

Bourdon tube pressure gauge Brass Internal compact case



Features:

- Rugged Construction
- Stainless steel case
- Dry / Liquid filled

Applications:

- Hydraulic & Pneumatic
- Pumps & Compressors
- Diesel Engines
- Water application
- Oil
- Gaseous / liquid media that will not obstruct the pressure system.

Standard:

EN 837-1

Standard Parameters

Accuracy	: ±1.6% of F.S. (for N.S. 63mm & 100mm)
	: ±2.5% of F.S. (for N.S. 50mm)
Ambient temperature	: -20 to +65°C
Process temperature	: 150°C max.
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

Materials of Construction

Case & bezel	: AISI 304 SS
Bourdon	: Copper Alloy
Socket	: Copper Alloy
Movement	: Copper Alloy
Joints	: Alloy brazing / soldering
Protection	: IP 65
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured, slotted zero adjustable
Window	: Plexi glass
Filling Plug	: Neoprene
Gasket	: Neoprene

Glycerine Filled Version

Accuracy	: ±1.6% of F.S.
Ambient & Process Temperature	: Maximum 65°C
Window	: Plexi Glass
Dampening Liquids	: Glycerine 99.7%

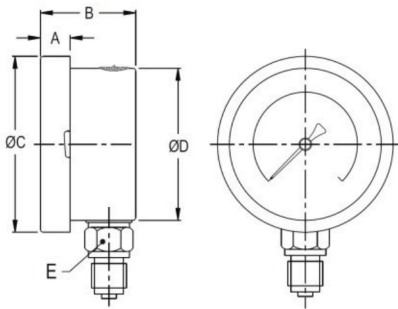
Temperature Effect

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 $\pm 0.04 \times (t_2 - 1) \%$ of F.S.

where t1: reference temperature (+20°C) and t2: ambient temperature in °C.

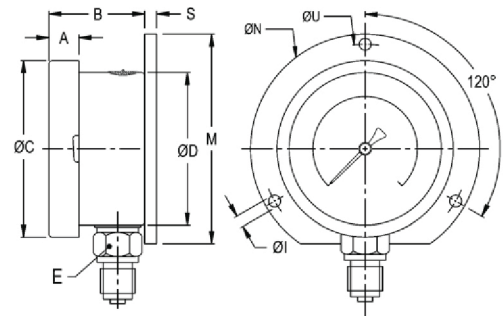
Dimensional drawing

TYPE 1 (Bayonet)


NS	A	B	ØC	ØD	E	W	WG
50	10	31	59	51	A/F 14	136	200
63	9	31	69.5	62.5	A/F 14	165	225
100	12.5	39	110	100	A/F 17	390	520

W = Weight in grams with box

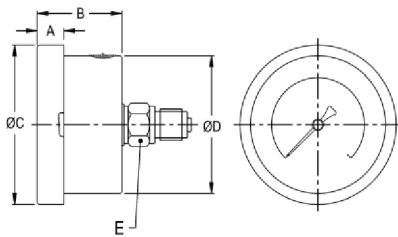
WG = Weight in grams with glycerine & box

TYPE 2 (Bayonet)


NS	A	B	ØC	ØD	E	S	ØN	ØI	ØU	M	W	WG
63	10	30	69.5	62.5	A/F 14	5	88	5	76	80	207	267
100	12.5	39	110	100	A/F 17	6	134	6	118	128	510	630

W = Weight in grams with box

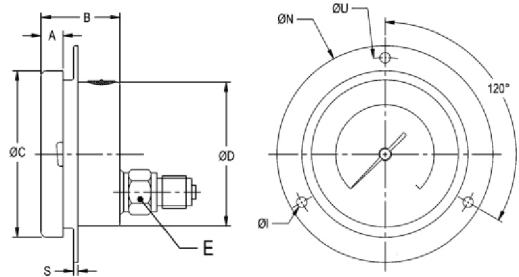
WG = Weight in grams with glycerine & box

TYPE 4 (Bayonet)


NS	A	B	ØC	ØD	E	W	WG
50	10	31	59	51	14	162	225
63	10	31	69.5	62.5	14	172	230

W = Weight in grams with box

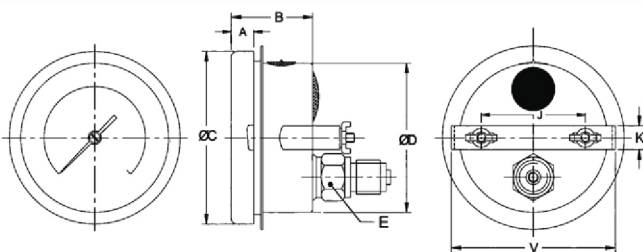
WG = Weight in grams with glycerine & box

TYPE 5 (Bayonet)


NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	W	WG
100	12.5	35.5	100	110	A/F 14	1	6	134	118	460	600

W = Weight in gram with box

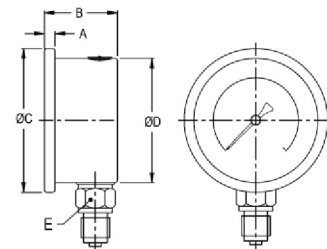
WG = Weight in gram with glycerine & box

TYPE 8 (Bayonet)


NS	A	B	ØD	ØC	E	J	K	V	W	WG
100	12.5	39	100	110	A/F 17	66.5	16	106	550	670

W = Weight in grams with box

WG = Weight in grams with glycerine & box

TYPE 1 (Rolling)


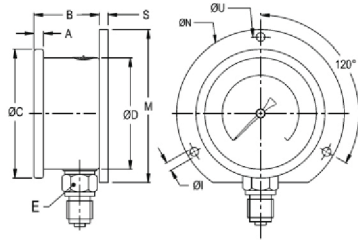
NS	A	B	ØC	ØD	E	W	WG
50	5	29	57	51.5	A/F 14	125	185
63	6.5	30	68	62.5	A/F 14	155	215
100	7	35.5	110	100	A/F 17	390	500

W = Weight in grams with box

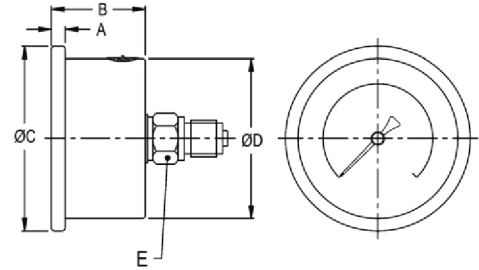
WG = Weight in grams with glycerine & box

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

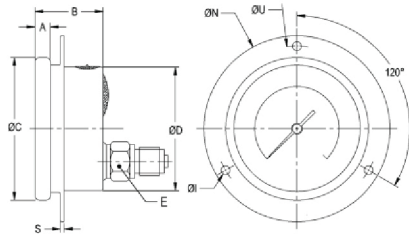
Dimensional drawing

TYPE 2 (Rolling)


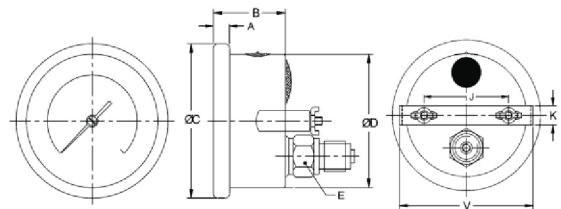
NS	A	B	ØC	ØD	E	S	ØN	ØI	ØU	M	W	WG
63	6.5	30	68	62.5	A/F 14	6	134	5	76	80	195	255
100	7	35.5	110	100	A/F 17	4	150	6	118	128	465	575
W = Weight in grams with box												
WG = Weight in grams with glycerine & box												

TYPE 4 (Rolling)


NS	A	B	ØC	ØD	E	W	WG
50	4.5	29	51.5	57.5	A/F 14	118	180
63	6.5	30	62.5	68	A/F 14	155	215
W = Weight in grams with box							
WG = Weight in grams with glycerine & box							

TYPE 5 (Rolling)


NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	W	WG
63	9	31	62	69.5	A/F 14	1	6	85.5	76	211	270
100	9	35.5	100	110	A/F 17	1	6	134	118	460	570
W = Weight in grams with box											
WG = Weight in grams with glycerine & box											

TYPE 8 (Rolling)


NS	A	B	ØD	ØC	E	J	K	V	W	WG
100	7	35.5	100	110	A/F 17	66.5	16	106	550	670
W = Weight in grams with box										
WG = Weight in grams with glycerine & box										

Range table

Note: We offer Pressure, Vacuum and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm² & 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/cm² & psi scales

Pressure Range

 Dual scale (psi with Kg/cm²)

psi	kg/cm ²	psi	kg/cm ²	psi	kg/cm ²
0/15	0/1	0/300	0/21	0/2200	0/160
0/30	0/2	0/400	0/28	0/3000	0/210
0/60	0/4	0/500	0/35	0/4000	0/280
0/100	0/7	0/600	0/42	0/5000	0/350
0/150	0/10	0/1000	0/70	0/6000	0/420
0/220	0/16	0/1500	0/100		

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

Vacuum and Compound Range

Dual scale

inHg with psi	kg/cm ²	inHg with psi	kg/cm ²	inHg with psi	kg/cm ²
- 30/15	-1/1	- 30/100	-1/7	- 30/300	-1/21
- 30/30	-1/2	- 30/150	-1/10		
- 30/60	-1/4	- 30/200	-1/14		

Freon (with temperature scale)

-30 "Hg / 150 psi	-30 "Hg / 300 psi	0 / 300 psi	0/500 psi
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Accessories

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

Ordering codes

1. Dial Size		E	10B 3/8" BSP[M]	5C	
Code	Nominal size		10N 3/8" NPT[M]		
B	2" [50 mm]		10BT 3/8" BSPT[M]		
C	2½" [63 mm]		15B 1/2" BSP[M]		
E	4" [100 mm]	15N 1/2" NPT[M]			
2. Mounting		1	15BT 1/2" BSPT[M]		
1	Direct bottom		4. Options		
2	Bottom surface		5C		Five-point calibration certificate
3	Direct lower back entry		SG		Shatterproof/safety glass
4	Direct center back entry		TG		Toughened glass
5	Flush back panel with front flange		OS	Oxygen service (for dry version)	
8	Back entry with mounting bracket	CR	Case with bayonet type bezel		
*Ask factory if drawing required		10B	FL	Fillable liquid	
3. Gauge Connection			LG	Dampening liquid glycerine filled	
03B	1/8" BSP[M]		ST	SS tag plate	
03N	1/8" NPT[M]		CD	Custom designed dial	
03BT	1/8" BSPT[M]		FR	Freon range (with temperature scale)	
06B	1/4" BSP[M]		I5	Enclosure protection IP 65	
06N	1/4" NPT[M]		I8	Enclosure protection IP 68	
06BT	1/4" BSPT[M]		HL	Helium leak test	
		5. Range		0/10 Kg/cm²	
		Refer range table			

Ordering Example: BI-E-1-10B-5C-0/10Kg/cm2

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.