

SPACE

SELECTION GUIDE



QUALITY SPEED VALUE-ADD EXPERTISE



QUALITY

You need to protect your customers' and your brand's reputation by using the highest quality products.

PEI-Genesis maintains an AS9100D and ISO9001:2015 certified quality management system at its corporate headquarters in Philadelphia, PA and at production facilities in South Bend, IN; Southampton, UK and Zhuhai, China. Our South Bend, IN operation is ITAR registered with the US Department of State and Southampton, UK is registered with the BIS in the UK.



SPEED

In your world, you need products quickly without any lost production time.



VALUE-ADD

Enjoy better access to the brands you trust. We provide manufacturing capabilities with distribution flexibility.



EXPERTISE

You're the expert in your products; let us be the expert for your interconnects.

MANUFACTURERS



PEI-Genesis is an authorized distributor for the premier brands in the industry.



Connector and backshell solutions for harsh environments.



High reliability military and commercial interconnects



Interconnect products for aerospace, transportation, military, and commercial applications including Fibreco



ISO 9001 and AS9100-certified, world-class designer and manufacturer of circular and rectangular connectors



Powering Business Worldwide

Including Souriau and Sunbank brands. High performance, high reliability interconnect solutions for harsh environments



High quality push-pull and ratchet-coupling connectors, tools and accessories.



High-quality rectangular connector fit for PCB applications, such as board-to-board, board-to-wire, and PCB mount connectors.



an Amphenol company

Premium power and signal connectors for a wide variety of global industries



SPACE APPLICATIONS

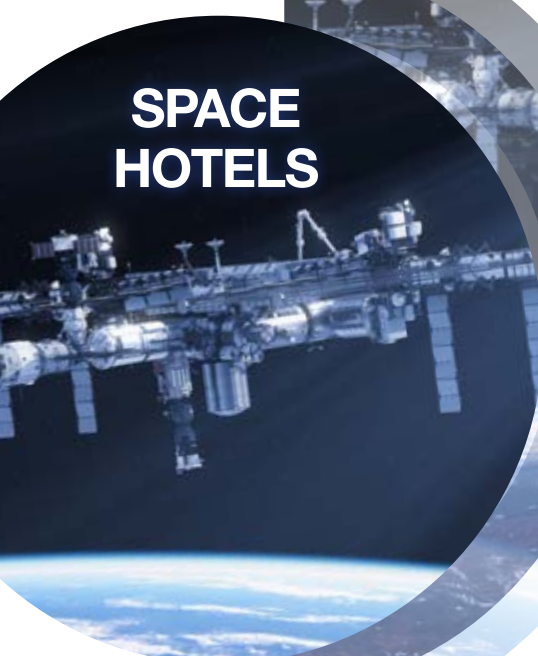
SATELLITES



LAUNCHERS



**SPACE
HOTELS**



ROVERS

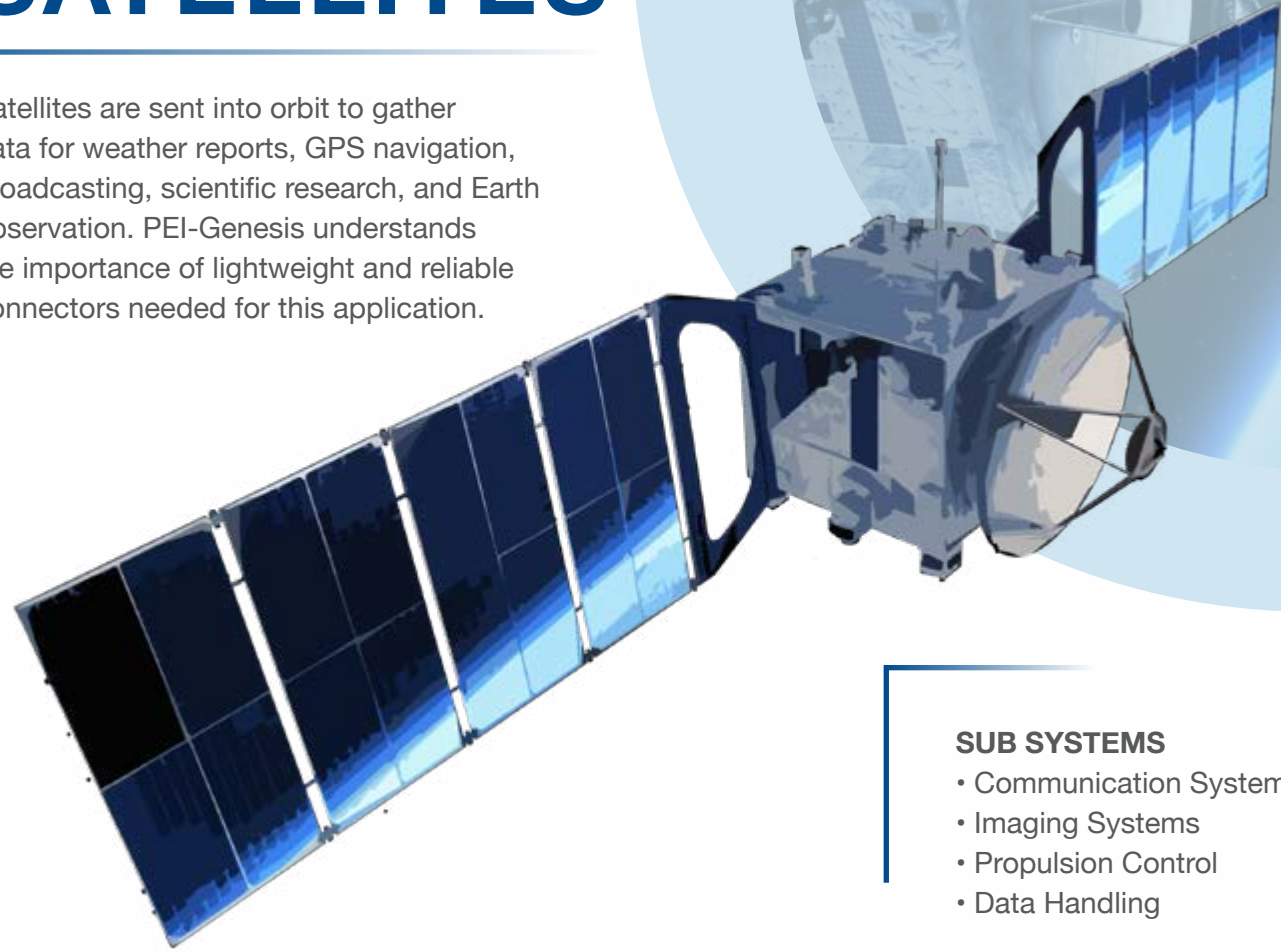


**SPACE
OPERATIONS**



SATELLITES

Satellites are sent into orbit to gather data for weather reports, GPS navigation, broadcasting, scientific research, and Earth observation. PEI-Genesis understands the importance of lightweight and reliable connectors needed for this application.



SUB SYSTEMS

- Communication Systems
- Imaging Systems
- Propulsion Control
- Data Handling

38999

KJ SERIES // ITT CANNON



- Low-Profile connector design
- High density layouts with up to 128 data connections
- Features proven bayonet coupling, optional grounded plug for superior EMI shielding and rear-release contacts

SERIES FIVE // AMPHENOL AEROSPACE



- Meets all performance requirements of standard 38999 in a smaller and lighter option
- Can withstand higher voltage requirements than standard 38999 series
- Uses standard accessory threads and AS39029 qualified contacts

8LTS 38999 SERIES I // SOURIAU BY EATON



- Resistance to hydraulic fluids
- RFI/EMI shielding and shell to shell continuity
- Quick mating- 3 point bayonet lock system

8TS 38999 SERIES II // SOURIAU BY EATON



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

JT/JTP 38999 SERIES II // AMPHENOL AEROSPACE



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

8DS 38999 SERIES III // SOURIAU BY EATON



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

BULKHEAD FEED-THROUGH 38999 SERIES III // AMPHENOL AEROSPACE



- Double ended receptacles with feed through contacts
- Mates to standard D38999 plugs and tooled in standard inserts
- Removes the need for discrete wire termination when assembling connectors

HERMETIC 38999 SERIES III // AMPHENOL AEROSPACE & AMPHENOL MARTEC



- Available in standard 38999 and Series Five
- Offers superior electrical performance in a glass or epoxy-sealed connector
- Superior leak rate performance and available in wide variety of Mil-Spec configurations

OCS (OVAL CONTACT SYSTEM) SERIES // AMPHENOL AEROSPACE



- Differential Twinax type contact system; many advantages for high speed data needs
- High speed data transmission up to 10 Gbps per pair
- Available in a variety of 38999 shell sizes and insert arrangements

PCB 38999 SERIES III // AMPHENOL AEROSPACE



- Ideal for printed circuit board applications
- Significantly eases cable to board wiring and contacts come pre-assembled in connectors
- Available in many shell varieties including double flange, clinch nut, and reduced flange

QUADRAX 38999 SERIES III // AMPHENOL AEROSPACE



- Offers several advantages for high data transfer rates, low power consumption, and excellent EMI compatibility
- Contacts form two 100 or 150 Ohm matched impedance differential pairs
- Available in size 8 crimp or PC tail styles

SPLIT PAIR QUADRAX RECTANGULAR SERIES // AMPHENOL AEROSPACE



- Supports up to 6.5 Gbps per pair and used with CAT6A Type Cable
- Used for a variety of high speed applications beyond current quadrax design
- Available in size 8 crimp and PC tail versions

TV/TVP 38999 SERIES III // AMPHENOL AEROSPACE



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

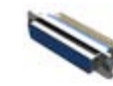
D-SUBMINIATURE

D-SUB // AMPHENOL PCD



- Available in Class M, D, and K QPL versions
- M2000 Series D-Sub connectors are MIL Qualified & meet the requirement of MIL-DTL-24308
- Conforming to applicable material, dimensional and performance requirements of MIL-DTL-24308 Space Class
- Terminations include cable or wire crimp and solder, straight and right angle PCB mount

D-SUB // POSITRONIC



- Includes: MACH-D, SCB, SND, SDD Series and Class M, D, K and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

D-SUB // ITT CANNON



- Includes: D*M, D*MM, D*MA Series with NM, NMB and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

MICRO D-SUB

DURA-CON™ SERIES // CINCH



- Smaller, higher density than D-Subs
- Electroless nickel finish with stainless steel hardware
- Harness and PCB style terminations

MDM SERIES // ITT CANNON



- Micro twist pin contact system recessed into plug insulators
- Designed to MIL-DTL-83513 specifications
- Unique mechanical engagement & locking mechanisms

SERIES 100 (VARIOUS) // AMPHENOL CANADA



- Harnessed connectors supplied pre-wired and fully potted
- Available in straight and right angle termination style
- Metal shells to provide RFI/EMI shielding
- Designed for compliance to MIL-DTL-83513

MICRO-D // NICOMATIC



- Includes the DMM, EMM, and DLMM Series
- High modularity: contacts Signal (LF), Power (HP), and Coax (HF) up to 10M arrangements
- Board to board, board to wire, wire to wire, panel mount (1 to 4 rows of contacts)
- Miniaturization: 2mm pitch, low profile

MICRO-MINIATURE CIRCULAR //////////////

2M SERIES // AMPHENOL AEROSPACE



- Lightweight micro-miniature 38999-type connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

2M HIGH SPEED SERIES // AMPHENOL AEROSPACE



- Lightweight micro-miniature 38999-type connectors
- Multiple catalog insert arrangements available
- Fluoropolymer inserts optimized for high speed capability

2M PYTHON SERIES // AMPHENOL AEROSPACE



- Low profile EMI/RFI plug and backshell combo
- Reduces space requirements without compromising ruggedness or shielding performance
- Python assemblies provide superior low profile cable routing and 2M connector performance all in one

M SERIES // LEMO



- Smallest multi-pin, fully shielded, vibration-secure and sealed connector available
- 360° EMC shielding protection
- Triplestart fast-locking ratchet coupling type

MKJ SERIES // ITT CANNON



- Lightweight micro-miniature connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

MODULAR POWER & SIGNAL //////////////

SP MAX SERIES// POSITRONIC



- Precision machined shell, available in three sizes, provides EMI/RFI protection
- Combines a multitude of contact sizes in a single connector including #12, #16, #18, and #22 contacts
- Performance compatibility to EN4165 and ESA/ESCC-3401

PUSH PULL //////////////////////////////////////

B, K, F SERIES // LEMO



- B/K/F Series: Self latching push pull coupling mechanism
- Operating temperature ranges: -55°C up to +250°C
- Watertight IP66/68 sealing options

RECTANGULAR MICRO //////////////

NANO (M32139 TYPE) // ITT CANNON



- Micro twist pin contact system
- 0.025 Contact spacing
- 9 To 51 contact positions
- Knurled jack screw assembly hardware

RMM SERIES // AMPHENOL CANADA



- Low profile & high density (2mm spacing)
- Modular design allows for wide range of combinations signal, power and RF contacts
- Focus on PCB tail receptacles, and crimp plugs as the ideal micro-, nano-, pico-satellite compact interconnect offering

RF & FIBER OPTIC ASSEMBLIES //////////////

FIBER OPTICS // ITT CANNON



- Reduced insertion loss
- Less channel-to-channel variance
- Easy integration into high density interconnect hardware

INSTABEND® PHASE STABLE CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Low-loss, highly flexible, foam-core micro coaxial cables
- Triple-shield construction
- Low outgassing materials per ASTM E595

MAXGAIN® CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Optimized for lowest attenuation at 50 GHz
- Ultra stable insertion loss, phase and VSWR with flexing
- Flexible, low minimum bend radius

RF CONNECTORS & ASSEMBLIES // AMPHENOL SV MICROWAVE



- Smaller diameters for RF cables
- Increased signal density and decreased weight

LAUNCHERS

Launchers are sent into space to transport a payload to space stations or deliver satellites to orbit Earth. PEI-Genesis has a wide range of lightweight interconnect solutions engineered to withstand vibration, shock, and extreme temperatures that may occur through liftoff. We provide compact connectors for applications where size and weight are at a premium.

38999 //////////////////////////////////////

HV38999 SERIES // AMPHENOL AEROSPACE



- Provides high voltage solutions for next-gen aircraft power requirements
- Insert optimizations allow these 38999 to safely carry high voltages and large currents at altitude
- Available in all MIL-DTL-38999 shell configurations and finishes

KJ SERIES // ITT CANNON



- Low-Profile connector design
- High density layouts with up to 128 data connections
- Features proven bayonet coupling, optional grounded plug for superior EMI shielding and rear-release contacts

SUB SYSTEMS

- Propulsion Systems Control
- Guidance and Navigation
- Power Distribution
- Equipment Control

SERIES FIVE // AMPHENOL AEROSPACE



- Meets all performance requirements of standard 38999 in a smaller and lighter option
- Can withstand higher voltage requirements than standard 38999 series
- Uses standard accessory threads and AS39029 qualified contacts

STAINLESS STEEL 38999 // AMPHENOL AEROSPACE



- Available in Class K, S, and L QPL versions
- High corrosion resistance
- Able to withstand higher temperatures

STAINLESS STEEL 38999 // CONESYS



- Available in Class K, S, and L QPL versions
- High corrosion resistance
- Able to withstand higher temperatures

8LTS 38999 SERIES I // SOURIAU BY EATON



- Resistance to hydraulic fluids
- RFI/EMI shielding and shell to shell continuity
- Quick mating- 3 point bayonet lock system

8TS 38999 SERIES II // SOURIAU BY EATON



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

JT/JTP 38999 SERIES II // AMPHENOL AEROSPACE



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

8DS 38999 SERIES III // SOURIAU BY EATON



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

BREAK AWAY FAIL-SAFE LANYARD RELEASE 38999 SERIES III // AMPHENOL AEROSPACE & AMPHENOL SOCAPEX



- Ability to quickly disconnect a connector with no damage
- Mates to existing D38999 receptacles
- Compatible with all Mil-Spec backshells and accessories

BULKHEAD FEED-THROUGH 38999 SERIES III // AMPHENOL AEROSPACE



- Double ended receptacles with feed through contacts
- Mates to standard D38999 plugs and tooled in standard inserts
- Removes the need for discrete wire termination when assembling connectors

HERMETIC 38999 SERIES III // AMPHENOL AEROSPACE & AMPHENOL MARTEC



- Available in standard 38999 and Series Five
- Offers superior electrical performance in a glass or epoxy-sealed connector
- Superior leak rate performance and available in wide variety of Mil-Spec configurations

PCB 38999 SERIES III // AMPHENOL AEROSPACE



- Ideal for printed circuit board applications
- Significantly eases cable to board wiring and contacts come pre-assembled in connectors
- Available in many shell varieties including double flange, clinch nut, and reduced flange

QUADRAX 38999 SERIES III // AMPHENOL AEROSPACE



- Offers several advantages for high data transfer rates, low power consumption, and excellent EMI compatibility
- Contacts form two 100 or 150 Ohm matched impedance differential pairs
- Available in size 8 crimp or PC tail styles

TV/TVP 38999 SERIES III // AMPHENOL AEROSPACE



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

5015

5015 CV SERIES III // ITT CANNON



- Lightweight die cast aluminum hardware with integral backshell design
- Extensive offering of both signal and power layouts
- Available with both machined solder and crimp silver plated contacts for durability

D-SUBMINIATURE

D-SUB // AMPHENOL PCD



- Available in Class M, D, and K QPL versions
- M2000 Series D-Sub connectors are MIL Qualified & meet the requirement of MIL-DTL-24308
- Conforming to applicable material, dimensional and performance requirements of MIL-DTL-24308 Space Class
- Terminations include cable or wire crimp and solder, straight and right angle PCB mount

D-SUB // POSITRONIC



- Includes: MACH-D, SCB, SND, SDD Series and Class M, D, K and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

D-SUB // ITT CANNON



- Includes: D*M, D*MM, D*MA Series with NM, NMB and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

ETHERNET

RJ45 SERIES // AMPHENOL PCD



- Rugged ethernet connection, a derivative from MIL-DTL-26482
- No tooling required for installation because of patented RJStop system
- 360-degree EMI shielding available

MICRO D-SUB

DURA-CON™ SERIES // CINCH



- Smaller, higher density than D-Subs
- Electroless nickel finish with stainless steel hardware
- Harness and PCB style terminations

MICRO-D // NICOMATIC



- Includes the DMM, EMM, and DLMM Series
- High modularity: contacts Signal (LF), Power (HP), and Coax (HF) up to 10M arrangements
- Board to board, board to wire, wire to wire, panel mount (1 to 4 rows of contacts)
- Miniaturization: 2mm pitch, low profile

MDM SERIES // ITT CANNON



- Micro twist pin contact system recessed into plug insulators
- Designed to MIL-DTL-83513 specifications
- Unique mechanical engagement & locking mechanisms

MICRO-MINIATURE CIRCULAR

2M SERIES // AMPHENOL AEROSPACE



- Lightweight micro-miniature 38999-type connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

2M805 SERIES // AMPHENOL AEROSPACE



- Lightweight micro-miniature connectors
- Tri-Start fast coupling and waterproof sealing
- Excellent EMI shielding

2M HERMETIC // AMPHENOL AEROSPACE



- Provides superior sealing of 1x10⁻⁸ cc/sec helium
- Low profile shells for minimum box protrusion
- Available in a variety of coupling technologies including tri-start, push pull, bayonet, and dual start

KPD SERIES // ITT CANNON



- Monobloc-type hard insulators are made of strong, durable, thermosetting plastic
- The pin cavities feature a closed-down effect resulting in superior pin stability and positive axial alignment of the contacts
- Features rear contact insertion, release and extraction

M SERIES // LEMO



- Smallest multi-pin, fully shielded, vibration-secure and sealed connector available
- 360° EMC shielding protection
- Triplestart fast-locking ratchet coupling type

MKJ SERIES // ITT CANNON



- Lightweight micro-miniature connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

MODULAR POWER & SIGNAL ////////////////

OPTIMUS EN4165 SERIES // NICOMATIC



- Rugged, rectangular & stackable
- Ultra-modular & customizable
- Weight savings

SIM EN4165 SERIES // AMPHENOL PCD AMPHENOL AIR LB FRANCE



- Modular, flexibility in design & reconfiguration
- Field replaceable inserts
- Weight savings

PUSH PULL ////////////////

B, K, F SERIES // LEMO



- B/K/F Series: Self latching push pull coupling mechanism
- Operating temperature ranges: -55°C up to +250°C
- Watertight IP66/68 sealing options

HDx™ SERIES // ITT CANNON



- Anti-glare, non-reflective plating
- Lightweight, compact design
- Ultra-high density layouts

RACK & PANEL ////////////////

RNJ SERIES // AMPHENOL SOCAPEX



- Lightweight space saving design with EMI shielding
- Between 1 and 128 contacts in accordance with MIL-C-39029 standard
- Compatible with some M85049 rear accessories for MIL-DTL-38999 I connectors

ZMMA SERIES // AMPHENOL CANADA



- Blind mate low mating force modular connector
- Endless customer design possibilities for high-density contact arrangements
- ARINC 600 components

ZR393 SERIES // AMPHENOL CANADA



- Rugged multiport support for RF contacts for reliable high-speed communications
- PCB and crimp termination available
- Based on the standard R39 Series which is a compact rectangular format using D38999 contacts

RECTANGULAR MICRO ////////////////

NANO (M32139 TYPE) // ITT CANNON



- Micro twist pin contact system
- 0.025 Contact spacing
- 9 To 51 contact positions
- Knurled jack screw assembly hardware

RMM SERIES // AMPHENOL CANADA



- Low profile & high density (2mm spacing)
- Modular design allows for wide range of combinations signal, power and RF contacts
- Focus on PCB tail receptacles, and crimp plugs as the ideal micro-, nano-, pico-satellite compact interconnect offering

RF & FIBER OPTIC ASSEMBLIES ////////////////

INSTABEND® PHASE STABLE CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Low-loss, highly flexible, foam-core micro coaxial cables
- Triple-shield construction
- Low outgassing materials per ASTM E595

MAXGAIN® CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Optimized for lowest attenuation at 50 GHz
- Ultra stable insertion loss, phase and VSWR with flexing
- Flexible, low minimum bend radius

RF CONNECTORS & ASSEMBLIES // AMPHENOL SV MICROWAVE



- Smaller diameters for RF cables
- Increased signal density and decreased weight

ROVERS

Rovers are ground-based objects that explore a planet's surface with cameras, sensors, and drills to collect scientific data. Our offering of rugged solutions is built to withstand moisture, sand, mud, and other contaminants present in this environment.



SUB SYSTEMS

- Onboard Systems
- Communication Systems
- Imaging Systems
- Navigation Systems
- RF Transmission and Receiving

26482 ////////////////

PV 26482 SERIES II // ITT CANNON



- Offers environmental sealing protection
- Machined gold plated crimp contact terminations
- Operating temperature range from -55°C to 200°C

SERIES FIVE // AMPHENOL AEROSPACE



- Meets all performance requirements of standard 38999 in a smaller and lighter option
- Can withstand higher voltage requirements than standard 38999 series
- Uses standard accessory threads and AS39029 qualified contacts

8TS 38999 SERIES II // SOURIAU BY EATON



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

38999 ////////////////

KJ SERIES // ITT CANNON



- Low-Profile connector design
- High density layouts with up to 128 data connections
- Features proven bayonet coupling, optional grounded plug for superior EMI shielding and rear-release contacts

JT/JTP 38999 SERIES II // AMPHENOL AEROSPACE



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

8DS 38999 SERIES III // SOURIAU BY EATON



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

BREAK AWAY FAIL-SAFE LANYARD RELEASE 38999 SERIES III // AMPHENOL AEROSPACE & AMPHENOL SOCAPEX



- Ability to quickly disconnect a connector with no damage
- Mates to existing D38999 receptacles
- Compatible with all Mil-Spec backshells and accessories

BULKHEAD FEED-THROUGH 38999 SERIES III // AMPHENOL AEROSPACE



- Double ended receptacles with feed through contacts
- Mates to standard D38999 plugs and tooled in standard inserts
- Removes the need for discrete wire termination when assembling connectors

HERMETIC 38999 SERIES III // AMPHENOL AEROSPACE & AMPHENOL MARTEC



- Available in standard 38999 and Series Five
- Offers superior electrical performance in a glass or epoxy-sealed connector
- Superior leak rate performance and available in wide variety of Mil-Spec configurations

PCB 38999 SERIES III // AMPHENOL AEROSPACE



- Ideal for printed circuit board applications
- Significantly eases cable to board wiring and contacts come pre-assembled in connectors
- Available in many shell varieties including double flange, clinch nut, and reduced flange

QUADRAX 38999 SERIES III // AMPHENOL AEROSPACE



- Offers several advantages for high data transfer rates, low power consumption, and excellent EMI compatibility
- Contacts form two 100 or 150 Ohm matched impedance differential pairs
- Available in size 8 crimp or PC tail styles

TV/TVP 38999 SERIES III // AMPHENOL AEROSPACE



- Available in commercial and Class G QPL versions
- Outgassing process to withstand space and other environments
- Standard insert arrangements and accessory threads

5015 //

5015 CV SERIES III // ITT CANNON



- Lightweight die cast aluminum hardware with integral backshell design
- Extensive offering of both signal and power layouts
- Available with both machined solder and crimp silver plated contacts for durability

D-SUBMINIATURE //

D-SUB // AMPHENOL PCO



- Available in Class M, D, and K QPL versions
- M2000 Series D-Sub connectors are MIL Qualified & meet the requirement of MIL-DTL-24308
- Conforming to applicable material, dimensional and performance requirements of MIL-DTL-24308 Space Class
- Terminations include cable or wire crimp and solder, straight and right angle PCB mount

D-SUB // POSITRONIC



- Includes: MACH-D, SCB, SND, SDD Series and Class M, D, K and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

D-SUB // ITT CANNON



- Includes: D*M, D*MM, D*MA Series with NM, NMB and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

MICRO D-SUB //

DURA-CON™ SERIES // CINCH



- Smaller, higher density than D-Subs
- Electroless nickel finish with stainless steel hardware
- Harness and PCB style terminations

MDM SERIES // ITT CANNON



- Micro twist pin contact system recessed into plug insulators
- Designed to MIL-DTL-83513 specifications
- Unique mechanical engagement & locking mechanisms

SERIES 100 (VARIOUS) // AMPHENOL CANADA



- Harnessed connectors supplied pre-wired and fully potted
- Available in straight and right angle termination style
- Metal shells to provide RFI/EMI shielding
- Designed for compliance to MIL-DTL-83513

MICRO-D // NICOMATIC



- Includes the DMM, EMM, and DLMM Series
- High modularity: contacts Signal (LF), Power (HP), and Coax (HF) up to 10M arrangements
- Board to board, board to wire, wire to wire, panel mount (1 to 4 rows of contacts)
- Miniaturization: 2mm pitch, low profile

MICRO-MINIATURE CIRCULAR //////////

2M PCB SERIES // AMPHENOL AEROSPACE



- Lightweight micro-miniature 38999-type connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

KPD SERIES // ITT CANNON



- Monobloc-type hard insulators are made of strong, durable, thermosetting plastic
- The pin cavities feature a closed-down effect resulting in superior pin stability and positive axial alignment of the contact
- Features rear contact insertion, release and extraction

MKJ SERIES // ITT CANNON



- Lightweight micro-miniature connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

PUSH PULL //

HDx™ SERIES // ITT CANNON



- Anti-glare, non-reflective plating
- Lightweight, compact design
- Ultra-high density layouts

RECTANGULAR MICRO //

NANO (M32139 TYPE) // ITT CANNON



- Micro twist pin contact system
- 0.025 Contact spacing
- 9 To 51 contact positions
- Knurled jack screw assembly hardware

RF & FIBER OPTIC ASSEMBLIES //////////

FIBER OPTICS // ITT CANNON



- Reduced insertion loss
- Less channel-to-channel variance
- Easy integration into high density interconnect hardware

INSTABEND® PHASE STABLE CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Low-loss, highly flexible, foam-core micro coaxial cables
- Triple-shield construction
- Low outgassing materials per ASTM E595

MAXGAIN® CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Optimized for lowest attenuation at 50 GHz
- Ultra stable insertion loss, phase and VSWR with flexing
- Flexible, low minimum bend radius

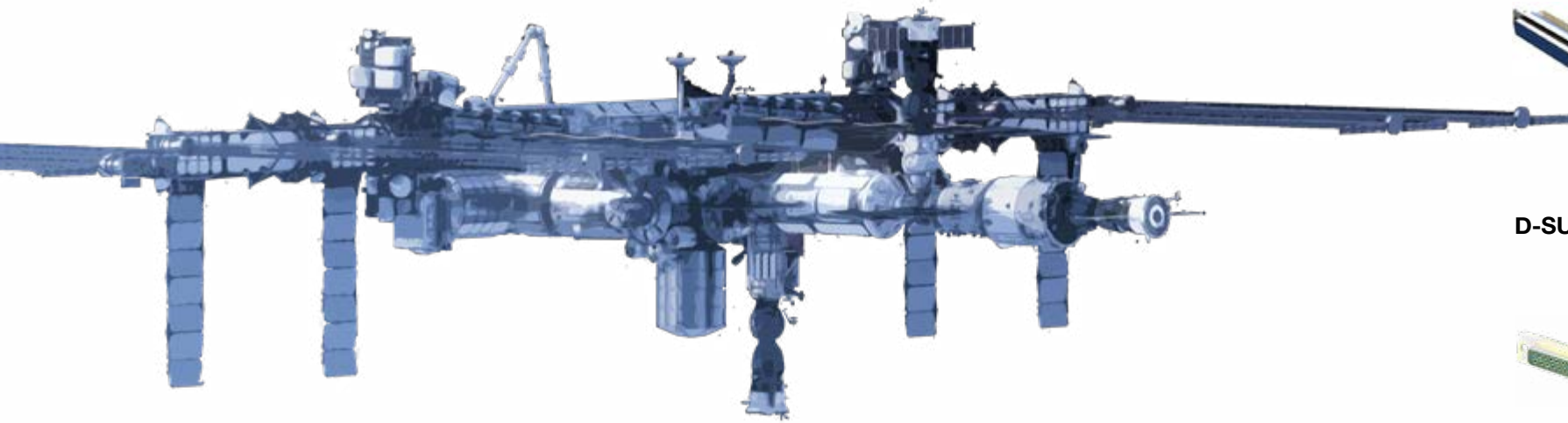
RF CONNECTORS & ASSEMBLIES // AMPHENOL SV MICROWAVE



- Smaller diameters for RF cables
- Increased signal density and decreased weight

SPACE HOTELS

Space hotels are establishments that allow tourists to experience space travel for enjoyment. They offer the same amenities and accommodations as a typical hotel, all while floating in low earth orbit. Connectors from PEI-Genesis deliver signal, data, and power to stay connected in these extreme conditions.



38999 //////////////////////////////////////

38999 HIGH POWER SERIES // AMPHENOL AEROSPACE



- Able to incorporate RADSOK®, Temper-Grip, or standard high power contacts with 38999 Series
- Offers special insert arrangements designed to carry high current; up to 1000amps per connector

BULKHEAD FEED-THROUGH 38999 SERIES III // AMPHENOL AEROSPACE



- Double ended receptacles with feed through contacts
- Mates to standard D38999 plugs and tooled in standard inserts
- Removes the need for discrete wire termination when assembling connectors

HERMETIC 38999 SERIES III // AMPHENOL AEROSPACE & AMPHENOL MARTEC



- Available in standard 38999 and Series Five
- Offers superior electrical performance in a glass or epoxy-sealed connector
- Superior leak rate performance and available in wide variety of Mil-Spec configurations

SUB SYSTEMS

- I/O Signal Transmission and Control
- Power and Data Transmission
- Navigation Systems

PCB 38999 SERIES III // AMPHENOL AEROSPACE



- Ideal for printed circuit board applications
- Significantly eases cable to board wiring and contacts come pre-assembled in connectors
- Available in many shell varieties including double flange, clinch nut, and reduced flange

QUADRAX 38999 SERIES III // AMPHENOL AEROSPACE



- Offers several advantages for high data transfer rates, low power consumption, and excellent EMI compatibility
- Contacts form two 100 or 150 Ohm matched impedance differential pairs
- Available in size 8 crimp or PC tail styles

D-SUBMINIATURE //////////////////////////////////////

D-SUB // AMPHENOL PCD



- Available in Class M, D, and K QPL versions
- M2000 Series D-Sub connectors are MIL Qualified & meet the requirement of MIL-DTL-24308
- Conforming to applicable material, dimensional and performance requirements of MIL-DTL-24308 Space Class
- Terminations include cable or wire crimp and solder, straight and right angle PCB mount

D-SUB // POSITRONIC



- Includes: MACH-D, SCB, SND, SDD Series and Class M, D, K and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

D-SUB // ITT CANNON



- Includes: D*M, D*MM, D*MA Series with NM, NMB and GSFC qualified options
- High-performance and M24308 intermateable
- Conforming to applicable material, dimensional, and performance requirements of GSFC S-311-P4, GSFC S-311-P10, and MIL-DTL-24308 Class M
- Terminations include cable or wire crimp and solder, straight and right-angle PCB mount

MICRO-MINIATURE CIRCULAR //////////////////////////////////////

2M HIGH SPEED SERIES // AMPHENOL AEROSPACE



- Lightweight micro-miniature 38999-type connectors
- Multiple catalog insert arrangements available
- Fluoropolymer inserts optimized for high speed capability

KPD SERIES // ITT CANNON



- Monobloc-type hard insulators are made of strong, durable, thermosetting plastic
- The pin cavities feature a closed-down effect resulting in superior pin stability and positive axial alignment of the contacts
- Features rear contact insertion, release and extraction

M SERIES // LEMO



- Smallest multi-pin, fully shielded, vibration-secure and sealed connector available
- 360° EMC shielding protection
- Triplestart fast-locking ratchet coupling type

MKJ SERIES // ITT CANNON



- Lightweight micro-miniature connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

PUSH PULL //////////////////////////////////////

B, K, F SERIES // LEMO



- B/K/F Series: Self latching push pull coupling mechanism
- Operating temperature ranges: -55°C up to +250°C
- Watertight IP66/68 sealing options

RACK & PANEL //////////////////////////////////////

RNJ SERIES // AMPHENOL SOCAPEX



- Lightweight space saving design with EMI shielding
- Between 1 and 128 contacts in accordance with MIL-C-39029 standard
- Compatible with some M85049 rear accessories for MIL-DTL-38999 I connectors

RF & FIBER OPTIC ASSEMBLIES //////////////////////////////////////

FIBER OPTICS // ITT CANNON



- Reduced insertion loss
- Less channel-to-channel variance
- Easy integration into high density interconnect hardware

INSTABEND® PHASE STABLE CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Low-loss, highly flexible, foam-core micro coaxial cables
- Triple-shield construction
- Low outgassing materials per ASTM E595

MAXGAIN® CONNECTORS & ASSEMBLIES // TIMES MICROWAVE



- Optimized for lowest attenuation at 50 GHz
- Ultra stable insertion loss, phase and VSWR with flexing
- Flexible, low minimum bend radius

RF CONNECTORS & ASSEMBLIES // AMPHENOL SV MICROWAVE



- Smaller diameters for RF cables
- Increased signal density and decreased weight

SPACE OPERATIONS

Space operations allow astronauts to perform extra-vehicular activity outside the spacecraft while remaining safe with proper equipment. Many of these interconnects have EMI/RFI shielding to protect against harmful radiation.



MORE THAN A DISTRIBUTOR 



Watch our "More Than a Distributor" Video Here!

WHEN THE DESIGN MATTERS, PEI-Genesis DELIVERS

Our Engineered Solutions Group (ESG) offers expert engineering design services, taking your application requirements from concept to drawing to prototype to production. Our team is leveraged by world-class brands and specializes in custom, quick-turn, application-driven harsh environment interconnect and cable solutions. **Contact us to get your solution!**

38999 //////////////////////////////////////

PCB 38999 SERIES III // AMPHENOL AEROSPACE



- Ideal for printed circuit board applications
- Significantly eases cable to board wiring and contacts come pre-assembled in connectors
- Available in many shell varieties including double flange, clinch nut, and reduced flange

MICRO-MINIATURE CIRCULAR //////////////////////////////////

HERMETIC 2M SERIES // AMPHENOL AEROSPACE



- Provides superior sealing of 1x10⁻⁸ cc/sec helium
- Low profile shells for minimum box protrusion
- Available in a variety of coupling technologies including tri-start, push pull, bayonet, and dual start

MKJ SERIES // ITT CANNON



- Lightweight micro-miniature connectors
- Many options to choose from including hermetic, high speed, and PCB
- Various shell styles available to meet the specific needs of customer

PUSH PULL //////////////////////////////////////

HDx™ SERIES // ITT CANNON



- Anti-glare, non-reflective plating
- Lightweight, compact design
- Ultra-high density layouts

SUB SYSTEMS

- Communication and Reporting System

RECTANGULAR MICRO //////////////////////////////////////

NANO (M32139 TYPE) // ITT CANNON



- Micro twist pin contact system
- 0.025 Contact spacing
- 9 To 51 contact positions
- Knurled jack screw assembly hardware

RF & FIBER OPTIC ASSEMBLIES //////////////////////////////////

FIBER OPTICS // ITT CANNON



- Reduced insertion loss
- Less channel-to-channel variance
- Easy integration into high density interconnect hardware

OUTGASSING CAPABILITIES

For a connector to qualify as a space connector, the Volatile Organic Compounds (VOCs) must be extracted by baking the connectors at an elevated temperature in a vacuum-sealed oven. After this process is complete, the connectors are tested to verify that they meet the applicable standards (e.g., NASA, ESA, or military) for outgassing.

With our state-of-the-art equipment in our manufacturing facilities worldwide, PEI-Genesis can outgas a connector to meet space-qualified needs in a matter of hours rather than weeks. We have the ability to outgas electroless nickel-plated versions of MIL-DTL-38999s to convert them into space-grade Class G D38999s.

CONNECTOR SELECTOR





	26482				
	PV 26482 SERIES II	HIGH POWER SERIES	HV38999 SERIES	KJ SERIES	SERIES FIVE
	ITT CANNON	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	ITT CANNON	AMPHENOL AEROSPACE
Application	Rovers	Space Hotels	Launchers	Satellite, Launchers, Rovers	Satellites, Launchers, Rovers
Hermetic	Available	Available	No	Available	Available
RoHS Compliant	Available	Available	Available	Available	Available
Wire Gauge Range	24 to 12	8 to 0	28 to 0	28 to 8	23 to 12
Number of Circuits	3 to 61	2 to 4	1 to 8	3 to 128	2 to 128
EMI/RFI Shielding	Yes	Yes	Yes	Yes	Yes
Style	Circular	Circular	Circular	Circular	Circular
Operating Voltage	Up to 1,000 VAC	Up to 1250 VDC	Up to 4500 VAC	Up to 2,300 VAC	Up to 1,150 VAC
Current Rating (Amps)	Up to 23	Up to 150	Up to 250	Up to 23	Up to 23
Power & Signal on Same Layout	Yes	No	No	Yes	Yes
Operating Temperature	-67°F to 392°F -55°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C
Type of Coupling	Bayonet	Threaded	Threaded	Bayonet	Dual Start, Threaded
Life in Mating Cycles (min.)	500	10,000	500	500	500
Shell Material	Aluminum Alloy	Aluminum, Stainless Steel	Aluminum, Composite, Stainless Steel	Aluminium Alloy, Stainless Steel	Aluminum, Aluminum Bronze, Stainless Steel
Shell Plating	Cadmium or Electroless Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Electroless Nickel, Passivated, Olive Drab, Cadmium	Durmalon, Black Zinc Nickel, OD Cad, Electroless Nickel, AP 93
Positive Shell Polarization	Available	Shell Keying Used	Shell Keying Used	Available	Available
Insert Polarization Options	Available	No	No	No	No
Standard/Associated Specs.	MIL-DTL-26482 Series II	MIL-DTL-38999	MIL-DTL-38999	MIL-DTL-38999 Series II	MIL-DTL-38999
Contact Plating	Gold	Silver	Silver or Gold	Gold	Gold
Shock Test (g's)	150	300	300	300	300
Vibration Test (g's)	20	60	60	Per M38999	60
Shell Color	Olive Drab or Silver	Green, Silver, or Black	Green, Silver, or Black	Olive Drab or Silver	Green, Silver, or Black
User Polarization	No	Yes	Yes	No	No
Crimp	X	X	X	X	X
Solder		X	X		X
Printed Circuit Solder	X			X	X
Printed Circuit Press Fit					
Thermocouple	X	X	X	X	
Wire Wrap					
Coax	X	X	X	X	
Pre-Terminated					
Fiber Optic	X			X	
High Voltage			X	X	
First-Mate Last-Break					X

*SEALING METHODS MAY VARY






	38999					
	STAINLESS STEEL 38999	STAINLESS STEEL 38999	8LTS 38999 SERIES I	8TS 38999 SERIES II	JT/JTP 38999 SERIES II	8DS SERIES 38999 SERIES III
	CONESYS	AMPHENOL AEROSPACE	SOURIAU BY EATON	SOURIAU BY EATON	AMPHENOL AEROSPACE	SOURIAU BY EATON
Application	Launchers	Launchers	Satellites, Launchers, Rovers	Satellite, Launchers, Rovers	Satellites, Launchers, Rovers	Satellites, Launchers, Rovers
Hermetic	Available	Available	No	No	Available	Available
RoHS Compliant	Available	Available	Available	Available	Available	Available
Wire Gauge Range	28 to 10	28 to 8	26 to 8	26 to 12	28 to 12	26 to 4
Number of Circuits	2 to 128	1 to 128	2 to 128	3 to 128	3 to 128	1 to 128
EMI/RFI Shielding	Yes	Yes	Yes	Yes	Yes	Yes
Style	Circular	Circular	Circular	Circular	Circular	Circular
Operating Voltage	300 to 900 VAC	Up to 1250 VDC	Up to 575 VAC	Up to 575 VAC	Up to 1250 VDC	Up to 575 VAC
Current Rating (Amps)	Up to 33	Up to 150	Up to 45	Up to 23	1.5 to 23	Up to 80
Power & Signal on Same Layout	Yes	Yes	Yes	Yes	Yes	Yes
Operating Temperature	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C
Type of Coupling	Bayonet, Tri-Start Threaded	Threaded	Bayonet	Bayonet	Bayonet	Tri-Start Threaded
Life in Mating Cycles (min.)	500	500	500	500	500	500
Shell Material	Stainless Steel Shell, Passivated, Firewall Stainless Steel Shell, Electrodeposited Nickel, Firewall	Stainless Steel	Aluminum Alloy	Aluminum Alloy	Aluminum, Stainless Steel	Aluminum, Stainless Steel
Shell Plating	Stainless Steel	Stainless Steel	Nickel	Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Nickel / Passivated
Positive Shell Polarization	Available	Shell Keying Used	Available	Available	Shell Keying Used	Available
Insert Polarization Options	No	No	No	No	No	No
Standard/Associated Specs.	MIL-DTL-38999	MIL-DTL-38999	ESA/ESCC 3401/052 (QPL) MIL-DTL-38999 Series I class G (QPL)	ESA/ESCC 3401/044 (QPL) MIL-DTL-38999 Series II class G (QPL)	MIL-DTL-38999 Series I	ESA/ESCC 3401/056 (QPL) MIL-DTL-38999 Series III Class G (QPL) SSQ21635 NATC (NASA Thread Coupling) intermateable
Contact Plating	Gold	Gold	Gold	Gold	Gold	Gold
Shock Test (g's)	300	300	75	75	300	75
Vibration Test (g's)		60	50	50	43.7	50
Shell Color	Silver		Silver	Silver	Green, Silver, or Black	Silver
User Polarization	No	Yes	No	No	Yes	No
Crimp	X	X	X	X	X	X
Solder		X			X	
Printed Circuit Solder	X					X
Printed Circuit Press Fit						
Thermocouple		X			X	
Wire Wrap						
Coax	X	X	X		X	X
Pre-Terminated						
Fiber Optic		X			X	
High Voltage						
First-Mate Last-Break						

*SEALING METHODS MAY VARY

CONNECTOR SELECTOR

	38999			
	BREAK AWAY FAIL-SAFE LANYARD RELEASE 38999 SERIES III	BULKHEAD FEED-THROUGH 38999 SERIES III	HERMETIC 38999 SERIES III	OVAL CONTACT SYSTEM 38999 SERIES III
				
	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE
Application	Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Satellites
Hermetic	No	Available	Available	No
RoHS Compliant	Available	Available	Available	Available
Wire Gauge Range	28 to 8	28 to 8	28 to 8	26 to 24
Number of Circuits	3 to 128	3 to 128	3 to 128	1 to 21
EMI/RFI Shielding	Yes	Yes	No	Yes
Style	Circular	Circular	Circular	Circular
Operating Voltage	Up to 1250 VDC	Up to 1250 VDC	Up to 1250 VDC	Up to 1250 VDC
Current Rating (Amps)	Up to 150	Up to 150	Up to 17	Up to 150
Power & Signal on Same Layout	Yes	Yes	No	No
Operating Temperature	-85°F to 392°F -65°C to 200°C	-85°F to 392°F -65°C to 200°C	-67°F to 257°F -55°C to 125°C	-85°F to 392°F 65°C to 200°C
Type of Coupling	Bayonet, Pull-Pull	Threaded	Threaded	Threaded
Life in Mating Cycles (min.)	500	500	500	500
Shell Material	Aluminum and Composite Hybrid	Aluminum, Composite, Stainless Steel	Stainless Steel	Aluminum, Composite, Stainless Steel
Shell Plating	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Stainless Steel with Nickel Plate, Passivated Stainless Steel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel
Positive Shell Polarization	Shell Keying Used	Shell Keying Used	Shell Keying Used	Shell Keying Used
Insert Polarization Options	No	No	No	No
Standard/Associated Specs.	MIL-DTL-38999, MIL-DTL-38999/31D, MIL-STD-202F (Method 204), MIL-S-901D, MIL-STD-1760, MIL-C-83538	MIL-DTL-38999	MIL-DTL-38999	MIL-DTL-38999
Contact Plating	Gold	Gold	Gold	Gold
Shock Test (g's)	300	300	300	300
Vibration Test (g's)	60	60	60	60
Shell Color	Green, Silver, or Black	Green, Silver, or Black	Green, Silver, or Black	Green, Silver, or Black
User Polarization	Yes	Yes	Yes	Yes
Crimp	X	X	X	X
Solder	X	X	X	X
Printed Circuit Solder				
Printed Circuit Press Fit				
Thermocouple	X	X	X	X
Wire Wrap				
Coax	X	X	X	X
Pre-Terminated				
Fiber Optic				
High Voltage				
First-Mate Last-Break				

*SEALING METHODS MAY VARY

	38999				5015
	PCB 38999 SERIES III	QUADRAX 38999 SERIES III	SPLIT PAIR QUADRAX RECTANGULAR 38999 SERIES III	TV/TVP SERIES 38999 SERIES III	5015 CV SERIES III
					
	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	ITT CANNON
Application	Satellites, Launchers, Rovers, Space Hotels, Space Operations	Satellites, Launchers, Rovers, Space Hotels	Satellites	Satellites, Launchers, Rovers	Rovers, Launchers
Hermetic	Available	No	No	Available	No
RoHS Compliant	Available	Available	Available	Available	Available
Wire Gauge Range	28 to 8	26 to 22	26 to 24	28 to 8	20 to 0
Number of Circuits	1 to 128	4 to 46	4 to 46	1 to 128	1 to 52
EMI/RFI Shielding	No	Yes	Yes	Yes	No
Style	Circular	Circular	Rectangular	Circular	Circular
Operating Voltage	Up to 1250 VDC	Up to 1250 VDC	500 Vrms max. at sea level, DWV 1000 VAC rms between all inner contacts @ sea level	Up to 1250 VDC	Up to 3,000 VAC
Current Rating (Amps)	Up to 150	Up to 150	Up to 150	Up to 150	Up to 150
Power & Signal on Same Layout	No	Yes	Yes	Yes	Yes
Operating Temperature	-85°F to 392°F -65°C to 200°C	-40°F to 185°F -40°C to 85°C	-85°F to 347°F -65°C to 175°C	-85°F to 392°F -65°C to 200°C	-67°F to 257°F -55°C to 125°C, (Firewall) -67°F to 350.6°F -55°C to +177°C
Type of Coupling	Threaded	Threaded	Threaded	Threaded	Threaded
Life in Mating Cycles (min.)	500	500	500	500	100
Shell Material	Aluminum, Composite, Stainless Steel	Aluminum, Composite, Stainless Steel	Aluminum, Composite, Stainless Steel	Aluminum, Composite, Stainless Steel	Aluminium Alloy, Stainless Steel
Shell Plating	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Aluminum Bronze, Electroless Nickel, Stainless Steel, Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Electroless Nickel, Olive Drab, Cadmium, Zinc Cobalt
Positive Shell Polarization	Shell Keying Used	Shell Keying Used	Shell Keying Used	Shell Keying Used	
Insert Polarization Options	No	No	No	No	Available
Standard/Associated Specs.	MIL-DTL-38999, Contacts meet all applicable requirements of AS39029	MIL-DTL-38999 receptacle interface per EIA-364-10E	MIL-DTL-38999	MIL-DTL-38999 Series III	SAE-AS50151
Contact Plating	Gold	Gold	Gold	Gold	Gold
Shock Test (g's)	300	300	300	300	500, 100 (Firewall)
Vibration Test (g's)	60	60	60	60	20
Shell Color	Green, Silver, or Black	Green, Silver, or Black	Green, Silver, or Black	Green, Silver, or Black	Olive Drab, Nickel or Stainless
User Polarization	Yes	Yes	Yes	Yes	No
Crimp	X	X	X	X	X
Solder	X	X	X	X	X
Printed Circuit Solder	X			X	X
Printed Circuit Press Fit	X				
Thermocouple	X	X	X	X	x
Wire Wrap					
Coax	X	X	X	X	
Pre-Terminated	X				
Fiber Optic				X	
High Voltage					X
First-Mate Last-Break					

*SEALING METHODS MAY VARY





CONNECTOR SELECTOR

	D-SUBMINIATURE				ETHERNET		MICRO D-SUB			
	D-SUB SERIES	MACH-D SERIES	NM/NMB SERIES	SCB SERIES	SDD	SND	RJ45	DLMM	DMM	DURA-CON™
										
	AMPHENOL PCD	POSITRONIC	ITT CANNON	POSITRONIC	POSITRONIC	POSITRONIC	AMPHENOL PCD	NICOMATIC	NICOMATIC	CINCH
Application	Satellites, Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Satellites, Launchers, Rovers, Space Hotels	Launchers	Satellites, Launchers, Rovers	Satellites, Launchers, Rovers	Satellites, Launchers, Rovers
Hermetic	Available	No	Available	No	No	No	Available	No	No	Available
RoHS Compliant	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
Wire Gauge Range	28 to 20	30 to 8	26 to 18	30 to 8	30 to 20	30 to 18	26 to 24	28 to 12	28 to 12	28 to 26
Number of Circuits	9 to 104	9 to 104 and Combo-D available	2 to 78	9 to 104 and Combo-D available	9 to 104 and Combo-D available	9 to 104 and Combo-D available	-	2 to 120	2 to 120	9 to 100
EMI/RFI Shielding	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Style	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular	Circular	Rectangular	Rectangular	Rectangular
Operating Voltage	1,000 VAC	300 VAC	500 VAC	300 VAC	300 VAC	300 VAC	-	600 (signal) 800 (power & coax)	600 (signal) 800 (power & coax)	600 VAC
Current Rating (Amps)	5 to 7.5	Up to 75	7.5	Up to 50	Up to 12	Up to 18	-	3A (signal) 20A (power & coax)	3A (signal) 20A (power & coax)	3
Power & Signal on Same Layout	Signal	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes
Operating Temperature	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to +125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-40°F to 186°F -40°C to 85°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-55°C to 125°C -67°F to 257°F
Type of Coupling	Without Hardware	Jackscrews	Screwlock, Jackpost	Jackscrews	Jackscrews	Jackscrews	Threaded, Bayonet, Push Pull, Reverse Bayonet	Screwlocks	Screwlocks	Screwlocks
Life in Mating Cycles (min.)	500	500	500	1,000	1,000	1,000	500	500	500	500
Shell Material	Steel, Brass	Aluminum, Stainless Steel	Stainless Steel, Brass or Aluminum	Brass	Brass	Brass	AL, Marine Bronze, Stainless Steel, Thermoplastic	Metalized Composite	Aluminum	Aluminum
Shell Plating	Nickel, Gold	Aluminum- Electroless Nickel, Cadmium and Chemical Conversion / Stainless Steel- Passivated	Passivated Gold, Nickel	0.000050 Inch [1.27 Microns] Gold Over Copper Plate	0.000050 Inch [1.27 Microns] Gold Over Copper Plate	0.000050 Inch [1.27 Microns] Gold Over Copper Plate	Olive Drab Cadmium, Black Zinc Nickel, Nickel, All-Over AL	Nickel	Nickel	Nickel
Positive Shell Polarization	Available	Available	Available	Available	Available	Available	No			Available
Insert Polarization Options	-	Available	Keying available (Aluminum Shells)	Available	Available	Available	Available			Available
Standard/Associated Specs.	MIL-D-24308	MIL-DTL-24308	M24308, NASA S311P	GSFC S-311-P4 & GSFC S-311-P10, MIL-DTL-24308 Class M, ASTM E-595 & NASA-RP-1124	GSFC S-311-P4 & GSFC S-311-P10, MIL-DTL-24308 Class M, ASTM E-595 & NASA-RP-1124	GSFC S-311-P4 & GSFC S-311-P10, MIL-DTL-24308 Class M, ASTM E-595 & NASA-RP-1124	MIL-DTL38999, EN3645, EN3155, VG (VG95328, VG95319, VG96944, VG95218, VG96949)	MIL-DTL-83513- G & MIL-DTL-55302-G	MIL-DTL-83513- G & MIL-DTL-55302-G	MIL-DTL-83513
Contact Plating	Gold	Gold	Gold	Copper Alloy	Copper Alloy	Copper Alloy	Gold	Gold	Gold	Gold
Shock Test (g's)	EIA-364-27, Test Condition E	Pass per MIL-DTL-24308J, EIA-364-27, test condition E	Per M24308	-	-	-	IK06 - Weight of 250g drop from 40cm	100	100	50
Vibration Test (g's)	EIA-364-28, Test Condition IV	43.92g	Per M24308	-	-	-	10g	20 gn (signal) 15 gn (power & signal)	20 gn (signal) 15 gn (power & signal)	20
Shell Color	Bright Nickel/Gold Yellow	Silver or Gold Tone	Gold, Nickel	Gold	Gold	Gold	Olive Green, Black, Nickel, Marine Bronze, or Stainless Steel	Silver	Silver	Nickel
User Polarization		Yes		Yes	Yes	Yes		Yes	Yes	Yes
Crimp	X	X	X	X	X	X		X	X	No
Solder	X	X	X	X	X	X	X	X	X	X
Printed Circuit Solder	X	X	X	X	X	X	X	X	X	X
Printed Circuit Press Fit		X		X	X	X				
Thermocouple		X		X	X	X				
Wire Wrap										
Coax		X	X (Combo-D)	X	X	X		X	X	X
Pre-Terminated		X		X	X	X				X
Fiber Optic			X (Combo-D)							X
High Voltage		X	x	X	X	X				
First-Mate Last-Break		X		X	X	X				


*SEALING METHODS MAY VARY

*SEALING METHODS MAY VARY

CONNECTOR SELECTOR





	MICRO D-SUB			
	EMM	MDM	SERIES 100 (VARIOUS)	2M
				
	NICOMATIC	ITT CANNON	AMPHENOL CANADA	AMPHENOL AEROSPACE
Application	Satellites, Launchers, Rovers	Satellites, Launchers, Rovers	Satellites, Rovers	Satellites, Launchers
Hermetic	No	No	Available	Available
RoHS Compliant	No	Available	Available	Available
Wire Gauge Range	30 to 24	32 to 24	32 to 24	20 to 12
Number of Circuits	2 to 60	9 to 100	9 to 148	1 to 130
EMI/RFI Shielding	No	Yes	Yes	Yes
Style	Rectangular	Rectangular	Rectangular	Circular
Operating Voltage	Up to 750 VAC	200 VAC	600 VAC	Up to 1800 VAC
Current Rating (Amps)	3.4	3	3	23
Power & Signal on Same Layout	No	Yes	Yes	Yes
Operating Temperature	-85°F to 200°F -65°C to 260°C	-85°F to 257°F -65°C to 125°C, (High-temp) -85°F to 392°F -65°C to 200°C	-67°F to 302°F -55°C to 125°C	-85°F to 347°F -65°C to 175°C
Type of Coupling	Screwlocks	Screwlock, Jackpost	M83513	Push Pull Bayonet, Triple & Dual-Lead Threaded
Life in Mating Cycles (min.)	500	500	500	250/2000
Shell Material	High Performance Glass Fiber Composite	Aluminum Alloy	Aluminum, Thermoplastic	Aluminum, Stainless Steel
Shell Plating	-	Cadmium, Electroless Nickel	Anodized, Zinc Nickel (Black Chromate), Cadmium (Yellow Chromate), Olive Drab Cadmium, Electroless Nickel, Gold, Nickel Teflon	Electroless Nickel, Black Anodized, Cadmium, Durmalon, Passivated, Zinc-Nickel (black or green)
Positive Shell Polarization	Available	Available	Available	Available
Insert Polarization Options		Keystone-shaped shells	Available	Available
Standard/Associated Specs.	MIL-DTL-83513- G & MIL-DTL-55302-G	MIL-DTL-83513		
Contact Plating	Gold	Gold	Gold over Nickel	Gold
Shock Test (g's)	160	50	50	300
Vibration Test (g's)	45g	20	20	37
Shell Color	Black	Silver or Yellow		Olive Drab, Silver, or Bronze
User Polarization	Yes	No	Yes	No
Crimp	X	X	X	X
Solder		X	X	X
Printed Circuit Solder		X	X	X
Printed Circuit Press Fit			X	X
Thermocouple			X	
Wire Wrap				
Coax		X	X	
Pre-Terminated		X	X	
Fiber Optic			X	
High Voltage		X	X	
First-Mate Last-Break				

*SEALING METHODS MAY VARY






	MICRO-MINIATURE CIRCULAR				
	2M805	2M HERMETICS	2M HIGH SPEED	2M PCB	2M PYTHON
					
	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE	AMPHENOL AEROSPACE
Application	Launchers	Launchers, Space Operations	Satellites, Space Hotels	Rovers	Satellites
Hermetic	Available	Available	Available	Available	Available
RoHS Compliant	Available	Available	Available	Available	Available
Wire Gauge Range	20 to 12	20 to 12	28 to 24		20 to 12
Number of Circuits	1 to 130	1 to 130	2 to 79	1 to 130	1 to 130
EMI/RFI Shielding	Yes	Yes	Yes	Yes	Yes
Style	Circular	Circular	Circular	Circular	Circular
Operating Voltage	Up to 1,800 VAC	Up to 1,800 VAC	Up to 1,800 VAC	Up to 1,800 VAC	Up to 1,800 VAC
Current Rating (Amps)	20	20	20	20	20
Power & Signal on Same Layout	Yes	Yes	No	Yes	Yes
Operating Temperature	-67°F to 392°F -55°C to 200°C	-67°F to 392°F -55°C to 200°C	-40°F to 185°F -40°C to 85°C	-67°F to 392°F -55°C to 200°C	-67°F to 392°F -55°C to 200°C
Type of Coupling	Tri-Start Threaded	Push Pull Bayonet, Triple & Dual-Lead Threaded	Push Pull, Bayonet, Triple-Lead Threaded	Push Pull Bayonet, Triple & Dual-Lead Threaded	Push Pull Bayonet, Triple & Dual-Lead Threaded
Life in Mating Cycles (min.)	500		500		
Shell Material	Aluminum, Stainless Steel, Passivated Stainless Steel	Stainless Steel	Aluminum, Stainless Steel, Passivated Stainless Steel	Aluminum, Stainless Steel, Passivated Stainless Steel	Aluminum, Stainless Steel, Passivated Stainless Steel
Shell Plating	Electroless Nickel, Stainless Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Passivated and Electrolytic Nickel	Electroless Nickel, Stainless Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Electroless Nickel, Stainless Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel	Electroless Nickel, Stainless Steel, Olive Drab Cadmium, Durmalon, Black Zinc-Nickel
Positive Shell Polarization			Available		
Insert Polarization Options			Available		
Standard/Associated Specs.	MIL-STD-810				
Contact Plating	Gold or Copper Alloy		Gold		
Shock Test (g's)	300		250	300	
Vibration Test (g's)	43.9		10		
Shell Color	Green, Silver, or Black		Green, Silver, or Black	Silver	Green, Silver, or Black
User Polarization			Yes		
Crimp	X		X	X	X
Solder	X	X	X		X
Printed Circuit Solder	X	X	X	X	
Printed Circuit Press Fit				X	
Thermocouple					
Wire Wrap					
Coax			X		
Pre-Terminated			X		
Fiber Optic			X		
High Voltage					
First-Mate Last-Break					

*SEALING METHODS MAY VARY

CONNECTOR SELECTOR





	MICRO-MINIATURE CIRCULAR			MODULAR POWER & SIGNAL
	KPD SERIES	M SERIES	MKJ SERIES	OPTIMUS EN4165
				
	ITT CANNON	LEMO	ITT CANNON	NICOMATIC
Application	Launchers, Space Hotels, Rovers	Satellites, Launchers, Space Hotels	Satellites, Launchers, Space Operations, Rovers, Space Hotels	Launchers
Hermetic	Available	Available	No	No
RoHS Compliant	Available	Available	Available	No
Wire Gauge Range	24 to 20	32 to 1	28 to 8	22 to 8
Number of Circuits	2 to 4	1 to 114	1 to 130	1 to 20
EMI/RFI Shielding	Yes	Yes	Available	Yes
Style	Circular	Circular	Circular	Rectangular
Operating Voltage	1500 to 2300 VAC RMS at Sea level. 375 to 500 VAC RMS at 70,000 Ft altitude	Up to 1,000 VAC	Up to 1800 VAC	Up to 1,500 VAC
Current Rating (Amps)	7.5	Up to 430	Up to 46	5 to 46
Power & Signal on Same Layout	Signal only	Yes	Yes	Yes
Operating Temperature	-67°F to 257°F -55°C to 125°C	-67°F to 392°F -20°C to 200°C	-85°F to 347°F 65°C to 175°C	-67°F to 392°F -55°C to 175°C
Type of Coupling	Bayonet	Ratcheted Twist	Push-Pull, Bayonet, Breakaway, Triple & Double Start Threaded	Rack, Coupling Screw
Life in Mating Cycles (min.)	500	3,000	Up to 2,000	500
Shell Material	Aluminum Alloy and steel passivated	Aluminum or Brass	Aluminum Alloy, Stainless Steel	Aluminum
Shell Plating	Olive Drab Chromate Coating Over Cadmium Plating or Electroless Nickel	Anthraccite Nickel or Chrome	Black Zinc Nickel, Electroless Nickel, Cadmium, Passivated, Teflon Nickel	Black Nickel, Olive Drab Cadmium
Positive Shell Polarization	Yes	Available	Available	No
Insert Polarization Options	Yes	Available	No	Available
Standard/Associated Specs.	NASA 40M38298 and 40M39569	-	Nett Warrior (MKJ4)	EN4165
Contact Plating	Gold	Gold	Gold	Gold
Shock Test (g's)	50 G's +/-15%	300	300	1 shock/direction of each axis, half sinus form, amplitude 100g, duration 6ms
Vibration Test (g's)	MIL STD 1344, Method 205, Test Condition II	30	30	Random Frequency from 10 to 2000Hz, spectral density
Shell Color	Silver or Olive drab	Anthraccite Nickel or Matte Chrome	Olive Drab, Silver, Black	Olive Drab, Gray, Silver
User Polarization		No	No	Yes
Crimp	X	X	X	X
Solder	X		X	
Printed Circuit Solder	X	X	X	X
Printed Circuit Press Fit				
Thermocouple	X	X		
Wire Wrap				
Coax		X		
Pre-Terminated				
Fiber Optic		X	X	
High Voltage	X			
First-Mate Last-Break				

*SEALING METHODS MAY VARY





	MODULAR POWER & SIGNAL		PUSH PULL		
	SIM EN4165	SP MAX	B SERIES	F SERIES	HDx™ SERIES
					
	AMPHENOL PCD AMPHENOL AIR LB FRANCE	POSITRONIC	LEMO	LEMO	ITT CANNON
Application	Launchers	Satellites	Satellites, Launchers, Space Hotels	Satellites, Launchers, Space Hotels	Launchers, Space Operations, Rovers
Hermetic	No	No	Available	Available	Available
RoHS Compliant	Available	Available	Available	Available	Available
Wire Gauge Range	23 to 8	26 to 10	32 to 0	32 to 18	28 to 22
Number of Circuits	1 to 30	6 to 64	2 to 64	2 to 66	9 to 16
EMI/RFI Shielding	Yes	Yes	Yes	Yes	Yes
Style	Rectangular	Hybrid Rectangular	Circular	Circular	Circular
Operating Voltage	Up to 1,800 VAC	Up to 600 VAC	Up to 3,000 VAC	Up to 1,000 VAC	Up to 250 VAC
Current Rating (Amps)	5 to 80	35	Up to 50	Up to 15	Up to 5
Power & Signal on Same Layout	Yes	Yes	Yes	-	Yes
Operating Temperature	-67°F to 392°F -55°C to 175°C	-67°F to 392°F -55°C to 175°C	-67°F to 482°F -55°C to 250°C	-67°F to 392°F -55°C to 200°C	-59.8°F to 257°F -51°C to 125°C
Type of Coupling	Push Pull, Rack, Coupling Screw	Jackscrews, Keying Guides, Quick Locking System	Push Pull	Push Pull	Breakaway or Locking
Life in Mating Cycles (min.)	500	500	5,000	1,000	5,000
Shell Material	Aluminum Alloy, Thermoplastic	Aluminum	Brass, Aluminum, or Stainless Steel	Aluminum or Brass	Brass
Shell Plating	Black Nickel, Olive Drab Cadmium, Bright Nickel	Electroless Nickel, Electroless Nickel PTFE	Chrome or Anodize	Anthraccite Nickel or Chrome	Ruthenium, over Electroless Nickel
Positive Shell Polarization	No	Available	Available	Available	Available
Insert Polarization Options	Available	Available	Available	Available	Available
Standard/Associated Specs.	EN4165	Performance compatibility to EN4165 and DO-160	-	-	
Contact Plating	Copper or Aluminum	Gold flash, 0.76µm Au (min) over 0.76µm Ni (min) over Cu, 1.27µm Au (min) over 1.52µm Ni (min) over Cu	Gold	Gold	Gold
Shock Test (g's)	1 shock/direction of each axis, half-sinusoidal form, amplitude 100gn, duration 6ms.	EIA 364-27 Condition D	100	100	50
Vibration Test (g's)	Random Frequency from 10 to 2000Hz, spectral density 0.4g ² /Hz, 8h/axis	Random vibration per EN 60068-2-64 Method B Sine vibration per MIL-DTL-202 Procedure 204	15	15	15
Shell Color	Olive Drab, Gray, Silver, and Black	Silver	Matte Chrome or Black	Anthraccite Nickel or Matte Chrome	Dark Gray
User Polarization	Yes	Yes	No	No	No
Crimp	Yes	X	X	X	
Solder		X	X		X
Printed Circuit Solder	X	X	X	X	X
Printed Circuit Press Fit	X	X			
Thermocouple		X	X	X	
Wire Wrap					
Coax	Quadax, Concentric, and Differential Twinax Modules Available	X	X		
Pre-Terminated	X	X			
Fiber Optic	X	X	X	X	
High Voltage	X	X	X		
First-Mate Last-Break		X	X		

*SEALING METHODS MAY VARY

CONNECTOR SELECTOR

	PUSH PULL	RACK & PANEL		
	K SERIES	RNJ SERIES	ZMMA SERIES	ZR393 SERIES
				
	LEMO	AMPHENOL SOCAPEX	AMPHENOL CANADA	AMPHENOL CANADA
Application	Satellites, Launchers, Space Hotels	Launchers, Space Hotels	Launchers	Launchers
Hermetic	Available	Available	Available	Available
RoHS Compliant	Available	Available	Available	Available
Wire Gauge Range	32 to 0	28 to 12	30 to 0	30 to 8
Number of Circuits	2 to 64	3 to 128	1 to 9999	1 to 9999
EMI/RFI Shielding	Yes	No	Yes	Yes
Style	Circular	Circular	Rectangular	Rectangular
Operating Voltage	Up to 3000 VAC	Up to 1,250 VAC	Up to 1500 VAC	Up to 1500 VAC
Current Rating (Amps)	Up to 50		Up to 500	Up to 500
Power & Signal on Same Layout	Yes		Yes	Yes
Operating Temperature	-67°F to 392°F -55°C to 200°C	-85°F to 347°F -65°C to +175°C	-85°F to 257°F -65°C to 125°C	-85°F to 257°F -65°C to +125°C
Type of Coupling	Push Pull		ARINC 600	AS39029
Life in Mating Cycles (min.)	5,000	500	500	500
Shell Material	Brass, Aluminum, Stainless Steel	Aluminum	Aluminum	Aluminum
Shell Plating	Chrome or Anodize	Olive Drab, Nickel	Anodized, Zinc Nickel (Black Chromate), Cadmium (Yellow Chromate), Olive Drab Cadmium, Electroless Nickel, Gold, Nickel Teflon	Anodized, Zinc Nickel (Black Chromate), Cadmium (Yellow Chromate), Olive Drab Cadmium, Electroless Nickel, Gold, Nickel Teflon
Positive Shell Polarization	Available		Available	Available
Insert Polarization Options	Available		Available	Available
Standard/Associated Specs.	-	DAT C 5935 x 0005 HE308 21, 25, 26 & 27T		
Contact Plating	Gold	Gold	Gold over Nickel	Gold over Nickel
Shock Test (g's)	100	150g 3 m/s 1/3 sinus	50	50
Vibration Test (g's)	15	28g	20	20
Shell Color	Matte Chrome or Black			
User Polarization	No	No	Yes	Yes
Crimp	X	X	X	X
Solder	X		X	X
Printed Circuit Solder	X	X	X	X
Printed Circuit Press Fit			X	X
Thermocouple	X		X	X
Wire Wrap		X		
Coax	X		X	X
Pre-Terminated			X	X
Fiber Optic	X		X	X
High Voltage	X		X	X
First-Mate Last-Break	X		X	X

*SEALING METHODS MAY VARY

	RECTANGULAR MICRO	ACCESSORIES		
	NANO (M32139 TYPE)	RMM	ALUMALIGHT SERIES BACKSHELLS	2M BACKSHELLS
				
	ITT CANNON	AMPHENOL CANADA	AMPHENOL PCD	AMPHENOL AEROSPACE
Application	Satellites, Launchers, Rovers, Space Operations	Satellites, Launchers	Satellites, Launchers	Launchers
Hermetic	No	No		
RoHS Compliant	Available	Available	Available	Available
Wire Gauge Range	32 to 30	26 to 24	-	
Number of Circuits	9 to 51	2 to 32	-	
EMI/RFI Shielding	No	No	Yes	Yes
Style	Rectangular	Rectangular	Straight, 45° and 90°	
Operating Voltage	200 VAC	Up to 800 VAC		
Current Rating (Amps)	1		-	
Power & Signal on Same Layout	No	Yes	-	
Operating Temperature	-67°F to 257°F -55°C to 125°C	-76°F to 302°F -60°C to +150°C	-85°F to 347°F -65°C to 175°C	-85°F to 347°F -65°C to 175°C
Type of Coupling	Scwlock, Jackpost	Custom	Self Locking	
Life in Mating Cycles (min.)	500	500	10	
Shell Material	Aluminum Alloy, Steel	Thermoplastic	Aluminum	Aluminum, Stainless Steel
Shell Plating	Cadmium, Electroless Nickel	-	Electroless Nickel, Cadmium, Black Zinc Nickel	Electroless Nickel, OD Cad, Durmalon, Black Zinc Nickel, OD Zinc Nickel, Black Electroless Nickel, AP 93
Positive Shell Polarization	Available	Available	-	
Insert Polarization Options	No	No	-	
Standard/Associated Specs.			-	
Contact Plating	Gold	Gold over Nickel	-	
Shock Test (g's)	100	50	1/2 Sine 100G 6Milli sec	
Vibration Test (g's)	20	20	43.92 50-200Hts Frequency	
Shell Color	Silver or Yellow			Silver, Black, Green
User Polarization		No		
Crimp	X	X		
Solder		X		
Printed Circuit Solder	X	X		
Printed Circuit Press Fit		X		
Thermocouple		X		
Wire Wrap				
Coax		X		
Pre-Terminated		X		
Fiber Optic				
High Voltage		X		
First-Mate Last-Break				

*SEALING METHODS MAY VARY

CONNECTOR SELECTOR

RF & FIBER OPTICS

RF CONNECTORS & ASSEMBLIES 2.4mm

RF CONNECTORS & ASSEMBLIES 2.92mm

RF CONNECTORS & ASSEMBLIES SMA

RF CONNECTORS & ASSEMBLIES SMP



AMPHENOL SV MICROWAVE

	AMPHENOL SV MICROWAVE	AMPHENOL SV MICROWAVE	AMPHENOL SV MICROWAVE	AMPHENOL SV MICROWAVE
Coupling	Threaded	Threaded	Threaded	Push-On
Body Finish	Passivated	Passivated	Passivated	Passivated
Cable Type	.047 / .085 Flexible Coax	.047 / .085 / .141 Flexible Coax	.047 / .085 / .141 Flexible Coax	.047 / .085 Flexible Coax
Frequency	50 GHz	40 GHz	18 GHz	18 GHz, 26.5 GHz, 40 GHz available
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Shielding Effectiveness	≥-100dB	≥-100dB	≥-90dB	≥ -80 dB DC - 3 GHz, ≥ -65 dB 3 - 26.5 GHz
Dielectric Withstanding Voltage	500 VRMS	750 VRMS	1000 VRMS	500 VRMS
Mating Cycles	500	500	500	LD - 500, FD - 100, SB - 1000
Intermateability	1.85mm	SMA	2.92mm	N/A
Temperature Rating	-85°F to 329°F -65°C to +165°C	-85°F to 329°F -65°C to +165°C	-85°F to 329°F -65°C to +165°C	-85°F to 329°F -65°C to +165°C
Vibration	MIL-STD-202, Method 204, Condition D	MIL-STD-202, Method 204, Condition D	MIL-STD-202, Method 204, Condition D	MIL-STD-202, Method 204, Condition D
Corrosion (salt spray)	MIL-STD-202, Method 101, Condition B	MIL-STD-202, Method 101, Condition B	MIL-STD-202, Method 101, Condition B	MIL-STD-202, Method 101, Condition B
Shock	MIL-STD-202, Method 213, Condition I	MIL-STD-202, Method 213, Condition I	MIL-STD-202, Method 213, Condition I	MIL-STD-202, Method 213, Condition I
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B	MIL-STD-202, Method 106, Less Step 7B	MIL-STD-202, Method 106, Less Step 7B	MIL-STD-202, Method 106, Less Step 7B
Thermal Shock	MIL-STD-202, Method 107, Condition B	MIL-STD-202, Method 107, Condition B	MIL-STD-202, Method 107, Condition B	MIL-STD-202, Method 107, Condition B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.	MIL-STD-202, Method 105, Condition C, 70k Ft.	MIL-STD-202, Method 105, Condition C, 70k Ft.	MIL-STD-202, Method 105, Condition C, 70k Ft.

*Also available in RG cable types

CONNECTOR SELECTOR

RF & FIBER OPTICS ASSEMBLIES

MAXGAIN® CONNECTORS & ASSEMBLIES MGS-300

MAXGAIN® CONNECTORS & ASSEMBLIES MGS-200

MAXGAIN® CONNECTORS & ASSEMBLIES MGS-160

MAXGAIN® CONNECTORS & ASSEMBLIES MGS-130

INSTABEND® PHASE STABLE CONNECTORS & ASSEMBLIES IBPS-092

INSTABEND® PHASE STABLE CONNECTORS & ASSEMBLIES IBPS-047



TIMES MICROWAVE

	TIMES MICROWAVE	TIMES MICROWAVE	TIMES MICROWAVE	TIMES MICROWAVE	TIMES MICROWAVE	TIMES MICROWAVE
Connector 1	SMA Male Straight	SMA or Type K Male Straight	SMA or 2.92mm Male Straight	2.4mm Male Straight	SMA, Type K Male Straight or Mini SMP Female	SMA Male, Type K Male or Female Straight
Connector 2	SMA Male Straight	SMA or Type K Male Straight	SMA or 2.92mm Male Straight	2.4mm Male Straight	SMA, Type K Male Straight or Mini SMP Female	SMA Male, Type K Male or Female Straight
Connector Loss (per pair)	0.06 x √f (GHz)	0.06 x √f (GHz)	0.08 x √f (GHz)	0.08 x √f (GHz)	0.06 x √f (GHz)	0.06 x √f (GHz)
Center Conductor	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper Clad Steel	Silver Plated Copper Clad Steel
Dielectric	Microporus PTFE	Microporus PTFE	Microporus PTFE	Microporus PTFE	TF4® Dielectric	TF4® Dielectric
Shield	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper Flat Braid
Interlayer	Metalized Tape	Metalized Tape	Metalized Tape	Metalized Tape	Metalized Polyimide Tape	N/A
Outer Braid	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper	Silver Plated Metal Clad Fiber	Silver Plated Copper
Jacket	Blue FEP	Blue FEP	Blue FEP	Blue FEP	Black Tefzel	Blue FEP
Diameter	.314"	.201"	.159"	.130"	.103"	.062"
Weight	0.093 lbs/ft	0.037 lbs/ft	0.026 lbs/ft	0.018 lbs/ft	.0113 lbs/ft	.031 lbs/ft
Min Bend Radius	1.75"	1.25"	0.75"	0.625"	0.50"	0.25"
Max Frequency	18 GHz	30 GHz	40 GHz	53 GHz	40 GHz	40 GHz
Velocity of Propagation	81%	80%	80%	80%	79.50%	76.00%
Capacitance	24.8 pF/ft	25.4 pF/ft	25.4 pF/ft	25.4 pF/ft	25.4 pF/ft	26.7 pF/ft
Delay	1.25 ns/ft	1.27 ns/ft	1.27 ns/ft	1.27 ns/ft	1.24 ns/ft	1.25 ns/ft
Shielding Effectiveness	>90dB	>90dB	>90dB	>90dB	-90dB	>80dB
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Temperature Rating	-67°F to 302°F -55°C to +150°C	-67°F to 302°F -55°C to +150°C	-67°F to 302°F -55°C to +150°C	-67°F to 302°F -55°C to +150°C	-85°F to 302°F -65°C to +150°C	-85°F to 302°F -65°C to +150°C
Insertion Loss @ 1m*	1.21dB @ 18 GHz	1.43dB @ 30 GHz	1.98dB @ 40 GHz	1.87dB @ 50 GHz	1.06dB @ 40 GHz	1.45dB @ 40 GHz
Insertion Loss @ 2m*	2.09dB @ 18 GHz	2.31dB @ 30 GHz	3.41dB @ 40 GHz	2.64dB @ 50 GHz	1.29dB @ 40 GHz	1.94dB @ 40 GHz
Insertion Loss @ 3m*	2.64dB @ 18 GHz	4.07dB @ 30 GHz	4.81dB @ 40 GHz	6.62dB @ 50 GHz	1.53dB @ 40 GHz	2.43dB @ 40 GHz
Max VSWR*	1.25 @ 18 GHz	1.35 @ 30 GHz	1.40 @ 40 GHz	1.40 @ 50 GHz	1.35 @ 40 GHz	1.35 @ 40 GHz

ADDITIONAL RESOURCES

Scan to visit our Space Market Resource Hub!



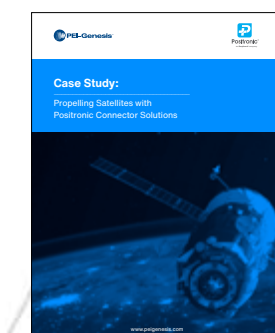
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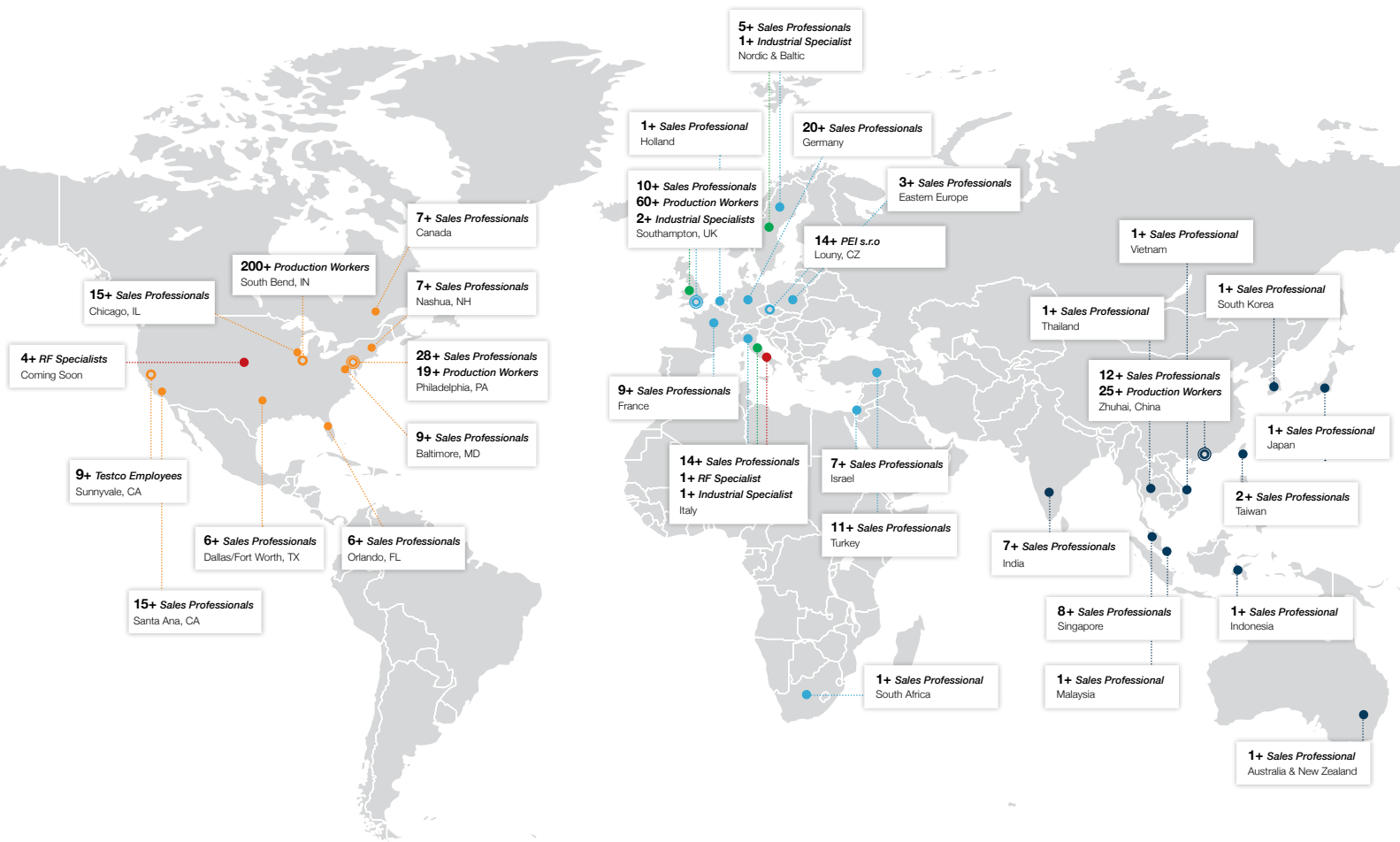
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BLOG ARTICLES



CASE STUDIES



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NOTE: ITT Cannon is not currently certified by the DLA and these products are not covered by the QPL/QML. Military Part Numbers: MIL-DTL-38999, MIL-DTL-26482, MIL-DTL-83723, MIL-DTL-83733