



NANO PEGASUS

Small, easy to use connectors that provide exceptional performance in tight spaces.



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Overview

Nano-Pegasus & Nano-Luminus build upon APCD's success in light weight, plastic circular connectors in the aerospace market, in a very small way. Nano-Pegasus & Nano-Luminus are small, plastic, easy to use connectors designed specifically for sensing, command and control applications where a Micro or Nano Dsub would be used. Nano-Pegasus & Nano-Luminus provide exceptional performance in tight spaces, packing 11 high grade contacts in a shell size 5 housing (0.325" outer diameter). That's equivalent to 132 contacts per square inch! Contacts are rated for 1a, 350 Vdc operation. With 0.050" spacing, this gives 500 Vdc insulation resistance, and 350 Vac dielectric withstanding at 70k feet.

Scoop proof construction and enclosed contacts protect the small gauge contacts during mating. When mated, IP67 sealing is guaranteed by the interfacial seal, helping ensure the contacts are free from dust, moisture and corrosion. And unlike many of the competitive connectors, which are multi-piece assemblies, Nano-Pegasus & Nano-Luminus shells are a single piece housing, impervious to humidity and dust, further enhancing clean, crack free operations over the full operating temperature and environmental conditions. Shells are a high grade polyetherimide construction, providing a temperature range of -65C to +175C, and high mating cycles, making Nano-Luminus suitable for man/machine interfaces. Nano-Pegasus adds a copper & nickel overplate, providing 40db to 60db EMI shielding.

Available in solder cup for user assembly or as a finished good pig tail assembly.

Features & Benefits

1/4 Turn Cam Lock	Easy to use, blind mate with audible click and visual locking aids
Interfacial & Wire sealing	IP67 performance for use in human interface, wet and damp applications
Polyetherimide Single Piece Housing	High temperature resistance, resistance to a large number of harsh fuels & chemicals, a long working life & high mating cycles
7.5 grams / mated pair	Lighter weight means longer flight times, larger payloads, longer battery life in non-static applications
28 awg wire barrel	1a continuous over full voltage and temperature range
0.050" Contact Spacing	Very high density interconnect, equivalent to 132 contacts per sq inch
30µ inch gold plated contacts	Long working life & high mating cycles
Nickel / Copper plating	Up to 60db EMI shielding typical, depending on frequency of interest

Materials & Specifications

Shock	300G, 3 Axis
Vibration	43.9G Random
Flammability & Toxicity	Meets FAR Par 25 Appendix F, Part 1
Sealing	IP67 when mated
Fluid Resistance	Skydrol, Ethylene Glycol, Jet A, more
DWV	250VAC @ Sea-level; 100VAC @ 70k ft
Salt Spray	5% solution @ 70K ft
Temperature	-65°C to +175°C
EMI Shielding	50db typical

