

HIGH SPEED PEGASUS SERIES HIGH SPEED LUMINUS SERIES

Amphenol Pcd



Amphenol Pcd is one of the world's leading suppliers of interconnect products for Military, Commercial Aerospace and Industrial applications. Located north of Boston in Beverly, Massachusetts, the company designs and manufactures a wide range of products; System Attachments, Junction Modules, Relay Sockets, Terminal Blocks, Rectangular & Circular Connectors, Cable Assemblies and Adapters. Each product is made and engineered with the highest quality standards in the industry. With facilities in North America and Asia, Amphenol Pcd products are chosen by thousands of OEMs around the world, reliant on Amphenol's technical excellence, global network of distributors, and cost-effective solutions for custom systems.

High Speed Luminus & Pegasus

APCD has expanded the capability of Luminus & Pegasus to support industry standard TWINAX and QUADRAX style contacts. PEGASUS HS & LUMINUS HS bring an easy to use, light weight, low cost connection solution to applications that have typically relied on heavier, more complicated, and therefore more expensive, metal shell connectors.

Supporting the AS39029/90, /91, /113, /114 Twinax and ARINC600, ARINC404, AS39029/119, /120 Quadrax rear release, rear removable, size 8 style contacts, PEGASUS HS & LUMINUS HS provide exceptional performance in tight spaces, with a svelte shell size 8 (0.512") outer diameter. With the explosive growth in ethernet enabled devices (IOT), this size and configuration is particularly suited for end point applications, such as individual avionics sensors, panel mounted units, seat back and wall mounted displays and monuments.

Scoop proof construction and molded in alignment keys help 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. A triple riser grommet sealing boot provides back end sealing on the wire side.

Unlike many of the competitive connectors, which are multipiece assemblies, PEGASUS HS & LUMINUS HS shells are a single piece housing, impervious to humidity and dust, ensuring 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 LUMINUS HS suitable for man/machine interfaces. PEGASUS HS shells add a copper & nickel overplate, providing 40db to 60db EMI shielding.

Compatibility with standard Luminus & Pegasus shell sizes means many of the currently available tape and screw mount cradle accessories are supported, easing installation and mounting tasks.

Features & Benefits

¼ 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

Nickel / Copper plating (Nano-Pegasus ONLY)

Up to 60db EMI shielding typical, depending on frequency of interest

Applications

- Twinax and Quadrax based applications with digital data transmission formats, such as Ethernet, USB2.0, ARINC629, ARINC429, and Mil-Std-1553, using AS39029/90, /91, /113, /114 Twinax and ARINC600, AS39029/119, /120 Quadrax style contacts
- End-use applications include Commercial Avionics Systems, Flight Sensors, Aircraft Data Networks, Military Communications, In-Flight Entertainment, and Space applications.

Supported Contacts

Twinax	AS39029/90, /91, /113, /114
Quadrax	ARINC600, AS39029/119, /120

Key connector specifications (Preliminary)

Shock	100G, 3 Axis, Sawtooth
Vibration	16G Random, 15G sinusoidal
Flammability & Toxicity	Meets FAR Par 25 Appendix F, Part 1
Sealing	IP67 when mated
Fluid Resistance	Skydrol, Ethylene Glycol, Jet A, more
Salt Spray	5% solution @ 70K ft
Humidity	10 days @ 25°C – 65°C, 90% - 95%
Temperature	-65°C to +175°C
ROHS/REACH	Compliant
Coupling Torque	Less than 5 lbs
Mating Cycles (Pegasus ONLY)	100 minimum, 250 typical
EMI Shielding (Pegasus ONLY)	50db typical

Configurations & Ordering Info

SJS801110	Plug
SJS801120	Receptacle