



LUMINUS

Luminus: Small, lightweight, low-cost circular solutions



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Overview

Luminus are lightweight, cost-effective connectors that are highly reliable and simple to use. With multiple configurations and arrangements available, a solution can be tailored to suite your application's exact requirements. Proven solutions can be found in single engine general aviation, multiple-engine business and passenger jets, and high performance rotary aircraft.

Ideal where space is limited, these innovative, "scoop-proof" connectors feature a locking mechanism that ensures stability, are suitable for blind-mating, and are RoHS compliant.

Features & Benefits

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| 1/4 turn bayonet style connection; push and snap connection | Makes wire installation/maintenance easy and efficient; positive "click" when locked |
| Interfacial and Triple-Barrier Seal | Enables environmental sealing (IP 67 rating) |
| Multiple Keying Positions | Ensures proper connectivity |
| Multiple Configurations and Accessories | Tailored solutions to meet application needs |
| Contacts | AS39029 MIL Spec contacts for broad application compatibility. Stamped & Formed available as lower cost option |
| Visual markings | Visual aid for easy assembly |
| Rugged Polyamide Housings; 500 mating cycles | Durability |
| Blind-Mate Connection | Enables simple, blind mating; easy assembly |
| D160, M81714, FAR25 Compliance | Meets demanding military-aerospace environmental conditions |

Materials & Specifications

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|-------------------------|---|
| Materials | Insulator Body: Polyamide 6/6 (Nylon) |
| | Grommet & Face Seal: Silicone Rubber |
| | Contact Retainer: Stainless Steel |
| Temperature Range | -65°C to 125°C |
| Temperature Life | 500 hours @ 85°C |
| Insulation Resistance | 5000 MΩ Min. @ 500 VDC |
| Dielectric Withstanding | 1500 VAC, 60 Hz @ Sea Level, 1ma |
| | 300 VAC, 60 Hz @ 70,000 ft, 2ma |
| Durability | 500 mating cycles |
| Temperature Cycling | 5(1) Hour Cycles: -65°C to 125°C |
| Thermal Shock | -65°C to 200°C |
| Vibration | 30G Sinusoidal; 43.96G Random |
| Shock | 300G, 3msec, Half-Sine |
| Salt Spray | 5% Salt Spray @ 95°C for 48 Hours |
| Humidity | 10 Days @ 25°C to 65°C, 90% - 95% RH |
| Seal Rating | IP67 |
| RoHS & REACH Compliance | Yes |

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|---|---|--------|
| Fluid Immersion | Lubricating Oil per Mil-Prf-7808 | |
| | Cleaning Compound per Mil-Prf-87937, Alkaline Base | |
| | Isopropyl Alcohol & Mineral Spirit Solution | |
| | Skydrol Hydraulic Fluid | |
| | Hydraulic Fluids per MIL-PRF-83282 MIL-PRF-87257 | |
| | Ethylene Glycol | |
| | Propylene Glycol | |
| | Aviation Jet A | |
| Flammability | UL94, V0. | |
| | DOTG section 26.6.2 & 26.6.3 | |
| | FAR Part 25 App F Part I | |
| Contact Insertion & Removal Force <small>(not to exceed)</small> | size 22 | 10 lbs |
| | size 20 | 10 lbs |
| | size 16 | 13 lbs |
| | size 12 | 15 lbs |
| Contact Retention <small>(minimum)</small> | size 22 | 10 lbs |
| | size 20 | 15 lbs |
| | size 16 | 25 lbs |
| | size 12 | 30 lbs |