Applications requiring diaphragm seals with bellows-actuated gauges (generally ranges less than 15 psi) require the use of a Viton or Kalrez diaphragm. Pressure instruments having such a range (Types 1187, 1188 and 1189 bellows gauges) normally have a high volumetric displacement requiring a diaphragm with low spring rate and high displacement capability.

The combination of low pressure and high displacement volume results in a very slow response time if a flexible line assembly or a capillary line is used between the instrument and the seal. We have, therefore, limited the sale of a diaphragm seal and Types 1187, 1188 and 1189 gauges to only directly connected assemblies.

There may be applications having low pressure ranges and low displacement volumes where a flexible line assembly is required and where it might be suitable. If you encounter such a requirement, give us all the particulars (instrument make, type number, range and volumetric displacement) so we can review and make a recommendation.

Note that due to the high viscosity of glycerin, it cannot be used when bellows gauges are ordered with diaphragm seals.

ASHCROFT DIAPHRAGM SEALS
ATTACHED TO TYPES 1187, 1188 AND 1189 BELLOWS GAUGES

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