

## Features

### What is a Diaphragm Seal?

A diaphragm seal is a device in which a flexible membrane (diaphragm) seals and isolates the measuring instrument from the process medium. The instrument side of the diaphragm is filled with appropriate fluid. The pressure exerted by the process fluid on the Diaphragm is hydraulically transmitted through the seal fluid to the pressure sensing element. Diaphragm seal protects the pressure sensor from the harmful and hazardous effect the process fluid.

### Where Diaphragm Seal is essential?

- Corrosive process fluid
- Highly viscous process fluid
- Process fluid having sediments or solid particles
- Process fluid having tendency to solidify, freeze or crystallize at lower temperatures which may block the sensing element.
- Hazardous process fluid



## Specifications

### The generally offered MOC is as follows :

- Non wetted parts:** CS, SS304, SS316
- Diaphragm :** SS316, SS316L, PTFE, SS PTFE coated, Titanium, Hastelloy B, Hastelloy C, Nickel, Monel, Tantalum
- Wetted Parts :** SS316, SS304L, SS316L, SS PTFE coated / lined/ block, Hastelloy B, C.
- Filling Fluids :** Silicone Oil, DC-200 (-45°C to 205°C)  
 DC-704 (0 to 315°C)  
 DC-705 (20 to 350°C, Short term exposure up to 400°C)  
 DC-710 (5 to 345°C)  
 Fluorolube Oil (-40°C to 150°C)  
 Glycerine (5 to 80°C)  
 Halocarbon Oil (-40°C to 235°C)  
 Food Grade Vegetable Oil (5 to 182°C)

### 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.

### Different types of Diaphragm Seal offered:

- 1) Sandwich Type (Threaded Connection)
- 2) Sandwich Type (Flanged Connection)
- 3) Threaded Flush Diaphragm Seal (Small / Mini Diaphragm Seal)
- 4) Flush Diaphragm Seal (Flanged Connection)
- 5) Pan Cake type Diaphragm Seal (Flanged Connection only)
- 6) Extended Diaphragm Seal (Flanged Connection only)
- 7) In line flow through type (Flanged or Weld in connection)
- 8) In line flow through Jacketed type (Flanged or Weld in connection)
- 9) In line flow through type with Cylindrical Diaphragm
- 10) In line Isolating Ring type

**Note :** Proper selection of diaphragm seal (Type & Material) is important after reviewing the application. Purchaser must confirm the suitability of the MOC suggested.

