Fill Fluids Fluids Available and Considerations

Fill fluids should be selected by carefully considering their physical properties at the extremes of the ambient and process temperature to which they will be subjected. Fill fluids must also be chemically compatible with the process fluid to avoid potentially hazardous reaction in the event of diaphragm failure. Typically, hydrocarbon based liquids must not be used with strong oxidizers such as oxygen, chlorine, hydrogen peroxide or nitric acid. For these special applications, inert liquids such as Fluorolube or Halocarbon are available. Fill fluids diluted with or containing water will not be supplied by ITT Conoflow. The presence of water in filled systems can cause gross inaccuracies.

Notes:
1. Not to be used in contact with aluminum or magnesium.
2. Information to be advised.

Fill Fluid	Temperature Limits	Specific Gravity	Viscosity cSt + 76°F (24°C)
Pure Glycerine (Food Grade)	+30 to +300°F (-1 to +149°C)	1.26	100e
Silicone D.C. 200-10	-35 to +450°F (-37 to +232°C)	0.93	10
Silicone D.C. 704	+30 to +520°F (-1 to +271°C)	1.07	40
Silicone D.C. 710	+ 30 to +650°F (-1 to +343°C)	1.11	500
Silicone D.C. 550	-40 to +600°F (-40 to +316°C)	1.07	125
Silicone D.C. 510	-60 to +400°F (-51 to +204°C)	0.99	50
Silicone D.C. 200-350 (Food Grade)	+ 0 to +300°F (-18 to +149°C)	0.97	350
Fluorolube FS-5) (See Note 1)	-40 to +500°F (-40 to +260°C)	1.87	5.5
Halocarbon Oil 6.3) (See Note 1)	-40 to +400°F (-40 to +204°C)	1.87	6.3
Ethylene Glycol (Anti-Freeze)	-30 to +300 F (-34 to +149°C)	1.10	30e
Propylene Glycol (Pharmaceutical-USP)	-50 to +200°F (-46 to + 93°C)	1.03	42.6
Syltherm 800	-40 to +450°F (-40 to +232°C)	0.93	10.7
Mineral Oil	(Note 2)	0.88	270cP
Neobee M-20 (Food Grade)	-4 to +320°F (-20 to +160°C)	0.92	9.5cP