



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 suit your application's exact requirements. Proven solutions can be found in single-engine general aviation, multiple-engine businesses 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 (IP67 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 and Formed available as lower cost option
Visual Markings	Visual aid for easy assembly
Rugged Polyamid 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)	Fluid Immersion	Lubricating Oil per MIL-PRF-7808	
	Grommet & Face Seal: Silicon Rubber		Cleaning Compound per MIL-PRF-87937, Alkaline Base	
	Contact Retainer: Stainless Steel		Isopropyl Alcohol & Mineral Spirit Solution	
Temperature Range	-65° to 125°C		Skydrol Hydraulic Fluid	
Temperature Life	500 hours @85°C		Hydraulic Fluids per MIL-PRF-83282, MIL-PRF-87257	
Insulation Resistance	5000 MΩ Min. @ 500 VDC		Ethylene Glycol	
Dielectric Withstanding	1500 VAC, 60 Hz @ Sea Level, 1ma		Propylene Glycol	
	300 VAC, 60 Hz @ 70,000 ft, 2ma		Aviation Jet A	
Durability	500 mating cycles	Flammability	UL94, V0.	
Temperature Cycling	5(1) Hour Cycles: -65° to 125°C		DOTG Section 26.6.2 & 26.6.3	
Thermal Shock	-65° to 200°C		FAR Part 25 App F Part I	
Vibration	30G Sinusoidal; 43.96G Random	Contact Insertion & Removal Force (not to exceed)	Size 22	10 lbs
Shock	300G, 3msec, Half-Sine		Size 20	10 lbs
Salt Spray	5% Salt Spray @ 95°C for 48 Hours		Size 16	13 lbs
Humidity	10 Days @ 25°C to 65°C, 90%-95% RH		Size 12	15 lbs
Seal Rating	IP67	Contact Retention (minimum)	Size 22	10 lbs
RoHS & REACH Compliance	Yes		Size 20	15 lbs
			Size 16	25 lbs
			Size 12	30 lbs