

Diaphragm Seal Systems

PEK491



Introduction

PEK491 Diaphragm Seals are designed for use in applications where chemical compatibility, corrosive, acid, trash or sludge in process or sanitary requirements prevent the use of a standard pressure gauge or gauge only installation.

Applications

Diaphragm seal systems provide a reliable process pressure measurement and prevent the process medium from contacting the transmitter diaphragm. Transmitter/diaphragm seal systems should be considered when :

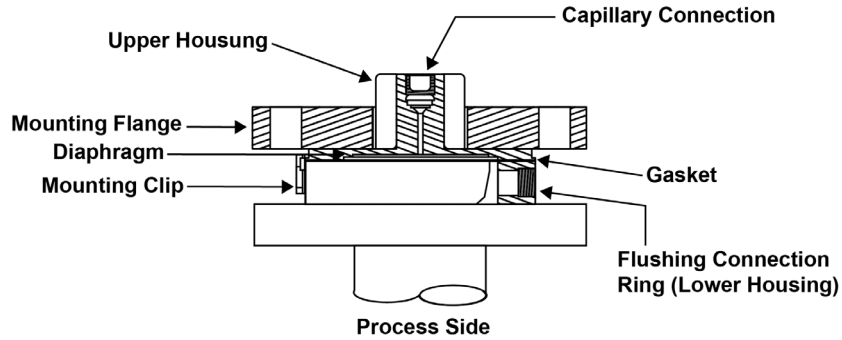
- Process temperature is outside of the operating ranges of the transmitter.
- Process is corrosive and/or requires specific exotic materials of construction.
- Process contains suspended solids or is viscous and is prone to plugging of connections.
- Application requires the use of flush-mount hygienic connections that facilitates.
- Process contains suspended solids or is viscous and is prone to plugging of connections.
- There is a requirement for easier cleaning of the process from the connections to avoid contamination between batches.

Standard Features

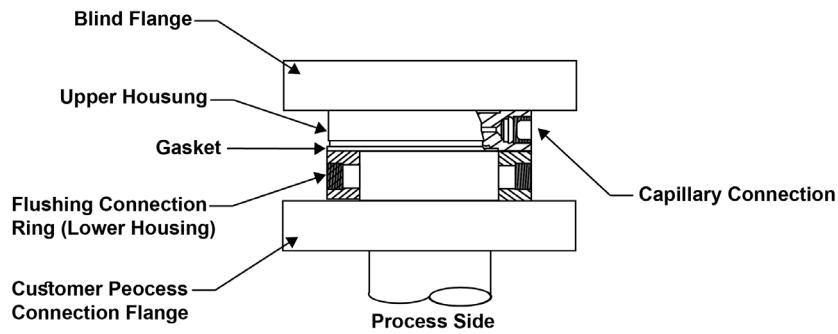
- Designed to isolate the pressure measuring instrument from high temperatures, or corrosive or viscous process media
- Can be used for remote mounting of pressure instrument(s) with capillary
- Utilizes a replaceable diaphragm clamped between the flanged metal housings with an o-ring seal to create a leak-free union
- Process connection sizes from 1/4" NPT through 1-1/2" NPT
- Flushing port connection is an available option that allows the wetted areas of the seal to be cleaned, or the process vented without removing the unit from the line
- Consider instrument size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- Capillaries and cooling elements are available for elevated process temperatures
- Fill fluid must be compatible with process media; i.e. Glycerin may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

Diaphragm Seal Standard Design

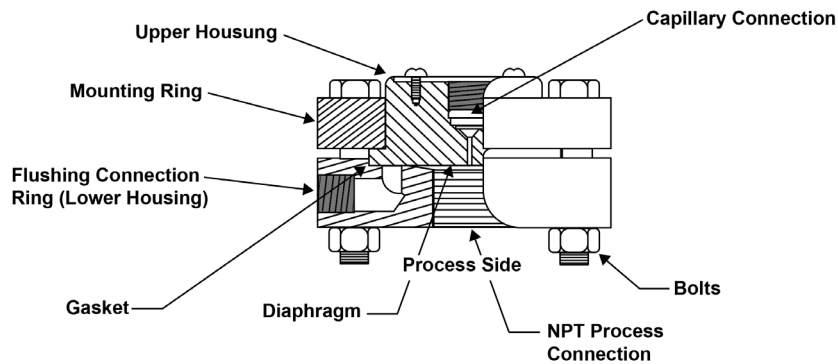
Flanged Type Seals



Capillary Support Tube



Threaded Type Seals



Ordering information

Model / Process connection (standard, nominal width, nominal pressure rating) / Connection Type / Sealing face form / Material / Instrument Connection / Flushing Connection / Options

For Example:

PEK411-2.0-F-RF-SS-2-V-1/2 F- 0 – C6

Model: PEK442

2.0 = 2"

F = Flange Type

RF = Raised face

Material SS = 316 stainless steel

1/2F = 1/2" NPT female

0 = Flushing Connection Included

C6 = Length of Capillary 6m