

Process industry bimetal thermometer

Model : T120

Spec. sheet no. TD01-05

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

75 and 100 mm

Accuracy

±2.0 % of full scale

Temperature element

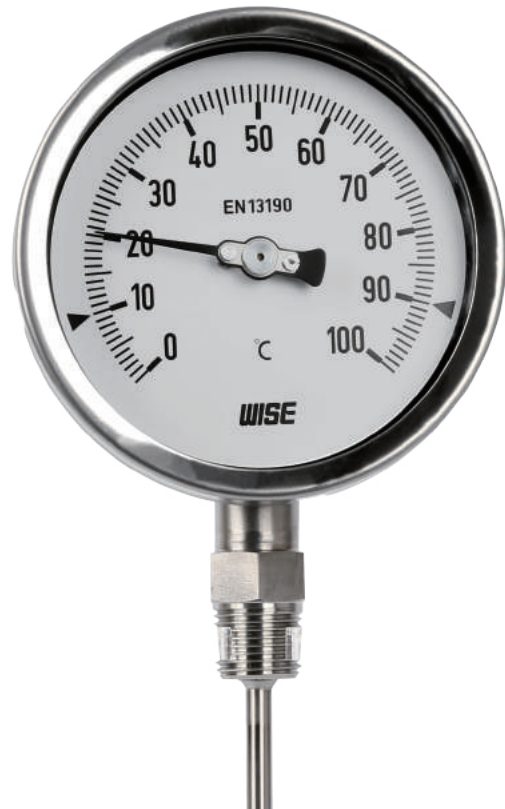
Coiled bimetal

Working range

Maximum scale value

Degree of protection

EN60529/IEC529/IP65 (100 mm)



Standard features

Location of stem

Bottom connection, direct

Case

304SS

Cover

304SS

Window

Glass

Dial

Metallic silver 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

1/4", 3/8", 1/2", 3/4" PT, NPT and PF

Option

±1.0 % of full scale

Certificates

ATEX II 2G Ex h IIC T6...T1 Gb /
ATEX II 2D Ex h IIIC T85°C...T450°C Db

Main order

Ordering information

1. Base model

T120 Process industry bimetal thermometer

2. Nominal diameter (mm)

3 75
4 100

3. Type of mounting

W Bottom connection, direct

4. Stem material

0 304SS
1 316SS
2 316L SS

5. Stem, process connection

A None
C 1/4"
D 3/8"
E 1/2"
F 3/4"
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 (mm)

0 6.0
1 6.4
2 8.0
3 10.0 (Not available process connection, 1/4")

8. Range

XXX Refer to scale range table

9. Insertion length

X Refer to insertion length table

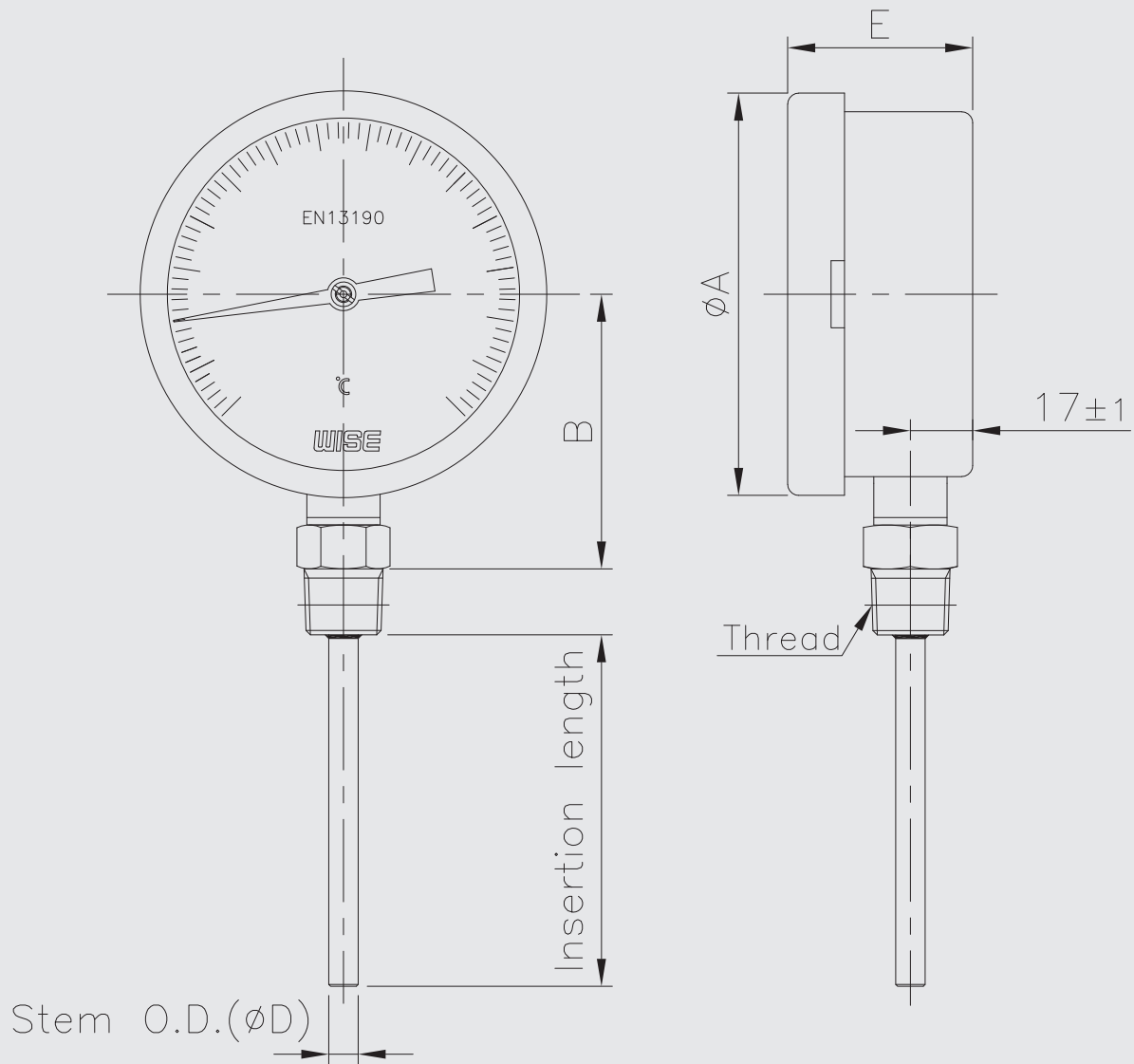
10. Accessories

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

Sample ordering code

| | | | | | | | | | |
|------|---|---|---|---|---|---|-----|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| T120 | 4 | W | 0 | E | C | 1 | XXX | X | 1 |

T120 : Type of mounting



Dimensions (mm)

| Dial Size | A | B±2 | E±2 |
|-----------|------|-----|------|
| 75 | 86.5 | 64 | 43 |
| 100 | 111 | 75 | 50.5 |

Scale ranges

| Code | Scale range (°C) | Scale spacing (°C) | 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 |

* Dial size 65 mm : Minimum stem length 60 mm

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 |