



# Bourdon Tube Pressure Gauges

Field Repairable

All Stainless Steel Construction

Panel Builder Gauges • Type 233.54

## Pressure Gauges

### Application

Suitable for corrosive environments compatible with 316 stainless steel wetted parts, dry and liquid fillable case, where vibration and/or pressure pulsation occur in liquid or gaseous media which will not obstruct the pressure system.

### Sizes

2½" & 4" (63 & 100 mm)

### Accuracy

2½": ±1.5% of span

4": ±1.0% of span (ASME B40.1 Grade 1A)

### Ranges (All ranges not stocked)

Vacuum / Compound to 30"HG / 0 / 200 PSI

Pressure from 15 PSI to 15,000 PSI

or other equivalent units of pressure or vacuum

### Working Range

2½" Steady: 3/4 of full scale value  
Fluctuating: 2/3 of full scale value  
Short time: full scale value

4" Steady: Full scale value  
Fluctuating: 0.9 x full scale value  
Short time: 1.3 x full scale value

### Operating Temperature

Ambient: -4°F to 140°F (-20°C to 60°C) <sup>Note 1</sup>

Media: max. 212°F (+100°C)

### 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.

## Standard Features

### Connection

Material: 316 stainless steel

Center back mount (CBM) 2½"

Lower back mount (LBM) 4"

1/4" NPT or 1/2" NPT limited to wrench flat area

### Bourdon Tube

Material: 316 stainless steel

30"Hg (Vac) to 1000 PSI C-type (2½")

30"Hg (Vac) to 1500 PSI C-type (4")

1500 PSI to 15,000 PSI helical type (2½")

2000 PSI to 15,000 PSI helical type (4")

### Movement

300-Series stainless steel

### Dial

White aluminum with black lettering. 2½" with stop pin.

### Pointer

Black aluminum, friction adjustable

### Case

304 stainless steel with vent plug and polished stainless steel bayonet ring.

EPDM o-ring between case and connection (4")

Welded case/socket connection (2½")



### Front Flange

300-series stainless steel, polished

### Restrictor

316 stainless steel. 0.012" (0.3 mm) orifice, standard for ranges 1500 PSI and higher

### Weather Protection

Weather tight (NEMA 4X / IP 65)

### Standard Scale

PSI, PSI/BAR, PSI/KG/CM<sup>2</sup>

### Window Gasket

Buna-N

### Window

Laminated safety glass

### Case Filling

Glycerine

### ORDER OPTIONS (min. order may apply)

Improved accuracy to ±0.5% of span (4" only)

Custom dial layout

Brass wetted parts (**213.54**)

Monel<sup>®</sup> wetted parts (**263.54**)

316 SS threaded restrictor

Silicone or fluorolube fill (NOTE 1)

Acrylic window or flat glass window

Special connections limited to wrench flat area

Other pressure scales available:

Bar, kPa, Kg/cm<sup>2</sup> and dual scales

DIN standards

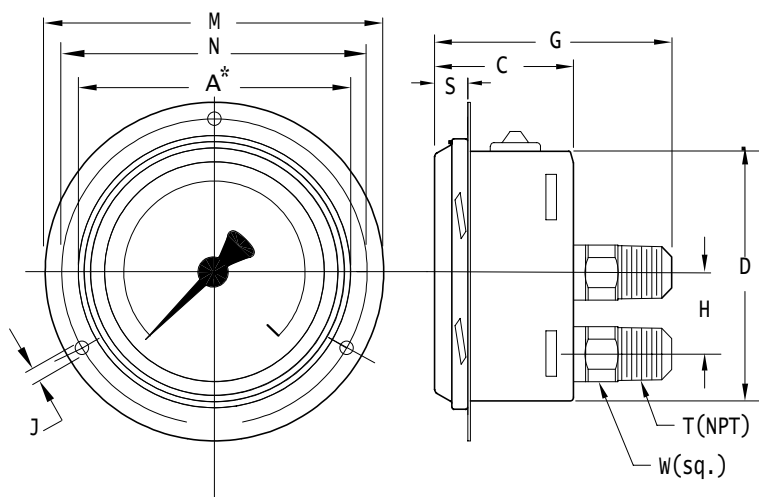
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Note 1 Temperature Ranges (Liquid filled gauges)

Glycerine: -4°F to 140°F (-20°C to 60°C)

Silicone: -40°F to 140°F (-40°C to 60°C)

## Dimensions



### 2XX.54 CBM/LBM/FF

A\* NOMINAL SIZE

TYPE	WEIGHT	KEY	A*	C	D	G	H	J	M	N	S	T	W
2XX.54 2.5"	0.50 lbs.	mm	63	33.5	62	55.5	--	3.6	85	75	12	--	14
		in	2.5	1.32	2.44	2.19		0.14	3.35	2.95	0.47	1/4"	0.55
2XX.54 4"	2.0 lbs.	mm	100	49.5	100	81	30	4.8	132	116	15	--	22
		in	4	1.95	3.94	3.19	1.18	0.19	5.2	4.57	0.59	1/2"	0.87

NOTE: For 4" gauges with 1/4" NPT connections, reduce B dimension by 5 mm (0.2 in.).

Panel Cutouts (2½") - 2.56" / 65 mm  
(4") - 4.13" / 105 mm

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#### Ordering Information:

State computer part number (if available) / type number / size / range / connection size and location / options required.

**WIKA reserves the right to make design changes without prior notice.**

06/00

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