

# Capsule Pressure Gauges

## Process Industry Series

### Type 632.50 - Dry Case

### Type 633.50 - Liquid-filled Case

WIKA Datasheet 63X.50

#### Applications

- Robust design and weather protection, suitable for outdoor use
- Suitable for dry, gaseous media that will not attack 316 stainless steel parts
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction

#### Product features

- Zero-adjustment through window
- All stainless steel construction
- Low pressure ranges from 1" WC to 250" WC (2.5 mbar to 600 mbar)

#### Specifications

##### Design

ASME B40.100 & EN 837-3

##### Sizes

2½", 4" & 6" (63, 100 and 160 mm)

##### Accuracy class

±1.6% of span

##### Ranges

2½" (63mm): 0...16" WC (40 mbar) to 0...250" WC (600 mbar)  
 4" (100mm): 0...6" WC (16 mbar) to 0...250" WC (600 mbar)  
 6" (160 mm): 0...1" WC (2.5 mbar) to 0...250" WC (600 mbar)  
 or other equivalent units of pressure or vacuum

##### Working pressure

Steady: full scale value  
 Fluctuating: 0.9 x full scale value

##### Operating temperature

Ambient: -4°F to +140°F (-20°C to +60°C)  
 Medium: +212°F (+100°C) maximum

##### Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.6% of span for every 18°F (10°K) rising or falling.



Capsule Element Pressure Gauge Model 632.50

##### Weather protection

Weather resistant (NEMA 3 / IP54)  
 With case filling (NEMA 4X / IP66)

##### Pressure connection

Material: 316L stainless steel  
 Lower mount (LM) or center back mount (CBM) - 2½" (63 mm)  
 Lower mount (LM) or lower back mount (LBM) - 4" & 6"  
 (100mm & 160mm)  
 ¼" NPT or ½" NPT limited to wrench flat area

##### Capsule element

Material: 316L stainless steel with Viton sealing ring

##### Movement

Stainless steel  
 Zero adjustment in front on dial

##### Dial

White aluminum with black lettering

##### Pointer

Black aluminum

##### Case

304 stainless steel with stainless steel bayonet ring

##### Window

Laminated safety glass, Acrylic for case filling (633.50)

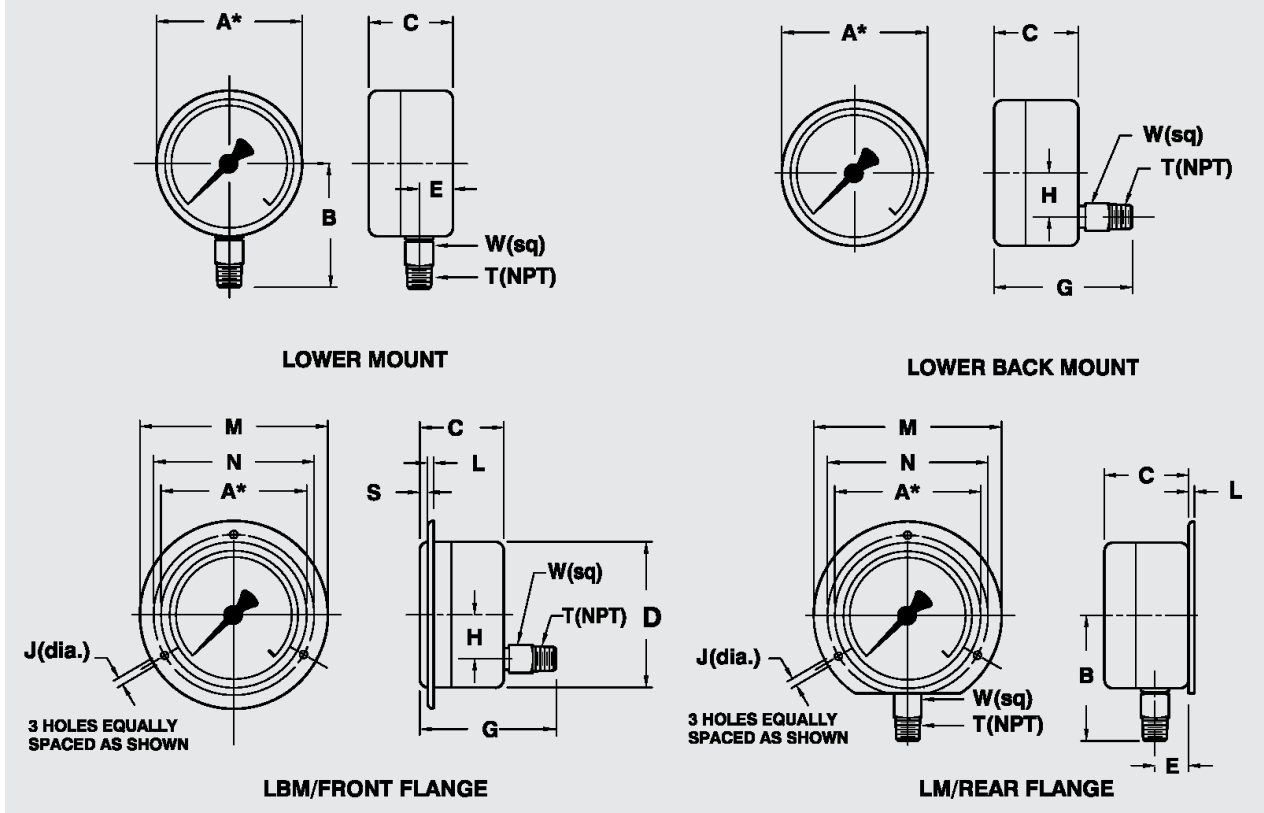
##### Case fill

Silicone - Type 633.50  
 (only available for full scale ranges ≥ 40" WC)

## Optional extras

- Other pressure connections
- $\pm 1.0\%$  accuracy (ASME B40.100 Grade 1A), available in ranges  $>16''$  WC (632.50) and  $>40''$  WC (633.50)
- SS front flange, 4" (100mm) and 6" (160mm) only
- U-clamp mounting, SS, 4" (100mm) and 6" (160mm) only
- Silicone case filling
- Over and underpressure protection
  - $\leq 10''$  WC (25mbar): 3X of full scale
  - $\geq 10''$  WC (25mbar): 10X of full scale
- Special connections limited to wrench flat area
- Custom dial layout
- With output signal, size 4" (100mm) only, from ranges  $\geq 25''$  WC (60 mbar)
- With inductive switch (831.XX), size 4" & 6" (100mm & 160mm), from ranges  $\geq 40''$  WC (100 mbar)

## Dimensions



| Size |    | A   | B    | C    | D    | E    | G    | H <sup>1</sup> | J    | L    | M    | N    | S   | T    | W    | Weight <sup>2</sup> |
|------|----|-----|------|------|------|------|------|----------------|------|------|------|------|-----|------|------|---------------------|
| 2.5" | mm | 63  | 51   | 42   | 62   | 9    | 58   | 0              | 4    | 3    | 85   | 75   | 5   |      | 14   |                     |
|      | in | 2.5 | 2.0  | 1.65 | 2.44 | 0.35 | 2.28 | 0              | 0.14 | 0.12 | 3.35 | 2.95 | 0.2 | 1/4" | 0.55 | 0.41 lb.            |
| 4"   | mm | 100 | 85   | 49.5 | 99   | 15.5 | 78   | 30             | 4.8  | 3    | 132  | 116  | 5   |      | 22   |                     |
|      | in | 4.0 | 3.35 | 1.95 | 3.9  | 0.61 | 3.07 | 1.18           | 0.19 | 0.12 | 5.20 | 4.57 | 0.2 | 1/2" | 0.86 | 1.32 lb.            |
| 6"   | mm | 160 | 116  | 49.5 | 159  | 15.5 | 78   | 50             | 5.8  | 3    | 196  | 178  | 5   |      | 22   |                     |
|      | in | 6.0 | 4.57 | 1.95 | 6.26 | 0.61 | 3.07 | 1.97           | 0.23 | 0.12 | 7.72 | 7.0  | 0.2 | 1/2" | 0.86 | 2.42 lb.            |

<sup>1</sup> For size 2.5", connection is center back mount (CBM)

<sup>2</sup> Weight without optional accessories

