

**EURO GAUGE®**  
**ELECTRICAL CONTACTS TEMPERATURE GAUGE**  
**MODEL : T521(H), T522(H/L), T523(L), T524(H/HH)**  
**T525(L/LL)**

**WISE®**

**SERVICE INTENDED**

Contact Type Temperature Gauge is installed with electric contact actuated by pointer. It provides the function which electrical circuit can be open 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**

100mm

**ACCURACY**

±2.0% of Full Scale

**TEMPERATURE ELEMENT**

Liquid Filled

Organic Gas : -50°C to 600°C

KEROSENE : -50°C to 200°C

**WORKING RANGE**

Maximum Scale Value



TD05 - 02

**Standard Features**

**LOCATION OF STEM**

Bottom Connection, Surface, Case Mounting

**CASE & BEZEL RING**

Stainless Steel 1.4301  
Bayonet Type

**WINDOW**

Safety Glass

**DIAL**

White Aluminium with  
Black Graduations

**CAPILLARY**

Capillary : 1.6/0.2mm, 316SS  
Armored tube : 6.6/4.5mm, 304SS

**CONTACTS**

Maximum Voltage : 250V AC

Contact Rating : AC 220V, 0.25A

DC 100V, 0.5A

with Max. No of Contact : 2 Sets per Gauge

**POINTER**

Aluminum alloy,  
Black painted

**STEM OUT DIA.**

8.0, 10.0 & 12.0mm

316SS

**STEM CONNECTION**

3/8", 1/2", 3/4" PT or NPT

**OPTION**

Special Accuracy, ±1.0% of Full Scale

# ORDERING INFORMATION

## BASE MODEL

- T521 : ELECTRICAL CONTACT TYPE TEMPERATURE GAUGE (HIGH ALARM)
- T522 : ELECTRICAL CONTACT TYPE TEMPERATURE GAUGE (HIGH & LOW ALARM)
- T523 : ELECTRICAL CONTACT TYPE TEMPERATURE GAUGE (LOW ALARM)
- T524 : ELECTRICAL CONTACT TYPE TEMPERATURE GAUGE (HIGH & HIHIGH ALARM)
- T525 : ELECTRICAL CONTACT TYPE TEMPERATURE GAUGE (LOW & LOLOW ALARM)

### NOMINAL DIAMETER

4 : 100mm

### MOUNTING TYPE

- A : Bottom Connection (Only Direct Mountain)
- B : Bottom Connection, Surface, Case Mountain Plate
- N : Lower Back entry & Panel Mountain

### STEM MATERIAL

1 : 316SS

### CONNECTION

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

### CONNECTION TYPE (CF : Compression Fitting)

- C : PT
- D : NPT
- E : CF + PT
- F : CF + NPT

### STEM OUT DIA.

- 2 : 8.0mm
- 3 : 10.0mm
- 4 : 12.0mm (Standard)

### RANGE(Refer to Scale Range Table)

XXX

### CAPILLARY LENGTH (If direct mounting, Specify Stem Length Code)

- P : 2 meter
- Q : 3 meter
- S : 5 meter
- V : 8 meter
- X : 10 meter
- Z : Other

### ACCESSORIES

- 0 : None
- 1 : Thermowell
- 2 : Special Accuracy  
(±1.0% of F.S.)
- 3 : Thermowell &  
Special Accuracy

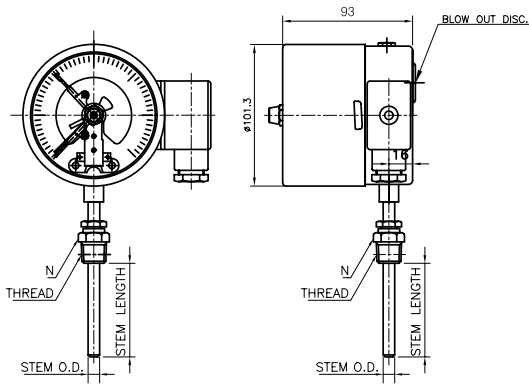


**SAMPLE  
MODEL  
NUMBER**

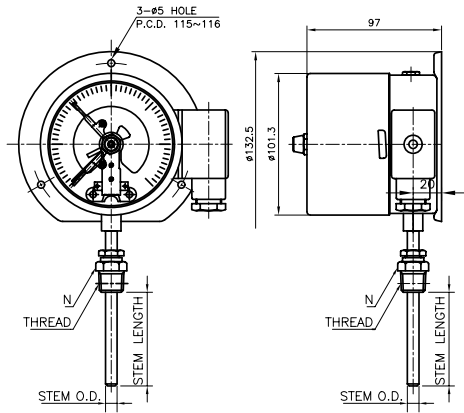
TD05 - 02

# T521 : TYPE OF MOUNTING

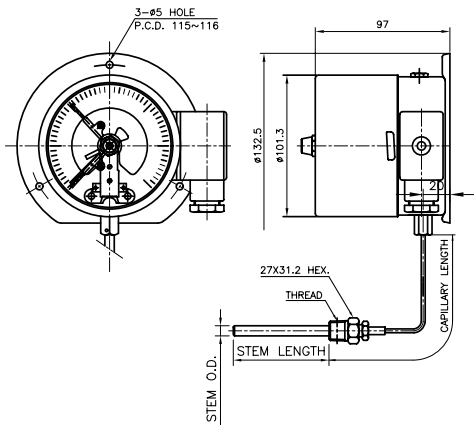
CODE A



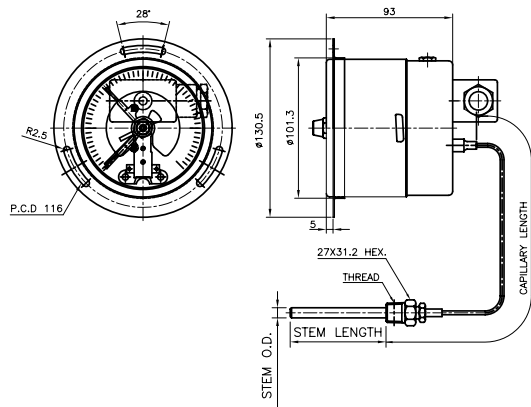
CODE B



CODE B\*



CODE N



## INDUCTIVE 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.

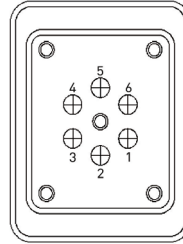
The switching safety is increased by the increased contact pressure.

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

### Terminal block arrangement



- ① No.1 CONTACT (HIGH or LOW)
- ② COMMON
- ③ HH or LL
- ④ GROUND
- ⑤ NOT USED
- ⑥ NOT USED

## Standard Features

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	130
037	-50~100	5	100	85	65	200	130	130
054	-30~50	2	100	85	65	200	150	130
059	-30~100	2	100	85	65	200	130	130
061	-30~120	5	100	85	65	200	130	130
069	-20~50	2	100	85	65	200	130	130
074	-20~100	2	100	85	65	200	130	130
079	-20~150	5	100	85	65	200	130	130
099	0~50	1	100	85	65	200	130	210
100	0~60	1	100	85	65	200	130	190
104	0~100	2	100	85	65	200	130	130
106	0~120	2	100	85	65	200	130	130
109	0~150	5	100	85	65	200	130	130
114	0~200	5	100	85	65	200	130	130
119	0~250	5	100	85	65	200	130	130
124	0~300	5	100	45	40	200	130	130
129	0~350	5	100	45	40	200	130	130
134	0~400	10	100	45	40	200	130	130
144	0~500	10	100	45	40	200	130	130
154	0~600	10	100	45	40	200	130	130
000	Special Range		Please Contact to Technical Dept.					

### STEM LENGTH

(For Direct Mountain)

Code	1	2	3	4	5	6	7	8	9	A	B	C	D
Length(mm)	50	60	70	80	100	120	130	150	175	200	225	250	275
Code	E	F	G	H	J	K	L	M	N	P	Z		
Length(mm)	300	350	375	400	450	500	550	1000	1500	2000	Longer than 2000		