



| DESCRIPTION | REQUIREMENT | PROCEDURE | REPORT |
|--|---|---|--------------------|
| Altitude test 27,000 ft (5 PSIA nom.) | 2.5% min. | RTCA DO-160F, Table 4-1, Table 4-2 Category C temp. spec | ARM-103 |
| Operating Temperature | -80°C to +260°C | (85% Shielding effectiveness 1000 hours) | ARM-103 |
| Braid Resistivity test, Pre and Post | Test pre/post-5 cycles-minimal disparity per spec. | EIA-364-32D IAW AS85049 | ARM-110/1 |
| Surface Transfer Impedance | Glenair Qual. Test Plan ATP-194 | Line injection IEC96-1 A.5.5.3 30KHz - 2.5 GHz mod | ARM-104 |
| Shield Effectiveness test, Pre and Post | Glenair Qual. Test Plan ATP-194 | Line injection IEC96-1 A.5.5.3 30KHz - 2.5 GHz mod | ARM-104 |
| Tensile/ Pull Strength | 220 lbs. (min.). No anomalies within 8% - 10% of pre test for variable sizes | Glenair ATP- 183. 0 lbs. to 90 lbs, to 150 lbs, to 220lbs @ speed of 0.25 inches/min | ARM-105 |
| Specific Gravity Test | 8.2 (max) per ISO-1183 | ASTM A580 (ref 316L Stainless Steel) | ARM-109 |
| Lightning Current Test | Glenair Qual. Test Plan 191/ DC resistance/voltage criteria per DO-160F Level for 3 sizes up to 30Ka. | ANSI/EIA-364-75-1977 Wave Form 5B SAE/ARP5416 Section 6.3 Waveform 1, 3 (1, 10MHz) and 5A | ARM-110 ARM-112 |
| Vertical Flammability | Self extinguishing ≤ 2 sec. Burn length 0.1 inch. max. Dripping 0.0 seconds. | 14 CFR part 25.853 (a) AMdT25-116 Appendix F Part I (a) (1) (ii) | ARM-101 |
| Mass Loss and Collected Volatile Condensable Materials | Total Mass Loss (TML) ≤1.0% Collected Volatile Condensable Matl.(CVCM) ≤.1% | ASTM E-595 | ARM-102 |
| | | | |
| DESCRIPTION | REQUIREMENT | PROCEDURE | TEST REPORT |
| Salt Spray Test | DC Resistance IAW AS85049 .5 milliohm. | ASTM B117-09 Sodium Chloride 5% 500 | ARM-100 |



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| | No evidence of base metal on braid | Hrs | |
| Vibration Resistance | EAI Test Report 33247. DO160 section 8 Cat. R Vib. Curves E1 | DO-160F RTCA/DO-160F, Section 9, Fig. 8-4. Curve E1. - 3 sizes – 3 hours on each axis. | ARM-111 |
| Salt Spray Test | DC Resistance IAW AS85049 .5 milliohm. No evidence of base metal on braid | ASTM B117-09 Sodium Chloride 5% 500 Hrs | ARM-100 |
| Thermal Shock Cycling test and Resistivity | No adverse effects in visual inspection or resistance after 50 cycles | EIA-364-32D, Table 3 Test condition V -75°C to +215°C | ARM-113 |
| Abrasion and Plating test | DC Resistance IAW AS 85049. Glenair internal QTR-003 | ATP 180 20 continuous @ 6 cycles/min. over 3 arms with .030" radiused edges | ARM-107 |
| Fluid Immersion Test | Material compatibility – see table below | Customer/AS4373D method 601 Mod | ARM-106 |
| Flex Test | 2 Cycles: starting 0° over vertical ctr. Line across to 180° cycle. Total cycles of 25633 | Glenair ATP 179 | ARM-112 |

| Test Fluid | Test | Test | Immersion Time (h) | Requirement | Procedure |
|---|---------|---------|--------------------|---|--|
| | Temp °C | Temp °F | | | |
| MIL-L-23699, Lubricating Oil ,Aircraft Turbine Engine, Synthetic Base | 48-50 | 118-122 | 20 | No fraying, DC resistance within limits (AS85049 paragraph 4.6.3> | SAE AS1241 Table 15/Mil-Std 810F Method 504 (modified), for all Substances Additional conformance to Test Criteria AS4373D method 601 Mod |
| MIL-H-5606 (Inactive for New Design), Hydraulic Fluid, Petroleum Base, Aircraft Missile, and Ordnance | 48-50 | 118-122 | 20 | | |
| TTI-I-735, Solvent, Isopropyl Alcohol | 20-25 | 68-77 | 168 | | |
| ASTM D 1153, Methyl Isobutyl Ketone (For use in organic coatings) | 20-25 | 68-77 | 168 | | |



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| MIL-DTL-5624 , Turbine Fuel, Aviation, Grade JP-4 either or MIL-T-83133, JP-8 | 20-25 | 68-77 | 168 |
| SAE AMS1424, Anti-Icing and Deicing-Defrosting Fluid, undiluted | 48-50 | 118-122 | 20 |
| SAE AMS1424, Anti-Icing and Deicing-Defrosting Fluid, diluted 60/40 (fluid/water) ratio. Supersedes Coolanol 25 Item Q | 48-50 | 118-122 | 20 |
| MIL-C-43616, Cleaning Compound, Aircraft Surface | 48-50 | 118-122 | 20 |
| SAE AS 1241 , Fire Resistant Hydraulic Fluid for Aircraft | 48-50 | 118-122 | 20 |
| MIL-L-7808, Lubricating Oil, Aircraft Turbine Engine, Synthetic Base | 118-121 | 244-250 | 30 |
| | | | |
| MIL-C-87937, Cleaning Compound, Aircraft Surface, Alkaline, undiluted | 63-68 | 145-154 | 20 |
| MIL-C-87937, Cleaning Compound, Aircraft Surface, Alkaline Waterbase, diluted 25/175 (fluid/water) ratio | 63-68 | 145-154 | 20 |
| TT-S-735, Standard Test Fluids; Hydrocarbon, Type I | 20-25 | 68-77 | 168 |
| TT-S-735, Standard Test Fluids; Hydrocarbon, Type II | 20-25 | 68-77 | 168 |
| TT-S-735, Standard Test Fluids; Hydrocarbon, Type III | 20-25 | 68-77 | 168 |
| TT-S-735, Standard Test Fluids; Hydrocarbon, Type VII | 20-25 | 68-77 | 168 |
| MIL-PRF-87252, Coolant Fluid, Hydrolytically Stable, Dielectric | 20-25 | 68-77 | 168 |