

OEM pressure measuring system

Module version, back mount

Model PMM01

WIKA data sheet PM 01.25

Applications

- For dry gaseous and liquid media that are not highly viscous or crystallising and are suitable for copper alloy parts
- Pneumatics
- Industrial gases
- Medical engineering
- Drinking water

Special features

- Compact and cost-effective integration solution
- Scale ranges from 0 ... 400 bar or 0 ... 5,000 psi
- Nominal size 40 mm [1 ½"], 50 mm [2"] or 63 mm [2 ½"]
- Accuracy class 2.5



OEM pressure measuring system, model PMM01

Description

Integration concept

The PMM01 is the ideal pressure measuring system for trouble-free integration into a wide variety of applications. This is possible through the simple mounting and sealing of the already preadjusted system. Due to the sealing with an O-ring and a support ring, the pressure measuring system is efficiently and cost-effectively exchangeable.

Design freedom for customer solutions

Without any enclosing components, the PMM01 OEM pressure measuring system provides a simple and compact integration solution. Both the flat design and the free positionability of the PMM01 open up a multitude of integration variants with the designing of a pressure display.

The PMM01 OEM pressure measuring system is available in nominal sizes of 40 mm [1 ½"], 50 mm [2"] or 63 mm [2 ½"].

Individual customer versions

Based on many years of experience in manufacturing and development, WIKA is happy to offer support in the construction and production of customer-specific solutions.

Specifications

Basic information	
Standard	In line with EN 837-1 For information on the "Selection, installation, handling and operation of pressure gauges", see Technical information IN 00.05.
Nominal size (NS)	<ul style="list-style-type: none"> ■ Ø 40 mm [1 ½"] ■ Ø 50 mm [2"] ■ Ø 63 mm [2 ½"]
Connection location	Lower back mount
Window	Without
Case	Without The construction and the design of the enclosing components, along with the resulting technical specifications, are the responsibility of the customer. If you have any further questions, your WIKA contact will gladly help you.
Movement	Copper alloy

Measuring element	
Type of measuring element	Bourdon tube, C-type or helical type
Material	Copper alloy
Leak tightness	Helium tested, leakage rate: $< 5 \cdot 10^{-3}$ mbar l/s

Accuracy specifications	
Accuracy class of mechanical display	<ul style="list-style-type: none"> ■ 2.5 ■ 1.6
Temperature error	On deviation from the reference conditions at the measuring system: $\leq \pm 0.4$ % per 10 °C [$\leq \pm 0.4$ % per 18 °F] of full scale value
Reference conditions	
Ambient temperature	+20 °C [+68 °F]

Scale ranges

bar	
0 ... 2	0 ... 10
0 ... 2.2	0 ... 12
0 ... 2.5	0 ... 100
0 ... 2.6	0 ... 160
0 ... 3	0 ... 250
0 ... 3.5	0 ... 300
0 ... 4	0 ... 315
0 ... 6	0 ... 350
0 ... 8	0 ... 400

kg/cm ²	
0 ... 2	0 ... 10
0 ... 2.2	0 ... 12
0 ... 2.5	0 ... 100
0 ... 2.6	0 ... 160
0 ... 3	0 ... 250
0 ... 3.5	0 ... 300
0 ... 4	0 ... 315
0 ... 6	0 ... 350
0 ... 8	0 ... 400

kPa	
0 ... 250	0 ... 1,000
0 ... 400	0 ... 1,600

MPa	
0 ... 1	0 ... 2.5
0 ... 1.6	0 ... 4

psi	
0 ... 30	0 ... 160
0 ... 60	0 ... 200
0 ... 100	0 ... 1,500
0 ... 150	0 ... 5,000

Other scale ranges on request

Further details on: Scale ranges	
Unit	<ul style="list-style-type: none"> ■ bar ■ kg/cm² ■ kPa ■ MPa ■ psi
Dial	
Scale colour	Black
Material	Plastic, white
Customer-specific version	<ul style="list-style-type: none"> ■ Without ■ Special dial, e.g. with customer logo, red mark or circular sectors
Pointer	Plastic, black
Pointer stop pin	<ul style="list-style-type: none"> ■ Without ■ At zero point

Process connection	
Type of process connection	Module connection with O-ring sealing and support ring
Materials (wetted)	
Process connection	Copper alloy
Measuring element	Copper alloy
Sealing	<ul style="list-style-type: none"> ■ NBR ■ EPDM
Support ring	Copper alloy

Other process connections on request

Operating conditions	
Medium temperature range	-20 ... +60 °C [-4 ... +140 °F]
Ambient temperature range	-20 ... +60 °C [-4 ... +140 °F]
Storage temperature range	-20 ... +60 °C [-4 ... +140 °F]
Pressure limitation	
Steady	3/4 x full scale value
Fluctuating	2/3 x full scale value
Short time	Full scale value

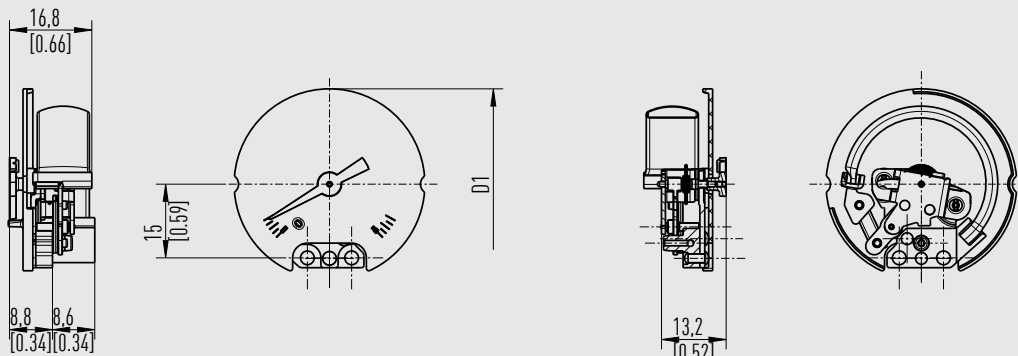
Certificates (option)

- 2.2 test report per EN 10204
- 3.1 inspection certificate per EN 10204

Dimensions in mm [in]

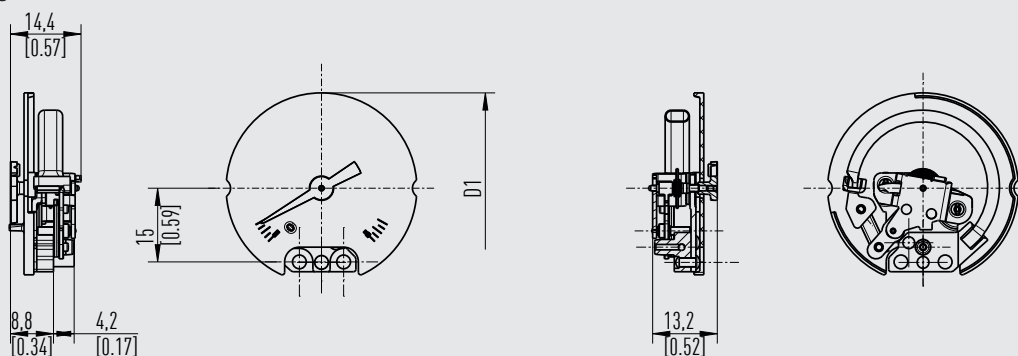
Pressure element: C-type

Pressure range 2.5 ... < 16 bar



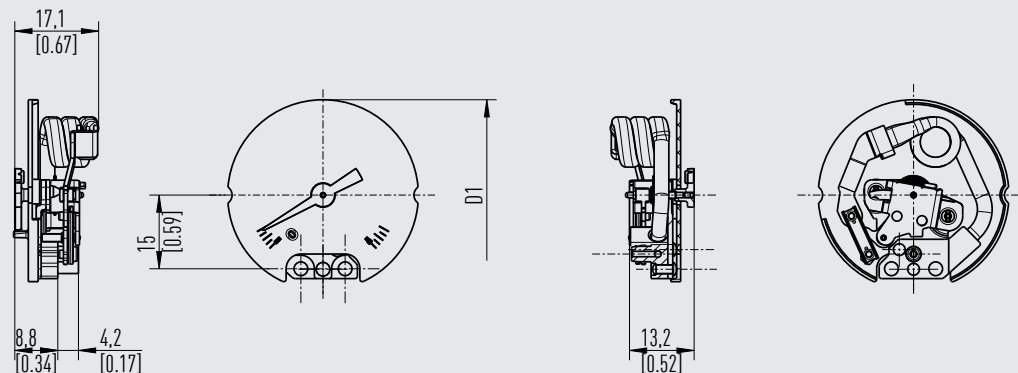
31084826.03

Pressure range $\geq 16 \dots \leq 60$ bar



Pressure element: Helical type

Pressure range > 60 bar



31084834.03

NS	Dimensions in mm [in]		Weight in kg [lb]
	D1	Pressure element	
40 [1 ½"]	38.8 ± 0.25 [1.53 ± 0.01]	C-type	0.012 [0.026]
		Helical type	0.014 [0.031]
50 [2"]	45.4 ± 0.25 [1.79 ± 0.01]	C-type	0.013 [0.029]
		Helical type	0.015 [0.033]
63 [2 ½"]	57.4 ± 0.25 [2.26 ± 0.01]	C-type	0.015 [0.033]
		Helical type	0.017 [0.037]

Ordering information

Model / Nominal size / Scale range / Options

© 11/2019 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.



WIKA 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