

## BIMETAL

CB

### SPECIAL FEATURES

- STAINLESS STEEL CASE & STEM
- BOTTOM / BACK / EVERY ANGLE ENTRY
- OPTIONAL : SILICON FILLED UPTO 200°C
- STANDARD FOLLOWED EN 13190.



### APPLICATIONS

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

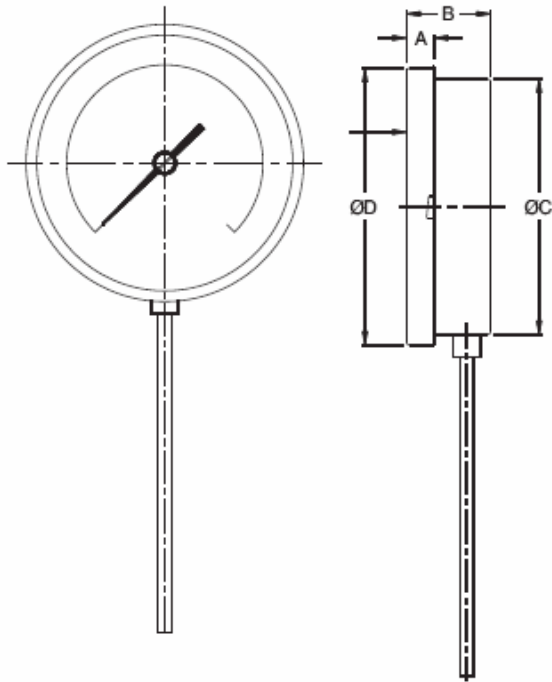
### SPECIFICATIONS

**STANDARD VERSION : 63mm, 80mm, 100mm, 125mm, 150mm**

|                    |  |
|--------------------|--|
| Accuracy           | : Class 1 as per EN 13190                                |
| Operating Pressure | : 15 kg/cm <sup>2</sup> / ( without thermowell ) maximum |
| Over Range Limit   | : 15% of full scale range or 600°C whichever is min.     |
| Stem Diameter      | : 6mm / 8mm / 9.5mm / 10mm / 12mm                        |
| Stem Length        | : Refer scale table                                      |

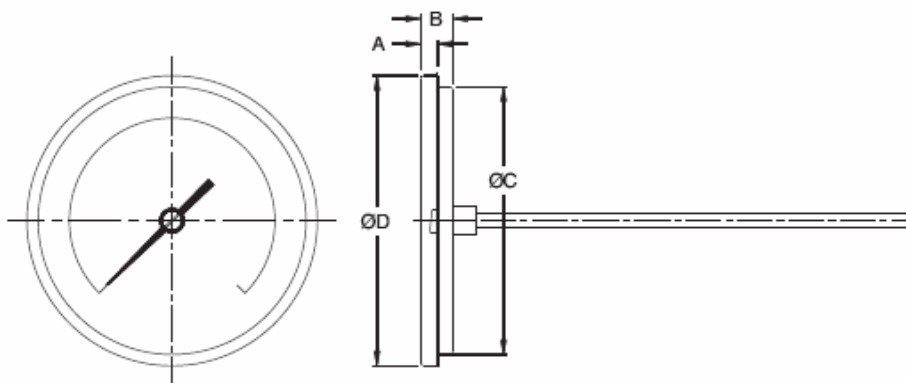
|                 |                             |
|-----------------|-----------------------------|
| Case            | : AISI 304 SS               |
| Ring            | : AISI 304 SS, Bayonet Lock |
| Stem            | : AISI 316 SS               |
| Connection      | : AISI 316 SS               |
|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

|            |   |
|------------|---|
| Protection | : IP 65   |
| Dial       | : Aluminium, black graduation on white background   |
| Pointer    | : Aluminium, black Coloured Slotted zero adjustable (STD)<br>Externally Zero adjustable pointer with Mounting - 8<br>(Except nominal size 63mm )<br>Aluminium, black Coloured Fixed Pointer for NS - 63mm |
| Window     | : Sheet Glass   |
| Gasket     | : Neoprene  |



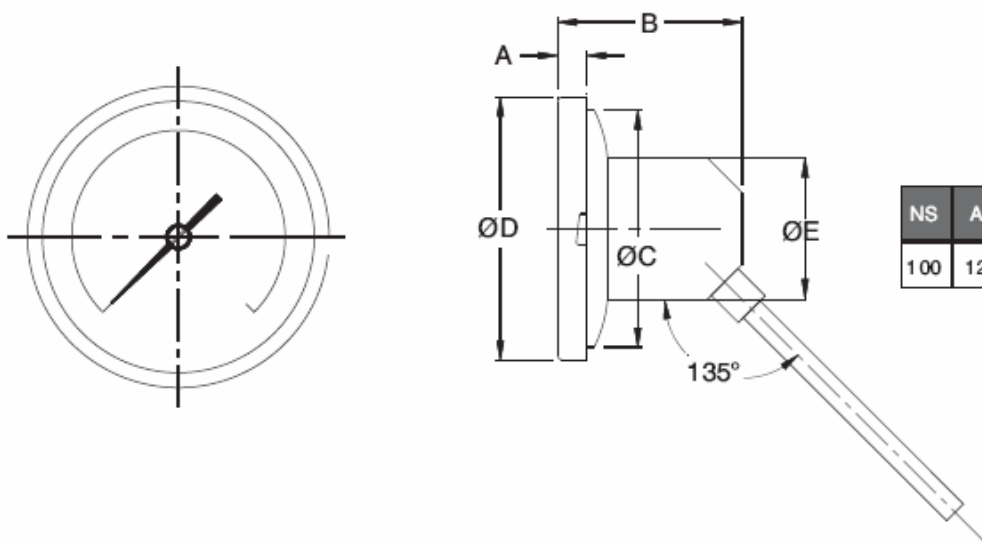
**TYPE 2**

| NS  | A    | B  | ØC  | ØD   |
|-----|------|----|-----|------|
| 63  | 12.5 | 46 | 66  | 77.5 |
| 80  | 11   | 36 | 80  | 89.5 |
| 100 | 9.5  | 46 | 100 | 110  |
| 125 | 11   | 48 | 119 | 131  |
| 150 | 15   | 49 | 149 | 161  |



**TYPE 4**

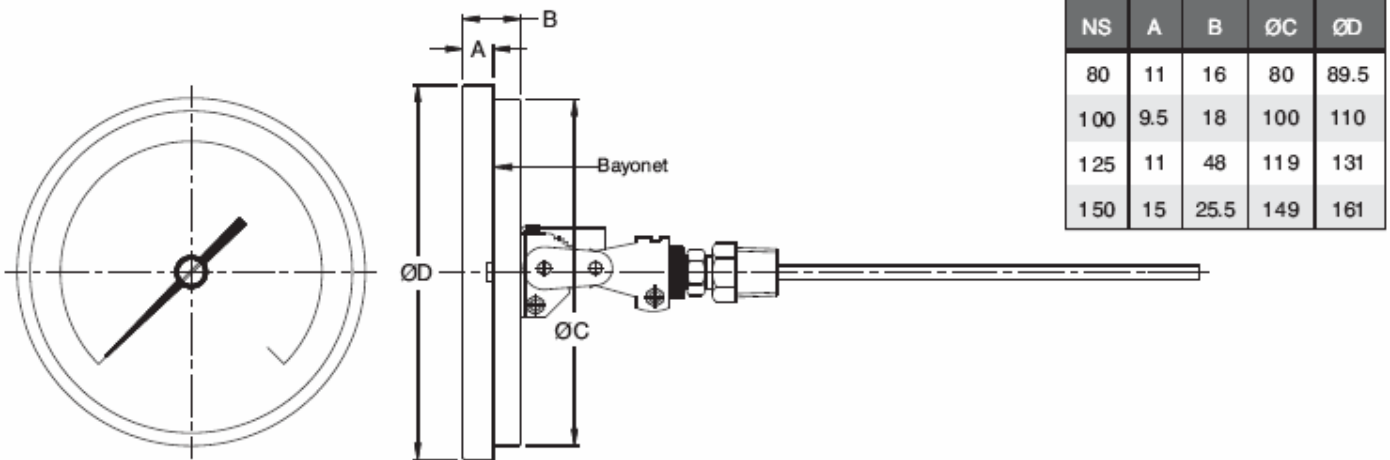
| NS  | A   | B    | ØC  | ØD    |
|-----|-----|------|-----|-------|
| 63  | 9.5 | 16   | 60  | 69.5  |
| 80  | 11  | 16   | 80  | 89.5  |
| 100 | 9.5 | 18   | 100 | 110   |
| 125 | 10  | 20   | 119 | 131.5 |
| 150 | 15  | 25.5 | 149 | 161   |



**TYPE 7**

| NS  | A  | B  | ØC  | ØD  | ØE |
|-----|----|----|-----|-----|----|
| 100 | 12 | 78 | 100 | 111 | 60 |

## TYPE 8



Notes : • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size.

### 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 (below thread). During stem length selection, please select between the limits mentioned below.

| (Range) °C | Ø 6 mm.   | Ø 8, 9.5 & 10 mm. | Ø 12 mm.  |
|------------|-----------|-------------------|-----------|
| -50 / 50   | 65 / 500  | 60 / 900          | 55 / 1000 |
| -50 / 100  | 50 / 500  | 40 / 900          | 35 / 1000 |
| -50 / 150  | 40 / 500  | 35 / 900          | 30 / 1000 |
| -30 / 220  | 30 / 500  | 25 / 900          | 25 / 1000 |
| -30 / 170  | 40 / 500  | 35 / 900          | 30 / 1000 |
| -30 / 120  | 50 / 500  | 40 / 900          | 55 / 1000 |
| -30 / 70   | 65 / 500  | 60 / 900          | 55 / 1000 |
| -30 / 50   | 85 / 500  | 60 / 900          | 55 / 1000 |
| -20 / 180  | 40 / 500  | 35 / 900          | 30 / 1000 |
| -20 / 100  | 60 / 500  | 50 / 900          | 45 / 1000 |
| -20 / 80   | 65 / 500  | 60 / 900          | 55 / 1000 |
| -20 / 60   | 85 / 500  | 60 / 900          | 55 / 1000 |
| 0 / 50     | 120 / 500 | 100 / 900         | 85 / 1000 |
| 0 / 60     | 100 / 500 | 85 / 900          | 80 / 1000 |
| 0 / 80     | 85 / 500  | 60 / 900          | 55 / 1000 |
| 0 / 100    | 65 / 500  | 60 / 900          | 55 / 1000 |
| 0 / 120    | 60 / 500  | 50 / 900          | 45 / 1000 |
| 0 / 150    | 50 / 500  | 40 / 900          | 35 / 1000 |
| 0 / 200    | 40 / 500  | 35 / 900          | 30 / 1000 |
| 0 / 250    | 30 / 500  | 25 / 900          | 25 / 1000 |
| 0 / 300    | 50 / 500  | 40 / 900          | 40 / 1000 |
| 0 / 400    | 40 / 500  | 35 / 900          | 35 / 1000 |
| 0 / 500    | 35 / 500  | 30 / 900          | 30 / 1000 |
| 0 / 600    | 30 / 500  | 25 / 900          | 25 / 1000 |

### RANGE TABLE

Note : Manufacturer 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      | 0/600 |
| COMPOUND RANGE SINGLE SCALE IN °C |       |            |       |            |       |
| - 30 / 50                         |       | - 20 / 100 |       | - 30 / 120 |       |
| - 20 / 60                         |       | - 20 / 180 |       | - 30 / 170 |       |
| - 20 / 80                         |       | - 30 / 70  |       | - 30 / 220 |       |
|                                   |       |            |       | - 50 / 50  |       |
|                                   |       |            |       | - 50 / 100 |       |
|                                   |       |            |       | - 50 / 150 |       |

Note : Other Scales are available on request.

† Refer Datasheet for complete specifications

## ACCESSORIES †

Thermowell

See Data Sheet EI

## HOW TO ORDER

### BASIC MODEL

#### CODE

D E F G H

#### NOMINAL SIZE (MM)

63 80 100 125 150

#### TYPE OF MOUNTING

- 2 DIRECT BOTTOM ENTRY
- 4 DIRECT CENTER BACK ENTRY
- 7 45° ANGLE MOUNTING (Only for NS100mm)
- 8 EVERY ANGLE BACK ENTRY (EXCEPT NS 63mm)

#### GAUGE CONNECTION

- |                           |                           |   |
|---------------------------|---------------------------|---|
| 3BM 3/8" BSP (M) *        | 3NM 3/8" NPT (M) *        | 2BM 1/4" BSP (M) FOR STEM DIA. 6mm ONLY |
| 4BM 1/2" BSP (M) STANDARD | 4NM 1/2" NPT (M) STANDARD | 2NM 1/4" NPT (M) FOR STEM DIA. 6mm ONLY |
| 4TM 1/2" BSPT (M)         | 4MM M 20 X 1.5 (M)        |   |
| 3TM 3/8" BSPT (M) *       | 4YN 1 1/2" TRICLOVER      |   |

Note : Connections like PT/PF/Flaired /UNF/G/R etc.can be provided on request.

Non standard connections can be provided through adaptors.

\* Available only upto stem dia 9.5 mm

#### CONNECTION TYPE

- ZI ADJUSTABLE      ZJ FIXED

#### STEM DIAMETER

- |           |          |
|-----------|----------|
| 1U 6 mm   | 2J 10 mm |
| 2C 8 mm   | 2K 12 mm |
| 2I 9.5 mm |          |

#### TOTAL STEM LENGTH (BELOW CASE)

PLEASE SPECIFY IN mm (INCLUDING IMMERSION & EXTENSION LENGTH)

#### RANGE

REFER TABLES

#### OPTIONS

FOR NON STANDARD PRODUCTS/OPTIONAL ITEMS, PLEASE CONTACT FACTORY FOR DELIVERY AND MINIMUM QUANTITY OF ORDER.

- |   |   |
|---|---|
| PS AISI 316 SS CASE & BEZEL                   | RS EXTERNAL ZERO ADJUSTMENT (EXCEPT NS 63mm, MOUNTING TYPE 2 & 7) |
| PW FIVE POINT CALIBRATION CERTIFICATE         |   |
| QA DAMPENING LIQUID SILICON OIL (UPTO 200°C)* | RX SHATTERPROOF GLASS/SAFETY GLASS                                |
| RH CUSTOM DESIGNED DIAL                       | RZ TOUGHENED GLASS  |
|   | SW DIAL TAG MARKING   |
|   | SX SS TAG PLATE   |

\* GASKET & PLUG OF VITON / NBR

#### Ordering Example:

CB - F - 2 - 4NM - ZI - 2C - 100 - 0/100°C - SX

Note : ● Due to continuous improvement, the specification may vary from time to time.

CB  
F  
2  
4NM  
ZI  
2C  
100  
0-100  
°C  
SX