

# XSEL® Process Gauge - Stainless Steel

## Type 232.34 - Dry Case

## Type 233.34 - Liquid-filled Case

WIKA Datasheet 23X.34

### Applications

- For applications with high dynamic pressure pulsations or vibration a liquid filled case and socket restrictor are available
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction

### Product features

- Excellent load-cycle stability and shock resistance
- Solid front thermoplastic case
- Positive pressure ranges to 30,000 psi (2,000 bar)
- XSEL® Process Gauge with 5 year warranty on gauge and 10 year warranty on pressure system (see terms and condition)
- All lower mount connection gauges are factory prepared for liquid filling

(LBM: must install membrane prior to field filling)

### Specifications

#### Design

ASME B40.100

#### Sizes

4½" & 6" (115 & 160 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 (1,600 bar) range and above

#### Ranges

Vacuum / Compound to 400 psi (25 bar)  
Pressure from 15 psi (1 bar) to 30,000 psi (2,000 bar)  
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

#### Operating temperature

Ambient: -40°F to +140°F (-40°C to +60°C) - dry  
-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. +212°F (+100°C)



Bourdon Tube Pressure Gauge Model 232.34

#### 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 resistant (NEMA 3 / IP54) - without membrane  
Weather tight (NEMA 4X / IP65) - dry case or filled case with membrane installed

#### Pressure connection

Material: 316L stainless steel  
Lower mount (LM) or lower back mount (LBM)  
1/4" or 1/2" NPT with M4 internal tap

#### Restrictor

Material: Stainless steel (0.6 mm), standard

#### Bourdon tube

Material: 316L stainless steel  
≤ 1,000 psi (69 bar): C-shape  
≥ 1,500 psi (100 bar): Helical

#### Movement

Stainless steel  
Internal overload stop set at 1.1x full scale  
Underload stop-optional  
Dampened movement-optional

#### Dial

White aluminum with black lettering, stop pin at 6 o'clock  
Standard WIKA psi single scales (4½" only) with large figures at beginning and end for quick and easy identification.

#### Pointer

Black aluminum, adjustable

#### Case

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

## Window

Clear acrylic with Buna-N gasket

## Case filling Type 233.34

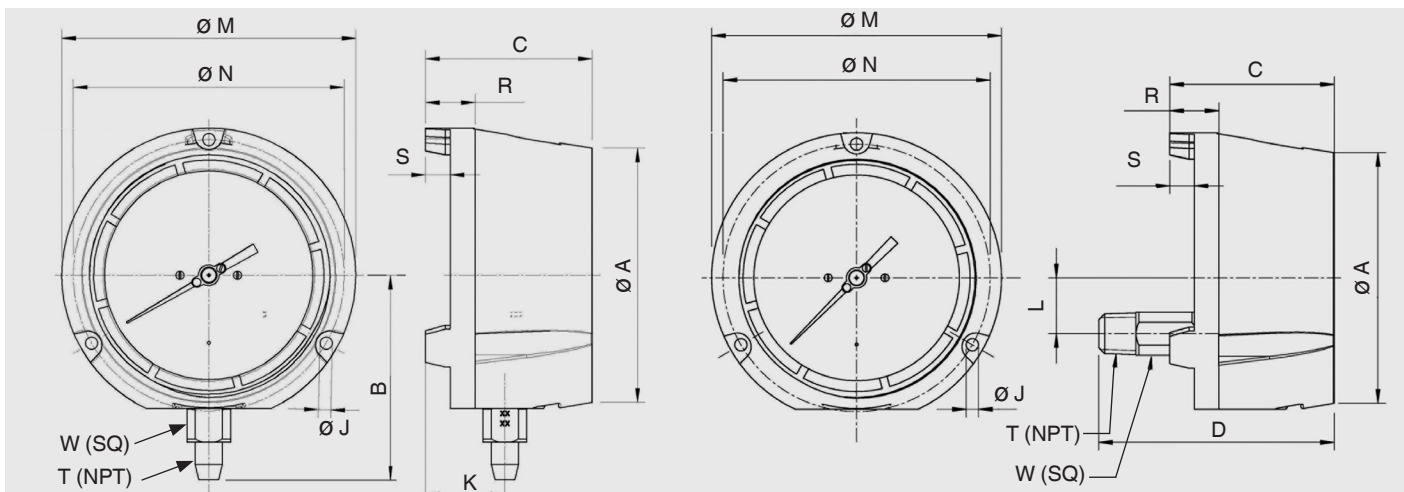
Glycerine 99.7% and  $\geq 40$  psi (2.5 bar)

Glycerine 86.5%/Water 13.5% -  $< 40$  psi (2.5 bar)

## Optional extras

- Silicone dampened movement
- Panel mounting adaptor kit (field assembled)
- Silicone case filling
- Halocarbon case filling
- Cleaned for oxygen service
- Instrument glass or safety glass window
- Drag pointer (maximum reading indicator)
- Alarm contacts switches (magnetic or inductive)
- Special process connections
- Custom dial layout
- External zero adjustment (4.5" size only)
- Case and ring in red or yellow thermoplastic (4½" LM only)
- Insight® reflective dial options available in white, fluorescent yellow, fluorescent orange or glow-in-the-dark

## Dimensions



Size		A	B	C	D	J	K	L	M	N	R	S	T	W	Weight <sup>1</sup>
4.5"	mm	128	103	84	120.3	6.3	40	28.5	148	136.5	25	12.5		22	2 lb. dry
	in	5	4.06	3.31	4.74	0.248	1.57	1.12	5.83	5.37	0.99	0.49	1/2"	0.87	3 lb. filled
6"	mm	164	122.5	88	123.4	7.1	40.2	28.5	190	177.8	25.4	12.7		22	3 lb. dry
	in	6.46	4.82	3.46	4.86	0.28	1.58	1.12	7.5	7	1	0.5	1/2"	0.87	4 lb. filled

<sup>1</sup> Weight without optional accessories

