

## Euro gauge

### Inductive contact type bimetal temperature gauge

Model : T511(H), T512(H/L), T513(L), T514(H/HH), T515(L/LL)

Spec. sheet no. TD05-02

#### 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 and 160 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

Stainless steel (304SS)

#### Cover

304SS  
Bayonet type

#### Window

Safety glass : Only available with diameter 100 mm  
Polycarbonate : 100 and 160 mm

#### 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

#### Option

Special accuracy, ±1.0 % of full scale

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**1. Base model**

- T511** Inductive contact type bimetal temperature gauge (High alarm)
- T512** Inductive contact type bimetal temperature gauge (High and low alarm)
- T513** Inductive contact type bimetal temperature gauge (Low alarm)
- T514** Inductive contact type bimetal temperature gauge (High and high alarm)
- T515** Inductive contact type bimetal temperature gauge (Low and low alarm)

**2. Nominal diameter (mm)**

- 4** 100 mm and safety glass
- 5** 100 mm and polycarbonate window
- 6** 160 mm and polycarbonate window

**3. Type of mounting**

- A** Bottom connection (Only direct mounting)
- B** Bottom connection, surface, case mounting plate

**4. Stem material**

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

**5. Stem, process connection**

- D** 3/8"
- E** 1/2"
- F** 3/4"

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

- 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**

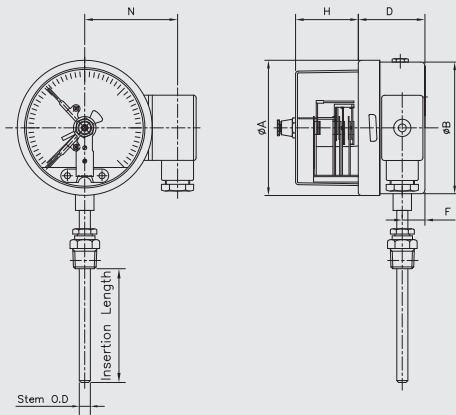
- 0** None
- 1** Thermowell
- 2** Special accuracy ( $\pm 1.0\%$  of full scale)
- 3** Thermowell and special accuracy

1	2	3	4	5	6	7	8	9	10
T511	4	A	1	E	C	3	XXX	X	1

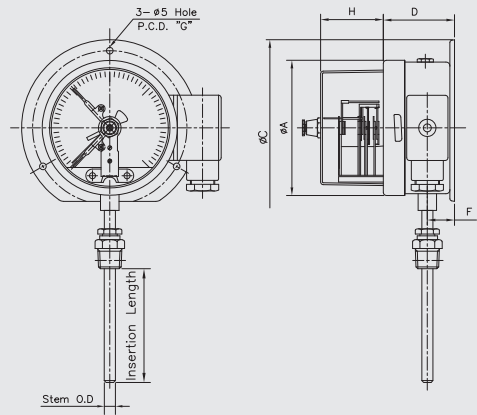
Sample  
ordering code

## T51X : Type of mounting

Code A



Code B

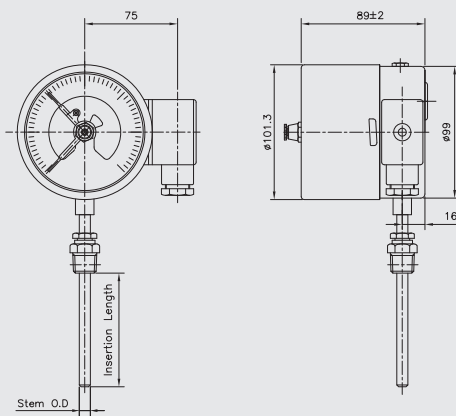


Dimensions (mm)

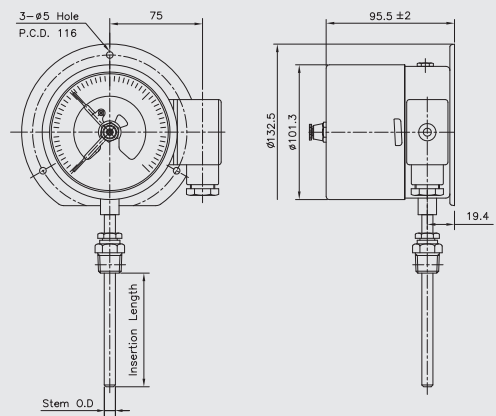
Dial size	Available code	A	B	C	D±2	F±1	G	H	N
100	A	101.3	99		50	16		34.5	75
	B	101.3		133	54.4	19.4	116	34.5	
160	A	160.6	159		52.5	16		34	105
	B	160.6		196	56	19.4	178	34	

(Polycarbonete window)

Code A



Code B



(Safety glass window / only 100mm)

## Inductive contacts

### General

Electromechanical limit switches in pointer type measuring instrument are equipped with electrical distance sensor (Proximity sensor).

The output signal is governed by the presence or absence of control vane moved by actual value pointer in the magnetic field of the proximity sensor.

Electronic contact essentially comprise

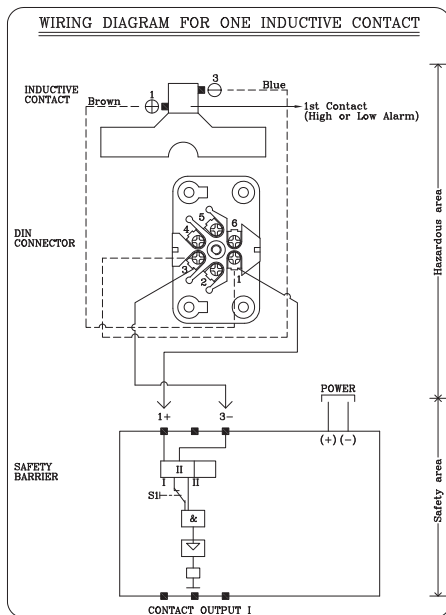
- An adjustable red set pointer
- A supporting arm which is connected with the end set pointer and the carries the proximity sensor, and
- A control vane moved by actual value pointer.

An adjusting lock provided with a separate or fixed key is used for external adjustment of the set pointers of the built-in limit value at which the switching operation is to take place.

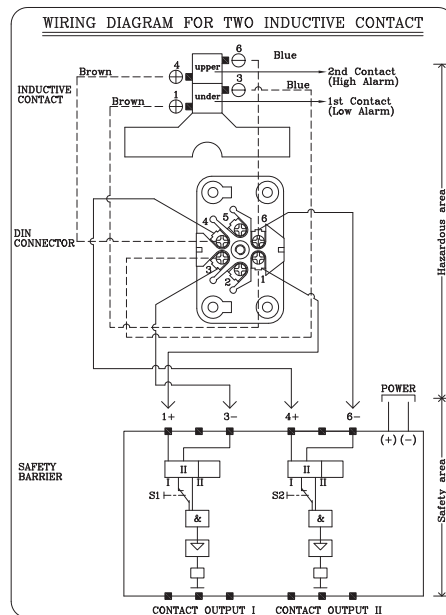
### Technical data

Nominal operating voltage	10 ~ 30 V max.
Breaking capacity	Less than 100 mA
Switching accuracy	Approx 0.5 % of the full scale value
Ambient temperature	-25 ~ 70 °C
Adjusting range	Max. 280°

## Terminal block arrangement



SAFETY BARRIER MODEL	Contact Output I (High or Low Alarm)	POWER
KPA5-SR2-Ex1.W(115V, AC) KPA6-SR2-Ex1.W(230V, AC) KFD2-SR2-Ex1.W(24V, DC)	7(COMMON) 8(OPEN) 9(CLOSE)	14(+) 15(-)



SAFETY BARRIER MODEL	Contact Output I (Low Alarm)	Contact Output II (High Alarm)	POWER
KPA5-SR2-Ex2.W(115V, AC) KPA6-SR2-Ex2.W(230V, AC) KFD2-SR2-Ex2.W(24V, DC)	7(COMMON) 8(OPEN) 9(CLOSE)	10(COMMON) 11(OPEN) 12(CLOSE)	14(+) 15(-)

## 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

A large empty rectangular box with a thin black border, intended for writing a memo.