

# Hermetically sealed case bimetal thermometer with adjustable stem

**Model : T191**

Spec. sheet no. TD01-10

## Service intended

Bimetal thermometer is used for measuring temperature of gas or fluid. This thermometer prevents entry of moisture into the casing, thus minimizing the possibility of icing or fogging inside the case.



## 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 (125 mm)

EN60529/IEC529/IP66 (100 mm)

## 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

Hermetically sealed, 316L SS

### Cover

Hermetically sealed, 316L SS

### Window

Safety 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

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

### Option

±1.0 % of full scale

Window : Safety glass

Special range : 0 ~ 600 °C

### Certificates

ATEX II 2G Ex h IIC T6...T1 Gb /

ATEX II 2D Ex h IIIC T85°C...T450°C Db

**1. Base model**

**T191** Hermetically sealed case 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** 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

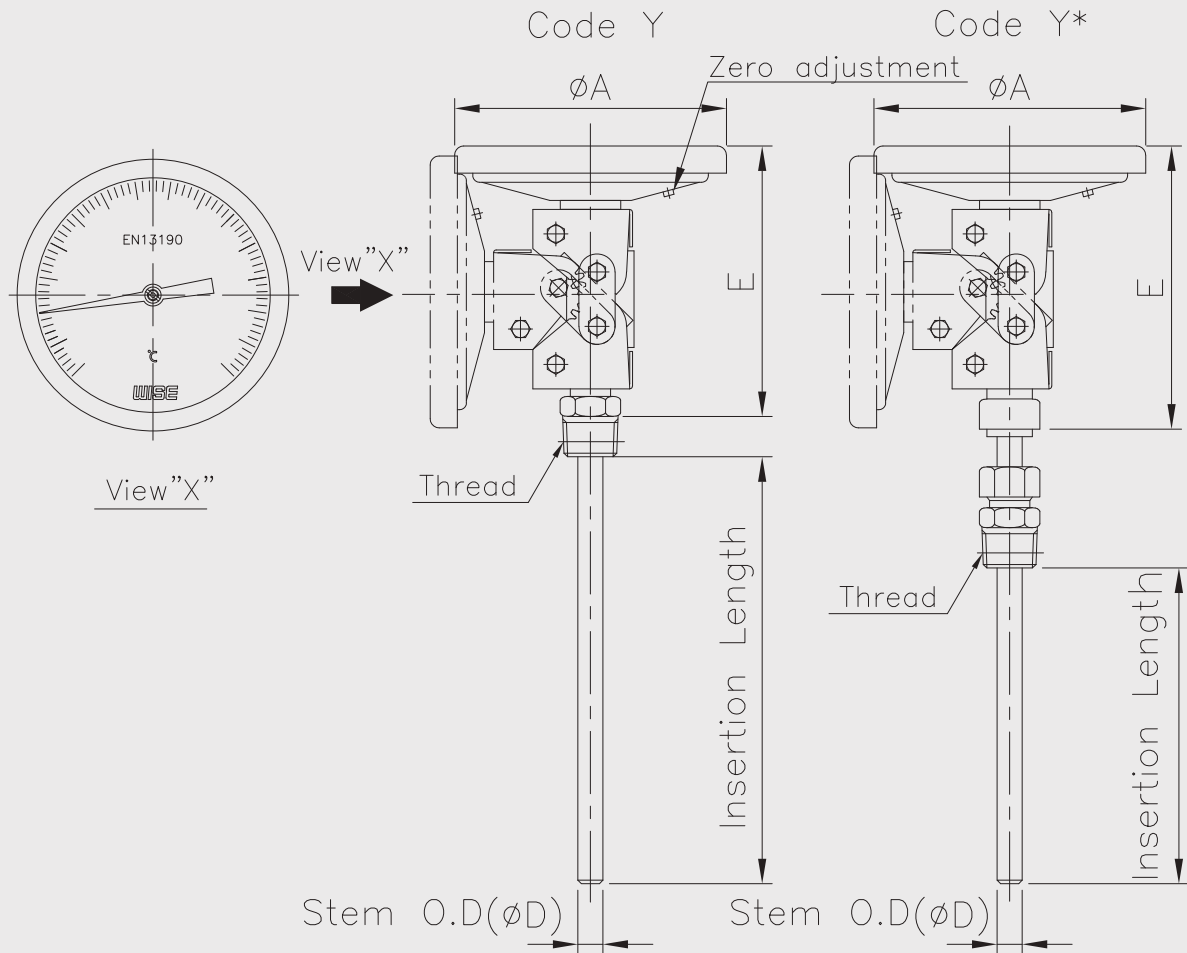
**10. Accessories**

**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
T191	6	Y	1	F	C	1	XXX	X	1

## T191 : 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 (°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	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