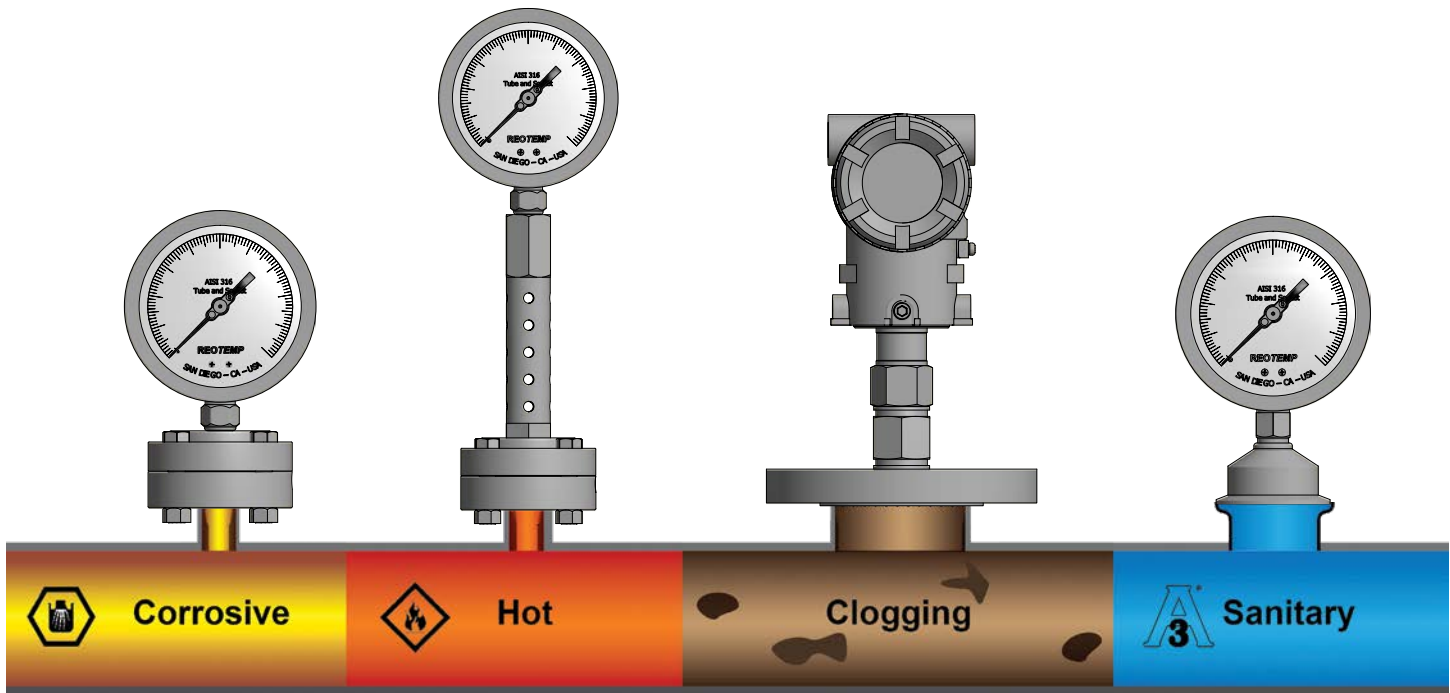


**Diaphragm Seals** are used in applications where the pressure sensor requires isolation from the process media. These applications may be corrosive, high temp, clogging, or require a sanitary fluid to remain captured in the piping or vessel. Rather than the process fluid interfacing with the pressure sensor, the pressure is exerted onto the flexible diaphragm and transmitted hydraulically to the instrument through the fill fluid. When properly mounted and filled a diaphragm seal assembly will have minimal effect on the instrument's performance.



## APPLICATION CONSIDERATIONS

Reotemp Diaphragm Seal Assemblies are carefully designed, built, and tested to maximize performance, increase instrument lifespan, and assure operator safety. The following should be considered when specifying a diaphragm seal:

### 1. Instrument Considerations

- Is there sufficient displacement to drive through its full range?
- Is the diaphragm sensitive enough for the measuring range and accuracy grade of the instrument?

### 2. Diaphragm Seal Mounting

- How will the diaphragm seal mount to the process? Threaded? Flanged? Clamped?
- How will the instrument mount to the diaphragm seal? Threaded? Welded?
- Will the instrument be mounted directly to the seal or with capillary?

### 3. Process Characteristics

- What are the pressure and temperature limits?
- Are there issues with clogging or high viscosity?
- Is there severe shock and pulsation?
- Is the process fluid compatible with the wetted material and gasket?

### 4. Ambient Characteristics

- Are there extreme or fluctuating ambient temperatures?
- Is the outside environment corrosive?

### 5. Vacuum Considerations

- Will the assembly be operating in deep vacuum (< 5psia)? If yes, contact the factory with process specifications.

**Questions?** If you require application assistance, please contact Reotemp customer service or your local Reotemp distributor.