

# SS CASE BRASS PRESSURE GAUGE

**WAAREE**

## BOURDON TYPE

**AT**

### SPECIAL FEATURES

- STAINLESS STEEL CASE
- RUGGED CONSTRUCTION
- DRY OR LIQUID FILLED
- STANDARD FOLLOWED IN GENERAL EN 837-1

### APPLICATIONS

OIL, WATER, PNEUMATICS, HYDRAULICS, PUMP, COMPRESSORS, DIESEL ENGINES AND GASEOUS/ LIQUID MEDIA THAT WILL NOT OBSTRUCT THE PRESSURE SYSTEM.



### SPECIFICATIONS

#### **STANDARD VERSION : 40 mm, 50 mm, 63 mm & 100 mm**

Accuracy	: ±1.6% of F. S.(For NS 63 mm & 100 mm) & ±2.5% of F. S.(For NS 40 mm & 50 mm)
Ambient temperature	: - 20°C to + 65°C
Process temperature	: Max 120°C
Operating Pressure Range	: 75 % of Scale value
Over pressure limit	: ≤ 100 bar : 125% of Max. Scale value
	: > 100 to ≤ 600 bar : 115% of Max. Scale value
	: > 600 to ≤ 1600 bar : 110% of Max. Scale value

Case & Bezel	: AISI 304 SS (Rolling Type)
Bourdon	: Copper Alloy up to 280 kg/cm <sup>2</sup>
	: AISI 316L SS for above 280 kg/cm <sup>2</sup>
Socket	: Copper Alloy
Movement	: Copper Alloy
Joints	: Alloy Brazing / Soldering

Protection	: IP 65
Dial	: Aluminium, black graduation on white background
Pointer	: Black coloured, Fixed
Window	: Plexi Glass
Filling Plug	: Neoprene
Gasket	: Neoprene /Silicon Rubber

### **DRY BUT FILLABLE VERSION (OPTION FG)**

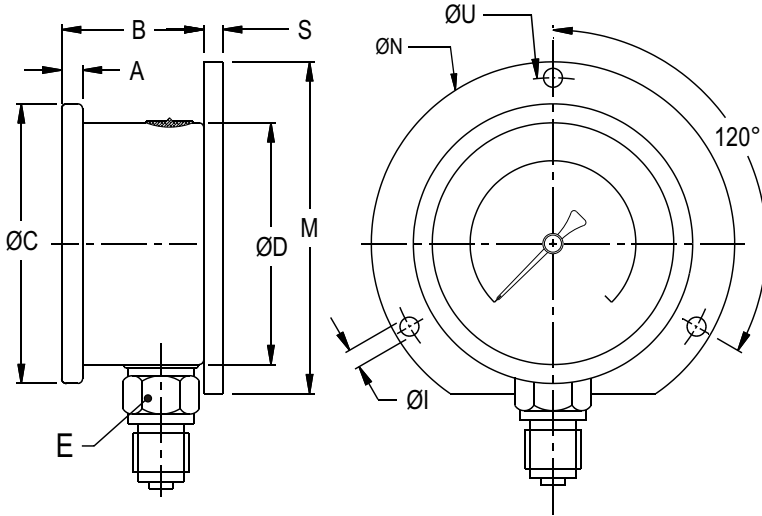
Fillable Dampening Liquid	: Glycerine 98%
Process Temperature	: Maximum 65°C
Other Features	: Refer Specification of Standard Version

### **GLYCERINE FILLED VERSION (OPTION PY)**

Accuracy	: ±1.6% of F. S.(For NS 63 mm & 100 mm) & ±2.5% of F. S.(For NS 40 mm & 50 mm)
Ambient Temperature	: Maximum 65°C
Process Temperature	: Maximum 65°C
Window	: Plexi Glass
Dampening Liquids	: Glycerine 98%
Other Features	: Refer Specification of Standard Version

**DIMENSIONS - STANDARD VERSION**

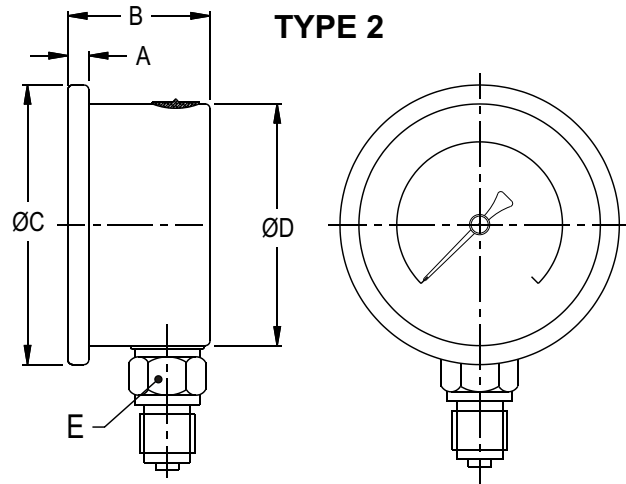
**TYPE 1**



**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	S	ØN	ØI	ØU	M	Weight in gram (With Box)
63	6.5	30	68	62.5	A/F 14	5	88	5	76	80	195.0
100	7	35.5	110	100	A/F 17	6	134	6	118	128	465.0

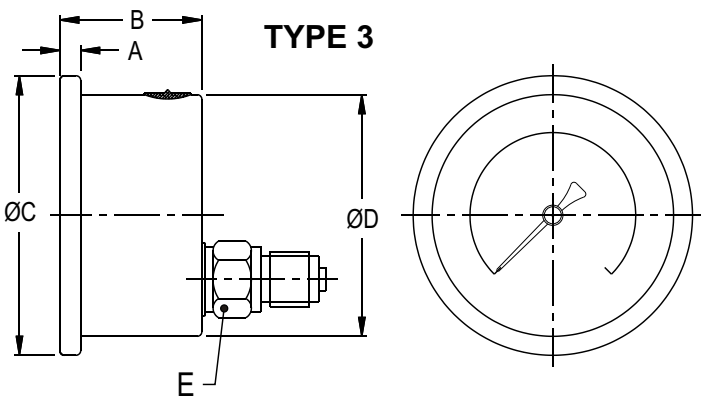
**TYPE 2**



**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)
40	5	25	43	41	A/F 14	88.0
50	5	29	57	51.5	A/F 14	125.0
63	6.5	30	68	62.5	A/F 14	155.0
100	12.5	39	110	100	A/F 17	390.0

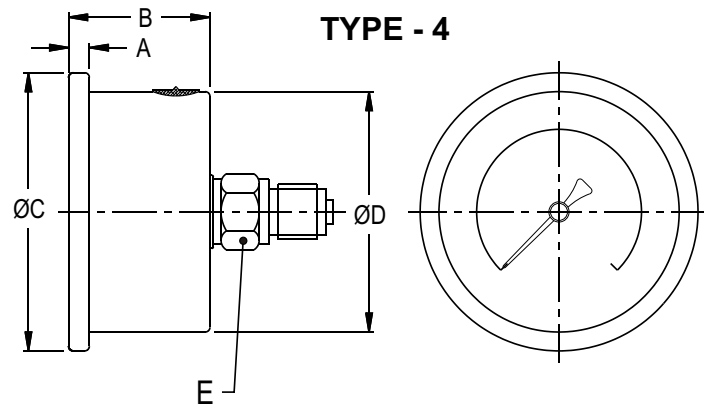
**TYPE 3**



**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)
63	6.5	30	68	62.5	A/F 14	155.0
100	12.5	39	110	100	A/F 17	410.0

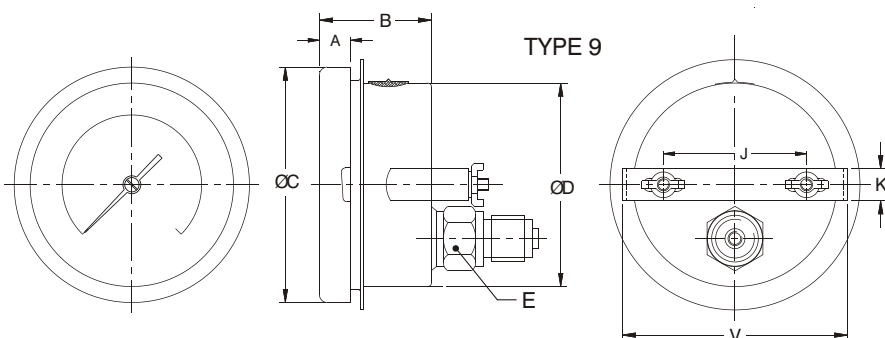
**TYPE - 4**



**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)
40	5	25	43	41	A/F 14	75.0
50	4.5	29	57.5	51.5	A/F 14	118.0
63	6.5	30	68	62.5	A/F 14	155.0

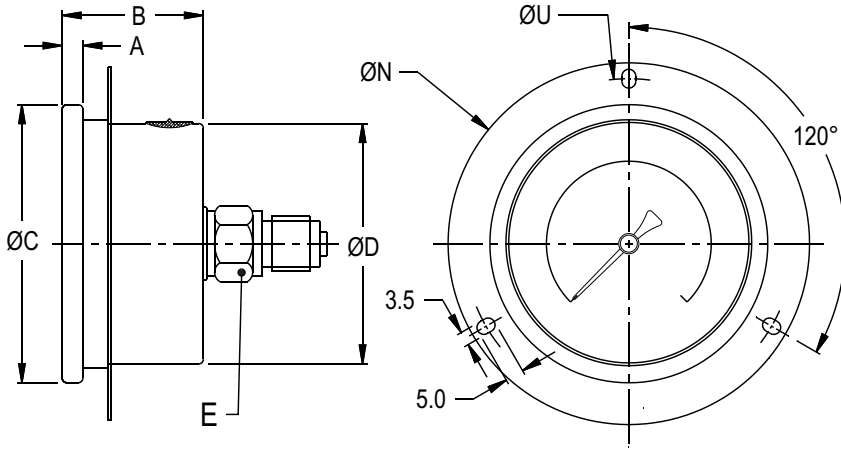
**TYPE 9**



**BAYONET TYPE (STANDARD)**

NS	A	B	ØD	ØC	E	J	K	V	Weight in gram (With Box)
100	12.5	39	100	110	A/F 17	66.5	16	106	550.0

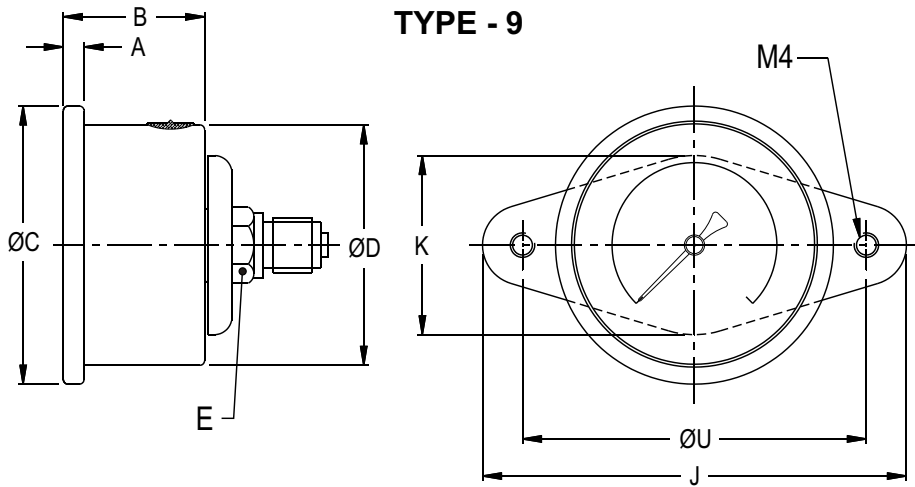
TYPE - 5



ROLLING TYPE (STANDARD)

NS	A	B	ØC	ØD	E	ØN	ØU	Weight in gram (With Box)
63	6.5	30	68	62.5	A/F 14	85.5	76	216.0

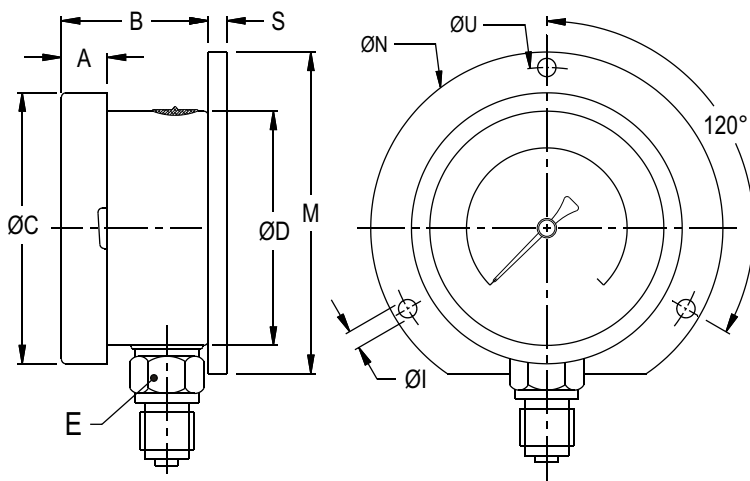
TYPE - 9



ROLLING TYPE (STANDARD)

NS	A	B	ØC	ØD	E	J	K	ØU	Weight in gram (With Box)
50	5	29	57	51.5	A/F 14	91	38	70.5	160.0
63	6.5	30	68	62.5	A/F 14	91	38	70.5	195.0

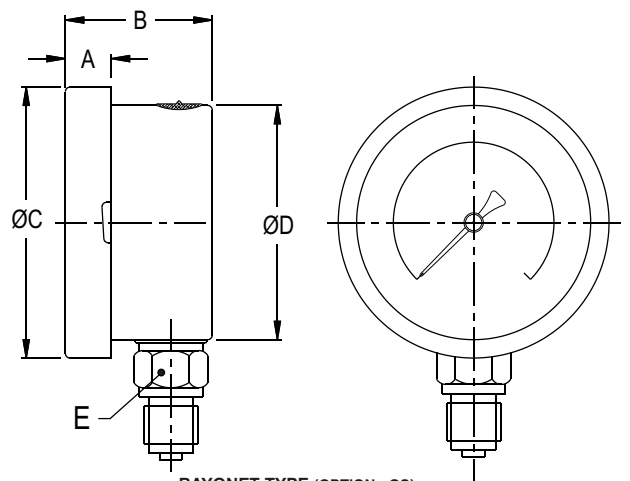
TYPE 1



BAYONET TYPE (OPTION - OS)

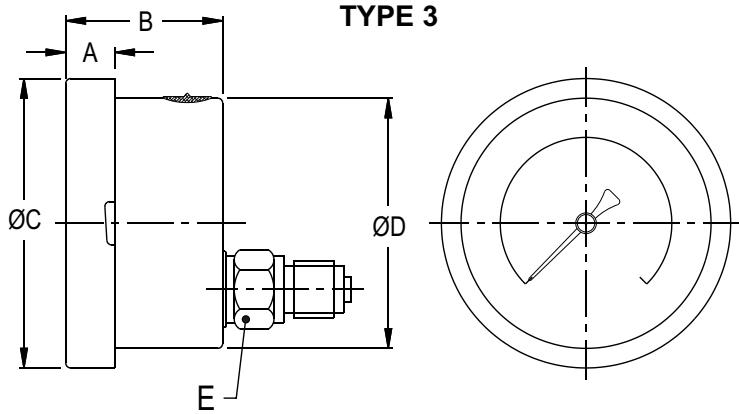
NS	A	B	ØC	ØD	E	S	ØN	ØI	ØU	M	Weight in gram (With Box)
63	9	31	69.5	62.5	A/F 14	5	88	5	76	80	207.0
100	7	39	110	100	A/F 17	6	134	6	118	128	510.0

TYPE 2

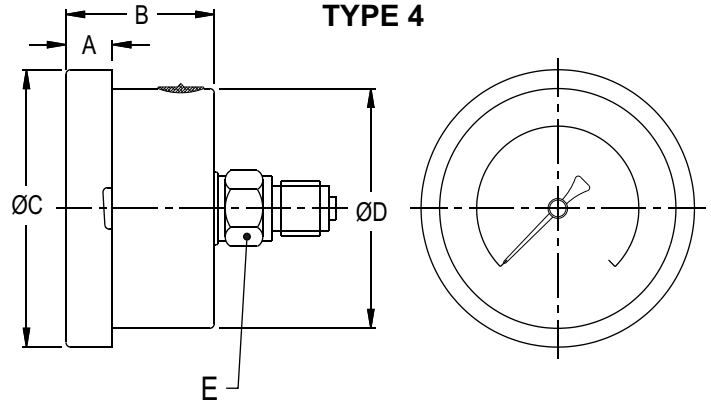


BAYONET TYPE (OPTION - OS)

NS	A	B	ØC	ØD	E	Weight in gram (With Box)
50	10	31	59	51	A/F 14	136.0
63	9	31	69.5	62.5	A/F 14	165.0
100	12.5	39	110	100	A/F 17	390.0



TYPE 3



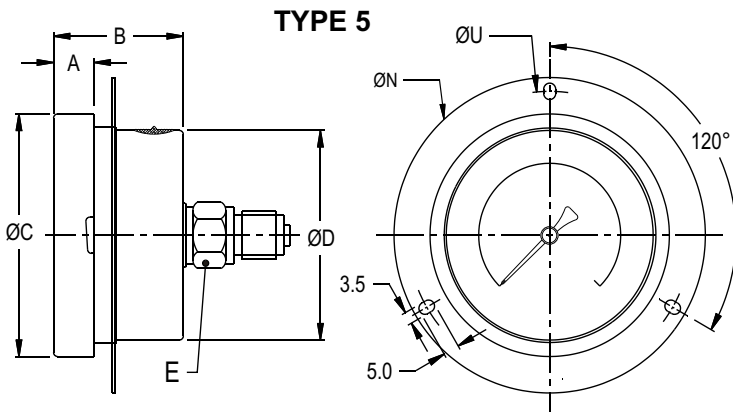
TYPE 4

BAYONET TYPE (OPTION - OS)

NS	A	B	ØC	ØD	E	Weight in gram (With Box)
63	9	31	69.5	62.5	A/F 14	172.0

BAYONET TYPE (OPTION - OS)

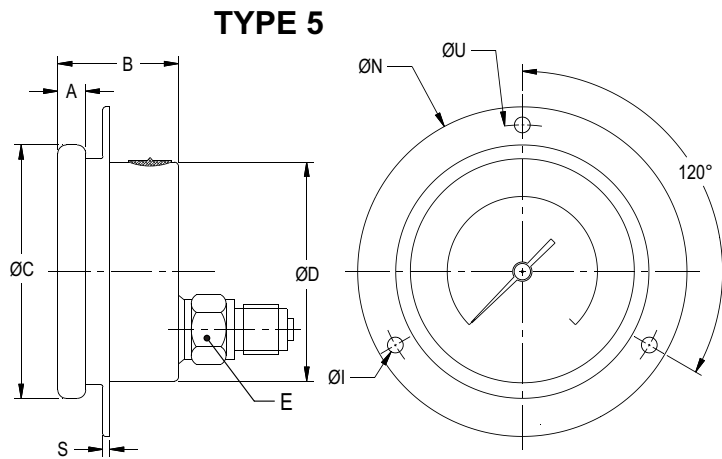
NS	A	B	ØC	ØD	E	Weight in gram (With Box)
50	10	31	59	51	A/F 14	162.0
63	9	31	69.5	62.5	A/F 14	172.0



TYPE 5

BAYONET TYPE (OPTION - OS)

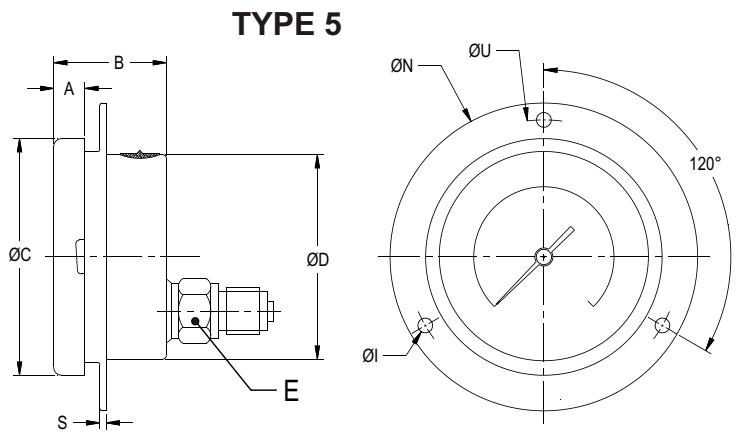
NS	A	B	ØC	ØD	E	ØN	ØU	Weight in gram (With Box)
63	9	31	69.5	62.5	A/F 14	85.5	76	211.0



TYPE 5

ROLLING TYPE (STANDARD)

NS	A	B	ØD	ØC	E	S	ØI	ØN	ØU	Weight in gram (With Box)
100	12.5	35.5	100	110	A/F 17	1	6	134	118	460.0



TYPE 5

BAYONET TYPE (OPTION - OS)

NS	A	B	ØD	ØC	E	S	ØI	ØN	ØU	Weight in gram (With Box)
100	12.5	339	100	110	A/F 17	1	6	134	118	480.0

Notes : • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size

**RANGE TABLE**

**Note :** Waaree offers Pressure ranges, Vacuum ranges and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm<sup>2</sup> & Dual Scale like kPa with psi, kPa with bar, bar with psi or scales as per the requirement can be provided on request.

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

**RANGE WITH NOMINAL SIZES**

NOMINAL SIZES		40	50	63	100
RANGE (PSI with kg/cm <sup>2</sup> )					
PSI	Kg/cm <sup>2</sup>				
-30 inHg / 0	-760 mmHg / 0	×	✓	✓	✓
0/15 psi	0/1 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/30psi	0/2 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/60 psi	0/4 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/100 psi	0/7 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/150 psi	0/10 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/220 psi	0/16 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/300 psi	0/21 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/400 psi	0/28 kg/cm <sup>2</sup>	×	✓	✓	✓
0/500 psi	0/35 kg/cm <sup>2</sup>	×	✓	✓	✓
0/600 psi	0/42 kg/cm <sup>2</sup>	×	✓	✓	✓
0/1000 psi	0/70 kg/cm <sup>2</sup>	×	✓	✓	✓
0/1500 psi	0/100 kg/cm <sup>2</sup>	×	✓	✓	✓
0/2200 psi	0/160 kg/cm <sup>2</sup>	×	✓	✓	✓
0/3000 psi	0/210 kg/cm <sup>2</sup>	×	✓	✓	✓
0/4000 psi	0/280 kg/cm <sup>2</sup>	×	✓	✓	✓
0/5000 psi	0/350 kg/cm <sup>2</sup>	×	×	✓	✓
0/6000 psi	0/400 kg/cm <sup>2</sup>	×	×	✓	✓
0/10000 psi	0/700 kg/cm <sup>2</sup>	×	×	✓	✓
0/15000 psi	0/1000 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg/15	- 1/1 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg /30	- 1/2 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg /60	- 1/4 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg /100	- 1/7 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg /150	- 1/10 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg /200	- 1/14 kg/cm <sup>2</sup>	×	×	✓	✓
- 30inHg /300	- 1/21 kg/cm <sup>2</sup>	×	×	✓	✓

**FREON WITH TEMPERATURE SCALE**

**Note :** For temperature scales, please provide refrigerant name.

- 30° Hg / 150 psi	×	×	✓	✓
- 30° Hg / 300 psi	×	×	✓	✓
0/300 psi	×	×	✓	✓
0/500 psi	×	×	✓	✓

**ACCESSORIES (Refer Datasheet for complete specifications)**

EC	GAUGE COCK	EG	SNUBBER
ED	OVERLOAD PROTECTOR (GAUGE SAVER)	EH	SIPHON
*	NEEDLE VALVE		

\* Refer catalogue for Valves & Manifolds

**HOW TO ORDER****BASIC MODEL****CODE****NOMINAL SIZE**

B	C	D	F
40 mm	50 mm	63 mm	100 mm

**TYPE OF MOUNTING**

	B	C	D	F
1 WALL/ SURFACE/ PROJECTION MOUNTING WITH BOTTOM ENTRY	×	×	✓	✓
2 DIRECT BOTTOM ENTRY	✓	✓	✓	✓
3 DIRECT LOWER BACK ENTRY	×	×	✓	✓
4 DIRECT CENTER BACK ENTRY	✓	✓	✓	×
5 FLUSH PANEL BACK ENTRY WITH FRONT FLANGE	×	×	✓	✓
9 BACK ENTRY WITH MOUNTING BRACKET*	×	✓	✓	✓

Note : \*Applicable for Rolling type design only.

**CONNECTION**

	B	C	D	F
1BM 1/8" BSP(M)	✓	✓	×	×
1NM 1/8" NPT(M)	✓	✓	×	×
1TM 1/8" BSPT(M)	✓	✓	×	×
2BM 1/4" BSP(M)	×	✓	✓	×
2NM 1/4" NPT(M)	×	✓	✓	×
2TM 1/4" BSPT(M)	×	✓	✓	×
3BM 3/8" BSP(M)	×	×	×	✓
3NM 3/8" NPT(M)	×	×	×	✓
3TM 3/8" BSPT(M)	×	×	×	✓
4BM 1/2" BSP(M)	×	×	×	✓
4NM 1/2" NPT(M)	×	×	×	✓
4TM 1/2" BSPT(M)	×	×	×	✓

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

\* These connections will be provided through adaptors.

**RANGE**

REFER RANGE TABLE

**OPTIONAL EXTRAS**

RH CUSTOM DESIGNED DIAL	SX SS TAG PLATE
SG OXYGEN SERVICE (WITHOUT DAMPENING LIQUIDS)	TB HELIUM LEAK TEST
PW FIVE POINT CALIBRATION CERTIFICATE	FG FILLABLE LIQUID GLYCERINE
PY DAMPENING LIQUID GLYCERINE FILLED	FK INTEGRAL DAMPENING SCREW (BRASS)
RI 25 MM BOD (EXCEPT MOUNTING 4, 5 & 9)*	ZC FREON RANGE (WITH TEMPERATURE SCALE)
OS CASE WITH BAYONET TYPE BEZEL ***	RX SHATTERPROOF GLASS/ SAFETY GLASS (FOR BAYONET TYPE DESIGN)*
RR ENCLOSURE PROTECTION IP 66	RZ TOUGHENED GLASS (FOR BAYONET TYPE DESIGN)*
RE ENCLOSURE PROTECTION IP 67	

\* Applicable for NS 63 mm & 100 mm. \*\*\* Applicable for NS 50 mm, 63 mm & 100 mm.

**Ordering Example: AT - 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.