

# Bourdon Tube Pressure Gauges Stainless Steel, High Pressure, Safety Pattern Version Model 222.30/223.30, without/with Liquid Filling

WIKA Data Sheet PM 02.09



## Applications

- Increased safety requirements
- With liquid filled case for applications with high dynamic pressure pulsations or vibrations
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system
- Process industries: chemical/petro-chemical, power stations, mining, on- and offshore, environmental technology, mechanical engineering

## Special Features

- Safety pressure gauge with solid baffle wall designed in compliance with operational safety requirements following EN 837-1, BS 1780 and ASME B 40.1
- Excellent load-cycle stability and shock resistance
- All stainless steel construction, welded pressure element assembly
- Scale ranges 0 ... 2000 to 0 ... 7000 bar



Bourdon Tube Pressure Gauge Model 222.30

## Description

### Nominal size

160 mm

### Accuracy class

1.0

### Scale ranges

0 ... 2000 to 0 ... 7000 bar

### Working pressure

Steady: full scale value

Fluctuating:  $\frac{2}{3}$  x full scale value

### Operating temperature

Ambient: -40 ... +60 °C without liquid filling

-20 ... +60 °C gauges with glycerine filling

Medium: +200 °C maximum without liquid filling

+100 °C maximum with liquid filling

### Temperature effect

When temperature of the pressure element deviates from reference temperature (+20 °C):

max.  $\pm 0.4$  %/10 K of true scale value

### Ingress protection

IP 65 per EN 60 529 / IEC 529

## Standard features

### Pressure connection

Material: stainless steel  
 Lower mount (LM), 9/16 - 18 UNF female thread with 60° sealing cone per Autoclave Engineers, optionally with M16 x 1.5 or 5/8 - 18 UNF female thread to fit lens type seal with 60° sealing cone (advise in order)

### Pressure element

Material: NiFe-alloy

### Movement

Stainless steel

### Dial

White aluminium with black lettering

### Pointer

Black aluminium

### Case

Natural finish stainless steel, case with solid baffle wall and blow-out back

### Window

Laminated safety glass

### Bezel ring

Cam ring (bayonet type), natural finish stainless steel

### Liquid filling (for model 223.30)

Glycerine 99.7 %

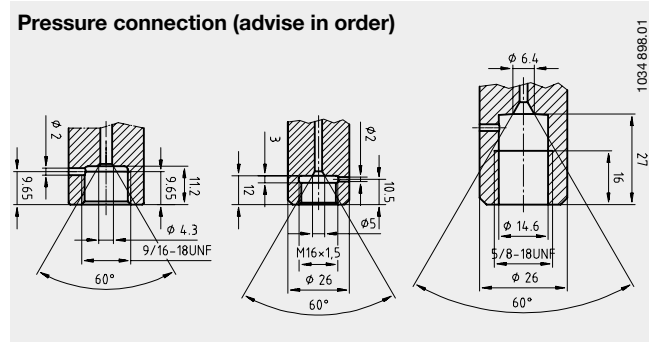
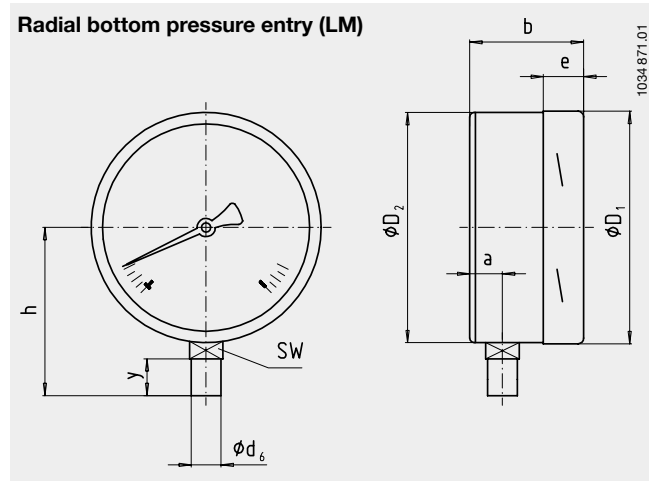
### Installation

Surface mounting with gauge support (60 mm extension) supplied with instrument

## Optional extras

- Accuracy class higher, class 0.25 and 0.6 (Model 322.30)
- 3-hole panel mounting flange, stainless steel
- Pressure connection G 3/4 B male per ISO 228/1
- Alarm contacts (see data sheet AC 08.01)

## Standard version



## Dimensions in mm

NS	Dimensions in mm									Weight in kg
	a	b	D <sub>1</sub>	D <sub>2</sub>	d <sub>6</sub>	e	h ± 2	y	SW	
160	26.5	71	161	159	26	26	125	30	27	2.00 1)

1) With liquid filling 3.20 kg

## Ordering information

Pressure gauge model / Nominal size / Scale range / Size of pressure connection / Optional extras required

Modifications may take place and materials specified may be replaced by others without prior notice.  
 Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.



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