Chemical / Diaphragm Seal Unit

MODEL : PGCSU

Features

Where isolation is essential

- Corrosive process fluid.
- Process fluid having sediments or is viscous.
- Process fluid has a tendency to solidify, freeze or crystallise at lower temperatures which may block the sensing element.
- Process fluid is hazardous.
- The diaphragm seal transmits process pressure to the instrument through a diaphragm. The instrument side of the diaphragm is filled with appropriate fluid. As liquids are incompressible, pressure is hydraulically transmitted to the pressure sensing element.
- Proper selection of diaphragm seal is important after reviewing the application.

Specifications

The generally offered MOC is as follows :

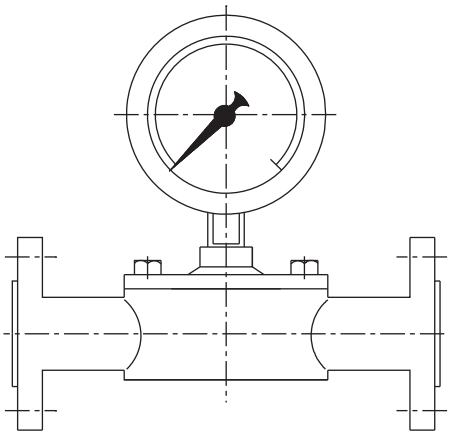
Upper housing : CS, SS304. SS316
Diaphragm : SS316L, PTFE, PTFE coated, Titanium, Hastelloy B, C, Nickel, Monel, Tantalum
Lower housing : SS304, SS316, SS304L, SS316L,Titanium, Nickel, PTFE coated / lined, PTFE block, Hastelloy B, C.
Filling Fluid : NameApplication range
Silicone oil(-) 40°C to 200°C
Fluorolube(-) 50°C to 150°C
Glycerine0 to 80°C
Paraffine0 to 85°C
DC-704 0 to 339°C
Halocarbon(-) 25°C to 225°C
Food grade oil 0 to 150°C
Water 20 to 80°C

Note : 1) Purchaser must confirm the suitability of the MOC suggested.
2) Capillary for remote seal can be offered.

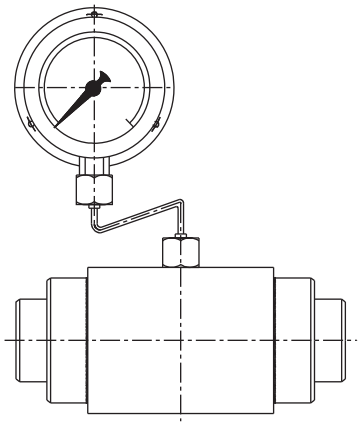
Different types of diaphragm seal offered:

1) Direct mounted
2) Inline flow through type with flanged connection.
3) Inline flow through type (jacketed)
4) Inline flow through type (weld in)
5) Extended diaphragm seal
6) Pan cake type diaphragm seal
7) I-Section type

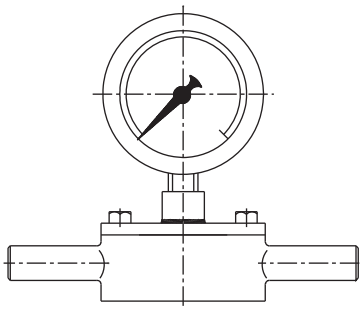
Dimensions



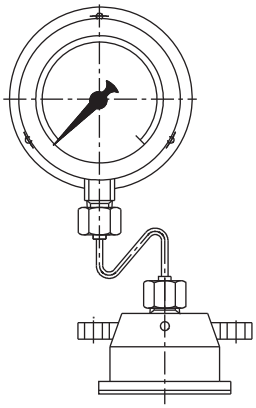
1) In-line flow through type
(End connection flanged)
For application in Waste Water, Pulp & Paper, Synthetic Fibre, where fluid is viscous and will contain solid undissolved particles.



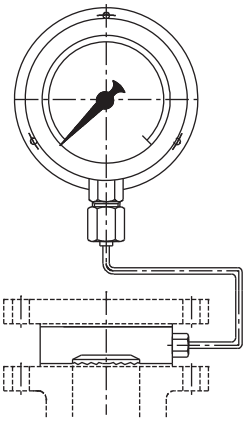
2) In-line flow through type
(Jacketed)
For applications where process fluid is likely to solidify as temperature reduces. Jacketing provided for steam or thermic fluid.
(End connection - weld in shown above)



3) In-line Flow through type
(Weld in)
End pipe suitable for butt welding to the process pipe. For application in Waste Water, Synthetic Fibre, Pulp & paper, etc.



4) Extended diaphragm seal
Diaphragm flushed to the process. Extension depends upon nozzle standout. Allows mounting in insulated vessels or pipelines.



5) Pan Cake type diaphragm seal
Sandwiched between loose flange (back-up flange) and nozzle flange. For fluids which are corrosive, contaminated, etc.

Ordering Information

PRISMA Instruments & Gauge Bourdon France

MODEL : PGCSU

MOUNTING

DM Direct mounted
IF Inline flow through type with flanged connection.
IJ Inline flow through type (jacketed)
IJ Inline flow through type (weld in)
ED Extended diaphragm seal
PC Pan cake type diaphragm seal
IS I-Section type

TOP CHAMBER

C CS
S4 SS304
S6 SS316

DIAPHRAGM

S6 SS316
SL SS316L
ST SS316Ti
SP SS316+PTFE
S1 SS321
HB Hastelloy B
HC Hastelloy C
M4 Monel 400
TI Titanium
NI Nickel
TA Tantalum
SI Silver
GP Gold Plated
GL Gold
PT PTFE

BOTTOM CHAMBER

S6 SS316
SL SS316L
ST SS316Ti
SP SS316+PTFE
S1 SS321
M4 Monel 400
18 Incoloy 800
HB Hastelloy B
HC Hastelloy C
TI Titanium
NI Nickel
TA Tantalum

CONNECTION

SIZE	TYPE	MALE / FEMALE	METRIC THREADS
6 1/4"	NT NPT	M Male	18 M - M 18 x 1.5
10 3/8"	BP BSP	F Female	20 M - M 20 x 1.5
15 1/2"	BT BSPT		24 M - M 24 x 1.5
20 3/4"	PF PF		27 M - M 27 x 2
25 1"	GS Gas		33 M - M 33 x 2
32 1.1/4"	NS NPSM		X X - Any other
40 1.1/2"			

OPTION

CE CE Certificate
F Flanged process connection **
FC Flushing connection
FR Flushing Ring
L Nil
O O_2 Cleaning
P Capillary for mounting "S" *
W Welded Diaphragm

FILLING FLUID

S Silicone oil
F Fluorolube
G Glycerine
P Paraffine
D DC-704
H Halocarbon
V Food grade oil
W Water

F - FLANGED PROCESS CONNECTION **

Size	Code	Rating	Code	Facing	Code
½"	15	150#	A	RF	RF
¾"	20	300#	B	FF	FF
1"	25	600#	C	RTJ	RTJ
1½"	40	900#	D	LT	LT
2"	50	1500#	E	LG	LG
3"	80	2500#	F		

* Length of capillary to be specified in bracket e.g. P (3) i.e. 3 mtr. capillary
** For Flanged Process Connection refer the table (mentioned separately)