PDR02

Double Bourdon Tube Differential Pressure Gauge for Relative and Differential Pressure

- nominal sizes 100 and 160 mm
- accuracy class 1,0
- completely made of stainless steel, fully welded version
- measuring ranges from -1...0 bar to 0...1600 bar
- all measuring ranges available for all designs





Description:

The pressure gauges PDR02 have two independent bourdon tube measuring systems with two pointers, which indicate the measured pressure on the same scale.

These devices can either be used monitor two separate measuring points or to determine the differential pressure (e.g. on a filter). The differential pressure corresponds to the difference in the display of the two pointers. Optionally, the differential pressure can also be read directly by means of an additional, rotatable scale.

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

Typical applications:

The differential pressure gauges PDR02 are mainly used in the following areas of applications:

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



Models:

Nominal sizes: housing diameter 100 or 160 mm Materials: stainless steel housing 1.4301, bourdon

tube and process connection made of

stainless steel 1.4571

Process connection: 2 x G 1/2 AG or 2 x 1/2" NPT male thread

Designs:

Version K: for pipe mounting, connection at bottom Version L: for wall mounting, with rear rim, connec-

tion 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

Version H: for panel mounting, with front ring and

hangers, connection at back

Measuring Ranges:

	Design					
Measuring range in bar		1				
			Order	code		
-10	K16	L16	M16	N16	O16	H16
-10,6	K42	L42	M42	N42	O42	H42
-11,5	K43	L43	M43	N43	O43	H43
-13	K44	L44	M44	N44	O44	H44
-15	K45	L45	M45	N45	O45	H45
-19	K46	L46	M46	N46	O46	H46
-115	K49	L49	M49	N49	O49	H49
-124	K52	L52	M52	N52	O52	H52
00,6	K67	L67	M67	N67	O67	H67
01	K69	L69	M69	N69	O69	H69
01,6	K70	L70	M70	N70	O70	H70
02,5	K72	L72	M72	N72	072	H72
04	K73	L73	M73	N73	O73	H73
06	K74	L74	M74	N74	074	H74
010	K75	L75	M75	N75	O75	H75
016	K76	L76	M76	N76	O76	H76
025	K78	L78	M78	N78	O78	H78
040	K79	L79	M79	N79	079	H79
060	K80	L80	M80	N80	O80	H80
0100	K81	L81	M81	N81	O81	H81
0160	K82	L82	M82	N82	O82	H82
0250	K84	L84	M84	N84	O84	H84
0400	K86	L86	M86	N86	O86	H86
0600	K87	L87	M87	N87	O87	H87
01000	K88	L88	M88	N88	O88	H88
01600	K89	L89	M89	N89	O89	H89

Rotatable scale for direct reading of differential pressure:



The static pressure of each bourdon tube must not exceed the measuring range.

Order Code:

PDR02. 10. E. 15G. 0. K75. 0. 0 Order number:

Double bourdon tube differential pressure gauge

Models:

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

Material:

= completely stainless steel Ε

Process connection:

 $15G = 2 \times G \frac{1}{2}$ male thread 15N = 2 x 1/2" NPT male thread

S = special connection (see: options)

Vibration damping:

0 = without

1 = with glycerine filling

Design and measuring range:

K16...H89 = see table "Measuring Ranges"

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 1.4301,

d = 100 or 160 mm

Measuring element: 2 x stainless steel bourdon tube 1.4571

Pointer mechanism: brass

Viewing class: mineral glass (4 mm)

Scale and pointer: aluminium, white,

1 pointer black and 1 pointer red, aluminium

Process connection: 1/2" G or NPT (standard),

1/4", 3/8" G or NPT (optional) made of stainless steel 1.4571, other connection on request

Liquid-filled version: glycerine

Measuring ranges: see table "Measuring Ranges"

Overload safety: 1,3 x full scale value Media temperature: -20 ... +100 °C

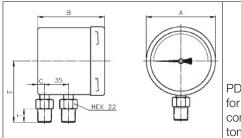
Accuracy: class 1,0 Protection class: IP65

Options and Accessories:

Description	Code
scale in psi	Р
double scale in bar / psi	BP
differential pressure scale	SD
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

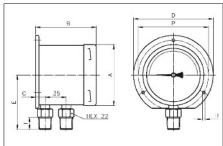


Dimensions:



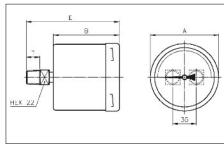
PDR02...K: for pipe mounting, connection at bottom

	Dimensions [mm]	
	Ø 100	Ø 160
А	101,5	162
В	97	100
С	14	18
Е	90	120
Т	20	20



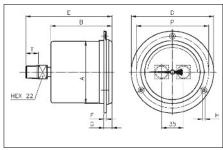
PDR02...L: for wall mounting, with rear rim, connection at bottom

	Dimensions [mm]		
	Ø 100	Ø 160	
А	101,5	162	
В	100	102	
С	14	18	
D	132	196	
E	90	120	
Р	116	178	
Н	4,5	6	
Т	20	20	



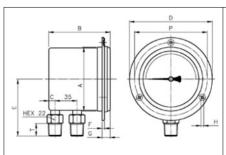
PDR02...M: for pipe mounting, connection at back

	Dimensions [mm]		
	Ø 100	Ø 160	
А	101,5	162	
В	97	100	
E	137	140	
Т	20	20	



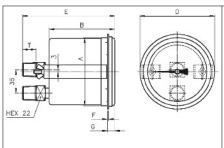
PDR02...N: for panel mounting, with three-hole front ring, connection at back

	Dimensions [mm]		
	Ø 100	Ø 160	
Α	101,5	162	
В	97	100	
D	132	196	
Е	137	140	
F	3,5	3	
G	13	15,5	
Н	4,5	6	
Р	116	178	
Т	20	20	



PDR020:
for pane
I mounting,
with three-hole front
ring,
connection at bot-
tom

	Dimensions [mm]		
	Ø 100	Ø 160	
Α	101,5	162	
В	97	100	
С	14	18	
D	132	196	
Е	90	120	
F	3,5	3	
G	13	15,5	
Н	4,5	6	
Р	116	178	
Т	20	20	



PDR02...H: for panel mounting, with front ring and hangers, connection at back

	Dimensions [mm]		
	Ø 100	Ø 160	
А	101,5	162	
В	97	100	
D	110	180	
E	137	140	
F	2	2	
G	10,5	9	
Т	20	20	