

# XSEL™ Process Gauge for NACE Sour Gas Service - Stainless Steel Type 232.34 NACE - Dry Case Type 233.34 NACE - Liquid-filled Case

WIKA Datasheet 23X.34 NACE

## Applications

- The WIKA 23X.34 NACE factory approved process gauge contains stainless steel wetted parts materials that meet the recommendations and guidelines set forth by the NACE International standards MR0175 and MR0103
- Suitable in oil and gas production industries as well as refinery environments containing H<sub>2</sub>S (Hydrogen Sulfide); commonly referred to “sour gas service”
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system

## Product features

- Excellent load-cycle stability and shock resistance
- Solid front thermoplastic case
- Positive pressure ranges to 30,000 psi
- All lower mount connection gauges are factory prepared for liquid filling
- Inspection Certificate to EN 10 204 - 2.2 (available upon request)
- XSEL™ Process Gauge with 5 year warranty on gauge and 10 year warranty on pressure system (see terms and conditions)

(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 +150°F (-40°C to +66°C) - dry  
-4°F to +150°F (-20°C to +66°C) - glycerine filled  
-40°F to +150°F (-40°C to +66°C) - silicone filled  
Medium: max. +212°F (+100°C)

### 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.



Bourdon Tube Pressure Gauge Model 232.34 NACE

### Weather protection

Weather resistant (NEMA 3 / IP54) - without membrane  
Weather tight (NEMA 4X / IP66) - dry case or filled case with membrane installed

### Pressure connection

Material: 316L stainless steel (maximum hardness 22 HRC)  
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)

### Bourdon tube

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

### Movement

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

### Dial

White aluminum with black lettering, stop pin at 6 o'clock with “NACE Sour Gas Service” on dial

### Pointer

Black aluminum, micro-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

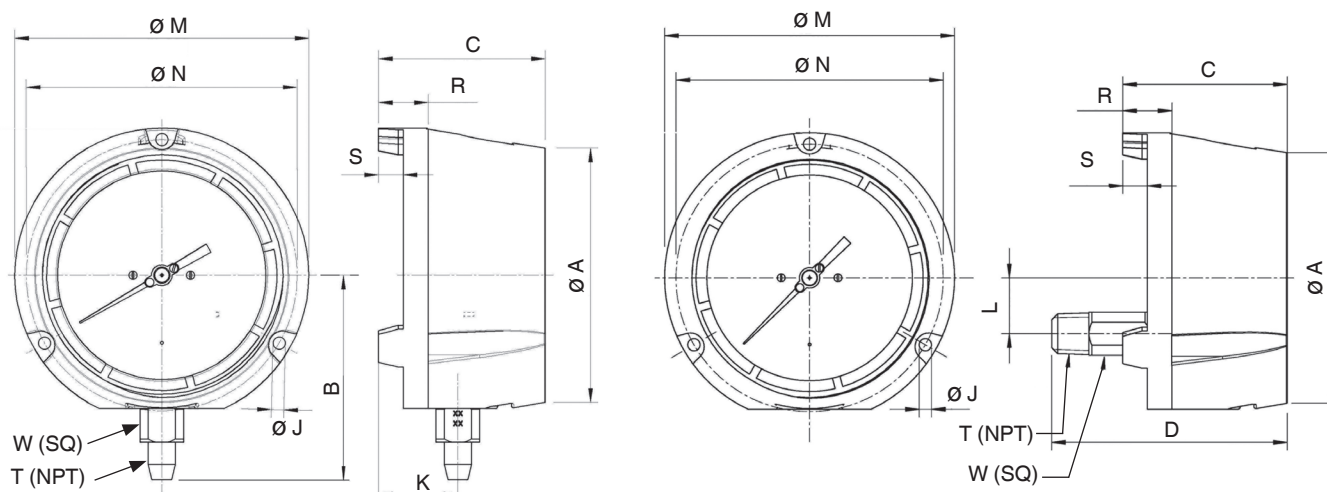
## Case filling

Glycerine 99.7% - Type 233.34

## 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)

## 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

### 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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