

Amphenol® Industrial Connectors Interconnect Product Overview

SL-381-6



Amphenol®
Industrial

Solutions by design.



www.Amphenol-Industrial.com

Amphenol Industrial Connectors

97 Series



Reference Catalog 12-022

MS/Standard MIL-5015



Reference Catalog 12-020

AC Threaded Series



Reference Catalog 12-025

APPLICATION

Low cost, general duty, non-environmental cylindricals with hard dielectric inserts.

General duty, environmentally resistant cylindricals with resilient neoprene inserts.

Modification of MIL-5015 connector family, designed for industrial applications. General duty, environmentally resistant.

STANDARDS

MIL-5015 type.
UL recognized.
CSA certified.

MS versions produced in strict accordance with MIL-DTL-5015 specifications: environmental classes F&R. Also MIL-5015 Class A general usage, Class C pressurized, Class E environmental.

Dimensions, styles and performance equate to MIL-5015 and the 97 Series.

COUPLING TYPE

Threaded coupling (intermateable with AC threaded and MIL-5015 connectors).

Threaded coupling

Threaded coupling AC Series.
(Note: Previously offered AC-B Bayonet is replaced with ACA-B Bayonet Series.)

TERMINATION TYPE

Solder - 310X types.
Crimp rear-release - 410X types.

MS versions are solder.
Non-MS versions in crimp or solder.

Crimp or solder termination.

ENVIRONMENTAL PERFORMANCE

Operating temperatures from -55°C to $+125^{\circ}\text{C}$.

Operating temp. from -55°C to $+125^{\circ}\text{C}$. Resilient inserts provide high dielectric strength and moisture barrier. IP67 performance in environmental versions.

Operating temp. from -55°C to $+125^{\circ}\text{C}$. Resilient inserts provide high dielectric strength and moisture barrier.

ELECTRICAL PERFORMANCE

Operating voltage to 3000 VAC (RMS) at sea level.

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Operating voltage to 3000 VAC (RMS) at sea level.

OPTIONAL FEATURES

- Solid or split shell construction.
- 6 shell styles, 128 insert patterns.
- Standard OD cadmium finish, optional finishes include non-cadmium zinc alloy.
- Thermocouples & reel assembly contacts.
- 97 Series reverse bayonet style available.
- Variety of backend accessories.

- 5 shell styles, 286 insert patterns.
- Hermetic configurations available.
- Standard OD cadmium finish, optional finishes include non-cadmium zinc alloy.
- Coax, thermocouple and PCB contact options.
- Variety of backend accessories.

- 5 shell styles, 275 insert patterns.
- Nickel and black zinc plating, plus other finishes available.
- Variety of backend accessories including PG adapters.

TYPICAL MARKETS

- Machine Tool
- Semiconductor Test & Assembly
- Welding Equipment

- Heavy Equipment/ Off Road Vehicles
- Mass Transportation
- Power Generation

- Process Control
- Sensors
- Test and Measurement



Amphenol offers more choices, more solutions, more options than any other interconnection manufacturer, and continues to develop products for emerging technologies. The markets that are served by Amphenol's industrial connector products are very broad; see typical markets listed below for each product family and consult Amphenol for further assistance.

Website: www.amphenol-industrial.com Phone: 607-563-5011 Fax: 607-563-5157

Amphe-dB Series Industrial Filter



Reference Prod. Sheet #189

Amphe-RC



Contact Amphenol Industrial Operations for further information

ARC Series



Contact Amphenol Industrial Operations for further information

<p>APPLICATION</p> <p>Amphe-dB is an industrial filter and chip capacitor board with a modified MIL-5015 connector.</p>	<p>Commercial 5015 type. Design features and benefits of the environmental Amphenol®/Matrix® MIL-5015 series.</p>	<p>Modification of MIL-5015 connector with 38999 Series III type coupling. Designed for heavy duty applications.</p>
<p>STANDARDS</p> <p>"P", "C", and chip capacitor board technology is incorporated into the industrial high performance connector to provide protection from electro-magnetic interference (EMI).</p>	<p>Offers the environmental benefits of the MIL-spec with crimp rear release contacts, but with some commercial/ industrial cost effective features.</p>	<p>Dimensions, styles and performance equate to MIL-5015. Also designed for incorporation of 5015 low-smoke zero halogen inserts.</p>
<p>COUPLING TYPE</p> <p>Threaded coupling.</p> <p>TERMINATION TYPE</p> <p>Solder, crimp and PCB terminations.</p>	<p>Threaded coupling.</p> <p>Crimp rear release termination.</p>	<p>Ratchet double-start stub threaded coupling similar to MIL-DTL-38999 Series III with 5 key/keyway alignment feature.</p> <p>Crimp or solder termination.</p>
<p>ENVIRONMENTAL PERFORMANCE</p> <p>Operating temp. from -55°C to +125°C. Voltage range from 6 to 240 VDC. Provides space savings and eliminates need to redesign circuit boards.</p> <p>ELECTRICAL PERFORMANCE</p> <p>MIL-5015 performance. Protection from MF, HF, VHF, UHF frequencies.</p>	<p>IP67 for environmental sealing. Completely sealed with contact seals, gaskets, wire seals and insert-to-shell seals. Operating voltage to 3000 VAC (RMS) at sea level.</p> <p>Operating temp. from -55°C to +200°C.</p>	<p>Operating temp. from -55°C to +125°C. Resilient inserts provide high dielectric strength and moisture barrier.</p> <p>Operating voltage to 3000 VAC (RMS) at sea level.</p>
<p>OPTIONAL FEATURES</p> <ul style="list-style-type: none"> Filtering available for all standard insert patterns. Contact sizes 22,20 and 16. Industrial filters can also be incorporated into MIL-C-26482 series and the Amphe-Lite series. 	<ul style="list-style-type: none"> 4 threaded shell styles, 172 insert patterns. Aluminum shells or higher performance stainless steel shells. 	<ul style="list-style-type: none"> 5 shell styles, 275 insert patterns. RADSOK high amperage sockets available. Variety of backend accessories including over-molding and heat shrinkable boots.
<p>TYPICAL MARKETS</p> <ul style="list-style-type: none"> Welding Equipment to filter sensor leads GPS Systems on earth moving equip. Heavy Equip. to meet EC requirements 	<ul style="list-style-type: none"> Heavy Equipment Engine Control Components 	<ul style="list-style-type: none"> Mass Transportation Heavy Equipment



Amphenol Industrial Connectors

ACA-B Bayonet Series



Reference Catalog 12-027

GT Bayonet Series



Reference Catalog 12-024

P-Lok®



Reference Pyle P-Lok Catalog

APPLICATION

Modification of MIL-5015 connector, environmentally resistant. Rugged, industrial power and signal usage.

Heavy duty, rugged connector, environmentally resistant. Preferred connector for mass transit.

Standard duty, control and signal rapid mating connector for use where MIL-5015 threaded connectors could be used.

STANDARDS

Utilizes MIL-5015 inserts. Intermateable with existing VG95234 connectors.

UL recognized. Utilizes MIL-5015 inserts. Intermateable with existing VG95234 connectors.

Same electrical characteristics and approximate size as MIL-5015 connectors, but is not intermateable with 5015 types.

COUPLING TYPE

Reverse bayonet coupling. Rated to 500 couplings min.

Reverse bayonet coupling (quick mating, audible, visual and tactile full mating indicators). Rated to 2000 couplings min.

Spring pressure coupling - simple push to mate/pull to unmate provides positive locking.

TERMINATION TYPE

Crimp or solder termination. Available with RADSOK sockets.

Crimp or solder termination. Available with RADSOK sockets.

Crimp or solder termination. Available with RADSOK sockets.

ENVIRONMENTAL PERFORMANCE

Operating temp. from -55°C to $+125^{\circ}\text{C}$. Resilient inserts provide high dielectric strength and moisture barrier. IP67 performance in environmental versions.

Operating temp. from -55°C to $+125^{\circ}\text{C}$; with Viton inserts from -50°C to $+200^{\circ}\text{C}$. Resilient inserts provide high dielectric strength and moisture barrier. IP67 performance in environmental versions.

Environmentally sealed - rated to IP65 specifications. Black hard coat finish provides long service life.

ELECTRICAL PERFORMANCE

Operating voltage to 3000 VAC (RMS) at sea level.

Operating voltage to 3000 VAC (RMS) at sea level.

Operating voltage to 3000 VAC (RMS) at sea level.

OPTIONAL FEATURES

- 7 shell styles, 75 insert patterns.
- Shells are aluminum alloy and plated with a variety of finishes including zinc alloy.
- Variety of accessory hardware to accommodate heavy duty wire and cable.

- Over 40 varieties of shell styles and backend accessory combinations.
- Optional insert materials: Neoprene, Viton, or low smoke/flame retardant.
- Variety of platings including non-cadmium.
- Resilient cover coupling nuts available.
- GT-PC with first mate/last break features.

- 4 shell styles, 80 insert patterns.
- Variety of backend accessories.

TYPICAL MARKETS

- Automation, Machine Tool, Robotics
- Instrumentation, Process Control
- Test and Measurement

- Mass Transportation
- Power Generation, Petro-Chemical
- Heavy Equipment, Geophysical

- Robotics
- Factory Automation
- Entertainment Equipment



This overview brochure references detailed catalogs for each connector type. Please see our website for on-line catalogs, or contact us by phone or fax for more information concerning the connectors covered in this publication, or if there are special application needs.

Website: www.amphenol-industrial.com Phone: 607-563-5011 Fax: 607-563-5157

MIL-C-26482 Series 1



Reference Catalog 12-070

Amphe-Lite™



Reference Catalog 12-094

Amphe-Lite™ with Fiber Optics



Reference Catalog 12-094

APPLICATION

Miniature, environmental connector.
Large family with wide variety of styles.

Commercial 38999, Series III type
connector for higher performance
industrial usage.

Amphe-Lite is the industrial connector of
choice for incorporating fiber optic
termini for high speed data transfer.

STANDARDS

MS versions produced in strict accord-
ance to MIL-C-26482, Series 1.
MS-PT Service Classes E, F and P types
are UL recognized.
Several non-MS types offered.

Offers 38999 type high performance
capabilities for severe environment
applications, yet is cost effective enough
for general duty and non-environmental
use as well.
UL recognized.

Offers 38999 type high performance
capabilities for severe environment
applications. Optical performance is
optimized utilizing the ceramic ferrule
and alignment sleeve features of the
termini.

COUPLING TYPE

Three point bayonet coupling.
Threaded PC types also available.

Threaded coupling (quickly, completely
mates in one 360° turn of coupling nut).

Threaded coupling (quickly, completely
mates in one 360° turn of coupling nut).

TERMINATION TYPE

Crimp or solder termination.

Crimp termination.

Crimp termination.

ENVIRONMENTAL PERFORMANCE

Operating temp. from -55°C to +125°C.
Resilient inserts provide high dielectric
strength and moisture barrier.

Operating temp. from -55°C to +125°C.
Class F provides excellent EMI shielding.
Class U provides a non-conductive finish.
IP67 rating for environmental sealing.
Composite shells resist severe corrosion.

Amphe-Lite operating performances.
Typical insertion loss for 100/140 fiber
with .2 NA at 820 nm is .5 to .7 dB using
Air Gap (AG) polish technique.

ELECTRICAL PERFORMANCE

Operating voltage to 1000 VAC (RMS) at
sea level.

Operating voltage to 900 VAC (RMS) at
sea level.

Operating voltage to 900 VAC (RMS) at
sea level.

OPTIONAL FEATURES

- 7 shell styles, 57 insert patterns.
- Hermetic configurations available.
- Standard OD cadmium finish, optional finishes include non-cadmium zinc alloy.
- Coax, thermocouple and PCB contact options.
- Variety of backend accessories.

- 3 shell styles, 59 insert patterns.
- Twinax, coax, filter contacts and fiber optic termini can be incorporated - ideal for communications equipment.
- Ground plane version and high decoupling version available.

- Amphe-Lite styles and patterns.
- Fiber optics and electrical hybrid capabilities
- Multi-mode size 16 and 20 straight termini and 90 degree multi-mode size 20 termini available.

TYPICAL MARKETS

- Instrumentation/Control/Machine Tool
- Communications
- Geophysical

- Communications
- Medical Equipment
- Automotive

- Communications
- Medical Equipment
- Automotive



Industrial

Amphenol Industrial Connectors

Amphe-Power™ with RADSOK® Technology



Reference Brochure SL-391

Amphe-Power™ Composite GTR



Reference Brochure SL-391

RADSOK® HiLok™



Reference Brochure SL-391

APPLICATION

High amperage capability connector for the most demanding industrial and transportation applications.

High amperage capability connector with high performance molded composite construction.

Designed to meet customer demand for tool-less but semi-permanent high amperage connectors.

STANDARDS

Family consists of: P-Lok, GT and 5015 (AC) connectors enhanced with RADSOK contacts (hyperbolic, stamped grid configuration within the socket) that handle up to 50% higher amperages than standard contacts.

Meets all specifications of GT Series and the additional feature of RADSOK sockets enables increased current ratings to 120A on individual contacts. Connectors are listed to UL/CUL 1977/1682/ 817.

Uses RADSOK high amperage technology. Often used as a replacement to the traditional threaded post and ring terminal. Locking feature offers tool-less installation and requires a simple tool for removal.

COUPLING TYPE

Amphe-Power P-Lok is push-pull coupling; Amphe-Power GT is reverse bayonet; Amphe-Power 5015 (AC) is threaded

Amphe-Power GT is reverse bayonet coupling.

Push to lock; tool to unlock.

TERMINATION TYPE

Crimp termination standard, with solder type in development.

Screw termination.

Crimp termination or PCB/Busbar.

ENVIRONMENTAL PERFORMANCE

Amphe-Power connectors are all 5015 type performance: Operating temp. from -55°C to +125°C. GT and 5015 styles are IP67 rated in environmental versions; P-Lok is IP65.

Operating temp. from -55°C to +125°C. IP67 performance is achieved with utilization of a standard PG adapter watertight strain relief on the plug. Flammability rating is UL94V-0.

HiLok characterized by low connection force requirements of less than 15 pounds, and high removal force requirements of greater than 50 pounds.

ELECTRICAL PERFORMANCE

Current Amphe-Power lines support from 50A to 500A continuous duty.

Currently available with 4 to 10 gage wire, 30A to 120A continuous duty.

Offered with 3.6mm (70A) and 8.0mm (200A) RADSOKs.

OPTIONAL FEATURES

- 3 series offered - most shell styles avail.
- RADSOK contacts currently available in size 12 (35 amps), size 8 (69 amps), size 4 (120 amps) & size 0 (250 amps).
- Hybrid arrangements with RADSOK and power contacts tailored to meet customer needs.

- Current style is: Straight plug that houses the RADSOK sockets and a box mount receptacle with pin contacts; available in 32-AR pattern.
- 4 conductor or 5 conductor styles.
- Meets a variety of cable sealing ranges.

- Sockets available with range of wire crimp barrels from 1/0 AWG to 12 AWG. Pins with wire crimp barrels or PCB/Busbar swage mount features.
- HiLok removal tool available.

TYPICAL MARKETS

- Power Generation, Petro-Chemical
- Mass Transportation
- Military Platforms

- High Power Process Control
- Server Applications

- Telecom/Data Power Distribution



Amphenol and Pyle Industrial provides reliable, proven and cost effective products that will meet or exceed your industrial interconnect requirements.

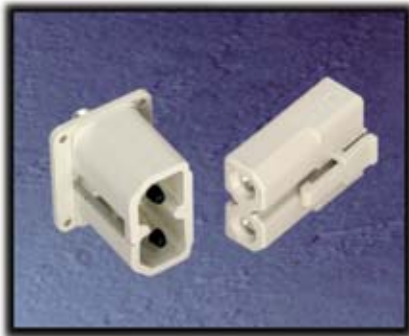
Amphenol is a global leader in the connector marketplace. Amphenol operates quality systems that are certified to ISO9001:2000 by third party registrars.

SurLok™



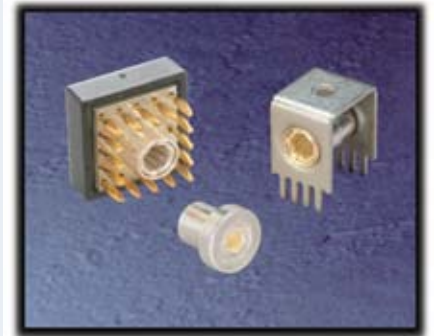
Reference Brochure SL-391

Amphe-PD™



Reference Brochure SL-391

RADSOK® Power to Board



Reference Brochure SL-391

<p>APPLICATION Non-environmental low mating force compression lug- designed as an alternative to common compression lugs.</p>	<p>Non-environmental power distribution connector for power supply, battery, busbar and PCB.</p>	<p>High current single-point connections for printed circuit boards.</p>
<p>STANDARDS Utilizes RADSOK high amperage sockets, high-power, smaller package as compared to conventional lugs. Vibration resistant, easy, toolless installation. UL listed, RoHS compliant, one-handed mating/unmating and toolless contact insertion.</p>	<p>Incorporates RADSOK high amperage sockets. Single position has 8mm RADSOK and 2-position molded type has 3.6mm RADSOKs in the plug. and pin contacts in the receptacle.</p>	<p>Utilizes Amphenol's RADSOK technology to bring current ratings of 35AMPS - 120 AMPS to a printed circuit board. RADSERTS are available in 2.4mm (35 AMPS) and 3.6mm (70 AMPS). RADSERTS are available for many board thickness' and are offered in solder or press-fit styles. RADSOK PGY's are available in 3.6mm (70 AMPS) and 5.7mm (120 AMPS). PGY's are connected to the pcb through a solder reflow process. The PowerBlok is available in a 3.0mm (70 AMPS) which is press-fit into the pcb.</p>
<p>COUPLING TYPE</p> <p>TERMINATION TYPE Crimping utilizing standard industry color-coded dies. No torque wrenches required.</p>	<p>2-Position molded type available in busbar mount with swage pins for single or multi-layer busbars, or box receptacle mount with pin-retention clip. Crimp termination or PCB/Busbar.</p>	
<p>ENVIRONMENTAL PERFORMANCE Non-environmental. Once mated, the socket with plastic housing offers a "touch proof" safety feature.</p>	<p>Non-environmental 2-position molded type has TUV "touch-proof" safety feature.</p>	<p>Non-environmental.</p>
<p>ELECTRICAL PERFORMANCE 70 Amps up to 500 Amps.</p>	<p>RADSOK sockets support 50A to 70A continuous duty in Amphe-PD, and up to 200A in a single pole.</p>	<p>35 Amps to 120 Amps.</p>
<p>OPTIONAL FEATURES</p> <ul style="list-style-type: none"> • Color coded plastic housing for positive and negative circuits. • Surlok lugs are also available without plastic . 	<ul style="list-style-type: none"> • Amphe-PD receptacles available with mounting for power supply, battery, busbar or PCB. 	<ul style="list-style-type: none"> • Amphenol Industrial Operations can design PCB products to meet your custom requirements.
<p>TYPICAL MARKETS</p> <ul style="list-style-type: none"> • Any industrial market where a compression lugs are currently being used. 	<ul style="list-style-type: none"> • High Power Applications • Telecom/Datacom Power Distribution 	<ul style="list-style-type: none"> • Telecom/Datacom Power Distribution • Anywhere PCBs are used or manufactured



Amphenol Industrial Connectors

Star-Line®/Star-Line EX®



Reference Catalog 12-054

Amphe-EX™



Reference Catalog 12-056

Cable Glands



Reference Catalog 12-055

APPLICATION

Heavy duty, for high power applications. Star-Line EX for harsh, potentially explosive environments.

Heavy duty connectors for use in ATEX and IECEx rated areas.

Heavy duty cable glands for use in ATEX and IECEx rated areas.

STANDARDS

UL listed and CSA listed for circuit breaking capability. Equals or exceeds MIL-5015 E and R specifications. SIRA Certification # 03ATEX1101X.

SIRA Cert. # 07ATEX1229X IECEx Cert. # IECEx SIR 08.0029X.

SIRA Certified; based on Seal Style IECEx Certified; based on Seal Style C.S.A. Approved

COUPLING TYPE

Double-lead Acme threads - complete coupling in one turn of coupling nut.

Tri-Start Acme Threads.

Metric, NPT & PG entry threads available.

TERMINATION TYPE

Solder, crimp and pressure terminals. Circuit breaking power and control types.

Crimp style contacts along with RJ45 and USB terminations.

Cable Types: Accomodates all cable styles including jacketed, armored, armored and sheathed.

ENVIRONMENTAL PERFORMANCE

Environ. rated to IP67. EX-IP68-8. Star-Line: oper. temp. range to 257°F; Star-Line EX: oper. temp. range to 750°F Star-Line EX is Cenelec certified for use in Zone1-IIc hazardous environment. Hard anodized shells resist corrosion.

Cenelec Rated to IP68 ATEX Temp. Class Rating of T6 Oper. Temp. -20°C to +40°C, point of mounting temp. -20°C to + 84°C.

Available IP66 through IP68 Deluge Resistant NEMA 4X Oper. Temps. from -60°C to +180°C

ELECTRICAL PERFORMANCE

Up to high amperage of 1135 amps at 1000V / AC or DC.

Up to 217 Amps (Size 21) at 1250 VDC, 900 VAC.

Ratings based on cable specified.

OPTIONAL FEATURES

- 3 retention styles with captive contacts or insertable/removable contacts.
- 4 styles, over 150 inserts; several varieties of backend hardware.
- Star-Line EX can be terminated onto unarmored/armored/sheathed cables built to several popular standards.

- 7 shell sizes, contacts # 8 through # 22D.
- Power, Signal, Coax and Hybrid Mix.
- Fiber Optics, RJ45 and USB available.
- Supplied complete with Cable Glands.

- Brass & Stainless Steel versions available for ATEX approved glands.
- Aluminum & Plastic Industrial versions available.
- Numerous sealing for all cable types.
- Complete line of accessories available.

TYPICAL MARKETS

- Mass Transportation, Automotive
- Power Generation, Petro-Chemical

- Oil & Gas, Petrochemical Production
- Power Generation, Geophysical
- Pharmaceutical Mfg. & Communications

- Oil & Gas, Petrochemical Production
- Power Generation, Geophysical
- Pharmaceutical Mfg. & Communications



Amphenol's product specialists jointly design with their customers to develop interconnect systems that will meet their particular issues of product performance, safety and cost effectiveness. Please contact Amphenol for your industrial interconnection requirements.

Website: www.amphenol-industrial.com Phone: 607-563-5011 Fax: 607-563-5157

Cord Grips



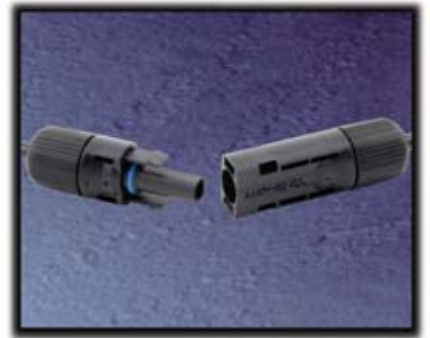
Reference Catalog 12-055

Vortex GT



Contact Amphenol Industrial Operations for further information

Helios H4



Contact Amphenol Industrial Operations for further information

APPLICATION

Provide liquid tight strain relief or cord, cable and flexible conduit.

Power connectors for wind and power generation.

Connectors and cable assemblies for Solar Panel installations.

STANDARDS

Large family of cable pass-thru and strain relief devices. UL listed and CSA certified.

Designed to meet UL, TUV and GT Series and Radsok standards.

Designed to meet UL, TUV and NEC 2008 requirements.

COUPLING TYPE

Theaded coupling for panel board or theaded hub applications. Straight, 45 degree and 90 degree styles.

Reverse bayonet coupling (quick mating, audible, visual and tactile full mating indicators). Rated to 2000 couplings min.
Standard Crimp, Busbar, Threaded Post.

Sealed Snap-Lock coupling.

TERMINATION TYPE

NA

Standard Crimp.

ENVIRONMENTAL PERFORMANCE

Oil-resistant grommets and compression nuts provide moisture sealing. Tapered conduit threads provide strong water and oil-tight joint.

Operating temp. from -55°C to $+125^{\circ}\text{C}$; with Viton inserts from -50°C to $+200^{\circ}\text{C}$. Resilient inserts provide high dielectric strength and moisture barrier. IP67 performance in environmental versions.

IP67
UV and Ozone resistant for 25 year life
Oper. Temp. -40°C to $+105^{\circ}\text{C}$

ELECTRICAL PERFORMANCE

NA

Radsok design carries high current in a smaller package, 1000 Amps, 1000 VDC.

Low resistance RADSOK, 30 Amps, 1000V DC.

OPTIONAL FEATURES

- Large variety of attachment options: compression nut, mechanical clamp nut or basketweave grip styles.
- Panelboard adapters, conduit fitting boxes, cord grip handles.
- Lightweight aluminum or ferrous alloy for more abusive usage.

- Cable Assemblies.
- Optional termination, optional backshell.
- Sealing glands.

- Cable Assemblies.
- Bulk components for field install.

TYPICAL MARKETS

- Power/Control Equipment, Machine Tool
- Communication Equipment

- Renewable Energy
- Wind Energy
- Power Generation

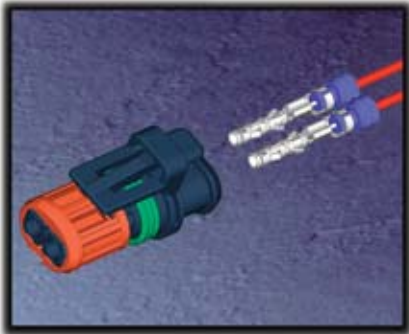
- Renewable Energy - Solar



Industrial

Amphenol Industrial Connectors

Tru-Loc®



Reference Prod. Sheet #191

27 Pole Train-Line



Reference Pyle Transportation Brochure

Specialty Molded Connectors



Contact Amphenol Industrial Operations for further information

APPLICATION

Environmentally sealed, rugged thermo-plastic interconnect. Developed for the heavy equipment marketplace.

27 pole MU and communication receptacles and jumpers for rail systems.

Capabilities in composite molding of interconnect solutions for power and/or harsh environment applications.

STANDARDS

Amphenol qualification procedure and results available upon request. Tested per IEC 512 and IEC 68-2.

Designed to Amtrak and APTA specifications. Jumpers are keyed differently from other 27 pole jumpers to prevent mis-mating.

Custom molded interconnects are designed to exceed customer specified standards.

COUPLING TYPE

Push-pull coupling with secondary lock.

Slip-fit, double-seated for environmental protection. Retention by receptacle cover or optional accessories.

Bayonet, threaded and push-pull are some of the coupling methods used when providing custom interconnects.

TERMINATION TYPE

Crimp, stamped and formed 1.5mm contacts.

Crimp termination per Amtrak specifications.

Crimp, solder and pressure termination are a few of the termination options.

ENVIRONMENTAL PERFORMANCE

IP67. -40° / +125° C.

Raintight. Operating ambient temperature -57° to +110° F.

Specific environmental sealing, temperature rating and/or connector platings vary for each application.

ELECTRICAL PERFORMANCE

1.5mm RADSOK sockets rated at 7.5 Amps (DC).

Wire configuration, per Amtrak standards, calls for 1-#10 wire, five shield twisted pairs, and balance #12 wire.

Can utilize Amphenol's RADSOK, Brush, Fiber Optic, RF or standard contacts.

OPTIONAL FEATURES

- Silicone wire seals are also available in Viton.
- Receptacles supplied with or without leads.
- Lead length and housing painting will be designed to meet specific customer needs.

- Options available per application.

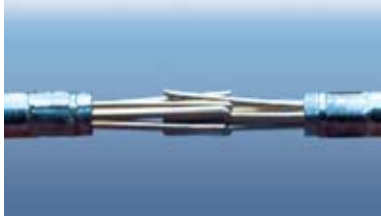
TYPICAL MARKETS

- Heavy Equipment
- Mass Transportation
- All types of Industrial Markets.



Other Industrial Products

Low Mating Force Brush Contact



The Bristle Brush contact system are designed into rectangular connectors for applications such as medical equipment and process controls. Consult Amphenol Industrial Operations for further information on Brush contacts for commercial/industrial use.

Advantages of the Bristle Brush contact include:

- 70%-90% reduction in mating/unmating forces from conventional pin-socket contacts
- Proven durability and long contact life (20,000 + mating/unmating cycles without performance degradation)
- Multiple points of contact provide superior electrical capability, stable, low resistance – 20 milliohms max. and gas tight contact sites.
- High contact count capability. Arrangements in rectangular connectors have 10 to 100 contacts per row in 2, 3 and 4 rows.

Industrial Hermetics



- Designed for environmental moisture sealing with fused compression glass sealed inserts.
- Available in MIL-C-26482 and MIL-5015 connectors for industrial applications.
- Receptacle mounting styles: box mount, wall mount, jam nut, solder and weld mount.
- Leakage rate with hermetically sealed inserts is less than 1.0×10^{-6} cc/sec. at 15 psi differential.
- Solder cup, flat eyelet or PCB termination. Contact counts from 2 to 128 are available.

Amphe-Flex™



- Flex circuitry is available for use with Industrial Amphe-Lite™ series connectors in flat or sculptured styles. Also can be used with MIL-5015 and MIL-C-26482 series connectors.
- Used for attachment of cylindrical connectors to printed circuit boards.
- Flex circuitry creates a self-locking terminal pad which eliminates the need for an additional interconnect to the PCB.
- Sculptured® Flexible Circuits with built-in terminations eliminate the failures associated with crimped or solder-on contacts.
- Flex is designed to geometrically fit the tight space requirements within a unit. They are strong and rigid, yet highly flexible.

Over-Molded Cables



- Cables can be designed with a custom overmold to any Amphenol cylindrical connector for almost any industrial application.
- Overmold seals to the rear of the connector and to the cable jacket providing moisture sealing.
- Variety of materials are available: Neoprene, Hypalon and others.
- Variety of lengths and configurations are designed to customer specifications.
- Personalization/special stamping (such as company logo or cable part number) on the overmolds is available.

Amphe-Armor™



Amphe-Armor is a rugged connector designed for harsh environment applications such as Heavy Equipment, Rail/Mass Transit, Hybrid Vehicles and other rugged environments.

- Over-molded for protection and sealing.
- Field installable, field repairable.
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