



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
	Grommet & Face Seal: Silicone Rubber
	Contact Retainer: Stainless Steel
	Plating: Nickel over Copper
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	Min 100 mating cycles; 250 typical
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
Housing Electrical Conductivity	6 milliohm
EMI Shielding Effectiveness	65db @ 100Mhz 60db @ 200Mhz 55db @ 300Mhz 55db @ 400Mhz 45db @ 800Mhz 45db @ 1Ghz
Salt Spray	5% Salt Spray @ 95°C for 48 Hours
Humidity	10 Days @ 25°C to 65°C, 90% - 95% RH
Seal Rating	IP67

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
Flammability	Propylene Glycol
	Aviation Jet A
	UL94, V0. DOTG section 26.6.2 & 26.6.3 FAR Part 25 App F Part I
RoHS & REACH Compliance	Yes
Contact Insertion & Removal Force (not to exceed)	less than 3 lbs
	less than 5 lbs insert (sz22)
	less than 4lb remove (sz22)
	less than 12lbs insert (sz 16) less than 12lbs remove (sz 16)
Coupling Torque	greater than 10lbs
	less than 10lbs, sz 22
	less than 25lbs, sz 16
	less than 5lbs