

**MICRO** exposed diaphragm seals are designed for the application where extreme level of sanitary cleanliness and purity is crucial.

These diaphragm seals are generally used across food, beverages and pharmaceutical industries. These seal avoids dead space and cavity so that solidification, contamination as well as bacterial & fungal formation is eliminated. This design also allows quick, efficient removal and installation for flushing or changing process media, line cleanout and equipment washout situations.

# DIAPHRAGM SEALED (EXPOSED DIAPHRAGM TYPE)

## PRESSURE GAUGES

### Technical Specifications: (Confirming to EN-837-3 & IS-3624)



Threaded End Flush Diaphragm Sealed

Flanged End Extended Diaphragm

SMS End

Paper & Pulp Flange

Homogenizer

Saddle Flange (Welded on Pipe)

Triclover End

Flanged End Flush Diaphragm Sealed

- **Nominal size :**  
Ø 50, 63, 100, 115, 150, 200, 250 & 300 mm
- **Accuracy :**  
±1% of FS (From 1 to 70 bar)  
±1.6% of FS (≥ 100 bar) (±1% Optional)  
±1.6% of FS (For Vacuum)
- **Case & Bezel :**  
SS 304 Case with Snap Action bayonet lock type bezel (SS 316 Optional)  
SS 304 Case with Crimped Bezel (Hermetically Sealed) (For Ø 50, 63 & 100 mm Optional)
- **Ingress Protection :**  
IP 65 as per EN 60 529 or IS/IEC 60 529  
IP 68 as per IS/IEC 60 529 for Ø 100 & 150 mm-Optional
- **Pressure element – Bourdon Tube :**  
SS 316 / SS 316L / SS 316Ti (Monel 400 Optional)  
( < 100 bar 'C' shape / ≥ 100 bar helical shape)
- **Over pressure limit :**  
≤ 100 bar - 125% of FS  
> 100 bar < 600 bar - 115% of FS  
> 600 bar < 1600 bar - 110% of FS
- **Movement :**  
SS 304 (SS 316 optional)
- **Socket :**  
SS 304 / SS 316 / SS 316L (Monel 400 Optional)
- **Dial :**  
Aluminium – Pre-coated White with black marking
- **Pointer :**  
Aluminium – Black Finish Center / Micro Zero Adjustment
- **Window :**  
4 mm thick Toughened Glass (Safety / Shatter Proof Optional)  
Transparent Acrylic Window for Hermetically Sealed Glycerin Filled Case
- **Joints :**  
Argon welded
- **Sealing gasket :**  
Neoprene Rubber (EPDM Optional)  
Nitrile Rubber for Glycerin Filled Case
- **Blow out protection :**  
Neoprene Rubber (EPDM Optional)  
For Ø 50 & 63 mm : On Top of Case  
For ≥ Ø 100 mm : On Back of Case
- **Pressure relief :**  
Top of Case with Vent Valve (On Request)
- **Sealed Unit :**  
Seal Body : SS 316 (Standard) / SS 316L  
Diaphragm : SS 316L (Standard) / Hastelloy C / Monel/Tantalum / Nickle (200/400) / PTFE Coating protection / Other on request  
Transmitting Fluid : Silicon Oil (Standard) / Halocarbon / Food Grade Glycerin/Vegetable Oil etc.
- **Process Connection :**  
1/2" / 3/4" / 1" / 1 1/2" / 2" BSP (Male) with Flush Diaphragm  
1 1/2" / 2" / 2 1/2" Triclover  
1 1/2" / 2" / 2 1/2" SMS  
1/2" / 3/4" / 1" / 1 1/2" / 2" / 3" Flanged with Flush Diaphragm  
Sandwich Flange (Cell Type) With Capillary Extension  
Flanged type Extended Diaphragm  
Homogenizer without Flange or With 7/8" thick 2 bolt flange  
Special connection for Pulp & Paper Industries  
Saddle flange type to be welded on pipe
- **Permissible temperature :**  
Ambient : -25°C to 65°C  
Process : Maximum 150°C (Direct Reading)  
Maximum 350°C (Remote Reading)
- **Type of mounting :**  
Bottom Connection Direct Mounting  
Back Connection Direct Mounting  
Bottom Connection Surface Mounting with Capillary Extension  
Back Connection Panel Mounting with Capillary Extension  
Back Connection Bracket Mounting with Capillary Extension
- **Pressure range :**  
-30" Hg ... 0 ... 60 bar  
For Homogenizer seals 400 bar Standard (600, 1000 & 1600 bar Optional)
- **Optional Available features :**
  - Liquid Fillable Case / Glycerin (99.7%) Filled Case
  - Solid front case (Safety Pattern) for Ø 100 & 150 mm
  - External Zero Adj. for ≥ Ø 100 mm
  - Electrical Contact for Ø 100 & 150 mm
  - Cooling Tower Assembly
  - Over Range Protection above pressure Range
  - Phenolic Solid Front safety design case for Ø115 mm

### APPLICATION

- Pulp & Paper Industries
- Food processing plant
- Pharmaceutical Industries
- Dairy Plants
- Paper & Pulp Industries etc...