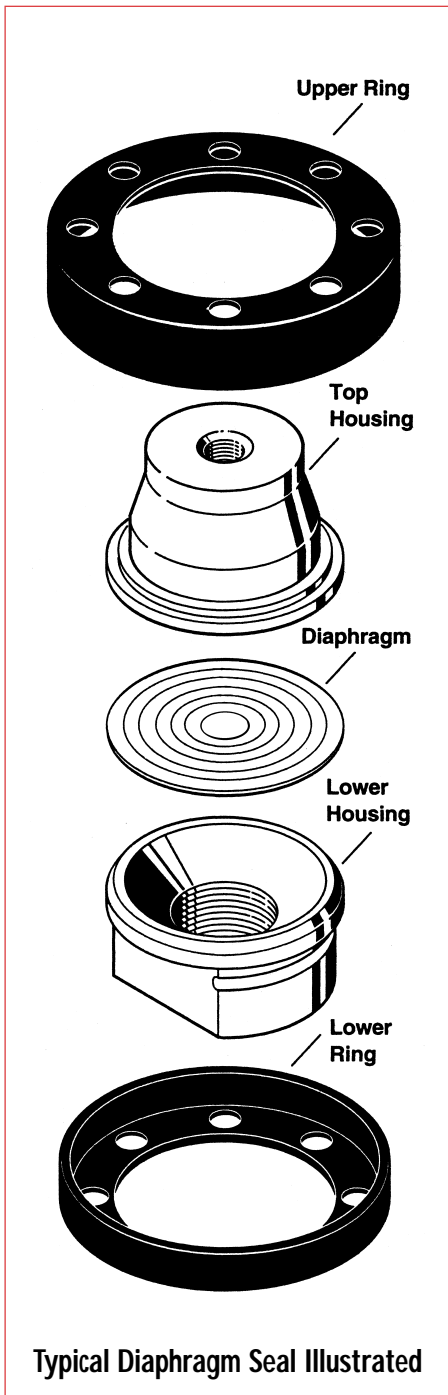


Warning: All seal components should be selected considering process and ambient operating conditions to prevent misapplication. Improper application could result in failure and possible injury or property damage.



Top Housing:

The top housing includes a connection for the pressure instrument and may support the upper surface of the diaphragm. Since this component is not in contact with the process fluid, it is commonly made of steel. However, if the external atmosphere contains corrosive elements, other materials like 316 SS, may be required.

Diaphragm:

The diaphragm separates the bottom housing from the fill fluid. The diaphragm material must be compatible with the process fluid. Because of its thin cross-section, special attention must be given to diaphragm material selection. Operating temperatures must not exceed the limit for the material used.

Bottom Housing:

The bottom housing material is in direct contact with the process fluid and must therefore be compatible with the process fluid.

Some models are offered with a flushing connection.

This feature offers a method of purging the seal cavity or a means of back flushing foreign material from the process connection. (Not available with plastic lower housings.)

Fill Fluids:

The fill fluid must be capable of withstanding operating process temperature. Glycerin or silicone can combine with strong oxidizing agents such as oxygen, chlorine, nitric acid and hydrogen peroxide causing fires or violent reactions. Seal assemblies intended for such applications should be filled with an inert fluid such as Halocarbon. Seals intended for use with oxygen must be manufactured completely free of oil.

Pressure Rating:

The maximum allowable pressure for the seal selected must not be exceeded. Flange seals are generally limited to the maximum rating of the flange itself. Plastic bottom housings will not withstand the same pressures as metal equivalents. Maximum allowable pressures for all materials decrease as temperatures increase.

Note: Maximum vacuum indication may not exceed 25" Hg. Consult Customer Service if higher vacuum indication is required.

Accuracy/Temperature Errors:

The addition of a liquid filled diaphragm seal to an instrument will degrade its accuracy by 0.5% (maximum). In addition, changes in ambient temperatures will introduce temperature errors because of the expansion/contraction of the fill.

Leaks:

The entire filled portion of the system must be absolutely leak tight, since any loss of fill will result in significant errors.