



PEGASUS

Pegasus: Small, lightweight, rugged connectors



Overview

The Pegasus Series is Amphenol Pcd's latest innovation in small, lightweight, rugged connectors. Designed for use in harsh environments, Pegasus builds on the successful Luminus Aerospace connector with the addition of EMI shielding.

EMI shielding is provided by electroless copper and nickel plate, with a copper alloy spring finger gasket to ensure shell-to-shell conductivity. Tests show between 40db and 60db of attenuation, depending on frequency. This combination of light weight, small size, and EMI shielding makes Pegasus the ideal choice where protection against ambient noise transients, or suppression of emitted noise is required, and space and weight are at a premium.

Features & Benefit

Electroless Copper & Nickel plating	Shielding from ambient noise transients, suppression of emitted noise (DO-160G Section 21 categories B, L and M and DO-160G Section 20 categories S & T)
1/4 turn bayonet style connection	Simple and easy mate & unmate; Blind mate keying
Interfacial and Triple-Barrier Seal	Environmental sealing to IP67
Multiple Configuration	Inline, Square Flange, Oval Flange, Jamnut PCB, Circular Snap-In
Scoop-Proof	Prevents contacts from being bent or electrically shorted during mating
Stainless Steel Contact Retainers	High contact retention force over operating life cycle

Materials & Specifications

Materials	Insulator Body: Ultem / Polyetherimide	Fluid Immersion	Lubricating Oil per Mil-Prf-7808
	Grommet & Face Seal: Silicone Rubber		Cleaning Compound per Mil-Prf-87937, Alkaline Base
	Contact Retainer: Stainless Steel		Isopropyl Alcohol & Mineral Spirit Solution
	Plating: Nickel over Copper		Skydrol Hydraulic Fluid
Temperature Range	-65°C to 125°C	Flammability	Hydraulic Fluids per MIL-PRF-83282 MIL-PRF-87257
Temperature Life	500 hours @ 85°C		Ethylene Glycol
Insulation Resistance	5000 MΩ Min. @ 500 VDC		Propylene Glycol
Dielectric Withstanding	1500 VAC, 60 Hz @ Sea Level, 1ma		Aviation Jet A
	300 VAC, 60 Hz @ 70,000 ft, 2ma		UL94, V0.
Durability	Min 100 mating cycles; 250 typical	RoHS & REACH Compliance	DOTG section 26.6.2 & 26.6.3
Temperature Cycling	5(1) Hour Cycles: -65°C to 125°C		FAR Part 25 App F Part I
Thermal Shock	-65°C to 200°C	Contact Insertion & Removal Force (not to exceed)	Yes
Vibration	30G Sinusoidal; 43.96G Random		less than 3 lbs
Shock	300G, 3msec, Half-Sine		less than 5 lbs insert (sz22)
Housing Electrical Conductivity	6 milliohm		less than 4lb remove (sz22)
EMI Shielding Effectiveness	65db @ 100Mhz 60db @ 200Mhz 55db @ 300Mhz 55db @ 400Mhz 45db @ 800Mhz 45db @ 1Ghz		less than 12lbs insert (sz 16)
			less than 12lbs remove (sz 16)
Salt Spray	5% Salt Spray @ 95°C for 48 Hours	Coupling Torque	greater than 10lbs
Humidity	10 Days @ 25°C to 65°C, 90% - 95% RH		less than 10lbs, sz 22
Seal Rating	IP67		less than 25lbs, sz 16
			less than 5lbs