# Industrial bimetal thermometer
## Model : T110

Spec. sheet no. TD01-01

### Service intended
Bimetal thermometer is used for measuring temperature of gas or fluid. It is suitable for measurement, regulation, and direct monitoring for the fluid. It meets the most stringent criteria on resistance to a corrosive atmosphere and exceptional climatic circumstances.




### Nominal diameter
50, 65, 75, 100, 125 and 150 mm

### Accuracy
±2.0% of full scale

### Temperature element
Coiled bimetal

### Working range
Maximum scale value

## Standard features

### Location of stem
Center back connection, direct

### Case
304SS

### Cover
304SS

### Window
Glass

### Dial
White aluminium with black graduations

### Pointer
Black painted aluminium alloy

### Stem
6.0, 6.4, 8.0 and 10.0 mm diameter
304SS, 316SS and 316L SS
Max. Insertion length : 2,000 mm

### Zero adjustment
Internal

### Stem, process connection
¼", ⅜", ½", ¾" PT, NPT and PF

### Option
±1.0% of full scale

### Certificates
ATEX Ex II GD c IIC TX

### 1. Base model

| | |
|---|---|
| **T110** | Industrial bimetal thermometer |

### 2. Norminal diameter (mm)

| | |
|---|---|
| **1** | 50 |
| **2** | 65 |
| **3** | 75 |
| **4** | 100 |
| **5** | 125 |
| **6** | 150 |

### 3. Type of mounting

| | |
|---|---|
| **X** | Center back connection, direct |

### 4. Stem material

| | |
|---|---|
| **0** | 304SS |
| **1** | 316SS |
| **2** | 316L SS |

### 5. Stem, process connection

| | |
|---|---|
| **A** | None |
| **C** | ¼" |
| **D** | ⅜" |
| **E** | ½" |
| **F** | ¾" |
| **G** | 1½S (Only available with sanitary) |
| **H** | 2S (Only available with sanitary) |
| **I** | 2½S (Only available with sanitary) |

### 6. Stem connection type (CF: Compression fitting)

| | |
|---|---|
| **A** | None |
| **B** | PF |
| **C** | PT |
| **D** | NPT |
| **E** | CF + PT |
| **F** | CF + NPT |
| **G** | CF + PF |
| **H** | MT + PT (Movable thread) |
| **I** | MT + NPT (Movable thread) |
| **J** | MT + PF (Movable thread) |
| **S** | Clamp (Sanitary type flange) |

### 7. Stem outer diameter

| | |
|---|---|
| **0** | 6.0 mm |
| **1** | 6.4 mm |
| **2** | 8.0 mm |
| **3** | 10.0 mm (Not available process connection, ¼") |

### 8. Range

| | |
|---|---|
| **XXX** | Refer to scale range table |

### 9. Insertion length

| | |
|---|---|
| **X** | Refer to insertion length table |

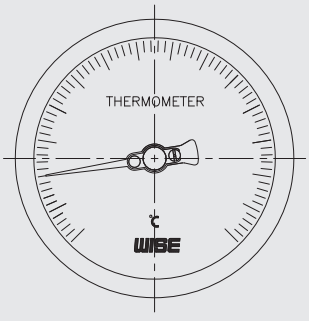
### 10. Accessories

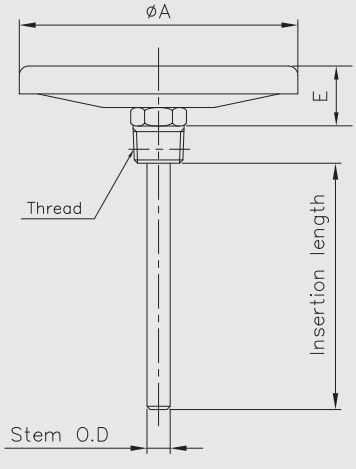
| | |
|---|---|
| **0** | None |
| **1** | Thermowell |
| **2** | Special accuracy (±1.0% of full scale) |
| **3** | Thermowell and special accuracy |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
|---|---|---|---|---|---|---|---|---|---|---|
| **T110** | **3** | **X** | **0** | **E** | **C** | **1** | **XXX** | **X** | **1** | **Sample ordering code** |

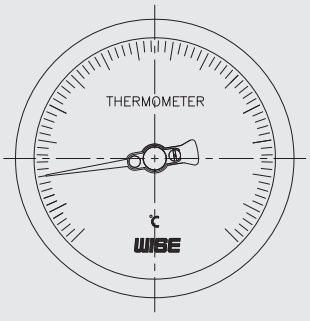
# T110 : Type of mounting

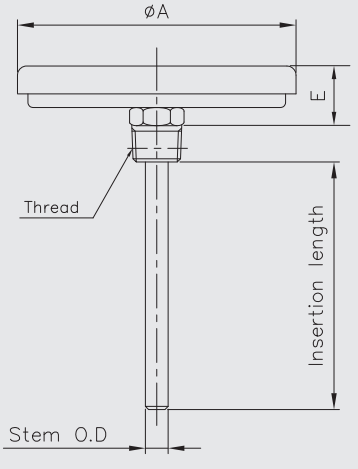
Code X



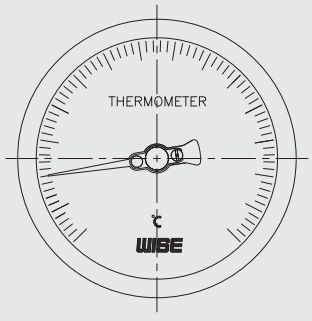



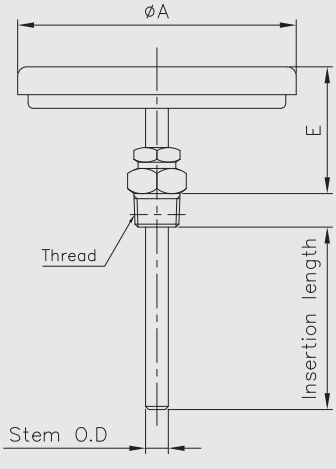

Code X*




Code X**




Dimensions (mm)

| Dial Size | Available code | A | E±2 |
|---|---|---|---|
| 50 | X | 50 | 23.5 |
| | X** | 50 | 33.5 |
| 65 | X | 65 | 28.5 |
| | X** | 65 | 38.5 |
| 75 | X | 86.5 | 28 |
| | X** | 86.5 | 43 |
| 100 | X | 111 | 32 |
| | X** | 111 | 42 |
| 125 | X | 137.5 | 30 |
| | X** | 137.5 | 44 |
| 150 | X* | 169.5 | 43 |
| | X** | 169.5 | 51 |

## Scale ranges

| Code | Scale range (℃) | Scale spacing (℃) | Minimum stem length (mm) | |
|---|---|---|---|---|
| | | | 6.0 and 6.4 | 8.0 and 10.0 |
| 032 | -50 ~ 50 | 2 | 55 | 50 |
| 037 | -50 ~ 100 | 2 | 45 | 35 |
| 054 | -30 ~ 50 | 2 | 70 | 60 |
| 059 | -30 ~ 100 | 2 | 50 | 45 |
| 061 | -30 ~ 120 | 2 | 45 | 35 |
| 069 | -20 ~ 50 | 2 | 80 | 70 |
| 074 | -20 ~ 100 | 2 | 45 | 45 |
| 079 | -20 ~ 150 | 5 | 40 | 35 |
| 084 | -10 ~ 50 | 1 | 95 | 80 |
| 099 | 0 ~ 50 | 1 | 110 | 70 |
| 100 | 0 ~ 60 | 1 | 95 | 80 |
| 101 | 0 ~ 70 | 2 | 80 | 60 |
| 102 | 0 ~ 80 | 2 | 70 | 55 |
| 104 | 0 ~ 100 | 2 | 55 | 50 |
| 106 | 0 ~ 120 | 2 | 50 | 45 |
| 109 | 0 ~ 150 | 2 | 45 | 35 |
| 114 | 0 ~ 200 | 5 | 35 | 35 |
| 119 | 0 ~ 250 | 5 | 35 | 30 |
| 124 | 0 ~ 300 | 5 | 35 | 25 |
| 129 | 0 ~ 350 | 5 | 30 | 25 |
| 134 | 0 ~ 400 | 5 | 80 | 65 |
| 144 | 0 ~ 500 | 10 | 70 | 60 |
| 154 | 0 ~ 600 | 10 | 70 | 60 |

## Insertion length

| Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Length (mm) | 50 | 60 | 70 | 80 | 100 | 120 | 130 | 150 | 175 | 200 | 225 | 250 |

| Code | D | E | F | G | H | J | K | L | M | N | P |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Length (mm) | 275 | 300 | 350 | 375 | 400 | 450 | 500 | 550 | 1,000 | 1,500 | 2,000 |