

# PMR02

## Bourdon Tube Pressure Gauge - Mini

- nominal size 60 mm
- accuracy class 1,6
- steel or stainless steel housing
- brass movement and connection or stainless steel
- filled or unfilled
- protection class IP65
- measuring range of -1200...0 mbar to 0...1000 bar



### Description:

The bourdon tube gauges of the PMR02 series can be supplied in brass or stainless steel, filled or unfilled.

A drawn brass or stainless steel tube formed into a spiral is filled with the medium and deforms depending in the pressure. This movement is indicated by a pointer measuring mechanism, which can be damped by means of the optionally available glycerine filling, so that vibrations or oscillations are only shown to advantage in a greatly reduced form. The wear of the moving parts is also reduced by the natural lubrication of the glycerine, and the penetration of corrosive gases and the formation of condensation water is prevented.

The stainless steel design allows pressure measurement even in the most aggressive liquids and gases. The pressure gauges are optionally equipped with a G ¼ A threaded connection at the bottom or rear.

### Typical applications:

Bourdon tube pressure gauges are used throughout industry and are particularly suitable for measuring points where no electrical supply is available. PMR02 series pressure gauges, in steel or brass design, are often used especially in mechanical and plant engineering, on pumps, compressors or BHKW's, since only light requirements are often placed on the media resistance.

The PMR02 stainless steel chemical pressure gauges, on the other hand, are resistant to much more aggressive media and are often used in the chemical and petrochemical industries, in the food sector, in pharmaceutical production or in power stations, where they have been delivering the best results for decades.

## Models:







**Nominal size:** housing diameter: 60 mm

### Materials:

- PMR02.K: housing made of steel, painted black brass connection
- PMR02.M: housing made of stainless steel brass connection only available with glycerine filling.
- PMR02.E: housing made of stainless steel stainless steel connection

**Process connection:** G 1/4 bottom or centric rear (steel and brass version) or eccentric rear (st. steel version)

## Measuring Ranges:

Measuring range [bar]	Order code					
						
For all nominal sizes						
-1200...0 mbar**	A17	B17 <sup>1</sup>	C17	D17	E17 <sup>1</sup>	F17 <sup>2</sup>
-1...0	A16	B16	C16	D16	E16	F16
-0,6...+1,0	A18	B18	C18	D18	E18	F18
-1...+0,6	A42	B42	C42	D42	E42	F42
-1...+1,5	A43	B43	C43	D43	E43	F43
-1...+3	A44	B44	C44	D44	E44	F44
-1...+5	A45	B45	C45	D45	E45	F45
-1...+9	A46	B46	C46	D46	E46	F46
-1...+15	A49	B49	C49	D49	E49	F49
0,2...1**	A50	B50	C50	D50	E50	F50
0...0,6**	A67	B67	C67	D67	E67	F67
0...1	A69	B69	C69	D69	E69	F69
0...1,6	A70	B70	C70	D70	E70	F70
0...2,5	A72	B72	C72	D72	E72	F72
0...4	A73	B73	C73	D73	E73	F73
0...6	A74	B74	C74	D74	E74	F74
0...10	A75	B75	C75	D75	E75	F75
0...16	A76	B76	C76	D76	E76	F76
0...25	A78	B78	C78	D78	E78	F78
0...40	A79	B79	C79	D79	E79	F79
0...60	A80	B80	C80	D80	E80	F80
0...100	A81	B81	C81	D81	E81	F81
0...160	A82	B82	C82	D82	E82	F82
0...250	A84	B84	C84	D84	E84	F84
0...400	A86	B86	C86	D86	E86	F86
0...600*	A87	B87	C87	D87	E87	F87
0...1000*	A88	B88	C88	D88	E88	F88

\* measuring range not for PMR02.K

\*\* measuring range not for PMR02.M

<sup>1</sup> panel cut-out 65 mm

<sup>2</sup> panel cut-out 63 mm

<sup>3</sup> PMR02.M: black painted rim, optional chrome-plated steel

PMR02.E: stainless steel rim

## Order Code:

**Order number:** PMR02. M. 1. 0. A49. 0

**Bourdon tube pressure gauge - mini**

### Materials:

K = housing steel, connection brass

M = housing stainless steel, connection brass (always with glycerine filling)

E = housing stainless steel, connection st. steel

### Process connection:

1 = G 1/4 bottom

2 = G 1/4 centric rear (only PMR02.K and M)

3 = G 1/4 eccentric rear (only PMR02.E)

9 = special connection

### Vibration damping:

0 = without

1 = with glycerine filling

### Design and measuring ranges:

A17...F88 = see table "Measuring Ranges"

### Options and accessories (multiple selection possible):

0 = without

xx = see table „Options and Accessories“

## Technical Data:

### Housing:

round steel housing, black, or st. steel, d = 60 mm protection class IP45 (unfilled version) protection class IP65 (filled version.)

### Vibration damping:

glycerine filling, with pressure relief opening and internal pressure compensation

### Measuring element:

PMR02.K: circular bourdon tube up to 60 bar. bourdon tube in screw form from 60 bar

PMR02.M: bourdon tube in circular form, copper alloy, soft soldered into the connection pin, from 100 bar bourdon tube in screw form, stainless steel 1.4571, hard soldered into the connection pin

PMR02.E: bourdon tube in circular form, from 100 bar bourdon tube in screw form, stainless steel 1.4571

### Pointer mechanism:

PMR02.K,M: brass, barrel nickel silver

PMR02.E: stainless steel 1.4571/1.4301

### Dial:

aluminium, white, black font acc. to EN 837-1

### Viewing glass:

PMR02.K: instrument acrylic glass

PMR02.M: Polycarbonat

PMR02.E: laminated safety glass

### Accuracy:

class 1,6

### Max. media temperature:

PMR02.K: 60 °C

PMR02.M: -25 °C...60 °C

PMR02.E: 100 °C

### Overload safety:

PMR02.K: short-term 1,0 times

PMR02.M,E: short-term 1,3 times

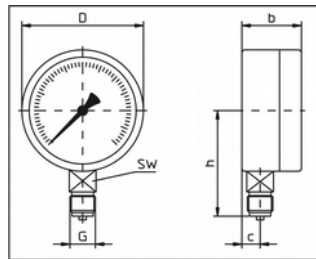
## Options and Accessories:

Description:	Code	for type PMR02...
rubber protective cap, red	<b>GR</b>	K
rubber protective cap, blue	<b>GB</b>	K, M
double scale (e.g. bar / psi)	<b>SD</b>	all types
refrigerant double scale pressure /R717 (NH3)	<b>SK7</b>	E
cliché creation for special scale	<b>SS1</b>	all types
measuring system free of oil and grease for oxygen	<b>MO</b>	all types
measuring system silicone-free	<b>MS</b>	M,E
measuring system overpressure proof >1,3-times	<b>U</b>	M,E
connection spigot 1/4" NPT	<b>Px</b>	E
red stamp on dial	<b>MR</b>	all types
red mark pointer adjustable from outside	<b>ZR</b>	all types
red mark pointer adjustable when device is open	<b>ZR1</b>	all types

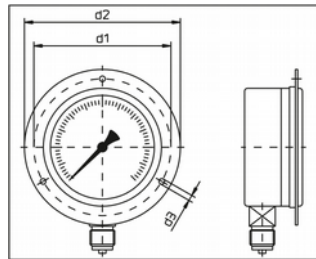
## Dimensions:

Dimensions:	Value [mm]
b	28,5
b1	46,5
b2	32,5
c	11
c1	18
D	63
d1	75
d2	85
d3	3,5
d4	67
h	84
SW	14
Weight [kg]	0,12

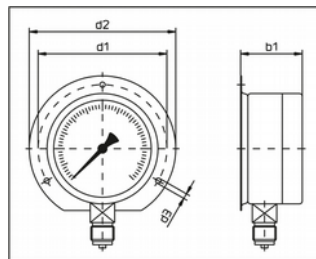
## Models:



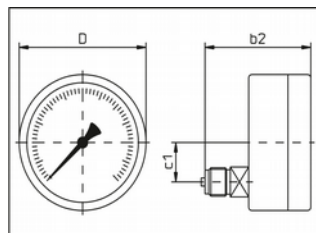
model A:  
connection at bottom



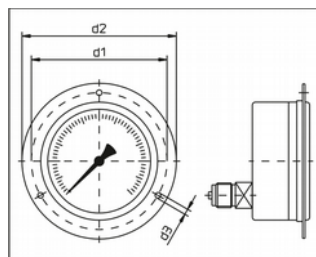
model B:  
connection at bottom,  
rim at front



model C:  
connection at bottom,  
rim at back

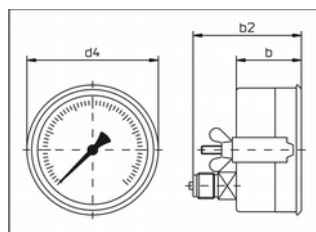


model D:  
connection at back



model E:  
connection at back,  
rim at front

panel cut-out: 65 mm



model F:  
triangular front ring and  
mounting bracket

panel cut-out: 63 mm