

# CRYO-SEAL HERMETIC

Air-Tight Glass Sealed Connector Series for Cryogenic Temperatures

PDS - 354



The Cryo-Seal Hermetic connector series is designed for extreme low temperature environments. They are built to retain contact-to-contact sealing in temperatures as low as  $-319^{\circ}\text{F}$  ( $-195^{\circ}\text{C}$ ).

Temperatures falling below  $-85^{\circ}\text{F}$  ( $-65^{\circ}\text{C}$ ) typically leaves one at risk of losing the pin-to-pin environmental seal and/or having cracked elastomeric components leading to electrical shorting. The Cryo-Seal Hermetic ensures your sealing and connectivity remain operational.

48-hour exposure testing conducted on our Cryo-Seal Hermetic series showed no fractures or cracks in the glass seal. It Maintained a true hermetic seal, limiting helium air leak to  $1 \times 10^{-7}$  cubic centimeters per second. No cracking of the elastomeric interfacial seal was observed under 5x magnification.

**Applications:** Liquid Rocket Engines (LRE), Superconducting Qubit Quantum Computers, Medical Devices, Lunar and Martian Environments, Deep Space Travel

## FEATURES AND BENEFITS:

- Internatable and interchangeable with standard 38999 connectors
- Limits helium air leak to  $1 \times 10^{-7}$  cubic centimeters per second
- Improved interfacial seal to resist cracking in extreme cold conditions
- Exposure tested for 2 weeks at  $-319^{\circ}\text{F}$  ( $-195^{\circ}\text{C}$ ) and retained full hermeticity
- Rubber will not take a compression set when stretched or compressed due to regular connector operations
- Available across 38999 Series I, Series II, and Series III
- Tooled in 30+ insert arrangements across 38999 connectors
- Can be made available in 2M connectors as well



Standard D38999  
cracked seal