

Bourdon Tube Pressure Gauges

Industrial Series Gauge

Type 212.20 - Dry Case

Type 213.20 - Liquid-filled Case

WIKA Datasheet 21X.20

Applications

- Sturdy industrial pressure gauges designed in compliance with operational safety requirements of EN 837-1 and ASME B40.100
- Reliable pressure gauge for machine and plant construction industry
- Suitable for gaseous or liquid media that will not obstruct the pressure system or attack copper alloy parts

Special features

- Long service life, robust
- Cost effective and reliable
- Pressure ranges up to 20,000 psi

Standard Features

Design

ASME B40.100 & EN 837-1

Sizes

6" (160 mm)

Accuracy class

± 1% of span (ASME B40.100 Grade 1A)

Ranges

Vacuum / Compound to 200 psi
Pressure from 15 psi to 20,000 psi
or other equivalent units of pressure or vacuum

Working pressure

Steady: full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.3 x 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: +180°F (+80°C) maximum

Temperature error

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



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Weather protection

Weather resistant (NEMA 3 / IP 54) - dry case
Weathertight (NEMA4X / IP65) - liquid filled case

Pressure connection

Material: copper alloy
Lower mount (LM) or lower back mount (LBM)
1/2" NPT

Bourdon tube

Material: copper alloy
≤ 1,000 PSI: C-type, copper alloy - soft soldered
≥ 1,500 PSI: helical type, 316L SS - brazed

Movement

Copper alloy with nickel-alloy wearable parts

Dial

White aluminum with black lettering

Pointer

Black aluminum

Case

304 stainless steel with stainless steel bayonet ring

Window

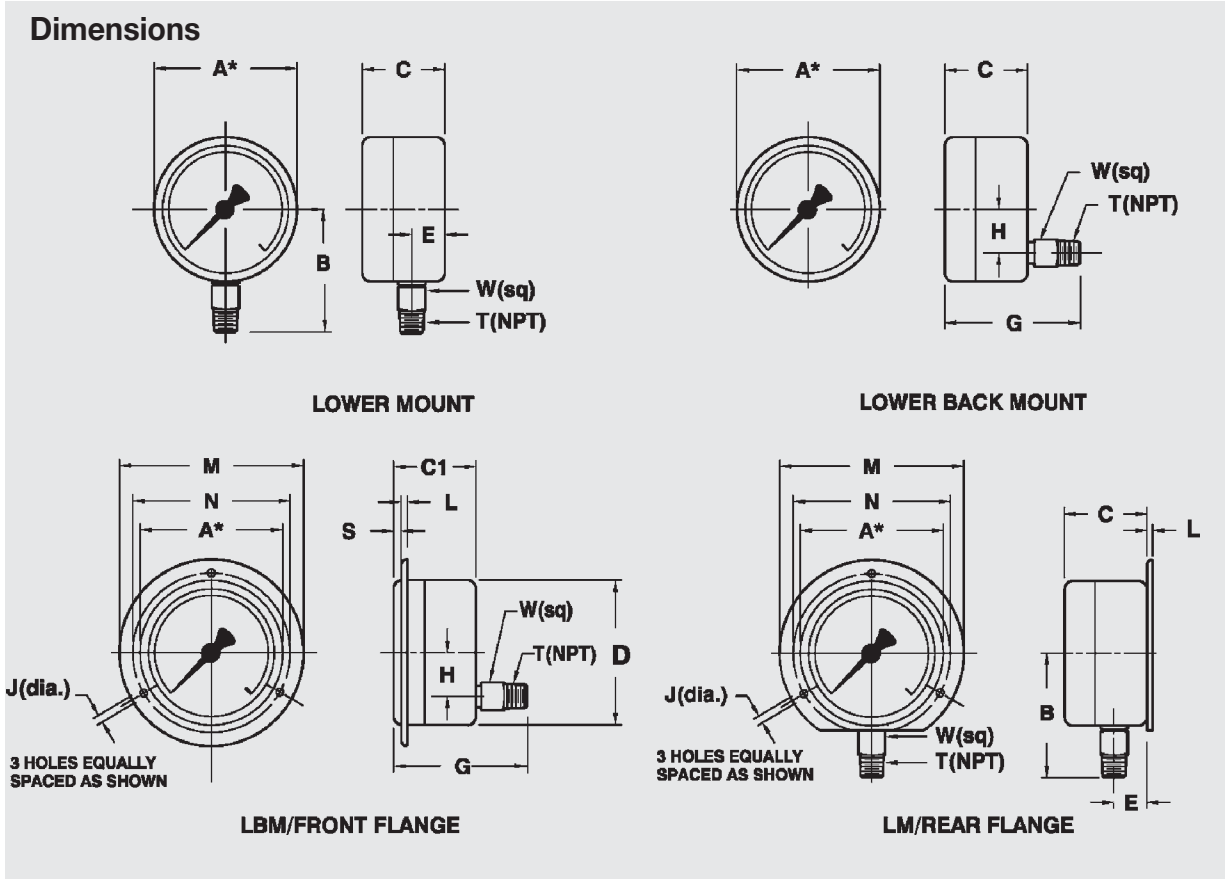
Flat instrument glass

Case fill

Glycerine 99.7% - Type 213.20

Optional extras

- Brass restrictor
- Stainless steel front or rear flange
- U-clamp panel mounting
- Integral alarm contacts
- Extended media temperature to +392°F (+200°C)
- Special connections limited to wrench flat area
- Custom dial layout
- Other pressure scales available
bar, kPa, MPa, kg/cm² and dual scales



| Size | | A | B | C ¹ | D | E | G | H | J | L | M | N | S | T | W | Weight |
|------|----|-----|------|----------------|------|------|------|------|------|------|------|-----|------|------|------|----------|
| 6" | mm | 160 | 116 | 49.5 | 159 | 15.5 | 81 | 50 | 5.8 | 3 | 196 | 178 | 5 | | 22 | |
| | in | 6.0 | 4.57 | 1.95 | 6.26 | 0.61 | 3.19 | 1.97 | 0.23 | 0.12 | 7.72 | 7.0 | 0.20 | 1/2" | 0.86 | 2.42 lb. |

¹ For LM range 20,000 psi and LBM ranges above 1,000 psi, C dimension changes to 66.5 mm / 2.58"

Recommended panel cutout is dimension D + 1.5 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.



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