



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

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

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
Altitude Immersion	5% salt solution, 75k feet
	5000Mohms @ 1500 VAC, sea level
	5000Mohms @ 300 VAC, 70k ft
	5000Mohms @ 300 VAC, 100k ft
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

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	
Flammability	Aviation Jet A	
	UL94, V0.	
	DOTG section 26.6.2 & 26.6.3	
Contact Insertion & Removal Force <small>(not to exceed)</small>	FAR Part 25 App F Part I	
	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