Bourdon tube pressure gauge
All stainless-steel construction
(50mm, 63mm)

Features:

- All SS case
- All SS Measuring System
- Dry / Liquid filled

Applications:

- Pumps
- Engine Compressors
- Turbines
- Conventional & Nuclear Plants
- Chemical & Petrochemical Industries
- Food & Beverage
- Pharmaceutical
- Cryogenics
- Presses

Standard:

- EN 837-1 (NS 50mm,63mm)

Standard Parameters

Accuracy	: ±1.6% of F. S. (for NS 63mm), ±2.5% F.S. (for NS 50mm)	
Ambient temperature	: -20 to +65°C	
Process temperature	: Max 200°C	
Operating Pressure Range	: 75% of the 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

Materials of Construction

Case & bezel	: AISI 304 SS (Bayonet type)
Bourdon	: AISI 316L SS
Socket	: AISI 316 SS (Directly welded to case)
Movement	: AISI 304 SS
Joints	: Tig Argon Arc Welding
Protection	: IP 65
Dial	: Aluminium, black graduation on white background
Pointer	: Black coloured, fixed
Window	: Plexi glass
Filling Plug	: Nitrile
Gasket	: Neoprene

Glycerine Filled Version

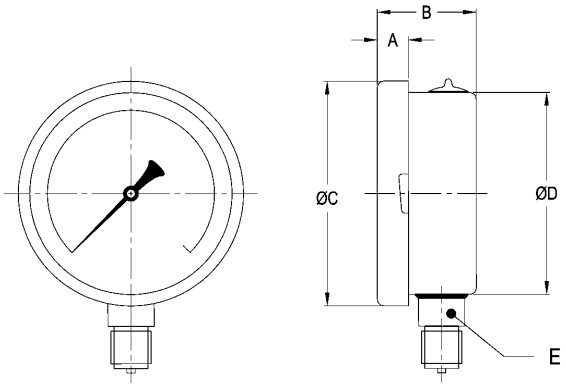
Accuracy	: ±1.6% of F.S. (63mm), ±2.5% of F.S. (50mm)
Ambient & Process Temperature	: Maximum 65°C
Window	: Plexi Glass
Dampening Liquids	: Glycerine 99.7%

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 specific accuracy while measurement:
Formula ±0.04 x (t2-1) % of F.S.
where t1: reference temperature (+20°C) and t2: ambient temperature in °C.

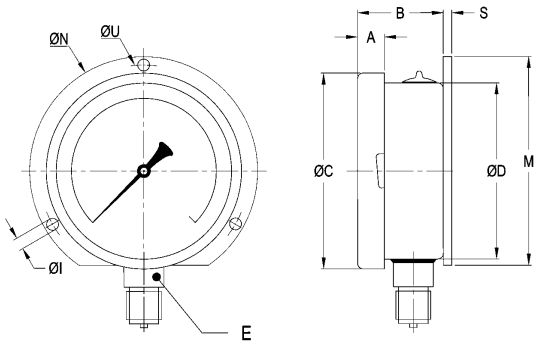
Dimensional drawing

TYPE 1



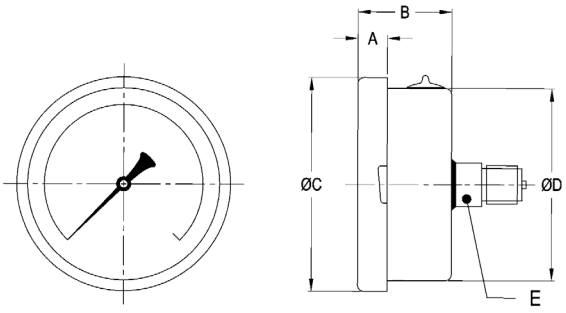
NS	A	B	ØC	ØD	E	W	WG
50	11	32.5	58.5	51	14	153	210
63	11	32	69.5	62.5	14	180	240
W = Weight in grams with box WG = Weight in grams with glycerine & box							

TYPE 2



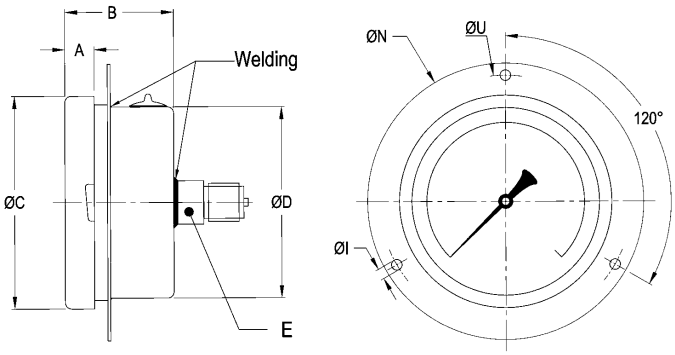
NS	A	B	ØC	ØD	E	M	S	ØI	ØN	ØU	W	WG
63	11	32	69.5	62.5	14	80	7	3.6	86	75	720	1025
W = Weight in grams with box												
WG = Weight in grams with glycerine & box												

TYPE 4



NS	A	B	ØC	ØD	E	W	WG
50	11	32.5	58.5	51	14	170	230
63	11	32	69.5	62.5	14	188	250
W = Weight in grams with box WG = Weight in grams with glycerine & box							

TYPE 5

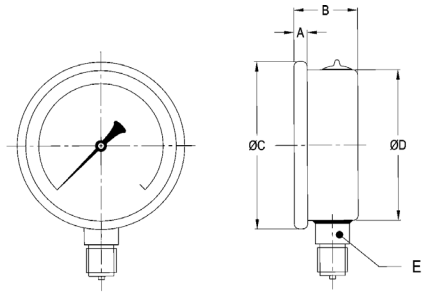


NS	A	B	ØC	ØD	E	ØN	ØI	ØU	W	WG
63	11	32	69.5	62.5	14	86	3.6	75	213	275
W = Weight in grams with box WG = Weight in grams with glycerine & box										

Note: ● Drawings are not to scale ● All dimensions are in mm

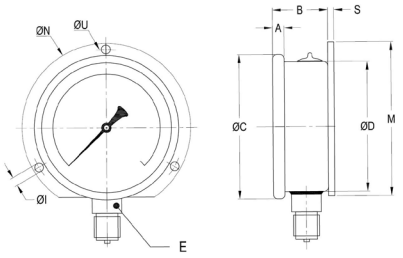
Dimensional drawing - Rolling type

TYPE 1



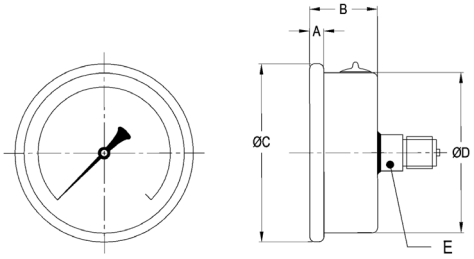
NS	A	B	ØC	ØD	E	W	WG
100	12.5	45	111	100	22	695	990
125	15	46	129	119	22	850	1170
W = Weight in grams with box							
WG = Weight in grams with glycerine & box							

TYPE 2



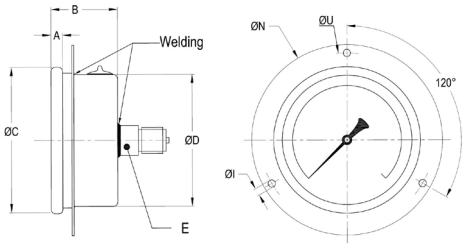
NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	M	W	WG
63	6.5	30.5	69	62.5	14	7	3.6	86	75	80	190	250
W = Weight in grams with box												
WG = Weight in grams with glycerine & box												

TYPE 4



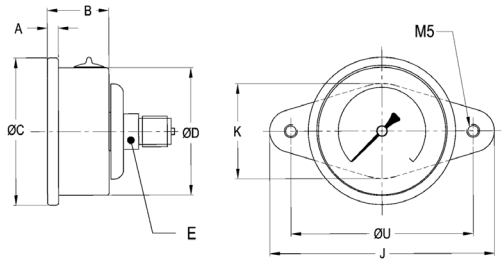
NS	A	B	ØC	ØD	E	W	WG
50	4.5	29	57.5	51.5	14	117	167
63	6.5	30.5	69	62.5	14	170	230
W = Weight in grams with box							
WG = Weight in grams with glycerine & box							

TYPE 5



NS	A	B	ØC	ØD	E	ØN	ØI	ØU	W	WG
63	6.5	30.5	69	62.5	14	86	3.6	75	170	230
W = Weight in grams with box										
WG = Weight in grams with glycerine & box										

TYPE 10



NS	A	B	ØC	ØD	E	J	K	ØU	W	WG
50	5	29	57	51.5	14	91	38	70.5	180	240
63	6.5	30.5	69	62.5	14	91	38	70.5	210	270
W = Weight in grams with box										
WG = Weight in grams with glycerine & box										

Note: ● Drawings are not to scale ● All dimensions are in mm

Range table

Note: We offer Pressure, Vacuum and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm^2 & 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^2 & psi scales

Pressure Table

Dual scale (psi with Kg/cm²)

psi	kg/cm²	psi	kg/cm²	psi	kg/cm²
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	0/420
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		
0/300	0/20	0/3000	0/200		

♦Applicable for NS 63mm only

Vacuum and Compound Range (for NS 63mm only)

inHg with psi	kg/cm²	inHg with psi	kg/cm²
- 30/30	- 1/2	- 30/150	- 1/10
- 30/60	- 1/4	- 30/200	- 1/14
- 30/100	- 1/7	- 30/300	- 1/ 21

Ammonia with temperature scale (for NS 63mm only)

Range (kg/cm²)	Range (psi)
-1 to 12.5	-30 - 150
-1 to 16	-30 - 300
-1 to 25	0 - 300

Accessories

Cooling Tower	Overload Protector (Gauge Saver)	Snubber
Gauge Cock	Needle Valve	Siphon

Ordering codes

1. Dial Size — C

Code	Nominal size
B	50mm
C	63mm

2. Mounting — 1

1	Direct bottom
2	Bottom surface♦
4	Direct center back entry
5	Flush back panel with front flange♦
10	Centre back entry with mounting bracket*

♦Applicable for NS 63mm only

*Applicable for rolling type design only

3. Gauge Connection — 06B

3B	1/8" BSP[M]
3N	1/8" NPT[M]
3BT	1/8" BSPT[M]
06B	1/4" BSP[M]
06N	1/4" NPT[M]
06BT	1/4" BSPT[M]

4. Execution — DR

DR	Dry
FL	Fillable Liquid
LG	Liquid Glycerine
LS	Liquid Silicon

5. Window — PG

PG	Plexi glass
SG	Shatterproof/safety glass
TG	Toughened glass

6. Bezel Type — BY

BY	Bayonet (Standard)
R	Rolling

7. Options — 5C

S6	AISI 316 SS case & bezel
5C	Five-point calibration certificate
OS	Oxygen service (for dry version)
MP	Maximum reading pointer with plexi glass# (except option OA and only for dry version)
DS	Dampening screw in AISI 316 SS
ST	SS tag plate
CD	Custom designed dial
FR	Freon range (with temperature scale)
AR	Ammonia range (with temperature scale)
I5	Enclosure protection IP 65
I8	Enclosure protection IP 68
MT	Material test certificate**
HL	Helium leak test
NT	Calibration certificate with NABL traceability

5. Range — 0-10 Kg/cm²

Refer range table

Ordering Example: SP-C-1-06B-DR-PG-BY-5C-0-10Kg/cm2

**Material test certificate will be provided for wetted parts only. For others, pls contact factory.
For NS 63mm only

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.