

## MERCURY FILLED TYPE TEMPERATURE GAUGE

### Special Features:

Stainless steel case & measuring system  
Bottom / Back / Every Angle Entry  
Dry or Liquid Filled  
Mercury Filled Expansion System

### Applications:

Food & beverage, pharmaceutical, cryogenics, chemical & petrochemical industries, conventional & nuclear power Plants, pumps, hydro-cleaning machines, presses, engine Compressors, turbines, diesel engines & refrigerating plants.



### Specifications:

#### Standard Version: 100mm, 150mm

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| Accuracy            | : Class 1 as per EN 13190                                |
| Ambient temperature | : - 25°C to + 65°C                                       |
| Process pressure    | : 15 kg/cm <sup>2</sup> (Without Thermowell)             |
| Over Range Limit    | : 130% of the Scale Value or 650°C, whichever is minimum |
| Stem Diameter       | : 6mm / 8mm / 10mm / 12mm                                |



|           |                             |
|-----------|-----------------------------|
| Case      | : AISI 304 SS               |
| Ring      | : AISI 304 SS, Bayonet Lock |
| Stem      | : AISI 316 SS               |
| Connecion | : AISI 316 SS               |
| Movement  | : AISI 304 SS               |
| Joints    | : Tig Argon Arc Welding     |



|            |                                                   |
|------------|---------------------------------------------------|
| Protection | : IP 65                                           |
| Dial       | : Aluminium, black graduation on white background |
| Pointer    | : Aluminium, black coloured fixed pointer         |
| Window     | : Sheet Glass                                     |
| Gasket     | : Neoprene                                        |



### RANGE TABLE:

Note : Omicron offers National / International Scales like °C, °F, °K. Dual scales in °C and °F scales can be provided on request. Following are the example ranges in °C

#### POSITIVE RANGE SINGLE SCALE IN °C

| RANGE | RANGE | RANGE | RANGE | RANGE |
|-------|-------|-------|-------|-------|
| 0/50  | 0/100 | 0/200 | 0/400 | 0/600 |
| 0/60  | 0/120 | 0/300 | 0/500 | 0/650 |
| 0/80  | 0/150 |       |       |       |

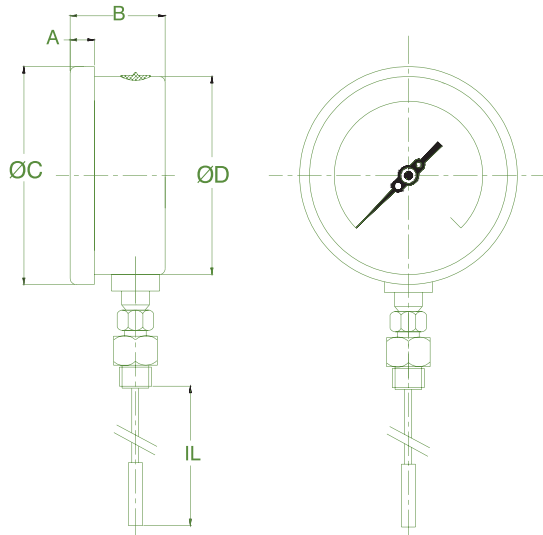
#### COMPOUND RANGE SINGLE SCALE IN °C

| RANGE  | RANGE  | RANGE   | RANGE  | RANGE   |
|--------|--------|---------|--------|---------|
| -80/70 | -40/60 | -40/40  | -30/70 | -30/120 |
| -50/50 | -20/60 | -30/50  | -20/40 | -30/170 |
| -80/40 | -20/80 | -20/180 | -20/80 | -20/100 |



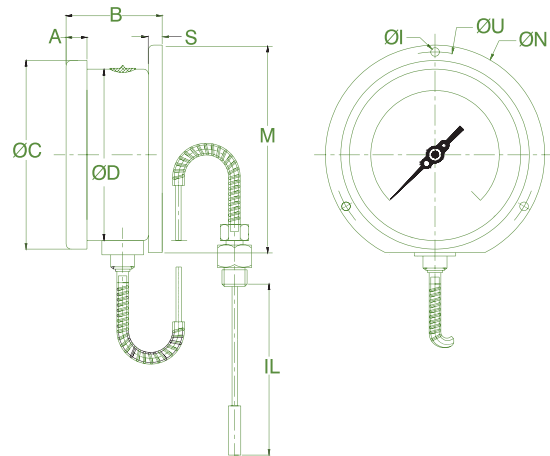
## MERCURY FILLED TYPE TEMPERATURE GAUGE

### ⚙️ Type 1



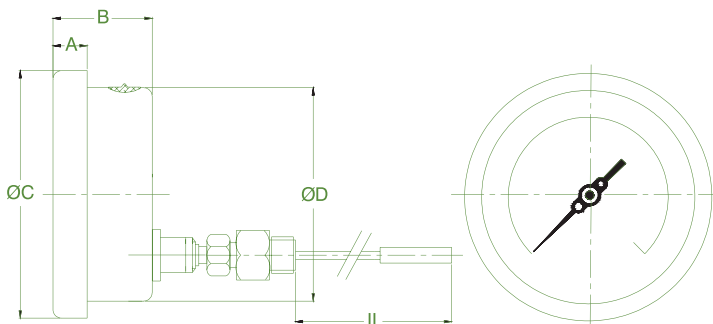
| NS  | A    | B  | ØC  | ØD  | IL |
|-----|------|----|-----|-----|----|
| 100 | 12.5 | 48 | 110 | 100 | *  |
| 150 | 15   | 48 | 161 | 149 | *  |

### ⚙️ Type 2



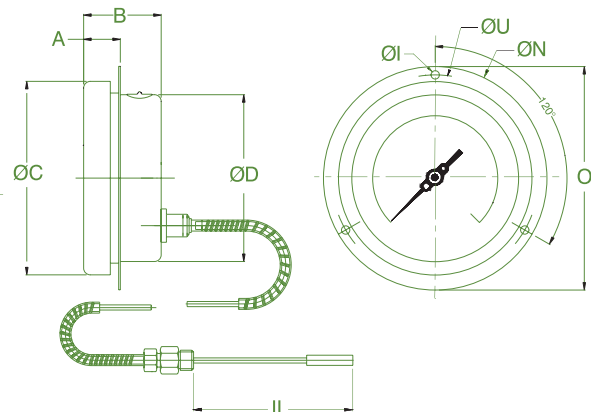
| NS  | A    | B  | ØC  | ØD  | S   | M   | IL | ØI  | ØN  | ØU |
|-----|------|----|-----|-----|-----|-----|----|-----|-----|----|
| 100 | 12.5 | 48 | 110 | 100 | 6   | 128 | *  | 118 | 134 | 6  |
| 150 | 15   | 49 | 161 | 149 | 5.5 | 177 | *  | 168 | 186 | 6  |

### ⚙️ Type 3



| NS  | A    | B  | ØC  | ØD  | IL |
|-----|------|----|-----|-----|----|
| 100 | 12.5 | 48 | 110 | 100 | *  |
| 150 | 15   | 48 | 161 | 149 | *  |

### ⚙️ Type 4

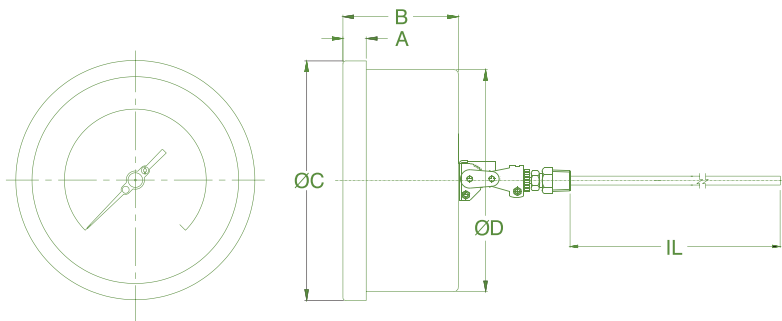


| NS  | A    | B  | ØC  | ØD  | S | IL | ØI  | ØN  | ØU |
|-----|------|----|-----|-----|---|----|-----|-----|----|
| 100 | 12.5 | 48 | 110 | 100 | 1 | *  | 118 | 134 | 6  |
| 150 | 15   | 49 | 161 | 149 | 5 | *  | 168 | 186 | 6  |

Notes : • Drawings are not to scale. • All Dimensions are in mm.

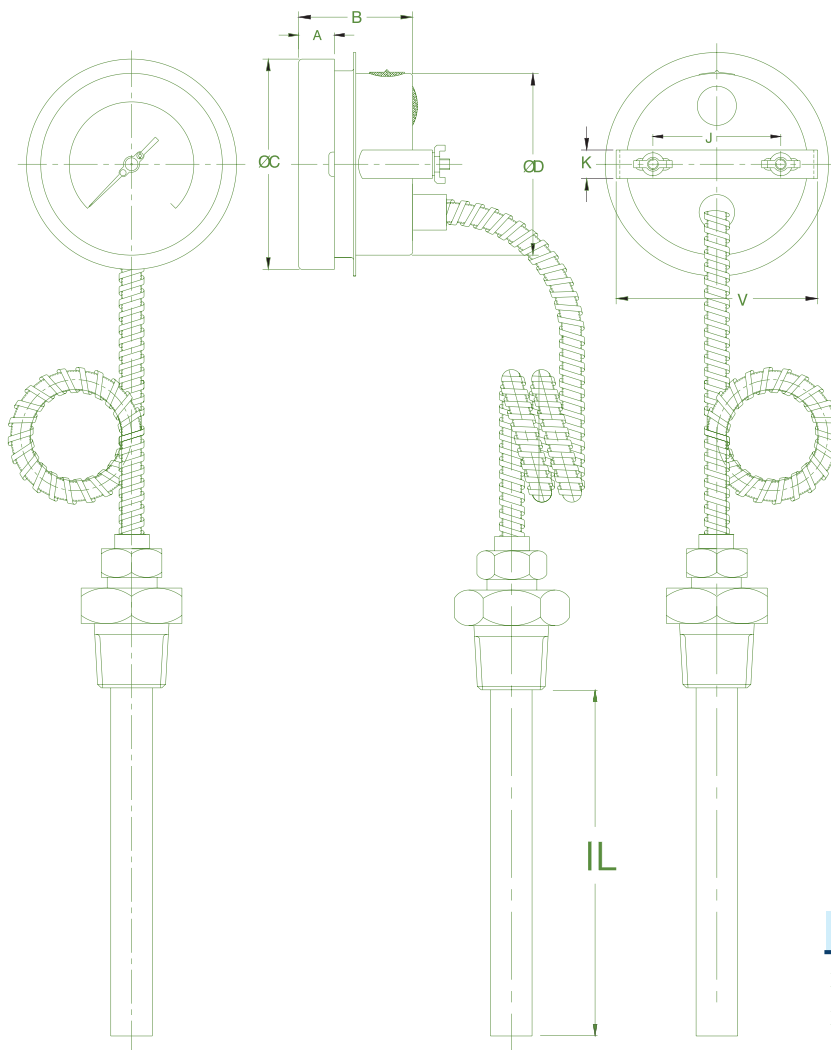
## MERCURY FILLED TYPE TEMPERATURE GAUGE

### ⚙️ Type 7



| NS  | A    | B  | ØC  | ØD  | IL |
|-----|------|----|-----|-----|----|
| 100 | 12.5 | 48 | 110 | 100 | *  |
| 150 | 15   | 48 | 161 | 149 | *  |

### ⚙️ Type 8



| NS  | A    | B  | ØC  | ØD  | IL | J    | K  | V   |
|-----|------|----|-----|-----|----|------|----|-----|
| 100 | 12.5 | 48 | 110 | 100 | *  | 66.5 | 16 | 106 |
| 150 | 15   | 49 | 161 | 149 | *  | 165  | 16 | 208 |

## HOW TO ORDER

### Basic Model:

TGMS

| CODE             | C   | D   | C |
|------------------|-----|-----|---|
| Nominal Size(mm) | 100 | 150 |   |

### Type Of Mounting:

1

1. Direct Bottom Entry
2. Wall / Surface / Projection Mounting With Bottom Entry
3. Direct Lower Back Entry
4. Flush Panel Back Entry with Front Flange
7. Every Angle Back Entry (Without Capillary)
8. Back Entry with Mounting Bracket

(Other types of mounting can be provided on request.)

### Process Connection:

10N

|      |               |      |               |
|------|---------------|------|---------------|
| 10B  | 3/8" BSP (M)  | 15B  | 1/2" BSP (M)  |
| 10BT | 3/8" BSPT (M) | 15BT | 1/2" BSPT (M) |
| 10N  | 3/8" NPT (M)  | 20N  | 3/4" BSP (M)  |
| 15N  | 1/2" NPT (M)  | 20B  | 3/4" BSP (M)  |

Note : Connections like PT/PF/Flaired /UNF/G/R etc.can be provided on request.  
Non standard connections can be provided through adaptors.

### Connection Type:

AC

|    |                  |    |                       |
|----|------------------|----|-----------------------|
| FC | Fixed Connection | AC | Adjustable Connection |
|----|------------------|----|-----------------------|

### Stem Diameter:

6mm

|     |              |     |              |      |               |      |               |
|-----|--------------|-----|--------------|------|---------------|------|---------------|
| 6mm | 6mm Diameter | 8mm | 8mm Diameter | 10mm | 10mm Diameter | 12mm | 12mm Diameter |
|-----|--------------|-----|--------------|------|---------------|------|---------------|

### Total Stem Length (Below Case):

L300

L Indicate Total Stem Length in mm (Including Immersion and Extension Length)

### Range:

0 - 100°C

Refer Range Table

### Capillary Type:

A4

|    |                      |    |                               |
|----|----------------------|----|-------------------------------|
| NC | Without Capillary    | A4 | AISI 304SS Armoured Capillary |
| S4 | AISI 304SS Capillary | A6 | AISI 316SS Armoured Capillary |
| S6 | AISI 316SS Capillary |    |                               |

### Capillary Type:

C 1.5mtr

C Indicate Total Capillary Length in metres.

### Options:

GT

|    |                             |    |                                            |
|----|-----------------------------|----|--------------------------------------------|
| SC | AISI 316 SS Case & Ring     | DD | Custom Designed Dial                       |
| GP | Plexi Glass                 | DT | Dial Tag Marking                           |
| GS | Shatterproof / Safety Glass | ST | SS Tag Plate                               |
| GT | Toughened Glass             | FP | Five Point Factory Calibration Certificate |

Ordering Example : TGMS-C1-10N-AC-6mm-L300-0/100C-A4-C1.5mtr-GT

Note : Due to continuous improvement, the specification may vary from time to time.

For non standard products/optional items, please contact factory for delivery and minimum quantity of order.