

Bourdon tube pressure gauge Utility type



Features:

- Economical version
- General purpose application

Applications:

- HVAC
- Filter-Regulator-Lubricator Units
- Water
- Air
- Allied process industries
- Hydraulics
- Pneumatics
- Valve Positioner
- Sugar Mills
- Irrigation equipment

Standard Parameters

Accuracy	: ±1.6% of F.S. (For NS 63mm, 100mm, 150mm & 200mm)
	: ±2.5% of F.S. (For NS 40mm & 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
	: > 600 to ≤ 1600 bar : 110% of Max Scale Value

Materials of Construction

Case & bezel	: Steel, powder coated / painted (Push fit type)
Bourdon	: Copper Alloy
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	: Sheet glass

Temperature Effect

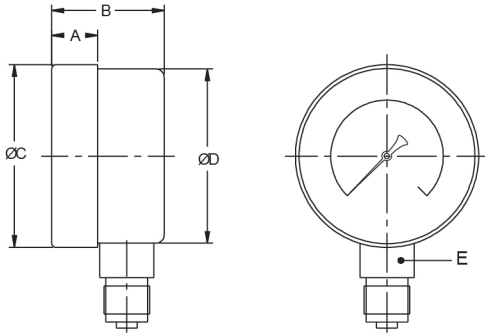
The variation of indication caused by effects of temperature is to be calculated by below formula which is to be added in the specific accuracy while measurement:

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

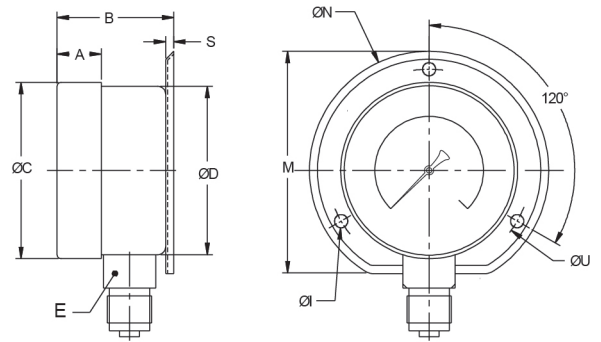
TYPE 1



NS	A	B	ØC	ØD	E	W
40	10	26.5	44	42	12	82
50	10	29	53	52	14	101
63	12	29	63	62	14	120
100	13	35	99	97	17	343
150	16	43	155	154	17	695
250	37.5	51	252	249	22	2100

W = Weight in grams with box

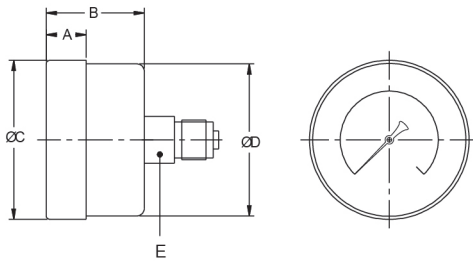
TYPE 2



NS	A	B	ØC	ØD	E	M	S	ØN	ØU	ØI	W
63	12	30	63	62	14	80	5	88	76	5	160
100	13	36	99	97	17	117	1.2	132	118	6	405
150	16	47.5	155	154	17	181	7	195.5	-	-	730
250	37.5	55	252	249	22	280	8	288.5	-	-	2300

W = Weight in grams with box

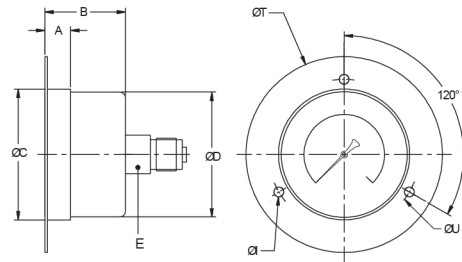
TYPE 4



NS	A	B	ØC	ØD	E	W
40	7	24	42	41	11	69
50	11	29	54	52	14	148
63	12	29.5	67	65.5	14	174
100	13	36	99	97	17	343
150	16	43	155	154	17	663

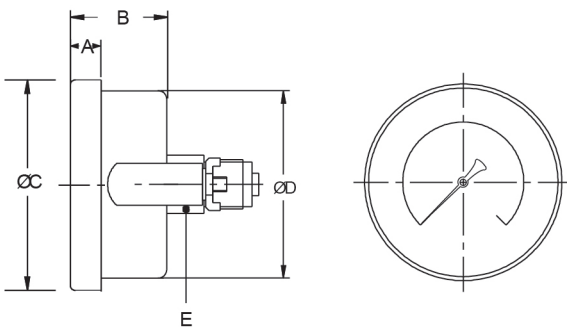
W = Weight in grams with box

TYPE 5



NS	A	B	ØC	ØD	E	ØT	ØU	ØI	W
50	12	29	54	52	14	90	71	4	175
63	12	31	63	62	14	90	76	4	210
100	14	33	99	97	17	134	117	4	445
150	16	37	155	154	17	134	170	5	581

TYPE 8



NS	A	B	ØC	ØD	E	W
50	11	29	54	52	14	210
63	12	29.5	67	65.5	14	240
100	13	36	99	97	17	390
150	16	43	155	154	17	700

W = Weight in grams with 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/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

Range with nominal sizes

Nominal Sizes		40	50	63	100	150	250
Range	Range						
Vacuum inHg							
-30 inHg / 0	-760 mmHg/0	✓	✓	✓	✓	✓	✓
Pressure psi	Pressure Kg/cm ²						
0/15	0/1	✓	✓	✓	✓	✓	✓
0/30	0/2	✓	✓	✓	✓	✓	✓
0/60	0/4	✓	✓	✓	✓	✓	✓
0/100	0/7	✓	✓	✓	✓	✓	✓
0/150	0/10	✓	✓	✓	✓	✓	✓
0/220	0/16	x	✓	✓	✓	✓	✓
0/300	0/21	x	✓	✓	✓	✓	✓
0/400	0/28	x	✓	✓	✓	✓	✓
0/500	0/35	x	✓	✓	✓	✓	✓
0/600	0/42	x	✓	✓	✓	✓	✓
0/1000	0/70	x	✓	✓	✓	✓	✓
0/1500	0/100	x	✓	✓	✓	✓	✓
0/2200	0/160	x	✓	✓	✓	✓	✓
0/3000	0/210	x	✓	✓	✓	✓	✓
0/4000	0/280	x	✓	✓	✓	✓	✓
0/5000	0/350	x	✓	✓	✓	✓	✓
0/6000	0/400	x	✓	✓	✓	✓	✓
Compound							
-30inHg/15	-1/1	x	x	x	✓	✓	✓
-30inHg/30	-1/2	x	x	x	✓	✓	✓
-30inHg/60	-1/4	x	x	x	✓	✓	✓
-30inHg/100	-1/7	x	x	x	✓	✓	✓
-30inHg/150	-1/10	x	x	x	✓	✓	✓
-30inHg/200	-1/14	x	x	x	✓	✓	✓
-30inHg/300	-1/21	x	x	x	✓	✓	✓

Freon (with temperature scale)	40	50	63	100	150	200
Range (psi)	x	x	✓	✓	x	x
-30 in Hg - 150	x	x	✓	✓	x	x
-30 in Hg - 300	x	x	✓	✓	x	x
0-300	x	x	✓	✓	x	x
0-500	x	x	✓	✓	x	x

Ordering codes

1. Dial Size		E	3. Gauge Connection		10B	
Code	Nominal size		03B	1/8" BSP[M] std. conn. for 40mm		
A	40mm	1	03N	1/8" NPT[M]	5C	
B	50mm		06B	1/4" BSP[M] std. conn. for 63mm		
C	63mm		06N	1/4" NPT[M]		
E	100mm		10B	3/8" BSP[M] std. conn. for 100mm		
G	150mm		10N	3/8" NPT[M]		
H	200mm		15B	1/2" BSP[M]		
I	250mm		15N	1/2" NPT[M]		
2. Mounting			4. Options			0-10
1	Direct bottom		5C	Five-point calibration certificate		
2	Bottom surface*		OS	Oxygen service (for dry version)		Kg/cm²
4	Direct center back entry#	DS	Dampening screw in AISI 316 SS			
5	Flush back panel with front flange**	ST	SS tag plate			
8	Back entry with mounting bracket**	DT	Dial tag marking			
*Not applicable for dial size 40mm & 50mm		CD	Custom designed dial			
#Not applicable for dial size 40mm only		FR	Freon range (with temperature scale)			
**Not applicable for dial size 40mm & 250mm		HL	Helium leak test			
		5. Range				
		Refer range table				

Ordering Example: UP-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.