131.5	500.0					
	150	15	25.5	149	161	750.0					

(# Weight in grams with box for 300 mm stem length.)

> ØС ØD

80 89.5

100 111

119

149

129

161

Approx. Wt.#

500.0

750.0

900.0

1000.0

125	15	48	119	131	
150	15	49	149	161	
					_

(# Weight in grams with box for 300 mm stem length.) Notes : • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size.

750.0

1000.0

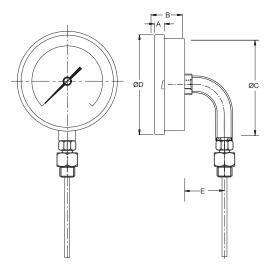
### **Range Table**

### Range, stem OD & stem length selection table

The following table indicates the minimum and maximum stem lengths in mm, per stem diameter per range. The lower values indicated are the minimum immersion length (below thread) for all type of threads. During stem length selection, please select between the limits mentioned below

(Range) °C	Ø 6 mm/ 6.34 mm.	Ø 8, 9.5 & 10 mm.	Ø 12 mm.
-20 to 40	115 to 500	95 to 600	95 to 600
-20 to 60	95 to 500	75 to 600	75 to 600
-20 to 120	65 to 500	55 to 600	55 to 600
-30 to 30	115 to 500	95 to 600	95 to 600
-30 to 50	95 to 500	75 to 600	75 to 600
-30 to 70	85 to 500	55 to 600	75 to 600
-40 to 40	95 to 500	75 to 600	75 to 600
-40 to 60	85 to 500	75 to 600	75 to 600
-80 to 80	65 to 500	55 to 600	55 to 600
0 <b>to</b> 60	115 to 500	95 to 600	95 to 600
0 <b>to</b> 80	95 to 500	75 to 600	75 to 600
0 <b>to</b> 100	65 to 500	50 to 600	75 to 600
0 <b>to</b> 120	50 to 500	40 to 600	55 to 600
0 <b>to</b> 160	45 to 500	35 to 600	55 to 600
0 <b>to</b> 200	40 to 500	30 to 600	45 to 600
0 <b>to</b> 250	45 to 500	45 to 600	45 to 600
0 to 300	65 to 500	55 to 600	55 to 600
0 to 400	55 to 500	45 to 600	45 to 600
0 <b>to</b> 500	55 <b>to</b> 500	45 to 600	45 to 600

Note: Design and Specifications subject to change without prior notice.



### **CODE - BMEL**

NS	А	В	øс	ØD	E	Approx. Wt.#
63	12.5	16	66.5	77.5	35	150.0
80	11	17	80	89.5	35	200.0
100	12.5	19	100	111	35	250.0
125	15	21	118.5	129	35	350.0
150	15	21	149	161	35	500.0

(# Weight in grams with box for 300 mm stem length.)



# Series 2511TG : BMT INDUSTRIAL THERMOMETER BIMETAL

Note : We of fer National / International Scales like °C, °F & Dual Scale in °C & °F & Scales as per the requirement can be provided on request. Following are the example tables for ranges in °C. Standard Ranges

Positive range single scale in °C												
0 to 60	0 to 80	0 to 100	0 to 120	0 to 160	0 to 200	0 to 250	0 to 300	0 to 400	0 to 500			
Compound range single scale in °C												
-20 to 40	-20 to 60	-20 to 120	-30 to 30	-30 to 50	-30 to 70	-40 to 40	-40 to 60	-80	to 80			
20 10 10												

#### Accessories (\*Refer Datasheet For Thermowells)

Note : Other Scales are available on reque

V

V

~

~

#### \* Thermowell

38BSM

### How To Order - Ordering Example: 2511TG : BMT.100. BM. 2BSM. FXD. 2C. 0 TO 60°C. SS

Basic Model 2511TG : BMT									
Code		50	63	80	100	125	150		
Nominal Size	e	50 mm	63 mm	80 mm	100 mm	125 mm	150 mm		
Code	Type Of Mounting	50	63	80	100	125	150		
BM	Direct bottom entry	×	~	~	~	~	~		
СВК	Direct center back entry	~	~	✓*	✓*	✓*	✓*		
EA	Every angle back entry	×	×	✓*	✓*	✓*	✓*		
BMEL	Bottom entry through elbow	×	~	✓*	✓*	✓*	✓*		
*Available with	external zero adjustment, Refer option EZ.								
Code	Gauge Connection	50	63	80	100	125	150		
8BSM	1/8" BSP(M) (Stem Dia. Max. 6.35 mm)	~	~	×	×	×	×		
8NPM	1/8" NPT(M) * (Stem Dia. Max. 6.35 mm)	~	~	×	×	×	×		
4BSM	1/4" BSP(M) (Stem Dia. Max. 6.35 mm)	~	~	×	×	×	×		
4NPM	1/4" NPT(M )* (Stem Dia. Max. 6.35 mm)	~	~	×	×	×	×		

V 1 V V X ~ ½" BSP(M) (Standard) (Stem Dia. Max. 12 mm) 2BSM V 2NPM 1/2" NPT(M)\* (Stem Dia. Max. 12 mm) × 1 V 1 1 V M 20 x 1.5 (Stem Dia. Max. 12 mm) × V 1 V V 2M20 4YN 11/2" TRICLOVER \*\* (Stem Dia. Max. 12 mm) X 1 1 V 1 1

Х

1

\* Not recommended for Revolving/ Swivel connections. \*\* Without clamp, gasket & bottom. Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc can be provided on request.

Proces	Process Connection Type (* Welded with stem / case & not suitable for taper threaded connections)									
ADJ	ADJ Adjustable FXD Fixed (Standard)* ROV Revolving / Swivel									
Stem I	Stem Diameter									
1U	6 mm <b>2M</b> 6	6.35 mm	2C	8 mm (Standard)	21	9.5 mm	2J	10 mm	<b>2K</b> 12 mm	
Stem Length (Below thread Max. 600 mm) Please specify in mm (refer scale for minimum & maximum stem lengths)									ximum stem lengths)	
Rang	Range Refer Range Table									
Code	Options (* Appl	licable for I	NS 100	mm & above)			0	Code	Options	
SS	AISI 316 SS case &	bezel (For	NS 100	) mm & above)*#			Г	G	Toughened glass*	
C5	Five point calibrat	ion certific	ate (fo	r measuring range	)		0	N	Custom designed dial	
DS	Dampening liquid	silicon oil (	up to 2	200°C)**			0	D	Dial tag marking*	
QZ Dampening liquid silicon oil (up to 300°C)**							r	итс	Material test certificates##	
EZ	External zero adju	istment* [e	except I	NS 50 mm & 63 mi	m (mounti	ng Code BM)]	S	т	SS tag plate	
SG	Shatterproof / safe	ety glass*								

\*\*Gasket & Filling plug of Viton. (# Consult factory for minimum order quantity & delivery.)

3/8" BSP(M) (Stem Dia. Max. 10 mm)

# # Material test certificates will be provided for wetted parts only with chemical composition testing. For others, please Consult factory

Note: Design and Specifications subject to change without prior notice.