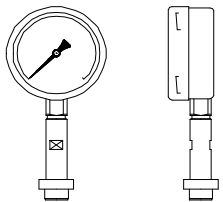
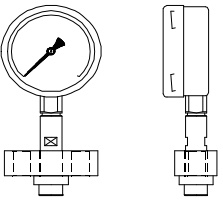


# ALL-STAINLESS" PRESSURE GAUGES FOR HOMOGENISERS

## TYPE PBR, chemical seal with flush diaphragm and built-in pulsation dampener

### STANDARD MODEL

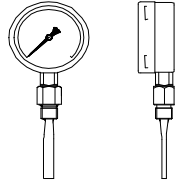
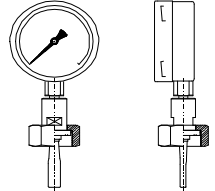
<b>CASE</b>	: bayonet lock, AISI304/1.4301, IP-65 standard with blow-out device	<b>RANGE</b>	: 0 + 25 upto 0 + 60 bar, standard acc. to EN 837-1 (see page 55) higher pressure ranges (max. 1000 bar)
<b>WETTED PARTS</b>	: flush diaphragm, AISI316Ti/1.4571	<b>ACCURACY</b>	: case Ø 100 and Ø 160 mm: ±1.0% F.S. /class 1.0
<b>WINDOW</b>	: mineral glass 4 mm	<b>Tprocess</b>	: -20/+120°Celcius (-40°C upto +250°C on demand)
<b>DIAL</b>	: aluminium, black figures on white	<b>OPTIONS</b>	: see page 57-58, electrical contact or transmitter 4-20 mA, 0-20mA, 0-10Vdc: see page 59-65
<b>POINTER</b>	: aluminium, black		
<b>MOVEMENT</b>	: stainless steel AISI304/1.4301		

TYPE	MODEL	CONNECTION	CASE DIAMETER xxx (Ø in mm)			
			100		160	
PBRxxxXA-01		WITHOUT FLANGE				
PBRxxxXA-02		WITH FLANGE 95x43x28 mm with 2 holes Ø17 mm on pitch 60 mm				

## TYPE PBT, finger type chemical seal with built-in pulsation dampener

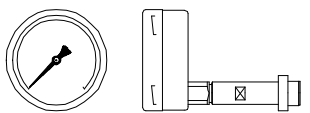
### STANDARD MODEL

<b>CASE</b>	: bayonet lock, AISI304/1.4301, IP-65 standard with blow-out device	<b>RANGE</b>	: 0 + 16 upto 0 + 60 bar, standard acc. to EN 837-1 (see page 55) high pressure ranges (max. 1000 bar)
<b>WETTED PARTS</b>	: tubular probe ±100 mm, AISI316Ti/1.4571	<b>ACCURACY</b>	: case Ø 100 and Ø 160 mm: ±1.0% F.S. /class 1.0
<b>WINDOW</b>	: mineral glass 4 mm	<b>Tprocess</b>	: -20/+120°Celcius (-40°C upto +250°C on demand)
<b>DIAL</b>	: aluminium, black figures on white	<b>OPTIONS</b>	: see page 57-58, electrical contact or transmitter 4-20 mA, 0-20mA, 0-10Vdc: see page 59-65
<b>POINTER</b>	: aluminium, black		
<b>MOVEMENT</b>	: stainless steel AISI304/1.4301		

TYPE	MODEL	CONNECTION	CASE DIAMETER xxx (Ø in mm)			
			100		160	
PBTxxxXA-01		½" BSP male				
PBTxxxXA-02		¾" BSP male				
PBTxxxXA-03		1" BSP male				
PBTxxxXA-04		¾" BSP female				
PBTxxxXA-05		1" BSP female				
PBTxxxXA-06		1¼" BSP female				

### OPTIONS FOR TYPE PBR AND PBT

### EXTRA COSTS

PBRxxxXC-xx PBTxxxXC-xx	  EXAMPLE: PBRxxxXC-01	OFF-CENTRE BACK CONNECTION				
PBxxxxLx-xx	CASE GLYCERINE FILLED (in combination with electrical device: Ondina oil see page 64)					

**"ALL STAINLESS" PRESSURE GAUGES FOR HOMOGENISERS**

TYPE	DRAWING	DIMENSIONS mm																												
PBR	<p align="center"><b>Flush diaphragm</b></p>	<table border="1"> <thead> <tr> <th>Flange</th> <th>PN</th> <th>x</th> <th>x1</th> <th>x2</th> <th>d</th> <th>k</th> <th>Flange</th> </tr> </thead> <tbody> <tr> <td>With</td> <td>1000</td> <td>89</td> <td>12.3</td> <td>10</td> <td>23.8</td> <td>35</td> <td rowspan="2">95x43x28, holes ø17mm, pitch 60</td> </tr> <tr> <td>Without</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Flange	PN	x	x1	x2	d	k	Flange	With	1000	89	12.3	10	23.8	35	95x43x28, holes ø17mm, pitch 60	Without											
			Flange	PN	x	x1	x2	d	k	Flange																				
With	1000	89	12.3	10	23.8	35	95x43x28, holes ø17mm, pitch 60																							
Without																														
PBT	<p align="center"><b>Finger Type male connection</b></p>	<table border="1"> <thead> <tr> <th>DN</th> <th>PN bar</th> <th>x</th> <th>x1</th> <th>L</th> <th>g</th> <th>d</th> <th>s</th> <th>HEX</th> </tr> </thead> <tbody> <tr> <td>½"BSP</td> <td rowspan="3">1000</td> <td>55</td> <td>20</td> <td rowspan="3">102</td> <td rowspan="3">½"BSP</td> <td rowspan="3">13</td> <td rowspan="3">6</td> <td>27</td> </tr> <tr> <td>¾"BSP</td> <td>55</td> <td>27</td> <td>36</td> </tr> <tr> <td>1"BSP</td> <td>56</td> <td>21</td> <td>41</td> </tr> </tbody> </table>	DN	PN bar	x	x1	L	g	d	s	HEX	½"BSP	1000	55	20	102	½"BSP	13	6	27	¾"BSP	55	27	36	1"BSP	56	21	41		
			DN	PN bar	x	x1	L	g	d	s	HEX																			
			½"BSP	1000	55	20	102	½"BSP	13	6	27																			
¾"BSP	55	27	36																											
1"BSP	56	21	41																											
PBT	<p align="center"><b>Finger Type female connection</b></p>	<table border="1"> <thead> <tr> <th>DN</th> <th>PN bar</th> <th>h</th> <th>h1</th> <th>h2</th> <th>L</th> <th>d</th> <th>d1</th> <th>d2</th> <th>s</th> <th>HEX</th> </tr> </thead> <tbody> <tr> <td>¾"BSP</td> <td rowspan="3">1000</td> <td>15</td> <td rowspan="3">25</td> <td rowspan="3">30</td> <td rowspan="3">112</td> <td rowspan="3">13</td> <td rowspan="3">15</td> <td rowspan="3">20</td> <td rowspan="3">6</td> <td>32</td> </tr> <tr> <td>1"BSP</td> <td>19</td> <td>41</td> </tr> <tr> <td>1¼"BSP</td> <td>19</td> <td>50</td> </tr> </tbody> </table>	DN	PN bar	h	h1	h2	L	d	d1	d2	s	HEX	¾"BSP	1000	15	25	30	112	13	15	20	6	32	1"BSP	19	41	1¼"BSP	19	50
			DN	PN bar	h	h1	h2	L	d	d1	d2	s	HEX																	
			¾"BSP	1000	15	25	30	112	13	15	20	6	32																	
1"BSP	19	41																												
1¼"BSP	19	50																												

## 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 <b>CE</b>	5	2	1												
0 ...400 <b>CE</b>	10	2	1												
0 ...600 <b>CE</b>	10	5	2												
0 ...1000 <b>CE</b>	20	5	5												
0 ...1600 <b>CE</b>	50	x	x	x	x			x					x	x	
0 ...2000 <b>CE</b>	50	x	x	x	x			x	x	x	x	x	x	x	
0 ...2500* <b>CE</b>	50	x	x	x	x			x	x	x	x	x	x	x	
0 ...3000* <b>CE</b>	50	x	x	x	x			x	x	x	x	x	x	x	
0 ...4000** <b>CE</b>	50	x	x	x	x		See p14	x	x	x	x	x	x	x	
0 ...5000***, 0 ... 6000*** and 0 ...7000*** - see page 14 <b>CE</b>															
<b>NON STANDARD RANGES</b>															
e.g. 0-7 bar or 0-110 psi															
<b>DOUBLE SCALES</b>															
e.g. bar/psi, bar/kPa, etc.															
FREON SCALES e.g. R12, R134A, R22, R404A, R407C, R502, R504, R717, NH3															
<b>ACCURACY</b>															
±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	
<b>TRM scales</b>															
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															

## 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!