

E-06.13

PBX100, PBX150



These instruments are designed for use in food, beverage, pharmaceutical, cryogenics, chemical and petrochemical processing industries, and in conventional and nuclear power plants. They are built to resist the most severe operating conditions created by the ambient environment and the process medium. The advantages of filling the case of the instrument with a dampening fluid are reduced pointer fluctuation, reduced wear of rotating parts of the movement, avoidance of contamination to the internal parts by corrosive atmosphere gases, avoidance of condensation of the front window lens, ensuring the instruments are suitable for use on equipment with very high pulsation and severe vibration.

Functional and constructive characteristics

PBX100X..., PBX150X...

Accuracy class : 1 as per EN 837.1.
Ambient temperature : -25...+65°C.
Process fluid temperature : -40...+150°C.
Overpressure limit : 30% of full scale value.
Socket material : AISI 316L st.st.
Elastic element : AISI 316L st.st.
Case : stainless steel.
Ring : st.st., bayonet lock.
Window : glass.
Movement : stainless steel.
Dial : aluminium, white with black marking.
Special dial : ranges different from standard, available on request.
Pointer : aluminium alloy.
Gasket, blow out vent and filling plug : EPDM.

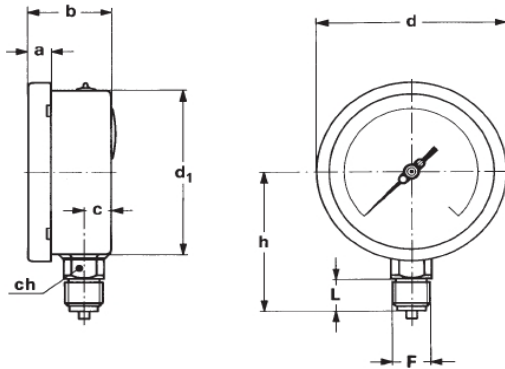
PBX100L..., PBX150L... Liquid filled

Ambient temperature : depending of liquid filling.
Process fluid temperature : +65°C.
Damping liquids : glycerine 98% or silicon oil.
Other characteristics : as Standard Model.

Options : on request

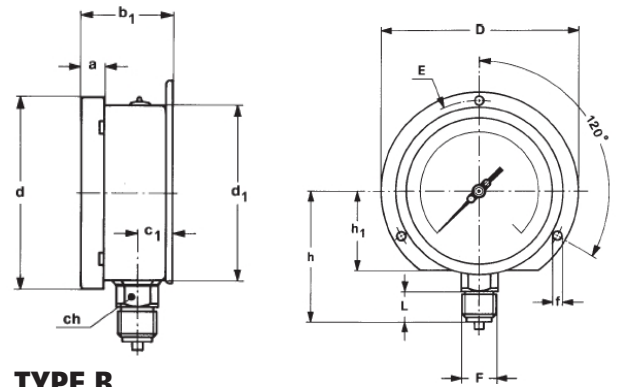
PBX100, PBX150

TYPE AND DIMENSIONS



TYPE A

Stem mounting; lower connection

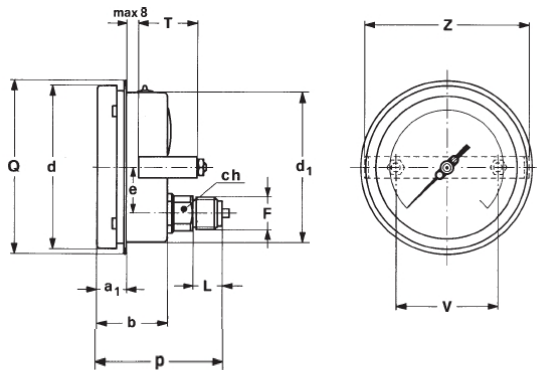


TYPE B

Surface mounting, back flange; lower connection

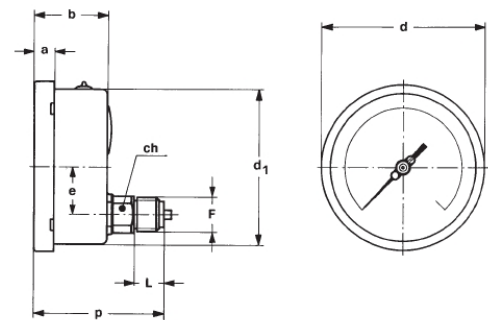
DS	Type	a	b	b ₁	c	c ₁	d	d ₁	f	h ₁	d	e	ch
100	A-B	13	48.5	52.5	15	19	110.5	101	6	52	130	118	22
150	A-B	15	50.5	54	15.5	19	161	149.5	6	85	190	175	22

(dimensions in mm.)



TYPE H

Flush mounting, «U»-Clamp; back connection

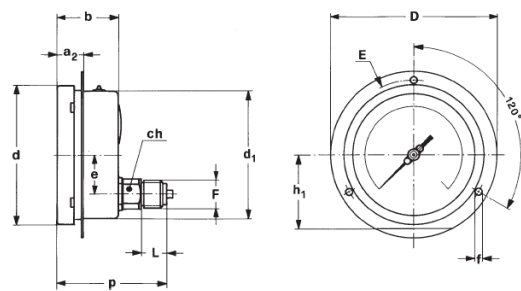


TYPE C

Stem mounting; back connection

DS	Type	a	a ₁	a ₂	b	d	d ₁	e	f	h ₁	D	E	Q	T	V	Z	ch
100	H-C-J	13	20	20	48.5	110.5	101	31	6	/	132	118	112	41.5	70	112	22
150	H-C-J	15	20.5	25.5	50.5	161	149.5	48	6	85	190	175	164	41.5	106	155	22

(dimensions in mm.)



TYPE J

Flush mounting, front flange; back connection

PROCESS CONNECTIONS

F	CODE	DS 100			DS 150		
		L	h	p	L	h	p
1/4" BSP M	21M	13	79	85	13	110	83,5
1/4" NPT M	23M	15	81	87	15	112	85,5
3/8" BSP M	31M	16	86	87	16	117	85,5
3/8" NPT M	33M	16	86	87	16	117	85,5
1/2" BSP M	41M	20	86	87	20	117	85,5
1/2" BSP M tapered	42M	20	86	87	20	117	85,5
1/2" NPT M	43M	20	86	87	20	117	85,5
M20 x 1,5 M	97M	20	86	87	20	117	85,5

(dimensions in mm.)

PBX100, PBX150

RANGES - «E» = Available ranges for PBX100; «G» = available ranges for PBX150.

PRESSURE

TAB. 1

RANGE	bar	kPa	MPa	bar ext.	bar ext.	bar ext.
				psi int.	kPa int.	MPa int.
0...0,6 (1)	E G			E G	E G	
0...1	E G		E G	E G	E G	
0...1,6	E G		E G	E G	E G	
0...2,5	E G		E G	E G	E G	
0...4	E G		E G	E G	E G	
0...6	E G		E G	E G	E G	
0...10	E G		E G			E G
0...16	E G		E G			E G
0...25	E G		E G			E G
0...40	E G		E G			E G
0...60	E G	E G	E G			E G
0...100	E G	E G	E G			E G
0...160	E G	E G	E G			E G
0...250	E G	E G				E G
0...300	E					
0...400	E G	E G		E G		E G
0...600	E G	E G		E G		E G
0...1000	E G	E G		E G		E G
0...1600	E G	E G		E G		E G
0...2500		E G				

(1) not available for PBX100-150L_ (filled)

TAB. 2

RANGE	psi	psi int.	psi ext.	psi ext.
		kPa ext.	bar int.	Kg/cm ² int.
0...15	E G	E G	E G	E G
0...30	E G	E G	E G	E G
0...60	E G	E G	E G	E G
0...100	E G	E G	E G	E G
0...160	E G	E G	E G	E G
0...200	E G	E G	E G	E G
0...300	E G	E G	E G	E G
0...400	E G	E G	E G	E G
0...600	E G	E G	E G	E G
0...1000	E G	E G	E G	E G
0...1500	E G	E G	E G	E G
0...2000	E G	E G	E G	E G
0...3000	E G	E G	E G	E G
0...4000	E G	E G	E G	E G
0...5000	E G	E G	E G	E G
0...6000	E G	E G	E G	E G
0...10000	E G	E G	E G	E G
0...15000	E G	E G	E G	E G
0...20000	E G	E G	E G	E G
0...30000 (1)	E	E	E	E

(1) Working pressure: max 75% of the full scale value over pressure limit: 10% of the full scale value

VACUUM & COMPOUND

TAB. 4

RANGE	bar	kPa	bar ext.	bar ext.
			psi int.*	kPa int.
-1...0	E G		E G	E G
-1...0,6	E G		E G	E G
-1...1,5	E G		E G	E G
-1...3	E G		E G	E G
-1...5	E G		E G	E G
-1...9	E G		E G	E G
-1...15	E G		E G	E G
-1...24	E G		E G	E G
-100...0		E G		
-100...150		E G		
-100...300		E G		
-100...500		E G		
-100...900		E G		
-100...1500		E G		
-100...2400		E		

* vacuum unit of measurement: "inHg"

TAB. 3 - Receiver

External	Internal	Internal
	0+100 linear	0+10 quadratic
0,2...1 bar	E G	E G
0,2...1 Kg/cm ²	E G	E G
3...15 psi	E G	E G
20...100 kPa	E G	E G

TAB. 5

RANGE	psi*	psi int.*	psi ext.*	psi ext.*
		kPa ext.	bar int.	Kg/cm ² int.
-30...0	E G	E G	E G	E G
-30...15	E G	E G	E G	E G
-30...30	E G	E G	E G	E G
-30...150	E G	/	E G	/

* vacuum unit of measurement: "inHg"

TAB. 6 - NH₃

bar external	NH ₃ internal	
-1...5	-70...+9°C	E
-1...9	-70...+25°C	E
-1...15	-70...+40°C	E
-1...24	-70...+56°C	E

PBX100, PBX150

ACCESSORIES

Diaphragm seals :

A complete range of diaphragm seals are available with a choice of materials of construction. Specifically for corrosive and difficult process fluids applications.

Adjustable overload protector :

This is useful for installations which may generate high overpressures; the pressure gauge is automatically excluded at the pre-set pressure and cut in again automatically when the operating pressure returns to normal.

Valves :

On request.

Pigtail and siphons :

Recommended with temperatures of 65°C (150°F) or over.

Pressure snubbers :

On request.

Modifications reserved

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