Conventional Subsea Gauge - Stainless Steel Type 233.34 - Special Compensated

WIKA Datasheet 233.34 Subsea

Applications

- In compensated subsea environments: tested to working depths of 10,00 ft. of sea water
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system

Special Features

- Excellent load-cycle stability and shock resistance
- Solid front reinforced thermoplastic case
- Positive pressure ranges to 30,000 psi
- Black dial face with white enlarged numerals for subsea visualization
- Optional easy-to-assemble Lexan Shield kit for impact protection



Bourdon Tube Pressure Gauge Model 233.34 Shown with Lexan Shield Kit (optional)

Standard Features

Design

ASME B40.100

Sizes

41/2" (115 mm) dial size

Accuracy class

± 0.5% of span (ASME B40.100 Grade 2A)

± 1.0% of span (ASME B40.100 Grade 1A) (for 20,000 psi range and above)

Temperature error

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

Operating temperature

Ambient: $-4^{\circ}F$ to $+150^{\circ}F$ ($-20^{\circ}C$ to $+66^{\circ}C$) - glycerine filled

Medium: max. +212°F (+100°C)

Ranges

Vacuum/compound to 200 psi

Pressure from 15 psi to 30,000 psi or other equivalent units of pressure or vacuum

Working pressure

Steady: full-scale value
Fluctuating: 0.9 x full-scale value
Short time: 1.5 x full-scale value

Pressure connection

Material: 316L SS

Lower mount (LM) or lower back mount (LBM)

Optional: 1/2" NPT (male)

High-pressure autoclave, F250C (9/16-18 UNF RH female)

or consult factory

Bourdon tube

Material: 316L SS



Movement

Stainless steel. Internal stop pin at 1.1 x full scale Overload and underload stops - standard

Dial

Black dial face with white enlarged numerals for subsea visualization

Pointer

White aluminum, adjustable

Case

Black fiberglass-reinforced thermoplastic (POCAN) Solid front, blowout back Turret-style case with built in rear flange lugs

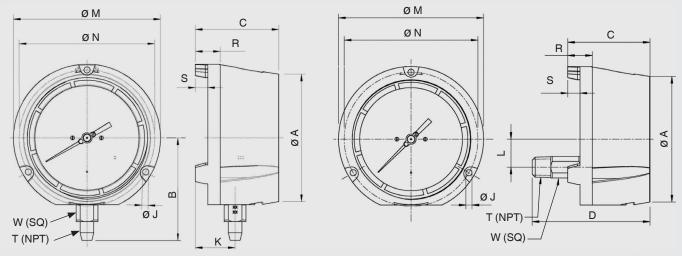
Dimensions

Window

Dual pane safety glass (increases stability/integrity and minimizes deflection from external seawater pressure)

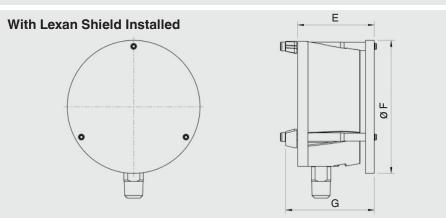
Case filling

- Glycerin / water mixture 86.5 / 13.5%
- FDA compliant
- Degassed to remove any impurities (N2, Oxygen, entrained gases) in order to minimize/eliminate compressibility of fill fluid
- 99% case fill, (air bubble no larger than ½" on window when gauge is laid flat)



Optional extras

- Lexan Shield kit for impact protection
- Special process connections
- Custom dial layout
- Anti-glare window
- Restrictor (for NPT connections only)
- Monel wetted parts (263.34 special)
- Magnifying Lexan Shield kit



Size	Size																		
		Α	В	С	D	E	F	G	J	K	L	M	N	R	S	T	W	Weight ¹	
4.5"	mm	128	103	84	120.3	86.5	150	100	6.3	40	28.5	148	136.5	25	12.5		22	2 lb.	dry
	in	5	4.06	3.31	4.74	3.41	5.91	3.94	0.248	1.57	1.12	5.83	5.37	0.99	0.49	0.5	0.87	3 lb.	filled

¹ Weight without optional accessories

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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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