

# NESS

## DIAPHRAGM SEAL

### FLANGED "I" SECTION TYPE

# Model - CSI

#### Special Features :

- Continuous duty
- I section extension to facilitate smaller flanged connection
- Ideal for general purpose application
- Suitable for anti corrosive protection
- Available with Flushing Ring (Optional)

#### Applications :

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification. This can be widely used with anti corrosive treatment / protection & various flanged sizes.

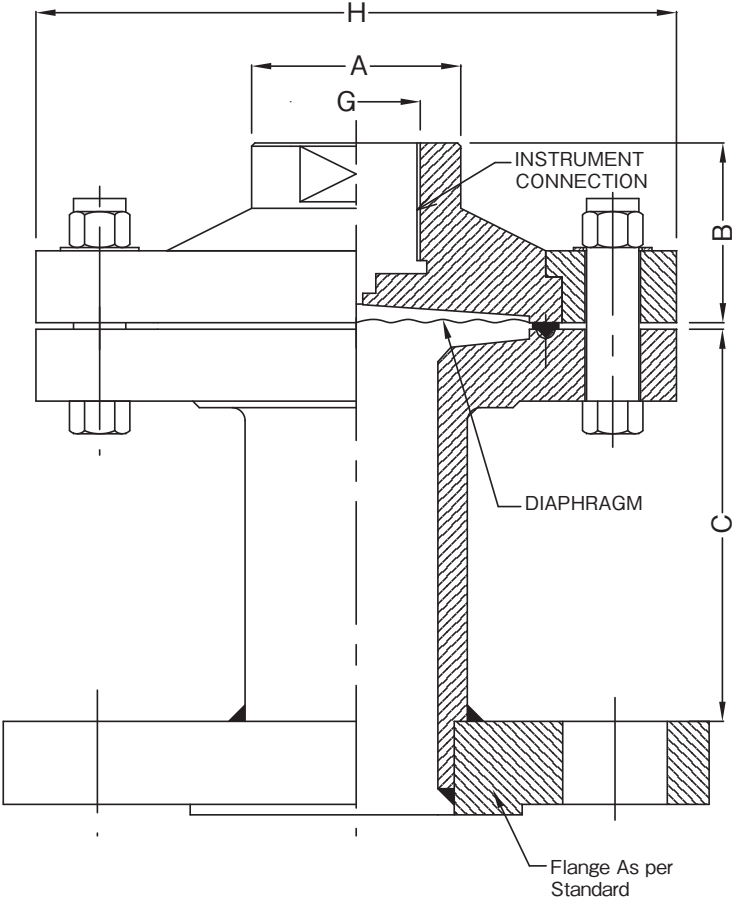


#### Specifications

##### STANDARD VERSION

Range	: -1 bar to 70 bar
Process temperature	: -20° C to 200° C for PTFE lined
	: -40° C to 200° C for without PTFE lined
Instrument Connection	: 1/2" G / BSP (F)
Process Connection	: Flange (as per DIN/BS/ANSI/JIS)
Filling Fluid	: Silicon Oil - DC 200 up to -40 to 200° C
Diaphragm	: AISI 316L SS
Top Chamber	: AISI 304 SS
I Section (Bottom Chamber)	: AISI 316 SS Flange (as per DIN/BS/ANSI/JIS)
Nuts / Bolts	: AISI 304 SS
Gasket	: PTFE (up to 200° C) / Metal Seal (up to 350° C)
Slip Ring (Tension Flange)	: AISI 304 SS

# DRAWING OF "I" SECTION



Ranges	A	B	C	H	G
-1 to 0 bar & 0 to 70 bar	32	28	50	98	1/2" G (F)
<b>E :- As per Standard Flange size.</b>					

# SELECTION OF MODEL

## (1) MODEL CODE

### (2) DIAPHRAGM

AISI 304 SS	<b>S4</b>
AISI 316 SS (Standard)	<b>S6</b>
AISI 316L SS	<b>S6L</b>
HASTELLOY 'C'	<b>HT</b>

MONEL	<b>MN</b>
CARBON STEEL	<b>CS</b>
TANTALUM	<b>TA</b>
TITANIUM	<b>TI</b>

### (3) BOTTOM CHAMBER (I SECTION)

AISI 304 SS	<b>S4</b>
AISI 316 SS (Standard)	<b>S6</b>
AISI 316L SS	<b>S6L</b>

(\* Refer Pressure v/s Temperature table below.)

HASTELLOY 'C'	<b>HT</b>
PVC*	<b>PC</b>
PVDF*	<b>PD</b>

### (4) PROCESS CONNECTION

# PLEASE INDICATE YOUR REQUIRED SIZE

### (5) PROTECTION ON WETTED PARTS

PTFE LINING ON BOTTOM CHAMBER - 2mm THICK (Max up to 150° C)	<b>LB</b>
PTFE PROTECTION FOR DIAPHRAGM (Max up to 150° C)	<b>PF</b>

### (6) FILLING FLUIDS

FLUROLUBE 4.2 (-45 TO 175 ° C)	<b>O1</b>
FLUROLUBE 6.3 (-40 TO 235 ° C)	<b>O2</b>
FLUROLUBE FS (-28 TO 148 ° C)	<b>O3</b>
SILICON DC 200 (-40 TO 205 ° C) (Standard)	<b>O4</b>
HALOCARBON OIL	<b>O5</b>

### (7) REMOTE MOUNTING (With capillary of Max. Up to 6 Mtrs.)

SPECIFY IN METERS (e.g. 1.5 = 1.5 METERS 2.0 = 2 METERS)

### (8) CAPILLARY

AISI 304 SS	<b>S4</b>	AISI 316 SS	<b>S6</b>
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### (9) CAPILLARY COVERED WITH ARMOUR (Applicable with S4 or S6 if selected)

AISI 304 SS	<b>S4</b>
AISI 316 SS	<b>S6</b>
PVC (Ambient Temp. Max. 60° C)	<b>PC</b>

### (10) OPTIONS

HELIUM LEAK TEST	<b>HT</b>
DRY SEAL ONLY WITHOUT INSTRUMENT	<b>SD</b>
MATERIAL TEST CERTIFICATES	<b>MC</b>



Example	1	2	3	4	5	6
Order Detail	CSI	S6	#	LB	O4	Option xx

CSI

S6

S6

#

LB

O4

SD

## ***PRESSURE V/s TEMPERATURE***

MOC OF BOTTOM CHAMBER	PRESSURE V/s TEMPERATURE					
	20° C	40° C	60° C	80° C	100° C	120° C
PVDF	10 bar	10 bar	10 bar	7 bar	4 bar	2 bar
PP	10 bar	10 bar	6 bar	4 bar	1 bar	N/A
PVC	10 bar	10 bar	4 bar	1 bar	N/A	N/A

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