

# Stainless steel test gauge open front or solid front

## Model TGS

Nominal size: 115mm (4.5"), 150 mm (6") or 250 mm (10")  
 ASME B40.100 / EN 837-1 / IS-3624  
 Accuracy: 0.5%, optional 0.25%

### Features

- Rugged stainless steel construction
- Protection IP65
- Usable to full scale
- Overload protection 130 %
- Dry, liquid filled
- Measuring system stainless steel all welded
- Optional external Zero Adjustment

### Ranges

-30 in. Hg ... 0 psi up to 0 ... 15,000 psi  
 -1 ... 0 bar up to 0 ... 1000 bar & kg/cm<sup>2</sup>  
 -100 ... 0 kPa up to 0 ... 100,000 kPa

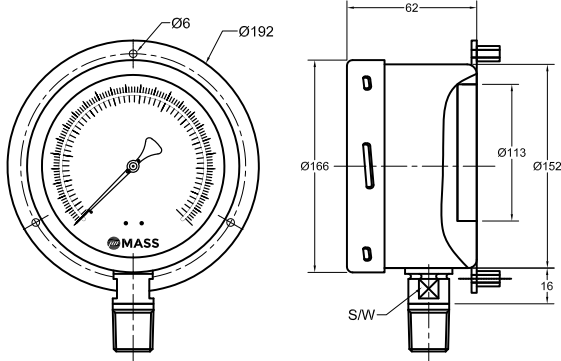
### Applications

Chemical & petrochemical industries  
 Machine and apparatus construction  
 Food and beverage industries  
 Pulp and paper industries

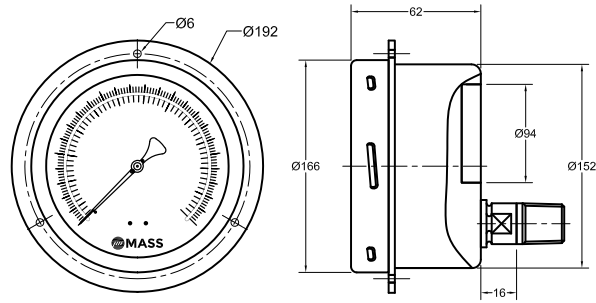


| Technical specification              | TGS   |             |             |
|--------------------------------------|---|-------------|-------------|
|                                      | 115   | 150         | 250         |
| Dial size in mm                      | 115   | 150         | 250         |
| Construction                         | Open front cylindrical case with snap action bayonet ring, optional solid front for 150mm   |             |             |
| Measuring principle                  | Bourdon tube  |             |             |
| Range in kg/cm <sup>2</sup> (or bar) | 0.6 1 1.6 2.5 4 6 10 16 25 40 60 100 160 250 400 600 1000<br>-1/0 -1/0.6 -1/1.5 -1/3 -1/5 -1/9 -1/15 -1/24  |             |             |
| Overpressure limit                   | 130 % F.S., short time.   |             |             |
| Pressure type                        | Gauge, vacuum and compound  |             |             |
| Process connection                   | 1/4" 3/8" 1/2" BSP / NPT (M), M20x1.5 (M)<br>Others on request  |             |             |
| Connection location                  | Lower, back   |             |             |
| Material                             | Pressure connection: Stainless steel 316, optional Monel<br>Tube: Stainless steel 316L, optional Monel<br>Case/bayonet ring: Stainless steel 304 optional 316L<br>Window: Instrument glass, optional laminated safety glass, acrylic glass<br>Dial: Aluminum, black markings on white background, with polished mirror band (except size 115)<br>Pointer: Aluminum, black knife edge, optional - micrometer adjustment others on request<br>Movement: Stainless steel |             |             |
| Accuracy                             | 0.5 % F.S., optional 0.25 % F.S.  |             |             |
| Permissible                          | Ambient temperature: -40 ... 60 °C (-40 ... 140 °F)<br>Medium temperature: Max. 100 °C (212 °F)<br>Storage temperature: -40 ... 60 °C (-40 ... 140 °F)<br>Effect: Max. 0,3 % / 10 K   |             |             |
| Protection according                 | IP65  |             |             |
| Filling liquids                      | Glycerin, silicone, halocarbon, others on request   |             |             |
| Mounting                             | Standard stem, optional panel, bracket, surface or others on request  |             |             |
| Weight dry/filled in kg              | 0.53 / 0.88   | 0.87 / 1.68 | 1.99 / 4.09 |
| Accessories, options                 | Valves  |             |             |

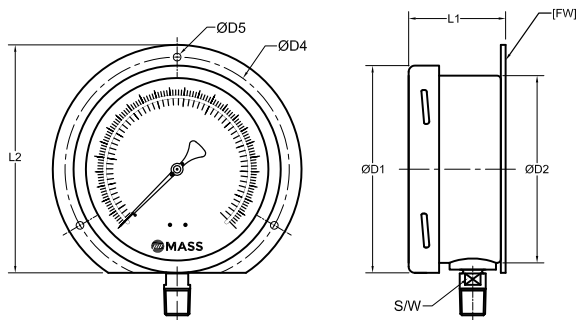
## General dimensions in mm



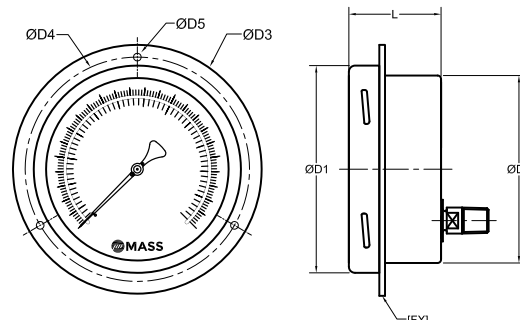
Lower Connection Surface Mounting with Solid Front



Back Connection Front Panel Mounting with Solid Front



Lower Connection Surface Mounting with Open Front



Back Connection Front Panel Mounting with Open Front

| DIAL SIZE | 115   | 150  | 250 |
|-----------|-------|------|-----|
| ØD1       | 127   | 166  | 265 |
| ØD2       | 114.5 | 152  | 252 |
| D3        | 152   | 192  | -   |
| D4        | 137   | 168  | -   |
| D5        | 6     | 6    | -   |
| L         | 50    | 50   | 53  |
| L1        | 52.5  | 52.5 | -   |
| L2        | 140   | 176  | -   |
| SW        | 17    | 17   | 17  |

## Order information

| Size                         | Type | System material                    | Execution | Process connection | Connection orientation | Range   | Engineering units  | Filling/case material        | Options  |                   |
|------------------------------|------|------------------------------------|-----------|--------------------|------------------------|---------|--|------------------------------|--|-------------------|
| (115)<br>115mm <sup>1)</sup> | TGS  | (S) Socket<br>316,<br>Tube<br>316L | (=) IP65  | (04) 1/2" NPT (M)  | (L) Lower              | -1/ 0   | kg/cm <sup>2</sup><br>(bar)  | (=) Standard<br>no filling   | (NH) Tagging wired                             |                   |
| (150)<br>150mm               |      |                                    |           | (03) 3/8" NPT (M)  | (B) Back               | -1/ 0.6 |  |                              |  | (DA) Dial Marking |
| (250)<br>250mm               |      |                                    |           | (02) 1/4" NPT (M)  |                        | -1/ 1.5 |  |                              |  | (CS) Dual Scale   |
|                              |      | (M) Socket<br>and<br>Tube<br>Monel |           | (15) 1/2" BSP (M)  |                        | -1/ 3   |  | (YW) Case ma-<br>terial 316L | (OF) Oil free                                  |                   |
|                              |      |                                    |           | (14) 3/8" BSP (M)  |                        | -1/ 5   |  |                              | (PD) Acrylic glass                             |                   |
|                              |      |                                    |           | (13) 1/4" BSP (M)  |                        | -1/ 9   |  |                              | (MP) Micrometer<br>pointer                     |                   |
|                              |      |                                    |           | (16) M20x1.5 (M)   |                        | -1/ 15  |  |                              | (EZ) External Zero<br>adjustment <sup>2)</sup> |                   |
|                              |      |                                    |           |                    |                        | 0/ 0.6  |  |                              | (SG) Safety glass                              |                   |
|                              |      |                                    |           |                    |                        | 0/ 1    |  |                              | (FX) Front panel                               |                   |
|                              |      |                                    |           |                    |                        | 0/ 1.6  |  |                              | (FW) Surface plate                             |                   |
|                              |      |                                    |           |                    |                        | 0/ 2.5  |  |                              | (UF) U-clamp <sup>3)</sup>                     |                   |
|                              |      |                                    |           |                    |                        | 0/ 4    |  |                              | (SF) Solid front <sup>2)</sup>                 |                   |
|                              |      |                                    |           |                    |                        | 0/ 6    |  |                              | (AQ) Calibrated<br>0.25% <sup>4)</sup>         |                   |
|                              |      |                                    |           |                    |                        | 0/ 10   |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 16   |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 25   |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 40   |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 60   |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 100  |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 160  |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 250  |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 400  |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 600  |  |                              |  |                   |
|                              |      |                                    |           |                    |                        | 0/ 1000 |  |                              |  |                   |
|                              |      |                                    |           |                    |                        |         | Equivalent<br>ranges in kPa,<br>MPa, psi, bar<br>and others<br>units available |                              |  |                   |

1) Plain dial, no polished mirror band

2) Only for 150mm

3) Not for solid front (SF), not for size (250)

4) Only for system Material (M)

## How to order

| Size | Type | System material | Execution | Process connection | Connection orientation | Range | Engineering unit   | Filling/Case material | Option |
|------|------|-----------------|-----------|--------------------|------------------------|-------|--------------------|-----------------------|--------|
| 150  | TGS  | S               | =         | 04                 | L                      | 0/16  | KG/CM <sup>2</sup> | =                     | NH     |

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