

Bourdon tube pressure gauge Lower mount, standard version Model 111.10

WIKA data sheet PM 01.01



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
- 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: -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

Standard version

Process connection

Copper 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

Copper alloy
C-type or helical type

Movement

Copper 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

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- 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

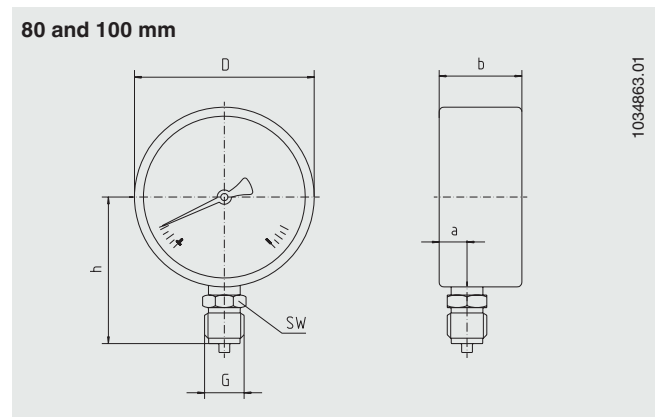
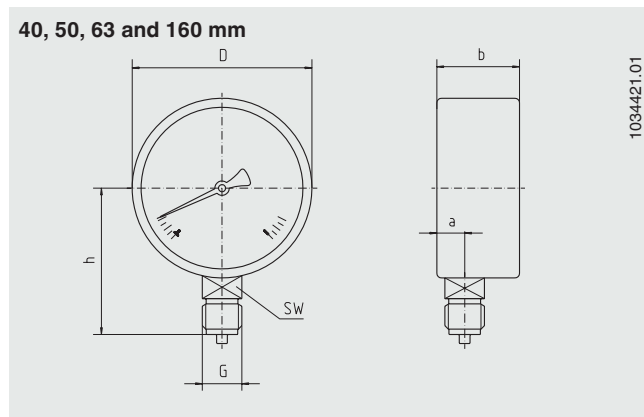
NS 63, 80
with additional temperature scale for refrigerants in °C,
refrigerants: R 12, R 22, R 502, R 404 a or R 134 a

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

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. indication accuracy)

1) Option

Approvals and certificates, see website

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.

