

In-Line Flow Through Type Diaph. Seal

Model : CSU-IFW / IFF / IJW / IJF

GAUGES BOURDON

F R A N C E

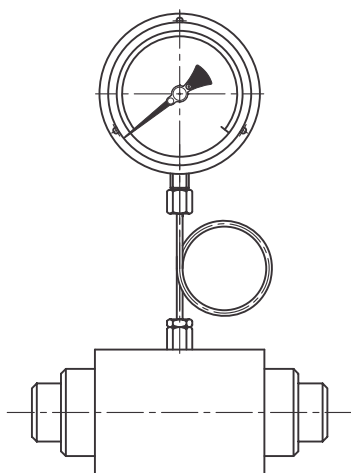
Features

In-Line Diaphragm Seal:

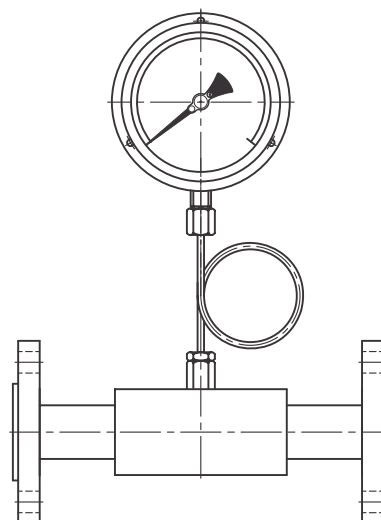
In line Diaphragm Seals are installed directly in the process flow line. These are referred to as "In-line" or "Flow-through" types. This diaphragm seal is so designed that the diaphragm is essentially flush with the flow stream and thus continually washed by the process media. In-line Diaphragm Seals are recommended when the process media is Slurry or a liquid that contains a solid component or viscous.

Jacketed In-Line Diaphragm Seal:

Jacketed In line Diaphragm Seals are used when the process fluid has a freezing point at normal ambient temperatures. Jacket helps the Diaphragm Seal to externally heat the process fluid by means of Steam or Thermic Fluid. Thus it prevents the process fluid from solidifying and keeps the same at elevated temperature as per the requirement.



Jacketed In-Line Diaphragm Seal (Weld in)



In-Line Diaphragm Seal (Flanged)

Optional Feature

- **Capillary** for Remote mounting of the Pressure Instrument
- **Stud / Nut & Gasket** for assembling the Diaphragm Seal with Process Flange.

Note: This catalogue indicates the general specifications used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Ordering Information

IN LINE DIAPHRAGM SEAL (Flange or Weld in Connection)

MODEL: CSU- [] [] [] [] [] []

CONNECTION TYPE	
IFW	In line flow through type, Weld in connection
IFF	In line flow through type, Flanged connection
IJW	In line flow through type, Jacketed, Weld in connection
IJF	In line flow through type, Jacketed Flanged connection

DIAPHRAGM	
S6S	SS 316
S6L	SS 316L
321	SS 321
xxx	Other (Please Specify)

WETTED PARTS	
S6S	SS 316
S6L	SS 316L
321	SS 321
xxx	Other (Please Specify)

OPTION	
4AR(*)	SS 316 Capillary, SS 304 Armoured
4PV(*)	SS 316 Capillary, SS 304 Armoured+PVC Covered
6AR(*)	SS 316 Capillary, SS 316 Armoured
6PV(*)	SS 316 Capillary, SS 316 Armoured+PVC Covered
CLT	Cooling Tower
GSK	Gasket
STN	Stud & Nuts
L	Nil
XXX	Other (Please specify)

* Specify the length of Capillary in Meters.

FILLING FLUID	
DC1	DC-710
DC2	Silicone Oil (DC-200)
DC4	DC-704
DC5	DC-705
FLU	Fluorolube
GLY	Glycerine
HLC	Halocarbon
VGO	Food grade oil
XXX	Other (Please specify)

PROCESS CONNECTION					
WELD IN PIPE SIZE					
CONN	CODE	SIZE	CODE	RATING	CODE
Weld in	W	1/2"	15	Sch 40	S40
		3/4"	20	Sch 80	S80
		1"	25	Sch 160	S16
		1-1/2"	40	Sch XXS	XXS
		2"	50	Other (Please Specify)	XXX
		3"	80		

e.g. For 2" (50 NB), Sch 80 Pipe, Model Code: **W50S80**

PROCESS CONNECTION								
FLANGED								
CONN	CODE	SIZE	CODE	RATING#	CODE	FACING	CODE	
Flange	F	1/2"	15	150	A	RF	RF	
		3/4"	20	300	B	FF	FF	
		1"	25	600	C	RTJ	RJ	
		1-1/2"	40	900	D	ST	ST	
		2"	50	1500	E	SG	SG	
		3"	80	2500	F	LT	LT	
							LG	LG
							SMF	SM
							SFF	SF
							LMF	LM
					LFF	LF		

e.g. For 40 NB 300# RF flange, Model Code: **F40BRF**

Sample model Code: CSU-IFW-S6S-S6S-W40S80-DC2-4AR(5)

In-line Flow Through Type Diaph. Seal Cylindrical Diaphragm seal to be mounted between 2 Flanges

Model: CSU-IFC

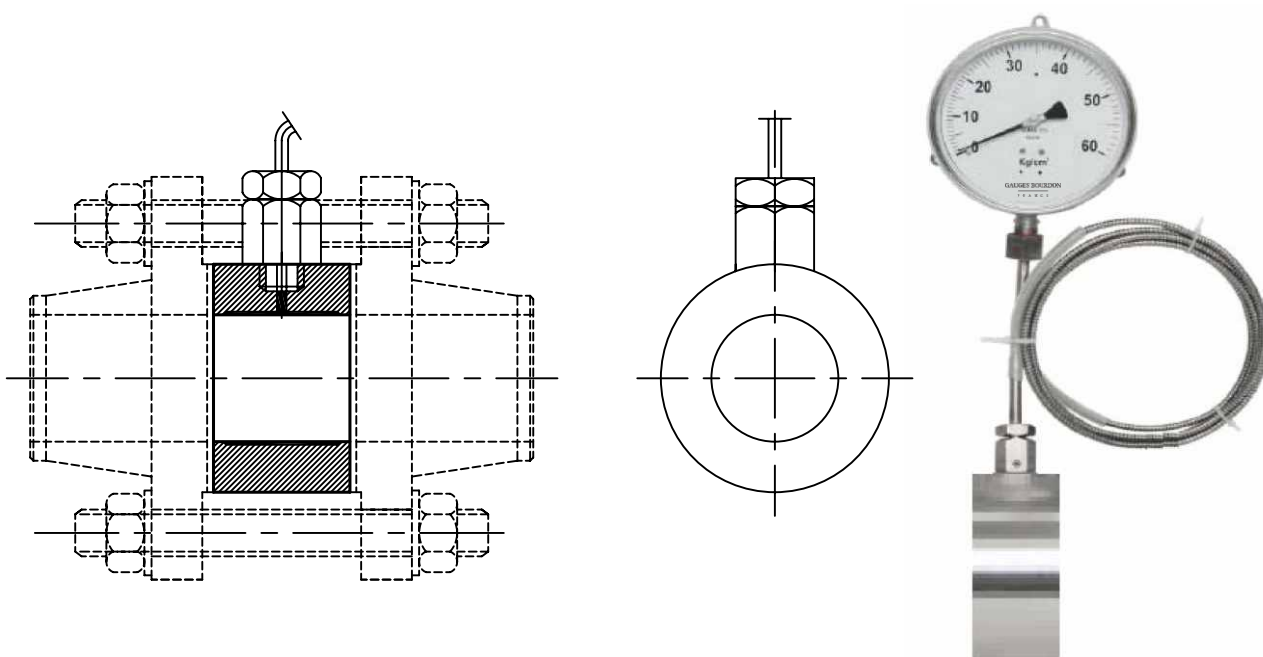
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FRANCE

Features

Cylindrical type In-Line Diaphragm Seals are installed directly in the process flow line between two flanges. These are also called as Cell type Diaphragm seal. Cylindrical type in-line Diaphragm seal recommended when the process media is Slurry or a liquid that contains a solid component or viscous.

The area behind the diaphragm is sealed with suitable filling fluid. As the process fluid flows through the pipe, it exerts pressure on the cylindrical diaphragm, which is transmitted to the pressure instrument through the filling fluid. The inner diameter of the seal unit is same as that of the process pipe. Thus it is continuously washed / cleaned by the flowing process media, thereby avoid any clogging, which results in accurate reading of the pressure instrument.



Optional Features

- Capillary tubing for Remote mounting of the Pressure Instrument
- Cooling Tower



Note: This catalogue indicates the general specifications used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

In-line Flow Through Type Diaph. Seal Cylindrical Diaphragm seal to be mounted between 2 Flanges

Model: **CSU-IFC**

Ordering Information

In-Line Diaphragm Seal (Cylindrical Diaphragm) to be mounted between 2 Flanges

MODEL: CSU- [] [] [] [] [] []

CONNECTION TYPE

IFC In line flow through type
Cylindrical Diaphragm Seal

BODY MATERIAL

S6S SS 316
S6L SS 316L
321 SS 321
HCC Hastelloy C
MN4 Monel 400
xxx Other (Please Specify)

CYLINDRICAL DIAPHRAGM

S6S SS 316
S6L SS 316L
321 SS 321
HCC Hastelloy C
MN4 Monel 400
xxx Other (Please Specify)

OPTION

4AR(*) SS 316 Capillary, SS 304 Armoured
4PV(*) SS 316 Capillary, SS 304 Armoured+PVC Covered
6AR(*) SS 316 Capillary, SS 316 Armoured
6PV(*) SS 316 Capillary, SS 316 Armoured+PVC Covered
CLT Cooling Tower
L Nil
XXX Other (Please specify)

* Specify the length of Capillary in Meters.

FILLING FLUID

DC1 DC-710
DC2 Silicone Oil (DC-200)
DC4 DC-704
DC5 DC-705
FLU Fluorolube
GLY Glycerine
HLC Halocarbon
VGO Food grade oil
XXX Other (Please specify)

MOUNTING FLANGE DETAILS (Not part of the Diaphragm Seal)

Conn	Code	Size	Code	Rating#	Code	Facing	Code
Flange	F	1"	25	150	A	RF	RF
		1-1/2"	40	300	B	FF	FF
		2"	50	600	C	XXX	Other (Please specify)
		2-1/2"	65	900	D		
		3"	80	1500	E		
		4"	10	2500	F		
		5"	55				
6"	66						

e.g. For 40 NB 300# RF flange, Model Code: F40BRF

Sample model Code: CSU-IFC-S6S-S6S-F40BRF-DC4-4AR(3)

In-line Flow Through Type Diaph. Seal Isolating Ring - Wafer Type to be mounted between 2 Flanges Model : CSU-IRW

Features

Ring type In-Line Diaphragm Seals are installed directly in the process flow line. These are also referred to as Isolating Rings. Isolating Rings are recommended when the process media is Slurry or a liquid that contains a solid component or viscous.

The area behind the flexible cylinder is sealed with suitable filling fluid. As the process fluid flows through the pipe, it exerts pressure on the flexible cylinder (Cylindrical Diaphragm), which is transmitted to the pressure instrument through the filling fluid. The diameter of the inner flexible cylinder is same as the inner diameter of the process pipe. Thus it is continuously washed / cleaned by the flowing process media, thereby avoid any clogging, which results in accurate reading of the pressure instrument.

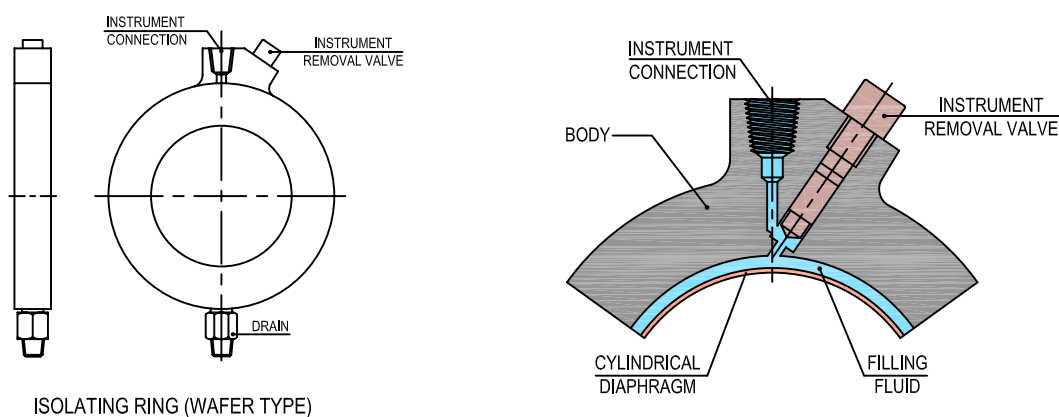
Instrument Removal Valve:

One additional feature offered by us is the Instrument Removal Valve, which facilitates the removal of the Pressure instrument for Calibration or repair without interrupting the flow in processes line.

Optional Feature:

Cooling Tower

Capillary tubing for Remote mounting of the Pressure Instrument



Note: This catalogue indicates the general specifications used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

In-line Flow Through Type Diaph. Seal Isolating Ring - Wafer Type to be mounted between 2 Flanges Model : CSU-IRW

Ordering Information

Ring type In-Line Diaphragm Seal (Isolating Ring - Wafer type) to be mounted between 2 Flanges

MODEL: CSU- [] [] [] [] [] [] []

TYPE

IRW Isolating Ring Diaphragm Seal, Wafer Type

SIZE

Code	Size	Code	Size
R050	2"	R250	10"
R080	3"	R300	12"
R100	4"	R350	14"
R125	5"	R400	16"
R150	6"	R450	18"
R200	8"	R500	20"

BODY MATERIAL

CST	CS
S4S	SS 304
S4L	SS 304L
S6S	SS 316
S6L	SS 316L
321	SS 321
xxx	Other (Please Specify)

CYLINDRICAL DIAPHRAGM

BUN	Buna-N
EPD	EPDM
FCN	Fluorocarbon
NTR	Natural Rubber
PTF	PTFE
NPR	Neoprene
VTN	Viton
xxx	Other (Please Specify)

OPTION

CLT	Cooling Tower
4AR(*)	SS 316 Capillary, SS 304 Armoured
4PV(*)	SS 316 Capillary, SS 304 Armoured+PVC Covered
6AR(*)	SS 316 Capillary, SS 316 Armoured
6PV(*)	SS 316 Capillary, SS 316 Armoured+PVC Covered
L	Nil
XXX	Other (Please specify)

FILLING FLUID

DC1	DC-710
DC2	Silicone Oil (DC-200)
DC4	DC-704
DC5	DC-705
FLU	Fluorolube
GLY	Glycerine
HLC	Halocarbon
VGO	Food grade oil
XXX	Other (Please specify)

SEALING FLANGES

CST	CS
S4S	SS 304
S4L	SS 304L
S6S	SS 316
S6L	SS 316L
321	SS 321
xxx	Other (Please Specify)

Sample model Code: CSU-IRW-R080-S6S-BUN-S6S-DC2-CLT

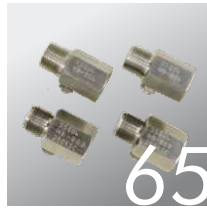


ACCESSORIES

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F R A N C E

INDEX



Snubbers



Pig tail Syphon



U Syphon



Gauge Saver



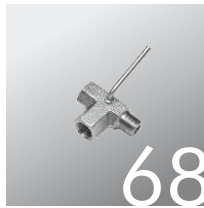
Gauge Adaptor



Universal Adaptor



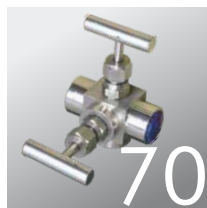
2 Way Gauge Cocks



3 Way Gauge Cocks



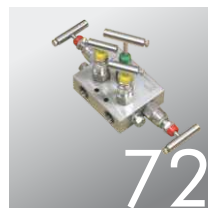
Needle Valves



Two Valve Manifold



Three Valve Manifold



Five Valve Manifold



Cooling Tower

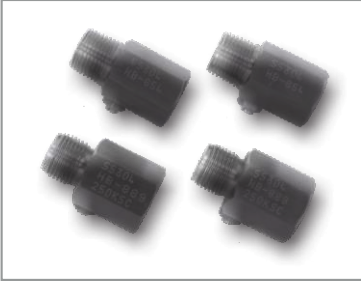


Flushing Rings



Pointer Puller & Fixer

Snubber



Snubber (Pulsation Dampener) protects the pressure instruments from pressure pulsations / rapid pressure fluctuation. Ideal for instruments which undergo severe pressure pulsations like those located at pump discharge. Available in materials like CS, SS304, SS316, Monel etc.

Standard connection is 1/2" NPT(F) x 1/2" NPT(M) (other connection can be offered as per customer requirement)

Pig tail Syphon



Syphons are used to protect pressure instruments from high temperature of the process fluid. It helps to reduce the service temperature so that the pressure instrument is exposed to lower temperature. Generally offered in 1/2" sch, 40 or 80 size (other sizes also can be offered on request). Standard connection is 1/2" NPT(F) x 1/2" NPT(M). Plain end suitable for Butt welding can also be offered. Available in material like CS (A106), SS304, SS316, P11 etc. IBR Certification can be offered as per customer requirement.

U Syphon



Gauge saver



Gauge Saver (Pressure Limit Valve) is used where the process pressure exceeds the over range limit of the pressure instrument. When the process pressure exceeds the pre-set pressure, Gauge Saver shuts off the pressure to the instrument and thereby prevents damage of the sensing element and protects the calibration. Generally minimum setting offered is 1 kg/cm²g (lower setting on request). Normally offered in SS316 & Monel with standard connection of 1/2" NPT(F) x 1/2" NPT(M) (other material / connection on request)

Gauge Adaptor



Gauge Adaptors are used for connecting instruments and accessories having different type of threads. Conversion from male to female threads and vice versa is possible by selecting suitable adaptors. Generally offered in material like SS304, SS316, Monel etc. (Other material on request).

Universal Adaptor or Gauge union



Universal Adaptor (Swivel Adaptor) facilitates the positioning of the Instrument during installation. Generally offered in material like SS304, SS316, Monel etc. (Other material on request). Standard connection is 1/2" NPT(F) x 1/2" NPT(M) (other connection on request)