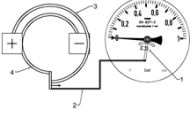
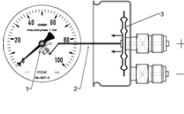
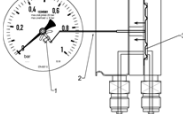
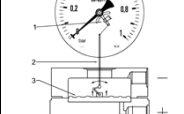
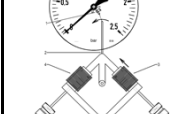
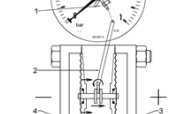


DIFFERENTIAL PRESSURE GAUGES

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 POD

TYPE POD, double diaphragm system overload safe upto 100 (250) bar

STANDARD MODEL

Features : double diaphragm system (DP cell)
 static pressure max. 100 bar
 two measuring chambers
both sides over pressure safe upto 100 bar (static pressure)
 corrosion resistance
 connections at 54 mm pitch

Wetted parts : diaphragms duratherm
 AISI316L/1.4404; Viton

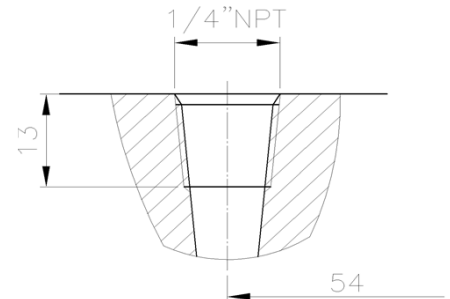


Example: POD100XK

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

Type	max. static pressure	Range
POD100xx-low	max. 100 bar	0 - 100 mbar upto
POD160xx-low		0 - 600 mbar
POD100xx	max. 100 bar	0 - 1 bar upto
POD160xx		0 - 25 bar

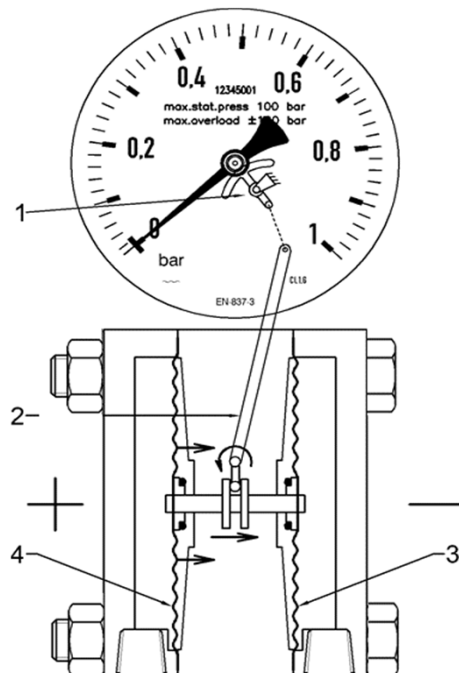
standard connections



Options : other connections (adapters)
 swivel adapters
 manifolds
 chemical seals
 electrical contacts
 special dials
 static pressure max. 250 bar

operating principle

- 1 pointer mechanism
- 2 connecting rod
- 3 - sensing diaphragm
- 4 + sensing diaphragm

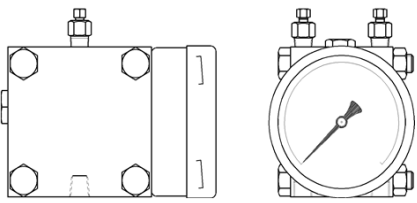
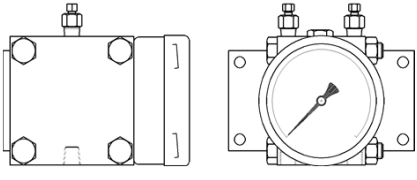
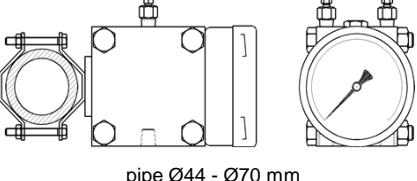


STAINLESS STEEL DIFFERENTIAL PRESSURE GAUGE, TYPE POD

**TYPE POD, with double diaphragm system, max. st. press. 100 bar
max. overload 100 bar on both sides**

STANDARD MODEL

CASE	: bayonet lock, AISI304/1.4301, IP-65	MOVEMENT	: AISI304/1.4301
WETTED PARTS	: diaphragms duratherm other AISI316L/1.4404/1.4435	ACCURACY	: ± 1.6% F.S./class 1.6
WINDOW	: safety glass	STATIC PRESS.	: max. 100 bar
DIAL	: aluminium, black figures on white	OVERLOAD	: both sides upto 100 bar *
POINTER	: aluminium, black	APPLICATION	: general and heavy industry
CONNECTION	: 2 x ¼"NPT female, AISI316L/1.4404 at pitch 54 mm	OPTIONS	: see page 57-58 electrical contacts see page 59-64 (excluding Q type contacts)

TYPE	MODEL	CASE DIAMETER (Ø in mm)			
		100 100 upto 600 mbar	100 1 upto 25 bar	160 100 upto 600 mbar	160 1 upto 25 bar
K		POD100XK-low	POD100XK	POD160XK-low	POD160XK
L		POD100XL-low	POD100XL	POD160XL-low	POD160XL
Y 2" Yoke vert. or hor.	 pipe Ø44 - Ø70 mm	POD100XY-low	POD100XY	POD160XY-low	POD160XY
OPTION		EXTRA COSTS			
Lx	ONDINA OIL FILLED CASE	POD100Lx-low	POD100Lx	POD160Lx-low	POD160Lx
* STATIC PRESSURE 250 BAR	STATIC PRESSURE UPTO 250 BAR both sides overload save upto 250 bar	x	O.D.	x	O.D.
CONNECTION	2x ½"BSP or ½"NPT male				
"Hz" CONTACT DEVICE	EXCLUDING "Hz" CONTACT (see page 59-62)	O.D.		O.D.	

DIFFERENTIAL PRESSURE GAUGE TYPE POD

TYPE	DRAWING	DIMENSIONS mm																																		
K PODxxxXKlow PODxxxXK		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">DIM.</th> <th colspan="4">CASE DIAMETER</th> </tr> <tr> <th>100</th> <th>160</th> <th>100 mm + contact</th> <th>160 mm + 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>150</td> <td>150</td> <td>202</td> <td>205</td> </tr> <tr> <td>C</td> <td>49,5</td> <td>49,5</td> <td>49,5</td> <td>49,5</td> </tr> <tr> <td>E</td> <td>49,5</td> <td>49,5</td> <td>49,5</td> <td>49,5</td> </tr> <tr> <td>T*</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> </tr> </tbody> </table> <p style="font-size: small; text-align: center;">* standard connection 1/4"NPT female</p>	DIM.	CASE DIAMETER				100	160	100 mm + contact	160 mm + contact	A	101.5	162	101.5	162	B	150	150	202	205	C	49,5	49,5	49,5	49,5	E	49,5	49,5	49,5	49,5	T*	15	15	15	15
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Y PODxxxXYlow PODxxxXY pipe size: Ø44 - Ø70 mm	<p style="text-align: center; font-size: small;">bracket for horizontal or vertical pipe mounting</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">DIM.</th> <th colspan="4">CASE DIAMETER</th> </tr> <tr> <th>100</th> <th>160</th> <th>100 mm + contact</th> <th>160 mm + 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>189**</td> <td>189**</td> <td>241**</td> <td>244**</td> </tr> <tr> <td>C</td> <td>88,5**</td> <td>88,5**</td> <td>88,5**</td> <td>88,5**</td> </tr> <tr> <td>E</td> <td>64,5</td> <td>64,5</td> <td>64,5</td> <td>64,5</td> </tr> <tr> <td>T*</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> </tr> </tbody> </table> <p style="font-size: small; text-align: center;">* standard connection 1/4"NPT female ** dimensions for 2" pipe size</p>	DIM.	CASE DIAMETER				100	160	100 mm + contact	160 mm + contact	A	101.5	162	101.5	162	B	189**	189**	241**	244**	C	88,5**	88,5**	88,5**	88,5**	E	64,5	64,5	64,5	64,5	T*	15	15	15	15
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STANDARD PRESSURE RANGES FOR TYPES:

PBX, PBX-TG, PBX-SF, PBB, PMX, PPB, PBS, PFS, PBQ, PFQ, PBR, PBT, RPX, RPP, PBX-SS, DIFFERENTIAL PRESSURE GAUGES

PRESSURE RANGES				EXTRA COSTS											
(in bar)*****	SCALE DIVISION			CASE DIMENSIONS (in mm)											
	cl. 1.0 cl. 1.6	OPTION		Ø 63	Ø 80	Ø 100	Ø 160	Ø 250	72x72	96x96	144x144	192x192 280x280 380x380 400x300 500x400	72x144 144x72	192x96 96x192	
		cl. 0.6 cl. 0.5	only PBX-TG cl. 0.3 cl. 0.25												
-1 ...0	0.02	0.005	0.005												
-1 ...0.6	0.05	0.01	0.005												
-1 ...1.5	0.05	0.02	0.01												
-1 ...3	0.1	0.02	0.01												
-1 ...5	0.1	0.05	0.02												
-1 ...9	0.2	0.05	0.05												
-1 ...15	0.5	0.1	0.05												
-1 ...24	0.5	0.2	0.1												
0 ...0.6	0.01	x	x												
0 ...1	0.02	0.005	0.005												
0 ...1.6	0.05	0.01	0.005												
0 ...2.5	0.05	0.02	0.01												
0 ...4	0.1	0.02	0.01												
0 ...6	0.1	0.05	0.02												
0 ...10	0.2	0.05	0.05												
0 ...16	0.5	0.1	0.05												
0 ...25	0.5	0.2	0.1												
0 ...40	1	0.2	0.1												
0 ...60	1	0.5	0.2												
0 ...100	2	0.5	0.5												
0 ...160	5	1	0.5												
0 ...250 CE	5	2	1												
0 ...400 CE	10	2	1												
0 ...600 CE	10	5	2												
0 ...1000 CE	20	5	5												
0 ...1600 CE	50	x	x	x	x			x					x	x	
0 ...2000 CE	50	x	x	x	x			x	x	x	x	x	x	x	
0 ...2500* CE	50	x	x	x	x			x	x	x	x	x	x	x	
0 ...3000* CE	50	x	x	x	x			x	x	x	x	x	x	x	
0 ...4000** CE	50	x	x	x	x		See p14	x	x	x	x	x	x	x	
0 ...5000***, 0 ... 6000*** and 0 ...7000*** - see page 14 CE															
NON STANDARD RANGES															
e.g. 0-7 bar or 0-110 psi															
DOUBLE SCALES															
e.g. bar/psi, bar/kPa, etc.															
FREON SCALES e.g. R12, R134A, R22, R404A, R407C, R502, R504, R717, NH3															
ACCURACY															
±1.6% F.S. (class 1.6)				.	.	x	x	x	.	.	x	x	x	x	
±1.0% F.S. (class 1.0)						
±0.6 / 0.5 %F.S. (class 0.6 or 0.5)***				x	x				x	x					
±0.3 / 0.25 %F.S. (class 0.3 or 0.25) ****				x	x	x	****	****	x	x	x	x	x	x	
Mirrorscale (standard for PBX-TG, page 12)				x	x	x			x	x	x	x	x	x	
TRM scales															
0 ...100 % lin.															
0 ...10 square root															
0.2 ...1 bar															
3 ...15 psi															
20 ...100 kPa															
x	NOT AVAILABLE * ELEMENT CrMo52 i.o. AISI316Ti/1.4571 *** ONLY FOR TYPE PBX OR PBX-SF														
•	STANDARD ** ELEMENT NiSpan C i.o. AISI316Ti/1.4571 ****ONLY FOR TYPE PBX-TG - see page 12														
***** Scale in Psi, kPa, kg/cm², mWC etc. available with no extra charge															

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	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, 22	×	×	×	●	×	×	×	×		×		×	
RPP		●		×	×	×	●	×	×	×	×		×		×	
PBX-SS	063	×	●	×	×	×		×	×	×	×					
	100	×	●	×	×	×		×	×	×	×					
	160	×	●	×	×	×		×	×	×	×					

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