

# Bourdon tube pressure gauge Test gauge series, class 0.6 Models 332.50, 333.50

WIKA data sheet PM 03.06





for further approvals see page 3

# **Applications**

- With liquid-filled case for applications with high dynamic pressure loads or vibrations 1)
- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive ambience
- Precision measurement in laboratories
- High-accuracy pressure measurement
- Testing of industrial type pressure gauges

# **Special features**

- All stainless steel construction
- Knife edge pointer for optimal accuracy of reading
- Wear-resistant precision movement from stainless steel
- Scale ranges up to 0 ... 1,600 bar



Test gauge series, stainless steel, model 332.50

## **Description**

# Design

EN 837-1

#### Nominal size in mm

160

### **Accuracy class**

0.6

# Scale ranges

0 ... 0.6 to 0 ... 1,600 bar

or all other equivalent vacuum or combined pressure and vacuum ranges

#### Adjustment medium

≤ 25 bar: Gas > 25 bar: Liquid

### **Pressure limitation**

Steady: Full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.3 x full scale value

### Permissible temperature

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

-20 ... +60 °C gauges with glycerine filling 1)

Medium: +200 °C maximum without liquid filling

+100 °C maximum with liquid filling 1)

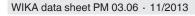
#### Temperature effect

When the temperature of the measuring system deviates from the reference temperature ( $\pm$ 20 °C): max.  $\pm$ 0.4 %/10 K of full scale value

### Ingress protection

IP 65 per EN 60529 / IEC 529

1) Model 333.50



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## Standard version

#### **Process connection**

Stainless steel 316L, lower mount (LM) or lower back mount (LBM) G ½ B (male), 22 mm flats

#### Pressure element

Stainless steel 316L, < 100 bar: C-type ≥ 100 bar: Helical type

≥ 1,000 bar: Ni-Fe-alloy, helical type

#### Movement

Stainless steel

#### Dial

Aluminium, white, black lettering

#### **Pointer**

Knife edge pointer, aluminium, black

#### Case

Stainless steel, with pressure relief in case back, scale ranges  $\leq 0 \dots 10$  bar with compensating valve to vent case

### Window

Laminated safety glass

### **Bezel ring**

Cam ring (bayonet type), stainless steel

# Filling liquid (for model 333.50)

Glycerine

# **Options**

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Surface or panel mounting flange, stainless steel
- Triangular bezel, polished stainless steel, with clamp
- Higher indication accuracy (for gauges without liquid filling), class 0.25 per EN 837 or GRADE 3A per ASME B40.1 after feasibility test
- Mirror band scale
- Zero point adjustable from outside (adjustable dial, only without case filling)
- Adjustment medium gas from 25 bar
- Transport case

# **CE** conformity

### Pressure equipment directive

97/23/EC, PS > 200 bar, module A, pressure accessory

# **Approvals**

- GOST, metrology/measurement technology, Russia
- GOST-R, import certificate, Russia
- CRN, safety (e.g. electr. safety, overpressure, ...), Canada

# Certificates 1)

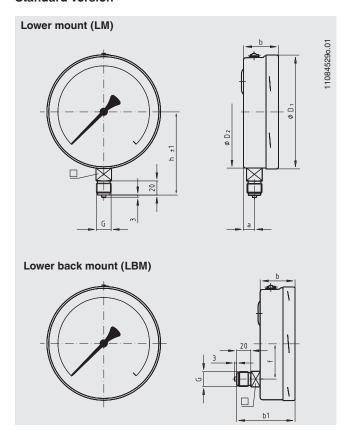
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. material proof wetted parts metal component, indication accuracy)
- DKD/DAkkS certified accuracy

1) Option

Approvals and certificates, see website

# **Dimensions in mm**

## Standard version



| NS  | Dimensions in mm   |                    |                  |                |                |    |       |      |    | Weight in kg |
|-----|--------------------|--------------------|------------------|----------------|----------------|----|-------|------|----|--------------|
|     | а                  | b                  | b <sub>1</sub>   | D <sub>1</sub> | D <sub>2</sub> | f  | G     | h ±1 | SW |              |
| 160 | 15.5 <sup>1)</sup> | 49.5 <sup>1)</sup> | 83 <sup>1)</sup> | 161            | 159            | 50 | G ½ B | 118  | 22 | 1.10         |

Process connection per EN 837-1 / 7.3 1) Plus 16 mm with scale ranges  $\leq$  4 bar and  $\geq$  100 bar

# Ordering information

Model / Nominal size / Scale range / Connection size / Connection location / Options

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