



### SPECIAL FEATURES

- POLYPROPYLENE CASE WITH SS MEASURING SYSTEM
- WETTED PARTS AISI 316L STAINLESS STEEL
- ACCURACY  $\pm 0.5\%$  F. S.
- SOLID FRONT DESIGN FEATURES BAFFLE WALL INTERPOSED BETWEEN THE SENSING SYSTEM, THE WINDOW AND A PRESSURE RELIEVING BACK FOR INCREASED SAFETY
- STANDARD FOLLOWED ANSI/ASME - B 40.100



### APPLICATIONS

SUITABLE FOR HIGH PRESSURE GAS, CORROSIVE / HAZARDOUS ENVIRONMENT THAT WILL NOT OBSTRUCT THE PRESSURE SYSTEM.

### SPECIFICATIONS

STANDARD VERSION : 4 1/2"

<b>Accuracy</b>	: $\pm 0.5\%$ F. S. (As per ANSI B40.100)
<b>Ambient temperature</b>	: - 20°C to + 65°C
<b>Process temperature</b>	: Max 150°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>	: Fibre Glass Reinforced Polypropylene
<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>	: Aluminium, black graduation on white background
<b>Pointer</b>	: Aluminium, black Coloured, Micrometer Zero Adjustable
<b>Window</b>	: Shatterproof/Safety Glass
<b>Blow off Disc</b>	: AISI 304 SS
<b>Gasket</b>	: Neoprene

### DRY BUT FILLABLE VERSION (OPTION FG)

<b>Fillable Dampening Liquid</b>	: Glycerine 99.7%
<b>Ambient Temperature</b>	: Maximum 65°C
<b>Process Temperature</b>	: Maximum 65°C
<b>Other Features</b>	: Refer Specification of Standard Version

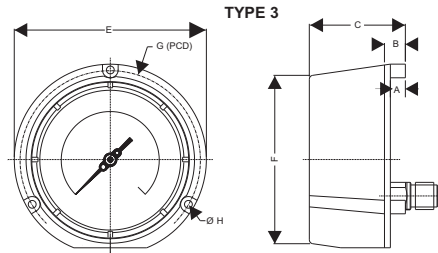
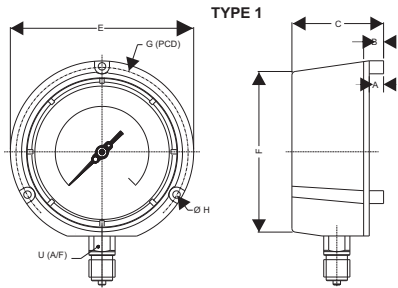
### GLYCERINE FILLED VERSION (OPTION PY)

<b>Accuracy</b>	: $\pm 1.0\%$ of F. S.
<b>Ambient Temperature</b>	: Maximum 65°C
<b>Process Temperature</b>	: Maximum 65°C
<b>Dampening Liquids</b>	: Glycerine 99.7% (Others available as Option)
<b>Other Features</b>	: Refer Specification of Standard Version
<b>Protection</b>	: IP 65

### Temperature effect:

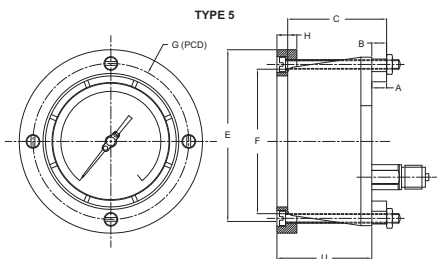
The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :- Formula :  $\pm 0.04 \times (t_2 - t_1) \%$  of F. S. where  $t_1$  = reference temperature (+20°C) and  $t_2$  = ambient temperature in °C.

**DIMENSIONS - STANDARD VERSION**



NS	A	B	C	E	F	G	H	U	Weight in gram (With BOX)	Weight in gram (With Glycerin & Box)
4 1/2"	12.5	24.5	73.5	148	130	137.5	6	22	900.00	1300.00

NS	A	B	C	E	F	G	H	U	Weight in gram (With BOX)
4 1/2"	12.5	24.5	73.5	148	130	137.5	6	22	850.00



NS	A	B	C	E	F	G	H	U	Weight in gram (with BOX)

Notes : • 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**

SINGLE SCALE (kg/cm <sup>2</sup> or bar)				
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	

DUAL SCALE (kg/cm <sup>2</sup> with psi)					
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 & 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	EC	GAUGE COCK	ED	OVER LOAD PROTECTOR (GAUGE SAVER)**
*	NEEDLE VALVE	EG	SNUBBER	EH	SIPHON

\* Refer catalogue for Valves & Manifolds. \*\* For Pressure Ranges.

## HOW TO ORDER

Example

## BASIC MODEL

AH

## CODE

## NOMINAL SIZE

G

4 1/2"

X

## TYPE OF MOUNTING

- 1 WALL / SURFACE / PROJECTION MOUNTING WITH BOTTOM ENTRY  
 3 DIRECT LOWER BACK ENTRY (NEVER FILLABLE)  
 5 LOWER BACK ENTRY WITH FRONT FLANGE

X

## GAUGE CONNECTION

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

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

- |   |  |
|---|--|
| <b>OB</b> ACCURACY 1.0% OF F.S.   | <b>RX</b> SHATTERPROOF / SAFETY GLASS            |
| <b>TI</b> MONEL BOURDON & SOCKET (MONEL VERSION)**                              | <b>TF</b> CONFORMITY AS PER NACE MR 0175         |
| <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE                                    | <b>FS</b> FILLABLE LIQUID SILICON OIL*           |
| <b>PU</b> CALIBRATION CERTIFICATE TRACEABLE TO NATIONAL/INTERNATIONAL STANDARDS | <b>FG</b> FILLABLE LIQUID GLYCERINE              |
| <b>RH</b> CUSTOM DESIGNED DIAL  | <b>SF</b> MOVEMENT WITH DAMPENING JELLY          |
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                                      | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS) |
| <b>SW</b> DIAL TAG MARKING  | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)**     |
| <b>SX</b> SS TAG PLATE  | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED |
| <b>TB</b> HELIUM LEAK TEST  | <b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED     |
| <b>RR</b> ENCLOSURE PROTECTION IP 66  | <b>PY</b> DAMPENING LIQUID GLYCERINE FILLED      |
| <b>ST</b> FIBRE GLASS REINFORCED POLYPROPYLENE BOD                              | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED*   |
| <b>SD</b> AISI 316 SS MOVEMENT  | <b>ZL</b> OVER RANGE PROTECTION 150% OF F. S.    |
|   | <b>GH</b> MATERIAL TEST CERTIFICATES***          |

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\* Gasket & 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: AH - 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.