# XSEL<sup>™</sup> 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

# **Special features**

- Excellent load-cycle stability and shock resistance
- Solid front thermoplastic case
- Positive pressure ranges to 30,000 psi
- XSEL<sup>TM</sup> 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)

# **Standard Features**

#### Design

**ASME B40.100** 

#### Sizes

41/2" & 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 range and above)

# 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

### Operating temperature

Ambient: -40°F to +150°F (-40°C to +66°C) - dry

 $-4^{\circ}$ F to  $+150^{\circ}$ F ( $-20^{\circ}$ C to  $+66^{\circ}$ C) - glycerine filled  $-40^{\circ}$ F to  $+150^{\circ}$ F ( $-40^{\circ}$ C to  $+66^{\circ}$ C) - silicone filled

Medium: max. +212°F (+100°C) (See Note 1 on reverse)

#### Temperature error

Additional error when temperature changes from reference temperature of  $68^{\circ}F$  ( $20^{\circ}C$ )  $\pm0.4\%$  for every  $18^{\circ}F$  ( $10^{\circ}C$ ) rising or falling. Percentage of span.



**Bourdon Tube Pressure Gauge Model 232.34** 

#### 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)

#### **Bourdon tube**

Material: 316L stainless steel

≤ 1,000 PSI: C-type ≥ 1,500 PSI: helical type

#### Movement

Stainless steel. Internal stop pin at 1.3 x full scale

Overload and underload stops - standard

Dampened movement - optional

#### Dial

White aluminum with black lettering, stop pin at 6 o'clock

#### **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

Glycerine 99.7% - Type 233.34

## Cycle testing

400,000 - 2,000,000° cycles, depending upon pressure range Liquid filled

Note 1: The maximum continuous media temperature for this gauge is 212°F. However, higher temperatures can be maintained safely for short term exposure per table to the right. The user should consider temperature error and gauge component degradation when exposing gauge to any media or ambient temperature above 212°F. For continuous use in either ambient or media temperatures above 212°F, a diaphragm seal or other heat dissipating means is recommended. Consult factory for technical inquiries and application assistance.

# **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

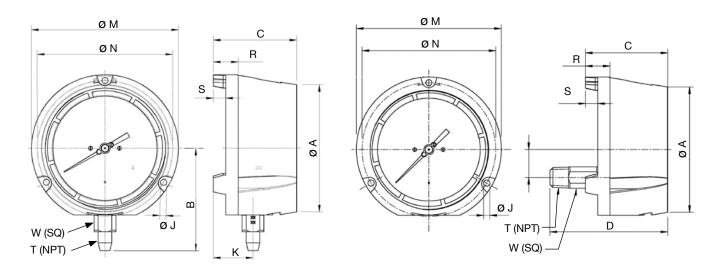
Short term, intermittent maximum media temperature limits (Optional glass window required for all these temperatures)

500°F (260 °C) -Dry Gauge

Liquid filled gauge 250°F (130°C) -

300°F (150°C) -Dampened movement gauge

# **Dimensions**



Size																
		Α	В	С	D		K	L	М	Ν	R	S		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

Page 2 of 2

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. WIKA Datasheet 23X.34 04/2010



1000 Wiegand Boulevard Lawrenceville, GA 30043 Tel (770) 513-8200 Toll-free 1-888-WIKA-USA Fax (770) 338-5118

E-Mail info@wika.com www.wika.com