NAVY / Shipboard

Rugged Fiber Optic CONNECTORS

Submersible Fiber Optics

SeaKing™ Fiber Optic Connectors offer rugged 10K PSI open-face pressure rated performance for data-intensive marine, subsea, and oil & gas industry applications. Glenair SeaKing™ Fiber solutions include harsh-environment overmolded cable assemblies, multibranch inside-the-box jumpers, as well as Glenair signature high-temp, high-vibration transceivers and optical-to-electrical media converters. Pressure-balanced oil-filled (PBOF) cable assemblies are also available for deep subsea applications.

- HIGH CHANNEL DENSITY
- DYNAMIC VIBRATION AND SHOCK RESISTANCE
- ENVIRONMENTALLY SEALED
- PRESSURE RESISTANCE
- CORROSION RESISTANCE
- FLAMMABILITY, TOXICITY, LOW-SMOKE
- EASE-OF-MAINTENANCE
- UNCOMPROMISED RELIABILITY

SeaKing Fiber Optic connectors are ideal for riser monitoring systems, subsea factories, or oil platforms where high datarates meet high pressure and harsh environments.

Mission-Driven Design

SeaKing™ Fiber Optic Select Mechanical Performance Specifications	
7.6 Dielectric Withstanding Voltage (All Parts)	Connectors shall be tested in accordance with test procedure EIA-364-20 Method C and Condition I, at 1200 VAC ± 10% 60 second and there shall be no evidence of electric breakdown or flashover.
7.7 Insulation Resistance (All Parts)	Connectors shall be tested in accordance with test procedure EIA-364-21. Connector contacts shall be tested 5 GΩ at 500 VDC ±10% voltage source at room temperature
7.8 Durability	Connectors shall be tested in accordance with EIA-364-9, IEC-60512-5 Test 9a. The wired, assembled plugs and receptacles shall be mated and unmated 300 cycles. The mating and unmating shall be accomplished so that the plug and receptacle are completely separated during each cycle. After the durability test is completed a pass 5 GΩ at 500 VDC insulation resistance test from each contact to every other contact and the shell.
7.9 Thermal Shock (All Parts)	Test in accordance with test procedure EIA-364-32 Method A. Unmated connectors shall be subjected to 5 cycles at temperature of -20ºC to 105ºC ± 5ºC. There shall be no evidence of cracking, breaking or loosening. After the thermal shock test is completed a pass 5 GΩ at 500 VDC insulation resistance test from each contact to every other contact and the shell.
7.10 Salt Spray (Group 2 only)	Connectors shall be tested in accordance with test procedure EIA-364-26 Condition C. The connectors shall be fully populated and immersion time 500 hours. At the end of the immersion duration while still immersed, insulation resistance 5 GΩ at 500 VDC test shall be completed from each contact to every other contact and the shell.
7.11 Hydrostatic Pressure	Connectors shall be test in accordance with procedure per ISO-13628-6 except the minimum period of measurement shall be three minutes. Replace Interface O-rings before pressure testing - Hydrostatic Pressure Testing – Open Face – BCR Individual - Hydrostatic Pressure Testing – Mated Condition – Mated Pair - Hydrostatic Pressure Testing – Glass sealed Inserts 8 cycles – 3X 5min-dwell @ 11,000 + 4X 5min-dwell @ 15,000 + 1 X 1hr-dwell @ 15,000psi. Ramp 3,000psi/min – Reference

Harsh-environment overmolded fiber optic jumpers

High-pressure fiber optic cable with chemical-resistant Viton® or polyurethane overmolding

Pressure-Balanced Oil-Filled (PBOF) high-pressure assemblies

High-pressure fiber optic cable in clear polyurethane tubing. Straight, 45°, and 90° PBOF backshells

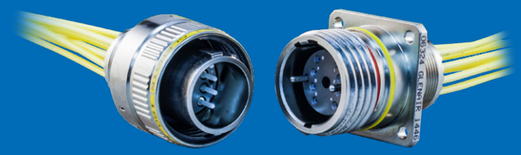
Pressure-sealed connectors with inside-the-box ST-, FC-, and LC- type connectors

10K PSI high-pressure open face SeaKing Fiber connector terminated to industry-standard F/O connectors.

ALSO-AVAILABLE MIL-SPEC TECHNOLOGY:

MIL-PRF-28876 QPL and NGCON Fiber Optics

Qualified M29504 termini and M28876 connectors / accessories



Next-generation connectors and rear-release genderless termini IAW the emerging MIL-PRF-64266 standard