



# INDUSTRIAL THERMOMETER

## BIMETALLIC

**CB**



### SPECIAL FEATURES

- STAINLESS STEEL CASE & STEM
- BOTTOM / BACK / ALL ANGLE ENTRY
- OPTIONAL : SILICONE DAMPED

### APPLICATIONS

CHEMICALS / REFINERY / FERTILIZER /  
PETROCHEMICALS / PHARMACEUTICAL / POWER /  
CEMENT / SUGAR / FOOD & BEVERAGES / PULP &  
PAPER & ALLIED PROCESS INDUSTRIES.

### SPECIFICATIONS

#### STANDARD VERSION : 63 mm, 100 mm, 115 mm, 150 mm

Accuracy	: Class 1 as per EN-13190 : 1999
Operating Pressure	: 15 kg/cm <sup>2</sup> / ( without thermowell ) maximum
Over Range Limit	: 15% of full scale range or 500°C whichever is min.
Stem Diameter	: 6mm / 8mm / 9.5mm
Stem Length	: Refer scale table

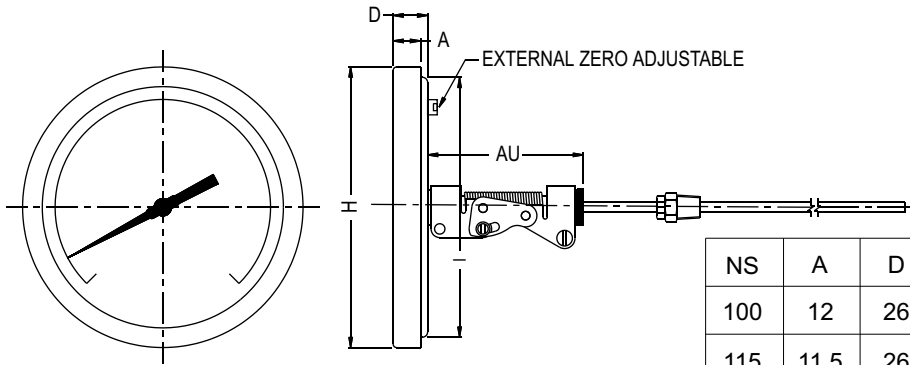
Case	: AISI 304 SS
Ring	: AISI 304 SS, Bayonet Lock
Stem	: AISI 316 SS
Joints	: Tig argon arc welding
Sensing Element	: Bi - metal strip coiled

Protection	: IP 55
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black Coloured Slotted zero adjustable (STD) Externally Zero adjustable pointer with Mounting - 8 Aluminium, black Coloured Fixed Pointer for NS - 63mm
Window	: Sheet Glass
Gasket	: Neoprene

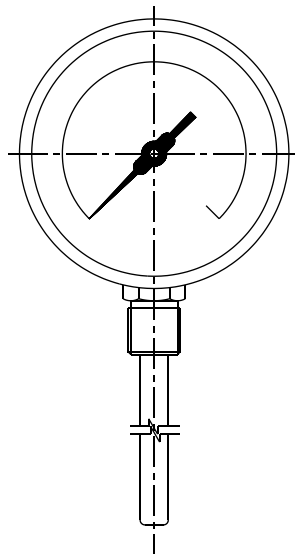
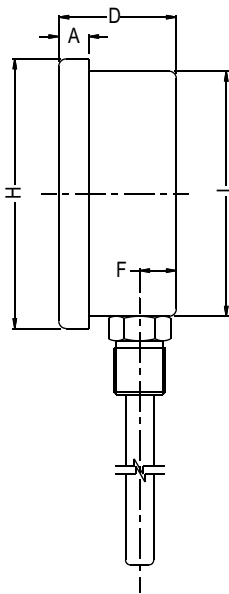


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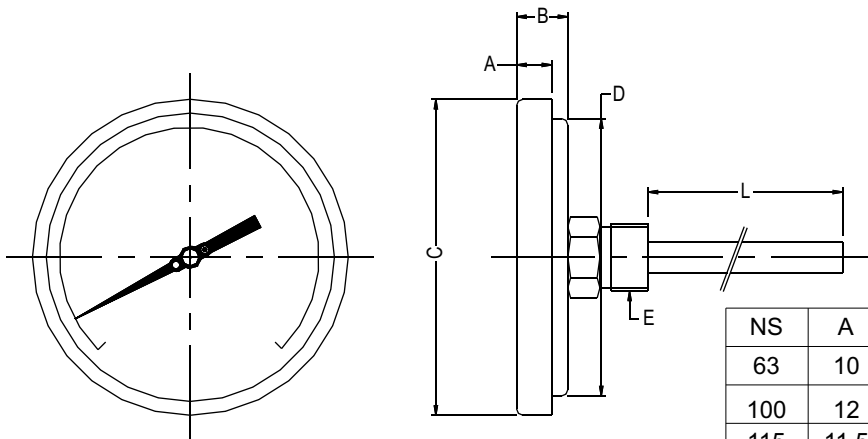
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NS	A	D	H	I	AU
100	12	26	110	100	88
115	11.5	26	132	115	88
150	12	26	160	150	88



NS	A	D	F	H	I	L
63	10	43	15	68.5	63	*
100	12	47	16.5	110	100	*
115	11.5	47	16.5	132	115	*
150	12	47	16.5	160	150	*



NS	A	B	C	D	E	L
63	10	15	69	62	*	*
100	12	17	110	100	*	*
115	11.5	17	132	115	*	*
150	12	17	160	150	*	*

(\* AS PER CUSTOMER REQUIREMENT.)  
Notes : • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size.



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### SCALE 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.

During stem length selection, please select between the limits mentioned



°C	Ø 6 mm.	Ø 8 & 9.5 mm.
-50 / 50	100 / 500	82 / 900
-50 / 100	116 / 500	91 / 900
-50 / 150	98 / 500	79 / 900
-30 / 220	84 / 500	70 / 900
-30 / 170	98 / 500	79 / 900
-30 / 120	116 / 500	91 / 900
-30 / 70	100 / 500	82 / 900
-30 / 50	114 / 500	88 / 900
-20 / 180	98 / 500	79 / 900
-20 / 100	88 / 500	72 / 900
-20 / 80	100 / 500	82 / 900
-20 / 60	114 / 500	88 / 900
0 / 50	100 / 500	107 / 900
0 / 60	137 / 500	107 / 900
0 / 80	114 / 500	88 / 900
0 / 100	100 / 500	82 / 900
0 / 120	88 / 500	72 / 900
0 / 150	116 / 500	91 / 900
0 / 200	98 / 500	79 / 900
0 / 250	84 / 500	70 / 900
0 / 300	100 / 500	88 / 900
0 / 400	150 / 500	100 / 900
0 / 500	150 / 500	100 / 900

### RANGE TABLE

**Note :** Waaree offers 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 ° C

#### STANDARD RANGE

POSITIVE RANGE SINGLE SCALE IN °C					
0/50	0/80	0/120	0/200	0/300	0/500
0/60	0/100	0/150	0/250	0/400	
COMPOUND RANGE SINGLE SCALE IN °C					
- 30 / 50		- 20 / 100	- 30 / 120		- 50 / 50
- 20 / 60		- 20 / 180	- 30 / 170		- 50 / 100
- 20 / 80		- 30 / 70	- 30 / 220		- 50 / 150

**Note :** Other Scales are available on request.

#### AVAILABLE ACCESSORIES

Thermowell

See Data sheet TW-



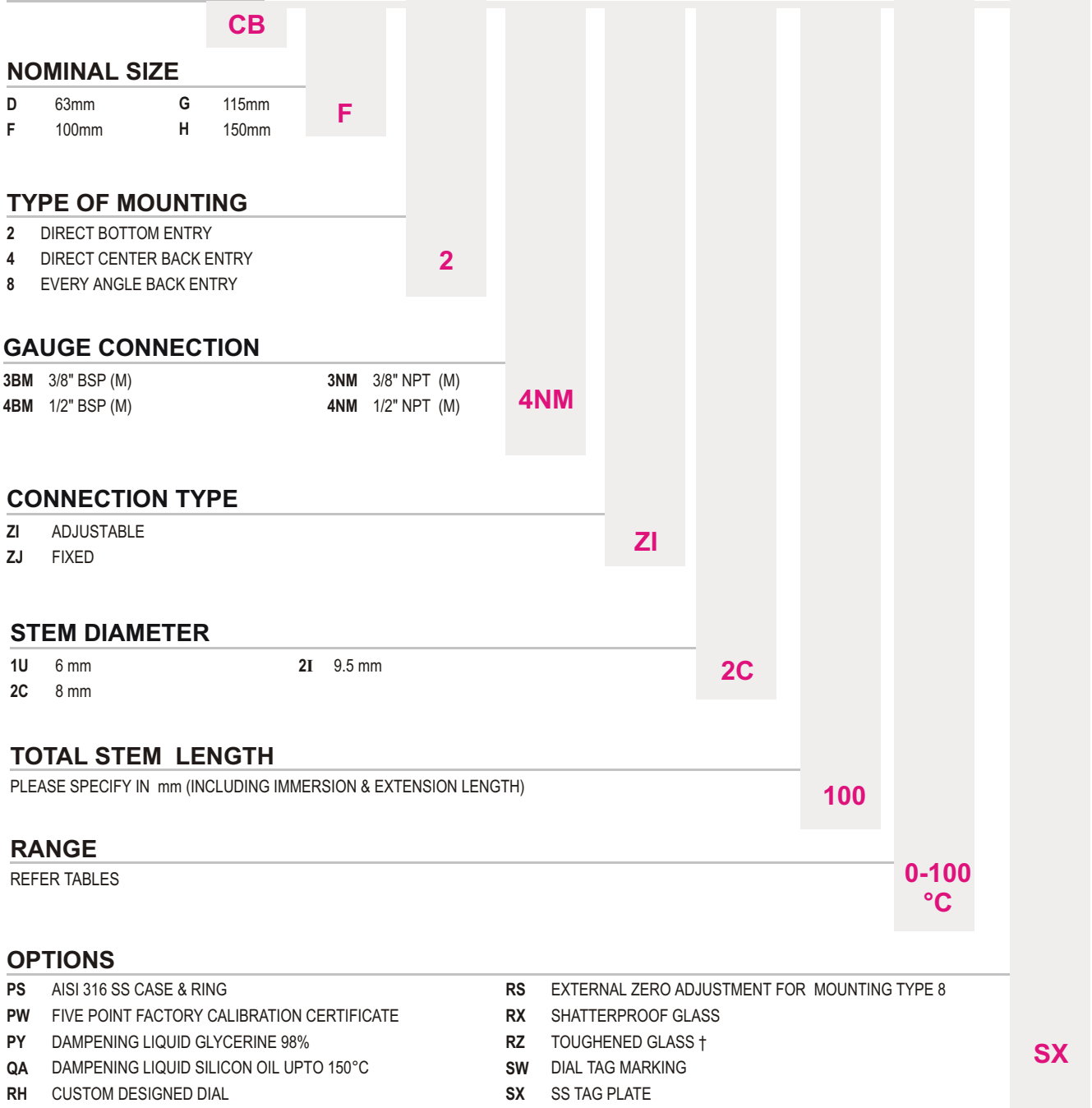
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### HOW TO ORDER

#### BASIC MODEL



#### NOMINAL SIZE

D	63mm	G	115mm
F	100mm	H	150mm

#### TYPE OF MOUNTING

- 2 DIRECT BOTTOM ENTRY
- 4 DIRECT CENTER BACK ENTRY
- 8 EVERY ANGLE BACK ENTRY

#### GAUGE CONNECTION

3BM	3/8" BSP (M)	3NM	3/8" NPT (M)
4BM	1/2" BSP (M)	4NM	1/2" NPT (M)

#### CONNECTION TYPE

- ZI ADJUSTABLE
- ZJ FIXED

#### STEM DIAMETER

1U	6 mm	2I	9.5 mm
2C	8 mm		

#### TOTAL STEM LENGTH

PLEASE SPECIFY IN mm (INCLUDING IMMERSION & EXTENSION LENGTH)

#### RANGE

REFER TABLES

#### OPTIONS

PS	AISI 316 SS CASE & RING	RS	EXTERNAL ZERO ADJUSTMENT FOR MOUNTING TYPE 8
PW	FIVE POINT FACTORY CALIBRATION CERTIFICATE	RX	SHATTERPROOF GLASS
PY	DAMPENING LIQUID GLYCERINE 98%	RZ	TOUGHENED GLASS †
QA	DAMPENING LIQUID SILICON OIL UPTO 150°C	SW	DIAL TAG MARKING
RH	CUSTOM DESIGNED DIAL	SX	SS TAG PLATE

† : Not Available in NS 63mm

Note : Due to continuous changes the specification may vary from time to time