

**MAIN FEATURES**

- Forged chambers
- Laser welded diaphragm
- Optional exotic materials

**SUGGESTED APPLICATIONS**

- Separation systems
- Isolation applications
- Viscous & corrosive media
- High-pressure applications
- High vibration application



DIAPHRAGM SEAL FLANGE  
(I-SECTION TYPE)

**BASIC DESCRIPTION**

- Flange design : ANSI B40.2
- Storage temperature : -40...+65°C
- Service temperature : 370°C max.
- Weld joints : Laser welding for Diaphragm and TIG argon arc welding for other parts

**MATERIAL OF CONSTRUCTION**

- Sensing element : Diaphragm
- Top chamber material: SS 304 / SS 316
- Diaphragm : SS 316L/ Monel / HC-276 / INC-625 / Titanium / Tantalum
- Bottom chamber material : SS 304 / SS 316 / SS 316L / Monel / HC-276 / INC-625 / Titanium / PVC<sup>1</sup> / Polypropylene<sup>1</sup> / PTFE<sup>1</sup>
- Gaskets : PTFE [ranges ≤ 100 bar] / Metal [ranges ≥ 100 bar]
- Capillary : SS 304 / SS 316
- Armour : SS 304 / SS 316 / PVC

**FILLING LIQUIDS Vs TEMPERATURE RANGE**

CODE	Fluid Name	Temperature Range
L2	Silicon Oil	-40°C to 250°C
L3	Food Grade Oil	-20°C to 200°C
L4	Hi-Temp Silicon Oil	-20°C to 450°C
L5	Fluorinated Oil	-10°C to 350°C

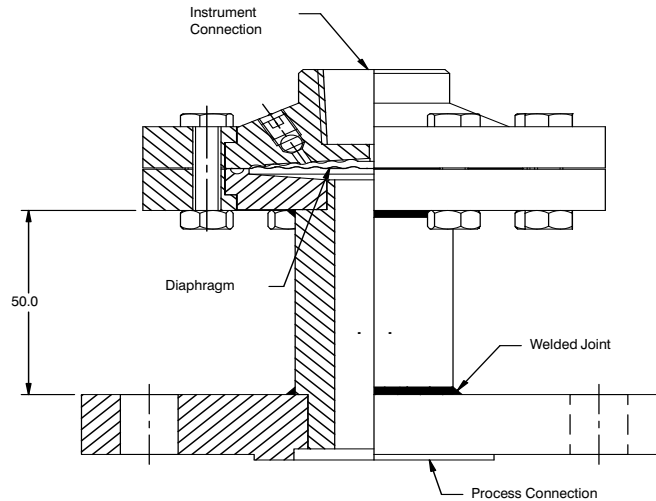
**PRODUCT SPECIFICATION**

- Seal type : DIAPHRAGM SEAL FLANGE (I-SECTION TYPE) : DSIS
- Instrument connection : ½" NPT (F) / ½" BSP (F) Sealing fluid : Silicon Oil [-40...250°C]
- Process connection : ½" UP TO 1" Flange size Model DSIS

**PROTECTION ON WETTED PARTS**

- Lining on Bottom Chamber [Code : LB]  
Material : PTFE - 2 ~ 3mm thick  
Service temperature : 150°C max.
- Coating on Diaphragm [Code : CD]  
Material : PFA - 70 Micron thick [spray coated & oven cured]  
Service temperature : 300°C max.
- Coating on Bottom chamber & diaphragm [Code : CB]  
Material : PFA - 70 Micron thick [spray coated & oven cured]  
Service temperature : 300°C max.

## DIMENSIONAL DRAWINGS



MODEL : DSIS

## MODEL CODING

MODEL	TOP CHAMBER	DIAPHRAGM	BOTTOM CHAMBER	INSTRUMENT CONNECTION	PROCESS CONNECTION	SEALING LIQUID
DSIS : DIPHRAGM SEAL FLANGE (I-SECTION TYPE)	S04 = SS 304 S16 = SS 316	S6L = SS 316L M40 = Monel 400 H76 = Hastelloy C-276 N62 = Inconel 625 TT6 = Titanium TAT = Tantalum	S16 = SS 316 S6L = SS 316L M40 = Monel 400 H76 = Hastelloy C-276 N62 = Inconel 625 TT6 = Titanium PVC = PVC PPY = Polypropylene PFE = PTFE	F4N = 1/2" NPT (F) F4B = 1/2" BSP (F)	FXX = Select from the table below.	L1 = Glycerine L2 = Silicon Oil L3 = Food Grade Oil L4 = Hi-Temp Silicon Oil L5 = Fluorinated Oil

CAPILLARY	CAPILLARY LENGTH	OTHER OPTIONS
C1 = No Capillary C2 = SS 316L bore + SS 304 Armour C3 = SS 316L bore + SS 316 Armour C4 = SS 316L bore + SS 304 Armour + PVC coating	1 Mtr. up to 6 Mtr. Other length on request	MTC = Material test certificate, 3.1 CC = 5-point factory calibration certificate LB = PTFE lining on Bottom Chamber CD = PTFE Coating on Diaphragm CB = PTFE Coating on Bottom Chamber & Diaphragm

## FLANGE TABLE

ANSI B 16.5																	
Code	Size	Rating	Code	Size	Rating	Code	Size	Rating	Code	Size	Rating	Code	Size	Rating	Code	Size	Rating
F01	1/2"	150#	F02	1/2"	300#	F03	1/2"	600#	F04	1/2"	900#	F05	1/2"	1500#	F06	1/2"	2500#
F07	3/4"	150#	F08	3/4"	300#	F09	3/4"	600#	F10	3/4"	900#	F11	3/4"	1500#	F12	3/4"	2500#
F13	1"	150#	F14	1"	300#	F15	1"	600#	F16	1"	900#	F17	1"	1500#	F18	1"	2500#
F25	1 1/2"	150#	F26	1 1/2"	300#	F27	1 1/2"	600#	F28	1 1/2"	900#	F29	1 1/2"	1500#	F30	1 1/2"	2500#
F31	2"	150#	F32	2"	300#	F33	2"	600#	F34	2"	900#	F35	2"	1500#	F36	2"	2500#
F43	3"	150#	F44	3"	300#	F45	3"	600#	F46	3"	900#	F47	3"	1500#	F48	3"	2500#

**ORDERING EXAMPLE** DSIS-S04-S6L-F4B-F01-L2.

## QUICK ORDER DETAILS / FEEDBACKS