



### Special Features

- CE approved electrical contacts.
- Inert gas filled expansion system.
- Stainless steel case & stem
- With or without thermowell
- Standard followed EN 13190.

### Application

- All stainless steel inert gas filled thermometers are suitable for corrosive media / environments in process industry chemical
- Food
- Pharmaceutical
- Pulp
- Paper
- Refinery
- Cement & many more.

### Specifications

**Standard Version : 63,mm 100 mm & 150 mm**

Accuracy	:	Class 1 as per EN 13190
Ambient temperature	:	-25°C to 65 °C
Operating pressure	:	15 kg/cm <sup>2</sup> ( without thermowell )
Over range limit	:	120% of Full Scale
Stem diameter	:	8 mm
Process connection	:	½" BSP (M) Adjustable
Case & bezel	:	AISI 304 SS (Bayonet Type)
Stem & connection	:	AISI 316 SS
Joints	:	Tig Argon arc welding
Protection	:	IP 68
Dial	:	Aluminium, black graduation on white background
Pointer	:	Aluminium, black Coloured Micrometer Zero adjustable
Window	:	Polycarbonate Dome
Gasket & Filling Plug	:	Neoprene

**Nominal range, measuring ranges & limits of error as per EN 13190**

Nominal Range (°C)	Measuring Range (°C)	Limits of Error (± °C)
-20 to +40	-10 to +30	0.5
-20 to +60	-10 to +50	1
-20 to +120	-10 to +110	2
-30 to +30	-20 to +20	0.5
-30 to +50	-20 to +40	1
-30 to +70	-20 to +60	1
-40 to +40	-30 to +30	1
-40 to +60	-30 to +50	1
-20 to +80	-80 to +40	1
0 to 60	10 to 50	0.5
0 to 80	10 to 70	1
0 to 100	10 to 90	1
0 to 120	10 to 110	1
0 to 160	20 to 140	2
0 to 200	20 to 180	2
0 to 250	30 to 220	2
0 to 300	30 to 270	5
0 to 400	50 to 350	5
0 to 500	50 to 450	5
0 to 600	100 to 500	5

Note : The addition of mechanical electric contacts affects the accuracy of instruments such that 1% becomes 1.5%, 1.6% becomes 2.4% etc. (Add the 50% of accuracy; If the contact is of the magnetically assisted type, this value can't be added within the ±5% of setting point.)

## Standard Ranges

Note : We offer National / International Scales like °C, °F & Dual scale in °C, °F & scales as per the requirement can be provided on request. following are the example tables for °C

### Standard Ranges

Positive range single scale in °C			
Range	Ranage	Range	Range
0/60	0/120	0/250	0/500
0/80	0/160	0/300	0/600
0/100	0/200	0/400	50/650
Compound range single scale in °C*			
Range	Ranage	Range	Range
- 80 / 60	- 20 / 60	- 40 / 60	- 20 / 180
- 60 / 40	- 20 / 80	- 30 / 50	- 20 /100

Note: \*Compound ranges are not recommended for electrical contact option. Refer table for limits of error as per EN13190 (On First Page)

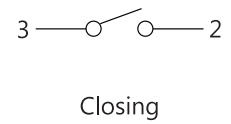
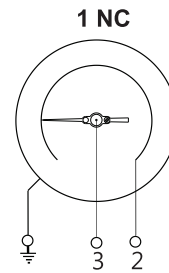
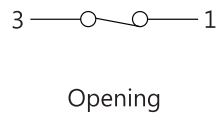
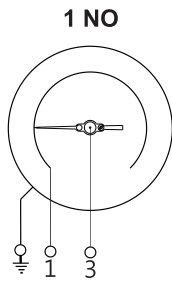
**ACCESSORIES** (\* Refer datasheet for Thermowells)

\* **Thermowell**

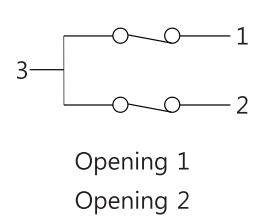
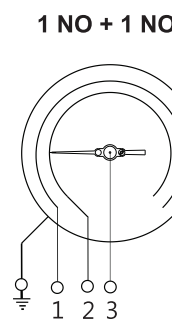
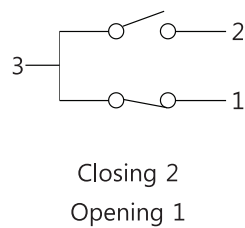
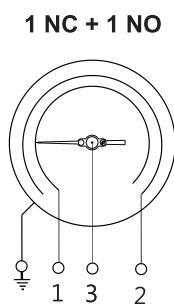
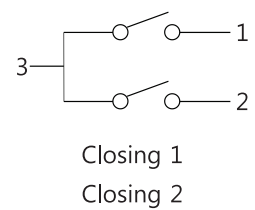
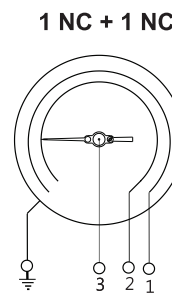
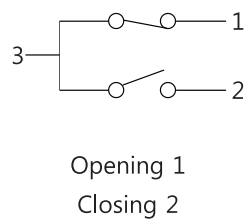
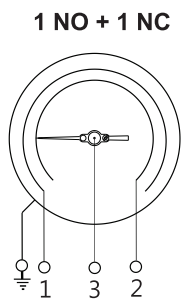
## Electrical Contact Wiring Information

### Wiring diagrams for electric contacts

#### Single Contact



#### Double contact



How To Order								Example	
<b>Basic Model</b>								GT+EC	
<b>Code</b>									
<b>Nominal Size</b>				<b>25</b>	<b>40</b>	<b>60</b>		XX or XXX	
<b>Type of Mounting(*without Capillary option)</b>				63 mm	100 mm	150 mm			
<b>1</b>	Wall/surface/projection mounting With bottom entry			<b>4</b>	Direct Center back entry			X	
<b>2</b>	Direct bottom entry*			<b>5</b>	Lower back entry with front flange				
<b>3</b>	Direct lower back entry*			<b>8</b>	Every angle back entry*				
				<b>9</b>	Lower back entry with mounting bracket				
<b>Process Connection</b> (# Not recommended for Revolving/ Swivel connections.)								XXX	
<b>3BM</b>	3/8" BSP (M)*		<b>4BM</b>	1/2" BSP (M) (Standard)*		<b>5BM</b>	3/4" BSP (M)		
<b>3NM</b>	3/8" NPT (M)*#		<b>4NM</b>	1/2" NPT (M)*#		<b>6BM</b>	1" BSP (M)		
<b>3TM</b>	3/8" BSPT (M)*#		<b>4TM</b>	1/2" BSPT (M)*#		<b>4MM</b>	M20 x 1.5 (M)*		
* Suitable for stem diameter 6 to 10 mm									
<b>Process Connection Type</b>								XX	
<b>AD</b>	Adjustable (Standard)		<b>FX</b>	Fixed		<b>SL</b>	Revolving / Swivel		
<b>Stem Diameter</b>								XXXX	
<b>SD04</b>	4 mm		<b>SD06</b>	6 mm (Standard)		<b>SD08</b>	8 mm		
<b>Stem Length (Below thread Max. 600 mm)</b>								100 mm	
Please specify in mm		Minimum stem Length (Below Thread)			120 mm	100 mm	100 mm		80 mm
		Stem OD			6 mm	8 mm	10 mm	12 mm	
<b>Range</b>								0/100°C	
Refer range table									
<b>Type</b>	<b>ST</b>	With rigid stem		<b>CP</b>	With capillary			XX	
<b>Capillary length (Max up to 15 Mtrs.)</b> In meters (e.g. 1.5 = 1.5 meters 2.0 = 2 meters)								3Mtr.	
<b>Capillary</b>	<b>S4</b>	AISI 304 SS		<b>S6</b>	AISI 316 SS			XX	
<b>Capillary covered with armour (Applicable with S4 or S6 if selected)</b>								XX	
<b>S4</b>	AISI 304 SS		<b>S6</b>	AISI 316 SS		<b>PV</b>	PVC (Ambient Temp. Max. 60°C)		
<b>Electric Contacts (FOR NS 100 mm &amp; 150 mm Only) (C € Approved)</b>									
<b>(With IP protection up to IP 55 &amp; window polycarbonate dome type)</b>									
<b>A) Single insulated magnetic snap action type</b> (230 V AC, 1 Amp.) (48 V DC, 0.5 Amp.)				<b>B) Inductive type (220 V AC, 0.4 Amp.)</b>				XX	
<b>M1</b>	Single; normally closed (1 NC)			<b>D1</b>	Single; normally open (1 NO)				
<b>M2</b>	Double; normally closed + normally open (1 NC + 1 NO)			<b>D2</b>	Single; normally closed (1 NC)				
<b>M3</b>	Single; normally open (1 NO)			<b>D3</b>	Double; normally closed + normally open (1 NC + 1 NO)				
<b>M4</b>	Double; normally open + normally closed (1 NO + 1 NC)			<b>D4</b>	Double; normally open (both NO)				
<b>M5</b>	Double; normally closed (both NC)			<b>D5</b>	Double; normally closed (both NC)				
<b>M6</b>	Double; normally open (both NO)			<b>D6</b>	Double; normally open + normally closed (1 NO + 1 NC)				
<b>Optional Extras</b>								XXX	
<b>CBS</b>	AISI 316 SS case & bezel**								
<b>CDD</b>	Custom designed dial								
<b>TND</b>	Tag No. marking on Dial								
<b>STP</b>	SS tag plate								
<b>MTC</b>	Material test certificates#								

\*\* Available for NS 100 mm to 150 mm. Consult factory for minimum order quantity & delivery.

# Material test certificates will be provided for wetted parts only with chemical composition testing. For others, please consult factory.

**Five Point Calibration Certificate Provided With Each Gauge For Measuring Range Only.**

**Ordering Example: GT+EC - XX or XXX - X - XXX - XX - XXXX - 100 mm - 0/100°C - XX - 3Mtr - XX - XX - XX - XXX**

For other optional items, please contact factory for delivery and minimum quantity of order. Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.