

# Bourdon tube pressure gauge, copper alloy Panel mounting series Models 111.16 and 111.26

WIKA data sheet PM 01.10



for further approvals  
see page 3

## Applications

- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Heating and air-conditioning technology
- Small-capacity compressors
- Drink dispensers
- Medical engineering

## Special features

- Specifically for panel mounting
- Reliable and cost-effective
- Design per EN 837-1
- Scale ranges up to 0 ... 400 bar



Fig. left: Model 111.16

Fig. right: Model 111.26

## Description

The models 111.16 and 111.26 have been specifically designed for panel mounting and therefore feature a back mount process connection.

The model 111 pressure gauges are based on the proven Bourdon tube measuring system. On pressurisation, the deflection of the Bourdon tube, proportional to the incident pressure, is transmitted to the movement via a link and indicated.

For easy installation, the plastic cases of the panel mounting series are already equipped with a mounting flange.

The model 111.16 Bourdon tube pressure gauge can be fitted to the panel by means of a mounting bracket (accessory). The model 111.26 is mounted to the panel by "snap-in mounting" using lateral locating lugs at the case. In addition, metallised front bezels can be supplied for the model 111.26.

The panel mounting series of model 111 is also available in customer-specific versions, e.g. with individual dial layout.

## Specifications

### Design

EN 837-1

### Nominal size in mm

Model 111.16: 40, 50 and 63

Model 111.26: 40, 50, 63 and 80

### Accuracy class

2.5

### Scale ranges

0 ... 0.6 to 0 ... 400 bar

or all other equivalent vacuum or combined pressure and vacuum ranges

### Pressure limitation

Steady: 3/4 x full scale value

Fluctuating: 2/3 x full scale value

Short time: Full scale value

### Permissible temperature

Ambient: -20 ... +60 °C

Medium: +60 °C maximum

### Temperature effect

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

### Process connection

Copper alloy

For process connections and spanner widths see page 4

### Pressure element

Copper alloy

C-type or helical type

### Movement

Copper alloy

### Dial

NS 40, 50, 63: Plastic, white, with pointer stop pin

NS 80: Aluminium, white

### Pointer

Plastic, black

### Case

Plastic, black

### Window

Plastic, crystal-clear, snap-fitted in case

### Panel fitting

Model 111.16: ■ Panel mounting flange

■ Mounting bracket

Model 111.26: Locating lugs on the case side

NS 40, 50, 63: Triangular bezel

NS 80: Front flange

## Options

■ Other process connection

■ Accuracy class 1.6

■ Model 111.26, NS 40, 50, 63: Triangular bezel, metallised

## Special version

### For drinking water installations

Material suitability of the wetted parts in accordance with the evaluation criteria for metallic substances of the German federal environmental agency and the "4MS Common Composition List".

## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b> Pressure equipment directive	European Union
	<b>EAC (option)</b> Pressure equipment directive	Eurasian Economic Community
	<b>GOST (option)</b> Metrology, measurement technology	Russia
	<b>KazInMetr (option)</b> Metrology, measurement technology	Kazakhstan
	<b>BelGIM (option)</b> Metrology, measurement technology	Belarus
-	<b>CPA</b> Metrology, measurement technology	China
-	<b>CRN</b> Safety (e.g. electr. safety, overpressure, ...)	Canada

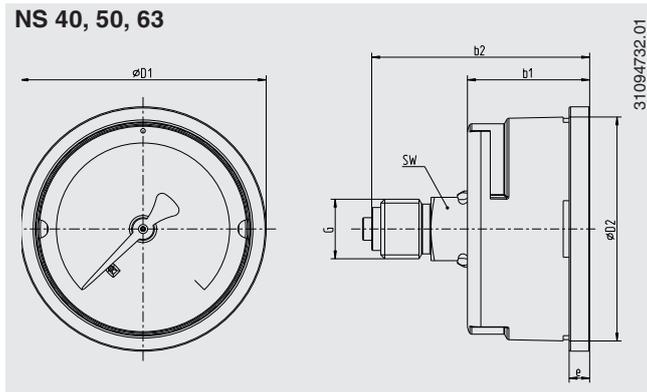
## Certificates (option)

- 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. indication accuracy)

## Dimensions in mm

### Model 111.16

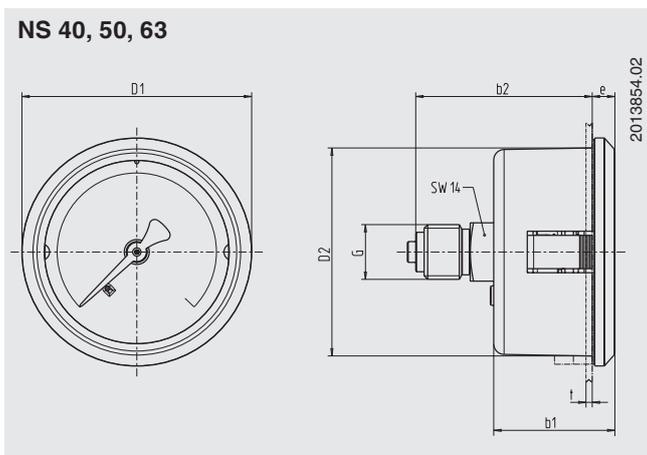
NS 40, 50, 63



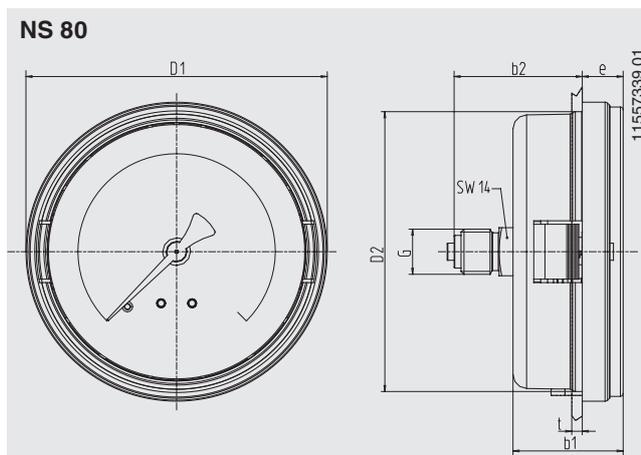
NS	Dimensions in mm							Weight in kg
	$b_1 \pm 0.5$	$b_2 \pm 1$	$D_1$	$D_2$	G	SW	e	
40	26.5	44.5	45	40	G 1/8 B	14	4.5	0.06
50	26.5	47.5	54	49.5	G 1/4 B	14	4.5	0.07
63	29.5	47.5	68	63	G 1/4 B	14	5	0.08

### Model 111.26

NS 40, 50, 63



NS 80



NS	Dimensions in mm							Panel cutout		Weight in kg
	$b_1 \pm 0.5$	$b_2 \pm 1$	$D_1$	$D_2$	G	SW	e	$\varnothing$	t	
40	29	39	44	40	G 1/8 B	14	5.5	40.5	1.0 ... 2.5	0.06
50	29	42	55	50	G 1/4 B	14	5.5	50.5	1.0 ... 2.5	0.07
63	29	42	68	63	G 1/4 B	14	5.5	63.5	1.0 ... 2.5	0.08
80	32	37	87	81.5	G 1/4 B	14	12	82	1.5 ... 3.5	0.12

## Ordering information

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

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**WIKAL Alexander Wiegand SE & Co. KG**  
Alexander-Wiegand-Straße 30  
63911 Klingenberg/Germany  
Tel. +49 9372 132-0  
Fax +49 9372 132-406  
info@wika.de  
www.wika.de