# Bourdon tube pressure gauge Test gauge series, class 0.6 Models 311.11, 331.11

WIKA data sheet PM 03.02











for further approvals see page 2

# **Applications**

- For gaseous and liquid media that are not highly viscous or crystallising
- Model 311.11: Measuring system copper alloy
   Model 331.11: Measuring system stainless steel, also for aggressive media
- Precision measurement in laboratories
- High-accuracy pressure measurement
- Testing of industrial type pressure gauges

# **Special features**

- Knife edge pointer for optimal accuracy of reading
- Precise movement with wear parts of argentan
- Particularly easy-to-read scale due to nominal size 250
- Scale ranges up to 0 ... 1,600 bar



Test gauge series model 311.11

# **Description**

### Design

EN 837-1

### Nominal size in mm

250

### **Accuracy class**

0.6

# Scale ranges

Model 311.11: 0 ... 0.6 to 0 ... 600 bar Model 331.11: 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

Medium: +80 °C maximum (model 311.11)

+200 °C maximum (model 331.11)

### **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

IP54 per IEC/EN 60529

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### Standard version

### **Process connection**

Model 311.11: Copper alloy Model 331.11: Stainless steel

Lower mount (radial) or lower back mount

G 1/2 B (male), SW 22

#### Pressure element

Model 311.11:

< 100 bar: Copper alloy

≥ 100 bar: Stainless steel 316L

≥1,000 bar: Ni-Fe alloy

Model 331.11: Stainless steel 316L

### Movement

Copper alloy, wear parts argentan

#### Dial

Aluminium, white, black lettering

#### **Pointer**

Knife edge pointer, aluminium, black

#### Case

Steel, black

### Window

Instrument glass

### **Bezel ring**

Slip-on bezel, steel, black

# **Options**

- Other process connection
- Window from laminated safety glass or clear non-splintering plastic
- Panel or surface mounting flange, steel, black
- Higher indication accuracy: Class 0.25 per EN 837 or grade 3A per ASME B 40.1 for scale ranges ≤ 400 bar
- Adjustment medium gas from scale range ≥ 25 bar

# **Approvals**

Logo	Description	Country
CE	<b>EU declaration of conformity</b> Pressure equipment directive, PS > 200 bar; module A, pressure accessory	European Union
EAC	EAC (option) Pressure equipment directive	Eurasian Economic Community
<b>©</b>	GOST (option) Metrology, measurement technology	Russia
6	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
<b>(</b>	BelGIM (option) Metrology, measurement technology	Belarus
	Uzstandard (option) Metrology, measurement technology	Uzbekistan
-	CPA (option) Metrology, measurement technology	China
-	CRN Safety (e.g. electr. safety, overpressure,)	Canada

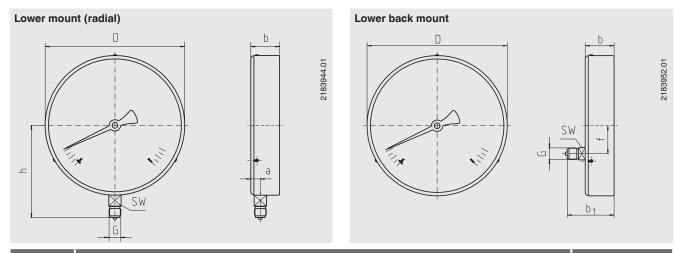
# Certificates (option)

- 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 for wetted metallic parts, indication accuracy)
- DKD/DAkkS certified accuracy

Approvals and certificates, see website

# **Dimensions in mm**

### Standard version



NS	Dimensions in mm								Weight in kg
	а	b	b <sub>1</sub>	D	f	G	h ±1	SW	
250	17	51.5 <sup>1)</sup>	83.5 <sup>1)</sup>	250	50	G 1/2 B	165	22	3.0

Process connection per EN 837-1 / 7.3 1) Plus 13 mm with scale ranges ≥ 100 bar

# **Ordering information**

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

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