

Bourdon Tube Pressure Gauges

Stainless Steel Case Process Gauge, Solid Front Design

Type 232.30 - Dry Case 4½"

Type 233.30 - Liquid-filled Case 4½"

WIKA Datasheet 23X.30 4.5

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
- Meets API RP 551 requirements for pressure measurement

Product Features

- Solid-front stainless steel case
- Excellent load-cycle stability and shock resistance
- All 316L stainless steel construction



Bourdon Tube Pressure Gauge Model 232.30 4½"

Specifications

Design

ASME B40.100

Sizes

4½" (115 mm)

Accuracy class

± 0.5% of span (ASME B40.100 Grade 2A)

Ranges

Vacuum / Compound to 200 psi (16 bar)
Pressure from 0/15 psi (1 bar) to 0/15,000 psi (1000 bar)

Working pressure

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: 316L stainless steel
Lower mount (LM)
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 and stop pin at 6 o'clock

Pointer

Black aluminum, adjustable

Case

- 316L stainless steel with solid baffle wall and blowout back (safety case)
- For pressure ranges ≤ 300 psi, case has a compensating valve/fill plug to vent case pressure

Window

Safety Glass with Buna-N gasket

Bezel ring

316L stainless steel, bayonet-type

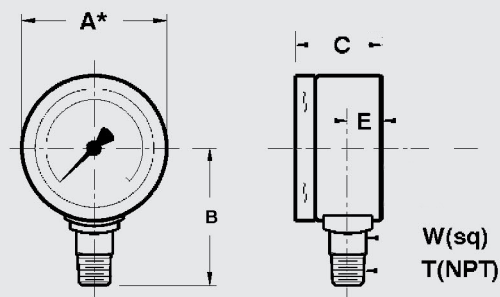
Case fill

Glycerine 99.7% - Type 233.30 (LM only)

Optional extras

- Other pressure connections
- Restrictor for high dynamic pressure pulsations
- Mounting lugs for wall mounting*
- Silicone or Halocarbon oil case filling (LM only)
- Red drag pointer or mark pointer
- Acrylic (PMMA) window
- Custom dial layout
- InSight™ reflective dial options available with white, fluorescent yellow, fluorescent orange or glow-in-the-dark dial backgrounds
- Other pressure scales available:
bar, kPa, MPa, kg/cm² and dual scales

Dimensions



LM/LBM

Size	A	B	C ¹	E	T	W	Weight
4.5" mm	121	97	59.5	25		22	1.43 lb. dry
in	4.76	3.82	2.34	0.99	1/2"	0.87	2.38 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: When mounting rear lugs, leave 15 mm between the back of the gauge and the mounting surface.

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