

Hermetic D-Sub Connectors

Aptiv's Hermetic D-Sub Connectors deliver airtight, pressure-tight performance to protect sensitive electronics from vacuum, pressure, moisture, gases, and extreme temperatures. Built with glass-to-metal or ceramic sealing technology and rugged materials like stainless steel and Kovar, these connectors ensure stable signal, power, and data transmission in mission-critical aerospace, defense, medical, industrial, and vacuum-tech applications.



KEY FEATURES & BENEFITS

- Hermetic Seal: Gas- and pressure-tight protection.
- Rugged D-Sub Format: Polarized, EMI/RFI-shielded, industry standard
- High Reliability: Stable performance in extreme environments
- Glass-to-Metal/Ceramic Seals: Long-lasting environmental isolation
- Wide Temperature & Pressure Range: Ideal for vacuum and harsh conditions
- Corrosion-Resistant Materials: Durable stainless steel/Kovar construction
- Consistent Electrical Performance: Reliable signal, power, and data integrity
- Flexible Mounting: Flange or threaded bulkhead options
- Multiple Contact Options: Standard and high-density configurations

PRODUCT SPECIFICATIONS

Electrical Properties	
Current Rating	1A to 7.5A (per contact)
Voltage Rating	250 VDC to 1000 VAC (sea level)
Dielectric Withstanding Voltage (DWV)	1000 VAC to 2000 VAC (sea level)
Contact Resistance	10 mΩ to 20 mΩ max
Shielding Effectiveness	40 dB to 60 dB

Environmental Properties	
Operating Temperature	Up to +200 °C
Storage Temperature	−65 °C to +150 °C
Humidity	MIL-STD-202, Method 103
Thermal Shock	MIL-STD-202, Method 107
Vibration	MIL-STD-202, Method 204
Shock	MIL-STD-202, Method 213
Pressure Rating	Up to 10,000 PSI (689 bar)

PRODUCT SPECIFICATIONS CONTD.

Mechanical Properties	
Mating Cycles	100 to 500 cycles min
Contact Retention (Axial)	4.5 lbs (20 N) min
Shell Material	Stainless Steel, Kovar®, Steel
Contact Material	Copper Alloy, Kovar®
Insulator Material	Glass, Ceramic, High-Performance Thermoset
Leak Rate	$<1 \times 10^{-7}$ to $<1 \times 10^{-9}$ cc/sec He
Mounting Options	Flange mount, Threaded bulkhead
Pin Count	9 to 104 contacts
Contact Spacing	0.050" (Micro-D) to 0.108" (Standard D-Sub)