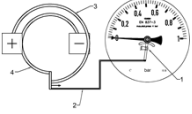
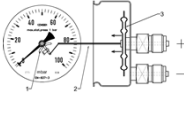
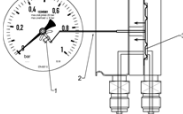
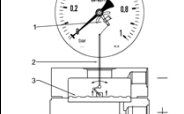
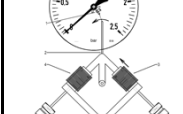
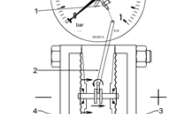


DIFFERENTIAL PRESSURE GAUGES

Selection guide

parameter		differential pressure gauge type					
		PBD	PCD	PDD	PMD	PSD	POD
operating principle		2x bourdon tube	capsule	1x diaphragm	1x diaphragm	2x bellows	2x diaphragm
range (span)	min.	0.6 bar	25 mbar case 100 6 mbar case 160	0.6 bar	250 mbar 25 mbar for type low	100 mbar	1 bar 100 mbar for type low
	max.	16 bar	400 mbar	16 bar	25 bar	6 bar	25 bar
static pressure	max.	2.5 ... 4 x range	1.5 bar case 100mm 1 bar case 160mm	20 bar	100 bar 25 bar for type low	10 x range	100 bar optional 250 bar
overload safe	max.	no	no optional max. 2 bar	4 x range 2.4 ...20 bar	no	upto static press. upto static press.	100 bar optional 250 bar
case diameter	mm	100; 160	100; 160	100; 160	100; 160		100; 160
contact device		yes	no	no	yes	no	yes
	min.	1.6 bar			1,6 bar 100 mbar for type low		1.6 bar
chemical seals <small>see catalogue page 37</small>		yes, wide range	no	yes	yes	no	yes
wetted parts		AISI316L/1.4435 AISI316Ti/1.4571 fully welded system	for clean air and dry gasses only stainless steel nickel coated brass; macrolon	AISI316L/1.4435 diaphragm duratherm Viton; PTFE	AISI316L/1.4435 diaphragm duratherm Viton; PTFE	AISI316L/1.4435 fully welded system	DP cell; AISI316L/1.4435 diaphragm duratherm Viton; PTFE
catalogue page		45	46				
operating principle <small>see also catalogue</small>							
T ambient		-20/+60 °C	-20/+50 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C	-20/+60 °C
T process max.		-20/+100 °C	-20/+50 °C	-20/+80 °C	-20/+80 °C	-20/+80 °C	-20/+80 °C

DIFFERENTIAL PRESSURE GAUGE TYPE PBD

TYPE PBD, with double bourdon-tube system

STANDARD MODEL

Features :

- double bourdon-tube system
- corrosion resistance
- all welded construction
- pointer deflection between 90°-180°
- pressure safe upto the measuring range

Wetted parts : bourdon tube AISI316Ti/1.4571

Applications :

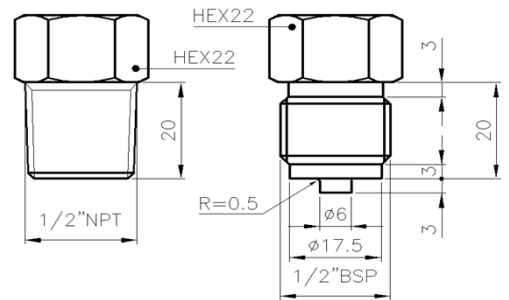
- flow measurement
- petrol chemical industry
- filter applications
- general industry
- shipping industry
- off-shore



Example: PBD100XN

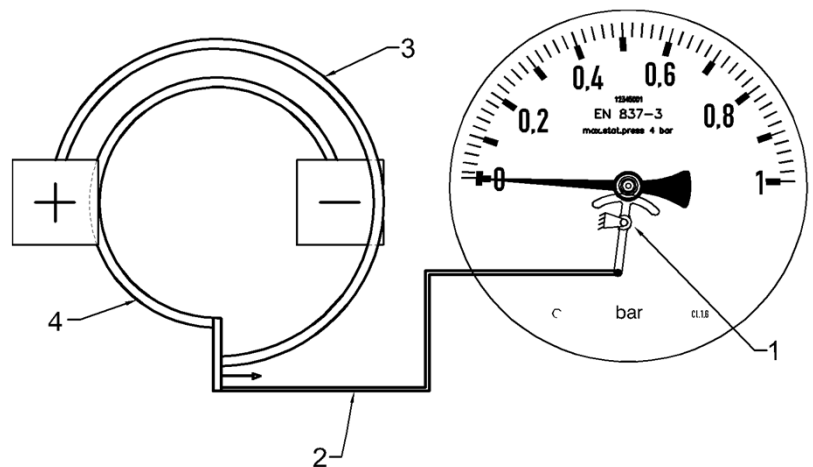
Type	max. static pressure	Range
PBD	max. 3 bar	0 - 0.6 bar
	max. 4 bar	0 - 1 bar
	max. 6 bar	0 - 1.6 bar
	max. 10 bar	0 - 2.5 bar
	max. 16 bar	0 - 4 bar
	max. 25 bar	0 - 6 bar
	max. 30 bar	0 - 10 bar
	max. 40 bar	0 - 16 bar

Standard connections



Options :

- other connections
- electrical contacts
- swivel adapters
- manifolds
- chemical seals (on demand)
- special dials



- 1 pointer mechanism
- 2 connecting rod
- 3 + bourdon tube
- 4 - bourdon tube

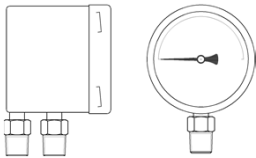
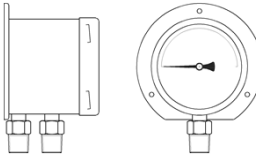
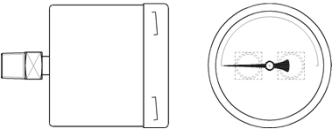
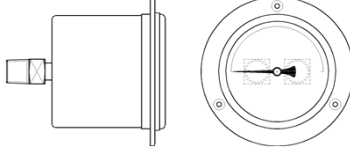
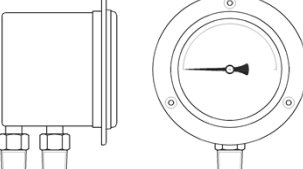
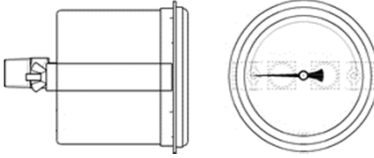
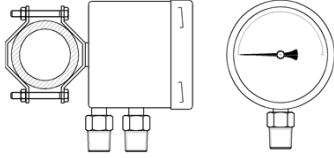
operating principle

STAINLESS STEEL DIFFERENTIAL PRESSURE GAUGE, TYPE PBD

TYPE PBD, with bourdon-tube system

STANDARD MODEL

CASE	: bayonet lock, AISI304/1.4301, IP-65	CONNECTION	: 2x ½"BSP or ½"NPT AISI316L/1.4404
WETTED PARTS	: double bourdon tube AISI316Ti/1.4571	MOVEMENT	: AISI304/1.4301
WINDOW	: safety glass	ACCURACY	: ± 1.6% F.S./class 1.6
DIAL	: aluminium, black figures on white	OPTIONS	: see page 57-65, electrical contacts
POINTER	: aluminium, black	POINTER DEFLECTION BETWEEN 100° AND 180°	

TYPE	MODEL	CASE DIAMETER (Ø in mm)	
		100	160
K		PBD100XK	PBD160XK
L		PBD100XL	PBD160XL
M		PBD100XM	PBD160XM
N		PBD100XN	PBD160XN
O		PBD100XO	PBD160XO
H		PBD100XH	PBD160XH
Y 2" Yoke (vert or hor)		PBD100XY	PBD160XY
OPTION		EXTRA COSTS	
Lx	LIQUID FILLED CASE: GLYCERINE (in combination with electrical contact: Ondina oil, see page 49)	PBD100Lx	PBD160Lx
"Hz" CONTACT DEVICE	EXCLUDING "Hz" CONTACT (see page 64)		

DIFFERENTIAL PRESSURE GAUGE TYPE PBD

TYPE	DRAWING	DIMENSIONS mm																																																						
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DIFFERENTIAL PRESSURE GAUGE TYPE PBD

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Y <i>PBDxxxXY</i> pipe size: Ø44 - Ø70 mm		<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #e0f2f1;"> <th rowspan="2">DIM.</th> <th colspan="4">CASE DIAMETER</th> </tr> <tr style="background-color: #e0f2f1;"> <th>100</th> <th>160</th> <th>100 + contact</th> <th>160 + contact</th> </tr> </thead> <tbody> <tr><td>A</td><td>101.5</td><td>162</td><td>101,5</td><td>162</td></tr> <tr><td>B</td><td>140**</td><td>143**</td><td>202**</td><td>206**</td></tr> <tr><td>C</td><td>57</td><td>61</td><td>57</td><td>61</td></tr> <tr><td>E</td><td>90</td><td>120</td><td>90</td><td>120</td></tr> <tr><td>T*</td><td>20</td><td>20</td><td>20</td><td>20</td></tr> </tbody> </table> <p style="text-align: center; font-size: small;">* standard connection ½"BSP or ½"NPT ** dimensions for 2" pipe size</p> <p style="text-align: center; font-size: small;">bracket for horizontal or vertical pipe mounting</p>	DIM.	CASE DIAMETER				100	160	100 + contact	160 + contact	A	101.5	162	101,5	162	B	140**	143**	202**	206**	C	57	61	57	61	E	90	120	90	120	T*	20	20	20	20																									
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OPTIONS ON PRESSURE GAUGES

TYPE	CASE DIMENSIONS (in mm)	EXTRA COSTS										
		CONNECTIONS						CASE & BEZEL				
		1/8" BSP/NPT max. 400 bar	1/4" BSP/NPT max. 1000 bar	1/2" BSP max. 2500 bar***, 1/2" NPT max. 1000 bar	3/8" BSP/NPT max. 1000 bar	M20x1.5 max. 1600 bar	M16x1.5 H.P. female max. 7000 bar**	9/16" UNF x 18 H.P. female max. 7000 bar**	AISI316L / 1.4404	BACK / FRONT FLANGE AISI316L/1.4404		
PBX	063		•							×		
	080		•						×	×		
	100			•								
	160			•					*	*		
	250			•					×	×		
PBX-SF	063		•						○	×		
	100			•					○			
	160			•					○			
PBB	100			•					×	×		
	160			•					×	×		
PCX	100			•			×	×				
	160			•			×	×				
	250			•			×	×	×	×		
PMX	100			•			×	×		×		
	160			•			×	×		×		
PPB - PPC	square		•				×	×	×	×		
	rectangular		•				×	×	×	×		
PBS - PBQ	063	ON DEMAND: SEE ALSO PAGE 23-41										
PFS - PFQ	080								×	×		
	100											
	160											
PBR - PBT	100	SEE PAGE 42-43									×	
	160											
PCD	100			•			×	×				
	160			•			×	×				
PBD	100			•			×	×	×	×		
	160			•			×	×	×	×		
PMD	100			•			×	×				
	160			•			×	×	×	×		
POD	100						×	×		×		
	160						×	×	*	×		
RPX	ALL			•					×	×		
PBX-SS	063		•						•	•		
	100			•					•	•		
	160			•					•	•		

× NOT AVAILABLE
 • STANDARD
 ○ ON DEMAND
 * Not possible in combinations with contacts or transmitters
 ** Not available with pulsation damper
 *** As per DIN16001

OPTIONS ON PRESSURE GAUGES

TYPE	CASE DIMENSIONS (in mm)	EXTRA COSTS													
		WINDOW MATERIAL			BLOW- OUT		POINTERS					MEASURING SYSTEM			
		PMMA - PLEXIGLASS	SECURIT	LAMINATED SAFETY GLASS	DISC	PLUG * (LIQUID FILLED)	ADJUSTABLE	INDEX POINTER ON GLASS	DRAG POINTER		DRAG POINTER in combination with HZ contact	OIL & GREASE FREE**	MONEL WETTED PARTS	PULSATION DAMPER AISI316 1.4401	OVERLOAD 2x F.S. other on demand
									Single	Double					
PBX	063				●	●					×	×			
	080				●	●					×	×			
	100				●	●									
	160				●	●									
	250				●	●					×		×		
PBX-SF	063	×	×	●	×	×					×	×			
	100	×	×	●	×	×					×				
	160	×	×	●	×	×					×				
PBB	100				●	●	×				×				
	160				●	●	×				×				
PCX	100				●	●				○	×	×	×	×	see page 16
	160				●	●				○	×	×	×	×	
	250				●	●				×	×	×	×	×	
PMX	100				●	●					×		×	×	see page 17-18
	160				●	●					×		×	×	
PPB	square	●	×	×	×	×					×		×		○
PPC	rectangular	●	×	×	×	×	×	×	×	×	×		×		○
PBS	063		×		●	●					×	×	○		○
PBQ	080		×	×	●	●					×	×	○		○
PFS	100				●	●					×		○		○
PFQ	160				●	●					×		○		○
PBR	100				●	●					×		○		○
PBT	160				●	●					×		○		○
PCD	100	×		×	×	×		×	×	×	×	×	×		see page 46
	160	×		×	×	×		×	×	×	×	×	×		
PBD	100				●	●					×		×		×
	160				●	●					×		×		×
PDD	100				●	●					×	×	×		×
PMD	160				●	●					×	×	×		×
POD	100				●	●					×	×	×	×	×
	160				●	●					×	×	×	×	×
RPX	ALL	●	see page 21,	×	×	×	●	×	×	×	×		×		×
RPP		●	22	×	×	×	●	×	×	×	×		×		×
PBX-SS	063	×	●	×	×	×		×	×	×	×				
	100	×	●	×	×	×		×	×	×	×				
	160	×	●	×	×	×		×	×	×	×				

× NOT AVAILABLE
 ● STANDARD
 ○ ON DEMAND
 * WITH COMPENSATING DIAPHRAGM
 ** Only PBX-SFxxxXX is suitable for use on oxygen!!