PROCESS INDUSTRY BIMETAL THERMOMETER WITH ADJUSTABLE STEM

Model : T190

Spec. sheet no. TD01-09

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, 100, 125 and 150 mm

Accuracy

±2.0 % of full scale

Temperature element

Coiled bimetal

Working range

Maximum scale value

Degree of protection

EN60529/IEC529/IP67 (100 mm)
EN60529/IEC529/IP66 (+A6230)

Max. allowable pressure at stem

Under normal static conditions, the stem is designed to withstand up to 2 MPa (20 bar).
However, depending on installation conditions such as vibration, flow velocity, or pressure fluctuations, the use of a thermowell is recommended in high-temperature or high-pressure environments.



Standard features

Location of stem

Center back with adjustable stem

Case

304SS, Adjustable on stem 90°

Cover

304SS

Window

Glass

Dial

Metallic silver aluminium with black graduations

Pointer

Metallic silver aluminium with black graduations

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

External

Stem, process connection

¼", ⅜", ½", ¾" PT, NPT and PF

Option

±1.0 % of full scale
Window : Safety glass
Special range : 0 ~ 600 ℃

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

T190	Process industry bimetal thermometer with adjustable stem

2. Nominal diameter (mm)

3	75
4	100
5	125
6	150

3. Type of mounting

Y	Center back with adjustable stem

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 (mm)

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

8. Range

XXX	Refer to scale range table

9. Insertion length

X	Refer to insertion length table

10. Accessories

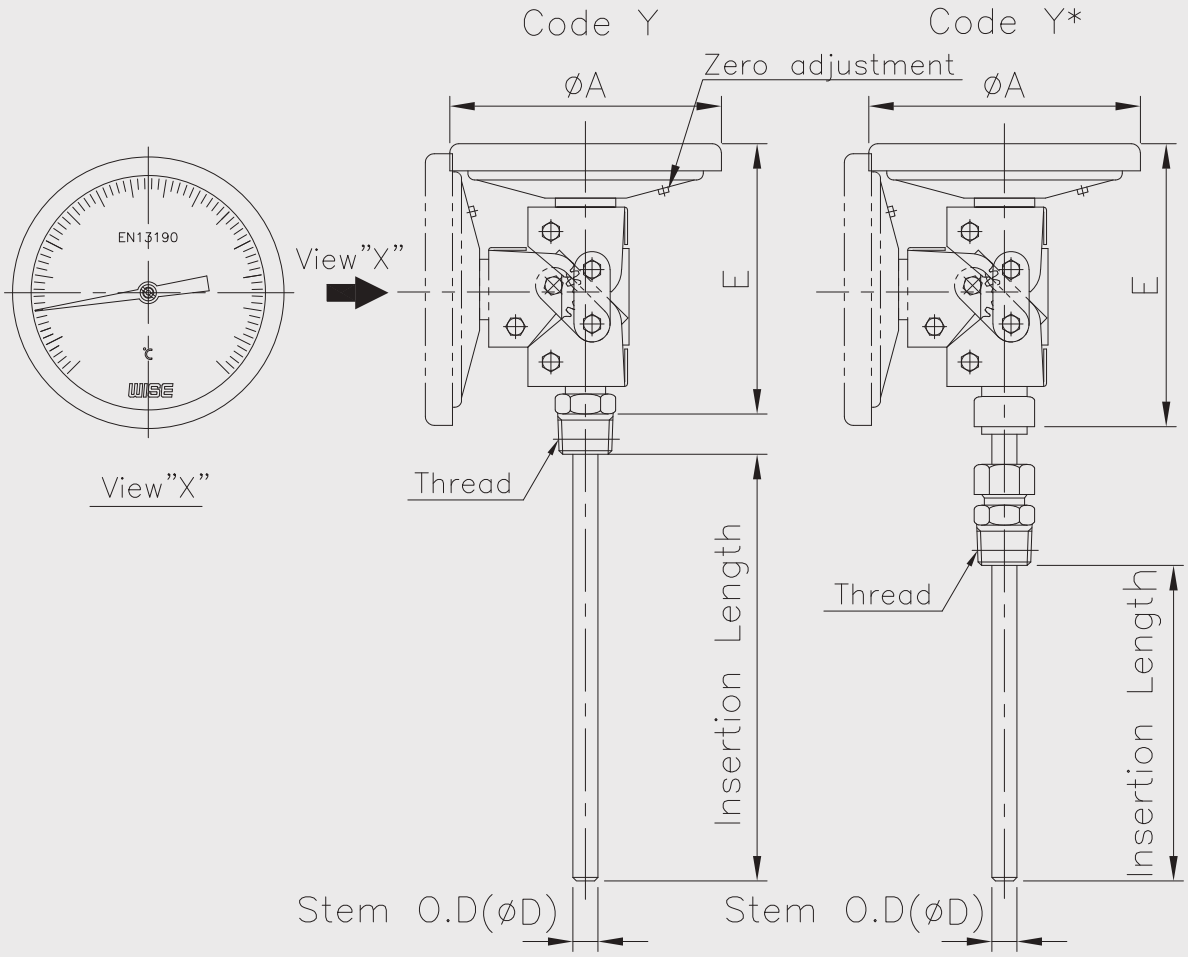
0	None
1	Thermowell
2	Special accuracy (±1.0 % of full scale)
3	Thermowell and special accuracy

Sample ordering code

1	2	3	4	5	6	7	8	9	10
T190	**4**	**Y**	**0**	**E**	**C**	**1**	**XXX**	**X**	**1**

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T190 : Type of mounting



Dimensions (mm)

Dial Size	Available code	A	E±2
75	Y	86.5	101
	Y*	86.5	99
100	Y	111	105
	Y*	111	103
125	Y	137.5	103
	Y*	137.5	101
150	Y	169.5	132
	Y*	169.5	130

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	1	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