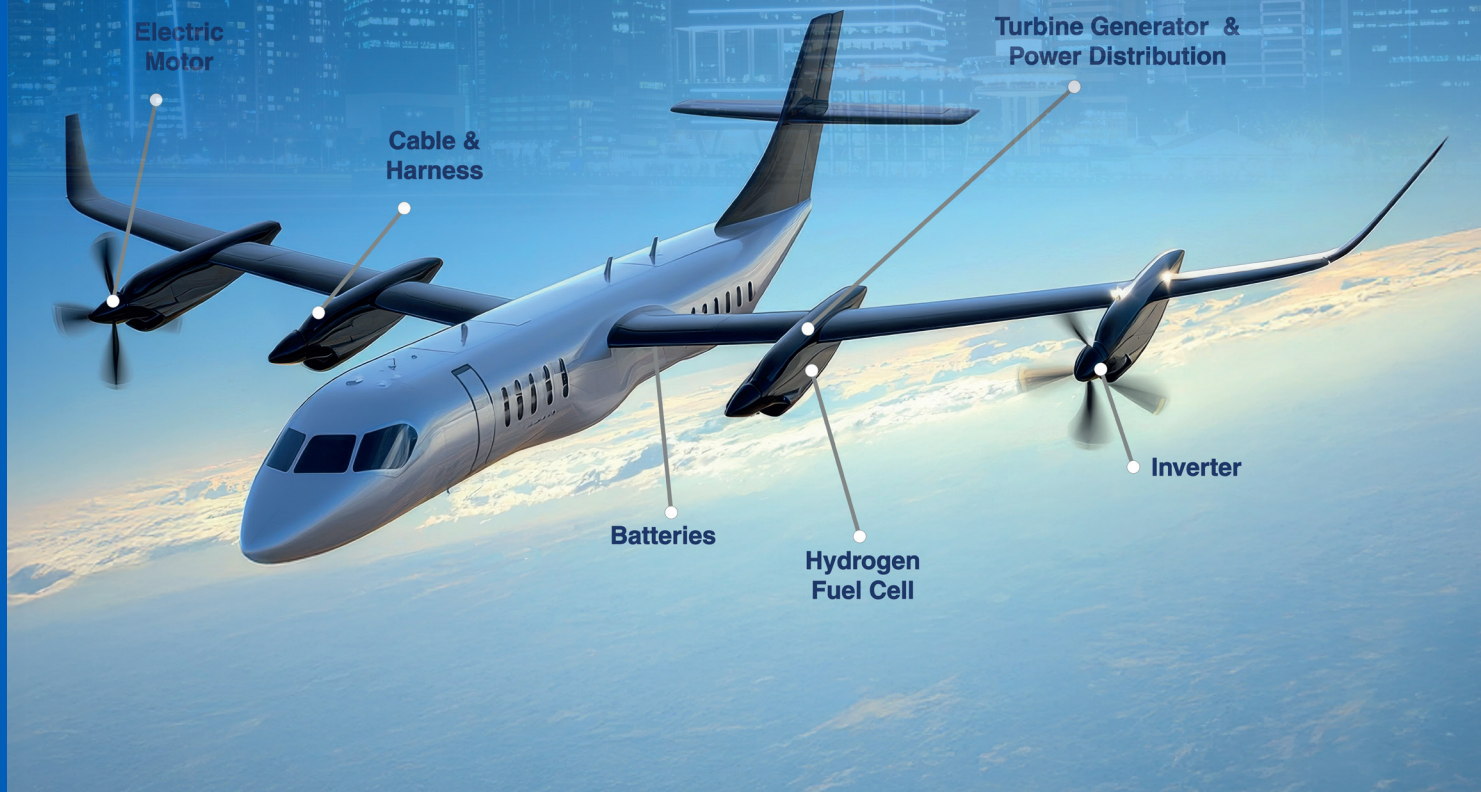


Hybrid and Electric Aviation

Amphenol Products Catalog



Amphenol

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

Powering the Next Era of Aerospace



Aviation has come a long way since the Wright Brothers' first flight on December 17, 1903, with the Wright Flyer. Only 73 years later the British-French Concorde was conducting commercial services, but civil aviation in the 20th century has seen few industry-changing innovations except for the jet engine. Concorde's last passenger flight took place on October 24, 2003, signaling an end to commercialized supersonic transportation, and with it the sonic boom and excessive fuel used by the aircraft. Evolving technology, restrictions, and increased safety regulations influence design characteristics that ultimately dictate how aircraft will look and perform in the modern transportation ecosystem.

Enabled by lightweight composites, hydrogen fuel cells, and a host of other technologies, electricity has become the source of innovation that will power disruptive change in the aerospace market. Aircraft electrification provides an environmentally responsible solution by freeing the engineering and design constraints of aircraft design through the use of distributed electric propulsion (DEP), busbars vice drive shafts, and connectors able to deliver high voltage and current requirements at altitude. Amphenol has been and continues to be at the forefront of this aviation revolution by leading and pioneering projects to develop new products and materials that enable aircraft electrification. Our innovation through joint and collaborative efforts with academia and our customers supports the rebirth of a dynamic aerospace environment as supersonic, vertical, electric, and autonomous systems become real.

Join us as we enable this aerospace revolution and select from our wide range of products with unique capabilities and applications. Our products support the diverse range of aircraft in development with technologies to deliver the highest power density in a form factor with size and weight as the primary consideration.

Thank you,
Team **Amphenol**

TABLE OF CONTENTS

Featured Products	4
Electric Motor	12
Charging and Power Distribution	17
Avionics and Communication	33
IFE and Air Quality	69
EMI Shielding	74
Sensors	76
System Attachments	79
Antennas and GPS	81
General Use	84
Cable and Harness	87
RF	88
Microminiature	90

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

FEATURED PRODUCTS



Electric
Motor



Cable &
Harness



Turbine Generator &
Power Distribution



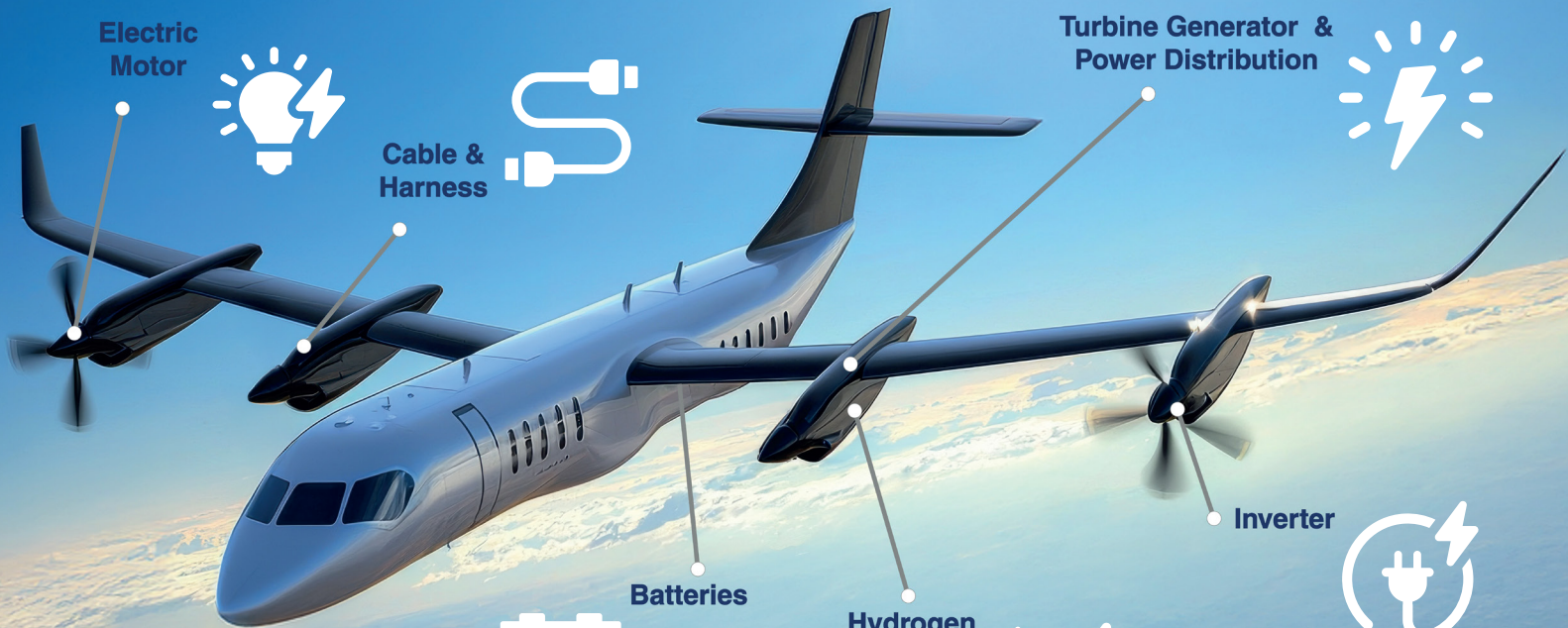
Inverter



Batteries



Hydrogen
Fuel Cell



FEATURED PRODUCTS



Contact

Brandon Brown
(607) 563-5685

bbrown@amphenol-aao.com
amphenol-aerospace.com

High Power 38999/5015

Features & Benefits:

- High Power 38999 meets applicable requirements of MIL-DTL-38999
- D38999 Series III and features a current carrying capability up to 1000 amps
- High Power 5015 features 40-50% increased current carrying capability over standard 5015 connector



Contact

accueil@amphenol-airlb.fr
amphenol-airlb.fr/en

EN4165

Features & Benefits:

- Overmoulding technology
- Space efficient & modular design
- Versatility of mixing & matching Signal & Power : RF (Quadrax, Triax, Twinax and Coax), Fiber Optic, or power Size 8 / 80 Amp contacts
- Suited for crimp or PCB contacts
- Shielding for EMI / EMC applications
- D shape polarization + locking/coding accessories



Contact

accueil@amphenol-airlb.fr
amphenol-airlb.fr/en

HPAC & HPAC w/ Sensor

Features & Benefits:

- According to MIL-DTL-38999 specifications
- 360° Shielding
- Temperature: -65 °C to +200 °C
- Overmolding technology for HVDC application
- HVIL technology (High Voltage Interlock Loop)
- Quick connection / Lever lock assistance
- CPA function (Connector Position Assurance)
- High mechanical conception: metallic shape
- Quick install accessories



FEATURED PRODUCTS



Contact

Brandon Brown

(607) 563-5685

bbrown@amphenol-aao.com

amphenol-aerospace.com

Raptor Feedthrough

Features & Benefits:

- For termination of screened power cables in semi-permanent installations
- Jam Nut or Square Flange style
- Shell Sizes 13 to 21 (2 to 2/0 AWG)
- Bus-bar termination, through hole, unit busbar or lug
- Harness side Crimp Terminal, bolted termination & Heatshrink Boot termination facility to provide external environmental protection.
- 1 KV ACrms Operating Voltage @ 25,000 ft
- 625 V ACrms Operating Voltage @ 35,000 ft
- 440 A continuous current carrying capability (Size 21 2/0 AWG)



Contact

Sarah Bushby

amphenol.co.uk

Raptor

Features & Benefits:

- Hyperbolic contact design
- Touch-Protected Contacts
- Safe Mating Design
- MIL-DTL-38999 Series III design features
- MIL-DTL-38999 panel cut-outs
- MIL-DTL-38999 Black Zinc Nickel plating RoHS Compliant
- Sealed to IP68 (mated)



Contact

Lorenzo Rouge

amphenol-socapex.com

TVHV

Features & Benefits:

- Optimized and lightweight high voltage connector
- MIL-DTL-38999 series III / EN3645 performances
- Shells in Aluminium, Composite, Stainless Steel
- Electrical performances at 50 000ft (Vac Peak):
- 1000 V Operating Voltage
- 1900 V PDIV - 1550 PDEV
- 3000 V Dielectric Withstanding Voltage
- AS39029, EN3155 or Temper Grip power contacts
- Interlock last mate, first break EN3155 contacts



FEATURED PRODUCTS



Contact

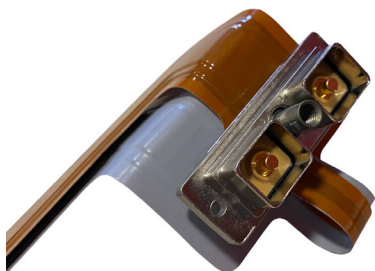
Brandon Brown
(607) 563-5685

bbrown@amphenol-aao.com
amphenol-aerospace.com

High Voltage 38999

Features & Benefits:

- HV38999 series was designed to meet and/or exceed the specifications of MIL-DTL-38999
- Dual interlock circuitry
- Utilizes existing mil-qualified 39029 contacts
- Amphenol Duallok Plugs available for increased shock and vibration performance
- Available in all shell configurations
- Amphenol high-performance contacts can be used for increased amperage rating (modification code B65)
- Shells are standard MIL-DTL-D38999 and will accommodate standard MIL-DTL-D38999 accessories



Contact

Brandon Brown
(607) 563-5685

bbrown@amphenol-aao.com
amphenol-aerospace.com

Amphenol Commercial Air Busbars

Features & Benefits:

Powder Coated Busbars

- Multiple off-the shelf powder coating formulations available dependent on performance needs
- High voltage capable
- Limited tooling required depending on geometr

Over-molded Busbars

- Typically molded rubber, excellent sealing to surface of conductor
- Can be designed with integral sealing feature and insulated fasteners
- Very good high voltage performance at altitude

Laminated Busbars

- Range of lamination materials for different temperature requirements, fluids, etc.
- Best performing at high voltages and altitude, including partial discharge mitigation
- Shielded busbars possible with this laminated technology



FEATURED PRODUCTS



Contact

Brandon Brown

(607) 563-5685

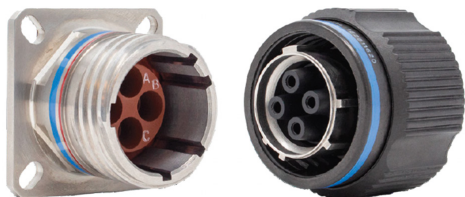
bbrown@amphenol-aao.com

amphenol-aerospace.com

HV Feedthrough

Features & Benefits:

- Composite insulator/shell combination prioritizes reduction of overall size and weight
- Multiple styles: bolted termination, push/pull termination, wire passthrough
- Voltage and amperage can be tailored to application requirements
- Materials available for use in pressurized and/or firewall-rated housings
- Provisions for insulating terminations available



Contact

Brandon Brown

(607) 563-5685

bbrown@amphenol-aao.com

amphenol-aerospace.com

High Voltage 38999 Dualok

Features & Benefits:

- Vibration-resistant plug prevents unintended disengagement during operation



Contact

Brandon Brown

(607) 563-5685

bbrown@amphenol-aao.com

amphenol-aerospace.com

Voltarius

Features & Benefits:

- Voltage Rating: 1000 VDC at sea level
- Sealing: IP67 (unmated) & IP69K (mated)
- Temperature range: -40 °F (-40 °C) to 257 °F (125 °C)
- Available in single-pole or multi-pole arrangements
- Full 360-degree shielding with integral shield termination
- Safety interlock circuitry utilizes last mate, first break sequence
- Busbar and threaded termination standard with the receptacle
- Plugs available in straight or right-angle orientations



FEATURED PRODUCTS



Contact

Tom Turner

tom.turner@amphenol-cit.com

Silicone Insulated 2-Conductor High-Voltage Copper Cable for Tilt Rotor Applications

Features & Benefits:

- High-voltage performance of 1000 V
- Shielded construction for EMI protection
- Engineered for applications requiring repeated flexing such as advanced air mobility (AAM) tilt rotor applications



Contact

Tom Turner

tom.turner@amphenol-cit.com

Ultra-Flexible High-Voltage Shielded Composite Wire

Features & Benefits:

- High-voltage performance of 1000 V
- Shielded construction for EMI protection
- 6x minimum bend radius
- Lightweight and small diameter PTFE composite tape wrapped composite insulation
- Seamless(TM) jacket construction for smooth appearance and installation characteristics of an extrusion



Contact

Tom Turner

tom.turner@amphenol-cit.com

3x Bend Radius High-Voltage Shielded Aluminum Cable

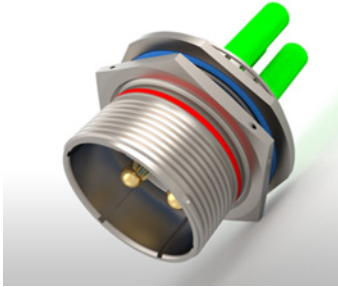
Features & Benefits:

- High-voltage performance of 1000 V
- Shielded construction for EMI protection
- 3x minimum bend radius
- Saves 50%-60% on weight vs equivalent copper construction



Visit amphenolmilitaryaerospace.com for more information

FEATURED PRODUCTS



Contact
amphenol-cit.com

PowerUp kV Connectors

Features & Benefits:

- HV Connector multipole type, 2 or 4 contact
- Max Voltage 900 VDC, Average Current 100 Amps, Peak Current 300 Amps
- Cable Size/Gauge 0, 2, 4, 6, 8
- Designed to Aerospace standards for Power Network and Loadshare Networks
- High voltage and temperature range in 38999 style shell
- ACIT Engineering teams have optimized the PowerUP™ connector with ACIT 1000 V cables and terminal blocks for end-to-end cable solutions



Contact
Paul Milburn
pmilburn@amphenolpcd.com
amphenolpcd.com

CCS1 Inlet

Features & Benefits:

- High power DC fast charging inlet assemblies
- CCS1, CCS2 & NACS, 80 A to 500 A, 1000 VDC
- DC wired pigtails or busbar contacts
- With or without LEDs
- E-Lock assemblies, 12 V or 24 V
- Offer complete custom cable assembly, plug and play solution
- Over 300 A charging, recommend liquid-cooled charging gun




Contact
Sarah Bushby
amphenol.co.uk

Rhino Series

Features & Benefits:

- Hyperbolic contact design
- Touch-Protected Contacts
- Safe-Mating Design
- MIL-DTL-38999 Series III design features
- MIL-DTL-38999 panel cut-outs
- MIL-DTL-38999 Black Zinc Nickel plating RoHS Compliant
- Sealed to IP68 (mated)





Your End-to-End Solutions Partner For Electrification

Power. It's the ability to act or do something in a particular way, especially as a faculty or quality. Battery power density is steadily increasing through chemical innovation toward the game-changing 500 Wh/kg that could unlock electricity's true potential in the skies. Harnessing the extreme amount of energy found in the next generation of flight propulsion systems demands attention to detail and a complete understanding of the electric environment. We've immersed ourselves in the revolution of flight as partners to provide solutions for a new era of aircraft through countless design iterations, material studies, and relentless testing. Success, credibility, certainty, and safety are the results.

Amphenol engineers and manufactures the highest performing connectors on the market. Couple that with our heavy copper PCB, and we become the end-to-end solution for your electric motor and inverter requirements. Our deep understanding and experience with power expanded as the primary manufacturer of connectors in military hardware during WWII, transitioned with the turbine engine, and advances today with hybrid-electric propulsion systems. We didn't just *survive* COVID; we *thrived* among challenges the market presented by staying at the forefront of our customers' needs, Amphenol product availability, and customer support.

We have the expertise to optimize Size, Weight and Power Performance (SWaPP) in products outfitted for simplicity and reliability with minimal weight penalty. Complex distributed propulsor arrangements might utilize a layered busbar approach or standard cables we specialize in. Every product we provide is meticulously engineered and tested to flat-out work in the environment it was made for. At Amphenol, we put power to work for you.



ELECTRIC MOTOR



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Brandon Brown

bbrown@amphenol-aao.com

amphenol-aerospace.com

High Power 38999/5015

Description:

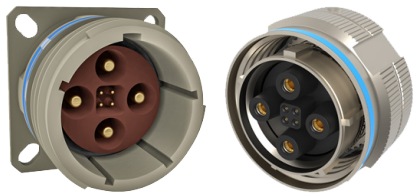
High Power 5015 and 38999 series from AAO features Amphenol Radsok and Temper-Grip high-power contact technology for up to 50% more current carrying capability.

Features & Benefits:

- High Power 38999 meets applicable requirements of MIL-DTL-D38999 Series III and features a current carrying capability up to 1000 amps
- High Power 5015 features 40-50% increased current carrying capability over standard 5015 connector

Application

HV AC/DC Power Generation



Contact

Brandon Brown

bbrown@amphenol-aao.com

amphenol-aerospace.com

High Voltage 38999/5015

Description:

The HV line of connectors is an expansion of the MIL-DTL-38999 series to provide solutions for next-generation aircraft power requirements. Amphenol HV38999 has been tested up to 1200 VAC / 1500 VDC* to remain partial discharge free at 50,000 ft. Safety interlock circuitry is managed through the use of size 22 contacts in a last mate, first break mating sequence.

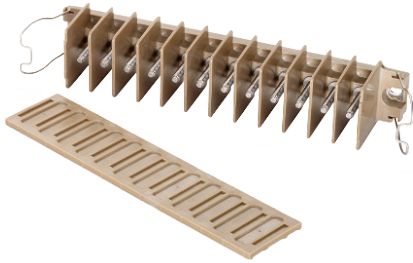
Features & Benefits:

- Designed to meet and exceed the requirements of MIL-DTL-38999
- Dual interlock Circuitry
- Able to support High voltages at altitude (tested up to 1200 VAC/1500 VDC to remain partial discharge free at 50,000 ft)
- Utilizes standard 38999 accessories

Application

HV AC/DC Power Generation

ELECTRIC MOTOR



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

3240 / 3242 Monoblock Assemblies

Description:

Designed for power distribution purposes, the monoblock assemblies are made of terminal junction block, for copper or aluminum cable connections. Monoblock assemblies are available with individual or shunted terminals, from 1 to 12 terminals, in different diameters. The protective cover fixing, as well as the terminal assembly's fixing on structure are secured by pillar bolts.

Features & Benefits:

- Military & Commercial Aerospace specification
- PEEK Polymer
- High Temp Range
- High Current up to 350 Amps
- Fire/Smoke/Toxicity conform to ABD 031 and FAR 25853

Application

HV AC/DC Power Generation



Contact

Russ Smolinsky
rsmolinsky@amphenolpcd.com
amphenolpcd.com.cn

HVPT Series Cable Pass Through

Description:

High Voltage Pass-Through for 2.5 mm² to 6 mm² & 25 mm² to 95 mm² Cable. Lightweight plastic cable pass-through, 1 to 3 positions, IP67, IP6K9K, Shielded, up to 95 mm².

Features & Benefits:

- Lightweight Plastic Cable Pass-Through
- 1-3 Positions
- IP67
- IP6K9K
- Shielded
- Up to 95 mm²

Application

Box Mount HV Cable Pass-Through



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

ELECTRIC MOTOR



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



MTS-360

PST-360

Contact

Jose Luis Macia
raffi.sahul@wilcoxon.com
piher.net

PST-360, MTS-360

Description:

Non-contact hollow shaft position sensors with excellent repeatability, accuracy, resolution, linearity and high stability under extreme environment conditions. The PST-360 sensor combines a through-shaft design with 360° absolute position feedback. It is compact yet extremely rugged, can easily be custom engineered to fit customers' specifications and existing mechanical assemblies. With its tiny size of only 6 mm x 17 mm x 18 mm (HxWxL), the MTS-360 allows engineers integrate a fully featured rotary angle sensor directly on their PCB.

Features & Benefits:

- Ruggedized for harsh environments
- Cost-effective
- Long life
- True non-contacting sensing element

Application

Shaft Position Electric Motor



Contact

Raffi Sahul
raffi.sahul@wilcoxon.com
wilcoxon.com

HV200

Description:

The HV200 is a specialized accelerometer designed to withstand high EM interference and extreme transient events in demanding condition monitoring applications. The sensor provides over 6 kV of electrical isolation between the connector and base, high EMI and ESD resistance, and rapid shock recovery.

Features & Benefits:

- Case-base isolated up to 6 kV
- Isolated sensor with extended EMI performance
- 100 mV/g, ±5% sensitivity tolerance
- Rapid shock recovery
- MIL-C-5015 connector
- 1/4-28 mounting stud
- Top exit

ELECTRIC MOTOR



Contact

Raffi Sahul

raffi.sahul@wilcoxon.com

wilcoxon.com

780A

Description:

The 780A is a versatile, compact accelerometer ideal for monitoring machine vibration in a broad range of condition monitoring applications. Designed for long-term reliability and accuracy, the sensor provides precise measurements to improve fault detection on rotating machinery and is compliant with the API 670 standard.

Features & Benefits:

- Condition Monitoring Accelerometer; Top exit
- 100 mV/g sensitivity and $\pm 5\%$ sensitivity tolerance
- Compact size
- API 670 compliant
- General Purpose Accelerometer
- Case Isolated, MIL-C-5015 Connector



Contact

Raffi Sahul

raffi.sahul@wilcoxon.com

wilcoxon.com

786A

Description:

The 786A is a versatile accelerometer used for monitoring machine vibration in a broad range of condition monitoring applications. Designed for long-term reliability and accuracy, the sensor provides precise measurements to improve fault detection on rotating machinery and is compliant with the API 670 standard.

Features & Benefits:

- Condition Monitoring Accelerator; Top exit
- 100 mV/g sensitivity and $\pm 5\%$ sensitivity tolerance
- API 670 compliant
- General Purpose Accelerometer
- Case Isolated, MIL-C-5015 Connector



ELECTRIC MOTOR



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



787A

Description:

The 787A is a versatile side-exit accelerometer ideal for monitoring machine vibration in a broad range of condition monitoring applications. Designed for long-term reliability and accuracy, the sensor provides precise measurements to improve fault detection on rotating machinery and is compliant with the API 670 standard.

Features & Benefits:

- Condition monitoring accelerometer; Side exit
- 100 mV/g with $\pm 5\%$ sensitivity tolerance
- API 670 compliant
- General purpose accelerometer
- Case isolated, MIL-C-5015 connector

Contact

Raffi Sahul

raffi.sahul@wilcoxon.com

wilcoxon.com



Custom Motor Stator and Other Solid Busbars

Description:

Amphenol IPC has extensive experience in design and manufacturing of engineer Stator and other solid busbars as well as laminated power conversion busbars.

Application

Mil-Aero

Contact

Brandon Brown

bbrown@amphenol-aerospace.com

amphenol-aerospace.com

CHARGING AND POWER DISTRIBUTION

1900/SIM Series Monomodule Connectors Fitted with Size 8 Contacts (80 Amps)

Description:

1900/SIM is a rectangular and modular connector series providing high density within a rather small form factor. It can be fitted with 3 modules selected from an extensive range of overmoulded EN4165/ SIM modules providing multiple contacts sizes and arrangements offering best-in-class dielectric and sealing performances. The connector shell is made of high grade composite material for mechanical strength and weight saving.

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- Space efficient & modular design
- Versatility of mixing & matching Signal & Power: RF (Quadrax, Triax, Twinax and Coax), Fiber Optic, or power Size 8/80 Amp contacts
- Suited for crimp or PCB contacts
- Shielding for EMI/EMC applications
- D shape polarization + locking/coding accessories

Application

Avionics

Amphenol Air LB France Busbars

Description:

AALBF's busbars provide a means of power distribution between power generator boxes, terminal blocks, and smaller terminal block interconnects. Bus bars are available in various standard sizes and shapes as well in custom designs. Bus bars present high mechanical resistance and are resistant to high temperatures.

Features & Benefits:

- Military & Commercial Aerospace specification
- Lightweight aluminum
- Perfectly suited for custom design

Application

HV AC/DC Power Generation



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en



CHARGING AND POWER DISTRIBUTION



Electric Motor

Charging & Power Distribution

Avionics & Communication

IFE & Air Quality

EMI Shielding

Sensors

System Attachments

Antennas & GPS

General Use

Cable & Harness

RF

Micro-Miniature



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

ARINC 809 / EN4165 / SIM Monomodule Connectors Fitted with Size 8 Contacts (80 Amps)

Description:

The EN4165 / SIM Monomodule Series (ARINC 800 / 809) connector is a monomodule shell, fitted with overmoulded SIM modules offering best-in-class dielectric and sealing performances, a push-pull locking mechanism makes it ideal for all kinds of In-Flight applications. With lightweight composite shells they are especially suited where weight and space saving is mandatory.

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Lightweight and robust thermoplastic; metalized for shielding
- SIM modules available with contacts from size 23 / 5 amp to size 8 / 80 amp
- Fixing accessories, multiple colors, flight caps and 3-pin quick install versions are also readily available

Application

Control Units



Contact

gjt@ssitech.com
ssi-sensors.com

P51 - MediaSensor™

Description:

The MediaSensor™ family comes in a choice of three pressure sensing type conventions: absolute, vented gauge or sealed gauge.

These compact and robust sensors, with a wide variety of fittings, measure pressures from 3 PSI to 7,500 PSI and are well suited for a variety of automotive, industrial and commercial applications.

Features & Benefits:

- Media isolated
- All stainless-steel, 0.5 V to 4.5 V ratiometric
- <1% FS accuracy across temp range

CHARGING AND POWER DISTRIBUTION



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

1750 Series Distribution Module

Description:

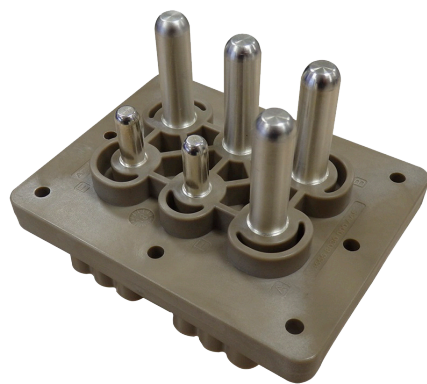
1750 Series consists of quick junction modules for signal and low current distribution, where sealing (IP66 / IP68 and IP69K), space and weight-saving are prime requirements. Specifically suited for wiring optimization, while offering weight and cost savings, these track-mounted modules (on metallic or composite track) are available from 8 contacts size 12 up to 36 contacts size 22 in different contact configurations. They also come in hybrid or ground versions, as well as PCB or component carrier versions. Fully REACH / RoHS compliant and conform to ABD0031 and FAR 25853 (Fire, Smoke and Toxicity).

Features & Benefits:

- Overmoulding technology offering excellent dielectric and sealing performances
- Military & Commercial Aerospace specification
- Compact design
- Suited to save cable linear meters, as well as cost and weight
- Versatility of mixing on metallic or composite tracks

Application

Signal Wiring Distribution



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

Ground Power Receptacle

Description:

This Power feed receptable connector is installed on commercial airliners and is fully intermateable with Ground based SAE AS 25486 power plugs installed around the world. It powers the aircraft while docked at the gate. Amphenol Air LB manufactures a fully qualified version of it presented here.

Features & Benefits:

- Robust thermoplastic reinforced with with glass fiber
- Operating temperature : -55 °C to +125 °C
- Associated products available : shield cover and Lightning Protection Unit (LPU): the whole package is produced in compliance with ABS1322 specification

Application

Ground to Aircraft Power Feeder



CHARGING AND POWER DISTRIBUTION



Electric Motor

Charging & Power Distribution

Avionics & Communication

IFE & Air Quality

EMI Shielding

Sensors

System Attachments

Antennas & GPS

General Use

Cable & Harness

RF

Micro-Miniature



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

1174 Series Ground Modules

Description:

Grounding modules for signal distribution and low current grounding, where sealing (IP66 / IP68 and IP69K), space and weight-saving are prime requirements. Specifically suited for grounding applications, including components or not, these modules can be screwed directly on the structure. They are available for 10 or 12 contacts size 20, male or female contacts, with or without components.

Features & Benefits:

- Modules for grounding applications
- Very compact design
- 2 versions : For male and female crimp contacts
- 2 versions : wit or without integrated components
- Available in sealing versions or not

Application

Signal and Grounding Distribution



Contact

circular@amphenolpcd.com
amphenolpcd.com

Raptor High Power/High Voltage

Description:

Raptor is a range of high-power, high voltage connectors for E-flight applications and is based on the existing Rhino series of connectors. This connector is ideal for small "island hopper" and training aircraft and eVTOL/UAM. Raptor is well suited for both narrow and wide-body regional hybrid aircraft. Radsok Technology Contacts. Allows from 85 A up to 1000 A capacity; Low engagement/separation forces. Low contact resistance (<5 mΩ). Various contact termination styles: Crimp. Male Thread. Female Thread. Flat Lug. Certified to IP2X finger proof high voltage protection. Breakdown / flashover voltage: 3500 Vac RMS. Dielectric Withstanding Voltage: 2625 VAC RMS. Working Voltage: 875 VAC RMS. Working voltage: 1238 VDC.

Features & Benefits:

- High current & voltage applications in harsh environment conditions
- IP68 sealing in mated & unmated condition
- Anti-decoupling ratchet mechanism
- Superior EMI performance & RoHS compliant Black Zinc Nickel plating
- Reliable connection even under high vibration

Application

Power Distribution

CHARGING AND POWER DISTRIBUTION



Contact

gjt@ssitech.com
ssi-sensors.com

Engine/Cam/Crank Speed Sensors

Description:

SSI Technologies is a leader in the design, development, and manufacturing of passive (Variable Reluctance) and active (Hall Effect or Magneto-Resistive) magnetic sensors. SSI has over 25 years of experience providing magnetic sensing solutions that meet the specific needs of our OEM customers. Drawing from our extensive design and manufacturing history with major transportation platforms, our engineering staff will provide a custom sensing solution for your specific application.

Features & Benefits:

- Field tested design modules (demonstrated low field warranty)
- Validated for operating temperatures of -40 °C to 150 °C
- Packaged to withstand harsh conditions including high vibration and moist environments
- Integrated connectors or custom dressed cable assemblies

Rhino 38999

Description:

Radsok Technology Contacts. Allows from 85 A up to 1000 A capacity; Low engagement/separation forces. Low contact resistance (<5mΩ). Various contact termination styles: Crimp. Male Thread. Female Thread. Flat Lug.

Certified to IP2X finger proof high voltage protection.

Breakdown / flashover voltage = 3500 VAC RMS.

Dielectric Withstanding Voltage = 2625 VAC RMS.

Working Voltage = 875 VAC RMS.

Working voltage = 1238 VDC.

Features & Benefits:

- High current & voltage applications in harsh environment conditions
- IP68 sealing in mated & unmated condition
- Anti-decoupling ratchet mechanism
- Superior EMI performance & RoHS compliant Black Zinc Nickel plating
- Reliable connection even under high vibration

Application

Power Distribution



Contact

circular@amphenolpcd.com
amphenolpcd.com



CHARGING AND POWER DISTRIBUTION



Electric Motor

Charging & Power Distribution

Avionics & Communication

IFE & Air Quality

EMI Shielding

Sensors

System Attachments

Antennas & GPS

General Use

Cable & Harness

RF

Micro-Miniature

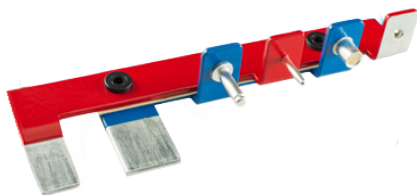
Amphenol IPC Customer Solid and Flexible Busbars in Copper or Aluminum

Description:

Amphenol IPC offers solid and flexible busbars in copper and aluminum for power distribution.

Application

Mil-Aero



Contact

Brandon Brown

bbrown@amphenol-aerospace.com

amphenol-aerospace.com

MIL-T-81714 Series I Junction Modules

Description:

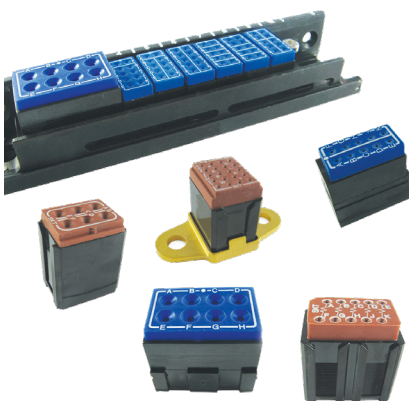
Designed and qualified to MIL-T-81714, Series I Terminal Junction Modules are robust, reliable, and always perform to highest standards. Amphenol PCD offerings cover the full SAE-AS81714 range of configurations—Feedback/Feedthrough, Electronic, In-Line Splice, Electronic Splice, and Ground. They use standard M39029/1 pin contacts and accommodate 12-26 AWG wires. Mounting rail and installation/termination accessories are available, and customization is always an option.

Features & Benefits:

- Class 3B silicone sealant - tear and flex resistant silicone
- UltraSonic bonding - tighter seals, less corrosion, and moisture penetration
- Proprietary epoxy - longer lasting in the field
- Stainless steel retaining clips - lighter, weight savings
- Fewer solder joints for more reliable electrical operation
- Wide application coverage, proven performance
- Application specific coverage (custom versions)

Application

Signal Wiring Distribution

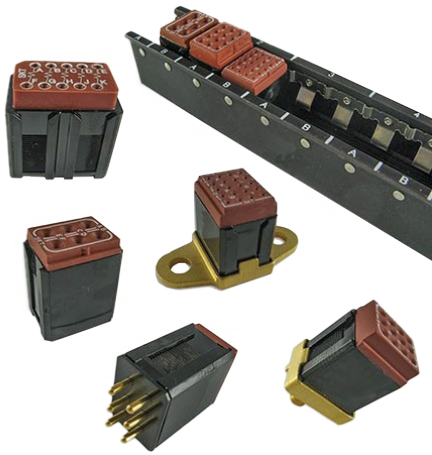


Contact

produced@amphenolpcd.com

amphenolpcd.com

CHARGING AND POWER DISTRIBUTION



Contact

produced@amphenolpcd.com
amphenolpcd.com

MIL-T-81714 Series II Junction Modules

Description:

Designed and qualified to MIL-T-81714, Series II Socket Junction Modules are robust, reliable, and always perform to the highest standards. Amphenol PCD offerings cover the full SAE- AS81714 — Feedback/ Feedthrough, Board Mount, Electronic, Sealed Splice, and Ground, and use standard AS39029/22 socket contacts to accommodate 12-26 AWG wires. Mounting rail and installation/ termination accessories are available, and customization is always an option.

Features & Benefits:

- Class 3B silicone sealant - tear and flex resistant silicone
- UltraSonic bonding - tighter seals, less corrosion, and moisture penetration
- Proprietary epoxy - longer lasting in the field
- Fewer solder joints for more reliable electrical operation
- Lighter end use solutions
- Wider application coverage, proven performance
- Application specific coverage (customs)
- Lighter weight than Series I due to simplified internal construction

Application

Signal Wiring Distribution

Amphenol PCD Cable Solutions

Description:

Custom-designed cables for a high voltage battery application using a custom cable for high temperature using Rhino power connectors.

Features & Benefits:

- Custom design for each application
- Military & Commercial Aerospace specification
- Discrete, multic-cable and harness design for copper cables
- Extensive engineering design and manufacturing capabilities providing prototype to turnkey solutions
- Experts in custom over-molded interconnect & cable transitioning solutions

Application

High-voltage battery harness cables



Contact

cablesales@amphenolpcd.com
amphenolpcd.com



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

CHARGING AND POWER DISTRIBUTION



Electric Motor

Charging & Power Distribution

Avionics & Communication

IFE & Air Quality

EMI Shielding

Sensors

System Attachments

Antennas & GPS

General Use

Cable & Harness

RF

Micro-Miniature



Contact

Pete Cook

pcook@amphenol-aao.com

amphenol-aerospace.com

Hermetic Connectors

Description:

Amphenol glass-sealed hermetic connectors provide high-temperature, high-pressure protection and are available in a wide variety of Mil-Spec configurations while also offering custom configurations for any harsh environment.

Features & Benefits:

- Leak rate of 1×10^{-7} cc He/sec or less
- Fused glass insert in stainless steel shell
- Operating Frequency: 0-500 MHz
- Insulation Resistance: 1000 mohms at 25 °C
- Dielectric Withstanding Voltage: Center to outer 500 VAC RMS at sea level
- Contact Resistance: Center and outer at 1 amp, 55 millivolts max. voltage drop at 25 °C.

Application

Avionics & Communication



Contact

Ross Young

ross.young@martec.ltd.uk

martec.solutions

High Temperature/Firebreak Hermetic Connectors

Description:

High temperature rating to 450 °C with electrical performance integrity; 960 °C as firebreak.

Application

Avionics

CHARGING AND POWER DISTRIBUTION

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

HVSL Series Connectors

Description:

High Voltage Power Connectors for EV. 16A-350 A @ 1000 VDC. Single and dual stage latching with CPA.

Features & Benefits:

- Lightweight plastic
- Single to 6 poles
- IP2xB, IP67, IP6K9K
- Shielded
- Integrated HVIL
- Finger Actuated 1 & 2 Stage Latching with CPA

Application

PDU, MCU Battery Pack, DC-DC Converters, OBC



Contact

Russ Smolinsky

rsmolinsky@amphenolpcd.com

amphenolpcd.com.cn

HVSLS Series Connectors

Description:

Metallized Connector in 2 to 3 Poles, IP2xB, IP67, IP6K9K, Shielded, Integrated HVIL, Finger Actuated 1 & 2 Stage Latching with CPA.

Features & Benefits:

- High Voltage Power Connectors for EV.
- 16 A-350 A @ 1000 VDC.
- Single and dual stage latching with CPA.

Application

PDU, MCU Battery Pack, DC-DC Converters, OBC



Contact

Russ Smolinsky

rsmolinsky@amphenolpcd.com

amphenolpcd.com.cn



CHARGING AND POWER DISTRIBUTION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Russ Smolinsky
rsmolinsky@amphenolpcd.com
amphenolpcd.com.cn

HVBI Series Connectors

Description:

Single Pole Metal Push-Pull with CPA, excellent for small space requirements, Shielded, Integrated HVIL IP67, IP6K9K.

Features & Benefits:

- High Voltage Single Pole Metal Push-Pull Connectors for EV.
- 90 A-250 A at 1000 VDC.

Application

PDU, MCU, Battery Pack



Contact

Russ Smolinsky
rsmolinsky@amphenolpcd.com
amphenolpcd.com.cn

EX/HVG Series Connectors

Description:

Multi Pole (2-6) Metal Push-Pull with CPA, excellent for small space requirements, Shielded, Integrated HVIL IP67, IP6K9K.

Features & Benefits:

- High Voltage Multi-Pole Metal Push-Pull Connectors for EV.
- 23 A-50 A at 800VDC.

Application

PDU, OBC, Auxiliary Power Systems

CHARGING AND POWER DISTRIBUTION



Contact

Russ Smolinsky

rsmolinsky@amphenolpcd.com

amphenolpcd.com.cn

MSD Series Battery Disconnects

Description:

For disconnecting High Voltage Battery Power. Fused & Shunted versions available. IP2xB, IP67, IP6K9K, Integrated HVIL, Finger Actuated 2 Stage Latching with CPA.

Features & Benefits:

- Manual Service Disconnects for Battery Packs.
- Shunted or Fused.
- 750 VDC - 1500 VDC

Application

Battery Pack, PDU



Contact

Russ Smolinsky

rsmolinsky@amphenolpcd.com

amphenolpcd.com.cn

HVCO Series EV Charging Solutions

Description:

High Voltage Charging solutions, Inlets & Charging Couplers.

Features & Benefits:

- SAE, IEC, GB Standard & Custom EV Charging Solutions.

Application

Battery Charging



CHARGING AND POWER DISTRIBUTION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Russ Smolinky
rsmolinsky@amphenolpcd.com
amphenolpcd.com.cn

LVRC Series Rectangular Connectors

Description:

Low Voltage Rectangular Connectors. 5 A - 13 A at 250 VAC/300 VDC

Features & Benefits:

- Lightweight plastic
- Cost effective
- IP67
- Shielded
- 12-35 positions

Application

BMS, PDU



Contact

Russ Smolinky
rsmolinsky@amphenolpcd.com
amphenolpcd.com.cn

BSM Series Battery Swap Modules

Description:

Standard and Custom Battery Swap Modules.

Features & Benefits:

- Floating
- Blind Mate

Application

Battery Swapping

CHARGING AND POWER DISTRIBUTION



Contact

Russ Smolinky

rsmolinsky@amphenolpcd.com

amphenolpcd.com.cn

Amphenol Ionix Systems Cable Solutions

Description:

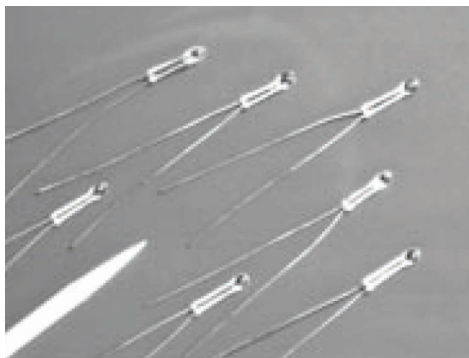
Custom designed & lightweight power feeder cables for harsh environments.

Features & Benefits:

- Custom designed assemblies
- For Military & Commercial Aerospace applications
- Extensive engineering design and manufacturing capabilities from prototype to volume production.

Application

High Voltage battery cables for Aero Engines and Airframe applications



Contact

stmaryscc@amphenol-sensors.com

amphenol-sensors.com

NTC Thermistors, Glass SP Series - Ultrastable Probe

Description:

Thermometrics SP Series of Ultra-Stable Probe NTC Thermistors receive additional processing to assure their continuous use in one of three temperature classes and are categorized into one of six stability groups. These thermistors may be used in all temperature measurement and control applications with the added assurance of long term stability and reliability. They are ideal for use as secondary standards in laboratories.

Features & Benefits:

- Long-term stability and reliability

Application

Atomic Clock Temperature



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

CHARGING AND POWER DISTRIBUTION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Paul Milburn

(978) 880-8063

pmilburn@amphenolpcd.com

amphenolpcd.com

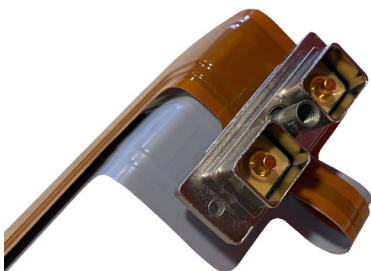
CCS1 Inlet

Description:

The CCS1, or Combo 1, combines a J1772 (Type 1) connector with two additional direct current(DC) contacts to allow high-power DC fast charging.

Features & Benefits:

- High power DC fast charging inlet assemblies
- CCS1, CCS2 & NACS, 80 A to 500 A, 1000 VDC
- DC wired pigtails or busbar contacts
- With or without LED's
- E-Lock assemblies, 12 V or 24 V
- Offer complete custom cable assembly, plug n play solution
- Over 300 A charging recommended liquid cooled charging gun



Contact

Brandon Brown

(607) 563-5685

bbrown@amphenol-aao.com

amphenol-aerospace.com

Amphenol Commercial Air Busbars

Features & Benefits:

Powder Coated Busbars

- Multiple off-the shelf powder coating formulations available dependent on performance needs
- High voltage capable
- Limited tooling required depending on geometry

Over-molded Busbars

- Typically molded rubber, excellent sealing to surface of conductor
- Can be designed with integral sealing feature and insulated fasteners
- Excellent high voltage performance at altitude

Laminated Busbars

- Range of lamination materials for different temperature requirements, fluids, etc.
- Best performing at high voltages and altitude, including partial discharge mitigation
- Shielded busbars possible with this laminated technology

CHARGING AND POWER DISTRIBUTION



Contact

Brandon Brown
(607) 563-5685

bbrown@amphenol-aa.com
amphenol-aerospace.com

Voltarius

Description:

Voltarius is a high-power interconnect system optimized for high-voltage applications. This high-power connector series is designed to provide performance up to 1000 VDC and 450 A and features proven RADSOK® technology. The Voltarius also provides essential safety features such as interlock circuitry and a secondary locking mechanism.

Features & Benefits:

- Voltage Rating: 1000 VDC at sea level
- Sealing: IP67 (unmated) & IP69K (mated)
- Temperature range: -40 °F (-40 °C) to 257 °F (125 °C)
- Available in single-pole or multi-pole arrangements
- Full 360-degree shielding with integral shield termination
- Safety interlock circuitry utilizes last mate, first break sequence
- Busbar and threaded termination standard with the receptacle
- Plugs available in straight or right-angle orientations

Cell Connection System

Description:

Custom designed cell connection system consisting of FPCA, busbars/collectors, and carrier.

Features & Benefits:

- Design flexibility and repeatability
- Space and weight savings
- Lower assembly costs

Application

Voltage and temperature sensing of the battery



Contact

ssangillo@amphenol-aio.com
amphenol-asip.com



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

CHARGING AND POWER DISTRIBUTION



Electric Motor

Charging & Power Distribution

Avionics & Communication

IFE & Air Quality

EMI Shielding

Sensors

System Attachments

Antennas & GPS

General Use

Cable & Harness

RF

Micro-Miniature



Contact

Brandon Brown

bbrown@amphenol-ao.com

amphenol-aerospace.com

High Power 38999/5015

Description:

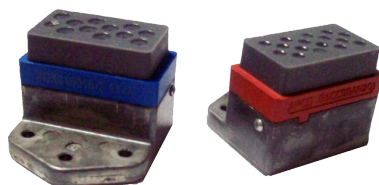
High Power 5015 and 38999 series from AAO features Amphenol Radsok and Temper-Grip high-power contact technology for up to 50% more current carrying capability.

Features & Benefits:

- High Power 38999 meets applicable requirements of MIL-DTL-D38999 Series III and features a current carrying capability up to 1000 amps
- High Power 5015 features 40-50% increased current carrying capability over standard 5015 connector

Application

Ground to aircraft power feeder



Contact

produced@amphenolpcd.com

amphenolpcd.com

Ground Blocks

Description:

Light weight, high density grounding solution. Wired connections are environmentally-sealed, providing protection from moisture, spray, and debris. Unused connections are protected via Amphenol Pcd's patented FODSeal Technology, which replaces the sealing plugs - reducing FOD, weight and part count.

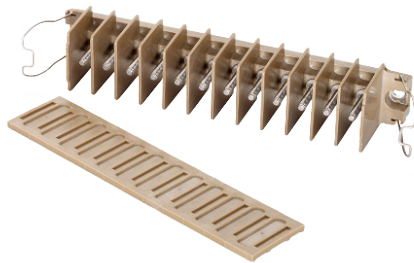
Features & Benefits:

- Overmold Technology - Simplifies construction and improves sealing and reliability
- Plastic retention clip made with VICTREX® PEEK Polymer-Simplifies construction; uses 1 plastic piece vs 6 individual metal pieces
- FOD Seal Technology (Patented)-Reduces FOD, part count and weight by eliminating sealing plugs
- Smart Engineering - Weight Savings up to 0.06 oz per block vs standard designs

Application

Signal and Grounding Distribution

CHARGING AND POWER DISTRIBUTION



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

3240 / 3242 Monoblock Assemblies

Description:

Designed for power distribution purposes, the monoblock assemblies are made of terminal junction block, for copper or aluminum cable connections. Monoblock assemblies are available with individual or shunted terminals, from 1 to 12 terminals, in different diameters. The protective cover fixing, as well as the terminal assembly's fixing on structure are secured by pillar bolts.

Features & Benefits:

- Military & Commercial Aerospace specification
- PEEK Polymer
- High Temp Range
- High Current up to 350 Amps
- Fire/Smoke/Toxicity conform to ABD 031 and FAR 25853

Application

HV AC/DC Power Generation

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

AVIONICS & COMMUNICATION



Contact

taunton.cc@amphenol-sensors.com
amphenol-sensors.com

Type 95 Epoxy-Coated Interchangeable NTC Thermistors

Description:

Epoxy-coated interchangeable NTC thermistor chips with bare tinned copper lead wires.

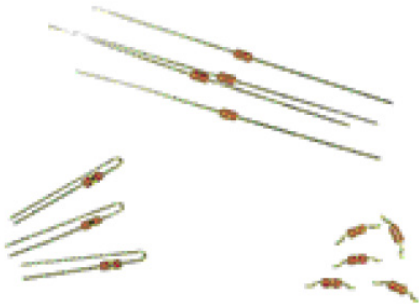
Features & Benefits:

- Precision, solid state temperature sensor
- Interchangeability down to $\pm 0.18^\circ\text{F}$ ($\pm 0.1^\circ\text{C}$)
- Suitable for use over a range of -112°F to 302°F (-80°C to 150°C)
- High sensitivity, greater than $-4\%/^\circ\text{C}$ at 77°F (25°C)
- Suitable for temperature measurement, control and compensation
- High reliability and stability over an interchangeable range
- Most popular Resistance (R) vs Temperature (T) curves are available
- Resin-coated for mechanical strength and resistance to solvents
- Rugged construction
- DC95: 0.012 in (0.3 mm) diameter, bare tinned copper lead wires
- EC95: 0.008 in (0.2 mm) diameter, bare tinned Cu-Ni alloy lead wires
- TK95: 0.010 in (0.25 mm) diameter, PTFE/PFA Cu-Ni alloy lead wires

Application

De-icing





Contact

taunton.cc@amphenol-sensors.com
amphenol-sensors.com

NTC Diode Thermistors

Description:

NTC Diode Thermistors consist of a range of NTC chip thermistors in DO-35 style glass package (diode outline) with axial solder-coated copper-clad steel wires. AEC Q-200 qualified.

Features & Benefits:

- Designed for accurate temperature measurement, control and compensation
- Tight tolerances on resistance and B value
- Operation up to 482 °F (250 °C) with excellent stability
- Glass body provides hermetic seal and voltage insulation and excellent stability
- Designed for cost-effective solid state sensor
- Lead wires metallurgically bonded to thermistor element for improved reliability (Type GE only)
- Resistant to corrosive atmospheres and harsh environments
- Available on axial bandolier to IEC-286-1/EIA-468A
- Also available loose-packed with axial and radial wire forms

Application

Avionics



Contact

Irina Pozdnyakova
irina.pozdnyakova@amphenol-sensors.com
amphenol-sensors.com

Surface-Mount Pressure Sensors

Description:

NovaSensor NPA Series of Surface-Mount Pressure Sensors is provided in a miniature size as a cost effective solution for applications that require calibrated performance. Packaged in a SOIC14 pin surface mount, the NPA Series is available in gauge, absolute and differential pressure ranges with either mV, amplified analog or digital outputs. The sensor is intended for printed circuit board mounting and delivered in tape and reel form to simplify manufacturing handling.

Features & Benefits:

- Surface-mountable
- Differential, gauge, absolute and low pressure
- 2x" H2O to 30 PSI full scale
- Output Options: Amplified analog, Digital Serial (14bit), Digital I2C, Uncalibrated mV
- On-chip temperature sensor in digital mode
- Operating Temperature Range: -40 °C to 125 °C
- Total Error Band: < ±1.5% FSO
- Proof Pressure: Up to 60 PSI

Application

Avionics



Contact

Joe Ryder

jryder@amphenol-aao.com

amphenol-aerospace.com

HD38999 Connectors

Description:

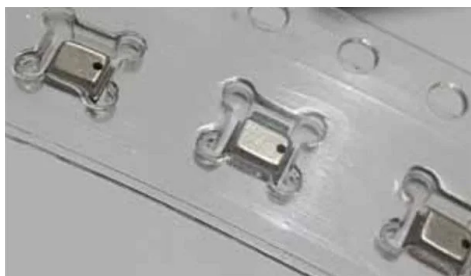
Drop-in replacement for a standard 38999 connector offering higher contact density.

Features & Benefits:

- Inserts with 30% more contact density using Size 23 contacts than
- the highest density Mil Spec 38999 connectors of comparable size.
- Smaller shells allow you to decrease the size of your system without decreasing the number of contacts.

Application

Avionics & Communication



Contact

Irina Pozdnyakova

irina.pozdnyakova@amphenol-sensors.com

amphenol-sensors.com

NPA 201 Digital Output Absolute Pressure Sensor

Description:

The NPA 201 is a low-cost absolute pressure sensor with digital output, housed in a compact 2.0 x 2.5 x 1.0 mm HCLGA package, ideal for portable and space-constrained applications. It features low power consumption (20 nA in Sleep Mode), a wide operating temperature range (-40°C to +85°C), and accurate pressure measurements from 260 to 1260 mBar using a MEMS sensor with signal-conditioning IC. It compensates and calibrates both pressure and temperature outputs via an internal sensor, with corrected data provided through an I²C interface. An onboard 18-bit DSP handles digital compensation, and calibration data is stored in robust, nonvolatile MTP memory.

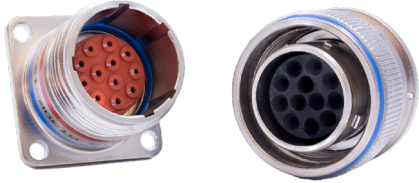
Features & Benefits:

- Sleep State Current: <20 nA Typ. (25 °C)
- Temperature Resolution: <0.003 K/LSB
- 16-bit pressure and temperature resolution
- Absolute Accuracy: +/- 0.2 mbar / Relative Accuracy: +/- 0.1 mbar Typical
- Operating Range: 1.7 ~ 3.6 V

Application

Data Acquisition and Transmission in harsh environments





Contact

Joe Ryder

jryder@amphenol-aa.com

amphenol-aerospace.com

MIL-DTL-38999 Connectors

Description:

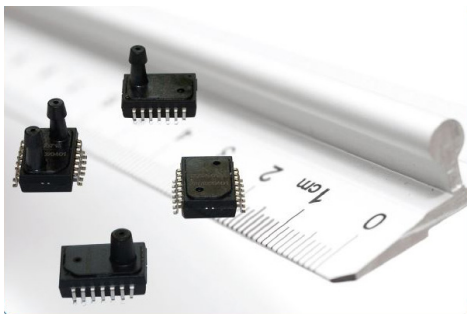
Tri-Start MIL-DTL 38999 Series 3 offers the highest performance capabilities for both general duty and severe environmental applications.

Features & Benefits:

- EMI shielding
- Contact protection
- Moisture/corrosion resistance
- Vibration/shock
- Firewall capability
- Lockwriting eliminated
- Quick coupling
- Inventory support commonality
- ESD protection
- Qualified specifications

Application

Avionics & Communication



Contact

Irina Pozdnyakova

irina.pozdnyakova@amphenol-sensors.com

amphenol-sensors.com

NPI Series of Media-Isolated Pressure Sensors

Description:

The NovaSensor NPI Series features a high stability SenStable® piezoresistive MEMS chip placed in a stainless steel media-isolated package. Ideal for use in hostile environments, the modular design allows for a variety of pressure port modules that are hermetically welded to the sensor header. The sensors monitor pressure in industrial, medical and transportation applications by producing a voltage output that is linearly proportional to the input pressure.

Features & Benefits:

- Pressure Range: 2.5 PSI (17 kPa) to 5,000 PSI (35,000 kPa)
- Gauge, absolute and sealed gauge variants
- Stainless Steel 316L package for corrosive media compatibility
- HEX Diameter: 15 mm/19 mm
- Current or voltage-driven
- Operating Temperature Range: -40 °F to 257 °F (-40 °C to 125 °C)
- Total Error Band: ±1% FSO*
- Outputs: Analog (mV) or Digital (I2C, coming soon)

Application

Avionics & Communication

AVIONICS AND COMMUNICATION



Contact

taunton.cc@amphenol-sensors.com
amphenol-sensors.com

PTC Heaters

Description:

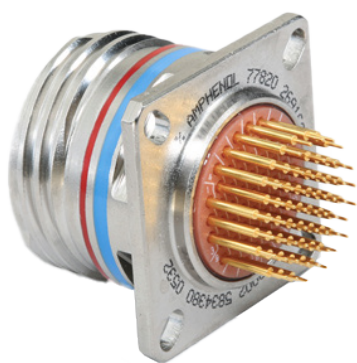
PTC Thermistors can be used in Aerospace applications as heaters for Angle of Attack Sensors to prevent ice formation during flight. The PTC self-regulates its temperature and minimizes the power consumption when the vane is not in an icing condition, which

Features & Benefits:

- Self-regulating properties - Power will adjust to prevailing conditions with ~10x variation in output
- Temperature on the ground is relatively cool ~ 150 °C compared to >500 °C for wire-wound products
- 10+ years of proven higher reliability than wire-wound products
- Special shapes to suit customer's vane design
- Available for 115 V 400 Hz and 28 VDC
- Switch temperature of 115 °C to 135 °C with additional capabilities outside this range
- Sub-assemblies can be produced

Application

Attack Angle



Contact

Joe Ryder
jryder@amphenol-aa.com
amphenol-aerospace.com

PCB Circular Connectors

Description:

Allows for a PCB to be grounded directly to the board.

Features & Benefits:

- Interchangeable with any MIL-DTL 38999 Series 3 plugs and accessories.
- Available in box mount and jam nut style shells
- Multiple ground pin positions avail.
- Also available in aluminum with all Amphenol standard plating options.

Application

Avionics & Communication



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Joe Ryder

jryder@amphenol-aao.com

amphenol-aerospace.com

Reduced Flange Jam Nuts

Description:

Provides space savings inside the box or on the panel.

Features & Benefits:

- Jam nut 38999 connector with reduced flange to save space, weight, and reduce footprint.
- Two versions : Standard & Double Flange.
- 30% lighter than standard 38999/24 (w/o stand-offs).
- Mates with standard MIL-DTL-38999 Series III plugs & caps.

Application

Avionics & Communication



Contact

Joe Ryder

jryder@amphenol-aao.com

amphenol-aerospace.com

Integral Accessories

Description:

Time, cost & weight savings available in 2 Versions: Integral Banding Platform & Strain Relief Plug.

Features & Benefits:

- Backshell feature incorporated, allowing to attach the cable shield directly to the connector, or provide strain relief for their wire bundle.
- Superior EMI shielding & enhanced sealing
- Ease for overmold applications

Application

Avionics & Communication

AVIONICS AND COMMUNICATION



Contact

Philip.Johnston@trackwise.co.uk
trackwise.co.uk

Flexible Printed Circuits

Description:

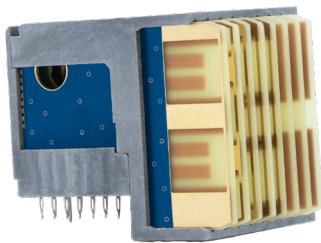
Custom designed extended length, roll to roll Flexible Printed Circuits.

Features & Benefits:

- Space and weight savings
- Improved assembly time and cost

Application

Electronic Packaging for Signals and Power



Contact

Cat Brandas

cbrandas@amphenol-aa0.com
amphenol-aerospace.com

R-VPX Evolution VITA Connectors

Description:

Capable of data rates in excess of 10 Gbps, meeting and exceeding VITA 46 standards.

Features & Benefits:

- Qualified to VITA 46 for Open VPX applications.
- Fully intermountable and intermateable to existing VITA 46 connectors
- Meets and exceeds VITA 47 performance requirements
- Supports Ethernet, Fiber Channel, InfiniBand, and other protocols
- Modular COTS lightweight connector system
- Higher than 10 Gb/s versions are also available

Application

Avionics & Communication



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Cat Brandas

cbrandas@amphenol-aao.com

amphenol-aerospace.com

R-SATA Connectors

Description:

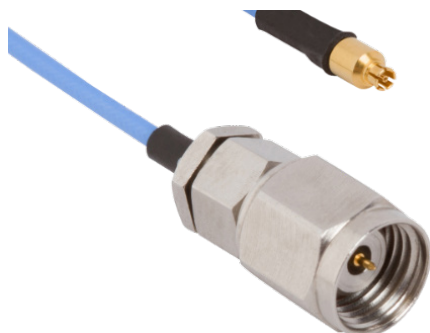
Ruggedized connectors for SATA drives.

Features & Benefits:

- Supports SATA 3.0 protocol (6.25 Gb/s)
- Resistant to shock, vibration, and fretting corrosion
- 20K mating cycles
- Micro-Hyperboloid contacts offer low insertion/ extraction force
- Available in 7 pin (two differential pair and three ground) and 22 pin insert arrangements
- Footprint compatible with 3M SATA Connectors

Application

Avionics & Communication



Contact

Andrew Dinsdale

adinsdale@svmicro.com

svmicro.com

SMPX Series

Description:

RF Connectors and Cable Assemblies.

Features & Benefits:

- Small form factor (high density)
- Low weight
- Ideal for Height Restricted Board-to-Board Applications
- High Frequency (DC-40 GHz)
- Radar, Collision Avoidance and Situational Awareness

Application

Avionics & Communication

AVIONICS AND COMMUNICATION



Contact

Andrew Dinsdale
adinsdale@svmicro.com
svmicro.com

SV Microwave RF/PCB Solutions

Description:

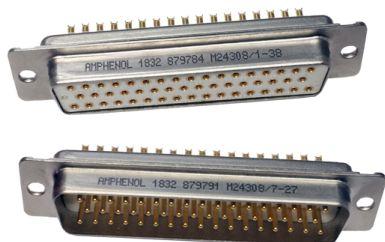
RF PCB/Connector Design and Build Solutions.

Features & Benefits:

- One-stop-shop with SV Microwave and Amphenol Printed Circuits
- Optimized Connector to PCB Transition for Minimal Loss
- All Standard Interfaces Supported
- Amphenol Proprietary Ultraspeed PWB Technology for Enhanced Performance

Application

Avionics & Communication



Contact

info@amphenol-airlb.de
amphenol-airlb.de

D-Sub Sealed Rectangular Connector Series with up to 50 Contacts

Description:

These connectors can be fitted with crimp contacts accommodating AWG18 and providing multiple contact arrangements offering IP676 sealing performances. The connector shell is made of metal material for mechanical strength. A zinc and tin plated version is available for efficient shielding and shell to shell continuity. 5 different arrangements are available from 9 contacts size 20 to 50 contacts size 20, all accommodating AWG 18 wires (see catalogue for details).• Legacy technology offering dielectric and sealing performances to IP67.

Features & Benefits:

- Space efficient
- Suited for crimp and PCB contacts
- Shielding version for EMI applications (tin plated with dimples)
- Can accommodate oversized AWG20 contacts for AWG18 wires



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

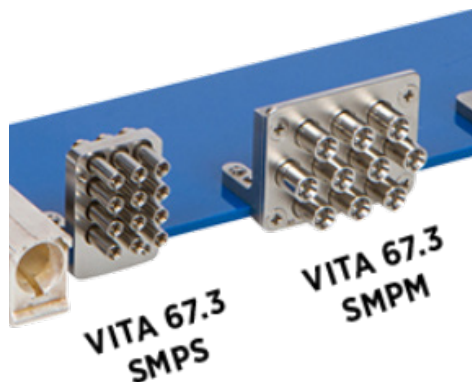
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Andrew Dinsdale
adinsdale@svmicro.com
svmicro.com

VITA 67 RF Modular Solutions

Description:

RF Modular Solutions for Backplane Applications.

Features & Benefits:

- Backplane and Plug-in Module RF Connector System
- Customizable RF for Embedded Systems
- Side-by-side implementation with other VITA standards
- All-form-factor modular RF solution

Application

Avionics & Communication



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

EN4165/SIM Connectors

Description:

EN4165 / SIM modular connectors can be fitted with an extensive range of overmoulded SIM modules providing multiple contacts sizes and arrangements offering best-in-class dielectric and sealing performances. The connector shells (2, 4, or multiple bays) come in electroless nickel coated high grade composite version for weight saving applications or in light weight aluminum version for more demanding applications. More than 20 Modules are available from 30 contacts size 23 (5 Amps), up to 1 contact size 8 (up to 80 Amps) and multiple configuration in between (see catalogue for details).

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- Space efficient & modular design
- Versatility of mixing & matching Signal & Power : RF (Quadrx, Triax, Twinax and Coax), Fiber Optic, or power Size 8 / 80 Amp contacts
- Suited for crimp or PCB contacts
- Available in standard Mono, 2 & 4 bay, or custom configurations
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Shielding for EMI / EMC applications
- 36 coupling polarization

Application

Avionics



Contact

Andrew Dinsdale
adinsdale@svmicro.com
svmicro.com

SV Microwave MIL-SPEC RF Connectors/Cables

Description:

MIL-SPEC/QPL RF Connectors and Cable Assemblies

Features & Benefits:

- Industry's Largest RF QPL Selection
- Connectors, Attenuators and Terminations
- Qualified to most M39012 standards

Application

Avionics & Communication



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

1900/SIM Series Monomodule Connectors Fitted with Size 8 Contacts (80 Amps)

1900/SIM is a rectangular and modular connector series providing high density within a rather small form factor. It can be fitted with 3 modules selected from an extensive range of overmoulded EN4165/SIM modules providing multiple contacts sizes and arrangements offering best-in-class dielectric and sealing performances. The connector shell is made of high grade composite material for mechanical strength and weight saving.

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- Space efficient & modular design
- Versatility of mixing & matching Signal & Power: RF (Quadax, Triax, Twinax and Coax), Fiber Optic, or power Size 8/80 Amp contacts
- Suited for crimp or PCB contacts
- Shielding for EMI/EMC applications
- D-shape polarization + locking/coding accessories

Application

Avionics



AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Simon Martienssen

simon.martienssen@ionix-systems.com

ionix-systems.com

Amphenol Ionix Systems Cable Solutions

Description:

Lightweight, Overbraided or Encapsulated wiring harnesses for aerospace applications.

Features & Benefits:

- Custom designed assemblies
- Military & Commercial Aerospace applications
- Extensive engineering design and manufacturing capabilities from prototype to volume production.

Application

Complex wiring harnesses for Aero Engine and Airframe applications



Contact

rugged_solutions@amphenolpcd.com

amphenol-socapex.com

RNJ Series Rack and Panel Connectors

The RNJ series rack and panel connectors are qualified for the requirements of the standard DAT C 5935 x 0005 HE308 21, 25, 26 & 27T models. They are used to connect electrical and optical devices between a moving unit (rack) and a fixed unit (panel) without any coupling/uncoupling device. This function is ensured by a system of moving and the fixed units. The connectors are built to allow for design tolerances (up to the limits shown in figure 1) during the mating of the connectors and the final locking of the moving and fixed units. These connectors are derived from the LJT series and meet or exceed the MIL-DTL-38999 Series I requirements.

Features & Benefits:

- Rack & Panel connectors for harsh environment
- Very lightweight vs ARINC 404 or 600
- Derived from HE308/38999 series I
- Realignment capability on 3-axis 38999 level sealing with the specific membrane mounting

Application

Data acquisition and transmission in harsh environments



RJF Cat6A Rugged Ethernet Connectors

RJF Cat6A allows you to use an Ethernet Class Ea / Cat. 6A connection for 10 BaseT, 100 BaseTx, 1000 BaseT or 10 G BaseT up to 500 MHz networks in harsh environments. With the patented RJStop system you can use a standard RJ45 cordset in a metallic plug which will protect it from shocks, dust and fluids. No hazardous on-field cabling and grounding!

Features & Benefits:

- Compliant with IEC 60603-7 variante 11
- Bayonet coupling ("Audible & Visual" coupling signal)
- Robust metallic shells based on MIL-DTL-26482 H - Shell size 18
- RJ45 cordset retention in the plug: 100N in the axis

Application

Data acquisition and transmission in harsh environments

Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com



RNJ Low Profile Rack and Panel Connectors

RNJ Low Profile rack and panel connectors are designed to connect electrical devices between a moving unit (rack) and a fixed unit (panel). The locking of the mating pair is ensured by the mechanical device of the rack. The RNJLP design allows a short distance between the two panels. This is a big benefit for the systems where space is an issue. The RNJLP realignment capability (as shown in figure 1) allows to make up the tolerances of the system. RNJLP are primarily designed for avionic/military and advanced industrial application.

Features & Benefits:

- Rack & Panel solutions for harsh environment
- Very lightweight vs ARINC 404 or 600
- Derived from 38999 series III (RNJLP)
- Realignment capability on 3-axis 38999 level sealing with the specific membrane mounting
- Same panel distance as the ARINC 404

Application

Data acquisition and transmission in harsh environments

Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

RJFTV Rugged Ethernet Connectors

RJFTV allows you to use an Ethernet Class D / Cat. 5e connection for 10 BaseT, 100 BaseTx or 1000 BaseT networks in harsh environments. With the patented RJStop system you can use a standard RJ45 cordset in a metallic plug which will protect it from shocks, dust and fluids. No hazardous on-field cabling and grounding.

Features & Benefits:

- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Mechanical coding/polarization (4 positions)

Application

Data acquisition and transmission in harsh environments



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com

RJF544 Rugged Ethernet Connectors

RJF544 allows you to use an Ethernet Class D / Cat 5e connection for 10 BaseT, 100 Base TX or 1000 BaseT networks in harsh environments. With the patented RJStop system you can use a standard RJ45 cordset in a protective composite plug which will protect it from shocks, dust and fluids. No hazardous on-field cabling and grounding.

Features & Benefits:

- Compliant with IEC 60603-7 variant 12
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Sealed against fluids and dust (IP68)

Application

Data acquisition and transmission in harsh environments



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com

Cat5e, Cat6, Cat6a Cable

A 4 pair, 24 AWG, 100 Ohm SFTP round patch cable, designed to the ISO / IEC 11801 Category 5e requirements (cat 5e on 76m). The cable contains 4 twisted pairs, cabled, double shielded with kevlar reinforcement strands, jacketed in black UV resistant Polyurethane halogen-free flame retardant. Designed for fixed or portable applications in harsh environments.

Features & Benefits:

- Halogen-free flame retardant
- Polyether-based polyurethane - Glossy finish
- Excellent hydrolysis resistance - UV resistant
- Resistance to microbial/fungus growth acc. IEC60068-2-10
- Environmental Testing – Test J degree of mould growth 1
- High flexibility

Application

Data acquisition and transmission in harsh environments



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com

USB 2.0 and USB 3.0 Cable

General construction: this is a USB 3.0 cable containing two 28 AWG 90Ω, USB 3.0 parallel shielded pair, one 28 AWG USB 2.0 pair, and two 24 AWG power conductors, overall SFTP shields (SFTP = double shielding, braid and foil), jacketed in black UV resistant Polyurethane halogen-free flame retardant. Designed for fixed or portable applications in industrial and harsh environments.

Features & Benefits:

- Halogen-free flame retardant
- Polyether-based Polyurethane - Glossy finish.
- Excellent hydrolysis resistance - UV resistant
- High microbial resistance
- High flexibility

Application

Data acquisition and transmission in harsh environments



AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com

Octomax Contacts

Amphenol Socapex OctoMax 1G26 solution is the perfect choice for Ethernet or high data transfer rate, low power consumption and excellent EMI compatibility. It offers an easy drop-in replacement of existing size 8 keyed contacts with no need of redesign. HFFR: Halogen-Free Flame Retardant.

Features & Benefits:

- The right choice for ethernet Cat 5e and AFDX application
- One Octomax 1G26 is equivalent to two quadrax
- Fit in a standard size 8 quadrax cavity
- Available in crimp and PC Tails version

Application

Data acquisition and transmission in harsh environments



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com

Quadrax Contacts

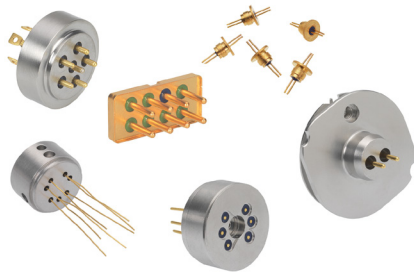
Amphenol Socapex Quadrax contacts offer several advantages for high data transfer rates, low power consumption and excellent EMI compatibility.

Features & Benefits:

- Contact sizes 8
- Qualified further EN3155-074 and 075
- Available for MIL-DTL-38999, EN3645, EN4165 and ARINC600
- Available in crimp and PC Tails versions
- Requires modification of cavities
- Size 8 to accommodate keyed contacts

Application

Data acquisition and transmission in harsh environments



Hermetic Sensor Headers and Connectors

True glass to metal hermeticity for maximum accuracy and reliability; lightweight and minitaurisation options.

Application

Proximity sensors, pressure sensors

Contact

Ross Young
ross.young@martec.ltd.uk
martec.solutions



Hermetic Coaxial Feedthroughs and Connectors

True glass to metal hermeticity for high-integrity interconnects offering low insertion loss and thereby avoid loss of data or signal.

Application

Data Acquisition and Transmission in harsh environments

Contact

Ross Young
ross.young@martec.ltd.uk
martec.solutions





Contact

Raffi Sahul

raffi.sahul@wilcoxon.com

wilcoxon.com

Internally Amplified Helicopter Accelerometer, 40 mV/g

Description:

Helicopter accelerometer for rotor track and balance applications; 40 mV/g sensitivity, $\pm 5\%$; top exit, 3-pin MIL-C-26482-style connector; rugged 316L stainless steel housing; case isolated. Model HA100

Features & Benefits:

- Ultra-low broadband noise, 70 μg
- Rugged design
- Hermetic seal
- ESD protection

Application

Avionics



Contact

Raffi Sahul

raffi.sahul@wilcoxon.com

wilcoxon.com

Internally Amplified Helicopter Accelerometer, 20 mV/g

Description:

Helicopter accelerometer for rotor track and balance applications; 20 mV/g sensitivity, $\pm 5\%$; top exit, 3-pin MIL-C-26482-style connector; rugged 316L stainless steel housing; case isolated. Model HA101

Features & Benefits:

- Very high acceleration range, 250 g peak
- Rugged design
- Hermetic seal
- ESD protection

Application

Avionics



Contact

Raffi Sahul

raffi.sahul@wilcoxon.com

wilcoxon.com

Internally Amplified Helicopter Accelertometer, 20 mV/in/sec

Description:

Helicopter velocity sensor for rotor track and balance applications; 20 mV/in/sec sensitivity, $\pm 10\%$; top exit, 4-pin MIL-C-26482-style connector; rugged 316L stainless steel housing; case isolated. Model HA100V

Features & Benefits:

- Very high acceleration range, 250 g peak
- Rugged design
- Hermetic seal
- ESD protection

Application

Avionics



Contact

sales@amphenolcanada.com

amphenolcanada.com

D83 Series Compact D-Sub

Description:

Reduced size d-subminiature connector featuring M24308 / AS39029 style contacts, bridging d-sub and micro-D sizes.

Features & Benefits:

- Fully crimp removable contacts in a compact package
- Standard and custom discrete contact arrangements AWG 23 to 12 (AS39029 style)
- Can accommodate RF contacts and fiber optics
- Suitable for high-speed communications

Application

Compact I/O wire to wire, wire to Board





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

taunton.cc@amphenol-sensors.com
amphenol-sensors.com

NTC Type NDL Thermometrics Epoxy-Coated Chip Thermistor

Description:

A range epoxy-coated chips with bare 0.0098 in (0.25 mm) tinned copper lead-wires.

Features & Benefits:

- Designed for accurate temperature measurement, control and compensation.
- Tight tolerances on resistance and B value.
- Operation up to 311 °F (155 °C) with excellent stability
- Small body size
- Fast response
- Epoxy resin provides voltage insulation
- Suitable for automotive, HVAC and white goods applications
- RoHS compliant

Application

De-icing



Contact

rugged_solutions@amphenolpcd.com
amphenolpcd.com

USBF TV

Description:

With USB Field, users can insert a standard USB 3.0 cordset into a metallic plug which will protect it from shock, dust and fluids. No hazardous on-field cabling and grounding. Also available a version including plug + cordset. This metallic plug is connected into a receptacle, using a Tri-Start Thread coupling mechanism (MIL-DTL-38999 Series III type) with an anti-decoupling device for high vibration.

Features & Benefits:

- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Improved EMI protection
- Tri-Start Thread coupling mechanism (MIL-DTL-38999 Series III type) with anti-decoupling device - Shell size 15
- 2 mechanical coding / polarization possibilities (receptacle insert rotation)
- USB3F TV plug retention in the receptacle: 100 N in the axis
- Mating cycles: 500 minimum

Application

Data Acquisition and Transmission in Harsh Environments

AVIONICS AND COMMUNICATION



USB TV Memory Keys

Description:

We provide reinforced USB memory keys, available in different capacities. They can only be used with our Amphenol Socapex USBFTV or USB3FTV series receptacles. When mated on the receptacle, the system is IP68 and allows data transmission in harsh environments.

Features & Benefits:

- Sealing: IP68 (when mated)
- Salt spray: 48 h with nickel plating (ROHS) > 500 h with olive drab cadmium
- Vibration: MIL-STD-810G method 514.5 fig 514.5.C CAT 14
- Temperature range: - 40 °C / +85 °C (MIL-STD-810F)
- Improved EMI protection
- Data transmission during vibration & temperature tests

Application

Data Acquisition and Transmission in Harsh Environments

Contact

rugged_solutions@amphenolpcd.com
amphenolpcd.com



USB Amplifiers

Description:

Based on MIL-DTL-38999 series III. Dedicated to applications where the USB cable length is longer than 4.8 meters which is the limit of USB specification Extension cord of 4.8 m (15,7 ft), 4 time stackable in order to reach 19.2 m (63 ft). Self-powered

Application

Data Acquisition and Transmission in Harsh Environments

Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

rugged_solutions@amphenolpcd.com
amphenol-socapex.com

μCom-Series

Description:

μCom-Series is a new range of connectors designed to address the latest trends of the industry : miniaturization and high speed, with the highest resistance for use in the harshest environments.

Features & Benefits:

- 10 Gb+: exceeds 10 Gb/s Ethernet following IEEE 802.3an-2006: 10G Base-T
- Cat.6A connector according to TIA568C.2 and ISO/IEC11801 standard
- Environmental testing based on MIL-DTL-38999 series III military specifications (Thread version)
- Environmental testing based on MIL-DTL-26482 military specifications (Push Pull version)
- Miniature : 15 mm(.59") max external diameter
- Receptacle and in-line receptacle compatible with both thread and push-pull plugs

Application

Data Acquisition and Transmission in Harsh Environments



Contact

rugged_solutions@amphenolpcd.com
amphenolpcd.com

TVμCom-Series

Description:

TVμCom-Series is a new range of connectors designed to address the latest trends of the military industry: miniaturization and high speed, with the highest resistance for use in the harshest environments. TV μCom combines μCom-10G+ speed with 38999 Series III size 11 shells robustness.

Features & Benefits:

- Based on MIL-DTL-38999 series III – Shell size 11
- 10Gb+: exceeds 10Gb/s Ethernet following IEEE 802.3an-2006: 10G Base-T
- Cat.6A connector according to TIA568C.2 and ISO/IEC11801 standard
- Environmental testing based on MIL-DTL-38999 Series III military specifications

Application

Data Acquisition and Transmission in Harsh Environments

AVIONICS AND COMMUNICATION



Contact

sales@amphenolcanada.com
amphenolcanada.com

Micro-D M83513

Description:

M83513 Micro-D, both Military qualified and non-military custom versions available. This includes parts from 9 lines to 100 lines in PC Tail, Solder Buckets and cable assemblies.

Features & Benefits:

- Fully qualified per MIL-DTL-83513 requirements for Micro-D
- One-piece contact with equally spaced compliant tines
- Gold over Nickel versus gold over the copper flash barrier
- Cat. 6A connector according to TIA568C.2 and ISO/IEC11801 standard
- Automated Stamping versus twist process variations
- Integrated closed engaging end ensures uniform insertion forces
- Continuous connection along the length of the contact beam (line contact) versus multi-point connection (point contact)

Application

I/O and Board to Board



Contact

sales@amphenolcanada.com
amphenolcanada.com

RMM (Rectangular Micro Modular)

Description:

RMM is a plastic rugged micro D style connector available in 4-60 lines and mixed signal/ power and RF contacts.

Features & Benefits:

- Modular insert arrangements – Signal, Power and RF positions
- Expandable insert patterns - 1 to 3 rows, 2 to 120 positions
- Mixed layout options: High frequency, high power, and low-frequency contacts in one connector
- Lower profile than traditional Micro-D series
- Meets performance requirements of MIL-DTL-83513G

Application

I/O and Board to Board



AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



105 Series Stripline

Description:

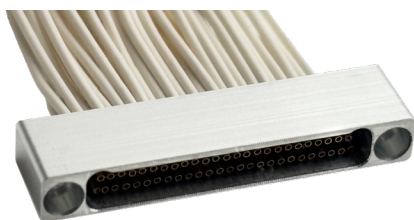
M83513 technology for efficient and reliable wired connections. Small rugged connector for high-reliability applications.

Application

Compact I/O wire to wire, wire to board

Contact

sales@amphenolcanada.com
amphenolcanada.com



Nano-D

Description:

M32139 Nano D commercial and future mil-qualified (2025 Q4). Smallest standard format rectangular. This includes parts from 9 lines to 85 lines in PC Tail, Solder Surface Mount and cable assemblies. Small rugged connector for high-reliability applications

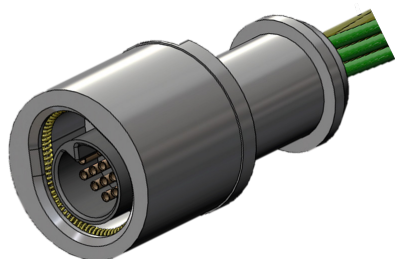
Application

Compact I/O wire to wire, wire to board, board to board

Contact

sales@amphenolcanada.com
amphenolcanada.com

AVIONICS AND COMMUNICATION



Contact

sales@amphenolcanada.com
amphenolcanada.com

Circular Micro/Nano

Description:

Circular format interconnect featuring M83513 or M32139 contact technology. Multiple mating styles supported, including bayonet and push-pull latching. Small rugged connector for high-reliability applications.

Application

Compact I/O wire to wire, wire to board



Contact

sales@amphenolcanada.com
amphenolcanada.com

SMC Series (Small Modular Connector)

Description:

Rugged connector using D38999 style contacts in a rectangular format. Targets high-performance, high-altitude, and high-reliability mission-critical applications for both military and commercial airborne use.

Features & Benefits:

- Low-profile, stackable composite shell
- Modular, environmentally sealed insert assemblies
- Supports quarter-turn mating hardware & backshells
- Ideal application: general avionics, engine & flight controls, HUDs, FADEC

Application

Compact rack & panel wired





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

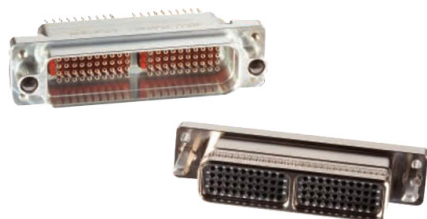
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

sales@amphenolcanada.com
amphenolcanada.com

MMA (Multi Modular ARINC) Rack and Panel

Description:

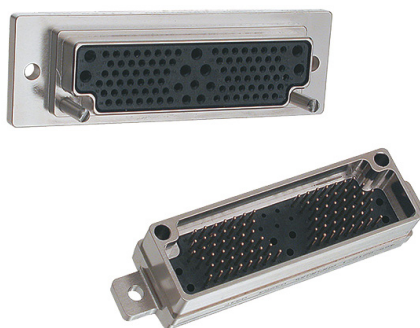
ARINC 600 based rack and panel blind-mating connector designed to be used in a wide variety of I/O applications. Capable of housing signal, RF, Twinax, Quadrax and Fiber Optic contacts.

Features & Benefits:

- Blind Mate Low Mating Force Modular Connector
- 40 Arrangements (size 22 contacts)
- Size 22 pin contacts protected from damage by being shrouded by the insert face
- Composite shells and Backshells available

Application

I/O applications requiring high contact count in a small area



Contact

sales@amphenolcanada.com
amphenolcanada.com

R39 (Rectangular D38999)

Description:

Very short rectangular connector utilizing standard M39029 contacts for D38999 II.

Features & Benefits:

- Rectangular space savings
- Low profile
- High density 127 position inserts or mixed inserts with power, RF or fiber optic available
- Uses same contacts as standard 38999
- Blind mate
- Rugged

Application

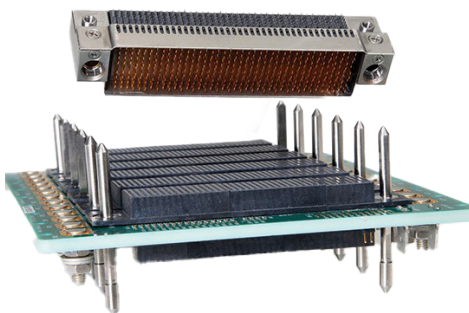
I/O applications requiring a very short mating distance

AVIONICS AND COMMUNICATION



Contact

sales@amphenolcanada.com
amphenolcanada.com



Contact

Kurt Whitcomb
kwhitcomb@amphenolapc.com
amphenol-apc.com

Amphenol Canada EMI/Filter Connectors

Description:

Ability to provide EMI filtering in all connector formats that have metal shells.

Features & Benefits:

- Extreme space saving against chip on board design
- A solution for both Radiated and Conducted emissions

Application

I/O applications where EMC issues need to be met

VIPER Ruggedized VPX Connector

Description:

The Viper connector is a VITA 60 backplane and daughtercard interconnect platform providing 63 differential signals per linear inch at 6.4 Gbps data rates. The VIPER connector has been ruggedized for Avionic, Ground and Naval applications.

Features & Benefits:

- Fully footprint-compatible with VITA 60, VITA 46 and VITA 48 standards
- High-Speed: the VIPER is designed for 10 + Gb/s data rate performance
- 100 ohm impedance for differential pair configuration
- The daughtercard assembly is optimized for differential pair architecture on a 1.8mm x 1.35mm grid.
- The daughtercard is waferized, and provides single-ended and power wafer options integrated onto a stainless steel stiffener with stainless steel frame and keying elements
- The backplane has signal contacts that incorporate a highly reliable 4-point-of-contact beam design, and ground contacts which are robust compliant pin & contact fork design
- ± 0.52 mm nom. translation in fully mated condition
- ESD protection supports 2-level maintenance designs
- Flexible modular design is ideal for standard 3U and 6U applications, as well as unique custom configurations incorporating RF and fiber optic MT solutions.

Application

Ruggedized Vita 46 Board Level Connectors



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

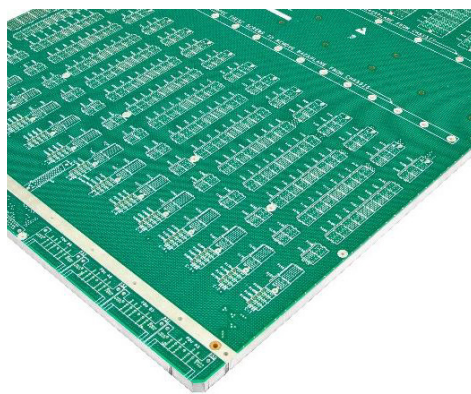
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Kurt Whitcomb
kwhitcomb@amphenolapc.com
amphenol-apc.com

Printed Circuit Boards

Description:

Custom designed Rigid, Flex, and Rigid FLEX PWB's and assemblies offering Design through Turn Key solutions from Amphenol Printed Circuits.

Features & Benefits:

- High Speed Signal Routing (56 Gbps)
- Space and weight savings
- High Current
- High Voltage

Application

I/O applications where EMC issues need to be met



Contact

produced@amphenolpcd.com
amphenolpcd.com

Pegasus

Description:

Pegasus is a small and lightweight connector, designed for use in low and medium power distribution and control applications in harsh environments.

Features & Benefits:

- 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 Configurations-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

Application

Avionics

AVIONICS AND COMMUNICATION



Contact

cablesales@amphenolpcd.com
amphenolpcd.com

Nano-Pegasus

Description:

Nano-Pegasus is a small, plastic, easy to use connector designed specifically for sensing, command and control applications where a Micro or Nano D-Sub would be used. Nano-Pegasus & Nano-Luminus provide exceptional performance in tight spaces, packing 11 high-grade contacts in a shell size 5 housing and providing exceptional performance in tight spaces.

Features & Benefits:

- Electroless Copper & Nickel plating- EMI Shielding
- 1/4 turn bayonet style connection- Simple and easy mate & unmate. Blind mate keying
- Single Piece Housing, shell size 5, up to 11 contacts
- .050" contact spacing
- Multiple Configurations-Inline, Oval Flange, Jam Nut PCB, Rear Mount Flange

Application

Avionics

Amphenol PCD Cable Solutions

Description:

Custom-designed cables for a high voltage battery application using a custom cable for high temperature using Rhino power connectors.

Features & Benefits:

- Custom design for each application
- Military & Commercial Aerospace specification
- Discrete, multic-cable and harness design for copper cables
- Extensive engineering design and manufacturing capabilities providing prototype to turnkey solutions
- Experts in custom over-molded interconnect & cable transitioning solutions

Application

High-voltage battery harness cables



Contact

Simon Martienssen

simon.martienssen@ionix-systems.com
ionix-systems.com



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

AVIONICS AND COMMUNICATION



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Carrie Obedzinski
timesmicrowave.com

TCA Cable

Description:

Times Commercial Air (TCA) is a low-loss, high-temperature, high-flexibility cable for navigation, collision, avoidance and communication systems. TCA is ideal for applications such as GPS, ADS-B, SATCOM, and ATG, especially when facing critical electrical and mechanical requirements.

Features & Benefits:

- Excellent temperature performance
- High flexibility for tight runs
- Wide connector availability and simple installation
- Available as fully tested custom assemblies
- Multiple shielding layers to reduce interference

Application

Low-loss, high-temperature, high flexibility cable for navigation, collision avoidance, and communications systems. Ideal for GPS, ADS-B, SATCOM and ATG



Contact

Carrie Obedzinski
timesmicrowave.com

Maxgain Cable

Description:

MaxGain® ultra low loss, flexible microwave coaxial cable and a full range of passivated stainless steel connectors are available as fully tested custom cable assemblies. MaxGain assemblies are used for general applications in both field and laboratory conditions. They are ideally suited for applications where lowest loss and good stability over flexure is required.

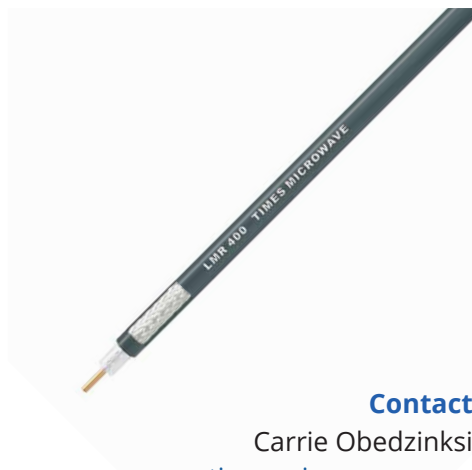
Features & Benefits:

- Lowest insertion loss available
- DC - 50 GHz
- Ultra stable insertion loss and VSWR with flexing
- With wide temperature range (-65 °C to + 150 °C)
- Extremely flexible
- Low minimum bend radius
- Superior shielding effectiveness (> 90 dB)

Application

Ku/Ka Band Satcom, 5G, Fully Customizable Assemblies, Fully Tested

AVIONICS AND COMMUNICATION



Contact
Carrie Obedzinski
timesmicrowave.com

LMR-FR Cable

Description:

LMR®- FR is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.

Features & Benefits:

- Excellent flexibility
- Much lower loss than standard RG cables
- Superior RF Shielding effectiveness
- Available as fully tested
- Custom cable assemblies
- Superb connector availability and easy installation

Application

Non-halogen, low smoke, fire retardant cable ideal for antenna runs, SATCOM feeders, and avionics systems



Contact
Edan Macfarlane
emacfarlane@amphenolpcd.com
amphenolpcd.com

QPL M85049 and Commercial Backshell Series

Description:

Amphenol M85049 backshells offer strain relief, environmental protection and EMI/RFI 360° shielding at the termination area for virtually any circular connector. Base material of aluminum alloy, composite, or silicone with a full line of finish options.

Features & Benefits:

- Meets SAE AS85049 Standard

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com

QPL Composite Backshell Series

Description:

Amphenol M85049 composite backshells are made of Ultum composite.

M85049/91 = straight strain relief

M85049/92 = 90° strain relief

M85049/93 = split shield ring for M85049/88 backshells

Features & Benefits:

- Meets SAE AS85049 Standard M85049/91, 92, 93 composite backshells for MIL-DTL-38999 Series III connectors

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed



Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com

BLL1 Alumatight Backshell

Description:

Lightweight aluminum EMI/RFI shielded Band lock adapters for MIL-DTL-38999 Series I, II, III, IV connectors.

Features & Benefits:

- Exceeds performance & functionality of MIL-standards
- More durable than composites
- Competitive pricing to composites
- Almost 50% weight savings from standard designs
- Equals composite in weight
- Superior EMI performance
- High shear strength - no breakage of coupling nuts

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed

AVIONICS AND COMMUNICATION

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Edan Macfarlane
emacfarlane@amphenolpcd.com
amphenolpcd.com

BEL1 Alumalight Backshell

Description:

Lightweight aluminum environmental straight backshell for MIL-DTL-38999 Series I, II, III, IV connectors.

Features & Benefits:

- Exceeds performance & functionality of MIL-standards
- Aluminum alloy base material
- Competitive pricing to composites
- Equals composite in weight
- High shear strength - no breakage of coupling nuts

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed



Contact

Edan Macfarlane
emacfarlane@amphenolpcd.com
amphenolpcd.com

BML1 Alumalight Backshell

Description:

Lightweight aluminum EMI/RFI shielded strain relief for MIL-DTL-38999 Series I, II, III, IV connectors.

Features & Benefits:

- Exceeds performance & functionality of MIL-standards
- More durable than composites
- Competitive pricing to composites
- Almost 50% weight savings from standard designs
- Equals composite in weight
- Superior EMI performance
- High shear strength - no breakage of coupling nuts

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

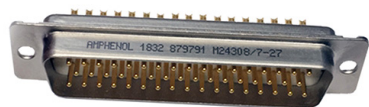
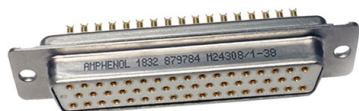
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

dsubs@amphenolpcd.com
amphenolpcd.com

M24308 M2000 D-Sub Connectors 9 to 104 Contacts

Description:

Qualified to MIL-DTL-24308, sub-miniature rack & panel type connectors with polarized shells. Pin and socket machined contacts provide high reliability and density for the connectors. With a versatile design, these high-performance connectors are used in a variety of applications where size and weight are critical factors.

Features & Benefits:

- Possibility of 9 to 104 contact count options
- Contact sizes of AWG20 & AWG22
- Standard Density & High Density inserts
- Termination options - Solder cup, Crimp, PC Tail (Straight/Right angle)
- Magnetic & Non-Magnetic connectors for space applications
- Shell made of Steel/ Brass with plating finishes Zinc, Nickel, Zinc Nickel, Gold, Cadmium etc. are available
- Custom options to meet specific application demand beyond mil-spec

Application

In-Flight Entertainment & Avionics



Contact

Edan Macfarlane
emacfarlane@amphenolpcd.com
amphenolpcd.com

QPL and Commercial Dust Caps - D38999 Series III

Description:

QPL and commercial designs are available. Caps protect the connector interface when connector is not in use.

Features & Benefits:

- D38999/32 Plug Cap & D38999/33 Receptacle Cap for MIL-DTL-38999 Series III connector

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed



QPL and Commercial Dust Caps - D38999 Series II

Description:

QPL and commercial designs are available. Caps protect the connector interface when connector is not in use.

Features & Benefits:

- MS27510 Plug Cap & MS27511 Receptacle Cap for MIL-DTL-38999 Series II connectors

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed

Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com

QPL and Commercial Dust Caps - D38999 Series I

Description:

QPL and commercial designs are available. Caps protect the connector interface when connector is not in use.

Features & Benefits:

- MS27501 Plug Cap & MS27502 Receptacle Cap for MIL-DTL-38999 Series I connectors

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed

Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com





Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com

QPL and Commercial Dust Caps - MIL-C-5015 AS50151

Description:

QPL and commercial designs are available. Caps protect the connector interface when connector is not in use.

Features & Benefits:

- MS25042 Plug Cap & MS25043 Receptacle Cap for MIL-C-5015 AS50151 connectors

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed



Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com

QPL and Commercial Dust Caps - MIL-DTL-26482

Description:

QPL and commercial designs are available. Caps protect the connector interface when connector is not in use.

Features & Benefits:

- MS3180 Plug Cap & MS3181 Receptacle Cap for MIL-DTL-26482 connectors

Application

Aircraft frame; communication; Data/Signal; Cables; anywhere a circular connector is needed

AVIONICS AND COMMUNICATION



Apex Galley Connector

Features & Benefits:

- Intermateable & interchangeable with other ARINC 810 galley
- Contact sizes AWG8, 12 & 22
- Guide pin feature enables quick and simple blind-mating
- Improved sealing with overmold technology mating connectors

Application

In-Flight Entertainment & Avionics

Contact

Edan Macfarlane

emacfarlane@amphenolpcd.com

amphenolpcd.com

IFE AND AIR QUALITY



EN4165/SIM Connectors

Description:

EN4165 / SIM modular connectors can be fitted with an extensive range of overmoulded SIM modules providing multiple contacts sizes and arrangements offering best-in-class dielectric and sealing performances. The connector shells (2, 4, or multiple bays) come in electroless nickel coated high grade composite version for weight saving applications or in light weight aluminum version for more demanding applications. More than 20 Modules are available from 30 contacts size 23 (5 Amps), up to 1 contact size 8 (up to 80 Amps) and multiple configuration in between (see catalogue for details).

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- Space efficient & modular design
- Versatility of mixing & matching Signal & Power : RF (Quadrx, Triax, Twinax and Coax), Fiber Optic, or power Size 8 / 80 Amp contacts
- Suited for crimp or PCB contacts
- Available in standard Mono, 2 & 4 bay, or custom configurations
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Shielding for EMI / EMC applications
- 36 coupling polarization

Application

Cabin Interiors and In-Flight Entertainment



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

ARINC 809 / EN4165 / SIM Monomodule Connectors Fitted with Size 8 Contacts (80 Amps)

Description:

The EN4165 / SIM Monomodule Series (ARINC 800 / 809) connector is a monomodule shell, fitted with overmoulded SIM modules offering best-in-class dielectric and sealing performances, a push-pull locking mechanism makes it ideal for all kinds of In-Flight applications. With lightweight composite shells they are especially suited where weight and space saving is mandatory.

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Lightweight and robust thermoplastic; metalized for shielding
- SIM modules available with contacts from size 23 / 5 amp to size 8 / 80 amp
- Fixing accessories, multiple colors, flight caps and 3-pin quick install versions are also readily available

Application

Control Units



Contact

stmarysccc@amphenol-sensors.com
amphenol-sensors.com

NTC Thermistors, Glass Miniature Series

Description:

Thermoprobes are recommended for all low cost, general purpose applications involving temperature measurement and control, circuit temperature compensation, liquid level sensing or fluid flow sensing. They are ideally suited for applications that require a reliable, low cost sensor.

Features & Benefits:

- Aircraft HVAC, value add like Aircraft coffee pot temp sensors

Application

Aircraft HVAC

IFE AND AIR QUALITY

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

adam.kostrzewa@sgxsensortech.com
sgxsensortech.com

Integrated IR (INIR) Sensor

Description:

The Integrated IR (INIR) sensor has been designed with the latest technology, using a microcontroller with an ARM7 core and via software design the necessary techniques have been implemented to increase the reliability of the device therefore minimize the probability of faults.

Features & Benefits:

- Gas Sensor with Automatic Switchover between ranges
- High Resolution up to 10 ppm
- Detectivity Level at 100 ppm
- Multi-sensor mode
- Analog Output of gas concentration
- Serial port communication
- Internal Temperature sensor
- Active & Reference Signals Monitored
- Full Faults Diagnostics & Error Generation
- Cyclic Redundancy Check (CRC)

Application

Gas Sensing



Contact

produced@amphenolpcd.com
amphenolpcd.com

Solaris

Description:

Solaris is a small, plastic, easy-to-use rectangular connector designed specifically for varying power applications. Solaris' spring-loaded slide lock mechanism is a snap to use - simply push to lock, and slide to unlock.

Features & Benefits:

- Low-profile rectangular form factor. Less than 0.5" tall. Fits into seat arms, backs, tray tables and compartments, lower profile ceiling/side panels
- Slide Latch makes it Easy-to-use, FOD free, tool-less mating
- Integrated Tie Wrap hole provides zero footprint tie down to pipes, bundles and bulkheads
- Interfacial & Wire sealing provides IP67 performance for use in human interface, wet and damp applications
- Polyetherimide Housings allow for high temperature and chemical resistance, long working life and high mating cycles
- Integral boot ridge gives integrated feature for tying off protective sheathing and braids w/o adding backshells or saddle clamps

Application

Cabin interiors and in-flight entertainment





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

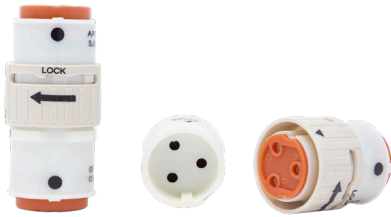
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

produced@amphenolpcd.com
amphenolpcd.com

Luminus

Description:

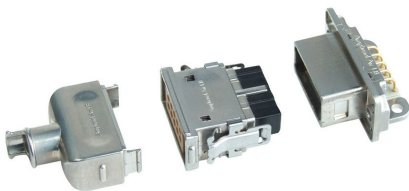
Luminus is a small, plastic, easy-to-use blind-mate lightweight circular connector for low- and medium-power and signal

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 (IP 67 rating)
- Multiple Keying Positions ensures proper connectivity
- Multiple Configurations and Accessories provides tailored solutions to meet application needs
- AS39029 MIL-Spec contacts for broad application compatibility. Stamped & Formed available as lower cost option
- Visual markings used as Visual aid for easy assembly
- Rugged Polyamide Housings; 500 mating cycles equates to part durability
- D160, M81714, FAR25 Compliance Meets demanding military-aerospace environmental conditions

Application

Cabin interiors and in-flight entertainment



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

ASR Series

Description:

This Small form factor ASR rectangular connector is perfectly suited for in line wiring as well as box mounted interconnection with 90° board mounted receptacle (with or without flange). Made of high grade thermoplastic it is available with or without electroless nickel coating for shielding and shell-to-shell continuity. High temperature compatible (up to 175 °C), lightweight and compact, it comes with interfacial and rear grommet sealing. Two shell sizes and several contact arrangements 10 and 30 size 22, mixed layouts, as well as fiber optics with SIMTac03 insert. Each shell comes with easy “push and lock” latching accessories.

Features & Benefits:

- Robust thermoplastic reinforced with glass fiber
- Operating temperature: -55 °C to +175 °C
- Associated products: clip on non removeable shells (straight, 45 or 90°) or clamp shells straight or 90° with or without coating for shielding and shell-to-shell continuity.

Application

In-seat actuation and in-seat screen connect

IFE AND AIR QUALITY



Contact

adam.kostrzewa@sgxsensortech.com
sgxsensortech.com

PM 2.5 Dust Sensor

Description:

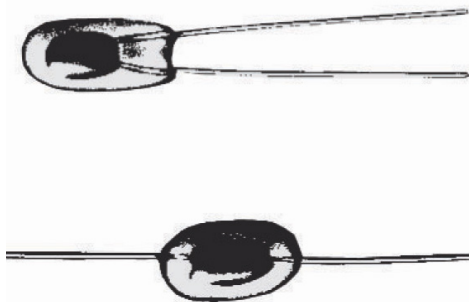
Telaire DSF Series of PM2.5 Automotive In-Cabin Particulate Dust Sensors are designed specifically to meet the needs of OEM manufacturers for a low-cost dust sensor with Lin2.2 Output for in-bulkhead mounting.

Features & Benefits:

- An affordable dust sensing solution for OEMs
- A reliable sensor design based on extensive research, field testing, engineering and manufacturing expertise
- Lin bus 2.2
- Embedded filtration for longer life
- Easy to mount with external tabs
- AEC-Q200 qualified components
- Extended operating temperature range
- Sensors shipped factory-calibrated
- Custom housing and connector subject to commercial consideration

Application

Aircraft HVAC



Contact

stmarysccc@amphenol-sensors.com
amphenol-sensors.com

NTC Thermistors, Glass BR Series - Glass - Encapsulated Bead

Description:

Thermometrics BR Series of Glass-Encapsulated Bead Thermistors consists of glass-encapsulated bead thermistors on fine diameter (alloy or platinum) lead wires. Rugged glass encapsulation provides hermetic seal and better strain relief than glass-encapsulated bead thermistors. Suitable for self-heated applications, such as liquid-level sensing or gas flow measurement. Recommended for applications where the customer will perform further assembly operations.

Features & Benefits:

- Fast thermal response times
- Rugged glass encapsulation provides hermetic seal and better strain relief than glass-encapsulated bead thermistors
- Unaffected by severe environmental exposures, including nuclear radiation
- Normal operating/storage temperatures range from -112 °F (-80 °C) to: 221 °F (105 °C) for material system E0, 392 °F (200 °C) for material systems A1 through A4, 572 °F (300 °C) for material systems A5 through D17
- Intermittent operation to 600 °C

Application

Aircraft HVAC



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

produced@amphenolpcd.com
amphenolpcd.com

Quick Mount Relay Sockets

Description:

Snap mount into standard aircraft panel cutouts and eliminate all socket-to-bulkhead mounting hardware, simplifying installation and dramatically reducing weight and installation cost.

Features & Benefits:

- Eliminates mounting hardware - reduces FOD, reduces weight up to 20%, reduces installation time up to 80%
- Meets MIL-PRF-12883 criteria
- Form-Fit-Function Compatible to MIL-PRF-12883/40, 41, 44, 45, 48, 55
- Utilizes standard panel cutout
- Simplified install/removal tool set
- Lower installation cost

Application

Actuation



Contact

produced@amphenolpcd.com
amphenolpcd.com

Relay Sockets MIL-PRF-12883

Description:

Sockets are made to MIL-PRF-12883 specifications, plus specialized requirements, and are supplied in a broad range of military standard and special configurations and styles for 2 through 25 amp operations. Relay Sockets feature state-of-the-art ultrasonically bonded interfaces between the dielectric components, which eliminate air paths and provide protection against moisture and degradation.

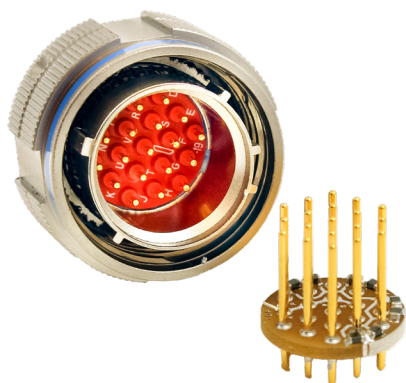
Features & Benefits:

- Low profile-available in all military configurations; configured to a minimum size & weight & accept the MIL-C-39029/29 contact family
- Extended profile allows for contact standardization; configured to accept the longer MIL-C-39029/5 contact
- Sockets available with fixed or loose mounting studs; can be top or bottom mounted
- Designed for MIL-C-39029 contacts; standardization simplifies product
- Polarization in accordance with MIL Spec requirements; provided by specific contact configuration and/or polarizing pins

Application

Actuation

EMI SHIELDING



Contact

Larissa Williams

williams@amphenol-aa.com

amphenol-aerospace.com

Amphenol Aerospace EMI/EMP Filters

Description:

Electromagnetic Interference (EMI) and Electromagnetic Pulse (EMP) protection.

Features & Benefits:

- Offers the versatility of standard connectors with EMI/EMP protection for sensitive circuits.
- Internal housing of the EMI/EMP devices eliminates costly and bulky exterior discrete protection devices.
- Reduction in overall weight and space with the elimination of external filter circuits.
- Increase in reliability due to fewer connections

Application

Avionics & Communication



Contact

Ross Young

ross.young@martec.ltd.uk

martec.solutions

Hermetic Feedthroughs

Description:

True glass to metal hermeticity for maximum reliability.

Application

Actuation Systems



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

EMI SHIELDING



ARINC 809 / EN4165 / SIM Monomodule Connectors Fitted with Size 8 Contacts (80 Amps)

Description:

The EN4165 / SIM Monomodule Series (ARINC 800 / 809) connector is a monomodule shell, fitted with overmoulded SIM modules offering best-in-class dielectric and sealing performances, a push-pull locking mechanism makes it ideal for all kinds of In-Flight applications. With lightweight composite shells they are especially suited where weight and space saving is mandatory.

Features & Benefits:

- Overmoulding technology offering second to none dielectric and sealing performances
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Lightweight and robust thermoplastic; metalized for shielding
- SIM modules available with contacts from size 23 / 5 amp to size 8 / 80 amp
- Fixing accessories, multiple colors, flight caps and 3-pin quick install versions are also readily available

Application

Actuation

Contact

customer-service@amphenol-airlb.fr

amphenol-airlb.fr/en

SENSORS



2M801/2M805 High Speed Connectors

Description:

2M connectors with a Fluoropolymer for use in USB 3.0, eSATA, and other high-speed databus applications.

Features & Benefits:

- Fluoropolymer inserts allows for increased data rate in the same 2M-sized package
- Cost-effective solution for multiple standard high-speed protocols
- Compatible with all standard 2M backshells and accessories
- Configurable for multiple termination styles (Crimp, PC tail, and Solder cup)

Application

Avionics & Communication

Contact

Pete Cook

pcook@amphenol-aa.com

amphenol-aerospace.com



Contact

info@i2s-sensors.de
i2s-sensors.de

CCT Pressure Sensor

Description:

The climate-control pressure transmitter (CCT) was developed specifically for measuring the pressure of refrigerants in motor vehicles. The hermetically sealed and robust aluminium housing makes this sensor a cost-effective solution for automotive air-conditioning systems. Thanks to its high-quality stainless-steel measuring element, the CCT is compatible with a wide range of fluids. Its innovative evaluation electronics reliably deliver high-precision measurements over a wide temperature range, using LIN or analog interface.

Features & Benefits:

- Specially designed stainless-steel measuring element
- Application-specific evaluation electronics
- Tried-and-tested aluminium housing
- Variety of analogue and digital output signals available

Application

Aircraft HVAC



Contact

info@i2s-sensors.de
i2s-sensors.de

CCT Pressure Temperature Sensor

Description:

The CCT pressure temperature sensor is often used in heat pumps for climate control systems and in thermal management (battery), particularly in vehicles with alternative drives. The specially developed thermoreceptors permit a fast response time in flowing media and guarantee the high accuracy of the temperature measurements. The design excels due to its compact size and minimal weight, which makes it easy to integrate and ideal for lightweight systems.

Features & Benefits:

- Specially designed thermoreceptors
- Tried-and-tested stainless-steel measuring element
- Small size
- Application-specific evaluation electronics
- Fully automated assembly

Application

Aircraft HVAC





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

info@i2s-sensors.de
i2s-sensors.de

VSP Pressure Sensor

Description:

As one of our smallest pressure sensors, the VSP stands out in particular for its robust and submersible design, which makes it a reliable solution for any oil pressure application in motor vehicles and commercial vehicles. Measurements of absolute or relative pressures in a rated pressure range up to 600 bar are possible with the VSP. Its specially developed evaluation electronics permit highly accurate and stable measurements at temperatures up to 150 °C, even under harsh conditions. In addition, the VSP meets the high EMC and ESD requirements that apply in the automotive industry.

Features & Benefits:

- Robust and minimised design
- Specially developed measuring element and evaluation electronics
- Variety of electrical connections and output signals available



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

EN4165/SIMTac03 Modules

Description:

A wide range of SIM/EN4165 modules are available to support various standards of fiber optic termini: butt joint or lensed. The SIMTac03 small form factor stand alone shicklet can accommodate one standard off the shelf MT ferrule. Each MT ferrule can be fitted with 1, 24 up to 48 fibers. (butt joint or lensed). Two SIMTac03 shicklets can be combined with a dedicated SIMTac03 /EN4165 compliant module and connector shell to form a high density, robust and reliable fiber optic interconnection. The SIMTac03 modules and shicklets can be used with the whole range of EN4165 / SIM connector shells: single, double, quad or multiple bays versions. Both shicklet and modules are pending EN standardization.

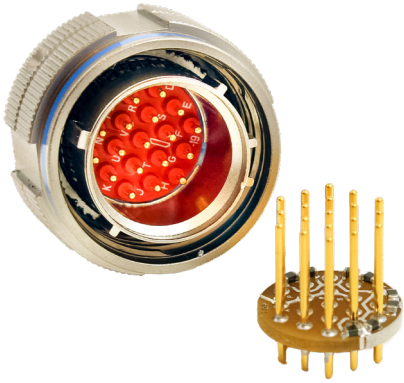
Features & Benefits:

- Pending standardization: EN4733 (SIMTac03 modules) and EN4734 (SIMTac03 connectors)
- SIM module for 2 SIMTac03 connectors with strain relief
- SIMTac03 connectors are fitted with MT ferrules as per IEC 61754-5
- Boot for Round or Ribbon Fiber
- Multi-mode and Single mode
- 12 and 24 optical ways

Application

High Speed Data Fiber Network Interconnect

SENSORS



Contact

Larissa Williams

lwiliams@amphenol-aao.com

amphenol-aerospace.com

Amphenol Aerospace EMI/EMP Filters

Description:

Electromagnetic Interference (EMI) and Electromagnetic Pulse (EMP) protection.

Features & Benefits:

- Offers the versatility of standard connectors with EMI/EMP protection for sensitive circuits.
- Internal housing of the EMI/EMP devices eliminates costly and bulky exterior discrete protection devices.
- Reduction in overall weight and space with the elimination of external filter circuits.
- Increase in reliability due to fewer connections

Application

Avionics & Communication

SYSTEM ATTACHMENTS



Contact

customer-service@amphenol-airlb.fr

amphenol-airlb.fr/en

ABS1339 Light Clamps

Description:

ABS1339 Light clamps provide routing, support and fixing for cable harnesses of various diameters. Full composite and silicone elastomer clamps are perfectly-suited for aerospace applications where weight savings are mandatory.

Features & Benefits:

- Electrical bundle or pipes protected from vibration induced wear and tear thanks to overmoulded elastomer
- Available in 8 sizes for cable diameters from 5 to 48 mm
- High Grade Material
- Impressive Weight Savings vs. Metal Clamps

Application

Harness Attachment



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

SYSTEM ATTACHMENTS



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

customer-service@amphenol-airlb.fr
amphenol-airlb.fr/en

CC5516 Light Clamps

Description:

The CC5516 Light Series is a new line of super lightweight cable clamps, in composite and silicone, derived from the legacy NSA5516 metallic clamps. They are designed to save time during installation (pre-locking mechanism) and keep the cable harnesses or hydraulic pipes securely maintained on a structure over time. They are closed and fixed on the structure by screw, in one simple operation.

Features & Benefits:

- Electrical bundle or pipes protected from vibration induced wear and tear thanks to overmoulded elastomer
- Up to 73% lighter than metal clamps
- PEEK Polymer offering high temp range up to 225 °C
- 10 Sizes Available for cable or pipes diameters from 5 to 25, 4 mm
- Pre-locking mechanism
- Suited for stacking mount

Application

Harness Attachment



Contact

lttoyedonnell@amphenolpcd.com
amphenolpcd.com

Wiring & Clamping Accessories

Description:

High strength to weight ratio = weight savings without compromising strength. Quicker Installation times.

Features & Benefits:

- Clamps (75P, 86P, PCL150, PCL400)
- Snap 'N Post
- Fairlead Blocks (ALBFLB)
- Lightening Hole Bushings (ALBCBS)
- Spacers, Anchor & Stringer Clips (ALBCBS)
- Feedthroughs
- Vapor Seals (ALBSEA)

Application

Wiring & Clamp Accessories

SYSTEM ATTACHMENTS



Contact

lttoyedonnell@amphenolpcd.com
amphenolpcd.com

Adhesive Solutions

Description:

Fastener-less VHB Adhesive installation perfect for composite airframes where holes can't be drilled into the structure. Weight savings for smaller bundles such as situational awareness where fastener mounted installations may be overkill.

Features & Benefits:

- U-Snap Clamp (ALBPCLU)
- Cable-tie mounts (ALBBDP)
- Standoffs
- Snap 'N Post

Application

Wiring & Clamp Accessories

ANTENNAS AND GPS



Contact

produced@amphenolpcd.com
amphenolpcd.com

ProFin Plus 2x2 MIMO Antenna

Description:

The ProFinPlus is indeed feature rich: Multi-Band – LTE coverage spanning 26 LTE frequency bands. One product for a global LTE market with endless connectivity options, all supported by 2X2 MIMO. Close attention was made to the design of the LTE element, ensuring the best correlation coefficients to enhance data speeds in market. Low band and high band Wi-Fi both 2X2 MIMO. Precision geo-location is provided with GNSS and GPS. Low band and high band Wi-Fi both 2X2 MIMO. Precision geo-location is provided with GNSS and GPS. The ProFinPlus is future proofed in the global market as 5G networks roll out. With 2x2 MIMO offered for 5G, up to 3.8GHz, and 5G at 600MHz, this antenna can easily manage in countries where 5G is already being implemented, like telco T-Mobile in the USA.

Application

Mobile LTE/GNSS comms antenna



ANTENNAS AND GPS



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

produced@amphenolpcd.com
amphenolpcd.com

Pegasus

Description:

Pegasus is a small and lightweight connector, designed for use in low and medium power distribution and control applications in harsh environments.

Features & Benefits:

- 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 Configurations-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

Application

GPS



Contact

[Carrie Obedzinski](mailto:Carrie.Obedzinski@timesmicrowave.com)
timesmicrowave.com

TCA Cable

Description:

Times Commercial Air (TCA) is a low-loss, high-temperature, high-flexibility cable for navigation, collision, avoidance and communication systems. TCA is ideal for applications such as GPS, ADS-B, SATCOM, and ATG, especially when facing critical electrical and mechanical requirements.

Features & Benefits:

- Excellent temperature performance
- High flexibility for tight runs
- Wide connector availability and simple installation
- Available as fully tested custom assemblies
- Multiple shielding layers to reduce interference

Application

Low-loss, high-temperature, high flexibility cable for navigation, collision avoidance, and communications systems. Idea for GPS, ADS-B, SATCOM and ATG.

ANTENNAS AND GPS



Contact
[Carrie Obedzinski](mailto:Carrie.Obedzinski@timesmicrowave.com)
timesmicrowave.com

Maxgain Cable

Description:

MaxGain® ultra low loss, flexible microwave coaxial cable and a full range of passivated stainless steel connectors are available as fully tested custom cable assemblies. MaxGain assemblies are used for general applications in both field and laboratory conditions. They are ideally-suited for applications where lowest loss and good stability over flexure is required.

Features & Benefits:

- Lowest insertion loss available
- DC - 50 GHz
- Ultra-stable insertion loss and VSWR with flexing
- With wide temperature range (-65 °C to + 150 °C)
- Extremely flexible
- Low minimum bend radius
- Superior shielding effectiveness (> 90 dB)

Application

Ku/Ka Band Satcom, 5G, Fully Customizable Assemblies, Fully Tested



Contact
[Carrie Obedzinski](mailto:Carrie.Obedzinski@timesmicrowave.com)
timesmicrowave.com

LMR-FR Cable

Description:

LMR®- FR is a non-halogen (non-toxic), low-smoke, fire-retardant cable designed for in-building runs that can be routed anywhere except air-handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.

Features & Benefits:

- Excellent flexibility
- Much lower loss than standard RG cables
- Superior RF Shielding effectiveness
- Available as fully tested
- Custom cable assemblies
- Superb connector availability and easy installation

Application

Non-halogen, low-smoke, fire-retardant cable ideal for antenna runs, SATCOM feeders, and avionics systems



ANTENNAS AND GPS



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

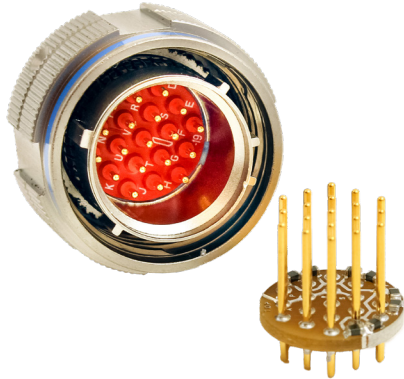
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

Larissa Williams

williams@amphenol-aa.com
amphenol-aerospace.com

Amphenol Aerospace EMI/EMP Filters

Description:

Electromagnetic Interference (EMI) and Electromagnetic Pulse (EMP) protection.

Features & Benefits:

- Offers the versatility of standard connectors with EMI/EMP protection for sensitive circuits.
- Internal housing of the EMI/EMP devices eliminates costly and bulky exterior discrete protection devices.
- Reduction in overall weight and space with the elimination of external filter circuits.
- Increase in reliability due to fewer connections

Application

Avionics & Communication

GENERAL USE



Contact

Pete Cook

pcook@amphenol-aa.com
amphenol-aerospace.com

2M801/2M805 Connectors

Description:

Micro-Miniature connectors designed for applications that require size and weight savings without sacrificing the performance of a MIL-DTL-38999 connector.

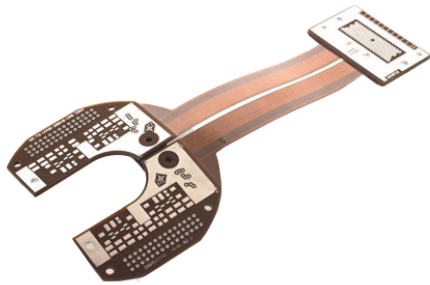
Features & Benefits:

- 71% Lighter and 52% Smaller than Similar MIL-DTL-38999 Connectors
- Integral Banding Platforms
- Available for Easy Cable Attachment
- Rear-Release Crimp, PC Tail, and Solder Cup Termination Options

Application

General Use

GENERAL USE



Contact

Jeremy Brook

jeremy.brook@amphenol-invotec.com
amphenol-invotec.com

Rigid Flex

Description:

By incorporating PCB and Flex into one design there are less points of failure as well as creating a smaller interconnect area.

Features & Benefits:

- Overall assembly effort is lowered, as is test complexity; both of which drive down cost.
- More-effective and convenient servicing over the course of the product life cycle.
- Reduction of interconnections leads to Improved signal transmission performance.
- Flex circuit's ductility and low mass will reduce the impact of vibration and shock and improve performance.
- Thermal stability of polyimide allows the circuit to withstand applications with extreme heat, as the material's excellent thermal stability provides a better base for surface mounting than traditional boards.
- Because the compliant base film places less stress on soldered joints, thermal mismatch is less likely to occur.
- Used extensively in high-reliability applications

Application

Avionics including: Power Management, Engine Controls, Actuation Controls, FAP

Single Sided & Double Sided Flex

Features & Benefits:

- Flexible circuits allow the board to conform to a desired shape (flex) during its application
- Flexible circuits (single or double sided) allow freedom of 3D packaging; significant weight and footprint reduction - typically 70% or higher
- These types of circuits are very cost effective in replacing low-high volume simple wire harnesses.
- Shielding can be added for EMI protection.
- Stiffeners can be added to "ruggedize" connection areas.
- Because the compliant base film places less stress on soldered joints, thermal mismatch is less likely to occur.
- Used extensively in high-reliability applications
- Flex circuits can accept any component or connector that can be assembled to a rigid PCB design

Application

Avionics including: Power Management, Engine Controls, Actuation Controls



Contact

Jeremy Brook

jeremy.brook@amphenol-invotec.com
amphenol-invotec.com



GENERAL USE



Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

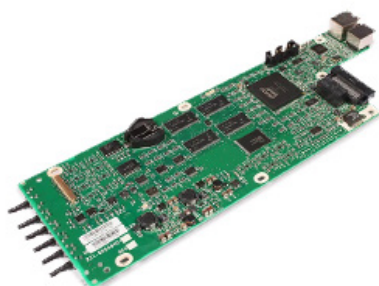
Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Multilayer PCBs

Features & Benefits:

- Multilayer up to 40+ layers.
- Wide range of laminate options including high reliability / temperature, low loss and lead-free laminates
- Mixed dielectric (hybrid) constructions.
- RF and microwave circuits
- Heavy copper and thermal management solutions
- Embedded components

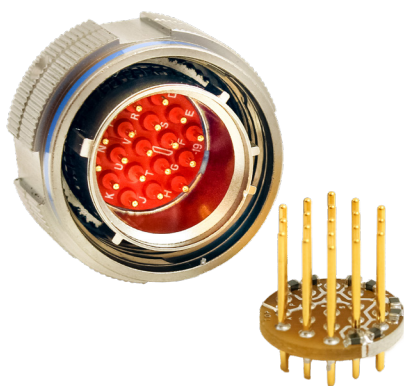
Application

Avionics including: Power Management, Engine Controls
Actuation Controls

Contact

Jeremy Brook

jeremy.brook@amphenol-invotec.com
amphenol-invotec.com



Amphenol Aerospace EMI/EMP Filters

Description:

Electromagnetic Interference (EMI) and Electromagnetic Pulse (EMP) protection.

Features & Benefits:

- Offers the versatility of standard connectors with EMI/EMP protection for sensitive circuits.
- Internal housing of the EMI/EMP devices eliminates costly and bulky exterior discrete protection devices.
- Reduction in overall weight and space with the elimination of external filter circuits.
- Increase in reliability due to fewer connections

Application

Avionics & Communication

Contact

Larissa Williams

lwilliams@amphenol-aao.com
amphenol-aerospace.com

CABLE AND HARNESS



Contact

cablesales@amphenolpcd.com
amphenolpcd.com

Amphenol PCD Cable Solutions

Description:

Custom-designed cables for a high voltage battery application using a custom cable for high temperature using Rhino power connectors.

Features & Benefits:

- Custom design for each application
- Military & Commercial Aerospace specification
- Discrete, multic-cable and harness design for copper cables
- Extensive engineering design and manufacturing capabilities providing prototype to turnkey solutions
- Experts in custom over-molded interconnect & cable transitioning solutions

Application

High-voltage battery harness cables



Contact

Russ Smolinsky

rsmolinsky@amphenolpcd.com
amphenolpcd.com.cn

Amphenol Ionix Systems Cable Solutions

Description:

Custom designed & lightweight power feeder cables for harsh environments.

Features & Benefits:

- Custom designed assemblies
- For Military & Commercial Aerospace applications
- Extensive engineering design and manufacturing capabilities from prototype to volume production.

Application

High Voltage battery cables for Aero Engines and Airframe applications



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

Electric
MotorCharging
& Power
DistributionAvionics &
CommunicationIFE & Air
QualityEMI
Shielding

Sensors

System
AttachmentsAntennas
& GPSGeneral
UseCable &
Harness

RF

Micro-
Miniature**Contact**

Andrew Dinsdale
adinsdale@svmicro.com
svmicro.com

SV Microwave RF/PCB Solutions

Description:

RF PCB/Connector Design and Build Solutions.

Features & Benefits:

- One-stop-shop with SV Microwave and Amphenol Printed Circuits
- Optimized Connector to PCB Transition for Minimal Loss
- All Standard Interfaces Supported
- Amphenol Proprietary Ultraspeed PWB Technology for Enhanced Performance

**Contact**

Andrew Dinsdale
adinsdale@svmicro.com
svmicro.com

SMPX Series

Description:

RF Connectors and Cable Assemblies.

Features & Benefits:

- Small form factor (high density)
- Low weight
- Ideal for Height Restricted Board-to-Board Applications
- High Frequency (DC-40 GHz)
- Radar, Collision Avoidance and Situational Awareness



Contact

Carrie Obedzinski
timesmicrowave.com

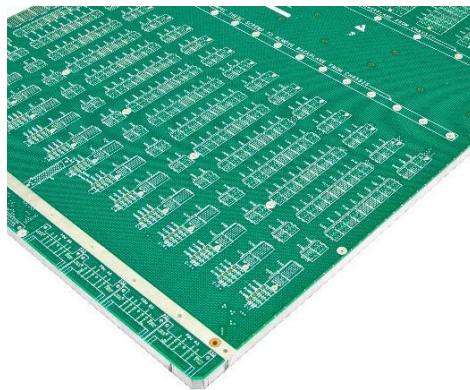
Maxgain Cable

Description:

MaxGain® ultra low loss, flexible microwave coaxial cable and a full range of passivated stainless steel connectors are available as fully tested custom cable assemblies. MaxGain assemblies are used for general applications in both field and laboratory conditions. They are ideally suited for applications where lowest loss and good stability over flexure is required.

Features & Benefits:

- Lowest insertion loss available
- DC - 50 GHz
- Ultra stable insertion loss and VSWR with flexing
- With wide temperature range (-65 °C to + 150 °C)
- Extremely flexible
- Low minimum bend radius
- Superior shielding effectiveness (> 90 dB)



Contact

Kurt Whitcomb
kwhitcomb@amphenolapc.com
amphenol-apc.com

Printed Circuit Boards

Description:

Custom designed Rigid, Flex, and Rigid FLEX PWB's and assemblies offering Design through Turn Key solutions from Amphenol Printed Circuits.

Features & Benefits:

- High Speed Signal Routing (56 Gbps)
- Space and weight savings
- High Current
- High Voltage





Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature



Contact

aaotech@amphenol-aa.com

amphenol-aerospace.com

Series Five

Description:

An innovation of MIL-DTL-38999 Series III that's Up to 20% smaller and 50% lighter than its D38999 Series III counterpart. Available in multiple configurations and with higher voltage capabilities.

Features & Benefits:

- 38999-Qualified Insulator and EMI Spring
- No Dielectric Bond Joint
- Triple Wire Seal
- AS39029-Qualified Gold-Plated Contacts
- Full Metal Clip Contact Retention
- Standard Accessory Thread
- Radial Interfacial Seal
- "Diamond-Grip" Nut Design
- Scoop Proof
- No-Mess Dry Film Thread Lubricant



Contact

Pete Cook

pcook@amphenol-aa.com

amphenol-aerospace.com

2M801/2M805 Connectors

Description:

Micro-Miniature connectors designed for applications that require size and weight savings without sacrificing the performance of a MIL-DTL-38999 connector.

Features & Benefits:

- 71% Lighter and 52% Smaller than Similar MIL-DTL-38999 Connectors
- Integral Banding Platforms
- Available for Easy Cable Attachment
- Rear-Release Crimp, PC Tail, and Solder Cup Termination Options

MICROMINIATURE



Contact
RANGER@NEXUS.com
nexus.com

Ranger

Description:

Ranger is the newest addition to the Amphenol Nexus line of connectors. With in-house capabilities and in-depth knowledge of the industry, we've developed a solution that is both high-performing and reliable.

Features & Benefits:

- Choose between High Density Ranger and Standard Ranger variants
- Used in multiple sectors – Military and Defense, Telecommunications, Commercial Aviation, etc.
- High-performing and reliable performance
- Excellent resistance to shock, vibration, and temperature extremes
- Compatible with different systems and equipment



Contact
Noah Levine
(978) 880-2413
circulars@amphenolpcd.com
amphenolpcd.com

Terrapin

Description:

Intended for harsh environment applications and used extensively in soldier communications, Amphenol Terrapin is a miniature series of circular push-pull connectors.

Features & Benefits:

- Rugged shell design ensures durability in harsh environments
- Superior EMC performance and environmental sealing to IP68
- RoHS-compliant black-silver plating is low-luster and corrosion resistant
- Resilient in severe battlefield conditions
- Optional locking mechanism for added security
- Available in multiple shell sizes with up to 37 contacts



Visit amphenolmilitaryaerospace.com for more information

Electric
Motor

Charging
& Power
Distribution

Avionics &
Communication

IFE & Air
Quality

EMI
Shielding

Sensors

System
Attachments

Antennas
& GPS

General
Use

Cable &
Harness

RF

Micro-
Miniature

[illegible]

[illegible]