

**Mechanical
pressure measurement**

**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
1,6
2,5 108-KD, 110.37-K, 6300-K, 6305-K, 105, 6300, 7300, 7302, 150, 8300

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

WIKA data sheet PM 01.01 · 08/2014

Page 1 of 3

Data sheets showing similar products:
Back mount; model 111.12; see data sheet PM 01.09
Panel mounting series, back mount; model 111.16; see data sheet PM 01.10



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)

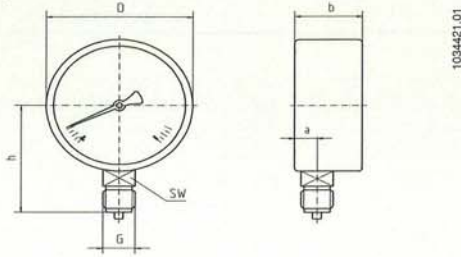
NS 80, 100, 160

Scale ranges 0 ... 0.6 to 0 ... 40 bar, with second scale
in mWS

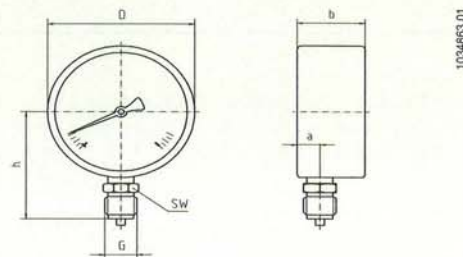
Dimensions in mm

Standard version

40, 50, 63 and 160 mm



80 and 100 mm



NS	Dimensions in mm			G	h ±1	SW	Weight in kg
	a	b ±0.5	D				
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.

08/2014 GB

WIKA data sheet PM 01.01 - 08/2014

Page 3 of 3



WIKAL
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

Art. No.	Ident No.
110.30-K	101680
110.31-K	101681
110.32-K	101682
110.33-K	101683
110.34-K	101684
110.35-K	101685
110.36-K	101686
110.37-K	101687
110.38-K	101688
100-K	101689
101-K	101690
102-K	101691
103-K	101692
104-K	101693
105-K	101694
106-K	101695
107-K	101696
108-K	101697
109-K	101698
110-K	101699
110/1-K	101700
110/2-K	101701

Art. No.	Ident No.
6300-K	101702
6301-K	101703
6302-K	101704
6303-K	101705
6304-K	101706
6305-K	101707
6306-K	101708
6307-K	101709
111-K	101710
112-K	101711
113-K	101712
114-K	101713
115-K	101714
116-K	101715
117-K	101716
118-K	101717
119-K	101718
120-K	101719
121-K	101720
122-K	101721
123-K	101722
124-K	101723
125-K	101724
126-K	101725

Art. No.	Ident No.
110.30	101764
110.31	101765
110.32	101766
110.33	101767
110.34	101768
110.35	101769
110.36	101770
110.37	101771
110.38	101772
100	101773
101	101774
102	101775
103	101776
104	101777
105	101778
106	101408
107	101779
108	101780
109	101781
110	101782
110/1	101783
110/2	101784

Art. No.	Ident No.
6300	101785
6301	101786
6302	101787
6303	101788
6304	101789
6305	101790
6306	101791
6307	101792
111	101793
112	101794
113	101795
114	101796
115	101797
116	101798
117	101799
118	101800
119	101801
120	101802
121	101803
122	101804
123	101805
124	101806
125	101807

Art. No.	Ident No.
126	101808
127	101809

Art. No.	Ident No.
5301	101944
5303	101945
5304	101946
5305	101947
5306	101948
5307	101949
130	101950
131	101951
132	101952
133	101953
134	101954
135	101955
136	101956
137	101957
138	101958
139	101959
140	101960

Art. No.	Ident No.
7300	101961
7301	101962
7302	101963
7303	101964
7304	101965
7305	101966
7306	101967
141	101968
142	101969
143	101970
144	101971
145	101972
146	101973
147	101974
148	101975
149	101976
150	101977
150/1	101978
150/2	101979
150/3	101980

Art. No.	Ident No.
8300	101981
8301	101982
8303	101983
8304	101984
8305	101985
8306	101986
151	101987
152	101988
153	101989
154	101990
155	101991
156	101992
157	101993
158	101994
159	101995
160	101996

Art. No.	Ident No.
110.32-KD	101652
110.33-KD	101653
110.34-KD	101654
110.35-KD	101655
110.36-KD	101656
110.37-KD	101657
103-KD	101658
104-KD	101659
105-KD	101660
106-KD	101661
107-KD	101662
108-KD	101663
114-KD	101664
115-KD	101665
116-KD	101666
117-KD	101667
118-KD	101668
119-KD	101669