Diaphragm Seals General Specifications



ANSI Sanitary Flange Seal

Type PFSAR

Application.

Ideal for any application where a sanitary barrier is required. This seal is used to prevent the product entering the instrument and therefore creating an unsanitary environment. The use of this seal is designed to integrate with automated clean in place systems (CIP). The sanitary barrier will prevent plugging or damage to the instrument caused by product or cleaning solution corrosion. They are commonly used in the food, beverage and pharmaceutical industries.

Configuration.

Gauge pressure measurement Is via capillaries or directly mounted to the instrument.

Differential pressure measurement is via capillaries.

The ANSI sanitary flange diaphragm seal can be supplied in a variety of sizes and pressure ratings. The flange body is available in 316L stainless steel as standard but can be supplied along with the diaphragm material in a variety of materials. Several instrument connections are available to suit most gauges and transmitters.

Process Connection.

According to ASME B16.5:2003 ANSI Rating: 150 - 2500 lbs Packing surface finish: Concentric rings 0.1mm deep

Process Connection Size.

Sizes available: 2" to 4" Other sizes available on request.

Seal Construction.

Flange machined from bar stock. Diaphragm welded into flange.

Flange body materials.

316L Stainless Steel (Standard) 304 Stainless Steel Hastelloy C-276 Monel 400 Tantalum Duplex 2205 PFA (316L Stainless Steel coated) Other materials available on request.



Diaphragm Materials.

316L stainless steel (Standard) 304 stainless steel Hastelloy C-276 Monel 400 Tantalum Duplex 2205 PFA (316L Stainless Steel coated) Gold Plated 316L Stainless Steel Nickel 200 Other materials available on request.

Instrument Connections.

¼" BSPT female
¼" NPT female
¼" BSPP female
3/8" BSPP female
½" BSPP female
Other connections available on request.

Diaphragm size.

2" Flange seal = 58mm diaphragm

- 3" Flange seal = 89mm diaphragm
- 4" Flange seal = 89mm diaphragm

Zero Stability.

Stability will be affected by the instrument configuration, ambient temperature, process temperature, connection size (diaphragm size) and the measuring range. For temperature effects and instrument accuracy please contact us.