

# 611T / 621T / 631T

## COUPLED THREADED SEAL - INVERTED DIAPHRAGM

### MINIATURE / STANDARD / HIGH-PRESSURE



#### 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



**COUPLED THREADED 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

#### 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 : -1...0...70 bar [Model: 611T] / -1...0...160 bar [Model: 621T]  
210...400 bar [Model: 631T]  
Instrument connection : 1/2" NPT (F) / 1/2" BSP (F)  
Sealing fluid : Silicon Oil [-40...250°C]  
Process connection : 1/2" NPT (M) / 1/2" BSP (M) / 1/4" NPT (M) / 1/2" NPT(F) / M20X1.5P (M) / 1/2" BSPT (M)

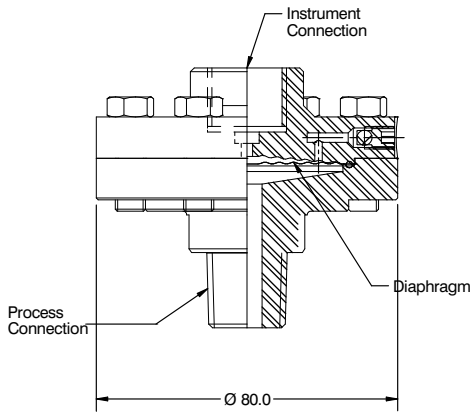
#### PROTECTION ON WETTED PARTS

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

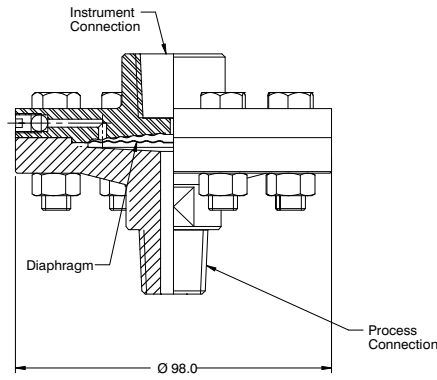
Coating on Diaphragm [Code : CD]  
Material : PFA - 70 Micron thick [spray coated & oven cured]  
Service temperature : 300°C max.

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

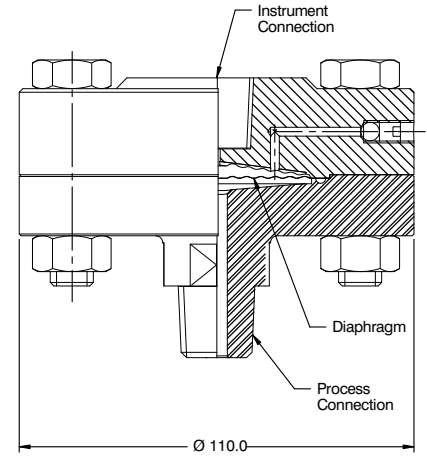
## DIMENSIONAL DRAWINGS



**MODEL: 611T**



**MODEL: 621T**



**MODEL: 631T**

All dimensions are in mm.

## MODEL CODING

MODEL	-	TOP CHAMBER	DIAPHRAGM	BOTTOM CHAMBER	/	INSTRUMENT CONNECTION	PROCESS CONNECTION	/	SEALING LIQUID	/
611T = Coupled Diaphragm Seal (-1 - 70bar) 621T = Coupled Diaphragm Seal (-1 - 160 bar) 631T = Coupled Diaphragm Seal (210 - 400 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 PVC = PVC PPY = Polypropylene PFE = PTFE		F4N = ½" NPT (F) F4B = ½" BSP (F)	M2N = ¼" NPT (M) M2B = ¼" BSP (M) M4N = ½" NPT (M) MBN = ½" BSP (M) M2M = M12 X 1.0P M4M = M20 X 1.5P M3B = ¾" BSP (M)		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

**ORDERING EXAMPLE**      611T-S04.S6L.S16/F4N.M4N/L2/C1.XXX/TC.

## QUICK ORDER DETAILS / FEEDBACKS

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