

# Flush Diaphragm Seal

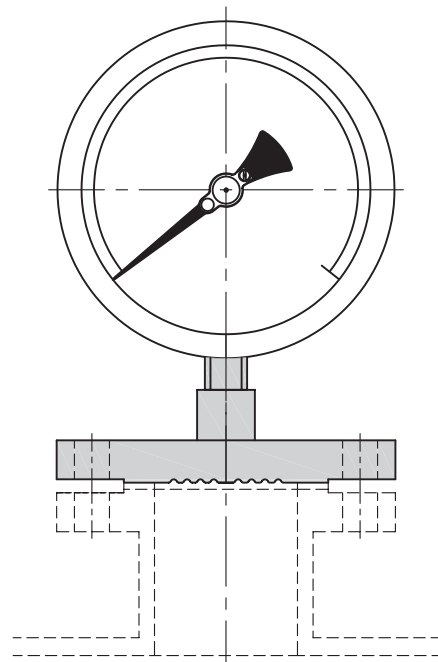
*General*

MODEL : CSU-FDF

## Features

Process fluids which are highly viscous or containing solid particles could plug or clog the Diaphragm Seal cavity on the process side of the diaphragm. In order to overcome this difficulty, Flush Diaphragm Seal are used. In this design, since the Diaphragm is directly welded on the Flange Face, there are no cavities or hidden ports where the process fluid can enter and clog the system.

Optionally, Flushing Ring (Spacer Ring) with 1/4" NPT(F) or 1/2" NPT(F) connection can be provided as per the requirement. Flushing Connection enables the user to purge / flush out / clean the area below the diaphragm without removing the Seal from the process line.



## Optional Feature

- **Cooling Tower**
- **Capillary** for Remote mounting of the Pressure Instrument
- **Flushing Ring (Spacer Ring)** for purging / cleaning the area below the diaphragm without removing the Seal from the process line.
- **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

## FLUSH DIAPHRAGM SEAL (Flange)

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

### CONNECTION TYPE

**FDF** Flush Diaphragm, Flanged Conn.

### FLANGE (Non-wetted part)

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

### DIAPHRAGM (wetted part)

**S4S** SS 304     **HCB** Hastelloy B  
**S4L** SS 304L   **HCC** Hastelloy C  
**S6S** SS 316     **TAN** Tantalum  
**S6L** SS 316L   **N20** Nickel 200  
**S6T** SS 316Ti   **MN4** Monel 400  
**321** SS 321     **xxx** Other (Please Specify)  
**TTM** Titanium#

### 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  
**FR4(\*\*)** Flushing Ring, 1/4" NPT(F)  
**FR2(\*\*)** Flushing Ring, 1/2" NPT(F)  
**GSK** Gasket  
**STN** Stud & Nuts  
**L** Nil  
**XXX** Other (Please specify)

\* Specify the length of Capillary in Meters.  
 \*\* Specify Ring material (Refer Diaphragm table)

### 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

#### FLANGED

CONN	CODE	SIZE	CODE	RATING	CODE	FACING	CODE
Flange	F	1"	25	150	A	RF	RF
		1-1/2"	40	300	B	RTJ	RJ
		2"	50	600	C		
		3"	80	900	D		
		4"	10	1500	E		
				2500	F		

e.g. For 100 NB 150# RF flange, Model Code: **F10ARF**

# For Titanium Diaphragm, Flange also shall be Titanium only

### Minimum Span of Range

Flange Size	Min Span of Range (RF flange)	Min Span of Range (RTJ flange)
1" NB	6 kg/cm2.g	N.A.
1-1/2" NB	2.5 kg/cm2.g	60 kg/cm2.g
2" NB	1 kg/cm2.g	2.5 kg/cm2.g
3" NB	1 kg/cm2.g	2.5 kg/cm2.g

Sample model Code: **CSU-FDF-CST-S6L-F40BRF-DC4-FR2(S6L)**