Bourdon tube pressure gauge
Lower mount, standard version
Model 111.10

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
- 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. ±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

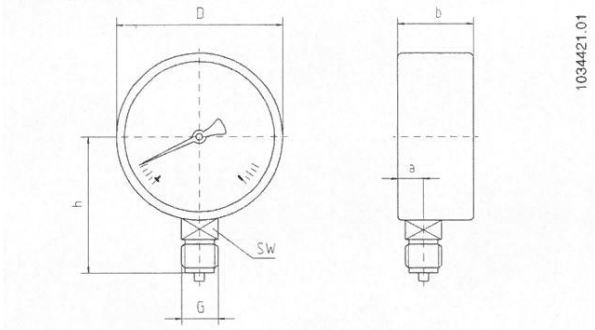
For refrigeration plants
NS 63, 80
with additional temperature scale for refrigerants in °C, refrigerants: R 12, R 22, R 502, R 404 a or R 134 a

For water-level indication (hydrometer)
NS 80, 100, 160
Scale ranges 0 ... 0.6 to 0 ... 40 bar, with second scale in mWS

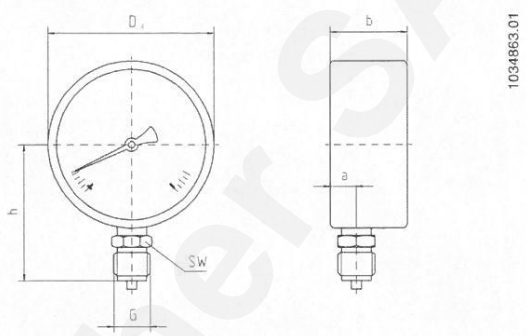
Dimensions in mm

Standard version

40, 50, 63 and 160 mm



80 and 100 mm



NS	Dimensions in mm						Weight in kg
	a	b ±0.5	D	G	h ±1	SW	
40	9.5	26	39	G ⅛ B	36	14	0.08
50	10	27.5	49	G ¼ B	45	14	0.10
63	9.5	27.5	62	G ¼ B	53.5	14	0.13
80	11.5	30	79	G ½ B	72	22	0.18
100	11.5	30.5	99	G ½ B	83.5	22	0.21
160	15.5	42	160	G ½ 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