

Safety Pressure Gauges

“Solid-Front”

E-06.13

RUEGER

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PBPSF115



These Solid-Front instruments are built in accordance with safety specifications of ASME B40.1. The safety construction consists of a stainless steel solid-front safety cell placed behind the scale, which welding to socket gives to instrument an exceptional strength. Whenever, due to leaks, an internal pressure is created or the elastic element is broken the safety cell protects the front and sides, meanwhile the blow out back is released from the case. 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.

Functional and constructive characteristics

PBPSF115X...

Accuracy : Grade 2A as per ASME B40.1 (+/-0.5% of span).

Ambient temperature : -25...+65°C.

Process fluid temperature : -30...+150°C max.

Overpressure limit : 30% of full scale value.

Socket material : AISI 316L st.st.

Elastic element : AISI 316L st.st.

Case and blow out disk : polyamide, optional phenolic.

Ring : reinforced.

Safety cell : stainless steel

Window : glass.

Movement : stainless steel.

Dial : aluminium, white with black marking.

Pointer : aluminium alloy.

Gaskets : EPDM.

PBPSF115L...,Liquid filled - Lower connection only

Accuracy : Grade 1A as per ASME B40.1 (+/-1.0% of span).

Ambient temperature : depending of liquid filling.

Process fluid temperature : max +65°C.

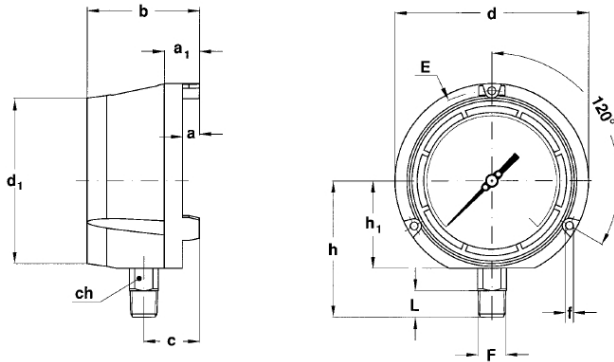
Damping liquids : glycerine 98% or silicon oil.

Other characteristics : as type PBPSF115X...

Options : on request

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TYPE AND DIMENSIONS



PROCESS CONNECTIONS

F	L	h
1/4" NPT	15	98.5
1/2" NPT	20	103.5

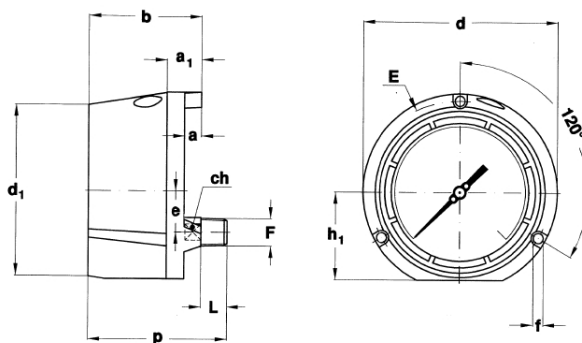
(dimensions in mm)

TYPE A

Stem mounting; lower connection

Type	a	a ₁	b	c	d	d ₁	E	f	h ₁	ch
A	13	27	86	42	148	126	137	6.5	66.5	22

(dimensions in mm.)



Dry version - Back connection only

Case : phenolic resin.

Separating wall : AISI 304 st.st.

Safety cell : not available.

Other characteristics : as type PBPSF115X...

TYPE C

Stem mounting; back connection

Type	a	a ₁	b	d	d ₁	e	E	f	h ₁	p	ch
C	13	27	86	148	129	31	137	6	66.5	106	17

(dimensions in mm.)

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RANGES

PRESSURE

TAB. 1

Range	bar	kPa	MPa	bar ext.	psi int.
0÷0.6	◆(1)		◆	◆(1)	
0÷1	◆		◆	◆	
0÷1.6	◆		◆	◆	
0÷2.5	◆		◆	◆	
0÷4	◆		◆	◆	
0÷6	◆		◆	◆	
0÷10	◆		◆	◆	
0÷16	◆		◆	◆	
0÷25	◆		◆	◆	
0÷40	◆		◆	◆	
0÷60	◆	◆(1)	◆	◆	
0÷100	◆	◆	◆	◆	
0÷160	◆	◆	◆	◆	
0÷250	◆	◆		◆	
0÷300	◆			◆	
0÷400	◆	◆		◆	
0÷600	◆	◆		◆	
0÷1000	◆	◆		◆	
0÷1600	◆	◆		◆	
0÷2500		◆			

(1) not available with liquid filling.

TAB. 2

Range	psi	psi int.	psi ext.
		kPa ext.	bar int.
0÷15	◆	◆	◆
0÷30	◆	◆	◆
0÷60	◆	◆	◆
0÷100	◆	◆	◆
0÷160	◆	◆	◆
0÷200	◆	◆	◆
0÷300	◆	◆	◆
0÷400	◆	◆	◆
0÷600	◆	◆	◆
0÷800	◆	◆	◆
0÷1000	◆	◆	◆
0÷1500	◆	◆	◆
0÷2000	◆	◆	◆
0÷3000	◆	◆	◆
0÷4000	◆	◆	◆
0÷5000	◆	◆	◆
0÷6000	◆	◆	◆
0÷10000	◆	◆	◆
0÷15000	◆	◆	◆
0÷20000	◆	◆	◆
0÷30000 (2)	◆		◆

VACUUM & COMPOUND

TAB. 3

Range	bar	kPa
-1÷0	◆	
-1÷0.6	◆	
-1÷1.5	◆	
-1÷3	◆	
-1÷5	◆	
-1÷9	◆	
-1÷15	◆	
-1÷24	◆	
-100÷0		◆
-100÷150		◆
-100÷300		◆
-100÷500		◆
-100÷900		◆
-100÷1500		◆
-100÷2400		◆

TAB. 4

Range	psi*	psi int.*
		kPa ext.
-30/0	◆	◆
-30/15	◆	◆
-30/30	◆	◆
-30/60	◆	◆
-30/30	◆	◆
-30/150	◆	◆

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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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