



Douglas Electrical Components

SPACE SIMULATION

Feedthrough designs allow easy connection to existing instrumentation

**FAST
SHIPPING
AVAILABLE!**



Space simulation facilities have the most challenging technical requirements and delivery time constraints of any type of vacuum system. That's why every major space simulation facility in North America depends on our OptiSeal™, PotCon® and ductorseal hardwired feedthroughs.

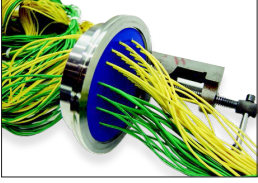
A broad range of design options include high-density wire harness packages and in-line quick disconnects, like our PBTR PotCon, that allow easy testing via existing instrument connectors.

Technical Advantages

- Products include DuctorSeal, PotCon, OptiSeal™, StudSeal™, CircuitSeal™ and non-hermetic cable harnesses.
- High frequency designs exceeding 18GHz.
- High voltage designs exceeding 30kV.
- Vacuum bake-out services available.
- NASA certified low outgassing epoxy tested per ASTM E-595-93 (0.33% TML. 0.00% CVCM).
- Drop-in replacements to Deutsch DM5623 connectors.
- DuctorSeal hermetic feedthroughs seal directly to stranded wire, shielded cable, multi-conductor cable and thermocouple wires, minimizing voltage drops at connection points and a reducing the chance of wiring mistakes.
- Connectors that can be hermetically-sealed include:
 - Industrial connectors from Amphenol, ITT, Tyco, Molex, Lemo and more.
 - Common Mil-Spec connectors such as Mil-C-5015, Mil-C-38999, Mil-C-26482, Mil-C-24308 (HDM and HDD D-Sub), Mil- DTL-83513 (Micro-D) and Mil- DTL-32139 (Nano-D).



Ideal Applications



Fiber Conflat

Fiber optic vacuum seal using a combination of multimode and single-mode fibers sealed in a conflat flange.



Large Portplate Assemblies

Complete NASA SSC A3 test stand Portplate assemblies, which can support more than 1,300 DuctorSeal and 40 PotCon discrete feedthrough.



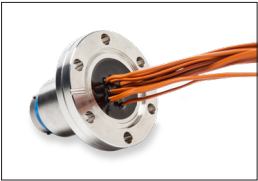
Complex Harness

Non-hermetic cable harness assemblies for bench-top and in-vacuum use, built by our IPC-620 certified technicians. Common configurations include multibreakout, fused, filtered and shielded harnessing.



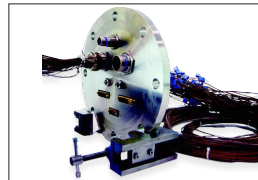
RBTW Portplate

Multi-connector PotCon Portplate flanges ship fully tested and ready to bolt onto the vacuum chamber.



DuctorSeal

DuctorSeal thermocouple feedthroughs provide direct point-to-point wiring for the most precise thermal measurements.



Portplate Signal High Frequency

Mixed bundle DuctorSeal feedthrough for signal, thermocouple and power lines through a single vacuum chamber penetration.



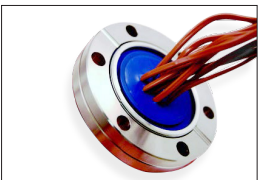
High Frequency RF Solutions

DuctorSeal and PotCon solutions capable of 18GHz.



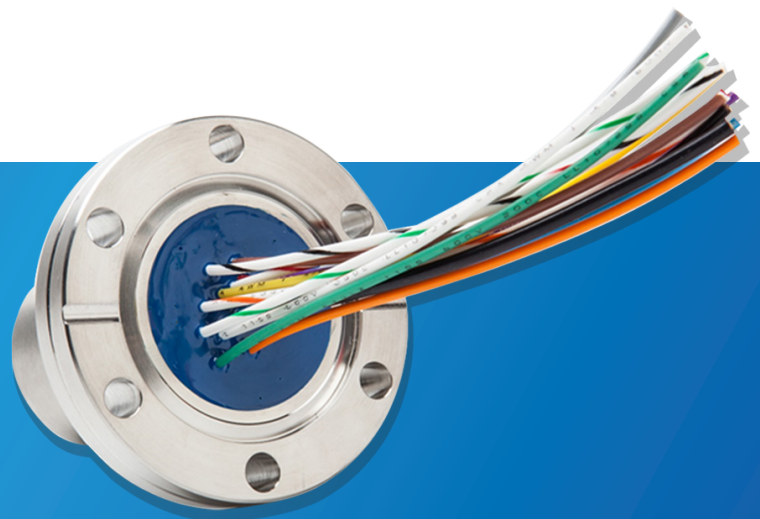
100c Micro-D

AlBeMet plate assembly for space flight application.



Cryo

Cryogenic designs for temperatures down to -270°C (3 K).



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