

621F / 641F / 661F FLANGED SEAL - INVERTED DIAPHRAGM COUPLED / WELDED / EXTENDED NECK



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



**FLANGED SEAL
INVERTED DIAPHRAGM**

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
PVC¹ / Polypropylene¹ / PTFE¹
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 : Coupled [Model: 621F] / Welded [Model: 641F]
Extended Neck [Model: 661F]
Instrument connection : 1/2" NPT (F) / 1/2" BSP (F)
Sealing fluid : Silicon Oil [-40...250°C]
Process connection : 1/2" UP TO 1" Flange size Model 661F
1 1/2" - 3" Flange size Model 621F / 641F

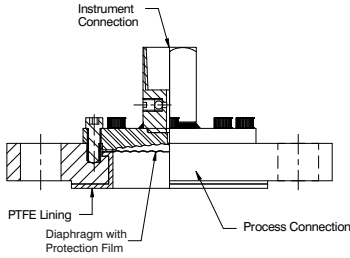
PROTECTION ON WETTED PARTS

Lining on Bottom Chamber [Code : LB]
Material : PTFE - 2 ~ 3mm thick
Service temperature : 150°C max.

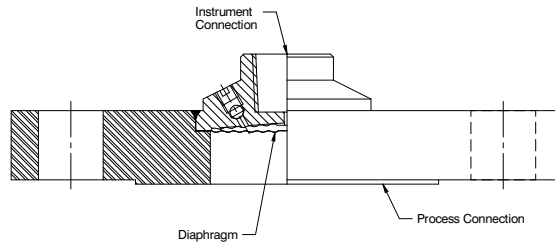
Coating on Diaphragm [Code : CD]
Material : PFA - 70 Micron thick [spray coated & oven cured]
Service temperature : 300°C max.

Coating on Bottom chamber & diaphragm [Code : CB]
Material : PFA - 70 Micron thick [spray coated & oven cured]
Service temperature : 300°C max.

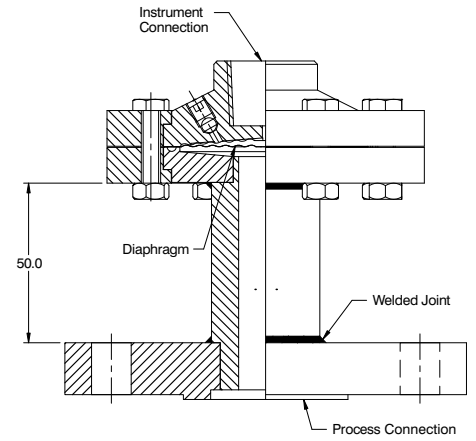
DIMENSIONAL DRAWINGS



MODEL: 621F



MODEL: 641F



MODEL: 661F

All dimensions are in mm.

MODEL CODING

MODEL	TOP CHAMBER	DIAPHRAGM	BOTTOM CHAMBER	INSTRUMENT CONNECTION	PROCESS CONNECTION	SEALING LIQUID
621F = Coupled Flanged seal (-1 - 40 bar) 641F = Welded Flanged Seal (-1 - 250 bar) 661F = Extended Neck Flanged Seal (-1 - 70 bar)	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 PPY = Polypropylene PFE = PTFE	F4N = 1/2" NPT (F) F4B = 1/2" BSP (F)	FXX = Select from the table below.	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	TC = Material test certificate, 3.1 TO = Certificate of De-greasing LB = PTFE lining on Bottom Chamber CD = Coating on Diaphragm CB = 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 641F-S04.S6L.S16/F4N.M4N/L2/C1.XXX/TC.

QUICK ORDER DETAILS / FEEDBACKS