



GOST - R

### SPECIAL FEATURES

- SOLID FRONT THERMOPLASTIC CASE
- ACCURACY  $\pm 0.5\%$  F. S.
- EXCELLENT LOAD CYCLE STABILITY & SHOCK RESISTANT
- WETTED PARTS AISI 316L
- STANDARD FOLLOWED ANSI/ASME - B 40.100

### APPLICATIONS

- SUITABLE FOR CHEMICAL / PETROCHEMICAL, POWER STATIONS, MINING, ON AND OFFSHORE, MECHANICAL ENGINEERING AND PLANT ENGINEERING.
- SUITABLE FOR CORROSIVE ENVIRONMENT AND GASEOUS OR LIQUID MEDIA THAT WILL NOT OBSTRUCT THE PRESSURE SYSTEM.
- WITH LIQUID FILLED CASE WITH HIGH DYNAMIC PRESSURE PULSATIONS OR VIBRATIONS.



## SPECIFICATIONS

### STANDARD VERSION : (4 1/2")

|                                 |   |
|---------------------------------|---|
| <b>Accuracy</b>                 | : $\pm 0.5\%$ F. S. (As per ANSI B40.100)               |
| <b>Ambient temperature</b>      | : $-20^{\circ}\text{C}$ to $+65^{\circ}\text{C}$        |
| <b>Process temperature</b>      | : Max $200^{\circ}\text{C}$                             |
| <b>Operating pressure range</b> | : 75 % of Scale Value                                   |
| <b>Over pressure limit</b>      | : $\leq 100$ bar : 125% of Max. Scale Value             |
|                                 | : $> 100$ to $\leq 600$ bar : 115% of Max. Scale Value  |
|                                 | : $> 600$ to $\leq 1600$ bar : 110% of Max. Scale Value |

|                 |  |
|-----------------|--|
| <b>Case</b>     | : Black Glass Reinforce Thermoplastic (PBTP) |
| <b>Bourdon</b>  | : AISI 316L SS                               |
| <b>Socket</b>   | : AISI 316L SS                               |
| <b>Movement</b> | : AISI 304 SS                                |
| <b>Joints</b>   | : Tig Argon Arc Welding                      |

|                   |  |
|-------------------|--|
| <b>Protection</b> | : IP 65  |
| <b>Dial</b>       | : Aluminum, black graduation on white background       |
| <b>Pointer</b>    | : Aluminum, black Coloured, Micrometer Zero Adjustable |
| <b>Window</b>     | : Shatterproof / Safety Glass                          |
| <b>Gasket</b>     | : Neoprene   |

### GLYCERINE FILLED VERSION (OPTION PY)

|                            |   |
|----------------------------|---|
| <b>Accuracy</b>            | : $\pm 1.0\%$ of F. S.                    |
| <b>Ambient Temperature</b> | : Maximum $65^{\circ}\text{C}$            |
| <b>Process Temperature</b> | : Maximum $65^{\circ}\text{C}$            |
| <b>Window</b>              | : Plexi Glass                             |
| <b>Dampening Liquids</b>   | : Glycerine 99.7%                         |
| <b>Other Features</b>      | : Refer Specification of Standard Version |

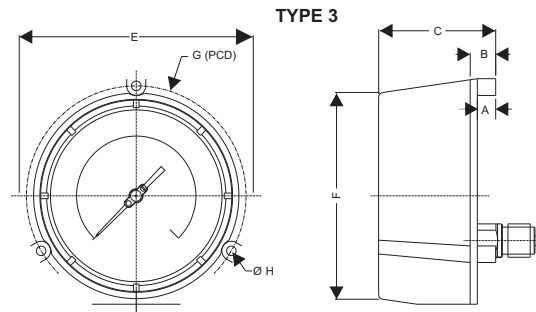
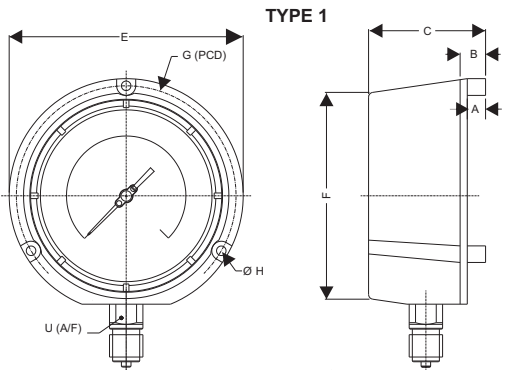
#### Temperature effect:

The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :-

Formula :  $\pm 0.04 \times (t_2 - t_1) \%$  of F. S.

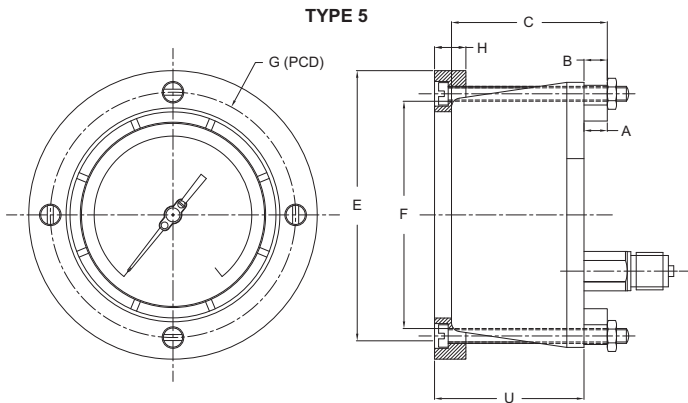
where  $t_1$  = reference temperature ( $+20^{\circ}\text{C}$ ) and  $t_2$  = ambient temperature in  $^{\circ}\text{C}$ .

**DIMENSIONS - STANDARD VERSION**



| NS  | A  | B  | C  | E   | F   | G   | H | U  | Weight in gram (with BOX) | Weight in gram (With Glycerin & Box) |
|-----|----|----|----|-----|-----|-----|---|----|---------------------------|--------------------------------------|
| 4½" | 13 | 25 | 84 | 148 | 129 | 137 | 6 | 22 | 950.00                    | 1250.00                              |

| NS  | A  | B  | C  | E   | F   | G   | H | U  | Weight in gram (with BOX) |
|-----|----|----|----|-----|-----|-----|---|----|---------------------------|
| 4½" | 13 | 25 | 84 | 148 | 129 | 137 | 6 | 22 | 925.00                    |



| NS  | A  | B  | C  | E   | F   | G   | H    | U  | Weight in gram (with BOX) |
|-----|----|----|----|-----|-----|-----|------|----|---------------------------|
| 4½" | 13 | 25 | 84 | 148 | 129 | 137 | 12.5 | 74 | 1150.00                   |

- Drawings are not to scale.
- All Dimensions are in mm.
- NS = Nominal Size
- H - Arrangement for Mounting type 1
- Weights mentioned are approximate and for standard product. Weight can be different after selection of options.

**RANGE TABLE**

Note : Waaree offers National / International Scales like kPa, MPa, bar, psi, kg/cm<sup>2</sup> & Dual Scale like kPa with psi, kPa with bar, bar with psi or Equivalent scales as per the requirement can be provided on request.

Following are the example tables for kg/cm<sup>2</sup> & psi scales

**PRESSURE RANGE**

|       |      |       |       |        |
|-------|------|-------|-------|--------|
| 0/0.6 | 0/4  | 0/25  | 0/160 | 0/1000 |
| 0/1   | 0/6  | 0/40  | 0/250 | 0/1600 |
| 0/1.6 | 0/10 | 0/60  | 0/400 | 0/2100 |
| 0/2.5 | 0/16 | 0/100 | 0/600 |        |

|       |                    |        |                    |         |                    |
|-------|--------------------|--------|--------------------|---------|--------------------|
| psi   | kg/cm <sup>2</sup> | psi    | kg/cm <sup>2</sup> | psi     | kg/cm <sup>2</sup> |
| 0/15  | 0/1                | 0/400  | 0/28               | 0/4000  | 0/280              |
| 0/30  | 0/2                | 0/500  | 0/35               | 0/5000  | 0/350              |
| 0/60  | 0/4                | 0/600  | 0/40               | 0/6000  | 0/400              |
| 0/100 | 0/7                | 0/1000 | 0/70               | 0/10000 | 0/700              |
| 0/150 | 0/10               | 0/1500 | 0/100              | 0/15000 | 0/1000             |
| 0/220 | 0/16               | 0/2200 | 0/160              | 0/22000 | 0/1600             |
| 0/300 | 0/20               | 0/3000 | 0/200              | 0/30000 | 0/2000             |

## VACUUM &amp; COMPOUND RANGE

| DUAL SCALE                         |                              |               |                              |               |                              |
|------------------------------------|------------------------------|---------------|------------------------------|---------------|------------------------------|
| inHg with psi                      | mmHg with kg/cm <sup>2</sup> | inHg with psi | mmHg with kg/cm <sup>2</sup> | inHg with psi | mmHg with kg/cm <sup>2</sup> |
| - 30/0                             | - 760 / 0                    | - 30/60       | - 760 / 3                    | - 30/200      | - 760 / 15                   |
| - 30/15                            | - 760 / 1                    | - 30/100      | - 760 / 6                    | - 30/300      | - 760 / 20                   |
| - 30/30                            | - 760 / 2                    | - 30/150      | - 760 / 9                    | - 30/350      | - 760 / 24                   |
| SINGLE SCALE (kg/cm <sup>2</sup> ) |                              |               |                              |               |                              |
| - 1/0                              |                              | - 1/1.5       |                              | - 1/5         | - 1/15                       |
| - 1/0.6                            |                              | - 1/3         |                              | - 1/9         | - 1/24                       |

## ACCESSORIES (Refer Datasheet for complete specifications)

|    |                                     |    |              |
|----|-------------------------------------|----|--------------|
| EB | COOLING TOWER                       | *  | NEEDLE VALVE |
| EC | GAUGE COCK                          | EG | SNUBBER      |
| ED | OVER LOAD PROTECTOR (GAUGE SAVER)** | EH | SIPHON       |

\* Refer catalogue for Valves &amp; Manifolds.

\*\* For Pressure Ranges.

## HOW TO ORDER

## BASIC MODEL

CODE

Example

NOMINAL SIZE

G

AE

4 1/2"

X

## TYPE OF MOUNTING

- 1 WALL / SURFACE / PROJECTION MOUNTING WITH BOTTOM ENTRY  
 3 DIRECT LOWER BACK ENTRY  
 5 LOWER BACK ENTRY WITH FRONT FLANGE

X

## GAUGE CONNECTION

4BM 1/2" BSP (M) STANDARD    2NM 1/4" NPT (M) STANDARD    3BM 3/8" BSP (M)  
 4NM 1/2" NPT (M) STANDARD    3NM 3/8" NPT (M)

XXX

Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc can be provided on request.

## RANGE

REFER RANGE TABLE

0/10  
kg/cm<sup>2</sup>

## OPTIONAL EXTRAS

|    |   |    |  |
|----|---|----|--|
| TI | MONEL BOURDON & SOCKET (MONEL VERSION)**                                  | TF | CONFORMITY AS PER NACE MR 0175         |
| PW | FIVE POINT CALIBRATION CERTIFICATE  | SF | MOVEMENT WITH DAMPENING JELLY          |
| PU | CALIBRATION CERTIFICATE TRACEABLE TO NATIONAL/<br>INTERNATIONAL STANDARDS | QB | INTEGRAL DAMPENING SCREW (AISI 316 SS) |
| RH | CUSTOM DESIGNED DIAL  | FL | INTEGRAL DAMPENING SCREW (MONEL)**     |
| SG | OXYGEN SERVICE (FOR DRY VERSION)  | RR | ENCLOSURE PROTECTION IP 66             |
| SW | DIAL TAG MARKING  | ZL | OVER RANGE PROTECTION 150% OF F. S.    |
| SX | SS TAG PLATE  | RW | PLEXI GLASS                            |
| TB | HELIUM LEAK TEST  | GH | MATERIAL TEST CERTIFICATES***          |
|    |   | SD | AISI 316 SS MOVEMENT                   |

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\*Gasket &amp; Filling plug of NBR. Refer Price List for Viton.

\*\*INTEGRAL DAMPENING SCREW WILL BE IN MONEL IF ORDERED. REFER OPTION FL.

\*\*\* MATERIAL TEST CERTIFICATES WILL BE PROVIDED FOR WETTED PARTS ONLY WITH CHEMICAL COMPOSITION TESTING. FOR OTHERS, PLEASE CONSULT FACTORY.

Ordering Example: AE - X - X - XXX - 0/10 kg/cm<sup>2</sup> - XX

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.