

# GENERAL PURPOSE STAINLESS STEEL PRESSURE GAUGE TGI02

## APPLICATIONS

- Liquid & gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Food & Beverages
- Nuclear power plants

## FEATURES

- All stainless steel welded construction
- Follows IS 3624 / EN 837-1 / ASME B40.100
- Accuracy as per  $\pm 1.6\%$  / CL 1.6 / Grade A
- Dry / Fillable / Liquid filled



GENERAL PURPOSE SS PRESSURE GAUGE, TGI02

## DESCRIPTION

### General

**Design :** EN 837-1

**Accuracy :**  $\pm 1.6\%$  of full scale

**Ambient temperature :** -40...+65°C [without dampening liquid]  
-40...+65°C [with dampening liquid filled silicon oil]

**Service temperature :** 300°C max.

**Pressure limits :** Steady pressure up to FS value  
Fluctuating pressure up to 90% of FS value  
Short time 130% of FS value for range up to 100 bar  
Short time 115% of FS value for range above 100 bar

**Weld joints :** TIG argon arc welding

**Protection class as per EN 837-1 :** S1 (80 mm & 100 mm)

### Material of construction

**Sensing element :** Bourdon Tube  
[<100 bar : C - type , >100 bar : Helical]

**Case & Ring material :** AISI 304 SS [Bayonet type]

**Bourdon tube & Shank :** AISI 316 SS / AISI 316L SS

**Movement mechanism :** AISI 304 SS

**Dial :** Aluminum, black graduation on white background

**Pointer :** Fixed, aluminum, black powder coated

**Gaskets & filling plug :** Neoprene / NBR

**Window :** Plexi glass

### Standard version

**Dial size :** 50 mm / 63 mm / 80 mm / 100 mm

**Range :** -1...0...1,000 bar

**Mounting pattern :** Direct Bottom

**Process connection :** 1/4" NPT (M) / 1/4" BSP (M)

**Ingress protection :** IP 65

**Execution :** Dry / Dry but fillable

### Filled versions

#### Glycerin

**Window :** Shatterproof safety glass

**Dampening liquid :** Glycerin 99.7% / 80% / 60%  
[Service temperature -20°C up to 65°C]

#### Silicon Oil

**Window :** Shatterproof safety glass

**Gasket, Blow off disc & filling plug :** NBR / Viton

**Dampening liquid :** Silicon oil DC 200  
[Service temperature -40°C up to 150°C]

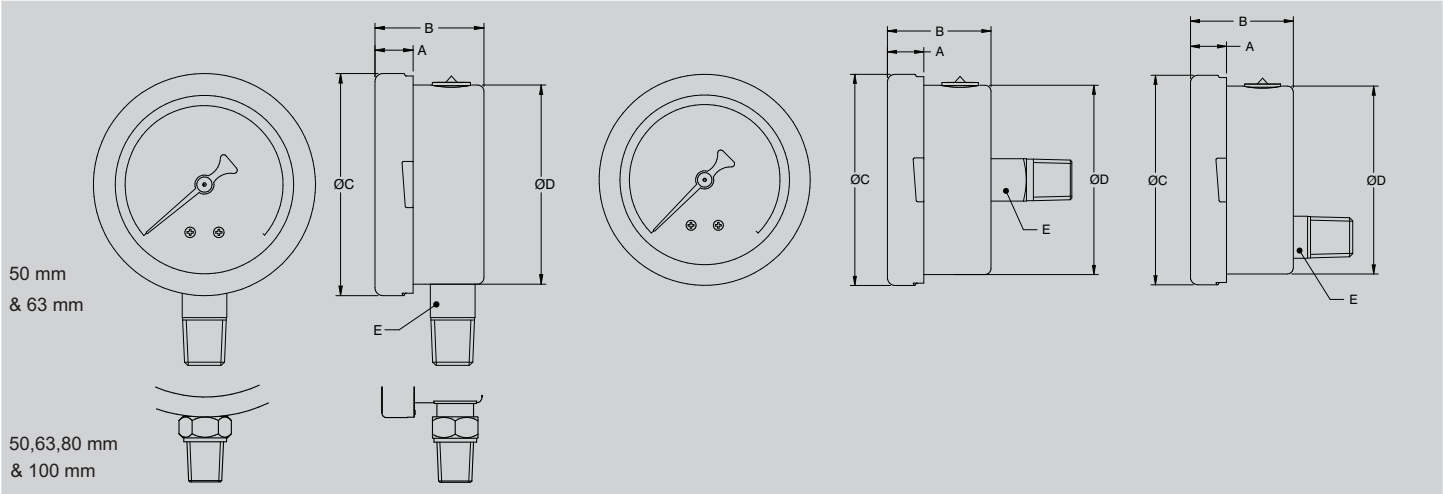
### Temperature effect

When temperature of the measuring system deviates from reference temperature (+20°C):  
max  $\pm 0.4\%$  / 10K of full scale value.

# GENERAL PURPOSE STAINLESS STEEL PRESSURE GAUGE

## TGI02

### DIMENSIONAL DRAWING



NOTES  
1. Drawing not to scale. All dimensions are in mm.  
2. For other mounting details, Panel cut-out dimensions, kindly contact factory.

| NS  | A   | B    | ØC   | ØD   | E     |
|-----|-----|------|------|------|-------|
| 50  | 9   | 34   | 58.5 | 52   | A/F14 |
| 63  | 12  | 33   | 69.7 | 62.5 | A/F14 |
| 80  | 9.5 | 33.5 | 89.5 | 80   | □4    |
| 100 | 12  | 38   | 111  | 100  | □4    |

### ORDERING CODES

| MODEL                                                |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | TGI02    |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------|-----|------------------------------------|----------|
| TGI02 General purpose stainless steel pressure gauge |                                                                                                                                                                                           |     |                                                                                                 |     |                                    |          |
| DIAL SIZE                                            |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | D2       |
| D1                                                   | 2" / 50 mm                                                                                                                                                                                | D2  | 2.5" / 63 mm                                                                                    | D3  | 3" / 80 mm                         |          |
| D4                                                   | 4" / 100 mm                                                                                                                                                                               |     |                                                                                                 |     |                                    |          |
| MOUNTING                                             |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | M1       |
| M1                                                   | Direct bottom                                                                                                                                                                             | M9  | Direct center back with front flange (Exp in D1/D3)                                             |     |                                    |          |
| M2                                                   | Direct bottom with Back flange (Exp in D1)                                                                                                                                                | M10 | Direct center back with panel mounting clamp (Exp in D1/D3)                                     |     |                                    |          |
| M5                                                   | Direct center back                                                                                                                                                                        | M7  | Direct lower back with front flange (Exp in D1/D3)                                              |     |                                    |          |
| M6                                                   | Direct lower back (Exp in D1)                                                                                                                                                             | M8  | Direct lower back with panel mounting clamp (Exp in D1/D3)                                      |     |                                    |          |
| CONNECTION                                           |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | P4       |
| P4                                                   | 1/4" NPT (M)                                                                                                                                                                              | P2  | 1/8" NPT (M)                                                                                    | P8  | 1/2" NPT (M)                       |          |
| P3                                                   | 1/4" BSP (M)                                                                                                                                                                              | P6  | 3/8" BSP (M)                                                                                    | P7  | 1/2" BSP (M)                       |          |
| P1                                                   | 1/8" BSP (M)                                                                                                                                                                              |     |                                                                                                 |     |                                    |          |
| CASE FILLING                                         |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | F3       |
| F1                                                   | Dry                                                                                                                                                                                       | F2  | Dry but fillable                                                                                | F3  | Glycerin filled                    |          |
| F4                                                   | Silicon oil filled                                                                                                                                                                        |     |                                                                                                 |     |                                    |          |
| WETTED PARTS                                         |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | S03      |
| S03                                                  | AISI 316L SS                                                                                                                                                                              | S01 | AISI 304 SS  |     |                                    |          |
| INGRESS PROTECTION                                   |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | I1       |
| I1                                                   | IP 65                                                                                                                                                                                     | I3  | IP 67                                                                                           |     |                                    |          |
| RANGE                                                |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | 0-10 bar |
| 0-10 bar                                             | Please mention range required with the measurement unit<br>[TGI offer in all types of National & International measurement units, e.g. kg/cm², psi, kPa, etc. with single or dual scales] |     |                                                                                                 |     |                                    |          |
| OPTIONAL EXTRAS                                      |                                                                                                                                                                                           |     |                                                                                                 |     |                                    | E16/E27  |
| E33                                                  | AISI 316 SS case & ring                                                                                                                                                                   | E23 | Cleaned for Oxygen service                                                                      | E06 | Maximum Reading pointer (In D2/D4) |          |
| E16                                                  | 5 - point calibration certificate                                                                                                                                                         | E17 | Material test certificate 3.1                                                                   | E28 | AISI 316 SS tag plate              |          |
| E27                                                  | AISI 304 SS tag plate                                                                                                                                                                     | E32 | Dial tag marking                                                                                |     |                                    |          |

Ordering Example : TGI02-D2.M1.P4.F3.S03.I1/0-10 bar/E16/E27