

# PDK01

## Differential Pressure Gauge with Capsule Element

- for gaseous and dry media
- housing diameter 100 or 160 mm
- measuring ranges from -400...0 to 0...600 mbar
- max. temperature: 100 °C
- accuracy class 1,6
- different housing / connection types



### Description:

The differential pressure gauges PDK01 are based on the capsule spring measuring system: The “plus” pressure (= high pressure) reaches the inside of the capsule spring. The “minus” pressure (= low pressure) reaches the inside of the pressure-tight housing. The resulting pressure difference deforms the capsule spring and creates the measuring path. This is transferred to the pointer mechanism. The differential pressure is indicated directly by a pointer. The measuring range must be selected according to the maximum differential pressure occurring.

### Typical applications:

The differential pressure gauges PDK01 are used for non-aggressive, gaseous and dry media.

- filter monitoring
- chemistry and petrochemistry
- shipbuilding
- general industrial applications

## Models:

**Nominal sizes:** housing diameter 100 or 160 mm

**Materials:** stainless steel housing 1.4301,  
copper alloy capsule spring

**Process connection:** 2 x hose fitting, Ø 6 mm

### Designs:

- version A: connection at bottom, for pipe construction
- version B: connection at bottom, with three-hole front ring, for panel mounting
- version C: connection at bottom, with rear rim, for wall mounting
- version D: connection at back, for pipe construction
- version E: connection at back, with three-hole front ring, for panel mounting
- version F: connection at back, with rear rim, for wall mounting
- version G: connection at back, with triangular front ring and screw fastening, for panel mounting

## Measuring Ranges:

Meas. range [mbar]	Design						
	Order code						
-25...0 ...+15	A109	B109	C109	D109	E109	F109	G109
-20...0 ...+40	A110	B110	C110	D110	E110	F110	G110
-40...0 ...+20	A210	B210	C210	D210	E210	F210	G210
-10...0	A06	B06	C06	D06	E06	F06	G06
-16...0	A07	B07	C07	D07	E07	F07	G07
-25...0	A08	B08	C8	D08	E08	F08	G08
-40...0	A09	B09	C9	D09	E09	F09	G09
-60...0	A10	B10	C10	D10	E10	F10	G10
-100...0	A11	B11	C11	D11	E11	F11	G11
-160...0	A12	B12	C12	D12	E12	F12	G12
-250...0	A13	B13	C13	D13	E13	F13	G13
-400...0	A14	B14	C14	D14	E14	F14	G14
0...10	A58	B58	C58	D58	E58	F58	G58
0...16	A59	B59	C59	D59	E59	F59	G59
0...25	A60	B60	C60	D60	E60	F60	G60
0...40	A61	B61	C61	D61	E61	F61	G61
0...60	A62	B62	C62	D62	E62	F62	G62
0...100	A63	B63	C63	D63	E63	F63	G63
0...160	A64	B64	C64	D64	E64	F64	G64
0...250	A65	B65	C65	D65	E65	F65	G65
0...400	A66	B66	C66	D66	E66	F66	G66
0...600	A94	B94	C94	D94	E94	F94	G94

## Order Code:

**Order number:** PDK01. 10. E. S. A109. 0. 0.

**Differential pressure gauge with capsule element**

### Models:

- 10 = housing diameter 100 mm
- 16 = housing diameter 160 mm

### Materials:

- E = stainless steel housing,
- capsule spring: copper alloy

### Process connection:

- S = 2 x hose fitting, Ø 6 mm

### Design and measuring ranges:

A109...G94 = see table „Measuring Range“

### Additional electrical equipment:

- 0 = without

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

- 0 = without
- xxx = see table „Options and Accessories“

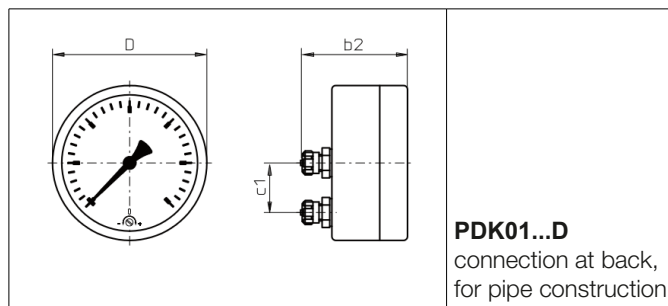
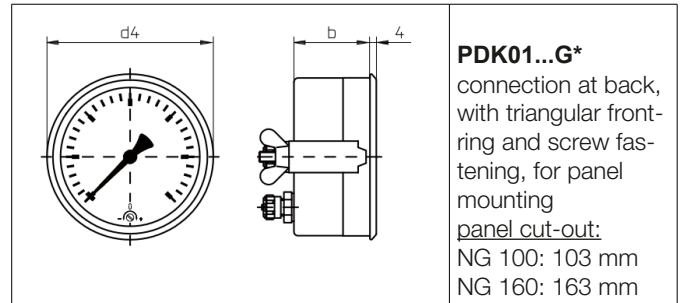
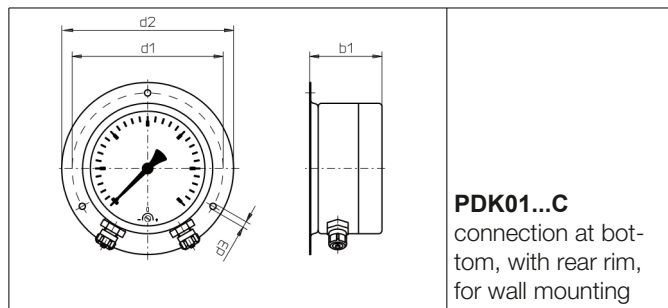
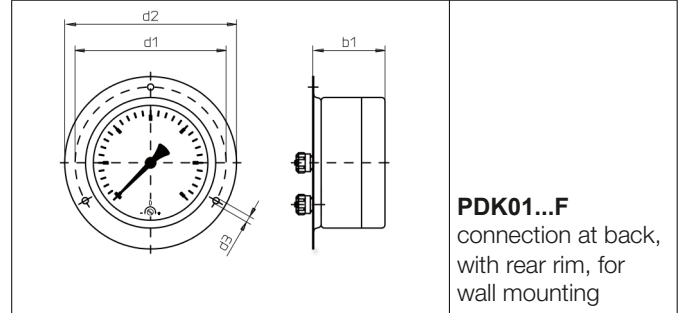
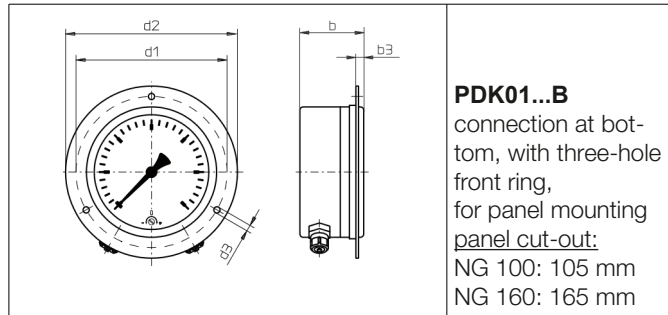
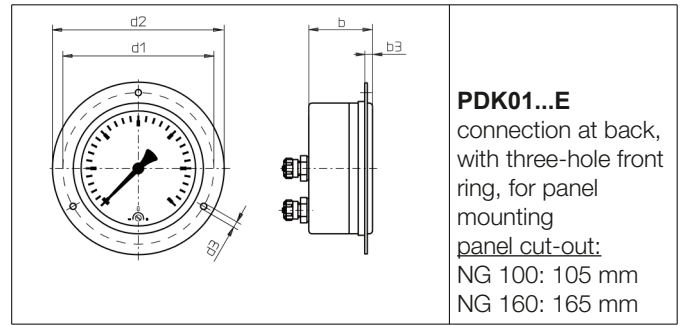
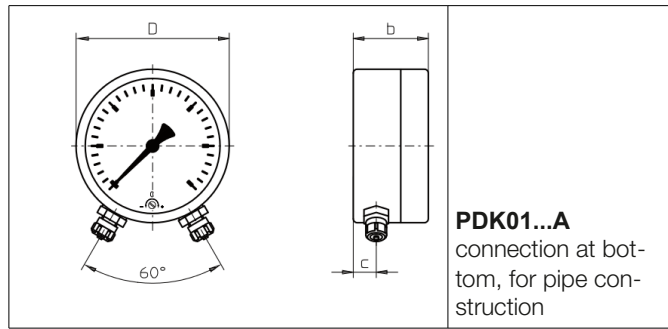
## Technical Data:

- Housing:** round stainless steel housing, Ø = 100 or 160 mm
- Measuring element:** copper alloy capsule spring
- Pointer mechanism:** brass
- Viewing class:** multilayer safety class
- Scale and pointer:** aluminium, white, black pointer
- Process connection:** 2 x hose fitting Ø 6 mm
- Zero adjustment:** adjusting screw in dial
- Measuring ranges:** see table „Measuring Ranges“
- Overload safety:** 1,3 x full scale value
- Media temperature:** -20 ... +100 °C
- Ambient temperature:** -25...60 °C
- Accuracy:** class 1,6
- Temperature influence:** temp. increase: +0,3 % FS / 10 K  
temp. decrease: -0,3 % FS / 10 K  
T<sub>ref</sub>: 25°C
- Overloadability:** < 25 mbar: 6 x full scale value  
> 25 mbar: 10 x full scale value
- Static pressure:** Ø 100 mm: max. 600 mbar  
Ø 160 mm: max. 400 mbar
- Protection class:** IP68

## Options and Accessories:

Description	Code
Over- and underpressure <25 mbar 3 times, >25 mbar 10 times	D
Measuring system cleaned for oxygen	S
Front ring painted black	L
Red stamp on the dial	R

## Dimensions:



## Dimensions [mm]

NG	b	b2	b3	c	c1	D	d1	d2	d3	d4	kg
100	50	68,5	6	15	29	100	116	132	4,8	107	0,5
160	50	68,5	6	14,5	50	160	178	196	5,8	166	1,1