Bourdon Tube Pressure Gauges
Stainless Steel Series, Solid Front Case
Type 232.30 - Dry Case
Type 233.30 - Liquid-filled Case

Applications

- With liquid-filled case for applications with high dynamic pressure pulsations (add restrictor) or vibration
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction

Product Features

- Solid-front stainless steel case
- Excellent load-cycle stability and shock resistance
- All stainless steel construction
- Positive pressure ranges to 20,000 psi (1600 bar)



Bourdon Tube Pressure Gauge Model 232.30, 4"

Specifications

Design
ASME B40.100 & EN 837-1

Sizes
2½", 4" & 6" (63, 100 and 160 mm)

Accuracy class
2½": ± 2½% of span (ASME B40.100 Grade A)
4" & 6": ± 1.0% of span (ASME B40.100 Grade 1A)

Ranges
Vacuum / Compound to 200 psi (16 bar)
Pressure from 0/15 (1 bar) to 0/15,000 psi (1000 bar) - 2½" , 4"
Pressure from 0/10 (0.6 bar) to 0/20,000 psi (1600 bar) - 6"
or other equivalent units of pressure or vacuum

Working pressure

2½":	Steady:	¾ full-scale value
	Fluctuating:	⅔ full-scale value
	Short time:	full-scale value
4" & 6":	Steady:	full-scale value
	Fluctuating:	0.9x full-scale value
	Short time:	1.3x full-scale value

Operating temperature
Ambient: -40°F to +140°F (-40°C to +60°C) - dry
-4°F to +140°F (-20°C to +60°C) - glycerine-filled
-40°F to +140°F (-40°C to +60°C) - silicone-filled
Medium: +392°F (+200°C) maximum - dry
+212°F (+100°C) maximum - liquid-filled

Temperature error
Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

Weather protection
Weather tight (NEMA 4X / IP65)

Pressure connection
Material: 316 stainless steel
Lower mount (LM)
Lower back mount (LBM) - for 2½" & 4" size only
¼" NPT or ½" NPT limited to wrench flat area

Bourdon tube
Material: 316L stainless steel
< 1,500 psi (100 bar): C-shape
≥ 1,500 psi (100 bar): Helical

Movement
Stainless steel

Dial
White aluminum with black lettering; 2½" with stop pin

Pointer
Black aluminum, adjustable

Case
304 stainless steel with solid baffle wall and blowout back (safety case)

Window
Polycarbonate (2½") and Safety Glass (4" & 6") with Buna-N gasket)

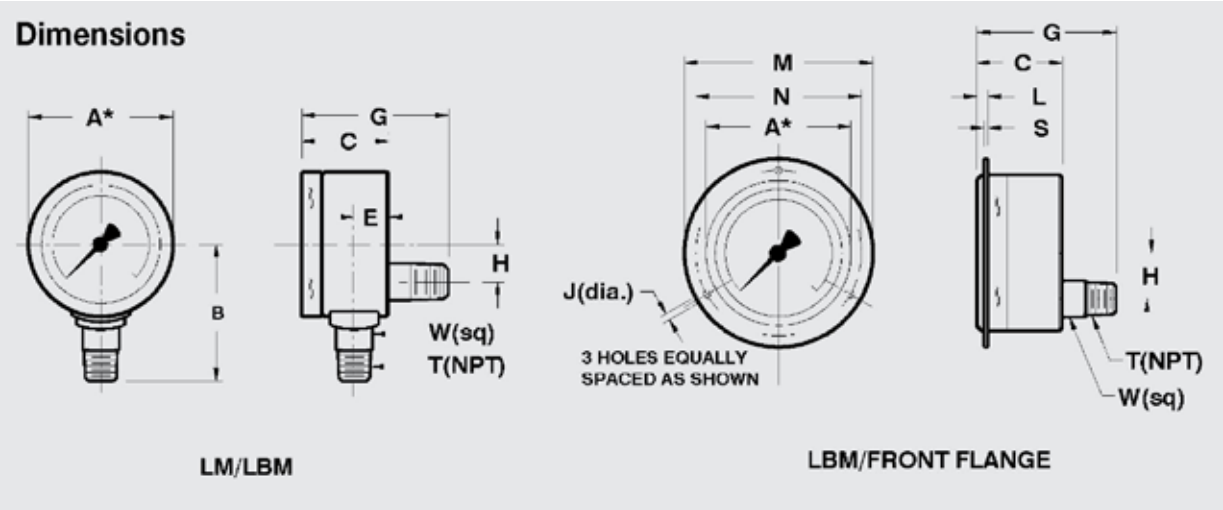
Bezel ring
Stainless steel, bayonet-type

Case fill
Glycerine 99.7% - Type 233.30 (LM only)

Optional extras

- Other pressure connections
- Restrictors for applications with high dynamic pressure pulsations
- Monel® wetted parts (Type 26X.30)
- Front flange, SS (LBM only)
- Mounting lugs for wall mounting*
- 316SS case material
- Silicone or Halocarbon oil case filling (LM only)
- Red drag pointer or mark pointer
- Non-adjustable pointer
- Safety glass window
- Custom dial layout
- Integral alarm contacts or transmitters
- Other pressure scales available: bar, kPa, MPa, kg/cm^2 and dual scales

Dimensions



Size		A	B	C[1]	E	G	H	J	L	M	N	S	T	W	Weight
2.5"	mm	63	48	42	17.5	63	18.5	4	3	85	75	2		14	0.44 lb. dry
	in	2.48	1.89	1.65	0.69	2.48	0.73	0.16	0.12	3.35	2.95	0.08	1/4"	0.55	0.57 lb. filled
4"	mm	101	86	57.5	24	93	30	4.8	3	132	116	2		22	1.43 lb. dry
	in	3.98	3.35	2.26	0.94	3.66	1.18	0.19	0.12	5.20	4.57	0.08	1/2"	0.87	2.38 lb. filled
6"	mm	161	116	58	24	-	-	5.8	3	196	178	2		22	2.86 lb. dry
	in	6.34	4.57	2.28	0.94	-	-	0.23	0.12	7.72	7.01	0.08	1/2"	0.87	5.15 lb. filled

[1] For 6" LM range 20,000 psi, C dimension changes to 75.5 mm / 2.97 in.

[2] Weight without optional accessories.

Note: For 2½" size, front flange is a 2-piece design. Hole panel cutout dimension for this option is 66.5 mm.

* Note: When mounting rear lugs, leave 15 mm between the back of the gauge and the mounting surface.

Recommended panel cutout is dimension D + 1 mm

Ordering information
Pressure gauge model / Nominal size / Scale range / Size of connection / Optional extras required
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.
Modifications may take place and materials specified may be replaced by others without prior notice.

WIKA Instrument Corporation
1000 Wiegand Boulevard
Lawrenceville, GA 30043
Tel (770) 513-8200 Toll-free 1-888-WIKA-USA
Fax (770) 338-5118
E-Mail info@wika.com
www.wika.com