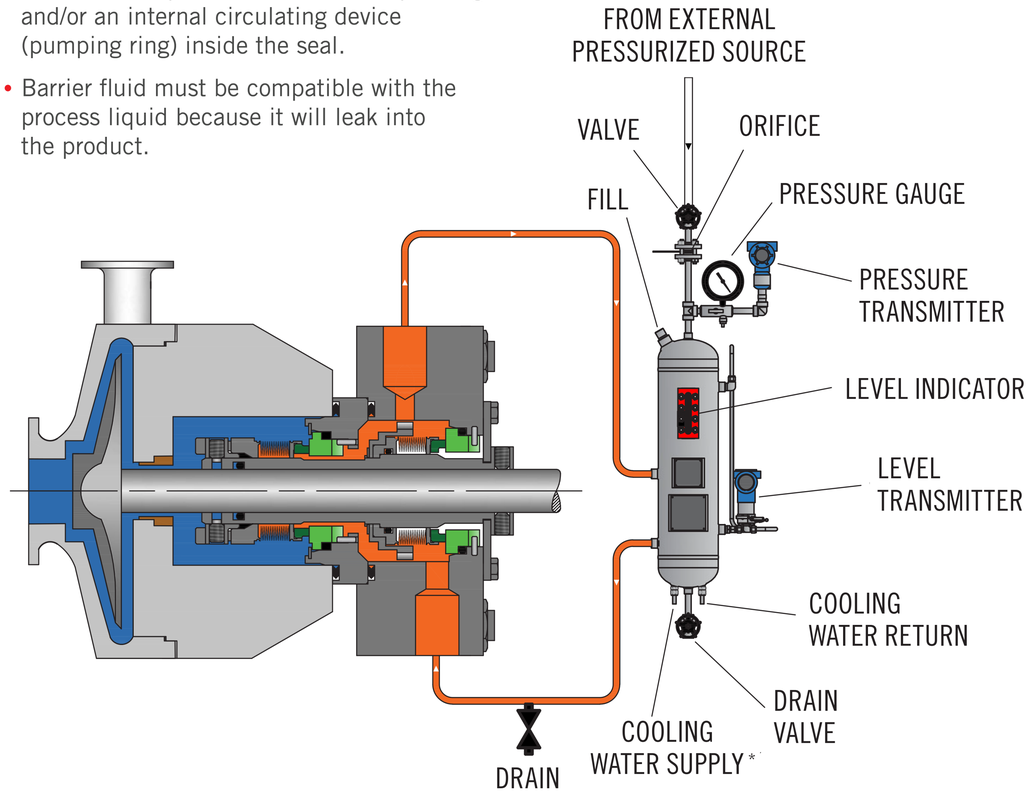
API PLAN 53A
Pressurized External Barrier Liquid Reservoir Supplying Clean Fluid to the Inboard and Outboard Seal Faces.

- Barrier fluid is maintained at a pressure greater than the seal chamber pressure, typically 20 psi (1.4 bar) above maximum seal chamber pressure.
- Circulation of barrier fluid to and from the reservoir is dependent on thermal siphoning and/or an internal circulating device (pumping ring) inside the seal.
- Barrier fluid must be compatible with the process liquid because it will leak into the product.
- NOTE: Continuous pressurization with nitrogen, not air, is recommended. Generally for barrier pressures above 150 psi (10.3 bar) use Plan 53B, 53C or 54. Consult Flexaseal for best practices in all applications.

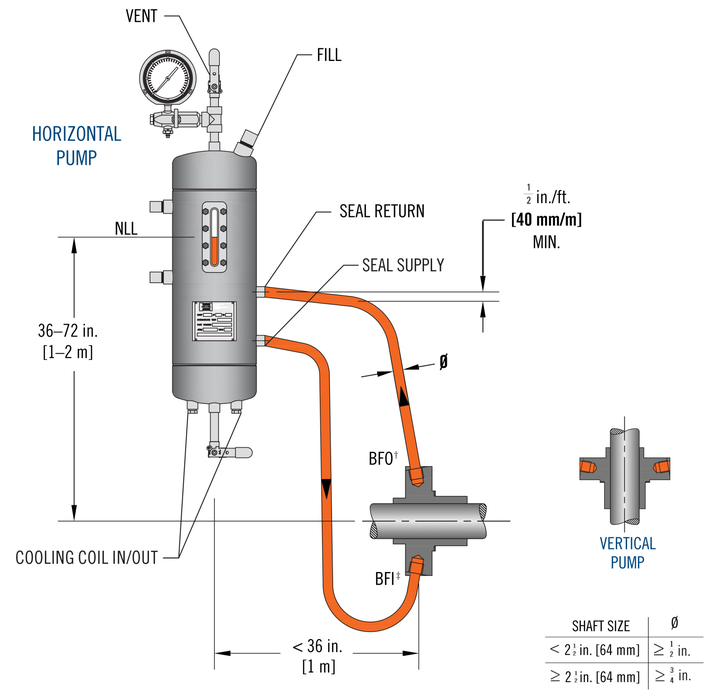


FLEXASEAL VANTAGE STYLE GLAND END VIEW

*Auxiliary cooling may be necessary in some applications. The cooling system is typically built into the reservoir.

Piping Practices for Seal Support Reservoir Systems.

- Reservoir should have a minimum 3 gallon 11.4 L volume for shafts less than 2-1/2 in. 64 mm. Reservoir should have a minimum 5 gallon 18.9 L volume for shafts 2-1/2 in. 64 mm or larger.
- The reservoir normal liquid level (centerline of sight glass) should be 36 in. 1 m above gland centerline.
- Reservoir should be located as close to the pump as possible (within 36 in. 1 m radius) while still leaving room for operation and maintenance.
- Do not mount the reservoir directly above the pump.



† BARRIER FLUID OUT ‡ BARRIER FLUID IN