

## Euro gauge

### Inductive contact type temperature gauge

**Model : T501(H), T502(H/L), T503(L), T504(H/HH), T505(L/LL)**

Spec. sheet no. TD05-01

#### 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

#### Measuring system (SAMA class III B)

Organic gas : 0 ~ 200 °C

Inert gas : -200 ~ 700 °C

#### Working range

Maximum scale value



### Standard features

#### Location of stem and mounting

Bottom connection, surface, case mounting

#### Case

304SS

#### Cover

Stainless steel (304SS)

Bayonet type

#### Capillary

Capillary : 1.6/0.2 mm, 316SS

Armored tube : 7.5/5.5 mm, 304SS

#### 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

8.0, 10.0 and 12.0 mm

316SS and 316L SS

#### Stem, process connection

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

#### Option

Special accuracy, ±1.0 % of full scale

#### Certificates

NEPSI Ex ia IIC T6 Ga

KCS Ex ia IIC T6

Tamb = -20 ~ 56 °C

**WISE**<sup>®</sup>

| T500 Series\_01

## Main order

## Ordering information

### 1. Base model

- T501** Inductive contact type temperature gauge (High alarm)  
**T502** Inductive contact type temperature gauge (High and low alarm)  
**T503** Inductive contact type temperature gauge (Low alarm)  
**T504** Inductive contact type temperature gauge (High and high alarm)  
**T505** Inductive contact type 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  
**N** Lower back entry and panel mounting (Only available with diameter 100 mm)

### 4. Stem material

- 1** 316SS  
**2** 316L SS

### 5. Stem, process connection

- A** None  
**D** 3/8"  
**E** 1/2"  
**F** 3/4"

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

- A** None  
**E** CF + PT  
**F** CF + NPT  
**G** CF + PF  
**H** MT + PT (Movable thread)  
**I** MT + NPT (Movable thread)  
**J** MT + PF (Movable thread)

### 7. Stem outer diameter (mm)

- 2** 8.0  
**3** 10.0  
**4** 12.0  
**Z** Other

### 8. Range

- XXX** Refer to scale range table

### 9. Capillary length (m)

- A** Direct mounting type  
**P** 2  
**Q** 3  
**S** 5  
**V** 8  
**X** 10  
**Z** Other

### 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
T501	4	B	1	E	C	3	XXX	P	1

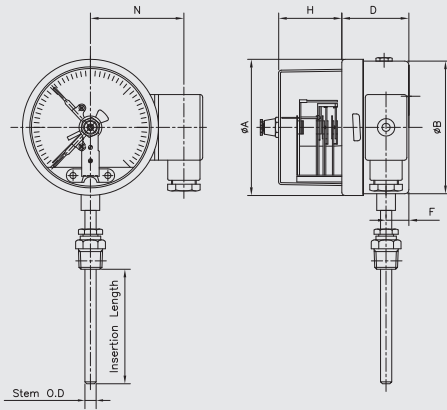
Sample ordering code



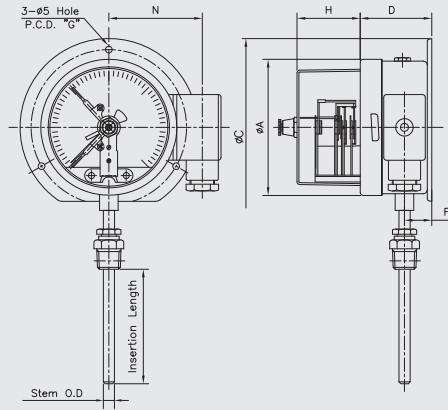
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## T50X : Type of mounting (1/2)

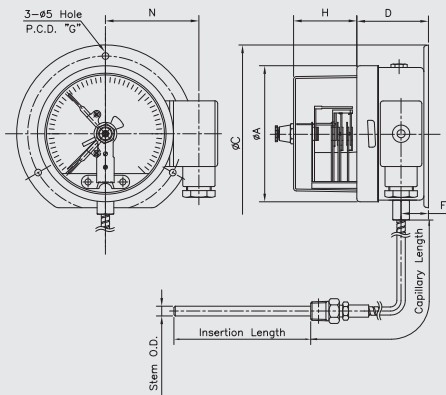
Code A



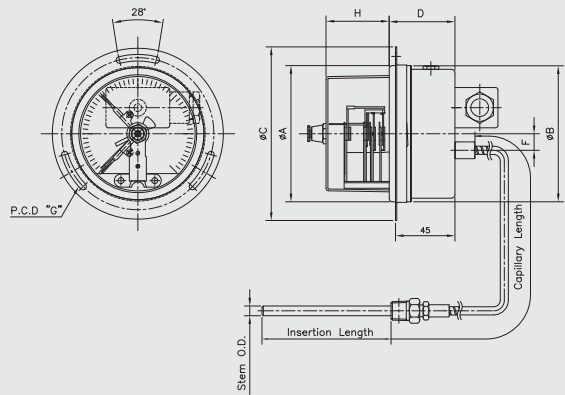
Code B



Code B\*



Code N

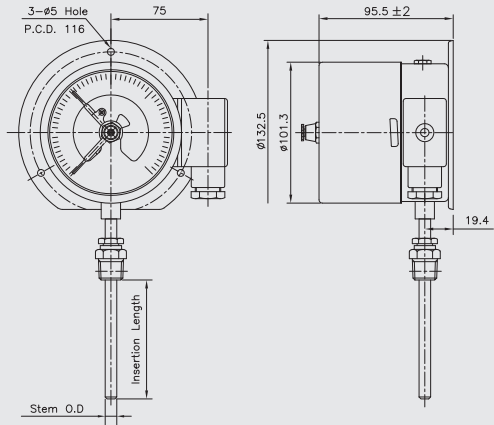
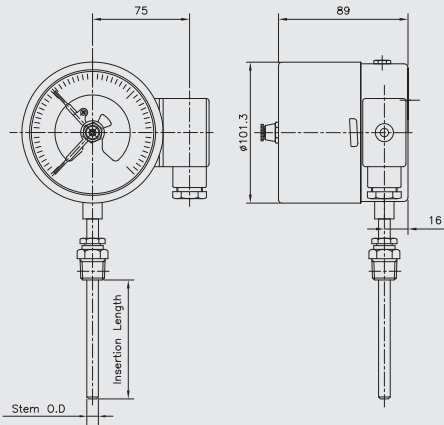


Dimensions (mm)

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	75
	B*	101.3		133	54.4	19.4		34.5	75
	N	101.3	103.1	131	50	12	116	34.5	
160	A	160.6	159		52.5	16		34	105
	B	160.6		196	56	19.4	178	34	105
	B*	160.6			52.5	19.4		34	105
	N	160.6	165	196	56	12	178	34	

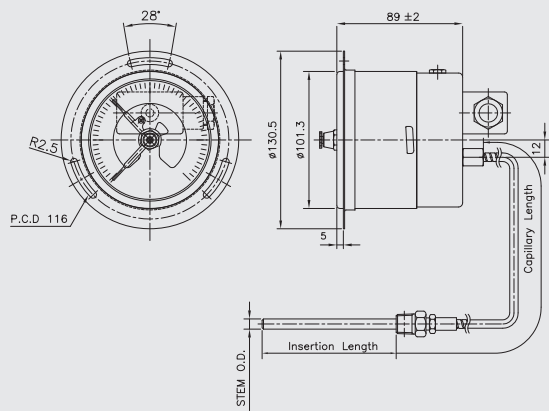
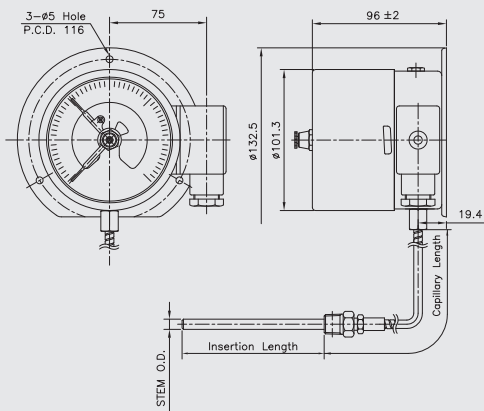
## T50X : Type of mounting (2/2)

Code A ( Only 100mm ) Code B



Code B\*

Code N



## Inductive contacts

### General

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

The output signal is govern 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

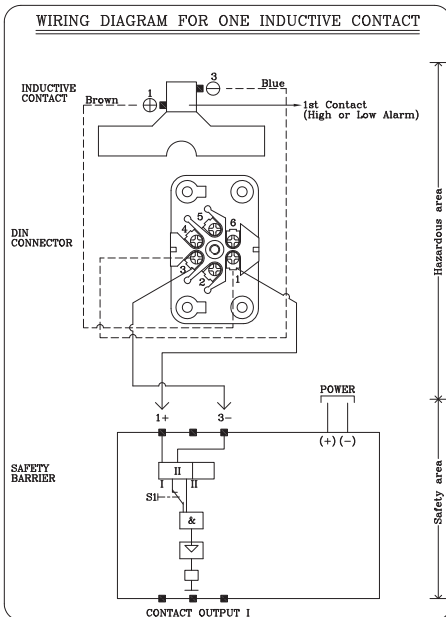
- An adjustable red set pointer
- A supporting arm which is connected with the end set pointer and the carries the proximity sensor, and
- A control vane moved by actual value pointer.

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.

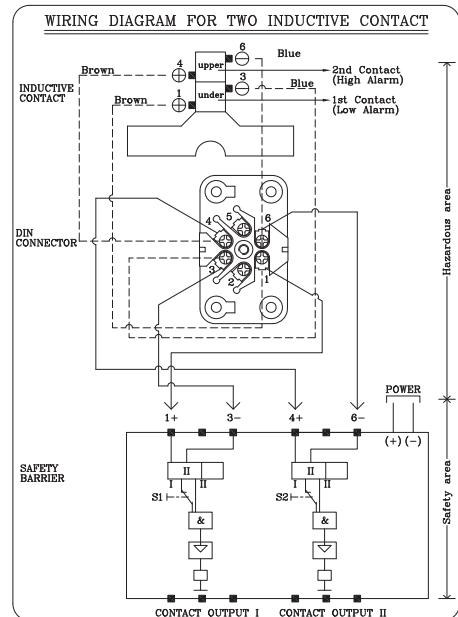
### Technical data

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
KFA5-SR2-Ex1.W(115V, AC)		
KFA6-SR2-Ex1.W(230V, AC)		
KFD2-SR2-Ex1.W(24V,DC)		



SAFETY BARRIER MODEL	Contact Output I (Low Alarm)	Contact Output II (High Alarm)	POWER
KFA5-SR2-Ex2.W(115V, AC)			
KFA6-SR2-Ex2.W(230V, AC)			
KFD2-SR2-Ex2.W(24V,DC)			

## Scale ranges

Code	Scale range (°C)	Scale spacing(°C)	Minimum stem length (mm)			Standard stem length (mm)		
			8.0	10.0	12.0	8.0	10.0	12.0
032	-50 ~ 50	2	100	85	65	200	130	100
037	-50 ~ 100	5	100	88	65	200	130	100
054	-30 ~ 50	2	100	85	65	200	130	100
059	-30 ~ 100	2	100	85	65	200	130	100
061	-30 ~ 120	5	100	85	65	200	130	100
069	-20 ~ 50	2	100	85	65	200	130	100
074	-20 ~ 100	2	100	85	65	200	130	100
079	-20 ~ 150	5	100	85	65	200	130	100
084	-10 ~ 50	1	100	85	65	200	130	100
099	0 ~ 50	1	100	85	65	200	130	100
100	0 ~ 60	1	100	85	65	200	130	100
101	0 ~ 70	2	100	85	65	200	130	100
102	0 ~ 80	2	100	85	65	200	130	100
104	0 ~ 100	2	100	85	65	200	130	100
106	0 ~ 120	2	100	85	65	200	130	100
109	0 ~ 150	5	100	85	65	200	130	100
114	0 ~ 200	5	100	85	65	200	130	100
119	0 ~ 250	5	100	85	65	200	130	100
124	0 ~ 300	5	100	85	65	200	130	100
129	0 ~ 350	5	100	85	65	200	130	100
134	0 ~ 400	10	100	85	65	200	130	100
144	0 ~ 500	10	100	85	65	200	130	100
154	0 ~ 600	10	100	85	65	200	130	100
164	0 ~ 700	10	100	85	65	200	130	100

\* 0 ~ 700 °C/Special range

## 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