

PDP02

Differential Pressure Gauge with Diaphragm and two Measuring Chambers

- low-cost version
- housing diameter 100 or 160 mm
- completely made of stainless steel, gaskets FKM and PTFE
- measuring ranges from 0...0,6 bar to 0...16 bar
- static pressure max. 20 bar
- high overload protection, max. 4 x full scale
- versions available for all installation variants
- accuracy class 2,5



Description:

The differential pressure gauges PDP02 have two measuring chambers which are separated from each other by a diaphragm. Different pressures in the two measuring chambers cause a deflection of the diaphragm, which is indicated on the scale by a pointer mechanism.

The devices are always supplied completely in stainless steel with FKM and PTFE seals in housing sizes 100 or 160 mm. Housing versions for practically all installation situations are available.

Typical applications:

The differential pressure gauges PDP02 are mainly used in the following areas of application:

- filter monitoring
- petrochemistry
- oil and gas applications
- shipbuilding
- off-shore applications
- general industrial applications
- flow measurement by means of orifice plates or according to differential pressure principle

Models:

Nominal size: housing diameter 100 or 160 mm

Materials: stainless steel housing 1.4301, bourdon tube and process connection made of stainless steel 1.4571, diaphragm made of Duratherm

Process connection: 2 x G 1/2 male or 2 x 1/2" NPT male, special connections optional

Designs:

Version K: for pipe mounting, connection at bottom






Version L: for wall mounting, with rear rim, connection at bottom

Version M: for pipe mounting, connection at back

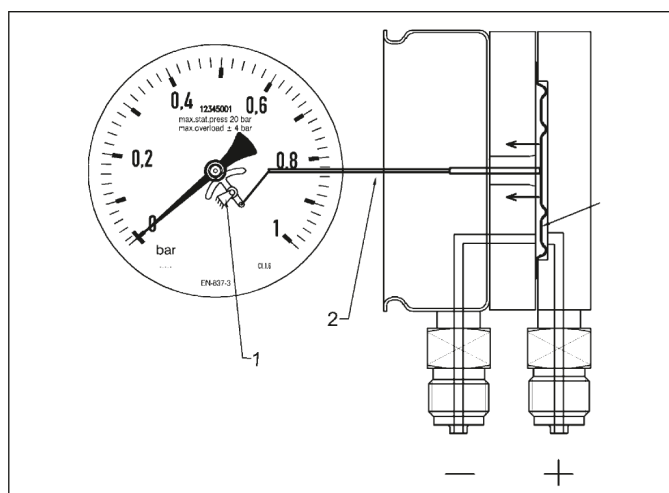
Version N: for panel mounting, with three-hole front ring, connection at back

Version O: for panel mounting, with three-hole front ring, connection at bottom

Measuring Ranges:

Measuring range [bar] (Overload safety [bar])	Design				
					
	Order Code				
0...0,6 (2,4)	K67	L67	M67	N67	O67
0...1 (4)	K69	L69	M69	N69	O69
0...1,6 (6,4)	K70	L70	M70	N70	O70
0...2,5 (10)	K72	L72	M72	N72	O72
0...4 (16)	K73	L73	M73	N73	O73
0...6 (20)	K74	L74	M74	N74	O74
0...10 (20)	K75	L75	M75	N75	O75
0...16 (20)	K76	L76	M76	N76	O76

Functional Principle:



1 = pointer mechanism
2 = mechanical connection to measuring element
3 = bourdon tube

Order Code:

Order number: PDP02. 10. E. 15G. 0. K75. 0. 0

Differential pressure gauge with diaphragm

Models:

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

Materials:

E = stainless steel, gasket FKM / PTFE
S = special version

Process connection:

15G = 2 x G 1/2 male thread
15N = 2 x 1/2" NPT male thread
S = special connection (see: options)

Vibration damping:

0 = 0 = without

Design and measuring range:

K67...H76 = see table „Measuring Ranges“

Additional electrical equipment:

0 = 0 = without

Options and accessories: (multiple selection possible)

0 = 0 = without

xxx = see table „Options and Accessories“

Technical Data:

Housing: round stainless steel housing 1.4301, d = 100 or 160 mm

Measuring element: diaphragm made of Duratherm

Pointer mechanism: brass, nickel-plated

Viewing class: mineral glass (4 mm)

Scale and pointer: aluminium

Process connection: 1/2" G or NPT (standard), 1/4", 3/8" G or NPT (optional) made of stainless steel 1.4404, other connections on request

Gasket: FKM / PTFE

Measuring ranges: see table „Measuring Ranges“

Max. static pressure: 20 bar (25 bar on request)

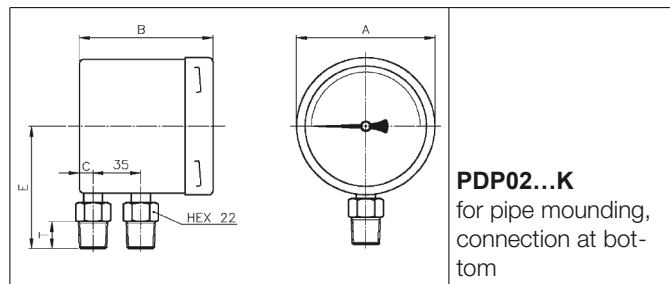
Overload safety: see table „Measuring Ranges“

Media temperature: -20 ... +80 °C

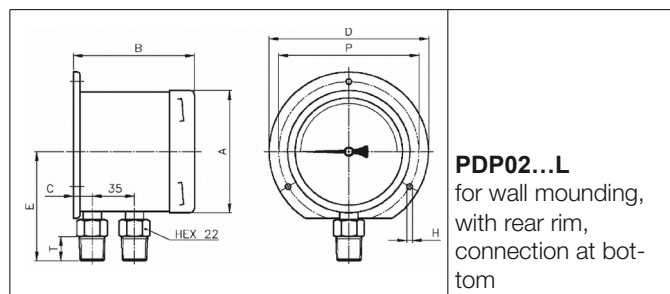
Accuracy: class 2,5

Protection class: IP65

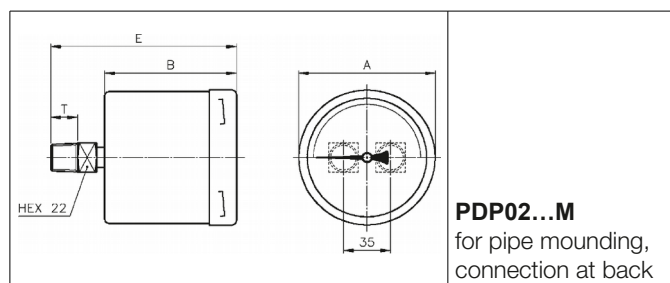
Dimensions:



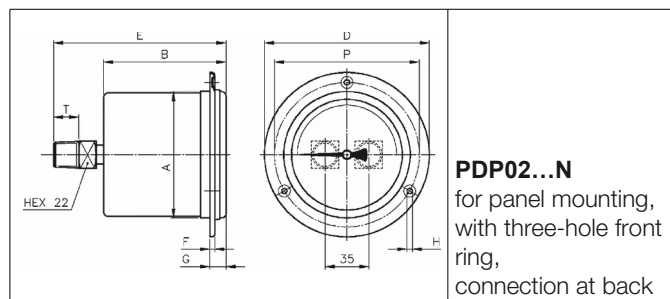
	Dimensions [mm]	
	Ø 100	Ø 160
A	101,5	162
B	80	80
C	11	11
E	89	119
T	20	20



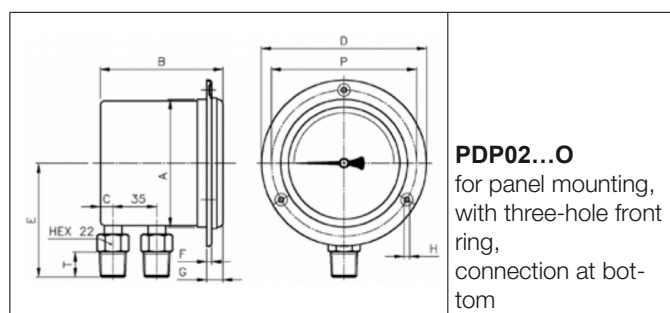
	Dimensions [mm]	
	Ø 100	Ø 160
A	101,5	162
B	83	83
C	14	14
D	132	196
E	89	119
P	116	178
H	4,5	6
T	20	20



	Dimensions [mm]	
	Ø 100	Ø 160
A	101,5	162
B	80	80
E	120	120
T	20	20

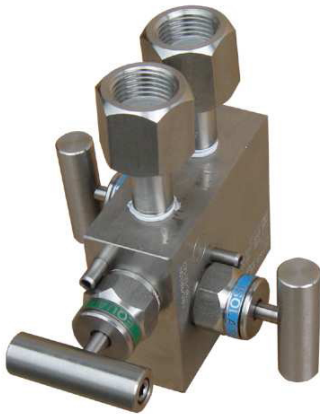


	Dimensions [mm]	
	Ø 100	Ø 160
A	101,5	162
B	80	80
D	132	196
E	120	120
F	3,5	3
G	13	15,5
H	4,5	6
P	116	178
T	20	20



	Dimensions [mm]	
	Ø 100	Ø 160
A	101,5	162
B	80	80
C	11	11
D	132	196
E	89	119
F	3,5	3
G	13	15,5
H	4,5	6
P	116	178
T	20	20

Three-Spindle Valve Block for PDP02:



The 3VD-35 valve block is used to shut off the connection to the process and to equalize the pressure between the two inputs of the differential pressure gauge before the actual measurement.

The device is completely made of stainless steel 1.4401, the packing is made of PTFE.

The valve block can be used for all differential pressure gauges with a centre distance of the process connections of 35 mm.

Options and Accessories:

Description	Code
scale in psi	P
double scale bar / psi	BP
special scale	SK...
process connection G 1/4	08G
process connection G 3/8	10G
process connection 1/4" NPT	08N
process connection 3/8" NPT	10N
three-spindle stainless steel valve block, process connection: 2 x G 1/4 female instrument connection: 2 x G 1/2 with rotating sleeve	3VD-35

Function:

