

SIAE 2023

19>25 june

Amphenol

Enabling the Electronics Revolution



**JUMP
with
AMPHENOL
in the Future
of FLIGHT**



Overview of Amphenol solutions dedicated to Space, Advanced Air Mobility, Commercial and Military Aerospace applications, in the fields of Connectors, Sensors, Attachment systems, PCB/Flex, Complex cable harnesses, Cable assemblies and Electronic Packaging.

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and access to more content

www.amphenol.com



Amphenol

Amphenol Corporation is one of the world's largest interconnect and added value manufacturers. Founded in 1932, Amphenol designs, manufactures and markets electrical, electronic and fiber optic connectors, interconnect systems and coaxial and specialty cables.

Amphenol products are engineered and manufactured in Europe, the Americas, Asia and sold by a worldwide sales and marketing organization.

Learn how Amphenol interconnect solutions will enable your organization to succeed. Our entire organization is at your service.

Amphenol Military & Aerospace is the world leader in the design, manufacture and supply of high-performance interconnect systems for military and commercial aerospace, especially for harsh environment applications.

Amphenol provides an unparalleled product breadth, from MilAerospace specification connectors to customized high-speed board level interconnects; from flexible to rigid printed circuit boards; from backplane systems to completely integrated assemblies.

Key applications supported are civil and military aircrafts, business jets, hybrid/electrical aircrafts, eVTOLs, radars, missiles, UAVs or space applications, from launchers to satellites. Amphenol is a technology innovator that designs to **meet customers' needs from program inception.**



KEY APPLICATIONS WE SUPPORT:

- Civil Aircraft
- Military Aircraft
- Business Jet
- Civil Helicopter
- Military Helicopter
- Missile
- UAV
- Satellite
- Radar & Surveillance
- eVTOL
- Hybrid / Electric Aircraft



KEY SOLUTIONS WE PROVIDE:

- Connectors
- Sensors
- Attachment systems
- Cable Harnesses
- Cable assemblies
- PCB / Flex / Rigid Flex
- Electronic packaging / Equipments
- Switches & Mediaconverters
- Power / HVDC / MEA solutions
- Easy install / Quick mount solutions
- Contacts / Optics / High speed

+ Who we are



Amphenol + advantage



Technological Expertise

We apply 90 years of industry-leading knowledge & experience in all markets to design the right solution for you.



Manufacturing Versatility

We utilize the latest manufacturing & process technologies to support our extensive dual production and off-set options around the world.



One Company, One Solution

We provide a complete, integrated solution for all system needs, from concept and design to manufacturing and sourcing.

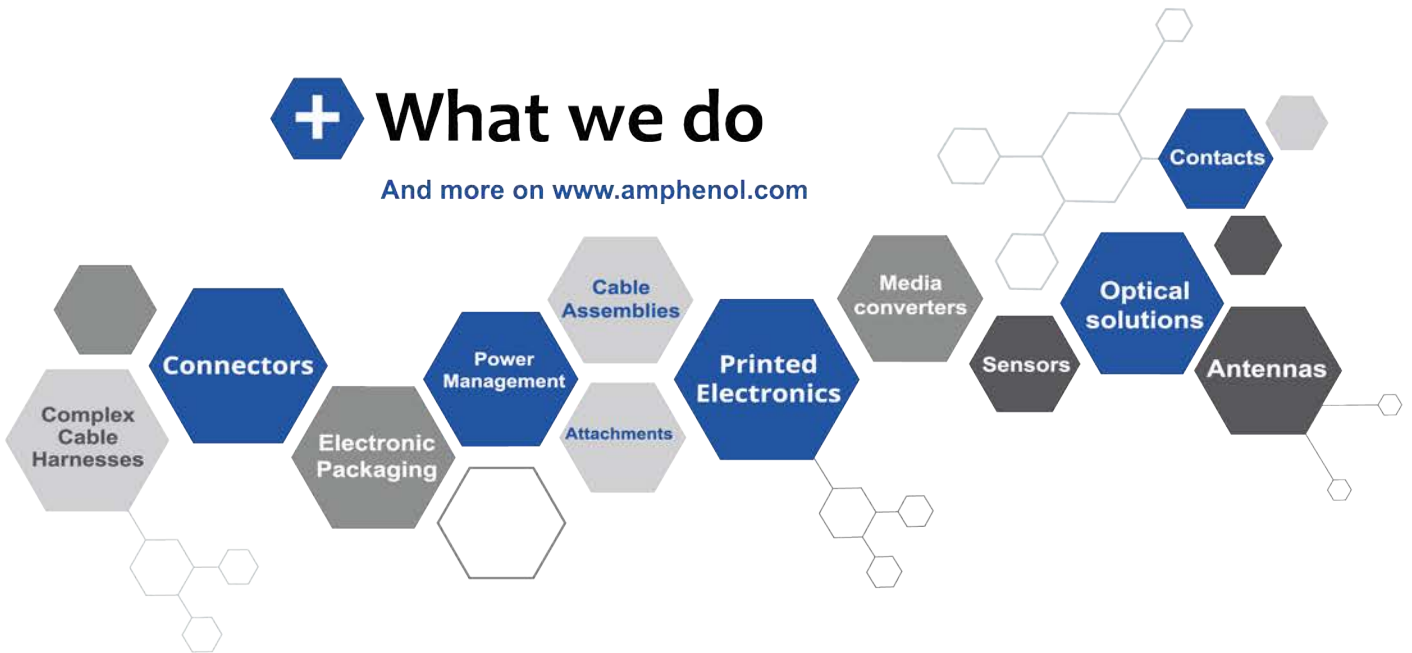


Superior Customer Engagement & Support

We constantly focus on continuous improvements, from management to local customer support, to build the highest quality, on-time products.

+ What we do

And more on www.amphenol.com



+ How we do it

Our people exhibit traits that, when combined, form the secret to our success in **Enabling the Electronics Revolution**.



Want to join?
Let's meet!



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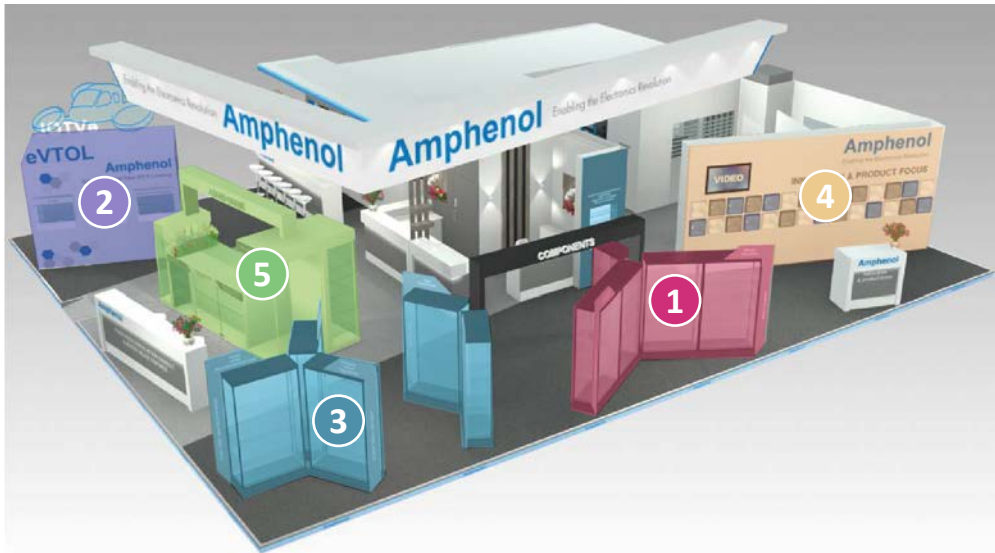
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APPLICATIONS WE SUPPORT

1 Commercial Aerospace



TV-SIM

- Connectors with thread coupling based on MIL-DTL-38999 (for the shell) & EN4165 / VG96513 (for the inserts) standard
- High liability
- Coevally waterproof and resistant to vibrations and wear
- Use the same installation dimensions as connectors according to MIL-DTL-38999

Amphenol Air LB Germany



Bantam

- High-performance circular connector product range developed for aerospace applications where electrical performance must be met with affordability
- Triple bayonet coupling
- Quick, reliable tool-less locking
- Lightweight & Compact
- Excellent EMI shielding

Amphenol Commercial Air Division



EN4165 / SIM Connectors & Modules

- Space efficient & modular design offering versatility of mixing & matching
- Shielding, sealing, polarization and 36 keying positions
- Shells in metal or composite versions, in 1, 2 or 4 bays
- Modules in overmold technology, fitted with standard crimp or PCB contacts (size 23/22/20/16/12/8), as well as RF, Quadax, Coax contacts, Fiber optics or RJ45
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



ARINC 600

- Low insertion force contacts
- Environmental versions
- Front removable keying posts
- Field replaceable inserts
- Crimp, coaxial, power, printed circuit, and wire wrap contacts

Amphenol Canada Corporation



Standard Hermetic D38999 series I, II and III

- Highest performance capabilities for both general duty and severe environment applications
- Meet or exceed MIL-DTL-38999 requirements
- Originally designed for the harshest environments and most demanding applications
- Continue to evolve with the needs of an ever-changing market

Amphenol Martec



Micro HDAS

- High density: 1.27mm [.050] pitch
- Smaller & lighter rugged PCB connector
- Meet & Exceed MIL-DTL-55302G & 83513G

Amphenol Socapex



Luminus

- Robust, lightweight bayonet and push-pull style connectors support signal and power
- Well-suited to low to medium power (to 23A) applications
- Rated to IP67 for use in harsh environments

Amphenol PCD



CC5516 Light Cable Clamps

- Derived from CC5516 composite clamps
- Available in 10 sizes for cable or pipe diameters from 5 to 25,4 mm
- Weight saving up to 24% compared to legacy CC5516 composite clamps, and up to 73% compared to metallic clamps
- Closing and fixing in one step by screw
- Pre-locking mechanism
- Suited for stacking mount
- Protection from vibration by overmolded elastomer

Amphenol Air LB France



ARINC 801

- Qualified to the ARINC 801 Specification
- Precision alignment and components provide excellent optical performances
- Supports APC termini for RF-over-fiber and other applications requiring low back reflection
- Supports standard suite of 38999 backshells and accessories
- Removable ASR facilitates termini cleaning and maintenance
- High-density arrangements up to 32 channels

Amphenol Fiber Systems International



Velok

- NEW Rectangular connector designed for low to medium power applications
- Spring-loaded latch provides quick mating / unmating with a push to lock / unlock connection
- Rated to IP69 for use in harsh environments

Amphenol PCD



Separators 3308

- According to ABS1144 standard for aerospace and defence
- They maintain clearance between two parallel or crossing cable harnesses, with 9 different versions available

Amphenol Air LB Germany



Octomax 1G26

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

Amphenol Socapex

Click on to learn more.

APPLICATIONS WE SUPPORT

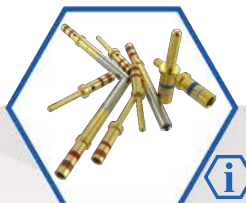
1 Commercial Aerospace



86P Clamp

- One-for-One replacement to outperform industry standard metal clamps (AS21919)
- Pre-mountable installation saves time vs traditional installation methods
- Reduces weight vs AS21919

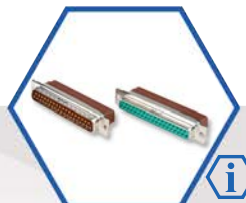
Amphenol PCD



EN3155 offer

- Designed & manufactured in France
- Designed for harsh environments
- Withstand vibrations at highest temperatures and additional temperature exposures & variations

Amphenol Socapex



EPC Series

- Environmentally Sealed Subminiature Rectangular D-Connectors, according to the ASNE0237 and ABS1145 standard, are designed primarily for applications where space and weight are of major importance
- Suitable for aerospace, telecommunications and wherever high tightness is required

Amphenol Air LB Germany



SIM Quick Release

- Specific design derived from EN4165 modular connectors
- Suited for direct Board to Harness Connection
- «Quick release» locking system for ease of use and time saving
- Compatible with the whole range of standard EN4165 / SIM modules
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



Lightning Protection Connectors

- Combine traditional environmental protections with transient voltage protection
- Can be couple with additional filtering components
- Weight and space saving
- Nanosecond transient clamping response time

Amphenol Aerospace Operations



1900SIM Connectors

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- Versatility of mixing & matching Signal & Power, RF (Quadrx, Triax, Twinax and Coax) or Fiber Optic
- Many accessories and backshells available
- EN4165 qualified
- With modules from 30 contacts #23 (5 Amps) up to 1 contact #8 (up to 80 Amps)

Amphenol Air LB France



75P Clamp

- One-for-one replacement to outperform industry standard metal clamps (AS21919)
- Reduces weight and installation time vs AS21919
- Butterfly stacking & locking features

Amphenol PCD



ABS 1547

- RJ45 & USB Human Machine Interface
- Bayonet multipin EN3646 output
- Cockpit interfaces

Amphenol Socapex



M12883 & Quick-Mount Relay Sockets

- Qualified to MIL-PRF-12883 specifications
- Amp range between 2 and 25
- Quick-Mount Relay Sockets snap into standard aircraft panel cutouts eliminating the need of mounting hardware

Amphenol PCD



MPO Field

- Transform a standard MPO / MTP patch-cord into an environmental connector
- Number of channels: multiples of 12
- Shock, vibration and water proof (IP68)
- Based on EN3645/38999 shell size 13

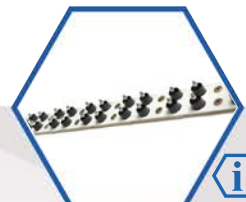
Amphenol Socapex



SIM OPLF Modules for PCB mounting

- Low profile alternative to standard SIM modules fitted with angled PCB contacts
- Contact strips are encapsulated in over-molded LCP composite shell and assembled in an EN4165 shaped module
- Modular, for easier maintenance
- Perfectly suited for automatic assembly
- To be used with shortened SIM receptacles offering overall size optimization on the PCB

Amphenol Air LB France



Battery Energy Storage System - Pluggable power distribution interconnect

- Lightweight, compactness, optimized heat management
- Flexible (translational & angular misalignment)
- Easy connection / connector integration, locking system (option), protection against water projections and dusts

Amphenol Auxel

1 Commercial Aerospace



Scorpion

- Unique approach to modular connector design
- Flexibility to configure the connector to meet your specifications
- Innovative modular tooling and injection molding process provides a customize solid body tailored to your requirements
- Up to 100 amperes per power contact
- Ability to add signal contacts and a variety of accessories

Positronic Industries



Relay Sockets

- Adaptation device between a Relay and a Cable harness
- Overmold technology
- Lightweight composite & Compact design
- For 8, 14 or 16 cts size 20 / 16 (crimp contacts)
- Contacts as per NFC 93422 model HE310A contacts / Contacts as per ASNE standard
- Polarization provided by specific contact configuration or polarized

Amphenol Air LB France



Composite Backshell

- Lightweight, high performing backshell ideally suited for the commercial air market
- Provides strain relief and weight saving
- Withstands severe corrosive environments

Amphenol PCD



EN4165 / SIMTac 03

- SIM module for 2 MTAC connectors with strain relief
- Protective shroud aiming recessed MT ferrule and "Finger-Touch-Proof"
- Boot for Round or Ribbon Fiber
- Multi-mode and Single mode

Amphenol Air LB France



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor



Adhesive Snap 'N Post

- One-for-one replacement for standard ring posts
- Posts are pre-installed to the structure, adapter heads pre-installed on wire harnesses
- Reduces installation time from ~30+ sec to less than 5sec compared to standard ring posts

Amphenol PCD



ABS1152 / 3559 series Push-Pull Connectors

- Lightweight and robust thermoplastic
- Modular design, compatible with the whole range of EN4165 / SIM modules
- SIM modules in overmold technology offering excellent sealing performances (IP66)
- Feed-thru and 3-pin quick install versions
- Push-Pull quick lock system
- Operating temperature: -55°C to +175°C

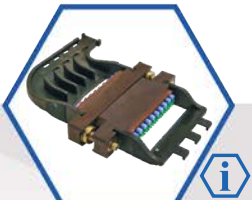
Amphenol Air LB France



CapLock / PlugLock

- CapLock allows to lock a cap onto a EN3645 / 38999 Power receptacle which may be under load
- PlugLock allows to lock a 38999 Power plug onto a receptacle which may be under load

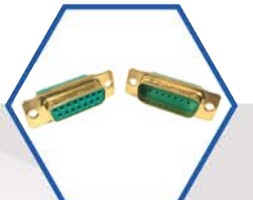
Amphenol Socapex



EN3545 / 1900 Connectors

- Sealed connectors IP66
- For copper cable contacts or aluminum cable contacts
- 36 coupling polarization
- Lightweight composite and silicone
- For MIL-C-39029 / EN3155 crimp contacts
- Many contact layouts for size 22, 20, 16, 12, 10 and 8 + Mixed
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



MIL-DTL -24308 D Sub Miniature Connectors

- Standard, High Density contacts
- High temperature monoblock insert
- Available in crimp, solder & PC tail version (Straight & Right Angle)
- Metal Retention clip design
- Environmental sealing with grommet available
- QPL Approved connectors

Amphenol Interconnect India



Air-Tight Lightweight Hermetic

- 35% weight savings across all shell sizes vs. standard stainless steel hermetic
- Full hermetic 10x-7 sealing using our epoxy technology
- Operating temperature of -65°C to +200°C

Amphenol Aerospace Operations



CC1339Light / ABS1339Light Cable Clamps

- Suited for cable harness fixing on structure
- Light versions derived from standard ABS1339 clamps: 18% weight saved
- 100% composite and silicone
- Electrical bundle protected from shocks & vibrations by over-moulded elastomer
- Fixing by screw, closing by cable tie
- Available in 8 sizes for cable diameters from 5 to 48 mm
- Operating temperature: -55°C to +150°C

Amphenol Air LB France

Click on to learn more.

APPLICATIONS WE SUPPORT

1 Commercial Aerospace



Adhesive Standoff

- Composite Standoff replaces traditional standoffs with no-hardware adhesive option
- VHB Tape or wet processes epoxy compatible
- PEEK 150GL30 or GF Ultem, 10-32 insert standard, metric option available

Amphenol PCD



EN3645

- Similar to MIL-DTL-38999 series III with additional requirements
- Higher lightning strike resistance
- Higher fluid resistance

Amphenol Socapex



ASR Connectors

- Snap in locking system
- Lightweight composite
- Shielding (Bright Nickel)
- Sealing
- D-shape polarization and 3 keying positions
- Available for cable-to-cable or cable-to-PCB applications
- Standard crimp contacts (size 22 / 20)
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 ms
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Multiple Electrical Output Options
- Change threading, o-ring port

Amphenol NovaSensor



EN4165 / SIMTac 08

- SIM module for 1 MT Ferrule packaged within a Size 8 Quadrax contact form factor
- 2 versions: for EN4165 / M38999 cavities, and for ARINC 600 cavities
- Available with Boot or sealed sleeve
- Multi-mode (12 optical ways)

Amphenol Air LB France



MIL-DTL-83723

- Three coupling style choices-Threaded, Bayonet, Quick Disconnect
- 5 Key / Keyway Design avoids mismatching
- High Temp resistance -65°C to +200°C
- Durability 500 Mating cycles, High Shock & Vibration resistance connectors
- QPL Approved connectors

Amphenol Interconnect India



1119 Splices

- Compact, thin and easy to use
- Suited in a cable harness to easily and quickly repair a damaged wire
- Overmold technology offering excellent sealing performances
- In Line or Component carrier (fuse, resistor, diode) versions
- From 1 to 4 contacts (size 20 / 16)
- Use of EN3155 standard socket contacts
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



Adhesive Tie Mounts

- Rectangular cable tie mounts provide convenient fixture locations anywhere in the system
- VHB Tape or wet processes epoxy compatible
- Used with any standard MS3367 or equivalent tie down strap

Amphenol PCD



Quick Release Connector

- Based on EN4165 / SIM standard
- Space saving / High density
- Best-in-class dielectric and sealing performances
- Quick disconnection
- Using std EN4165 modules
- For Power & Signal contacts

Amphenol Air LB France



M55116 Audio Connectors

- Waterproof, polarized plugs and receptacles for use in audio frequency circuits at 60 volts maximum potential and 0.5 amperes maximum current
- Crimp sleeve or solder cup contacts
- The rigid contacts in the plug connector mate with the pogo-pin, or spring loaded, contacts in the receptacle
- In-line plugs and receptacles with a wire strain relief
- Receptacles also available in panel-mount

Amphenol Nexus Technology



Series Five

- Up to 20% smaller and 50% lighter vs. D38999 series 3
- High voltage capabilities
- Utilized D38999 qualified insulator and EMI spring
- High vibration resistance

Amphenol Socapex & Amphenol Aerospace Operations



EN4165 / SIM MPO

- Custom design SIM module accommodating MT ferrule-type based & standard MTP / MPO multi-fiber connectors
- MTP / MPO directly plugs / locks into the SIM module; easily removed for repair
- From 12 to 48 fibers; Multi-mode and Single mode type

Amphenol Air LB France

1 Commercial Aerospace



Junction Modules

- Provides a simple, lightweight way to distribute power, signal or ground connections
- Wide array of busing options accommodate 12-26 AWG wires
- Electronic modules contain fuses, resistors, diodes with customization available

Amphenol PCD



EN4165 / SIM Luxcis

- Module as per EN4830 fitted with 6 standard ARINC 801 / EN4639 contacts (Multi-mode and Single mode)
- Guiding pins for alignment prior to mating into sleeve holder
- Only 1 insert, gender is defined by which side is fitted with sleeve holder; Interfacial, extended sealing grommet

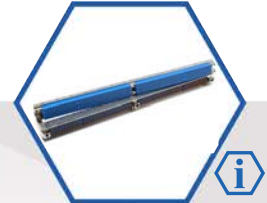
Amphenol Air LB France



Dualok

- Enhanced anti-decoupling mechanism
- Designed to perform under severe vibration environments
- Far exceeding the performance of MIL-DTL-38999 Series III plugs

Amphenol Commercial Air Division



SIAL

- Robust technology designed for severe environments
- 13 arrangements available from 18 to 392 contacts
- Contact technology allowing lateral displacement ± 0.25 mm

Amphenol Socapex



ABS1019 / 3357 series Push-Pull Connectors

- Lightweight and robust thermoplastic
- 3-pin quick install or PCB versions
- Push-Pull quick lock system
- Operating temperature: -55°C to $+175^{\circ}\text{C}$

Amphenol Air LB France



Telephone Plugs and Jacks MIL-DTL-9177

- Environment resisting
- FRFI / EMI protection
- Low level circuit capabilities
- High cross-talk resistance

Amphenol Nexus Technology



Rugged USB3 memory Keys

- Memory: 32, 64, 128 & 256Gb. Up to 1T on demand
- MTBF: >3 000 000 hours
- USB3.2 Gen1 max transfer rate: 5 Gb/s
- Compatible with USB3FTV or USBFTV receptacles
- Based on EN3645 / 38999 Size 15 shell

Amphenol Socapex



EN4165 / SIM Elio

- Modules as per EN4701 fitted with 4 hermetic contacts (EN 4531-101)
- Standard 2.5mm ST type ferrule interface allows the use of standard termination procedures & readily available tools
- Simple access to optical terminus facilitates cleaning
- Options available for single mode & multi-mode fiber
- Full-proof option allows the use of the terminus in a connector without backshell
- Supports tight or loose structured cable

Amphenol Air LB France



Adhesive U-Snap Clamps

- Pre-mountable, non-conductive, non-corrosive, and lightweight Nylon and PEEK quick latching clamp for each wire harness routing
- Interchangeable grommets allow the wire bundle diameter changes without removing the mounted base
- VHB Tape or wet processes epoxy compatible

Amphenol PCD



EN4165 / SIM Monomodule Connectors

- Rectangular, Modular, Push-Pull
- Shielding, sealing, polarization and 7 coupling versions (mechanical and color)
- Lightweight and robust composite
- Suited for the whole range of EN4165 / SIM modules
- Modules in overmold technology, fitted with standard crimp or PCB contacts (size 23/22/20/16/12/8), as well as RF, Quadax, Coax contacts, Fiber optics or RJ45
- Operating temperature: -55°C to $+175^{\circ}\text{C}$

Amphenol Air LB France

APPLICATIONS WE SUPPORT

2 Military Aerospace



Centaur

- Fiber speeds with copper durability (up to 56Gbps)
- Connect to several protocols from one connector (HDMI, USB, QSFP, RJ45, etc)
- Is plug and play (unlike competition - requires insert/removal tool)
- Available as connector, cable assembly, PC tail, etc

Amphenol Military High Speed



MMA

- Blind Mate Low Mating Force Modular Connector
- Based on ARINC 600 standard
- Composite shells and backshells available

Amphenol Canada Corporation



R-VPX

- Up to 32 Gb/s performance
- Qualified to VITA 46 for Open VPX applications
- Fully intermountable & intermateable to existing VITA 46 connectors
- Meets and exceeds VITA 47
- Modular COTS lightweight connector system
- Low mating force connector system

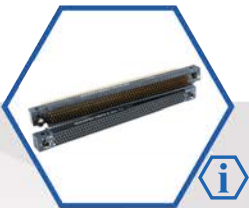
Amphenol Socapex & Amphenol Aerospace Operations



SIM Custom Plates

- Custom design derived from EN4165 standard, perfectly suited to comply with space, shape or environmental constraints
- Also suited for the connectorization of boxes or structures aiming to save parts and simplify the supply chain
- Highly modular design offering versatility of mixing & matching
- Suited with the whole range of EN4165 / SIM modules

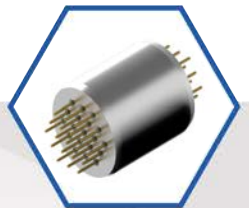
Amphenol Air LB France



HDAS

- High density: 1.905mm [.075] staggered grid
- 12 sizes from 11 to 253 contacts on 3, 4 or 5 rows
- Robust technology designed for severe environments

Amphenol Socapex



High Pressure Connectors

- Martec offers a wide range of solutions for high pressure environment, whether underwater immersion or for usage at the surface where water exposure is frequent
- With careful material consideration, our products are suitable for extended pressure capabilities of up to 60,000 PSI

Amphenol Martec



NGCON

- In accordance to MIL-PRF-64266
- Precision alignment and components provide excellent optical performances
- Supports APC termini for RF-over-fiber & applications requiring low back reflection
- Removable ASR facilitates termini cleaning and maintenance
- O-ring seals on each termini... no rear grommet. Cable independent
- Positive engagement release tool minimizes potential damage to fiber
- HD: up to 4 fiber in size 11 & 36 in size 23

Amphenol Fiber Systems International



FiberQuad Ruggedized Quadrax Contact

- Speeds up to 10.3 Gbps
- Operating temp -40°C to +85°C
- Transmit or receive
- Supports many wavelengths, modes, and protocols

Amphenol Military High Speed



Series Five

- Up to 20% smaller and 50% lighter vs. D38999 series 3
- High voltage capabilities
- Utilized D38999 qualified insulator and EMI spring
- High vibration resistance

Amphenol Socapex & Amphenol Aerospace Operations



EN4165 / SIM RJ45

- Compatible with the SIM / EN4165 connector shells
- RJ45 - 10 Gb
- Cat6a (TIA 568C2)
- Ea class (ISO 11801)
- Versions cable-to-cable and cable-to-PCB

Amphenol Air LB France



Smash

- High density, modular and shielded PCB connector
- 7 arrangements from 132 to 450 contacts
- Robust technology designed for severe environments

Amphenol Socapex



R398 Series

- Compact D-sub variant
- Features size 23 contacts for compact arrangements
- Supports combo arrangements
- Rugged mating
- High-temperature capable

Amphenol Canada Corporation

2 Military Aerospace



LuxBeam

- Expanded Beam Termini
- Beam section expanded 140 times
- Contactless Optical connection
- For Size 16 standard contact cavity for series III of MIL-DTL-38999 / EN3645 / EN4165

Amphenol Socapex



1750 Distribution Junction Modules

- Cable harness optimization: cable linear meters, weight and space saved
- Compact design and very high contact density for low space applications
- Overmold Technology offering excellent sealing performances (IP66)
- Clip mounting and versatility of mixing on metallic or composite rails
- Use of EN3155 standard socket contacts
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



3U VPX 48-Channel Rugged Ethernet Switch

- Up to 48 Channels of 10GbE
- Operating temp -40°C to +85°C
- Configurable ports between 10GBase-T, 10GBase-KR
- Ports work at 100Mb, 1G and 10G

Amphenol Military High Speed



MilTech® Cable Assemblies

- Hermetically sealed, flexible cable assemblies with superior phase stability
- Fully vapor sealed, optimized, and qualified for commercial and military avionics applications
- Available in a variety of diameters from 4.3 mm to 12.2 mm

Times Microwave Systems



Ranger Connectors

- Push/Pull locking and breakaway
- Function IP68 & IP69K, > 5,000 mating cycles
- Operating Temp range: -60°F to +257°F (-51°C to +125°C)
- Aluminum ruthenium plated body - lightweight yet rugged
- Diameter of male and female connector is smaller than a penny
- Custom cable assembly available

Amphenol Nexus Technology



Circular Filter Connectors

- Provide critical protection for sensitive systems
- Utilized on all standard and Mil-spec circular connectors
- Durable, versatile EMI and RFI protection

Amphenol Aerospace Operations



M29505/4 & /5 Termini

- Qualified to MIL-STD-29504 / 04 & / 05 Rev. D
- Precision fiber optic ceramic ferrules
- Accurate ferrule / split sleeve alignment system
- Only qualified Single Mode Supplier
- Low Insertion Loss
- Widely available

Amphenol Fiber Systems International



MicroPlus

- Alternate ultra compact solderless format meeting M83513 performance
- Mezzanine or stacker options available
- NanoPlus M32139 alternate in development

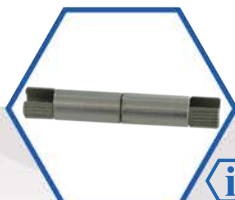
Amphenol Canada Corporation



LEAP On Board Transceiver

- 12 duplex channels of 25Gbps in every transceiver (most competition has 4 channels)
- Operating temp -40°C to +85°C
- Removable ferrule (most competition has attached ferrule)
- Through MIL STD-883 Shock and Vibe

Amphenol Military High Speed



PROMI

- In Line Miniature Optical Adaptor
- ARINC 801 standard termini
- Eases installation & maintenance of big FO harnesses into the Aircrafts

Amphenol Socapex



SPMAX

- Modularity of Scorpion available in a machined metallic shell
- Benefits of Scorpion, with added EMI and environmental protection (IP Rated)
- 4 shell sizes
- LCP material insulator supports high temperature operation
- Quick locking system available
- Termination styles: PCB mount (straight or right angle), free cable (strain relief or backshell) & potting compatibility, PressFit
- IP Levels up to IP67 supported

Positronic Industries



1119 Splices

- Compact, thin and easy to use
- Suited in a cable harness to easily and quickly repair a damaged wire
- Overmold technology offering excellent sealing performances
- In Line or Component carrier (fuse, resistor, diode) versions
- From 1 to 4 contacts (size 20 / 16)
- Use of EN3155 standard socket contacts
- Operating temperature: -55°C to +175°C

Amphenol Air LB France

APPLICATIONS WE SUPPORT

2 Military Aerospace



USB Amplifiers

- USB2 amplifier based on EN3645 / 38999 Shell size 15
- For applications where the USB2 cable length must be longer than 4.8 m which is the limit of USB2 specification
- Extension cord of 4.8 m (15,7 ft), 4 time stackable in order to reach 19.2 m (63ft)
- Self-powered
- USB3, USB3 Type C & HDMI amplifiers in development

Amphenol Socapex



MACH D

- Planarity, precision & robust vs stamped
- Two-piece shell design, Epoxy / adhesive not needed to retain insulator
- Integrated mating hardware, reduced FOD
- Banding option on rear shell 360° EMI protection, strain relief in a small envelope
- High shielding continuity
- IP67 Protection
- Intermateable with any M24308 products
- 36 keying positions, many keying options
- 10,000 mating cycles survive the abuse of high mating cycle applications

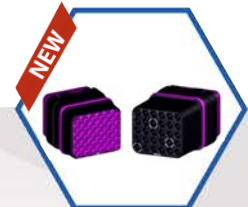
Positronic Industries



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor



Module SIM 3023 reversed gender

- Module to be used with the whole range of EN4165 / SIM connectors
- High contact density: 30 contacts size 23
- Reversed gender (male module fitted with socket contacts, female module fitted with pin contacts) offering a high contact robustness

Amphenol Air LB France



Multiport Connectors

- Lightweight aluminum construction
- Advanced Reach / ROHS compliant conductive platings and well shielded structure
- Allows for blind mating connections for ease of installation

Times Microwave Systems



THDM

- 5 configurations: 1, 2, 3, 4 & 8 MT ferrules for up to 192 fiber channels
- Ratcheting coupling nut for high vibration environments (derived from M28876)
- IP 68 sealing
- Removable and replaceable MT ferrules
- Expanded beam capable
- Operating temperature -54°C to +65°C
- Available in cadmium and nickel plated aluminum, stainless steel, PTFE and black anodize

Amphenol Fiber Systems International



MIL-DTL-83723

- Three coupling style choices-Threaded, Bayonet, Quick Disconnect
- 5 Key / Keyway Design avoids mismatching
- High Temp resistance -65°C to +200°C
- Durability 500 Mating cycles, High Shock & Vibration resistance connectors
- QPL Approved connectors

Amphenol Interconnect India



Telephone Plugs and Jacks MIL-DTL-9177

- Environment resisting
- FRFI / EMI protection
- Low level circuit capabilities
- High cross-talk resistance

Amphenol Nexus Technology



TVµCom Multipin USB3

- Based on EN3645 / 38999 - Shell size 11
- Hotplug USB3 with multipin insert using crimp screw machined contacts
- 4 pairs totally insulated throughout the connector - No cross-talk between the four pairs
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

Amphenol Socapex



1765 Modules

- Derived from 1750 series
- Components carrier modules that can be fitted with diodes, resistors, fuses, etc
- To be used in a cable harness to easily insert a component
- Sealing (IP66 / IP68 and IP69K)
- Space and weight-saving
- Mounting on composite or metallic tracks

Amphenol Air LB France



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 mS
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Multiple Electrical Output Options
- Change threading, o-ring port

Amphenol NovaSensor



Mini Multi-Ports "MMP"

- 40 GHz operating frequency
- Hermetically sealed housing and connector attachments
- Spring loading interfaces to guarantee full mating and electrical performance

Times Microwave Systems

2 Military Aerospace



TACBeam

- Hermaphroditic coupling
- IP 68 sealing
- Expanded Beam Technology highly resistant to contamination
- 1,2,4,8 and 12 fiber in one compact shell
- Ideal for high frequency mating applications
- MIL-DTL-83526 and VG qualified
- 3000 cycle mating durability
- Available in cadmium and nickel plated aluminum, stainless steel, PTFE and black anodize

Amphenol Fiber Systems International



TLMP Connector

- Vibration proof: prevents de-mating under vibration and shock
- Visible «green/red» color locking
- Built to withstand higher voltage/power

Times Microwave Systems



1765 Double

- Derived from 1750 series
- Components carrier modules that can be fitted with large components compared to standard 1765 modules (diodes, resistors, fuses, etc.)
- To be used in a cable harness to easily insert a large component
- Sealing (IP66 / IP68 and IP69K)
- Space and weight saving
- Mounting on composite or metallic tracks

Amphenol Air LB France



TVCom 10 Gb Ethernet

- Based on EN3645 / 38999 - Shell size 11
- 10 Gbit Ethernet: Cat.6A Ethernet Class Ea per ISO/IEC 11801
- Crimp screw machined contacts
- 4 pairs totally insulated throughout the connector - No cross-talk between the four pairs
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

Amphenol Socapex



RNJ Rack & Panel

- Realignment capabilities & floatability on 3 axis
- Quick and easy connection, 100% scoop proof design
- Available in reduced flange, low profile, fiber optics and power versions

Amphenol Socapex



ACE-L

- Positive lock for ultra high vibration environments
- IP 68 Sealing
- Angle Polish Capable for Sensing applications
- Small Form Factor
- Wide Operating Temp range
- Multiple Keys
- Pull-Proof Design

Amphenol Fiber Systems International



M55116 Audio Connectors

- Waterproof, polarized plugs and receptacles for use in audio frequency circuits at 60 volts maximum potential and 0.5 amperes maximum current
- Crimp sleeve or solder cup contacts
- The rigid contacts in the plug connector mate with the pogo-pin, or spring loaded, contacts in the receptacle
- In-line plugs and receptacles with a wire strain relief
- Receptacles also available in panel-mount

Amphenol Nexus Technology



387TV

- Smallest 38999 size on the market (7)
- High speed, multipin, and fiber optic versions
- Where size & weight are critical
- Several contacts terminations available

Amphenol Socapex

APPLICATIONS WE SUPPORT

3 Space



Air-Tight Lightweight Hermetic

- 35% weight savings across all shell sizes vs. standard stainless steel hermetic
- Full hermetic 10x-7 sealing using our epoxy technology
- Operating temperature of -65°C to 200°C

Amphenol Aerospace Operations



R39 Series

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

Amphenol Canada Corporation



MT Ferrule Optical Connector

- Stainless steel connector fitted with MT ferrule
- Space saving: compact design
- Weight saving on harnesses: no metallic braid needed
- Ruggedized
- Versatile: 24 or 48 FO channels
- No adverse effect of EMI

Amphenol Air LB France



Hermetic Cryogenic and Vacuum Interconnects

- Hermetic cryogenic connectors and feedthroughs are designed and built to withstand extremely low temperatures
- Suitable for applications within Quantum Computing, Medical, Science and Research, Space and Aerospace industries

Amphenol Martec



Low Outgassing Vibration Sensors

- Vibration measurements in Thermal Vacuum or Space environment
- Welded hermetic accelerometer designs have low outgassing qualities
- Materials selected using NASA guidelines

Amphenol PCB Piezotronics



Scorpion

- Unique approach to modular connector design
- Flexibility to configure the connector to meet your specifications
- Innovative modular tooling and injection molding process provides a customize solid body tailored to your requirements
- Up to 100 amperes per power contact
- Ability to add signal contacts and a variety of accessories

Positronic Industries



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor



EN4165 / SIM

- Space efficient & modular design offering versatility of mixing & matching
- Shielding, sealing, polarization and 36 keying positions
- Shells in metal or composite versions, in 1, 2 or 4 bays
- Modules in overmold technology, fitted with standard crimp or PCB contacts (size 23/22/20/16/12/8), as well as RF, Quadax, Coax contacts, Fiber optics or RJ45
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



MaxGain® Space Assemblies

- High-performance, ultra-low loss cables
- Unique spiral outer conductor technology
- Lightweight

Times Microwave Systems



CC5516Light Cable Clamps

- Derived from CC5516 composite clamps
- Available in 10 sizes for cable or pipe diameters from 5 to 25,4 mm
- Weight saving up to 24% compared to legacy CC5516 composite clamps, and up to 73% compared to metallic clamps
- Closing and fixing in one step by screw
- Pre-locking mechanism
- Suited for stacking mount
- Protection from vibration by overmolded elastomer

Amphenol Air LB France



Z Series Micro-D

- Micro-D qualified to MIL-DTL-83513
- Drop-in for NASA Level 1 qualified parts
- Ready for ESA qualification
- Precision stamped / twist pin options

Amphenol Canada Corporation



Radiation Hardened Vibration Sensors

- Hermetically sealed and Ground isolated
- Temperature compensated to +288°C
- Radiation environment up to 108 rads

Amphenol PCB Piezotronics

3 Space



Micro-C

- "Compression termination" technology
- Solderless installation
- Compact footprint and height while meeting M83513 performance
- Ready for high speed applications and ESA qualification
- Precision stamped / twist pin options available

Amphenol Canada Corporation



Stage Separation Shock Sensors

- Rugged accelerometers suitable for surviving and measuring high g environment during stage separation

Amphenol PCB Piezotronics



InstaBend® Space Assemblies

- Flexible, can be bent very closely behind the connector
- Optimized for lowest attenuation
- Ultra stable performance with flexure

Times Microwave Systems



MACH D

- Planarity, precision & robust vs stamped
- Two-piece shell design, Epoxy / adhesive not needed to retain insulator
- Integrated mating hardware, reduced FOD
- Banding option on rear shell 360° EMI protection, strain relief in a small envelope
- High shielding continuity
- IP67 Protection
- Intermateable with any M24308 products
- 36 keying positions, Many keying options
- 10,000 mating cycles survive the abuse of high mating cycle applications

Positronic Industries



InstaBend® PhaseStable Space Assemblies

- Foam core eliminates PTFE phase change occurring around 19°C
- Triple-shield construction
- Low loss, highly flexible micro coaxial cable assemblies

Times Microwave Systems



Series Five

- Up to 20% smaller and 50% lighter vs. D38999 series 3
- High voltage capabilities
- Utilized D38999 qualified insulator and EMI spring
- High vibration resistance

Amphenol Socapex & Amphenol Aerospace Operations



POGO Pin Connectors

- Alternative solution to FLEX
- Cost neutral on solution vs. FLEX
- Savings on board to board assembly
- Wave solder termination to board
- Provides dynamic solution to board to board
- Great for high vibratory applications

Amphenol Nexus Technology



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 mS
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Multiple Electrical Output Options
- Change threading, o-ring port

Amphenol NovaSensor



SPMAX

- Modularity of Scorpion available in a machined metallic shell
- Benefits of Scorpion, with added EMI and environmental protection (IP Rated)
- 4 shell sizes
- LCP material insulator supports high temperature operation
- Quick locking system available
- Termination styles: PCB mount (straight or right angle), free cable (strain relief or backshell) & potting compatibility, PressFit
- IP Levels up to IP67 supported

Positronic Industries

Click on [i](#) to learn more.

eVTOL

Electrical Vertical Take-Off & Landing



1 Cockpit



MMA

- Blind Mate Low Mating Force Modular Connector
- Based on ARINC 600 standard
- Composite shells and Backshells available
- High power contact arrangements

Amphenol Canada Corporation



2M804

- Micro Miniature Push pull circular connector
- Lightweight
- Several shell types and styles, from 1 to 85 contacts

Amphenol Socapex



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 mS
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Multiple Electrical Output Options
- Change threading, o-ring port

Amphenol NovaSensor



Micro HDAS

- High density: 1.27mm [.050] pitch
- Smaller & lighter rugged PCB connector
- Meet & Exceed MIL-DTL-55302G & 83513G

Amphenol Socapex



CTV composite 38999

- MIL-DTL-38999 series III & EN3645 qualified
- Lightweight
- Nickel or cadmium plated

Amphenol Socapex



1900SIM Connectors

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- Versatility of mixing & matching Signal & Power, RF (Quadrx, Triax, Twinax and Coax) or Fiber Optic
- Many accessories and backshells available
- EN4165 qualified
- With modules from 30 contacts #23 (5 Amps) up to 1 contact #8 (up to 80 Amps)

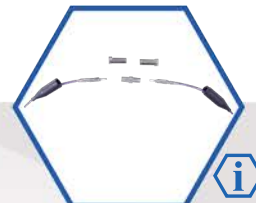
Amphenol Air LB France



LuxBeam

- Expanded Beam Termini. Beam section expanded 140 times
- Ideal for Fly by Fiber applications
- Contactless Optical connection
- Size 16 standard contact cavity for series III of MIL-DTL-38999 / EN3645 / EN4165

Amphenol Socapex



PROMI

- In Line Miniature Optical Adaptor
- ARINC 801 standard termini
- Eases installation & maintenance of FO harnesses into the Aircrafts

Amphenol Socapex



USB amplifiers

- USB2 amplifier based on EN 3645 / 38999 Shell size 15
- For applications where the USB2 cable length must be longer than 4.8 meters which is the limit of USB2 specification
- Extension cord of 4.8 m (15,7 ft), 4 time stackable in order to reach 19.2 m (63ft)
- Self-powered
- USB3, USB3 Type C & HDMI amplifiers in development

Amphenol Socapex



Scorpion

- Unique approach to modular connector design
- Flexibility to configure the connector to meet your specifications
- Innovative modular tooling and injection molding process provides a customize solid body tailored to your requirements
- Up to 100 amperes per power contact
- Ability to add signal contacts and a variety of accessories

Positronic Industries



2M801

- Micro Miniature circular connector with dual start ACME thread
- Low profile and lightweight
- Several shell types and styles, from 1 to 130 contacts

Amphenol Socapex



EN4165 / SIM Connectors & Modules

- Space efficient & modular design offering versatility of mixing & matching
- Shielding, sealing, polarization and 36 keying positions
- Shells in metal or composite versions, in 1, 2 or 4 bays
- Modules in overmold technology, fitted with standard crimp or PCB contacts (size 23/22/20/16/12/8), as well as RF, Quadrx, Coax contacts, Fiber optics or RJ45
- Operating temperature: -55°C to +175°C

Amphenol Air LB France

Click on to learn more.

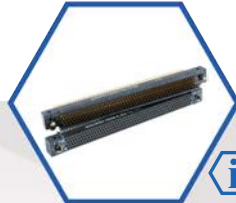
1 Cockpit



HUMS Vibration Sensors

- Accelerometers tailored for:
 - Mechanical Diagnostics
 - Rotor Track & Balance (RTB)
 - Engine Vibration Monitoring (EVM)
 - Electric Vertical TakeOff & Landing (eVTOL)
 - Urban Air Mobility
 - Hybrid & Electric Aircraft Engine Testing
- Case isolated to reduce EMI & ground loop interference
- Can be qualified to RTCA/DO-160 & MIL-STD-810

Amphenol PCB Piezotronics



HDAS

- High density: 1.905mm [.075] staggered grid
- 12 sizes from 11 to 253 contacts on 3, 4 or 5 rows
- Robust technology designed for severe environments

Amphenol Socapex



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor



2M805

- Micro Miniature circular connector with Tri-Start thread coupling
- High vibration resistance
- Several shell types and styles, from 1 to 130 contacts

Amphenol Socapex



RNJ Rack & Panel

- Realignment capabilities & floatability on 3 axis
- Quick and easy connection, 100% scoop proof design
- Available in reduced flange, low profile, fiber optics and power versions

Amphenol Socapex



M12883 & Quick-Mount Relay Sockets

- Qualified to MIL-PRF-12883 specifications
- Amp range between 2 and 25
- Quick-Mount Relay Sockets snap into standard aircraft panel cutouts eliminating the need of mounting hardware

Amphenol PCD

2 Passengers



Velok

- NEW Rectangular connector designed for low to medium power applications
- Spring-loaded latch provides quick mating / unmating with a push to lock / unlock connection
- Rated to IP69 for use in harsh environments

Amphenol PCD



Luminus

- Robust, lightweight bayonet and push-pull style connectors support signal and power
- Well-suited to low to medium power (to 23A) applications
- Rated to IP67 for use in harsh environments

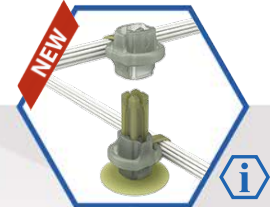
Amphenol PCD



EPC Series

- Environmentally Sealed Subminiature Rectangular D-Connectors, according to the ASNE0237 and ABS1145 standard, are designed primarily for applications where space and weight are of major importance
- Suitable for aerospace, telecommunications and wherever high tightness is required

Amphenol Air LB Germany



Adhesive Snap 'N Post

- One-for-one replacement for standard ring posts
- Posts are pre-installed to the structure, adapter heads pre-installed on wire harnesses
- Reduces installation time from ~30+ sec to less than 5sec compared to standard ring posts

Amphenol PCD



Adhesive Standoff

- Composite Standoff replaces traditional standoffs with no-hardware adhesive option
- VHB Tape or wet processes epoxy compatible
- PEEK 150GL30 or GF Ultem, 10-32 insert standard, metric option available

Amphenol PCD



EN4165 / SIM Monomodule Connectors

- Rectangular, Modular, Push-Pull
- Shielding, sealing, polarization and 7 coupling versions (mechanical and color)
- Lightweight and robust composite
- Suited for the whole range of EN4165 / SIM modules
- Modules in overmold technology, fitted with standard crimp or PCB contacts (size 23/22/20/16/12/8), as well as RF, Quadrx, Coax contacts, Fiber optics or RJ45
- Operating temperature: -55°C to +175°C

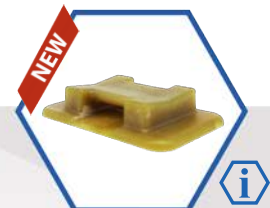
Amphenol Air LB France



Adhesive U-Snap Clamps

- Pre-mountable, non-conductive, non-corrosive, and lightweight Nylon and PEEK quick latching clamp for each wire harness routing
- Interchangeable grommets allow the wire bundle diameter changes without removing the mounted base
- VHB Tape or wet processes epoxy compatible

Amphenol PCD



Adhesive Tie Mounts

- Rectangular cable tie mounts provide convenient fixture locations anywhere in the system
- VHB Tape or wet processes epoxy compatible
- Used with any standard MS3367 or equivalent tie down strap

Amphenol PCD

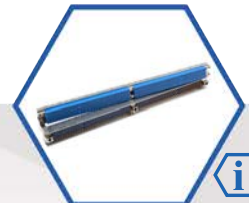
3 Wings



Hermetic high temp interconnects

- High Temperature design
- Collaboration with Interconnect to develop product series
- Ceramic Glass Technology - incorporated into existing connector technology
- Ability to perform at 450°C (operational temperature) and up to 1000°C (fire wall capabilities)

Amphenol Martec



SIAL

- Robust technology designed for severe environments
- 13 arrangements available from 18 to 392 contacts
- Contact technology allowing lateral displacement ± 0.25 mm

Amphenol Socapex



86P Clamp

- One-for-One replacement to outperform industry standard metal clamps (AS21919)
- Pre-mountable installation saves time vs traditional installation methods
- Reduces weight vs AS21919

Amphenol PCD



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 mS
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Multiple Electrical Output Options
- Change threading, o-ring port

Amphenol NovaSensor



R-VPX

- Up to 32 Gb/s performance
- Fully intermountable & intermateable to existing VITA 46 connectors
- Modular COTS lightweight connector system

Amphenol Socapex



CC5516Light Cable Clamps

- Derived from CC5516 composite clamps
- Available in 10 sizes for cable or pipe diameters from 5 to 25,4 mm
- Weight saving up to 24% compared to legacy CC5516 composite clamps, and up to 73% compared to metallic clamps
- Closing and fixing in one step by screw
- Pre-locking mechanism
- Suited for stacking mount
- Protection from vibration by overmolded elastomer

Amphenol Air LB France



CTV composite 38999

- MIL-DTL-38999 series III & EN3645 qualified
- Lightweight
- Nickel or cadmium plated

Amphenol Socapex



75P Clamp

- One-for-one replacement to outperform industry standard metal clamps (AS21919)
- Reduces weight and installation time vs AS21919
- Butterfly stacking & locking features

Amphenol PCD



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor



Smash

- High density, modular and shielded PCB connector
- 7 arrangements from 132 to 450 contacts
- Robust technology designed for severe environments

Amphenol Socapex



CC1339Light / ABS1339Light Cable Clamps

- For cable harness fixing on structure
- Light versions derived from standard ABS1339 clamps: 18% weight saved
- 100% composite and silicone
- Electrical bundle protected from shocks & vibrations by overmolded elastomer
- Fixing by screw, closing by cable tie
- Available in 8 sizes for cable diameters from 5 to 48 mm
- Operating temperature: -55°C to +150°C

Amphenol Air LB France

4 Power Generation & Propulsions



Push/Pull Flex Busbar

- Battery module connection system with a push / pull flexible bus bar
- Tool-less connection system
- Blind mate direct to cell collection system
- Custom configurations possible - please consult factory

Amphenol Commercial Air Division



Filtered D-SUB

- Patented stress-isolated solderless design
- Allows for the rugged transfer of shock and vibration waveforms without damage to the filter elements
- All sizes and termination styles are available
- Supports power contacts
- Available for sealed and high reliability applications (space, military)

Amphenol Canada Corporation



HPAC size 0 and size 4

- Innovative and easy-to-use locking system offering a perfect connection security
- 2 mixed arrangements available:
 - 4 Power (#4) + 6 Interlock (#22)
 - 3 Power (#0) + 4 Interlock (#22)
- Quick connect, no tools needed (lever)
- Secured connection thanks to the CPA (Connector Position Assurance)
- Overmolding suited for HVDC application
- Sealing IP67, shielding 360°
- Temperature: -65°C to +200°C
- Specifications according to EN4165

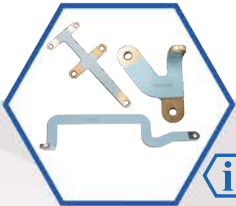
Amphenol Air LB France



Raptor

- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

Amphenol Limited Ltd



Bus Bars & Distribution Bars

- Aluminum bars
- Available in various standard sizes and shapes (custom design)
- High mechanical resistance
- Up to 200 Amp
- From -55°C to +150°C

Amphenol Air LB France



RNJ Rack & Panel

- Realignment capabilities & floatability on 3 axis
- Quick and easy connection, 100% scoop proof design
- Available in reduced flange, low profile, fiber optics and power versions

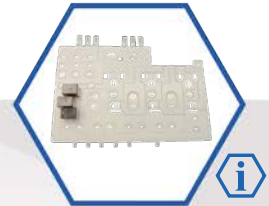
Amphenol Socapex



Filtered MICRO-D

- Micro-D format
- All sizes and termination styles are available
- Supports power contacts
- Available for sealed and high reliability applications (space, military)

Amphenol Canada Corporation



Custom DC-Link busbar for HV power conversion application

- HV application, designed to avoid Partial Discharges in altitude
- Interconnect inductance level optimization, validation through multi-physics simulation
- Lightweight, compactness, optimized heat transfer, high temp

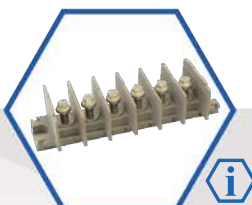
Amphenol Auxel



Raptor Feedthrough

- Feedthrough version
- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

Amphenol Limited Ltd



3240 / 3242 series Monoblock Assemblies

- Power distribution device for copper or aluminum cable connections
- Available with individual or shunted terminals, from 1 to 12 terminals, in different diameters
- Protective cover fixing, and mounting on structure by pillar bolts
- Up to 350 A permanent
- Operating temperature: -60°C to +230°C

Amphenol Air LB France



HV38999 Rack & Panel

- Rack & Panel floating connector with High Voltage and Current capabilities
- Performances as per HE308 / 38999 series
- Up to 250 Amp
- Safety interlock circuit with last mate - first break contacts
- Several contacts terminations available

Amphenol Socapex

5 Power Distribution



HV38999

- Can safely carry high voltages and large currents at altitude while remaining partial discharge free to extend connector life thanks to insert optimizations
- Designed to meet MIL-DTL-38999 mechanical and environmental performance
- Available safety interlock circuitry utilizes last mate, first break sequence
- All MIL-DTL-38999 shell configurations / finishes available including our Dualok high vibration plug

Amphenol Commercial Air Division



Junction Modules

- Provides a simple, lightweight way to distribute power, signal or ground connections
- Wide array of busing options accommodate 12-26 AWG wires
- Electronic modules contain fuses, resistors, diodes with customization available

Amphenol PCD



Power Contacts

- New Temper-Grip contacts
- Compliant with European - EN3155 and US - AS39029 standards
- Several termination available (crimp, solder, PC tail, compliant pins)

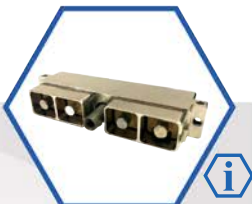
Amphenol Socapex



Raptor

- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

Amphenol Limited Ltd



SIM Serie 2 with contacts size 8

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Comes in 1, 2 or 4 modules for respectively 80 Amps, 160 Amps or 320 Amps for power applications

Amphenol Air LB France



PCB's

- Heavy Copper Rigid and Flexible PCB's
- Multiple layers of up to 6 oz Cu
- Can support Surface Mount Components for Power conditioning

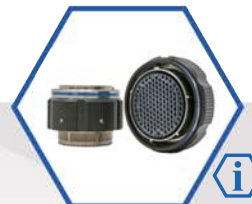
Amphenol Printed Circuits



Composite Backshell

- Lightweight, high performing backshell ideally suited for the commercial air market
- Provides strain relief and weight saving
- Withstands severe corrosive environments

Amphenol PCD



Dualok

- Enhanced anti-decoupling mechanism designed to perform under severe vibration environments
- Far exceeding the performance of MIL-DTL-38999 Series III plugs

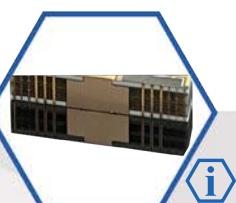
Amphenol Commercial Air Division



HDAS Hybrid

- Hybrid configurations to mix signal, power and RF
- High density: 1.905mm [.075] staggered grid
- Robust technology designed for severe environments

Amphenol Socapex



High Power/Thermal Technology

- Heavy Copper 70 - 210um (2oz-6oz) multilayers
- Aluminium & Copper Heatsinks - Bonded externally to the PCB
- Copper or Copper Invar Copper Cores
- Copper Coins - Local pieces of Copper inserted into the PCB structure

Amphenol Invotec



Raptor Feedthrough

- Feedthrough version
- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

Amphenol Limited Ltd

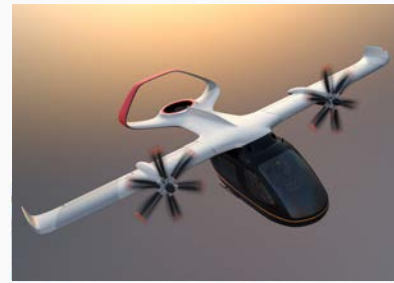


1900SIM Connectors with size 8 power contacts

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- Many accessories and backshells available
- EN4165 qualified
- Fitted with overmolded SIM modules
- Allows to pass power up to 240 Amps

Amphenol Air LB France

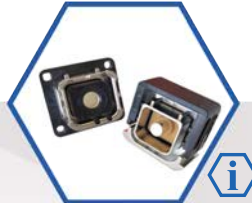
5 Power Distribution



CapLock / PlugLock

- CapLock allows to lock a cap onto a EN3645 / 38999 Power receptacle which may be under load
- PlugLock allows to lock a 38999 Power plug onto a receptacle which may be under load

Amphenol Socapex



SIM Monomodule with size 8 power contact

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- Many accessories and backshells available
- EN4165 qualified
- Fitted with overmolded SIM modules
- Up to 80 Amps

Amphenol Air LB France



Voltarius

- High voltage, latch assisted connector
- Industrial Powerlok connector upgraded to enhance performance for military and aerospace applications
- Design mitigates partial discharge for operation with high voltages at altitude
- Meet mechanical and environmental requirements for aircraft & military vehicles
- Metal latch with secondary locking ensures rigid shell to shell bottoming
- Pass-through last mate, first break safety interlock circuitry integral to design

Amphenol Commercial Air Division

6 Optical & Electrical Systems



TV-SIM

- Connectors with thread coupling based on MIL-DTL-38999 (for the shell) & EN4165 / VG96513 (for the inserts) standard
- High liability
- Coevally waterproof and resistant to vibrations and wear
- Use the same installation dimensions as connectors according to MIL-DTL-38999

Amphenol Air LB Germany



1750 Distribution Junction Modules

- Cable harness optimization: cable linear meters, weight and space saved
- Compact design and very high contact density for low space applications
- Overmold Technology offering excellent sealing performances (IP66)
- Clip mounting and versatility of mixing on metallic or composite rails
- Use of EN3155 standard socket contacts
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



Stingray

- Magnetic mating mechanism
- Non-keyed rotatable 'blind mating'
- Compatible with Power, USB 2.0 and Audio signal requirements
- IP68 sealed (mated and unmated)

Amphenol Limited Ltd



Hermetic Sensor Headers

- Landing Gear
- Vibration sensors
- Temperature sensors
- Level monitoring
- Gas Analysers
- Pressure sensors
- Proximity sensors

Amphenol Martec



Arinc 801

- Qualified to the ARINC 801 Specification
- Precision alignment and components provide excellent optical performances
- Supports APC termini for RF-over-fiber and other applications requiring low back reflection
- Supports standard suite of 38999 backshells and accessories
- Removable ASR facilitates termini cleaning and maintenance
- High-density arrangements up to 32 channels

Amphenol Fiber Systems International



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 mS
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Multiple Electrical Output Options
- Change threading, o-ring port

Amphenol NovaSensor



R39 Series

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

Amphenol Canada Corporation



EN4165 / SIMTac 03

- SIM module for 2 MTAC connectors with strain relief
- Protective shroud aiming recessed MT ferrule and "Finger-Touch-Proof"
- Boot for Round or Ribbon Fiber
- Multi-mode and Single mode

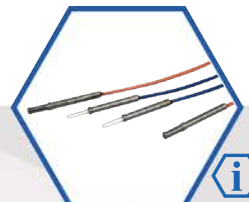
Amphenol Air LB France



EN4165 / SIMTac 08

- SIM module for 1 MT Ferrule packaged within a Size 8 Quadrax contact form factor
- 2 versions: for EN4165 / M38999 cavities, and for ARINC 600 cavities
- Available with Boot or sealed sleeve
- Multi-mode (12 optical ways)

Amphenol Air LB France



20 HD Termini

- Small form factor
- Super and Ultra-PC polish capabilities
- High grade stainless steel body with zirconia ceramic ferrule
- For use in Size 20 cavities in MIL-DTL-D38999 Series III and 2M connectors
- Superior optical performance in extreme environmental conditions

Amphenol Fiber Systems International



EN4165 / SIM Luxcis

- Module as per EN4830 fitted with 6 standard ARINC 801 / EN4639 contacts (Multi-mode and Single mode)
- Guiding pins for alignment prior to mating into sleeve holder
- Only 1 insert, gender is defined by which side is fitted with sleeve holder; Interfacial, extended sealing grommet

Amphenol Air LB France



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor

6 Optical & Electrical Systems



1119 Splices

- Compact, thin and easy to use
- Suited in a cable harness to easily and quickly repair a damaged wire
- Overmold technology offering excellent sealing performances
- In Line or Component carrier (fuse, resistor, diode) versions
- From 1 to 4 contacts (size 20 / 16)
- Use of EN3155 standard socket contacts
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



Hermetic Filtered Interconnection Solutions

- Providing System integrity under harsh interference conditions
- Mateable with other standard Mil-Spec receptacles
- Rugged custom designs
- Operational temperature -55°C to +125°C
- Capacitance:
Maximum per line; Typically up to 1µF
Minimum per line; Typically 22pF

Amphenol Martec



Mil-ST

- Super and Ultra-PC polish capabilities
- High grade stainless steel body with zirconia ceramic ferrule and fungus-resistant self-extinguishing boot
- Superior optical performance in extreme environmental conditions
- MIL-qualified to MIL-DTL-83522

Amphenol Fiber Systems International



1765 Modules

- Derived from 1750 series
- Components carrier modules that can be fitted with diodes, resistors, fuses, etc
- To be used in a cable harness to easily insert a component
- Sealing (IP66 / IP68 and IP69K)
- Space and weight-saving
- Mounting on composite or metallic tracks

Amphenol Air LB France



EN4165 / SIM MPO

- Custom design SIM module accommodating MT ferrule-type based & standard MTP / MPO multi-fiber connectors
- MTP / MPO directly plugs / locks into the SIM module; easily removed for repair
- From 12 to 48 fibers; Multi-mode and Single mode type

Amphenol Air LB France

TECHNOLOGIES WE PROVIDE

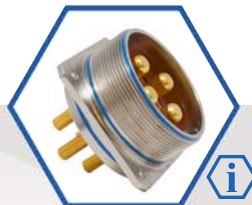
1 Power / HVDC / MEA



HV38999

- Can safely carry high voltages and large currents at altitude while remaining partial discharge free to extend connector life thanks to insert optimizations
- Designed to meet MIL-DTL-38999 mechanical and environmental performance
- Available safety interlock circuitry utilizes last mate, first break sequence
- All MIL-DTL-38999 shell configurations / finishes available including our Dualok high vibration plug

Amphenol Commercial Air Division



High Power 5015

- 40-50% increased current capability vs. standard 5015
- Contact termination methods include crimp, male & female threaded termination, solder, PCB and bus-bars
- Over 25 tooled insert arrangements for current carrying capacity from 50 to 1200 Amps

Amphenol Aerospace Operations



MMA

- Blind Mate Low Mating Force Modular Connector
- Based on ARINC 600 standard
- Composite shells and backshells available

Amphenol Canada Corporation



1900SIM Connectors with size 8 power contacts

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- Many accessories and backshells available
- EN4165 qualified
- Fitted with overmolded SIM modules
- Up to 240 Amps

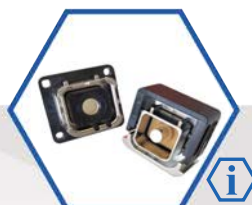
Amphenol Air LB France



38999 Tin Zinc

- Dark non reflective RoHS & Reach plating
- Excellent electrical conductivity
- More than 500 hrs salt spray exposure
- V & AB class in MIL-DTL-38999 series III standard

Amphenol Socapex



SIM Monomodule with size 8 power contact

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- Many accessories and backshells available
- EN4165 qualified
- Fitted with overmolded SIM modules
- Up to 80 Amps

Amphenol Air LB France



HV power distribution interface

- Custom design, optimized thanks to electromagnetic and thermal simulation, improved heat management, high power density, high operating temperature
- High voltage applications, high Partial Discharges Inception Level (PDIV), limitation of skin effects
- In option: hot pluggability, protection devices, shielding, interlocking

Amphenol Auxel



Voltarius

- High voltage, latch assisted connector
- Industrial Powerlok connector upgraded to enhance performance for military and aerospace applications
- Design mitigates partial discharge for operation with high voltages at altitude
- Meet mechanical and environmental requirements for aircraft & military vehicles
- Metal latch with secondary locking ensures rigid shell to shell bottoming
- Pass-through last mate, first break safety interlock circuitry integral to design

Amphenol Commercial Air Division



R39 Series

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

Amphenol Canada Corporation



Megawatt Charging System

- Three Levels of Electrical Performance: 1250Vdc at 350A, 1000A and 3000A
- Communication and interlock functionality via dedicated contacts
- Integral actuator to prevent disengagement during charging
- Flexible main pole termination solutions

Amphenol Commercial Air Division



Ground Power Receptacle

- Power feed receptacle suited for powering the aircraft while docked at the gate
- Robust thermoplastic with glass fiber
- Operating temperature: -55°C to +125°C
- Associated products: shield cover and LPU

Amphenol Air LB France



Scorpion

- Unique approach to modular connector design
- Flexibility to configure the connector to meet your specifications
- Innovative modular tooling and injection molding process provides a customize solid body tailored to your requirements
- Up to 100 amperes per power contact
- Ability to add signal contacts and a variety of accessories

Positronic Industries

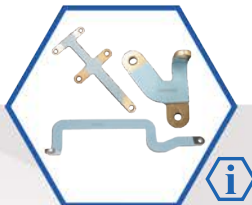
1 Power / HVDC / MEA



CapLock / PlugLock

- CapLock allows to lock a cap onto a EN3645 / 38999 Power receptacle which may be under load
- PlugLock allows to lock a 38999 Power plug onto a receptacle which may be under load

Amphenol Socapex



Bus Bars & Distribution Bars

- Aluminum bars
- Available in various standard sizes and shapes (custom design)
- High mechanical resistance
- Up to 200 Amp
- From -55°C to +150°C

Amphenol Air LB France



Push/Pull Flex Busbar

- Amphenol has developed a battery module connection system with a push/pull flexible bus bar.
- Tool-less connection system
- Blind mate direct to cell collection system
- Custom configurations possible - please consult factory

Amphenol Commercial Air Division



Module SIM HVDC size 8

- Partial Discharge (DP) resistant design: PDIV:
 - 3100 Vac peak at 30Kft
 - 2500 Vac peak at 45Kft
 - 1050 Vac peak at 98Kft
- Up to 80A per contact
- Operating temperature -65°C to +200°C
- Suitable for crimp contact or threaded contact for bus bar connection

Amphenol Air LB France



Warrior Grip

- Mates with existing Nett Warrior connectors
- Provide 10 Amp Capability in a size #23 contact
- Unmating force of 13 +/- 3LBS

Amphenol Aerospace Operations



SPMAX

- Modularity of Scorpion available in a machined metallic shell
- Benefits of Scorpion, with added EMI and environmental protection (IP Rated)
- 4 shell sizes
- LCP material insulator supports high temperature operation
- Quick locking system available
- Termination styles: PCB mount (straight or right angle), free cable (strain relief or backshell) & potting compatibility, PressFit
- IP Levels up to IP67 supported

Positronic Industries



Busbar / Cable support

- Lightweight composite clamp
- Suited for busbar or cable fixing on structure
- Interchangeable grommets to cope with the cable diameters or busbar size
- To be mounted on ABS2225 fixing brackets. Or direct mounting on structure (with screws)
- Locking system to secure the closing

Amphenol Air LB France



38999 with enhanced grommet

- Power connector according to MIL-DTL-38999 series III
- Threaded contacts for busbar connection
- Enhanced grommet for increasing clearance & creepage distance

Amphenol Socapex



Raptor Feedthrough

- Feedthrough version
- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

Amphenol Limited Ltd



HVDC

- Low mating force, high mating cycle connector
- Enhanced performance due to multiple points of contact vs. standard 2 or 4 tine contacts
- Weight savings with a composite shell and hollow pin design threaded or lug termination
- Temperature rating: 180°C
- Current Rating: 365Amps

Amphenol Commercial Air Division



SMC Series

- Stackable Modular Connector
- Low-profile, stackable composite shell
- Modular, environmentally sealed insert assemblies
- Supports quarter-turn mating hardware & backshells
- Rugged applications: Military avionics: engine & flight controls, HUDs, FADECs

Amphenol Canada Corporation



3240 / 3242 series Monoblock Assemblies

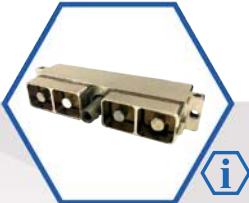
- Distribution device for copper or aluminum cable connections
- Available with individual or shunted terminals, from 1 to 12 terminals, in different diameters
- Protective cover fixing, and mounting on structure by pillar bolts
- Up to 350 A permanent
- Operating temperature: -60°C to +230°C

Amphenol Air LB France

Click on to learn more.

TECHNOLOGIES WE PROVIDE

① Power / HVDC / MEA



SIM Serie 2 Connectors with size 8 power contacts

- Overmolding technology: second to none dielectric and sealing performances
- Lightweight and robust thermoplastic
- Metallized for shielding
- EN4165 qualified, comparable to U.S. MIL-STD-810 in performance
- Comes in 1, 2 or 4 modules for respectively 80 Amps, 160 Amps or 320 Amps for power applications

Amphenol Air LB France



Raptor

- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

Amphenol Limited Ltd



HPAC size 0 and size 4

- Innovative and easy-to-use locking system offering a perfect connection security
- 2 mixed arrangements available:
 - 4 Power (#4) + 6 Interlock (#22)
 - 3 Power (#0) + 4 Interlock (#22)
- Quick connect, no tools needed (lever)
- Secured connection thanks to the CPA (Connector Position Assurance)
- Overmolding suited for HVDC application
- Sealing IP67, shielding 360°
- Temperature: -65°C to +200°C
- Specifications according to EN4165

Amphenol Air LB France

2 Contacts / Optics / High Speed



R-VPX Evolution 2.0

- 25+ Gb/s performance
- Module and backplane connectors utilize smaller compliant contacts for increase Si performance
- Intermateable with existing / legacy VITA 46 connectors
- Qualified to VITA 46 spec
- Ruggedized 4-point contact system

Amphenol Aerospace Operations



TV-SIM

- Connectors with thread coupling based on MIL-DTL-38999 (for the shell) & EN4165 / VG96513 (for the inserts) standard
- High liability
- Coevally waterproof and resistant to vibrations and wear
- Use the same installation dimensions as connectors according to MIL-DTL-38999

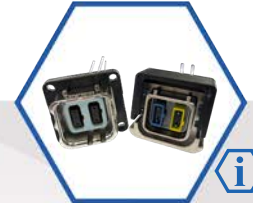
Amphenol Air LB Germany



Centaur

- Fiber speeds with copper durability (up to 56GBps)
- Connect to several protocols from one connector (HDMI, USB, QSFP, RJ45, etc)
- Is plug and play (unlike competition - requires insert / removal tool)
- Available as connector, cable assembly, PC tail, etc

Amphenol Military High Speed



EN4165 / SIMTac 03

- SIM module for 2 MTAC connectors with strain relief
- Protective shroud aiming recessed MT ferrule and "Finger-Touch-Proof"
- Boot for Round or Ribbon Fiber
- Multi-mode and Single mode

Amphenol Air LB France



Arinc 600

- Low insertion force contacts
- Environmental versions
- Front removable keying posts
- Field replaceable inserts
- Crimp, coaxial, power, printed circuit and wire wrap contacts

Amphenol Canada Corporation



MT Ferrule Optical Connector

- Stainless steel connector fitted with MT ferrule
- Space saving: compact design
- Weight saving on harnesses: no metallic braid needed
- Ruggedized
- Versatile: 24 or 48 FO channels
- No adverse effect of EMI

Amphenol Air LB France



Hermetic COAX

- Matched impedance variants -50 / 75 Ω
- Stainless Steel / Inconel construction
- Pressure rating up to 40,000 PSI
- Screen - grounded or floating options
- Cable flyhead variants
- 'S' parameters available for specific variants
- Different housing options available

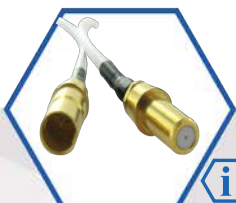
Amphenol Martec



R-VPX

- Up to 32 Gb/s performance
- Qualified to VITA 46 for Open VPX applications
- Fully intermountable & intermateable to existing VITA 46 connectors
- Meets and exceeds VITA 47
- Modular COTS lightweight connector system
- Low mating force connector system

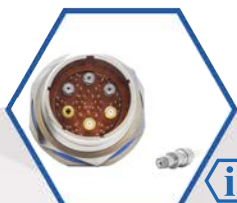
Amphenol Socapex



750hms

- Contact sizes 16, 12, 8 and 6
- Available for MIL-DTL-38999, EN3645, EN4165 and ARINC600
- Available in crimp and PC Tails versions

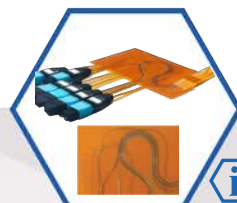
Amphenol Socapex



FiberQuad Ruggedized Quadrax Contact

- Speeds up to 10.3 GBps
- Operating temp -40°C to +85°C
- Transmit or receive
- Supports many wavelengths, modes and protocols

Amphenol Military High Speed



FO Flex Planes

- Flame resistant substrate
- Multimode, single mode and hybrid constructions
- Temp range -55°C to +95°C
- Diverse substrate size, shape & packaging
- Available in virtually any routing scheme
- Compatible with multi-channel and discrete fiber terminations
- Compatible with standard MT ferrules
- Entire circuit 100% IL & continuity tested
- Direct and fusion splice termination available

Amphenol Fiber Systems International



MACH D

- Planarity, precision & robust vs stamped
- Two-piece shell design, Epoxy / adhesive not needed to retain insulator
- Integrated mating hardware, reduced FOD
- Banding option on rear shell 360° EMI protection, strain relief in a small envelope
- High shielding continuity
- IP67 Protection
- Intermateable with any M24308 products
- 36 keying positions, Many keying options
- 10,000 mating cycles survive the abuse of high mating cycle applications

Positronic Industries

TECHNOLOGIES WE PROVIDE

② Contacts / Optics / High Speed



Stingray

- Magnetic mating mechanism
- Non-keyed rotatable 'blind mating'
- Compatible with Power, USB 2.0 and Audio signal requirements
- IP68 sealed (mated and unmated)

Amphenol Limited Ltd



3U VPX 48-Channel Rugged Ethernet Switch

- Up to 48 Channels of 10GbE
- Operating temp -40°C to +85°C
- Configurable ports between 10GBase-T, 10GBase-KR
- Ports work at 100Mb, 1G and 10G

Amphenol Military High Speed



HD750hms

- Contact size 8
- One channel for 4K or Ultra-HD quality - Meet 12G-SDI
- Unique float mount technology to allow consistent microwave performance
- Available for MIL-DTL-38999, EN3645, EN4165 and ARINC600
- Available in crimp and PC tails versions

Amphenol Socapex



Hi Density - Hermetic

- Ultra High Density 1mm sealed termini
- Multimode, single mode and hybrid constructions
- Temp range -55°C to +95°C
- <1.0x10⁻⁷ He leak rates
- Removable for easy and long service life
- Available in Circular, Rectangular or D-Sub configurations
- Ideal for bulk head and pressurized sensor applications

Amphenol Fiber Systems International



GCB-M

- Connectors with reverse bayonet coupling
- Compliant to the VG95234 standard
- Use the same installation dimensions as connectors according to MIL-C-5015
- Housing with shell size 32 can take up to 4 modules as per EN4165 for contacts for signal and power (AWG 23- AWG8), FO-contacts, RJ45 and HF contacts
- Provide more than 230.000 different insert arrangement configurations

Amphenol Air LB Germany



USB3 Type C Field

- Based on EN3645 / 38999 - Shell size 11
- Ruggedized solution for USB3 Type-C standard connectors
- Data & Power in the same connector
- Reversibility on both plug and receptacle
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

Amphenol Socapex



EN4165 / SIMTac 08

- SIM module for 1 MT Ferrule packaged within a Size 8 Quadrx contact form factor
- 2 versions: for EN4165 / M38999 cavities, and for ARINC 600 cavities
- Available with Boot or sealed sleeve
- Multi-mode (12 optical ways)

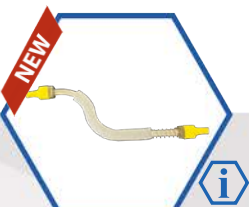
Amphenol Air LB France



RJFTV Cat6A 10 Gb Ethernet

- Based on EN3645 / 38999 - Shell size 19
- 10 Gbit Ethernet: Cat.6A Ethernet Class Ea per ISO / IEC 11801
- No cabling operation in field and no tools required
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

Amphenol Socapex



Encapsulated Cables

- Custom 2D and 3D routings
- Allows for very compact fiber routing
- Resistant to a variety of fluids
- Temp range -55°C to +95°C
- Ideal for dense EO application where liquid cooling is essential

Amphenol Fiber Systems International



USB Amplifiers

- USB2 amplifier based on EN 3645 / 38999 Shell size 15
- For applications where the USB2 cable length must be longer than 4.8 meters which is the limit of USB2 specification
- Extension cord of 4.8 m (15,7 ft), 4 time stackable in order to reach 19.2 m (63ft)
- Self-powered
- USB3, USB3 Type C & HDMI amplifiers in development

Amphenol Socapex



QEPT100G NRZ Extended Temperature

- 4-channel TRX
- Up to 28Gbps per channel
- Temperature range -40°C to +85°C
- Optically and electrically hot-pluggable
- Optimized thermal design

Amphenol Active Optical Product



LEAP On Board Transceiver

- 12 duplex channels of 25Gbps in every transceiver (most competition has 4 channels)
- Operating temp -40°C to +85°C
- Removable ferrule (most competition has attached ferrule)
- Through MIL STD-883 Shock and Vibe

Amphenol Military High Speed

2 Contacts / Optics / High Speed



TVµCom 10 Gb Ethernet

- Based on EN3645 / 38999 - Shell size 11
- 10 Gbit Ethernet: Cat.6A Ethernet Class Ea per ISO / IEC 11801
- 4 pairs totally insulated throughout the connector - No cross-talk between the four pairs
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

Amphenol Socapex



EN4165 / SIM MPO

- Custom design SIM module accommodating MT ferrule-type based & standard MTP / MPO multi-fiber connectors
- MTP / MPO directly plugs / locks into the SIM module; easily removed for repair
- From 12 to 48 fibers; Multi-mode and Single mode type

Amphenol Air LB France



Blind Mate Pressured Hybrids

- Blind mate and pressure withstanding
- Multimode, single mode and power
- Temp range -55°C to +95°C
- 1.0×10^{-6} He leak rates
- 30 Bar immersion
- Removable for easy and long service life
- Ideal for remote sensor pods that require power, high speed data, and nitrogen sealing

Amphenol Fiber Systems International



MPO Field

- Transform a standard MPO / MTP patchcord into an environmental connector
- Number of Channels: Multiples of 12
- Shock, vibration and water proof (IP68)
- Based on EN3645/38999 shell size 13

Amphenol Socapex



SCFF

- Small Cubic Form Factor (SCFF) -> half the area of an SFP+
- Data rate transparent from 1.25Gbps to 28.05Gbps
- Duplex LC optical interface (ARINC801 adapter option)
- SFF-8472 compliant two-wire control and diagnostic interface (i²c)
- Clock and Data Recovery functionality
- Low power consumption
- High link-budget

Amphenol Active Optical Product



EN4165 / SIM Luxcis

- Module as per EN4830 fitted with 6 standard ARINC 801 / EN4639 contacts (Multi-mode and Single mode)
- Guiding pins for alignment prior to mating into sleeve holder
- Only 1 insert, gender is defined by which side is fitted with sleeve holder; Interfacial, extended sealing grommet

Amphenol Air LB France



TVµCom Multipin USB3

- Based on EN3645 / 38999 - Shell size 11
- Hotplug USB3 with multipin insert using crimp screw machined contacts
- 4 pairs totally insulated throughout the connector - No cross-talk between the four pairs
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

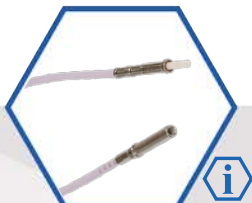
Amphenol Socapex



QEPT200G PAM4

- 4-channel TRX
- Up to 56Gbps PAM4 per channel
- Temperature range 0°C to +70°C
- Optically and electrically hot-pluggable
- Optimized thermal design

Amphenol Active Optical Product



LuxBeam

- Single Expanded Beam Termini
- Beam section expanded 140 times
- Contactless Optical connection
- Size 16 standard contact cavity for series III of MIL-DTL-38999 / EN3645 / EN4165

Amphenol Socapex



LEAP OBT RUGGED

- Small footprint (1inchx1inch) allows for an optimal space-saving solution
- Data rate transparent from 300Mbps to 16.Gbps
- Accepts standard MT24 ferrule - Separable Interface
- Two-wire control and diagnostic interface (i²c)
- Low power consumption (0.3W average per channel at 10Gbps Tx+Rx)
- High link-budget

Amphenol Active Optical Product



HDMI Field

- Based on EN3645 / 38999 Shell size 17
- No cabling operation in field and no tools required
- Data Transmission:
 - HDMI 2.0 protocol
 - Bandwidth: 18 Gbit/s with 6 Gbit/s per lane
 - Can support 4K UHD (3840 × 2160) at 60 Hz

Amphenol Socapex



EN4165 / SIM Elio

- Modules as per EN4701 fitted with 4 hermaphroditic contacts (EN 4531-101)
- Standard 2.5mm ST type ferrule interface allows the use of standard termination procedures & readily available tools
- Simple access to optical termini facilitates cleaning
- Options available for single mode & multi-mode fiber
- Full-proof option allows the use of the terminus in a connector without backshell
- Supports tight or loose structured cable

Amphenol Air LB France

TECHNOLOGIES WE PROVIDE

③ Easy to Install & Quick Mount



Hermetic Subsea Booted Connectors

- Alternative to hard wiring, for applications requiring periodic maintenance
- Robust and reliable retention of plug to the receptacle, for harsh environments
- 15,000 PSI (1,000 Bar) pressure tight hermetic glass sealed receptacle
- Weld mountable receptacle or custom
- Seawater-tight boot with individual pressure energised wire seals, no need for gels or grease
- Crimp cts #22 (preassembled or on field)

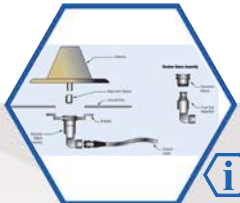
Amphenol Martec



Quick Release Connector

- Based on EN4165 / SIM standard
- Space saving / High density
- Best-in-class dielectric and sealing performances
- Quick disconnection
- Using std EN4165 modules & accessories
- For Power & Signal contacts

Amphenol Air LB France



Blind Mate Antenna

- Quick antenna removal / exchange - does not require stowage brackets and dummy connectors
- Decreases coaxial cable damage
- Eliminates service loops and lockwire requirements

Times Microwave Systems



SIM Quick Release

- Specific design derived from EN4165 modular connectors
- Suited for direct Board to Harness Connection
- «Quick release» locking system for ease of use and time saving
- Compatible with the whole range of standard EN4165 / SIM modules
- Operating temperature: -55°C to +175°C

Amphenol Air LB France



Relay Sockets Quick Install

- Adaptation device between a relay and a cable harness
- Clip mounting on structure (quick install)
- Derived from standard ASNE0219 relay sockets
- Lightweight composite & Compact design
- For 8, 14 or 16 cts size 20 / 16 (crimp contacts)

Amphenol Air LB France



38999 Extended ranges

- Adapted 38999 for easy mounting or space / weight savings
- Reduced flange, stand-off shells, clinch nuts or integrated backshell feature
- Performances according to MIL-DTL-38999 standard

Amphenol Socapex



Press Fit 22/23F OPLF SIM module

- Overmolded Plated Lead Frame (OPLF) technology
- Press Fit contacts: quick mount on PCB
- Alternative to modules fitted with machined angled PCB contacts
- Suited for automatic assembly on PCB

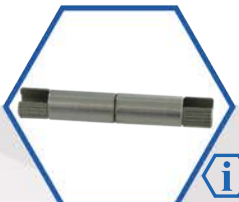
Amphenol Air LB France



H+ 38999

- Improved box mount design 38999
- Self-locking Helicoils & O-ring groove
- Reduced size square flange shape - Lightweight & space saving
- Same inserts & contacts possibilities as 38999 series III

Amphenol Socapex



PROMI

- In Line Miniature Optical Adaptor
- ARINC 801 standard termini
- Eases installation & maintenance of big FO harnesses into the Aircrafts

Amphenol Socapex



Ram-Lock

- Push-pull coupling with positive lock
- Prevents accidental unmating
- Full environmental sealing and EMI protection
- Lower mate / unmate forces compared to 2M804

Amphenol Aerospace Operations

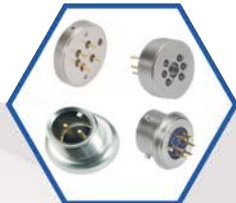
4 Sensors



High Temperature Vibration and Pressure Sensors

- Technical advantages of PCB's high-temperature UHT-12™ sensors
- Absence of pyroelectric noise spikes up to 1400°F (760°C)
- Sensitivity that remains more consistent over a wide temperature change
- Proprietary shear mode crystal technology comes sealed in a hermetic package, isolated from base strain & transverse measurement errors

Amphenol PCB Piezotronics



Hermetic Sensor Headers

- Landing Gear
- Vibration sensors
- Temperature sensors
- Level monitoring
- Gas Analysers
- Pressure sensors
- Proximity sensors

Amphenol Martec



IPT

- Pressure ranges from 1 to 10,000 psi
- Accuracy 0.25% FSO - 0.5% FSO
- Compensated Temp -20°C to +85°C
- IP65 - IP67, model dependent
- Response Time < 1 mS
- Multiple Pressure Port options
- Multiple Electrical Connection Options
- Change threading, o-ring port

Amphenol NovaSensor



PST-360

- Selectable output: analogue (ratiometric), PWM, SPI and CAN
- Hollow shaft design
- Resistant to vibration and extreme temperatures
- Absolute position over 360°
- Life: up to 50M cycles
- Full redundancy available

Amphenol Piher Sensing Systems



PSCI - Inductive eMotor Rotor Position Sensor

- Alternative to conventional resolvers
- Up to 600,000 (el) rpm speed
- Low weight and compact dimensions
- Robust to tilt, misalignment & air gaps
- True power-on sensor: excellent accuracy and precision
- No shielding required
- End-of-shaft sensor for metallic target
- Std version available for 6, 8, and 12 poles
- Suitable for harsh environments (fully sealed, shock, vibration)

Amphenol Piher Sensing Systems



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

Amphenol NovaSensor



Cryogenic Pressure Sensors

- Operating temperature from -320°F to +112°F (-196°C to +100°C)
- Safety wire holes
- Ground isolation

Amphenol PCB Piezotronics



MTS360 - Miniature Hall-Effect Through-Shaft Rotary Position Sensor

- Through-hole design
- Low weight and compact dimensions
- Life: up to 50M cycles
- Sensor + PCB + connector combo package available
- Switch function with programmable position

Amphenol Piher Sensing Systems



Cryogenic Vibration Sensors

- The use of specialized, built-in, cryogenic circuitry and quartz shear sensing technology promote survivability in demanding environments such as liquid nitrogen
- Each sensor is hermetically sealed and individually tested to determine the thermal coefficient of sensitivity at -320°F (-196°C) ensuring reliable operation and accurate measurements
- These sensors have been successfully used in the presence of liquid helium during structural testing of rocket boosters

Amphenol PCB Piezotronics



PS2P LIN,CON - Touchless two-piece sensor

- Selectable output: analogue (ratiometric), PWM, SPI and CAN
- Programmable measuring range
- Immunity to magnet's misalignment that negatively impacts operational performance
- LVDT and RVDT replacement

Amphenol Piher Sensing Systems

Click on to learn more.

TECHNOLOGIES WE PROVIDE

5 High Temperature



R398 Series

- Compact D-sub variant
- Features size 23 contacts for compact arrangements
- Supports combo arrangements
- Rugged mating
- High-temperature capable

Amphenol Canada Corporation



Hermetic High Temp Interconnects

- High Temperature design
- Collaboration with Interconnect to develop product series
- Ceramic Glass Technology - incorporated into existing connector technology
- Ability to perform at 450°C (operational temperature) and up to 1000°C (fire wall capabilities)

Amphenol Martec



High Temperature Connector

- Under development - MIL-AERO connector using Ceramics insert
- Withstands very high temperature exposure
- Standard 38999 performances @200°C

Amphenol Socapex



SiO2

- Ultimate Phase Tracking Performance
- Semi-Rigid Construction
- Withstands Extreme Environments

Times Microwave Systems

6 Clamps & Attachment Systems



CC5516Light Cable Clamps

- Derived from CC5516 composite clamps
- Available in 10 sizes for cable or pipe diameters from 5 to 25,4 mm
- Weight saving up to 24% compared to legacy CC5516 composite clamps, and up to 73% compared to metallic clamps
- Closing and fixing in one step by screw
- Pre-locking mechanism
- Suited for stacking mount
- Protection from vibration by overmolded elastomer

Amphenol Air LB France



86P Clamp

- One-for-One replacement to outperform industry standard metal clamps (AS21919)
- Pre-mountable installation saves time vs traditional installation methods
- Reduces weight vs AS21919

Amphenol PCD



Fixing Brackets ABS1424

- Brackets for Cable harnesses fixing
- Full lightweight thermoplastic
- Suited for different structure thicknesses
- 2 functions in 1:
 - Fixing on structure
 - Cable clamps are fixed by screw
- Operating temperature: -55°C to +85°C mini
- Conform to ABD0031 and FAR 25853

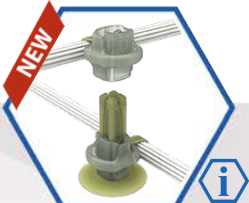
Amphenol Air LB France



75P Clamp

- One-for-one replacement to outperform industry standard metal clamps (AS21919)
- Reduces weight and installation time vs AS21919
- Butterfly stacking & locking features

Amphenol PCD



Adhesive Snap 'N Post

- One-for-one replacement for standard ring posts
- Posts are pre-installed to the structure, adapter heads pre-installed on wire harnesses
- Reduces installation time from ~30+ sec to less than 5sec compared to standard ring posts

Amphenol PCD



ABS14XX Monoblock Pipe Clamps

- Hydraulic pipes fixing on structure
- For Standard or Fuel zone
- Lightweight (composite + silicone)
- Pipes protected from vibration by overmolded elastomer
- Closing and fixing on structure by screw
- Available from 1 to 5 holes / various and mixed diameters (from 6.3 to 19 mm)
- Operating temperature: -55°C to +150°C

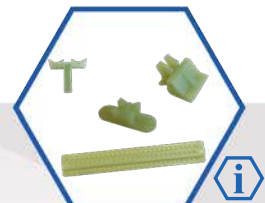
Amphenol Air LB France



Adhesive Standoff

- Composite Standoff replaces traditional standoffs with no-hardware adhesive option
- VHB Tape or wet processes epoxy compatible
- PEEK 150GL30 or GF Ultem, 10-32 insert standard, metric option available

Amphenol PCD



Wiring Accessories

- Lightweight and Durable: simplifies wire bundle installation & maintenance
- Variety of sizes and shapes: accommodates different cable routing requirements
- Cable harness maintained by cable tie
- Fixing on structure (by screw), on shaped supports or banded supports
- Operating temperature: -55°C to +135°C

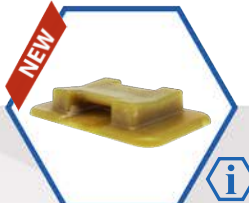
Amphenol Air LB France



Fixing Brackets ABS1688

- Brackets to maintain Cable harnesses or hydraulic pipes on structure
- Full lightweight thermoplastic
- Suited for different structure thicknesses
- 3 functions in 1 depending on the PN:
 - Fixing on structure without tool
 - Pipe maintaining with locking system
 - Ensure the required centre-to-centre distance between pipes
- Operating temperature: -55°C to +85°C
- Conform to ABD0031 and FAR 25853

Amphenol Air LB France



Adhesive Tie Mounts

- Rectangular cable tie mounts provide convenient fixture locations anywhere in the system
- VHB Tape or wet processes epoxy compatible
- Used with any standard MS3367 or equivalent tie down strap

Amphenol PCD



CC1339Light / ABS1339Light Cable Clamps

- Suited for cable harness fixing on structure
- Light versions derived from standard ABS1339 clamps: 18% weight saved
- 100% composite and silicone
- Electrical bundle protected from shocks & vibrations by overmolded elastomer
- Fixing by screw, closing by cable tie
- Available in 8 sizes for cable diameters from 5 to 48 mm
- Operating temperature: -55°C to +150°C

Amphenol Air LB France



Fixing Brackets ABS1694 / ABS1695

- Designed to help guide and maintain ventilation conduits on structure
- Full lightweight thermoplastic
- Suited for different structure thicknesses
- 2 functions in 1 depending on the PN:
 - Fixing on structure
 - Pipe maintaining with locking system
- Operating temperature: -55°C to +85°C
- Conform to ABD0031 and FAR 25853

Amphenol Air LB France

TECHNOLOGIES WE PROVIDE

6 Clamps & Attachment Systems



Modular Brackets

- Suited for cable fixing on structure
- Modular design
- Adjustable design to cope with cable orientation (45° / 90° / 135° and 180°)
- Lightweight composite
- Wide range of sizes and standoff versions

Amphenol Air LB France



Adhesive U-Snap Clamps

- Pre-mountable, non-conductive, non-corrosive, and lightweight Nylon and PEEK quick latching clamp for each wire harness routing
- Interchangeable grommets allow the wire bundle diameter changes without removing the mounted base
- VHB Tape or wet processes epoxy compatible

Amphenol PCD



Separators 3308

- Separators according to the ABS1144 standard for aerospace and defence
- They maintain clearance between two parallel or crossing cable harnesses, with 9 different versions available

Amphenol Air LB Germany



Fixing Brackets ABS2225

- Full lightweight thermoplastic
- Wide range of track length (1 up to 24 parts)
- 4 mounting positions on structure (0° / 90° / 180° / 270°)
- Cable accessories can be fixed on 3 sides of tracks
- Operating temperature: -55°C to +85°C
- Conform to ABD0031 and FAR 25853

Amphenol Air LB France



Bus bar / Cable support

- Lightweight composite clamp
- Suited for bus bar or cable fixing on structure
- Interchangeable grommets to cope with the cable diameters or busbar size
- To be mounted on ABS2225 fixing brackets. Or direct mounting on structure (with screws)
- Locking system to secure the closing

Amphenol Air LB France

7 In-seat Connectivity



Bluetooth

- Bluetooth® connectivity to add to or extend the wireless connectivity of Inflight Entertainment (IFE) and media systems
- Directional antenna allows for a more efficient and less noisy connection compared to a traditional omni directional antenna
- Directional Bluetooth Jack provides audio streaming to passenger headphones, headsets and game controllers via Bluetooth 5.0

Amphenol PCD



Dual Port MagJacks

- Incorporates high durability magnetic interfacing jack with a USB charging port all in one small, lightweight package
- Dual Port Magjack is built with proprietary Active Noise Cancelling technology within the jack
- Compatible with standard 3.5mm jacks and comes with an LED light pipe illuminating the charging port for low light environments

Amphenol PCD



Magnetic Jacks

- Magnetic Jacks pair with proprietary active noise cancelling technology
- High durability magnetic interface
- Compatible with standard 3.5mm jacks

Amphenol PCD



Smart Jacks

- Standard obround, square, and triangle cutout audio jacks with proprietary active noise cancelling technology
- Pair any standard 3.5mm audio device and enjoy reduced noise for a more convenient flight

Amphenol PCD



Smart PIM

- Patented modular system that can be installed in the seatback, armrest, or as a remote application
- Each module can be installed in any opening, allowing the customer to completely customize the chassis to fit different requirements

Amphenol PCD



DualUSB

- 60W USB A/USB smart power balancing charging device
- Incorporating advanced over current and over
- Heating safety features
- Configured as Dual USB-A and Dual USB-C

Amphenol PCD

INNOVATION & PRODUCT FOCUS



HV38999

- Can safely carry high voltages and large currents at altitude while remaining partial discharge free to extend connector life thanks to insert optimizations
- Designed to meet MIL-DTL-38999 mechanical and environmental performance
- Available safety interlock circuitry utilizes last mate, first break sequence
- All MIL-DTL-38999 shell configurations / finishes available including our Dualok high vibration plug

Amphenol Commercial Air Division



MIL-HD2

- Highest density with 1.80mm pitch
- 4 diff, 8 columns - SOSA aligned config.
- Data rates scalable to 56Gb/s PAM4 to support system upgrades without costly redesigns
- Proprietary crosstalk reducing techno.
- 15.7mil drill compliant pin allows deeper backdrilling
- Optimized footprints
- Shielded contacts mate before signal contacts, providing up to a 4mm mini wipe
- Embedded capacitor available

Amphenol Aerospace Operations



High Temperature Vibration and Pressure Sensors

- Technical advantages of PCB's high-temperature UHT-12™ sensors
- Absence of pyroelectric noise spikes up to 1400°F (760°C)
- Sensitivity that remains more consistent over a wide temperature change
- Proprietary shear mode crystal technology comes sealed in a hermetic package, isolated from base strain & transverse measurement errors

PCB Piezotronics



Micro-C

- "Compression termination" technology
- Solderless installation
- Compact footprint and height while meeting M83513 performance
- Ready for high speed applications and ESA qualification
- Precision stamped / twist pin options available

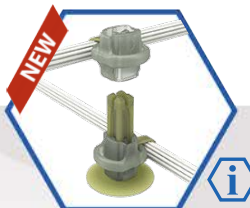
Amphenol Canada Corporation



MT Ferrule Optical Connector

- Stainless steel connector fitted with MT ferrule
- Space saving: compact design
- Weight saving on harnesses: no metallic braid needed
- Ruggedized
- Versatile: 24 or 48 FO channels
- No adverse effect of EMI

Amphenol Air LB France



Adhesive Snap 'N Post

- One-for-one replacement for standard ring posts
- Posts are pre-installed to the structure, adapter heads pre-installed on wire harnesses
- Reduces installation time from ~30+ sec to less than 5sec compared to standard ring posts

Amphenol PCD



CapLock / PlugLock

- CapLock allows to lock a cap onto a EN3645 / 38999 Power receptacle which may be under load
- PlugLock allows to lock a 38999 Power plug onto a receptacle which may be under load

Amphenol Socapex



Module SIM HVDC size 8

- Partial Discharge (DP) resistant design: PDIV:
 - 3100 Vac peak at 30Kft
 - 2500 Vac peak at 45Kft
 - 1050 Vac peak at 98Kft
- Up to 80A per contact
- Operating temperature -65°C to +200°C
- Suitable for crimp contact or threaded contact for bus bar connection

Amphenol Air LB France



MicroPlus

- Alternate ultra compact solderless format meeting M83513 performance
- Mezzanine or stacker options available
- NanoPlus M32139 alternate in development

Amphenol Canada Corporation



Raptor

- TALON high temperature contacts
- Shell Sizes 15 to 25
- Improved insulation geometry for HV electric fields
- Designed for increased operating voltages at aircraft altitudes

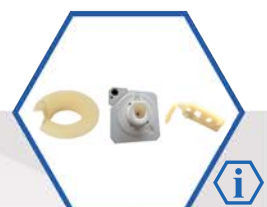
Amphenol Limited Ltd



MACH-D

- Precision machined shell provides EMI shielding protection
- Grounding strip provides excellent electromagnetic compatibility (EMC)
- Mechanically rugged machined shell protects against shock, vibration, and impact
- IP67 configurations protect against fluid and dust ingress
- High-performance M24308 intermateable

Positronic Industries



Rapid Part Development

- Rapidly design and deploy production ready parts using 3D printing technology
- Expedites part development by 86% at a fraction of the cost of standard part development cycles
- Production ready parts in 4 weeks

Amphenol PCD



NPI

- Pressure sensor housed in a fluid filled cavity and isolated from the measured media by a stainless-steel diaphragm and body
- Designed to operate in hostile environments while providing outstanding sensitivity, linearity, and hysteresis

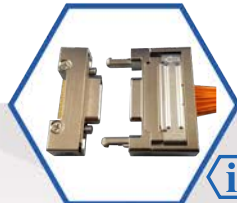
Amphenol NovaSensor



HPAC size 0 and size 4

- Innovative and easy-to-use locking system offering a perfect connection security
- 2 mixed arrangements available:
 - 4 Power (#4) + 6 Interlock (#22)
 - 3 Power (#0) + 4 Interlock (#22)
- Quick connect, no tools needed (lever)
- Secured connection thanks to the CPA (Connector Position Assurance)
- Overmolding suited for HVDC application
- Sealing IP67, shielding 360°
- Temperature: -65°C to +200°C
- Specifications according to EN4165

Amphenol Air LB France



ClickMate

- Manual, tool-less, latching connector
- Fully compliant with standard M83513 performance
- 40 lbs pull out force
- Available for sizes 9-37
- All wired and solder cup configurations
- Backshell options available

Amphenol Canada Corporation



USB3 Type C Field

- Based on EN3645 / 38999 - Shell size 11
- Ruggedized solution for USB3 Type-C standard connectors
- Data & Power in the same connector
- Reversibility on both plug and receptacle
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant

Amphenol Socapex



Stingray

- Magnetic rotating mechanism
- Non-keyed rotatable 'blind mating'
- Compatible with Power, USB 2.0 and Audio signal requirements
- IP68 sealed (mated and unmated)

Amphenol Limited Ltd



ShutterMate

- Part of the Lockheed Martin Mission Augmentation Port (MAP) Standard, Augmentation System Port Interface (ASPIN) program
- Application: A2100 host bus or SLS Block 1B ESPA payloads
- Data and power transfer between Host Vehicle and Satellite Augmentation Vehicle (SAV)
- Supports future automated in-orbit servicing & vehicle electronics augmentation activity

Amphenol Canada Corporation



Adhesive Standoff

- Composite Standoff replaces traditional standoffs with no-hardware adhesive option
- VHB Tape or wet processes epoxy compatible
- PEEK 150GL30 or GF Ultem, 10-32 insert standard, metric option available

Amphenol PCD



PS2P-ARC - Play Resistant Arc Position Sensor

- Unlimited mechanical life
- True touchless operation
- IP69K sealing, high operating temperature range, shock and vibration resistance
- Immune to radial and axial play
- Compact and low profile package
- Standard magnets available
- Custom mechanical design, programmable transfer function and switch outputs as well as different output protocols and redundancy levels available

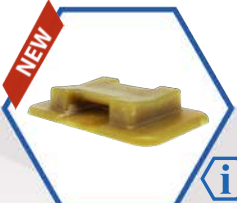
Amphenol Piher Sensing Systems



Reengineering

- Redesigning and reproducing an obsolete component or improving existing products
- No need to redesign / requalify all the system -> Cost saving
- Redesign of an interchangeable product -> Time saving
- Customized and stable solutions

Amphenol Air LB France



Adhesive Tie Mounts

- Rectangular cable tie mounts provide convenient fixture locations anywhere in the system
- VHB Tape or wet processes epoxy compatible
- Used with any standard MS3367 or equivalent tie down strap

Amphenol PCD



Harness in the box

- Innovative and high-performance interconnect assembly solutions inside the electronics boxes for military & commercial aerospace applications
- Turnkey solution for Flexible Printed Circuit (FPC) assembly with several types of flex circuit possibilities (single layer, double or multilayer, rigid-flex)
- Enables high-speed data transmission, impedance control, space reduction and weight reduction

Amphenol Socapex

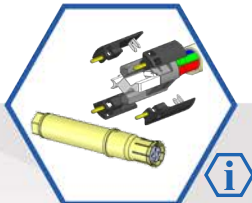


R38 Series / R39M Micro

- Hybrid D-sub / micro-D / RF contacts
- Compact formats
- Custom arrangements
- Military or aerospace high-speed applications

Amphenol Canada Corporation

INNOVATION & PRODUCT FOCUS



Quick Quadrax

- Patented quadrax innovation
- Repairable
- Reversible
- Supports ARINC 600 and D38999
- All existing cable types
- Drop in for all existing contact arrangements

Amphenol Canada Corporation



Connectorization Plates

- Derived from EN4165 standard
- Compatible with the full range of SIM / EN4165 inserts
- Monoblock machining -> Time saving on assembly
- Removing fasteners -> FOD reduction
- Single part number -> Supply chain simplification
- Juxtaposition of connectors -> Space saving
- Design optimization -> Weight saving

Amphenol Air LB France



Twist pin micro-D

- Twist Pin contacts now available: an alternate format pin technology, meeting military spec performance and reliability (full M83513 compliance)
- Supports all plug connector configurations including new compression termination products (MicroC family)

Amphenol Canada Corporation



Adhesive U-Snap Clamps

- Pre-mountable, non-conductive, non-corrosive, and lightweight Nylon and PEEK quick latching clamp for each wire harness routing
- Interchangeable grommets allow the wire bundle diameter changes without removing the mounted base
- VHB Tape or wet processes epoxy compatible

Amphenol PCD



Shielded flexible busbar attached to SIM connector

- Flexible aluminum busbar, compact, lightweight
- RipStop conductive fabric shielding system integrated in the busbar construction
- Grounding can be achieved through several techniques: independent connector, connector which integrates power signal and shielding, threaded stud

Amphenol Auxel



SMC Series

- Stackable Modular Connector
- Low-profile, stackable composite shell
- Modular, environmentally sealed insert assemblies
- Supports quarter-turn mating hardware & backshells
- Rugged applications: Military avionics; engine & flight controls, HUDs, FADECs

Amphenol Canada Corporation



Contact Temper Grip

- High Temp Capability: Maintains current capability in high temp (200°C+) situations, outperforming standard contacts
- «Napkin-Ring» Technology: Prevents relaxation of beryllium copper tines at high temps, reducing resistance
- Wide Applications: Standard in 38999, High Power, MGT-5015, Tri-Power D38999 series
- Reliable and Durable: Manufactured to high quality standards for demanding conditions

Amphenol Socapex



D83 Series Compact d-sub

- Compact d-sub variant
- Features size 23 contacts for compact arrangements
- Supports combo arrangements

Amphenol Canada Corporation



R398 Series Compact R39

- Compact D-sub variant
- Features size 23 contacts for compact arrangements
- Supports combo arrangements
- Rugged mating
- High-temperature capable

Amphenol Canada Corporation



CC5516 Light Cable Clamps

- Derived from CC5516 composite clamps
- Available in 10 sizes for cable or pipe diameters from 5 to 25,4 mm
- Weight saving up to 24% compared to legacy CC5516 composite clamps, and up to 73% compared to metallic clamps
- Closing and fixing in one step by screw
- Pre-locking mechanism
- Suited for stacking mount
- Protection from vibration by overmolded elastomer

Amphenol Air LB France



RF PCB / Assembly / Test

- Wide range of material availability
- Rogers Materials, Meg 6/Meg7, and other advanced laminates and advanced composite laminates
- Hybrid constructions are available to help lower material costs
- Assembly and Test Services Available

Amphenol Printed Circuits

CABLE HARNESSES



Cable harnesses are the link between mechanical controls and accessories, electronic components and software on complex and demanding systems in aerospace, ground vehicles, and electronic applications, specifically engines and power distribution applications.

Build to specification and/or build to print requirements can be addressed from Digital Mock-Up data (DMU) to form boards of electrical harnesses in all aerospace applications. This will include wiring diagrams, product change management, configuration management and electrical testing. An EWIS responsibility (Electrical Wiring Interconnect Systems) can be proposed to customers, including aircraft certification support, integration into the aircraft when requested, obsolescence management, maintenance and technical assistance over the total program flying period.

Contact us to know more about our worldwide offset capabilities.

Amphenol Sefee / Amphenol Ionix Systems Ltd

At Amphenol, we understand that high reliability electronics requires state-of-the-art equipment, experienced and passionate people, and rigorous process validation. We work closely with our customers to ensure that products meet or exceed all requirements and expectations right from the very start of the project.

Amphenol can design, develop, qualify and manufacture any specified requirements from a customer for control and monitoring data in all aerospace applications. Hardware and software development will follow Validation & Verification process cycles, managed by special project management teams. Outcomes may include functional test equipment, maintenance documentation and obsolescence management.

ELECTRONIC PACKAGING & EQUIPMENTS



Amphenol Sefee / Amphenol Borisch Technologies / Amphenol Martec / Amphenol Interconnect India

Amphenol's cable assemblies include simple point-to-point cables, custom high-power and high-speed data cable assemblies.

Our cable assemblies include the latest industry innovations in radio frequency (RF), fiber optics, high-power requirements and high-speed data transfer for the newest systems and applications.

In addition, our broad portfolio of cable connectors and accessories can be used in our cable assemblies to provide a complete solution.

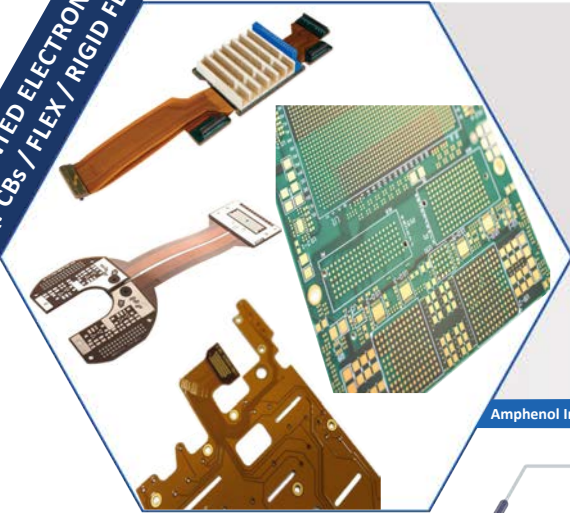
Our commitment to technical excellence makes us an industry leader in providing sophisticated solutions and professional technical assistance.

CABLE ASSEMBLIES (ELECTRICAL, FIBER OPTICS, RF)



ADDED VALUE

PRINTED ELECTRONICS (PCBs / FLEX / RIGID FLEX)



Amphenol Invotec / Amphenol Printed Circuits

Amphenol is a world leader in the printed circuit industry for Military and Commercial markets, building PCBs, Backplanes, Flex and Rigid-Flex products to meet our customers' demanding needs.

PCBs: With production capabilities well beyond the industry standard for panel size, thickness, speed and technology, Amphenol provides solutions to the most rigorous system demands. Collaborative relationships with suppliers assure Amphenol's ability to offer the experience necessary to remain current with laminates, processes and equipment while defining the path to the future.

FLEX: Amphenol has developed extensive manufacturing experience, product knowledge and technical expertise in the fields of flex and rigid flex: single-sided flex, double-sided flex, multi-layer flex and rigid flex.

MEDIA CONVERTERS / TRANS-CEIVERS / OPTICAL SWITCHES



Amphenol Socapex / Amphenol Active Optical Product

The switches are the center of Network Solutions.

Amphenol provides network solutions for use in harsh environments, where reliability and resistance to outside influences, such as temperature, shock, vibration, water, dust, etc. are paramount. Its rugged and durable solutions give you the assurance of a continuous and secure data transmission between all your communication equipments in the harshest environments.

Amphenol capabilities in networks solutions include: Network design, Network evaluation, Network gateways and converters, Measurement equipment. Based on its expertise in harsh environment, Amphenol provides high demanding markets with both the interconnection products and the network design.

IN-SEAT CONNECTIVITY



Amphenol PCD

This refers to all Audio & Charging solutions, USB power, bluetooth connectivity and Wireless charging for commercial Aerospace applications.

Amphenol is the world's leading supplier of electronic innovations in noise cancellation, audio enhancement and other electronic touch points in the aircraft cabin.

Amphenol's proprietary active noise-cancellation technology is now specified by major airlines and sourced by all of the major manufacturers of in-flight entertainment systems.

CONNECTORIZATION

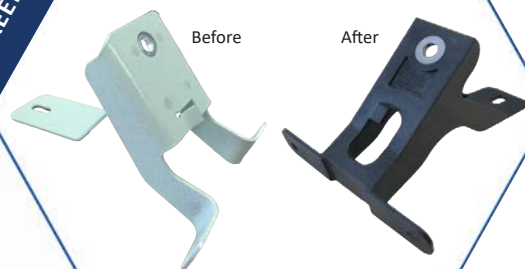


Amphenol Air LB France

Connectorization refers to the principle of «integrating connectors onto structural elements», aiming to reduce part numbers and integration time while optimizing space and simplifying the supply chain (one part, one supplier to track).

Our commitment to technical excellence in the fields of interconnects and value added systems makes us an industry leader in providing custom design solutions for your needs regarding connectorization of structural elements.

REENGINEERING



Amphenol Air LB France

Reengineering consists of a method aiming to redesign and reproduce an obsolete component or improve the performances of an existing product.

Especially suited when the component is part of a complex system, Reengineering might be a solution to avoid a time consuming and expansive redesign and qualification of the whole system.

Application: All connectors and attachment systems for demanding applications.

SENSORS



Amphenol Sensors

Amphenol provides leading edge technology for today's Aerospace applications. From critical sensors for flight instrumentation to cabin comfort and convenience applications, we offer an array of standard and customized sensing solutions to provide the most reliable and accurate performing solutions for the most stringent of Aerospace applications.

Part of our product portfolio: Temperature Sensors, Pressure Sensors, Air Quality Sensors ...

Amphenol

Amphenol Active Optical Product

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