

# Bourdon tube pressure gauge Model 111.10, lower mount (LM) Standard version

WIKA data sheet PM 01.01

## Applications

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

## Special features

- Reliable and cost-effective
- Design per EN 837-1
- Nominal size 40, 50, 63, 80, 100 and 160
- Scale ranges up to 0 ... 400 bar



Bourdon tube pressure gauge model 111.10

## Description

### Design

EN 837-1

### Nominal size in mm

40, 50, 63, 80, 100 and 160

### Accuracy class

2.5

### Scale ranges

0 ... 0.6 to 0 ... 400 bar (NS 160: max. 40 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: -40 ... +60 °C  
Medium: +60 °C maximum

### Temperature effect

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

## Standard version

### Process connection

Cu-alloy,  
lower mount (LM)

NS 40: G 1/8 B (male), 14 mm flats  
NS 50,63: G 1/4 B (male), 14 mm flats  
NS 80, 100, 160: G 1/2 B (male), 22 mm flats

### Pressure element

Cu-alloy,  
≤ 60 bar: C-type  
> 60 bar: Helical type

### Movement

Cu-alloy

### Dial

NS 40, 50, 63: Plastic, white, with pointer stop pin  
NS 80, 100, 160: Aluminium, white, with pointer stop pin  
Black lettering, red mark pointer with measuring ranges  
0 ... 0.6 to 0 ... 60 bar

### Pointer

Plastic, black  
NS 160: Aluminium, black

### Case

Plastic, black  
NS 160: Steel, black

### Window

Plastic, crystal-clear, snap-fitted in case  
NS 160: Instrument glass

### Bezel ring

without  
NS 160: Steel, black

### Options

- Accuracy class 1.6
- Case steel, black, for NS 40, 50 and 63 with blow-out device
- Surface mounting flange (not with NS 40 and 50)

### Special versions

#### For closed heating systems

NS 63, 80  
with red mark pointer and adjustable green sector, scale ranges 0 ... 4 bar, red mark at 2.5 or 3 bar

#### For heating systems

NS 80, 100, 160  
Scale ranges 0 ... 0.6 or 0 ... 1 bar, with retard scale spacing and red mark pointer

### For refrigeration plants

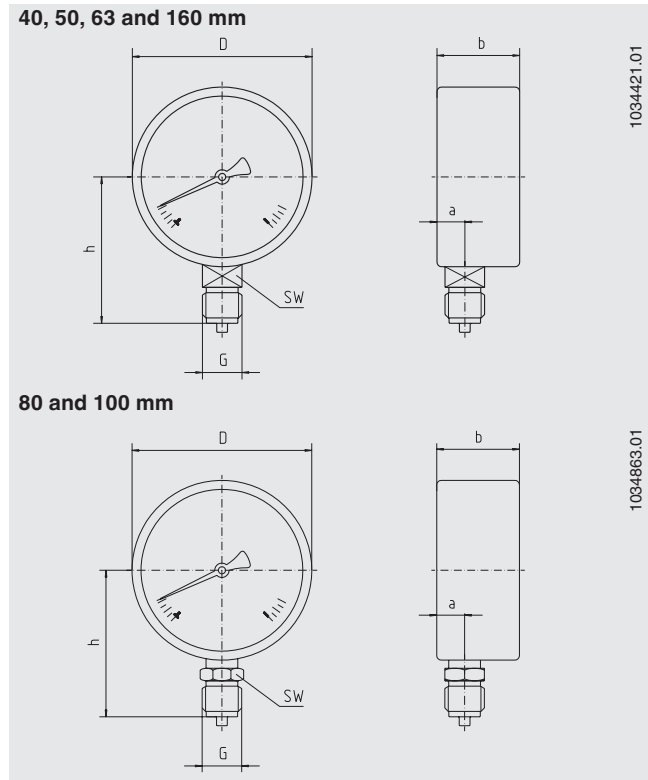
NS 63, 80  
with additional temperature scale for refrigerants in °C, refrigerants: R 12, R 22, R 502, R 404 a or R 134 a

### For water-level indication (hydrometer)

NS 80, 100, 160  
Scale ranges 0 ... 0.6 to 0 ... 40 bar, with second scale in mWS

### Dimensions in mm

#### Standard version



NS	Dimensions in mm						Weight in kg
	a	b ± 0.5	D	G	h ± 1	SW	
40	9.5	26	39	G 1/8 B	36	14	0.08
50	10	27.5	49	G 1/4 B	45	14	0.10
63	9.5	27.5	62	G 1/4 B	53.5	14	0.13
80	11.5	30	79	G 1/2 B	72	22	0.18
100	11.5	30.5	99	G 1/2 B	83.5	22	0.21
160	15.5	42	160	G 1/2 B	115.5	22	0.85

Process connection per EN 837-1 / 7.3

### Ordering information

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

© 2005 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.  
The specifications given in this document represent the state of engineering at the time of publishing.  
We reserve the right to make modifications to the specifications and materials.



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