

## Magnetic Fluid Feedthrough

When shaft rotation at the feedthrough is required, Magnetic Fluid Technology can be used to provide a hermetic seal against both vacuum and gas/atmosphere

A Magnetic loop consists of the magnet, pole pieces and the shaft. Several stages of liquid "O-ring" are formed by concentration of the magnetic fluid between the poles and the shaft. Each stage can sustain a pressure of  $0.2\text{kg/cm}^2$ . There are normally 10 to 20 stages in the sealing segment of the feedthrough.

Using the magnetic properties of the magnetic fluid as controlled by the magnet, there is no mechanical friction Even at very high rotary speeds. The Magnetic fluid feedthrough is a Dynamic Sealing component with a long usage Life. It can be used under both positive and negative pressures.

**Applications: Rotary Seal**  
**Helium Leakage:  $10\text{-}12\text{ Pa m}^3/\text{sec}$**

**Magnetic Fluid, Hollow Shaft, and other high Precision standard and specialty Feedthroughs with 4 to 6 week lead Times and low prices.**

