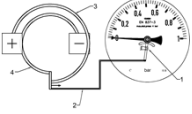
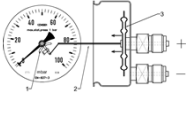
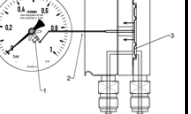
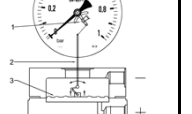
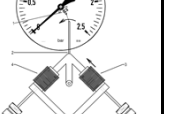
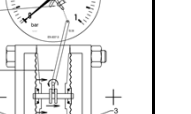


DIFFERENTIAL PRESSURE GAUGES

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 PCD

TYPE PCD, capsule system for low pressure

STANDARD MODEL

Features : capsule system
for clean air and dry gasses
case under static pressure

Liquid filling and contact devices with PCD not possible

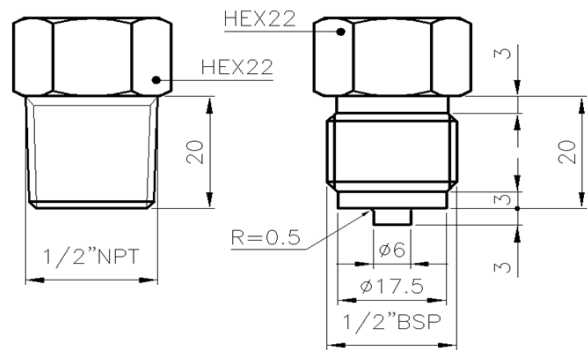
Wetted parts: capsule AISI316Ti/1.4571
st.steel; viton; NBR; macrolon
nickel plated brass movement in measuring chamber

Applications : flow measurement
heating and ventilation
filter applications
general industry
oil and gas industry
for clean air and dry gasses only



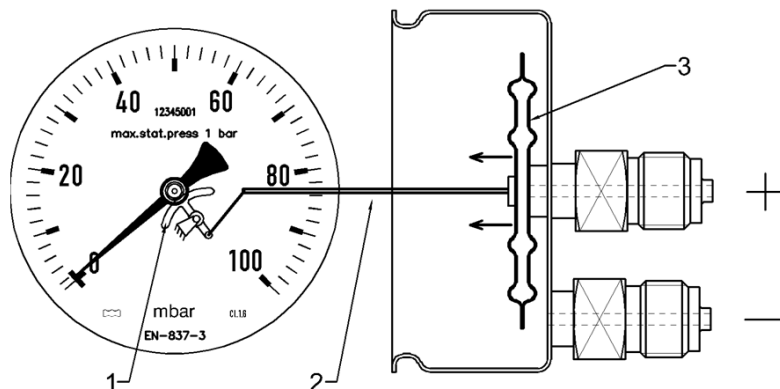
Example: PCD100XK

Type	Range	Max. stat. pressure
PCD100xx	0 - 25 mbar upto 0 - 400 mbar	1.5 bar
PCD160xx	0 - 6 mbar upto 0 - 400 mbar	1 bar



Standard connections

Options : other connections
swivel adapters
manifolds
special dials



operating principle

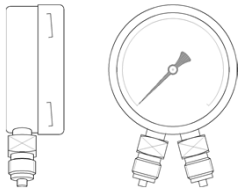
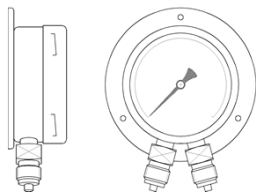
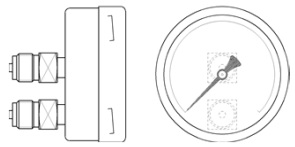
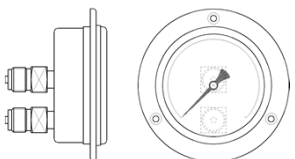
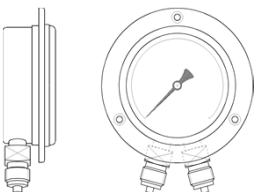
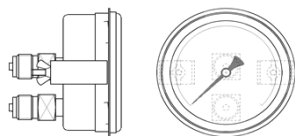
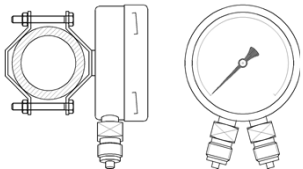
- 1 pointer mechanism
- 2 connecting rod
- 3 sensing element (capsule)

STAINLESS STEEL LOW-DIFFERENTIAL PRESSURE GAUGE, TYPE PCD

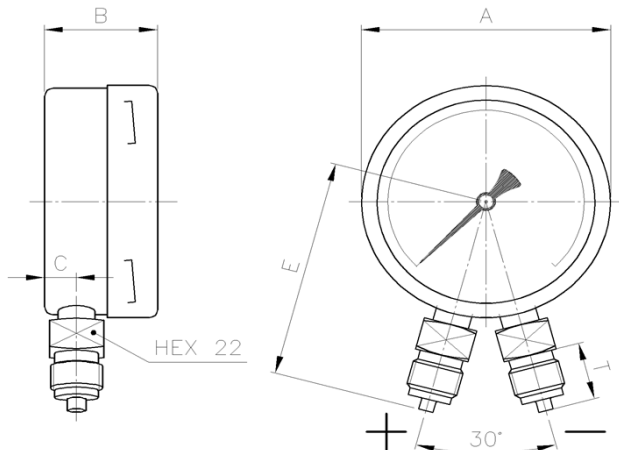
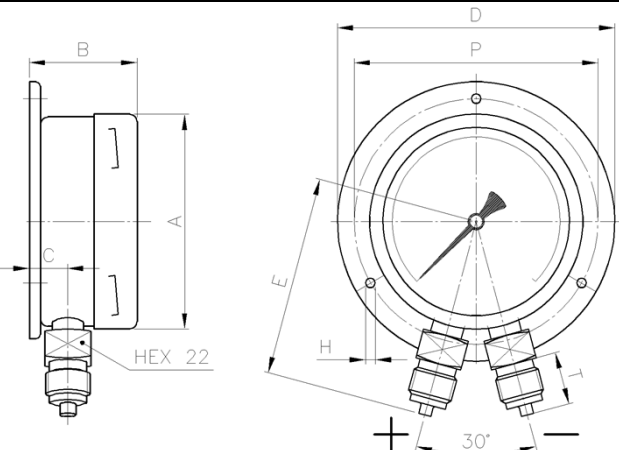
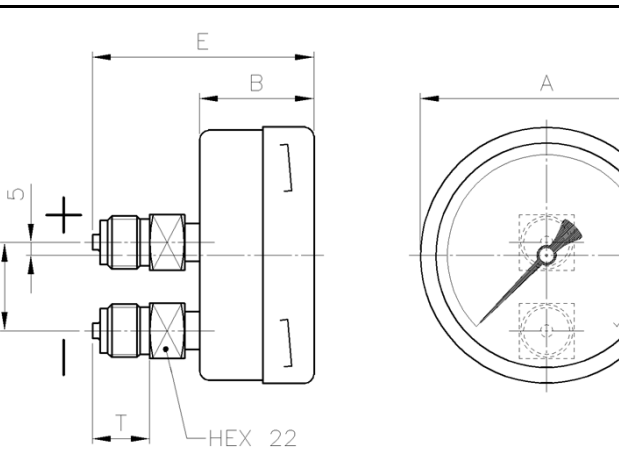
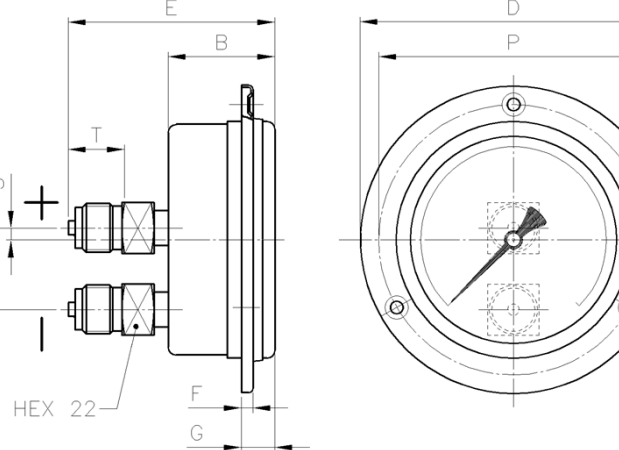
TYPE PCD, with capsule measuring element

STANDARD MODEL

CASE	: bayonet lock, AISI304/1.4301, IP-66	CONNECTION	: 2x ½"BSP or ½"NPT, AISI316L/1.4404
WINDOW	: macrolon 8 mm	MOVEMENT	: nickel plated brass
DIAL	: aluminium, black figures on white	ACCURACY	: ± 1.6% F.S./class 1.6
POINTER	: aluminium, black	OPTIONS	: see page 57-58

TYPE	MODEL	CASE DIAMETER (Ø in mm)	
		100	160
K		<i>PCD100XK</i>	<i>PCD160XK</i>
L		<i>PCD100XL</i>	<i>PCD160XL</i>
M		<i>PCD100XM</i>	<i>PCD160XM</i>
N		<i>PCD100XN</i>	<i>PCD160XN</i>
O		<i>PCD100XO</i>	<i>PCD160XO</i>
H		<i>PCD100XH</i>	<i>PCD160XH</i>
Y 2"Yoke vert or hor	 pipe Ø44mm - Ø70 mm	<i>PCD100XY</i>	<i>PCD160XY</i>
OPTION		EXTRA COSTS	
OVERRANGE PROTECTION	UPTO 10 TIMES FULL SCALE maximum 2.0 bar		
NOTES:		Contact devices / liquid filling not possible with PCD	

DIFFERENTIAL PRESSURE GAUGE TYPE PCD

TYPE	DRAWING	DIMENSIONS mm																																
K <i>PCDxxxXK</i>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">DIM.</th> <th colspan="2">CASE DIAMETER</th> </tr> <tr> <th style="text-align: center;">100</th> <th style="text-align: center;">160</th> </tr> </thead> <tbody> <tr> <td>A</td> <td style="text-align: center;">101.5</td> <td style="text-align: center;">162</td> </tr> <tr> <td>B</td> <td style="text-align: center;">51</td> <td style="text-align: center;">49</td> </tr> <tr> <td>C</td> <td style="text-align: center;">13</td> <td style="text-align: center;">13</td> </tr> <tr> <td>E</td> <td style="text-align: center;">90</td> <td style="text-align: center;">120</td> </tr> <tr> <td>T*</td> <td style="text-align: center;">20</td> <td style="text-align: center;">20</td> </tr> </tbody> </table> <p style="text-align: center; font-size: small;">* standard connection 1/2"BSP or 1/2"NPT</p>	DIM.	CASE DIAMETER		100	160	A	101.5	162	B	51	49	C	13	13	E	90	120	T*	20	20												
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DIFFERENTIAL PRESSURE GAUGE TYPE PCD

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<p>Y</p> <p><i>PCDxxxXY</i></p> <p>pipe size: Ø44 - Ø70 mm</p>		<table border="1"> <thead> <tr> <th rowspan="2">DIM.</th> <th colspan="2">CASE DIAMETER</th> </tr> <tr> <th>100</th> <th>160</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>101.5</td> <td>162</td> </tr> <tr> <td>B</td> <td>94**</td> <td>92**</td> </tr> <tr> <td>C</td> <td>56</td> <td>56</td> </tr> <tr> <td>E</td> <td>90</td> <td>88</td> </tr> <tr> <td>T*</td> <td>20</td> <td>20</td> </tr> </tbody> </table> <p>* standard connection 1/2"BSP or 1/2"NPT ** dimensions for 2" pipe size</p> <p>bracket for horizontal or vertical pipe mounting</p>	DIM.	CASE DIAMETER		100	160	A	101.5	162	B	94**	92**	C	56	56	E	90	88	T*	20	20															
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STANDARD PRESSURE RANGES FOR TYPES: PCX, PMX, PPC, PCD, PMD

PRESSURE RANGES												
(in mbar) **		SCALE DIVISION		CASE DIMENSIONS (in mm)								
		cl. 1.6	option cl. 1.0	Ø 100	Ø 160	Ø 250	72x72	96x96	144x144	192x192	72x144 144x72	192x96 96x192
-4 ...0*	0 ...4*	0.1	0.1	x	•	x	x	x	•	•	x	•
-6 ...0*	0 ...6*	0.1	0.1	x	•	x	x	x	•	•	x	•
-10 ...0*	0 ...10*	0.2	0.2	x	•	x	x	x	•	•	•	•
-16 ...0*	0 ...16*	0.5	0.5	x	•	x	x	x	•	•	•	•
-25 ...0	0 ...25	0.5	0.5	•	•	•	x	•	•	•	•	•
-40 ...0	0 ...40	1	1	•	•	•	•	•	•	•	•	•
-60 ...0	0 ...60	1	1	•	•	•	•	•	•	•	•	•
-100 ...0	0 ...100	2	2	•	•	•	•	•	•	•	•	•
-160 ...0	0 ...160	5	5	•	•	•	•	•	•	•	•	•
-250 ...0	0 ...250	5	5	•	•	•	•	•	•	•	•	•
-400 ...0	0 ...400	10	10	•	•	•	•	•	•	•	•	•
-2.5 ...1.5*	-1.5 ...2.5*	0.1	0.1	x	•	x	x	x	•	•	x	•
-4 ...2*	-2 ...4*	0.1	0.1	x	•	x	x	x	•	•	x	•
-6 ...4*	-4 ...6*	0.2	0.2	x	•	x	x	x	•	•	•	•
-10 ...6*	-6 ...10*	0.5	0.5	x	•	x	x	x	•	•	•	•
-15 ...10	-10 ...15	0.5	0.5	•	•	•	x	•	•	•	•	•
-25 ...15	-15 ...25	1	1	•	•	•	•	•	•	•	•	•
-40 ...20	-20 ...40	1	1	•	•	•	•	•	•	•	•	•
-60 ...40	-40 ...60	2	2	•	•	•	•	•	•	•	•	•
-100 ...60	-60 ...100	5	5	•	•	•	•	•	•	•	•	•
-150 ...100	-100 ...150	5	5	•	•	•	•	•	•	•	•	•
-250 ...150	-150 ...250	10	10	•	•	•	•	•	•	•	•	•
NON STANDARD RANGES:												
e.g. 0-50 mbar etc.												
DOUBLE SCALES												
e.g. mbar/mmWC, mbar/Pa, etc.												
ACCURACY												
±1.6% F.S. / class 1.6				•	•	•	•	•	•	•	•	•
±1.0% F.S. / class 1.0 *							x				x	x
Mirrorscale				x			x	x	x	x	x	x

NOT AVAILABLE STANDARD

* not for type PMX and ALL differential pressure gauges

** Scale in psi, kPa, kg/cm², mWC etc. available with no extra charge

MARKING FOR PRESSURE GAUGES

OPTIONS	EXTRA PRICE
TAG number on dial	
TAG number on AISI304/1.4301 TAG plate 55x25 mm	
Lettering on dial	
Red mark on dial	

CERTIFICATES FOR PRESSURE GAUGES

TYPE OF CERTIFICATE	NET PRICES
Certificate of Conformity acc. to EN 10204 2.2.	
Material certificate wetted parts acc. to EN 10204 3.1	
ATEX certification, including ATEX on the dial; only possible with STIKO logo for gauges without contact INSTRUMENTS WITH ATEX CERTIFICATION SHALL ALSO HAVE SAFETY GLASS AND A BLOW - OUT	PER ORDER
ATEX certification, including ATEX on the dial; only possible with STIKO logo for gauges with inductive contact INSTRUMENTS WITH ATEX CERTIFICATION SHALL ALSO HAVE SAFETY GLASS AND A BLOW - OUT	PER INSTRUMENT
Pressure (Bar)	<=2500 2500-4000 >=4000
Calibration certificate pressure gauge (standard for PBX-TG - see page 12)	Certificate traceable to international standards
Calibration certificate pressure gauge with transmitter (see page 64)	
Calibration certificates for type PBB (duplex)	

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
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!!