

Bourdon Tube Pressure Gauge Model 213.40 Industrial Series Liquid Filled

WIKA Data Sheet 213.40

Applications

- Intended for adverse service conditions where pulsation or vibration exists
- Suitable for gaseous or liquid media that will not obstruct the pressure system
- Hydraulics & compressors

Product features

- Vibration and shock resistant
- Solid forged-brass case and socket
- Pressure ranges up to 15,000 psi

Specifications

Design

ASME B40.100 & EN 837-1

Sizes

2½" & 4" (63 & 100 mm)

Accuracy class

2½": ± 2/12% of span (ASME B40.100 Grade A)

4": ± 1% of span (ASME B40.100 Grade 1A)

Ranges

Vacuum / Compound to 200 psi

Pressure from 15 psi to 15,000 psi

or other equivalent units of pressure or vacuum

Working pressure

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

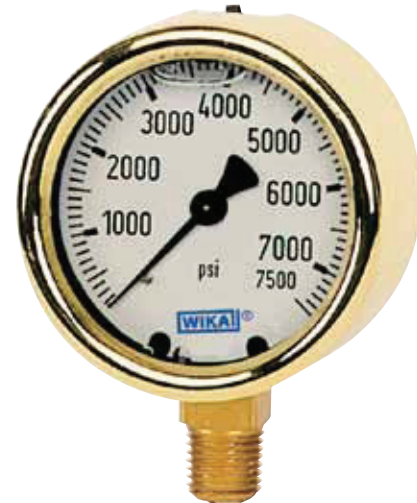
4": Steady: full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.3 x full scale value

Operating temperature

Ambient: -4 °F to +140 °F (-20 °C to +60 °C) - glycerine filled

-40 °F to +140 °F (-40 °C to +60 °C) - silicone filled

Medium: max. +140 °F (+60 °C)



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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 / IP 66)

Pressure connection

Material: copper alloy

Lower mount (LM) or center back mount (CBM) - 2½" (63 mm)

Lower mount (LM) or lower back mount (LBM) - 4" (100 mm)

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

Bourdon tube

2½" (63 mm) ≤ 870 psi (60 bar): C-shape copper alloy

2½" (63 mm) > 870 psi (60 bar): Helical copper alloy

4" (100 mm) ≤ 1,000 psi (70 bar): C-shape copper alloy

4" (100 mm) > 1,000 psi (70 bar): Helical stainless steel

Movement

Copper alloy

Dial

White aluminum with black lettering, 2½" with stop pin

Pointer

Black aluminum

Case

Gold-painted forged brass with integral connection and vent plug

Bezel ring

Gold-plated ABS cover ring (2½")
Chrome-plated brass cover ring (4")

Window

Acrylic with Buna-N gasket

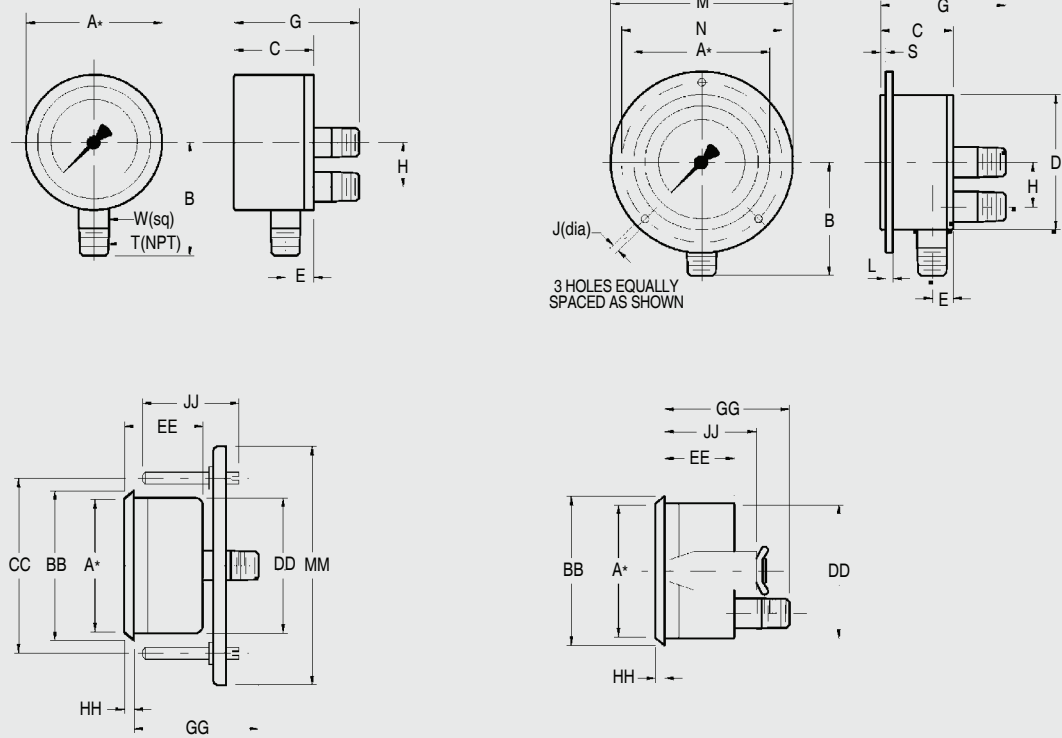
Case fill

Glycerine 99.7%

Optional extras

- Brass restrictor
- Front or rear flange
- U-clamp mounting
- Laminated safety glass or flat glass window
- Red drag pointer or mark pointer
- Silicone or Halocarbon Oil case filling
- Special connections limited to wrench flat area
- Custom dial layout
- Other pressure scales available
bar, kPa, MPa, kg/cm² and dual scales

Dimensions



Size		A	B	C	D	E	G	H	J	K	L	M	N	O	P	R
2.5"	mm	63	53	37	63	11	63	-	3.5	14	2	85	75	79	39	5.5
	in	2.5	2.09	1.46	2.48	0.43	2.48	-	0.14	0.55	0.08	3.35	2.95	3.11	1.54	0.22
4"	mm	100	80	49	101	13.5	74	30	5	17	2	132	115	122	52.5	5.5
	in	4.0	3.15	1.93	3.98	0.53	2.91	1.18	0.20	0.67	0.08	5.20	4.53	4.80	2.07	0.22

Size		S	T	W	BB	CC	DD	EE	GG	HH	JJ	MM	Weight
2.5"	mm	2	-	14	68	72	63	36.5	61	3	50	91	
	in	0.08	1/4"	0.55	2.68	2.83	2.48	1.44	2.40	0.12	1.97	3.58	0.66 lb.
4"	mm	3.5	-	22	107	-	101	48	75.5	5	59	-	
	in	0.14	1/2"	0.87	4.21	-	3.98	1.89	2.97	0.20	2.32	-	2.43 lb.

Recommended panel cutout is dimension D + 1.8 mm = 102.8 mm