

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

±1.5% 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)
 1/4" NPT or 1/2" 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

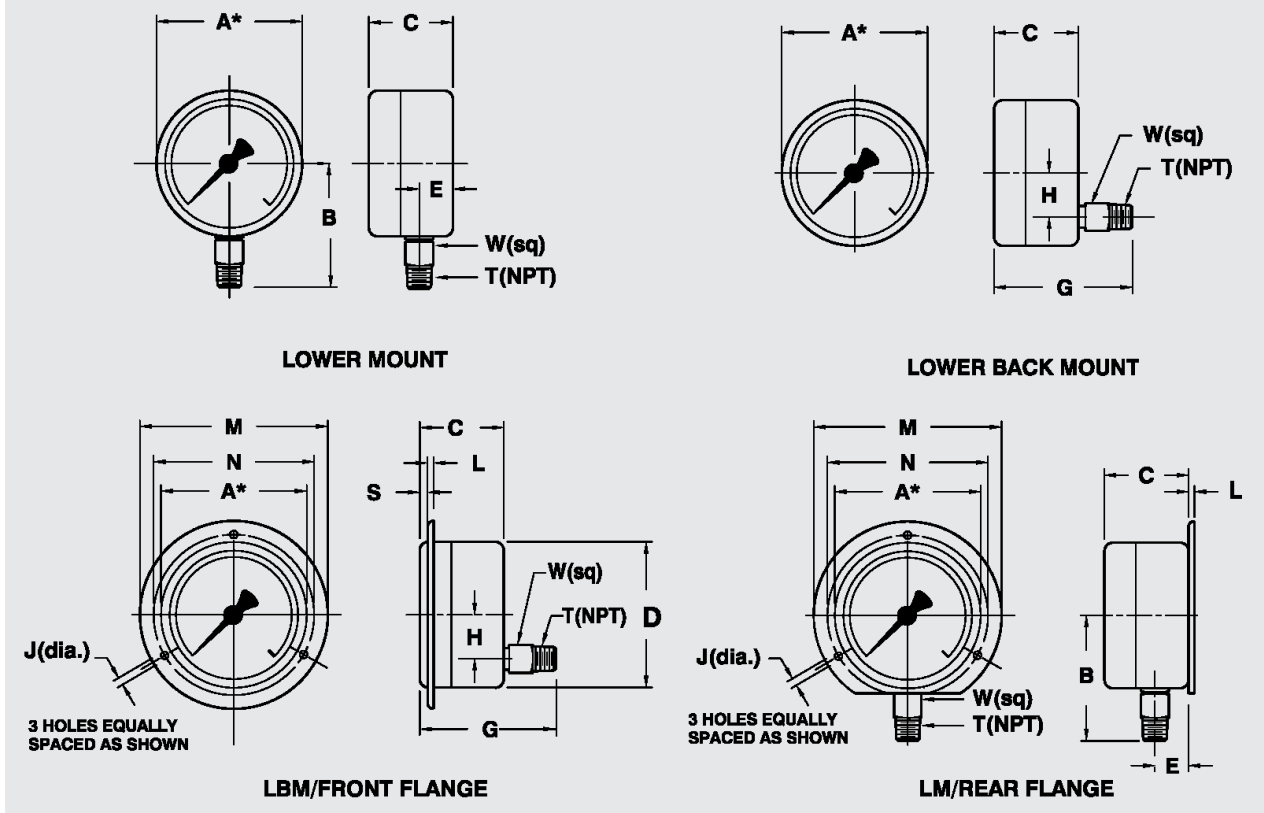
Case fill

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

Size		A	B	C	D	E	G	H ¹	J	L	M	N	S	T	W	Weight ²
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.

¹ For size 2.5", connection is center back mount (CBM)

² Weight without optional accessories