



SERIES 22

# Geo-Marine®

## High-pressure harsh-environment connectors and overmolded cables

### Applications

Designed for use in oceanographic, geophysical and other severe industrial environments, Glenair Series 22 Geo-Marine® Connectors and Cables are the ultimate harsh-environment power and signal connector solution. Built to withstand hydrostatic pressures up to 5,000 PSI and exposure to extreme temperatures and corrosives, the Series 22 Geo-Marine® is ideally suited for applications such as US Navy towed array sonar systems, military land vehicles, submersibles and ROV's, offshore-oil drilling equipment, seabed exploration, pipeline inspection systems, well monitoring equipment, and digital seismic streamers.

### Design

Geo-Marine® plugs are equipped with arctic coupling nuts—made from marine-grade naval bronze—with easy-to-grip castellated knurling and a powerful ratcheted anti-decoupling mechanism which guarantees reliable mating and demating performance in even the harshest environments. Supplied as discrete connectors—or more typically in build-to-print overmolded cable assemblies—the Series 22 Geo-Marine® has delivered reliable, proven performance for over four decades and is an excellent interconnect solution for high-pressure, harsh-environment applications.



- Marine Grade 316 stainless steel machined shells and Naval Bronze coupling rings
- High-pressure environmental and hermetically sealed receptacles for field applications
- Power and signal contact arrangements from 2 to 128 contacts
- Anti-vibration ratcheted coupling nuts with castellated knurling
- Available Viton® overmolded cable assemblies



SUBSEA/SHALLOW WATER: GEO-MARINE®





photo: Seismometer, geophysical observatory, Neumayer Station, Antarctica by Dr. Hannes Grobe



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### Anti-Galling Arctic Coupling Nuts

One of the most valuable features of the Series 22 Geo-Marine® from the user's perspective is the specially-designed castellated and knurled coupling nut which facilitates rapid mating and demating in field applications. Single-start, stub Acme threads reduce thread fouling and binding, and are supplied with an anti-vibration/anti-decoupling device which prevents accidental loosening or decoupling. Plugs contribute to high-pressure sealing, up to 5,000 PSI in the mated condition, by means of rugged and durable interfacial and peripheral seals.



### Range of Offerings

Series 22 Geo-Marine® connectors are supplied with either fused-glass ("H" hermetic class-up to 5,000PSI open face rating) or high grade thermoplastic ("E" environmental class-5,000PSI in the mated condition) insulators. Both classes of connectors are supplied with rugged, corrosion-resistant materials. Low-profile and scoop-proof cable plugs and receptacles, as well as bulkhead feed-throughs are available. Specially-designed cable sealing backshells as well as EMI/RFI shield termination backshells and environmentally-sealed protective covers complete the range of discrete product offerings. 35 Contact Arrangements (contact sizes #12, #16, #20 and #22) are tooled and fully available.

**Receptacle Configurations:** High-pressure environmental ("E") and hermetic ("H") class receptacles are available for cable as well as box applications. Rugged o-ring piston seals located inside the receptacle barrel contribute to reliable high-pressure sealing in the mated condition. Glenair is able to supply Geo-Marine® customers with a wide range of receptacle configurations for unique requirements including low-profile and scoop-proof designs, pin and socket contact designs, solder cup and printed circuit board termination, unique flange shapes and mounting configurations, in-line cable receptacles, connector savers and gender changers.

### HIGH-PRESSURE ENVIRONMENTAL AND HERMETIC RECEPTACLE CONFIGURATIONS



Rear Panel Mount , Jam Nut



In-Line (CCP)



Square Flange (FCR)



Solder-Mount



Bulkhead Feed-Through