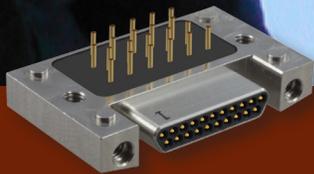




Glenair®



RUGGED CONNECTORS FOR GEOPHYSICAL AND OFFSHORE APPLICATIONS

**HIGH TEMPERATURE, HIGH PRESSURE CONNECTORS
AND BULKHEAD FEED-THRUS FOR SEISMIC,
WIRELINE, AND OTHER DOWNHOLE APPLICATIONS**



United States ■ United Kingdom ■ Germany ■ France ■ Nordic ■ Italy ■ Spain ■ Japan

High-Pressure, High-Temperature Harsh Environment Connectors

Resolving Gas, Moisture and Particle Ingress Problems in Geophysical Applications with High-Temperature Glass Hermetic Connectors

Interconnection devices permanently sealed by glass fusion are ideally suited to prevent the transmission of air, moisture, and other gases into electronic equipment used in downhole and other well completion applications. Hermeticity is expressed as the rate of leakage volume of helium per second in time, and glass-to-metal seal technology achieves highest possible hermeticity ratings (up to 1×10^{-10} CC He/Sec.) High temperature vitreous glass is used to provide a robust hermetic seal between metal conductors (contacts) and metal connector shells. Glenair is the recognized worldwide leader in the design and manufacture of high-reliability glass hermetic connectors, and can integrate the technology into virtually any connector package or series.

Advantages of glass-to-metal sealed hermetic connectors compared to potted plastics or elastomers in hostile environments

- ◆ Enhanced reliability
- ◆ Superior pressure resistance to 32,000+ PSI
- ◆ Higher resistance to extreme operating temperatures to 260°+ C
- ◆ Superior mechanical strength
- ◆ No material breakdown or aging over time

Improving Durability and Total Cost of Ownership for Oil Patch Connectors and Cables

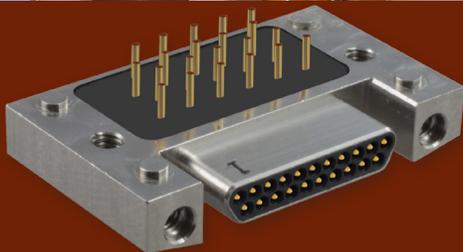
Designed for use in geophysical and other hostile marine and oil-patch applications, Glenair's Series 22 Geo-Marine® connectors, cables and bulkhead feed-thrus offer high-density insert arrangements and advanced environmental sealing. Specialized corrosion-resistant materials increase system integrity and lower system cost. Standard mated stainless steel plugs and receptacles deliver a hydrostatic pressure sealing capability of up to 5000 psi (345 bar) and are available in either glass-sealed hermetic or with rigid dielectric environmental insulators. Customized HTHP Connectors can be engineered with Inconel® body/pin materials or other exotics. Other features include single-start, stub-Acme threads for quick coupling and superior resistance to thread fouling and binding due to dirt and other foreign matter; a castellated and knurled plug coupling ring which provides easy mating and unmating, even with arctic gloves; and plug shell leading edge configuration which assures key-keyway alignment and engagement prior to mating of the plug coupling ring threads.

GLASS-SEALED
Hermetic
CONNECTORS


Geo-Marine®

Well-Master²⁶⁰ High Temp Micro-D

Glenair Well-Master™ 260—The Micro-D Connector for Serious, High-Temperature Applications



- ◆ 260° continuous operating temperature
- ◆ Angled mounting ears for easy fit in cylindrical equipment housings
- ◆ High-reliability TwistPin contact system utilizing special high-temperature alloys on .050" pitch contact spacing
- ◆ Solder cup, pre-wired or printed circuit board terminations

Standard Micro-D connectors are rated for +125°C. Glenair's MWDM Micro-D can withstand +150°C continuous operating temperature and can be upgraded to +200°C if assembled with special high temperature epoxies. (Glenair, by the way, is the world's largest manufacturer and supplier of these standard-duty Micro-D connectors). But oil, gas and geothermal wells can subject electronic instruments utilizing these miniature connectors to temperatures as high as +260°C or more. The GHTM (Well-Master) Series Micro-D meets this need for a high density, high performance connector capable of handling extreme temperatures. Well-Master contacts are made from a special alloy that resists softening when exposed to high temperatures. Rugged passivated stainless steel shells and hardware, high temperature liquid crystal polymer (LCP) insulators and special epoxies allow these connectors to survive the most demanding high-temperature environments. Consult factory for high-temp versions up to 300°C.

GHTM HIGH TEMPERATURE CONTACT ARRANGEMENTS



Mating face of pin connector. Socket connector contact numbers are reversed.

MATERIALS AND FINISHES	
Contacts	Proprietary nickel alloy, gold plated
Insulators	Liquid crystal polymer (LCP)
Shell	Stainless steel, passivated
Mounting Hardware	Stainless Steel
Potting Compound	Epoxy
Insulated Wire	Nickel-coated copper, PTFE insulation per M22759/87 (260°C)

SPECIFICATIONS	
Current Rating	3 Amps
Contact Resistance	8 milliohms maximum
Dielectric Withstanding Voltage	600 Vac sea level
Insulation Resistance	5000 megohms minimum
Operating Temperature	-55° C. to +260° C.
Shock	300 g.
Vibration	37 g.