

# PMR06

## Precision Bourdon Tube Pressure Gauge

- nominal sizes 160 and 250 mm
- accuracy class 0,6
- versions with brass connection and stainless steel housing or completely in stainless steel
- with or without liquid filling for vibration damping
- measuring ranges from -1200...0 mbar to 0...1600 bar



### Description:

The pressure gauges of the PMR06 series operate according to the bourdon tube principle. They 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 on the pressure.

This movement is indicated by a pointer measuring mechanism, which can be damped by means of the optionally available liquid 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 filling liquid 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 equipped with a threaded connection at the bottom or rear.

### Typical applications:

The PMR06 pressure gauges are used wherever precise pressure measurements are required.

For mobile use, versions are available in a test case, complete with shut-off valve and connection pieces.

The stainless steel versions are resistant to most aggressive media and are often used in the chemical and petrochemical industries, in the food industry, in pharmaceutical production or in power stations, where they have been providing the best results for decades.

## Models:

**Nominal size:** housing diameter 160 or 250 mm

### Materials:




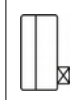
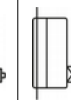

PMR06.x.M: stainless steel housing 1.4301,  
brass or copper alloy,  
from 100 bar st. steel, brass  
connection

PMR06.x.E: stainless steel housing 1.4301,  
stainless steel measuring element  
and connection 1.4571

**Process connection:** G 1/2 or 1/2" NPT bottom or back

**Vibration damping:** optional glycerine filling

## Measuring Ranges:

Measuring range [bar]	Order code					
						
	For all nominal sizes					not for NG 250
-1200...0 mbar	A17	B17	C17	D17	E17	F17
-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
0...1600	A89	B89	C89	D89	E89	F89

## Order Code:

**Order number:** PMR06. 16. M. 1. 0. A75. 0. 0

**Precision bourdon tube pressure gauge**

### Models:

16 = 160 mm  
25 = 250 mm

### Materials:

M = housing stainless steel,  
connection brass  
E = housing stainless steel,  
connection stainless steel  
S = special material  
(please specify in plain text)

### Process connection:

1 = G 1/2 bottom  
2 = G 1/2 eccentric back  
3 = 1/2" NPT bottom  
4 = 1/2" NPT eccentric back  
9 = special connection

### Vibration damping:

0 = without  
1 = with glycerine filling

### Design and measuring ranges:

A17...F89 = see table "Measuring Ranges"

### Additional electrical equipment:

0 = without

### Options and accessories (multiple selection possible)

0 = without  
xx = see table „Options and Accessories“

## Technical Data:

### Housing:

round stainless steel housing,  
d = 160 or 250 mm  
protection class IP45

### Liquid-filled version:

glycerine filling with pressure relief  
opening and internal pressure  
equalization, protection class IP65

### Stainless steel version:

with pressure relief opening (optional  
for increased safety with break-proof  
partition wall and blow-out rear wall)

### Measuring element:

PMR06.xx.M: bourdon tube, up to 60 bar copper  
alloy, soft-soldered, from 100 bar  
stainless steel 1.4571, hard soldered

PMR06.xx.E: stainless steel bourdon tube 1.4571

### Pointer mechanism:

PMR06.xx.M: brass, barrel nickel silver

PMR06.xx.E: stainless steel 1.4571/1.4301

### Dial:

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

### Viewing class:

PMR06.xx.M: instrument glass

PMR06.xx.E: laminated safety glass

### Accuracy:

class 0,6

### Max. media

### temperature:

60 °C for PMR06.xx.M to 60 bar,  
100 °C for all other devices

### Overload safety:

short-term 1,3-times

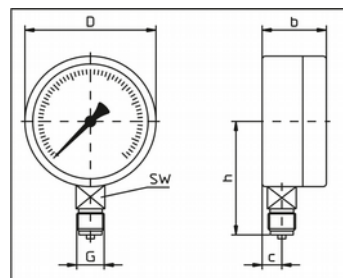
## Options and Accessories:

Description:	Code	for type PMR06...
Design for increased safety (break-proof partition wall and blow-out rear wall)	ES	x.E..., unfilled, not for NG 250, only model A, B
Front ring polished	FP	models B,E,F
Tropical-proof housing	GT	only unfilled devices
Pointer movement stainless steel	ZE	x.M... unfilled
Multiple scale	SM	all types
Scale label	SA	all types
Cliché creation for special scale (1-colored or multicolored)	SS1 SSx	all types
Measuring system free of oil and grease for oxygen	MO	all types
Measuring system silicone-free	MS	all types
Glycerine filling	FG	all types
Throttle screw in connection, d = 0,8 or 0,3 mm	D08 D03	all types
Process connection G 1/4 female, M20 x 1,5, small flange DN10, stainless steel	Px	all types only x.E...
Red stamp on dial	MR	all types
Red mark pointer in the sight glass	ZR	all types
Slave pointer, resettable, 1-fold or 2-fold	ZS1 ZS2	all types
Pointer with toothed drive adjustment	ZZ	all types
Calibratable acc. to calibration regulations	E	all types
Transport case with manometer, shut-off valve and accessories	TK	only NG 160

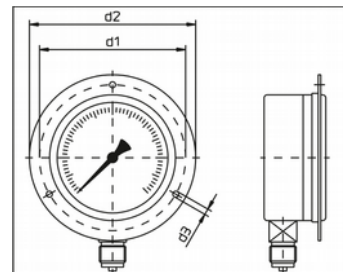
## Dimensions:

Dimensions:	Value [mm]	
	NG 160	NG 250
b	50	55
b1	56	61
b2	88	93
c	14,5	16
c1	50	50
D	161,3	251
d1	178	271
d2	196	285
d3	5,8	5,8
d4	166	-
h	118	165
SW	22	22
Weight [kg]	1,1	2,2

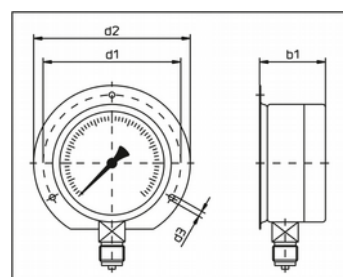
## Models:



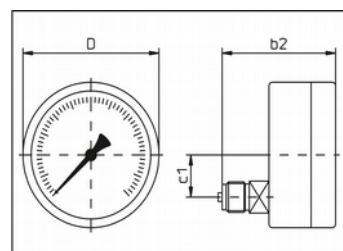
model A:  
connection at bottom



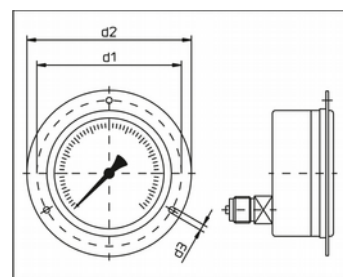
model B:  
connection at bottom,  
rim at front



model C:  
connection at bottom,  
rim at back

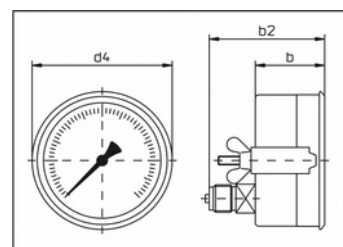


model D:  
connection at back



model E:  
connection at back,  
rim at front

Panel cut-out:  
NG 160: 165 mm  
NG 250: 254 mm



model F:  
triangular front ring and  
mounting bracket

Panel cut-out:  
NG 160: 163 mm  
NG 250: /

## Precision Gauge Manometer in Test Case:

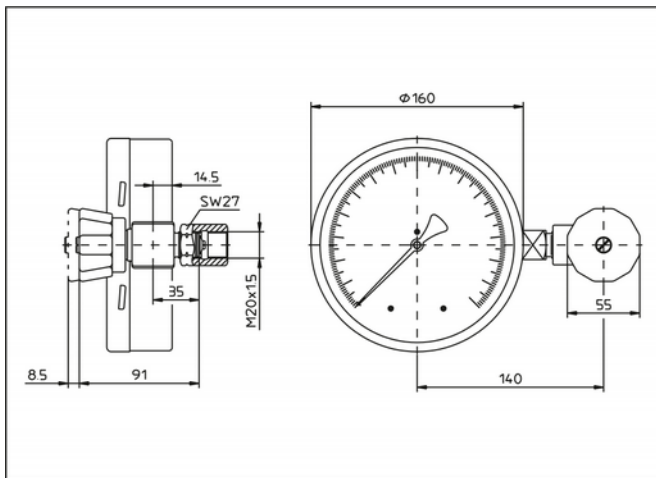
### Version...TK

For mobile use, types PMR06.16... can be supplied in a service case complete with installation accessories.

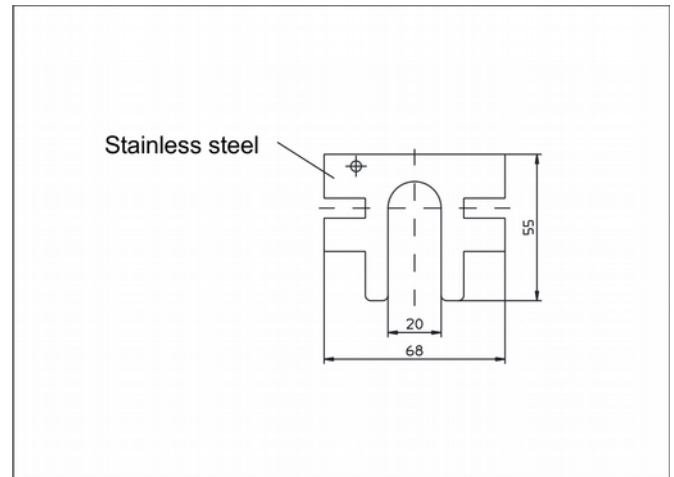
The mounting accessories include:

- shut-off valve
- clamping sleeve M20x1,5 - LH /RH acc. to DIN 16238
- intermediate piece with test flange and accessories
- fork for test flange
- solid transport case
- test report

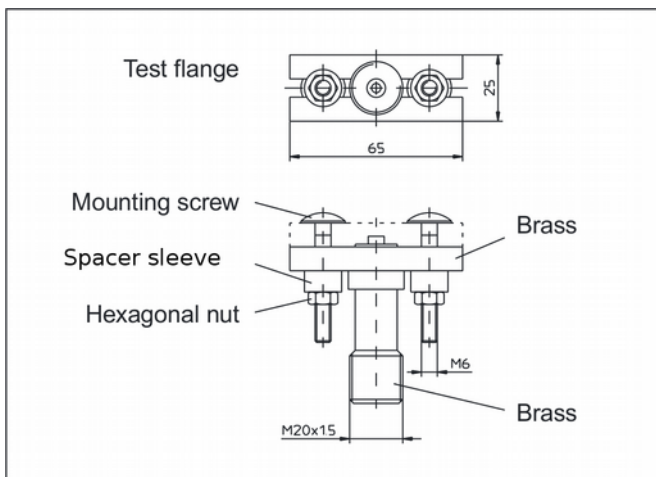
### Dimensions:



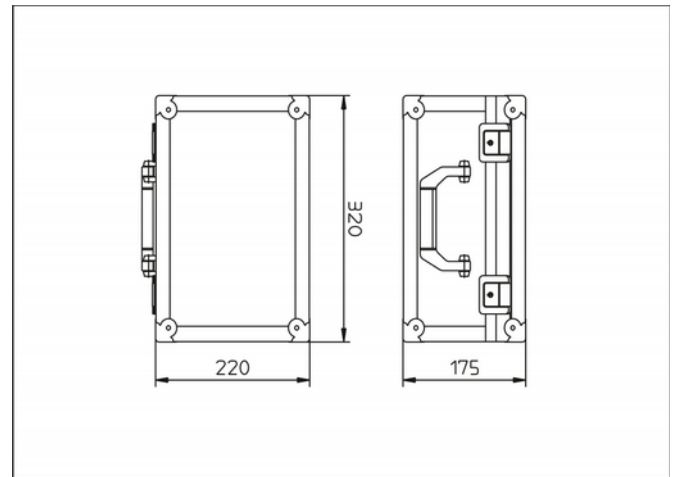
PMR06.16... with shut-off valve and clamping sleeve



fork for test flange



intermediate piece with test flange



transport case