

# Euro gauge

## Electrical contact type bimetal temperature gauge

### Model : T531(H), T532(H/L), T533(L), T534(H/HH), T535(L/LL)

Spec. sheet no. TD05-04

#### Service intended

Contact type temperature gauge is installed with electric contact actuated by pointer. It provides the function which electrical circuit can be opened or closed by manual set point. It is applicable where signal is required (Audible or visual alarm) for control of resistance or any other application with auxiliary relay and contact.



#### Nominal diameter

100 mm

#### Accuracy

±2.0% of full scale

#### Temperature element

Coiled bimetal

#### Working range

Maximum scale value



### Standard features

#### Location of stem

Bottom connection, surface, case mounting

#### Case

304SS

#### Cover

304SS

Bayonet type

#### Window

Safety glass

Polycarbonate

#### Dial

White aluminium with black graduation

#### Contacts

Maximum voltage : 250 V AC

Contact rating : AC 220 V, 0.25 A

DC 100 V, 0.5 A

With max. no of contact : 2 sets per gauge

#### Pointer

Black painted aluminium alloy

#### Stem out diameter

6.0, 6.4, 8.0 and 10.0 mm diameter

304SS, 316SS and 316L SS

Max. Insertion length : 2,000 mm

#### Stem, process connection

$\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{3}{4}$ " PT or NPT

G1/2B, G3/4B

#### Optional

Special accuracy, ±1.0% of full scale

## Main order

## Ordering information

### 1. Base model

- T531** Electrical contact type bimetal temperature gauge (High alarm)
- T532** Electrical contact type bimetal temperature gauge (High and low alarm)
- T533** Electrical contact type bimetal temperature gauge (Low alarm)
- T534** Electrical contact type bimetal temperature gauge (High and high alarm)
- T535** Electrical contact type bimetal temperature gauge (Low and low alarm)

### 2. Nominal diameter and window material

- 4** 100 mm and safety glass
- 5** 100 mm and polycarbonate window

### 3. Type of mounting

- A** Bottom connection (Only direct mounting)
- X** Center back connection
- W** Center back connection with angle stem

### 4. Stem material

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

### 5. Stem, process connection

- D**  $\frac{3}{8}$ "
- E**  $\frac{1}{2}$ "
- F**  $\frac{3}{4}$ "

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

- 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

### 8. Range

- XXX** Refer to scale range table

### 9. Insertion length

- X** Refer to insertion length table

### 10. Accessories

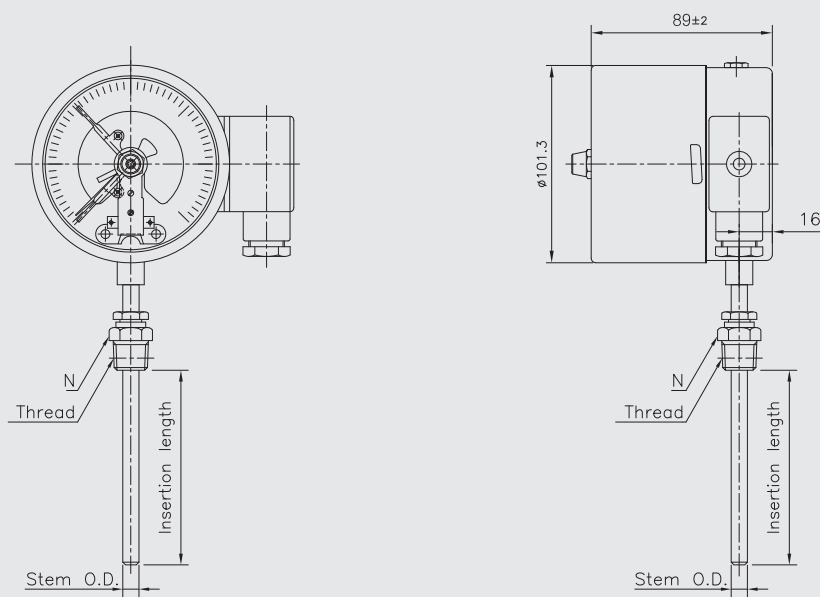
- 0** None
- 1** Thermowell
- 2** Special accuracy ( $\pm 1.0\%$  of full scale)
- 3** Thermowell and special accuracy

1	2	3	4	5	6	7	8	9	10
T531	4	A	1	E	C	3	XXX	X	1

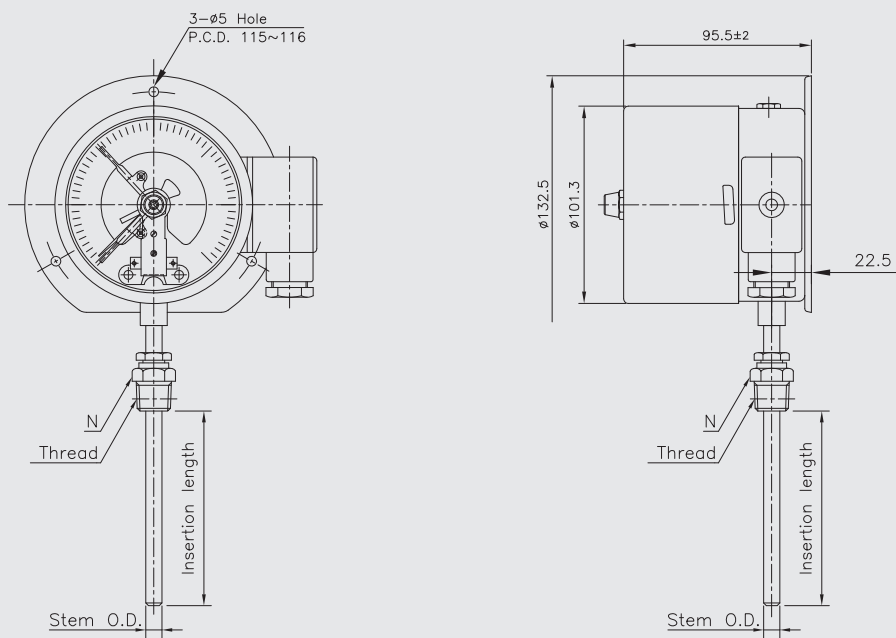
Sample  
ordering code

## T53X : Type of mounting

Code A



Code B



## Snap-action contacts

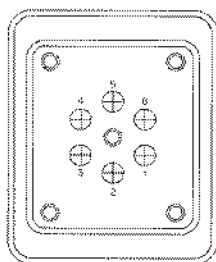
### General

Electromechanical limit switches in pointer type measuring instruments are auxiliary current switches which open or close electrical circuits at set limit value by means of a contacts arm which is moved by the actual value pointer. The snap action contact is a mechanical contact for switching capacities up to 30W 50VA max. Contact making will be delayed or advanced in relation to the movement of the actual value pointer. To closed the circuit, the contact pin of the movable contact arm is attracted in a jump by the permanent magnet fasten to the supporting arm shortly before the set value has been reached. Due to the retention force of the magnet, snap action contacts are more resistance against shock and vibration. The switching safety is increased by the increased contact pressure. When the circuit is opened, the magnet keeps the contact arm in its place until the restoring force of the measuring element exceeds the magnetic force, and the contact opens in a jump.

### Technical data

Normal operating voltage	Max. 250 V
Making and breaking current	Max. 1.0 A
Permanent current	Max. 0.6 A
Switching capacity	Max. 30 W 50 VA
Contact material	Ag80-Ni20
Switching accuracy	Approx. 2-5% of full scale value
No. of contact	Max. 2

## Terminal block arrangment



- ① No.1 contact (High or low)
- ② Common
- ③ HH or LL
- ④ Ground
- ⑤ Not used
- ⑥ Not used

## 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	5	45	35
054	-30 ~ 50	2	70	60
059	-30 ~ 100	2	50	45
061	-30 ~ 120	5	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	5	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

