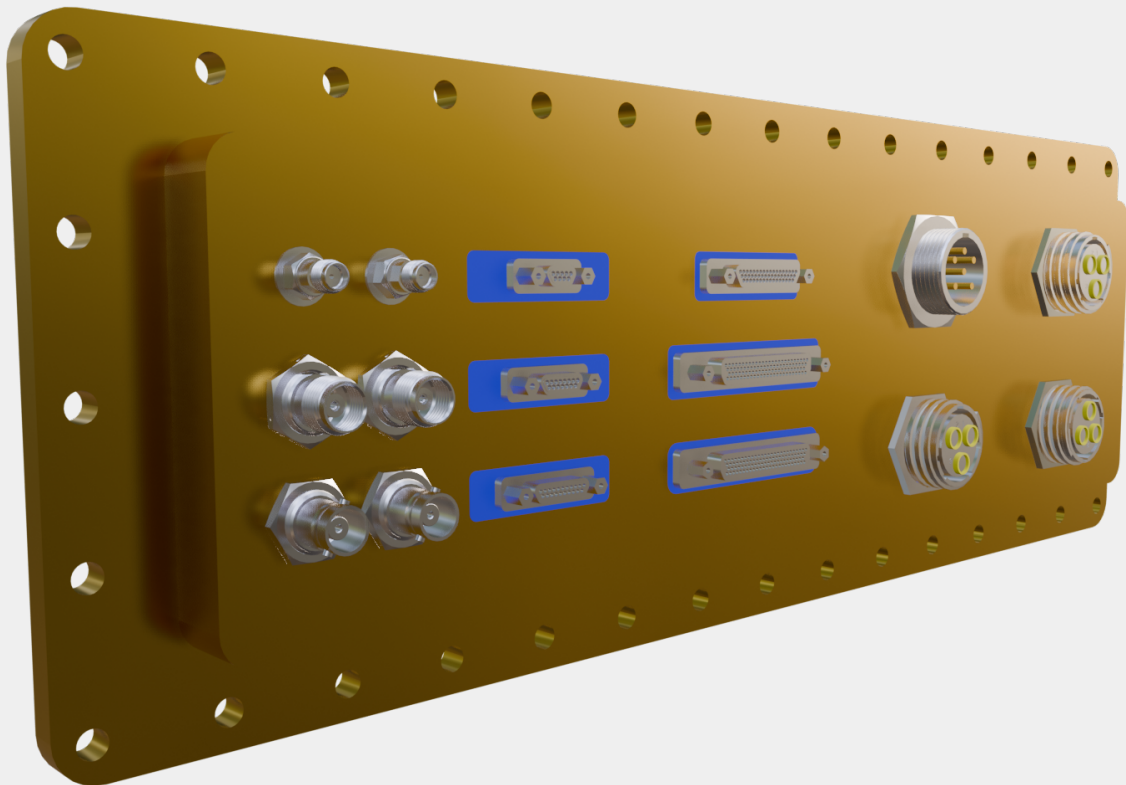


Hermetic Plate Assemblies for Aerospace & Defense

Customized Solutions to Meet your Exact Specifications



WHY CHOOSE DOUGLAS

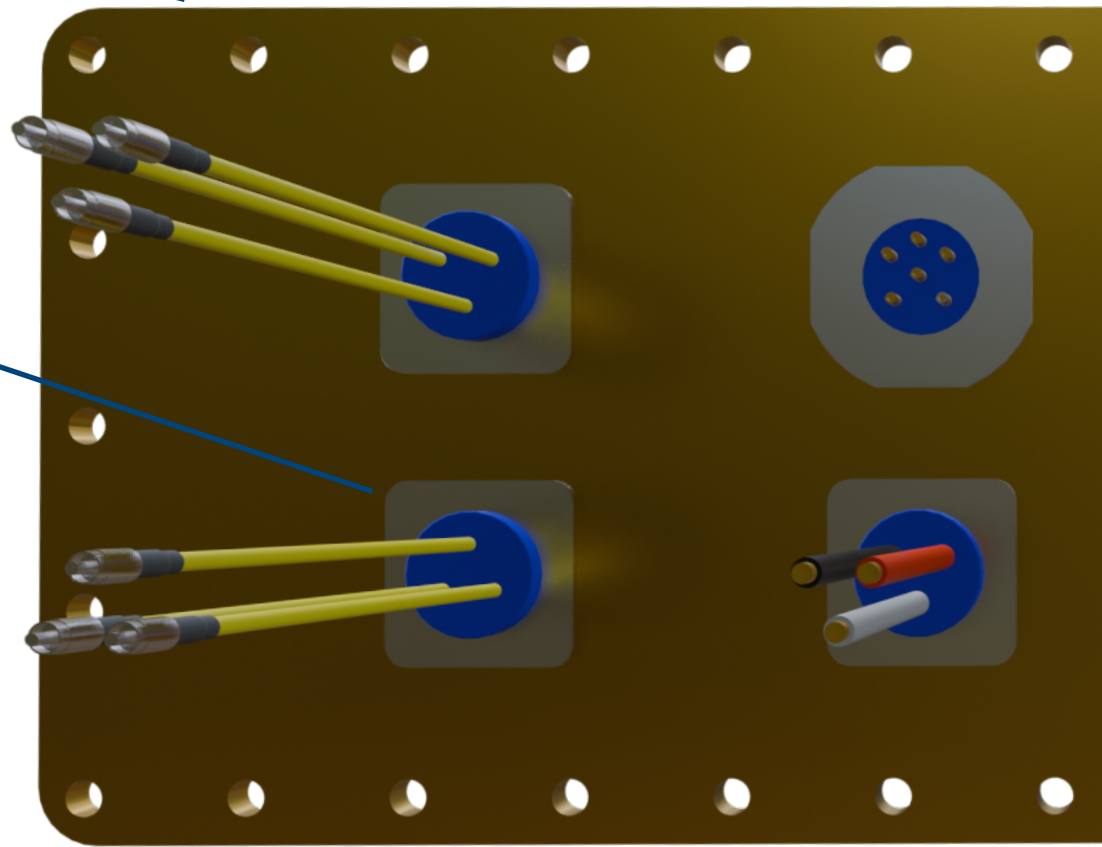
- **Build More – Buy Less** – Create **high density hermetic solutions** using our proprietary epoxy technology to create an air- and moisture-tight seal of virtually any conductor, circuit, or optical fiber.
- **Get it Faster** – From **rapid prototypes to full scale production**, Douglas Electrical Components manufactures standard and custom solutions for MIL/Aero applications in our NJ facilities **on schedule**.
- **Plug & Play** – With a Design for Manufacturability mindset and technology with ultimate design flexibility, our application engineers will partner with you to design a hermetic solution as a second source or new design to **optimize it for your operational success**. Save time and money with Douglas Electrical Components.

QUALITY

- ISO 9001:2015 & ISO 14001:2015
- AS9102 First Article Inspections available upon request; contact factory.
- 100% quality control testing to IAW MIL-STD-810
- ITAR-DDTC Registration & SAM Registered business
- NASA ASTM-E-595 certified low outgassing epoxy (0.33% TML, 0.00% CVCM)

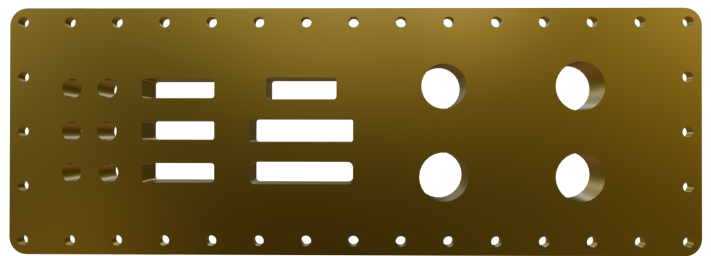
1. Mechanical Interface

2. Wire / Optical Fiber Options



1. Mechanical Interface

The plate assembly has various options. Douglas can machine the plate from a variety of materials including brass, stainless steel, aluminum, titanium, or specialty alloys. Additionally, Douglas can hermetically seal customer supplied plates and housings with electrical connections directly integrated into the custom design.



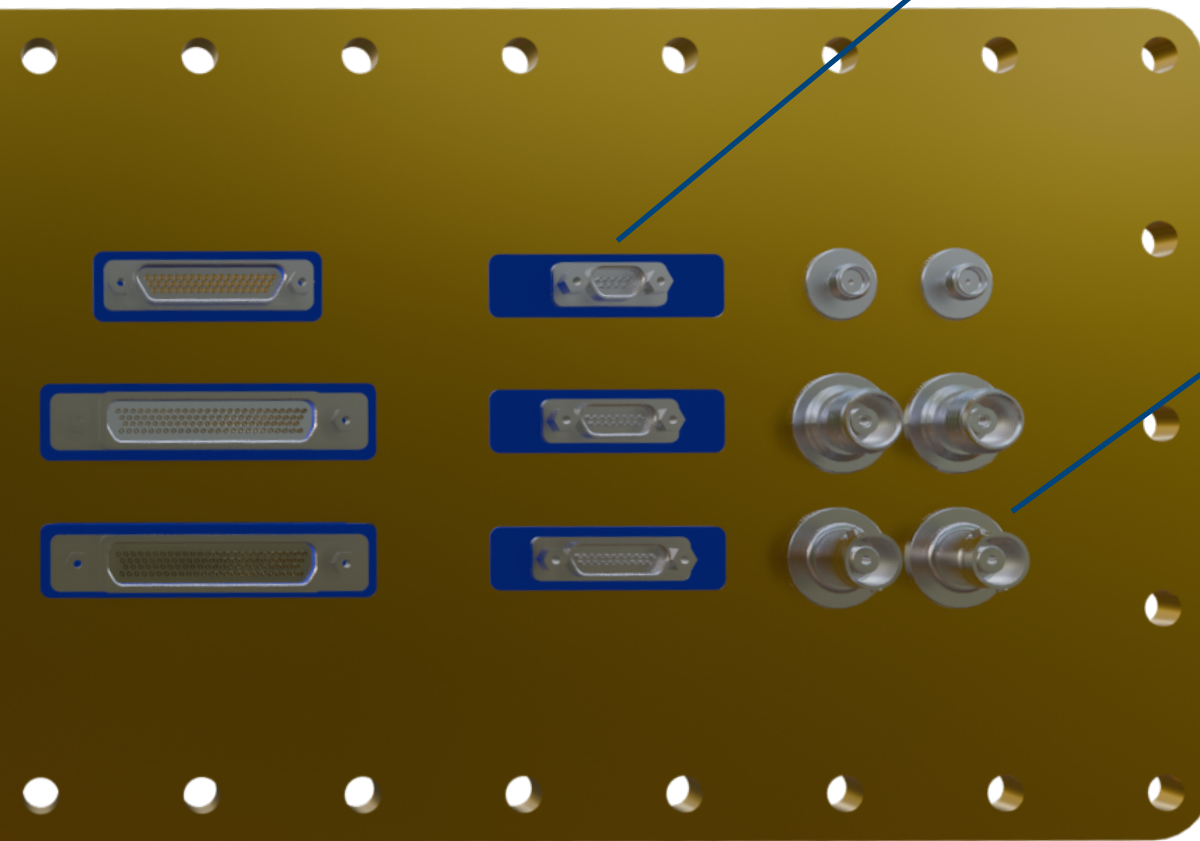
2. Wire / Optical Fiber Options

Directly integrate wires, cables, and pre-terminated optical fibers into the hermetic plate. This can save assembly time, weight, and space. Douglas can integrate solder cups, PCB tails, or pins into any electrical interface. Wires and cables can feature inline connectors, integration of armor, jackets, labeling, and more.



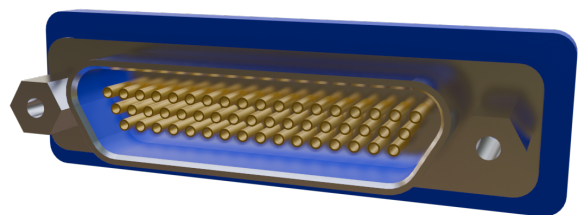
3. Hermetically Sealed MIL-spec Connectors

4. Coaxial Connectors



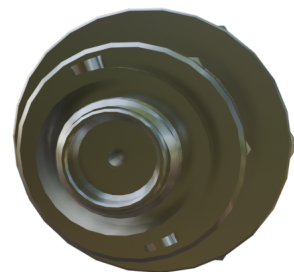
3. Hermetically Sealed MIL-Spec Connectors

Integrate virtually any circular or rectangular connector on the market including **MIL-DTL-38999**, MIL-DTL-5015, MIL-DTL-24308 (D-sub) and MIL-DTL-83513 Micro-D connectors. This enhances plug-and-play operation with high density connections. Additionally, utilize virtually any non-hermetic connector option to improve your design flexibility.



4. Coaxial Connectors

Integrate virtually any coaxial connector options including SMA, BNC, Triaxial and more. In this example, Douglas is hermetically sealing high frequency **SMA connectors** to the plate assembly that are electrically isolated from the hermetic plate assembly.



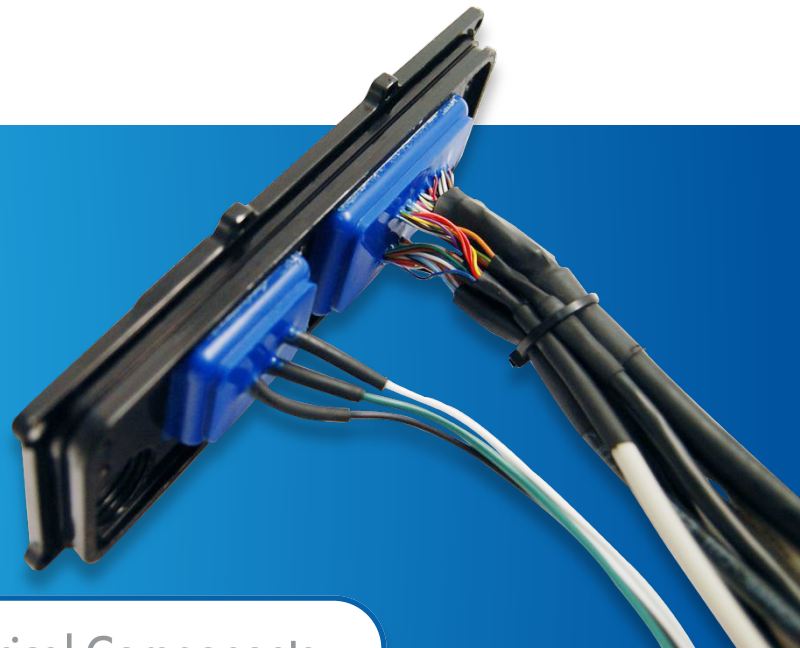
ADVANTAGES OF A DOUGLAS HERMETIC PLATE ASSEMBLIES

- **Partner with a company who specializes in hermetically sealing various electrical connection types to a variety of materials.** Douglas Electrical employs a low-outgassing epoxy tested per ASTM E-595- 93 (0.33% TML, 0.00% CVCM) while meeting various moisture-tight standards including those in MIL-STD-883 and MIL-STD-750. This sealing method enables customers to increase signal density, mix conductor types, reduce weight, and integrate connectors, terminals, conductors, and circuits for a hermetically sealed connection for power or signal.
- **Design exactly what you need and where you need it.** Epoxy gives you the flexibility to combine various connection types, sizes, and interfaces to simplify your design and manufacturing process. It provides robust, long-term sealing producing decades of reliable performance.
- **Ensure it meets your standards.** Douglas will mechanically and electrically test your assembly to ensure it meets vacuum and pressure testing requirements.
- **Made in US.** Douglas is ITAR-, DDTC-, DFARS-, Conflict Materials-, and ROHS-compliant and a SAM registered business. ISO 9001 / ISO 14001 registered with AS9102 First Article Inspections available upon request.

Solving Your Wire and Connector Sealing Challenges

For 80 years, Douglas Electrical has provided custom solutions to meet the demands of glove boxes, medical equipment, semiconductor manufacturing, space simulation, military, vacuum systems, energy-and more. From pin headers and pogo-pin solutions, to cooling feedthroughs and electronic encapsulation, we look for new opportunities to push our boundaries even further to meet your unique application needs.

Visit www.douglaselectrical.com to learn more.



 Douglas Electrical Components

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