



DIAPHRAGM SEALS

Designed for use with pressure gauges or switches or transmitters on process applications where:

- Process element materials capable of withstanding corrosive effects of certain fluids are not available.
- The process fluid being measured would normally clog the pressure measuring element.
- The process fluid in the measuring element might freeze due to changes in ambient temperatures.

A diaphragm assembly fabricated of materials that will withstand various corrosive media encountered, separates the measuring element from the process fluid. Since the space between the diaphragm and the measuring element is solidly filled with liquid, any movement of the diaphragm caused by a change in the process pressure will be indicated by the instrument.

Ashcroft diaphragm seals are normally mounted directly to the socket of an instrument. A flexible stainless steel armored line assembly, is available for mounting the gauge at some point away from the seal location to provide easy reading or to limit the temperature at the gauge to 150°F maximum.

Diaphragm seals (isolators) with filled, capillary line assemblies are another good solution to the problem of hot liquid and gas lines. Due to the small diameter of the flexible line (capillary) a five foot line length will usually assure that the temperature of the gauge connection does not exceed 150°F. This solution is also superior to a siphon on steam service where the water filled siphon might freeze.