



# POWER GUIDE

Amphenol Military & Aerospace

# COMPARISON CHART

Product Line	Picture	Description & Coupling Type	Total Amperage Range (30°C heat rise)	Connector Size Range	Signal Contact Availability	Contact Gauge Range
High Power Series		Heavy Duty	40-1200	Medium to Large	Power and Signal	0 to 16
MGT-5015		Heavy Duty Quick Disconnect (1/4 turn bayonet)	13 to 1000	Medium to Large	Power and Signal	0 to 16
Tri-Power Connectors		High Current, medium duty, D38999-style interface	240 to 620	Medium to Large	Power Only	0 to 8
Matrix 5015		Medium Duty, threaded	13 to 1000	Small to Large	Power and Signal	0 to 16
MIL-DTL-22992 & Commercial Class L		Heavy Duty, Threaded	40 to 200	Large	Power and Ground	1/0 to 6
QWLD/QWL (MIL-C-22992)		Heavy Duty, Threaded	23 to 800	Medium to Large	Power and Signal	0 to 16
D38999		Medium Duty, Triple Start Thread Coupling	1 to 560	Small to Medium	Power, Signal, and High Speed	8 to 22 D
ECTA133 Push-Pull		Medium Duty Push-Pull	Up to 450	Small to Large	Power, Signal, and High Speed	0 to 16

Max Temp Rating (Celsius)*	Service Rating (voltage rating)	Shell Material	Standard Contact Terminations	Military Specification Reference	Circular or Rectangular	Common Applications	Page
150 to 200+	Same as 5015	Aluminum or Stainless Steel	Crimp, Solder, Bus bar, Threaded Post, PC Tail	MIL-DTL-5015	Circular	Hybrid and Conventional Ground Vehicles, Power Boxes	10
125 to 200	Same as 5015	Aluminum or Stainless Steel	Crimp, Solder, Busbar	MIL-DTL-5015	Circular	Hybrid and Conventional Ground Vehicles, Power Boxes	10
150	By arrangement	Aluminum or Stainless Steel	Crimp	MIL-DTL-D38999	Circular	Power Systems	15
175 to 200	Same as MGT	Aluminum or Stainless Steel	Crimp	MIL-DTL-5015	Circular	High power in Aircraft/ Drones, ground support	14
175	By arrangement	Aluminum	Crimp	MIL-DTL-22992	Circular	Battlefield power (Shelters, Generators)	11
175	Same as 5015	Aluminum	Crimp, Solder	MIL-DTL-22992	Circular	Ground support equipment, Industrial and commercial use	11
175 to 200	Per D38999	Aluminum, Composite, Stainless Steel	Crimp	MIL-DTL-D38999	Circular	General Use Military/ Aerospace	14
-40 to 125	Contact Factory	Aluminum	Crimp, Solder	EN 61984	Circular	Indoor/Industrial Use	16

# COMPARISON CHART

Product Line	Picture	Description & Coupling Type	Total Amperage Range (30°Cheat rise)	Connector Size Range	Signal Contact Availability	Contact Gauge Range
ECTA544 Push-Pull		Medium Duty Push-Pull Blind Mate	5 to 135	Small to Large	Power and Signal	8 to 20
MIL-DTL-26482 Series II		Medium Duty Bayonet coupling	20 to 460	Medium	Power and Signal	12 to 20
MIL-DTL-83723 (PYLE)		Medium Duty Threaded Non-decoupling	15 to 680	Medium	Power and Signal	12 to 20
LC26500		Medium Duty Threaded Coupling	10 to 300	Small to Medium	Power and Signal	8 to 20
Rhino Reverse Bayonet 5015		Medium Duty 1/4 turn bayonet	250 to 1000	Medium to Large	Power	0 and up
Rhino 38999 Series		Medium Duty triple start thread coupling	250 to 1000	Medium to Large	Power	0 and up
Circular Multi-pole Rhino		Medium Duty triple start thread coupling	250 to 1000	Medium to Large	Power	0 and up
PowerSafe Connectors		Medium Duty, Triple Start Thread Coupling	16 to 63	Medium to Large (size 13, 17 and 25)	Power only	6 to 16

Max Temp Rating (Celsius)*	Service Rating (voltage rating)	Shell Material	Standard Contact Terminations	Military Specification Reference	Circular or Rectangular	Common Applications	Page
125	Contact Factory	Composite	Crimp, Solder	EN 61984	Circular	Indoor/Industrial Use	17
200	1000 at sea level	Aluminum or Stainless Steel	Crimp	MIL-DTL-26482	Circular	Air Frame	19
260	1500 at sea level	Aluminum or Stainless Steel	Crimp	MIL-DTL-83723	Circular	Aircraft Engines	19
125	110 volts	Aluminum, Composite, Stainless Steel	PC Tail	MIL-DTL-26500	Circular	Aircraft passenger power	13
150	500 to 875 VAC	Aluminum or Stainless Steel	Crimp, busbar, threaded post	MIL-DTL-5015	Circular	Electric Drive Vehicles, Battlefield Power	12
150	500 to 875 VAC	Aluminum or Stainless Steel	Crimp, busbar, threaded post	MIL-DTL-38999 Series III	Circular	Electric Drive Vehicles, Battlefield Power	13
150	500 to 875 VAC	Aluminum or Stainless Steel	Crimp, busbar, threaded post	MIL-DTL-38999 Series III	Circular	Electric Drive Vehicles, Battlefield Power	13
175 to 200	Up to 500 volts	Aluminum, Stainless steel, marine bronze	Crimp	VG96944-04 - Derived from MIL-DTL-38999 series III	Circular	Battlefield, Ground vehicle, C4ISR and harsh industrial markets	20

# COMPARISON CHART

Product Line	Picture	Description & Coupling Type	Total Amperage Range (30°C heat rise)	Connector Size Range	Signal Contact Availability	Contact Gauge Range
AGE96929 Power Connectors		Heavy Duty Circular, Bayonet Coupling	225 to 950	Medium to Large	Power	0 and up
R39 (Rectangular 38999) Series		Medium duty, blind-mate rugged	up to 340 A	Medium	Power, Signal, and High Speed	0 to 23
R58 Series		Heavy duty, blind-mate rugged	up to 840 A	Medium to Large	Power, Signal, and High Speed	0 to 23
SD308 Series		Light duty, rugged	up to 240 A	Small to Medium	Power and Signal	8 to 23
MMA Series		Medium duty, blind-mate rugged	up to 320A (per cavity)	Small to Large	Power, Signal, and High Speed	0 to 23
R27 Series		Medium duty, blind-mate rugged	up to 320A (per cavity)	Large	Power, Signal, and High Speed	0 to 23
HVDC		Latch Free Interference Fit	900A	Currently only 3 pin, but others available upon request	Power	0 to 2
LC-LRM		Rack and Panel	up to 460 A	Specialized Rectangular	Power	8 to 22

Max Temp Rating (Celsius)*	Service Rating (voltage rating)	Shell Material	Standard Contact Terminations	Military Specification Reference	Circular or Rectangular	Common Applications	Page
150	Contact Factory	Aluminum	Crimp & Screw Bolt	VG95234	Circular	Military Vehicle & Industrial Equipment	21
125	By arrangement; up to 1500 V(ac)	Aluminum	Crimp, PCB tail	MIL-DTL-38999	Rectangular	High power in Aircraft/ Drones, Ground support, Hybrid and Conventional Ground Vehicles, Power Boxes	23
125	By arrangement; up to 1500 V(ac)	Aluminum	Crimp, PCB tail	DTL-83733 & JN1122	Rectangular	High power in Aircraft/ Drones, Ground support, Hybrid and Conventional Ground Vehicles, Power Boxes	24
125	By arrangement; up to 1000 V(ac)	Aluminum, plastic	Crimp, Solder cup, PCB tail	MIL-DTL-24308	Rectangular	General Use Military/ Aerospace	24
125	By arrangement; up to 1500 V(ac)	Aluminum	Crimp, PCB tail	ARINC 600	Rectangular	High power in Aircraft/ Drones, Ground support, Hybrid and Conventional Ground Vehicles, Power Boxes	25
125	By arrangement; up to 1500 V(ac)	Aluminum	Crimp, PCB tail	MIL-DTL-83527 & EN3682	Rectangular	High power in Aircraft/ Drones, Ground support, Hybrid and Conventional Ground Vehicles, Power Boxes	
150	270 D/C & 240 A/C	DAP	Lug Termination	N/A	Oval	Primary Power Distribution	25
150	Contact Factory	Aluminum	Crimp, Solder	N/A	Rectangular	Secondary Power Distribution	26

# HIGH POWER CONTACTS



**Contact:**  
Amphenol Socapex  
amphenol-socapex.com

## Power Contacts

Description:

Featuring several terminations (Crimp, Solder, Threaded, PC Tail), the signal contacts are ideal for MIL-DTL-38999 / EN3645 / 2M, SIM EN4165. They're in accordance with the latest standards (European - EN3155)

Features & Benefits:

- One piece contacts
  - Fit in standard MIL-DTL-38999 cavities
  - 100% made in France
  - Qualified
- Size 10:**  
EN3155-008 / 009 for EN3645 / MIL-DTL-38999 series III
- EN3155-008 / 003 for EN4165 / SIM / 2M
  - **Size 8:**  
EN3155-065 / 083 for Size 8 EN3645 / MIL-DTL-38999 series III



**Contact:**  
Amphenol Aerospace  
amphenol-aerospace.com

## Temper Grip

Description:

For use in high temperature (200°C+) applications, the Temper-grip socket has been tested to maintain current capability in high-temperature situations where standard mil-spec socket contacts can begin to relax. Proven "Napkin-Ring" technology utilizes a stainless steel napkin ring to prevent the beryllium copper tines from "relaxing" at higher temperatures and maintaining a greater area of true contact in all situations to decrease resistance.

Features & Benefits:

- High temperature capability
- Napkin Ring technology
- Prevents failure during high temperature spikes

Contact Size	Current Rating
8	65
4	110
0	220



# HIGH POWER CONTACTS



## Radsok

### Description:

**Radsok contacts feature a large interface area between the socket lamella and pin surface. This results in very low contact resistance, enabling the RADSOK® contacts' high current rating compared to traditional power contact designs. The hyperbolic lamella socket contact construction distributes normal forces over a high percentage of mating pin surface. This creates a smooth, even engagement effort. This force distribution also contributes to excellent performance in vibration applications with resistance to typical fretting corrosion.**

### Contact:

**Amphenol Aerospace**  
[amphenol-aerospace.com](http://amphenol-aerospace.com)

### Features & Benefits:

- **Low contact engagement/separation forces**
- **Low contact resistance**
- **High mating cycle durability**

Contact Size	Current Rating
8	70
4	120
0	250

# CIRCULAR CONNECTORS



### Contact:

Amphenol Aerospace  
amphenol-aerospace.com

Current Ratings:	40-1200amps
Contact Gauges:	0 to 16
Voltage Ratings:	per MIL-DTL-5015

## High Power Series

### Description:

The High Power Series features advanced socket contact technology resulting in 30-40% higher current carrying capacity compared to standard contacts. The proven RadSok technology along with the new high current, high temperature Temper-Grip design provide a solution for any operating temperature. Utilizing two proven connector mating designs (Matrix 5015 and MGT-5015) and a host of new contact termination methods, the High Power Series offers custom connector performance in a standard catalog offering!

### Features & Benefits:

- 40-50% increased current carrying capability over standard 5015 connector
- Catalog customization reduces design-in time
- Standard interfaces allow users to utilize existing cabling design where high performance is needed
- Contact termination methods including crimp, male and female threaded termination, solder, PCB and bus-bar
- Over 25 tooled insert arrangements for current carrying capacity from 50 to 1200 Amps
- Easily Customizable, and models available in under 48 hours



### Contact:

Amphenol Aerospace  
amphenol-aerospace.com

Current Ratings:	50-1000amps
Contact Gauges:	16 to 0
Voltage Ratings:	1000-7000v

## MGT-5015 Reverse Bayonet Coupling

### Description:

The MGT line of connectors is an expansion of the GT-5015 series, offering a rugged environment connector in new finishes such as Durmalon and Black Zinc Nickel for military applications. Available with press-fit or crimp removable contacts, these connectors use machined shells which can be customized for any design to meet a specific application's needs. Termination options include crimp, solder, PC tail, threaded, or custom designed bus bars. Upgraded socket contacts include the RADSOK® high current sockets and Amphenol's exciting new Temper-Grip socket, which carries more current than a standard contact at higher temperatures than a RADSOK.

### Features & Benefits:

- Quick positive coupling
- Waterproof-IP67 rated
- High shock and vibration capabilities
- Numerous military and commercial finishes available
- Rated for 2000 mating cycles
- Up to 50% more ampacity with the use of RADSOK
- Customized solutions available

# CIRCULAR CONNECTORS



## MIL-DTL-22992 Class L

### Description:

Amphenol's Class "L" 22992 heavy duty connectors are the largest size cylindricals. They are available only in the specific configurations prescribed by MIL-DTL-22992 for either military or industrial applications. This rigid configuration control assures correct interconnection of electrical circuits for maximum safety and reliability.

### Features & Benefits:

- **Heavy electrical loads:** current range from 40 to 200 amperes
- **Direct current or single three phase, 60/400 Hertz alternating current**
- **Automatic grounding for safety**
- **Meet MIL-DTL-22992 qualification**
- **Resistance to the operating environments of heat, moisture, vibration, high impact and immersion - see chart below.**
- **Double stub coupling threads for faster connections; no cross threading, easy cleaning**
- **Left hand accessory threads to minimize cable twisting, wire breakage, accidental connector disassembly**
- **Gaskets or "O" rings at appropriate surfaces for perfect weather tight connections**

### Contact:

Amphenol Aerospace  
amphenol-aerospace.com

Current Ratings: 40-200amps

Contact Gauges: 6 to 4/0

Voltage Ratings: 120/480VAC



## MIL-DTL-22992 QWLD

### Description:

Amphenol QWLD Series heavy duty circular connectors provide reliable power and control functions in hostile environments where ordinary connectors cannot survive. Available in solder and crimp terminations, these connectors can be purchased to a military specification or Amphenol's proprietary part number system.

### Features & Benefits:

- **High Durability - water and explosion proof, resistant to abrasion, corrosion, vibration and shock**
- **Quick, Positive Mating - double stub thread per MIL-STD-1373 for fast coupling, easily cleaned**
- **Selection - over 300 industrial and MS-approved insert patterns available, including coaxial and thermocouple**

### Contact:

Amphenol Aerospace  
amphenol-aerospace.com

Current Ratings: 23-800amps

Contact Gauges: 16 to 0

Voltage Ratings: per  
MIL-DTL-22992

# CIRCULAR CONNECTORS



## LC26500

### Description:

**Low Cost 26500 connectors are designed for aircraft passenger power. (USB, 110V, or display systems) The LC 26500 series features a simplistic design for low cost and high volume applications. Current designs are available in straight or 90° PC tail contacts.**

### Features & Benefits:

- **Designed for aircraft passenger power**
- **Low-cost alternative with PC tails, Multiple size and arrangement available.**

### Contact:

**Amphenol Commercial Air Division  
amphenol-aerospace.com**



## Rhino Reverse Bayonet 5015 Series

### Description:

**The reverse bayonet coupling style of Rhino connectors features all the same internal components as Rhino 38999, but with a quick-coupling bayonet track mating style. This alternative product style is optimized for applications that may be more difficult to access or when quick de-coupling is required. Rhino 5015 maintains the same IP68 sealing, IP2X finger protection and current capacity up to 1000A.**

### Features & Benefits:

- **Hyperbolic contact design**
- **Touch-Protected Contacts for bus-bar or crimp termination**
- **Quick decoupling MIL-DTL-5015 Reverse bayonet coupling style**
- **Low profile 90 degree style available**
- **Various materials and finishes including RoHS compliant Black Zinc Nickel**
- **Sealed to IP68**
- **Multiple key orientations**

### Contact:

**Amphenol Limited  
amphenol.co.uk**

**Current Ratings: 250-1000amps**

**Contact Gauges: See Catalog**

**Voltage Ratings: 500-1238**

# CIRCULAR CONNECTORS



**Contact:**  
Amphenol Limited  
amphenol.co.uk

Current Ratings:	250-1000amps
Contact Gauges:	See Catalog
Voltage Ratings:	500-1238

## Rhino 38999 Series

### Description:

Rhino 38999 combines the benefits of field proven MIL-DTL-38999 Series III with low resistance hyperbolic RADSOK® power contacts. Designed to meet the latest military and industrial specifications, Rhino 38999 connectors also comply with stringent safety requirements. Rhino 38999 connectors are intended to satisfy market requirements for high power & voltage applications in harsh environment conditions. With IP68 sealing, an anti-decoupling ratchet mechanism, superior EMC performance and RoHS compliant Black Zinc Nickel plating, Rhino 38999 connectors ensure a reliable connection even under high vibration. Current capacity is up to 1000A.

### Features & Benefits:

- Hyperbolic contact design
- Touch-Protected Contacts for bus-bar or crimp termination
- MIL-DTL-38999 Series III design features
- Low profile 90 degree style available
- MIL-DTL-38999 panel cut-outs
- Various materials and finishes including RoHS compliant Black Zinc Nickel
- Sealed to IP68
- Multiple key orientations



**Contact:**  
Amphenol Limited  
amphenol.co.uk

Current Ratings:	250-1000amps
Contact Gauges:	See Catalog
Voltage Ratings:	500-1238

## Circular Multi-pole Rhino

### Description:

This range extension from the Rhino 38999 connector series enables more than one contact to be housed within a circular connector shell alongside a pair of HVIL contacts. These connectors are available in cable or panel mounting configurations and contact counts up to 5-pins. Multiple high-current contacts can be housed within one single connection for simplicity and space-saving.

### Features & Benefits:

- Hyperbolic contact design
- Touch-Protected Contacts for bus-bar or crimp termination
- MIL-DTL-38999 Series III design features
- Various materials and finishes including RoHS compliant Black Zinc Nickel
- Sealed to IP68
- Multiple key orientations
- Interlock contacts included as standard

# CIRCULAR CONNECTORS



## Contact:

Amphenol Aerospace  
amphenol-aerospace.com

Current Ratings:	1-560amps
Contact Gauges:	8 to 22D
Voltage Ratings:	per MIL-DTL-38999

## MIL-DTL-38999 Series III

### Description:

The most widely used medium-sized circular connector is available with a host of power contact technologies including high current RadSok and Temper Grip Sockets, offering up to 40% more ampacity than standard contacts. Over 20 standard insert arrangements allow the substitution of a power contact in place of the Coax or Twin-ax contacts which come standard in a size 8 cavity. Additionally, Amphenol has a host of larger shell sizes for even higher power applications, up to size 37. For lower power applications there are over 10 tooled arrangements with contacts ranging from size 8 to 22D.

### Features & Benefits:

- Standard modification codes allow ordering D38999 power to AAO's coded "TV" part numbers
- (PWR) = Standard Size 8 Power contact substitution
- (B65) = High Temperature, High Current Temper-Grip Contacts
- (RDS) = High Current, 10,000 mating cycle RadSok Sockets
- Available tooled sizes up to size 37 for even more current carrying capability



## Contact:

Amphenol Aerospace  
amphenol-aerospace.com

Current Ratings:	12-600amps
Contact Gauges:	0 to 16
Voltage Ratings:	per MIL-DTL-5015

## MIL-DTL-5015

### Description:

Amphenol Aerospace's MIL-DTL-5015 with crimp rear release contacts provides an alternative to the older MIL-C-5015 solder type. It bridges the gap between an old connector standard and the high performance needs of current technologies.

### Features & Benefits:

- Medium to heavy weight cylindrical
- Seven mounting style in shell sizes 8 to 48. Contact sizes 0 to 16 in over 100 insert patterns.
- Classes include aluminum or stainless steel shells, or firewall capability
- 
- Radsok sockets available

# CIRCULAR CONNECTORS



## QWL Heavy Duty Circular

### Description:

**Amphenol QWL Series Connectors** are tailor made for compact, heavy duty industrial use. The outstanding performance of this series makes it well suited for shipboard installations and ground support power distribution applications where physical strength and dependability are key requirements. The QWL Series is a versatile, economical alternative to military qualified designs. Equivalent MS shell sizes and insert arrangements offer compatibility with all standard cable types. MIL-DTL-22992 environmental connector requirements are used as a performance criteria base for this series to assure reliability under the most severe conditions.

### Contact:

**Amphenol Aerospace**  
amphenol-aerospace.com

Current Ratings:	23-800amps
Contact Gauges:	16 to 0
Voltage Ratings:	per MIL-DTL-22992

### Features & Benefits:

- **High strength aluminum shells with Alumilite 225 hard anodic finish and shock resistant resilient inserts**
- **Rugged double stub coupling threads, left hand accessory threads and simple single keyway mating**
- **MS and custom insert patterns available for a wide variety of multi-conductor cables**



## Tri-power with RADSOK® Technology

### Description:

**The Amphenol Power Connectors** incorporate the proven design of the MIL-DTL-38999 Series III Tri-Start connectors with the evolving technology of the High Power RADSOK® contacts. This newly designed product is the future of power connectors enabling customers to choose contacts ranging from 70 to 250 amps (240 to 1000 amps per connector) allowing more power in a smaller connector.

### Features & Benefits:

- **Also available in our alternative to cadmium plating, Durmalon**
- **Black Zinc Nickel is also available**
- **Durmalon and Black Zinc Nickel are RoHS and proven to meet coupling torque, shell-to-shell conductivity, and durability tests required by the MIL-DTL-38999 salt spray requirements**
- **current carrying capability**

### Contact:

**Amphenol Aerospace**  
amphenol-aerospace.com

Current Ratings:	40-1000amps
Contact Gauges:	0 to 16
Voltage Ratings:	per MIL-DTL-5015

# CIRCULAR CONNECTORS



**Contact:**

**Amphenol Air LB France**  
[amphenol-airlb.fr](http://amphenol-airlb.fr)

## EN4165 SIM Monomodule Connectors fitted with size 8 contact (80 amps)

**Description:**

The EN4165 SIM Monomodule Series (ARINC 809) connector is a mono modular, push-pull connector that is ideal for In-Flight Entertainment Systems, Cabin Service Systems, and other interconnect system requirements. Especially suited for applications where shielding is mandatory.

**Features & Benefits:**

- **Military & Commercial Aerospace specification for rectangular modular connectors**
- **Fully qualified and compliant with ARINC 809 specifications**
- **Tested and qualified per EN4165 Series specifications**
- **Lightweight and robust thermoplastic; metalized for shielding**
- **SIM module size 8 in Overmold Technology**
- **Fixing accessories, multiple colors, flight caps and 3-pin quick install versions are also readily available**
- **Fire/Smoke/Toxicity conform to ABD 031 and FAR25853**



**Contact:**

**Amphenol Air lb Germany**  
[amphenol-airlb.de](http://amphenol-airlb.de)

## ECTA 133 Push-Pull Connectors

**Description:**

The ECTA 133 connector with push-pull locking system is used wherever it is necessary to insert it safely and blindly. It is particularly suitable for indoor use, in industry, in railways, in apparatus and vehicle construction and diagnostics. This series is nickel-plated in aluminum. Increased mating cycles, pressure-tight sockets, fiber optic contacts are available in many polar patterns. Series 1331: Connector with leading ground contact, 3 and 5 pole, 15-125A. Series 1332: from 3 to 41 contacts, 5A (punched, rolled contacts) 7.5A (twisted contacts).

**Features & Benefits:**

- **Operating temperature range: from -40 ° to + 125 ° C**
- **Protection class: IP66/67**
- **Metal push-pull**
- **Salt spray test: 96 hours**
- **Mating cycles: 1,000 / 5,000 / 100,000**
- **Connectors according to EN 61984 and UL**
- **Solder-crimp or solder-in Version**
- **Quadrax contacts**
- **Also available in brass (Series 233) and stainless steel (Series 633)**

**Current Ratings: Up to 450 amps**

**Contact Gauges: 0 to 16**



# CIRCULAR CONNECTORS



## ECTA 544 Push-Pull Connectors

### Description:

The ECTA 544 plug connector with a push-pull locking system can be used everywhere where one must connect securely and blindly. It is especially suitable for indoor areas, industry, diagnostics and laboratories. Available in black, gray and yellow.

### Contact:

Amphenol Air LB Germany  
amphenol-airlb.de

Current Ratings: 5 to 135 amps

Contact Gauges: 8 to 20

### Features & Benefits:

- Plastic push-pull plug connector as per EN 61984 and UL in solder-crimp or single solder versions
- 
- 3- and 5-pole plug from 5-25 A or as a data transfer plug
- 3- 27 contacts 5 A



## GCA Connectors

### Description:

GCA round plug connector with bayonet and screw locking, plug compatible and crossable with CA-COM, as per MIL-C-5015 and VG95234, crimp and solder contacts; Standard surfaces for this series is nickel (ROHS compliant). In non-conductive version or in stainless steel: salt spray test > 1000 hours.

### Contact:

Amphenol Air LB Germany  
amphenol-airlb.de

### Features & Benefits:

- Robust round plug for rough environments
- Temperature range from -55° to +125°C
- Protection type: Screw IP65
- Bayonet IP67

# CIRCULAR CONNECTORS



## GCB-B Connectors

Description:

**Circular connector in the GCB-B series with reverse bayonet locking according to VG95234. It offers high reliability, is waterproof, wear- and vibration-resistant.**

**Contact:**

**Amphenol Air LB Germany  
amphenol-airlb.de**

Features & Benefits:

- **Temperature deployment range from -55° to +125°C**
- **Nominal current to 245 A**



## GCB-M Connectors

Description:

**Reverse Bayonet modular connector GCB-M, as per VG95234, housing size 32, to take up to 4 inserts as per EN4165 for contacts: AWG 23- AWG8, FO contacts (MT, Lumière, ARINC801), RJ45, coax, quadrax contacts. More than 230,000 various pole arrangements possible.**

**Contact:**

**Amphenol Air LB Germany  
amphenol-airlb.de**

Features & Benefits:

- **Temperature deployment range: from -65° to +150°C**
- **Cadmium**
- **Nickel**
- **Black-Zinc-Nickel**
- **Marine Bronze**

# CIRCULAR CONNECTORS



## MIL-DTL-26482 Series II

### Description:

Amphenol Aerospace offers the Matrix product line of MIL-DTL-26482, Series 2 Connectors. This series provides a bayonet coupling connector with crimp rear insertable, rear releasable contacts.

### Features & Benefits:

- Bayonet coupling connector with crimp rear insert, rear release contacts.
- Medium size, environmentally resistant connector
- Shells size 8 to 24. Contact sizes 20, 16, and 12.
- Recommended operating voltage to 1,000 VAC (RMS) at sea level
- Quick positive coupling assured by 3 point bayonet coupling system
- 34 insert patterns available from 3 to 55 circuits
- Various finishes are available

### Contact:

Amphenol Commercial Air Division  
amphenol-aerospace.com

Current Ratings:	20-460amps
Contact Gauges:	12 to 20
Voltage Ratings:	1000 at Sea Level



## MIL-DTL-83723 (Pyle)

### Description:

The Amphenol Pyle MIL-DTL-83723 Series III Connectors were developed for the higher operating temperatures inherent in today's high performance aircraft and aircraft engines. These connectors meet the performance requirements of: Boeing BACC63CM CN Firewall; European ASD EN2997; GE M50TF3564; and Rolls-Royce ESC10 and ESC11.

### Features & Benefits:

- Versions capable of operations at 200°C and 260°C
- Available in threaded or bayonet coupling styles
- Hermetic styles with solderwell or flat eyelet contact termination
- Improved shell-to-shell conductivity with optional RFI grounding fingers
- Special shell geometry styles available

### Contact:

Amphenol Commercial Air Division  
amphenol-aerospace.com

Current Ratings:	15-680amps
Contact Gauges:	12 to 20
Voltage Ratings:	1500 at Sea Level

# CIRCULAR CONNECTORS



## Power Thru-bulkhead for Radlock

### Description:

The Power Thru-bulkhead jam nut is perfectly designed for Radlock usage in Military and Ground vehicles environments. This rugged, compact and cost-effective power interconnect solution is suitable with Radlock size 8, 10 and 12. This Thru-bulkhead is 100% transversely sealed and also available in short and long version.

### Contact:

**Amphenol Socapex**  
[amphenol-socapex.com](http://amphenol-socapex.com)

### Features & Benefits:

- Long and short version
- Jamnut castel nut reducing danger in case of explosion
- easy mating/unmating and easy maintenance/leaning



## PowerSafe Connectors

### Description:

Qualified to VG96944 norms, PowerSafe connectors are designed to transmit high power with voltages over 500V in high demanding environments, in keeping the full safety of the user. The connectors are directly derived from the standard MIL-DTL-38999 III, with the same environmental characteristics. Their main benefit is to provide user safety with a first-to-mate earth contact directly linked to the shell. The last-to-mate first-to-break pilot contact allows the mating and unmating without power.

### Contact:

**Amphenol Socapex**  
[amphenol-socapex.com](http://amphenol-socapex.com)

### Features & Benefits:

- Transmit high-power with voltages over 500V (EN61984, EN60664)
- Meet the most stringent requirements of the market regarding user safety

Current Ratings:	16-400amps
Contact Gauges:	6 to 16
Voltage Ratings:	Up to 500 volts

# CIRCULAR CONNECTORS



**Contact:**  
**India**  
[amphenol-in.com](http://amphenol-in.com)

## AGE96929 Power Connectors

**Description:**

**Single pole power connectors with high power at low voltage. Connector shell construction in terms of mating as well as mechanical dimensions in line with VG95234. Connectors meet the specification requirements of VG96929.**

**Features & Benefits:**

- **Operating temperature range from -55 to 150 DegC**
- **Shell Aluminum Alloy with Insert PTFE for high voltage performance.**
- **Rated current from 225A-950A with variable shell sizes**
- **Contact termination Crimp & Screw bolt.**
- **Used in Military vehicle & Industrial equipment, as well as EV application**



**Contact:**  
**India**  
[amphenol-in.com](http://amphenol-in.com)

## EV Series (1-4 Pole connectors)

**Description:**

**The EVSeries Connector line is specifically designed for connecting Power Cables within a mobile or stationary power supply. The power supplies may be used with vehicle drive systems or stationary power. The connectors meet the necessary specifications for commercial transportation requirements. The IP2X or TUV Finger proof design on both the plug and receptacle allow much greater flexibility when connectorizing 'always hot' systems such as battery packs, fuel cells, and capacitor packs.**

**Features & Benefits:**

- **Perfect for Electric Vehicles, Power Management**

# CIRCULAR CONNECTORS



## MIL-DTL-55181 Connectors

### Description:

Mil qualified to MIL-DTL-55181, Amphenol Pcd's Power Connectors are designed with a center lock coupling screw that enables the connector to withstand high shock and vibration. They are also engineered with a waterproof and polarized design.

### Contact:

**India**  
[amphenol-in.com](http://amphenol-in.com)

### Features & Benefits:

- **Military Radios**
- **Harsh Environment Communications**
- **Ground Vehicles**

# RECTANGULAR & BOARD LEVEL CONNECTORS



## 3240/3242 Monoblock assemblies

### Description:

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

### Contact:

**Amphenol Air LB France**  
[amphenol-airlb.fr](http://amphenol-airlb.fr)

### Features & Benefits:

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



## R39 Series (Rectangular 38999)

### Description:

The R39 provides high performance in the severe environment demands of military specifications. Its lower profile translates into a smaller space-saving footprint and the new rectangular orientation provides additional installation options.

### Contact:

**Amphenol Canada**  
[amphenolcanada.com](http://amphenolcanada.com)

### Features & Benefits:

- **Rectangular space savings**
- **Low profile, blind-mate, rugged**
- **Power inserts up to 17 size 12 contacts**
- **Uses same contacts as standard 38999**

**Current Ratings: Up to 340amps**

**Contact Gauges: 0 to 23**

**Voltage Ratings: Up to 1500 VAC**

# RECTANGULAR & BOARD LEVEL CONNECTORS



## R58 Series (M83733 equivalent)

### Description:

The Amphenol R58 series are high-performance environment-resistant, rectangular connectors designed to be compatible with all MIL-DTL-83733 connectors and Amphenol Canada is M83733 equivalent and the only qualified supplier for JN1122 specification. The connectors are available in two shell sizes with a variety of hard and spring mounting configurations. A broad range of power arrangements is available including 64 arrangement, featuring size 16 contacts. Crimp and PCB standards deliver power in all size combinations. Shells are machined aluminum alloy with several finish options, including Olive Drab Chromate over Cadmium, and Electroless Nickel. Insulators are a high grade, plastic to MIL-M-14. Silicone rubber is used for grommets, inter-facial seals and peripheral seals.

### Contact:

Amphenol Canada  
amphenolcanada.com

Current Ratings:	Up to 840amps
Contact Gauges:	0 to 23
Voltage Ratings:	Up to 1500 VAC

### Features & Benefits:

- Harsh environmental applications
- Shield and corrosion resistance
- Rear release crimp snap-in contacts
- Field proven assembly allow contacts to be inserted and extracted from the rear



## SD308 Series

### Description:

Amphenol's SD308 Sealed D-Subminiature and Press Fit (C308 Series) connectors are available in the full range of standard density and hi-density insert arrangements, pin and socket contacts, as defined in M24308, and custom arrangements for power contacts in combo arrangements (like 8W8 pattern) up to size 8.

### Contact:

Amphenol Canada  
amphenolcanada.com

Current Ratings:	Up to 240amps
Contact Gauges:	8 to 23
Voltage Ratings:	Up to 1000 VAC

### Features & Benefits:

- One piece machined aluminum shell
- Gold plated screw machine contacts
- High grade thermoplastic inserts, suitable for customization with several power contact styles
- Integrated blind panel mounts
- Supplied with conductive panel seal gasket



# RECTANGULAR & BOARD LEVEL CONNECTORS



## MMA Series

### Description:

MMA combines many of the best features from popular product lines based on ARINC 600. Sealing capabilities are comparable to M83527 with shell seal, face seal and grommet features. Modular insert configurations are effective for separating signal and power contacts, while providing ease of installation and customization in the field. Customer specific designs lead to endless possibilities.

### Contact:

**Amphenol Canada**  
[amphenolcanada.com](http://amphenolcanada.com)

### Features & Benefits:

- **Military & commercial avionic applications**
- **Power for Navigation/communication displays**
- **Cable to avionics box applications**



## HVDC

### Description:

High Voltage Direct Current rack and panel connector that utilizes RADSOK contacts. HVDC was designed for primary power distribution, such as that found on ATRU's (Auto Transformer Rectifier Unit.) HVDC consist of floating plastic shells that helps to provide weight savings.

### Contact:

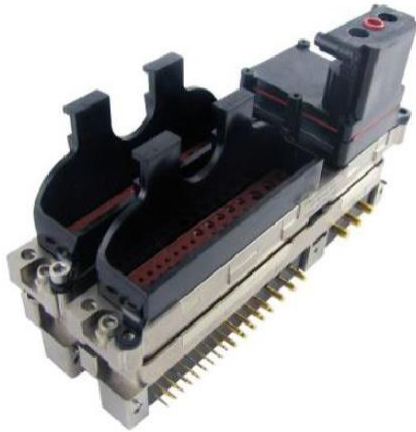
**Amphenol Commercial Air Division**  
[amphenol-aerospace.com](http://amphenol-aerospace.com)

### Features & Benefits:

- **Board Level Power**
- **Low-Profile Cost Effective Solution**
- **Contact Variations; High Speed, Crimp, 90° PC Tail, Bussed Contacts**
- **Two bays (Power input and output)**
- **AC/DC Versions**
- **High Voltage Rack Power**
- **High power (11.1 MM Radsok)**
- **High Voltage (270VDC, 240VAC Three Phase)**
- **Floating plastic shells**
- **Optimized weight**

# RECTANGULAR & BOARD LEVEL CONNECTORS

## Low Cost LRM



### Description:

**Low-Profile, cost-effective rack and panel connectors which has multiple contact variations, including high speed, crimp, 90° PC tail, or bussed contacts. Features two bays for power input and output, and metal grounded shells.**

### Contact:

**Amphenol Commercial Air Division  
amphenol-aerospace.com**

### Features & Benefits:

- **Low cost rack and panel connector**
- **Metal shell, 90° PC tail, crimp, EMI, float, triple web grommets**



## Rectangular Multi-pole Rhino

### Description:

**This rectangular connector series enables more than one high current contact to be housed within a rectangular connector shell alongside a pair of HVIL contacts. These connectors are available in cable or panel to panel mounting configurations and up to 6 contacts with current rating up to 1000A per contact. Multiple high-current contacts can be housed within one single connection for simplicity and space-saving.**

### Features & Benefits:

- **Hyperbolic contact design**
- **Touch-Protected Contacts for bus-bar or crimp termination**
- **Optimized rectangular footprint for space-saving**
- **Various materials and finishes including RoHS compliant Black Zinc Nickel**
- **Sealed to IP68**
- **Interlock contacts included as standard**

### Contact:

**Amphenol Limited  
amphenol.co.uk**



## High Power Coaxial TNC Connectors

### Description:

**SV Microwave manufactures high performance TNC connectors. These miniature, threaded weatherproof connectors have a constant impedance of 50 Ohms and operate at DC to 11 GHz. As a ruggedized version of the BNC, the TNC features a threaded coupling nut for extra mating stability. This ensures the connector will not de-couple in vibration intensive applications.**

### Contact:

**Amphenol SV Microwave**  
[svmicrowave.com](http://svmicrowave.com)

### Features & Benefits:

- **Dielectric Withstanding Voltage of 1500 VRMS (Max)**
- **High temperature dielectric materials**
- **Custom connector body designed to dissipate heat**



## High Power RF BZ Blindmate Connectors

### Description:

**SV Microwave's high performance BZ Blindmate connectors are mechanically ruggedized blindmates high power connectors. They use a Blindmate (push-on) design with overlapping dielectrics that increase the voltage path of the mated interface to air dielectric, guaranteeing superior RF performance. These same designs utilize tapered outer contacts that allow grounding to occur before the center contacts engage.**

### Contact:

**Amphenol SV Microwave**  
[svmicrowave.com](http://svmicrowave.com)

### Features & Benefits:

- **Dielectric Withstanding Voltage of 1500 VRMS (Max)**
- **Blindmate technology for push-on mating and multiport applications**
- **Spring loaded alignment to mitigate tolerance stackup**



## Wedge TNC Coaxial Connectors

### Description:

**SV Microwave manufactures high performance Wedge TNC connectors that incorporate a unique tapered dielectric design. This distinctive design allows the mating connectors' dielectrics to physically overlap which effectively minimizes air gaps and generates a longer voltage path for improved voltage breakdown. The Wedge TNC allows for outstanding passive intermodulation (PIM) performance due to the tapered dielectric design feature and the tri-alloy plated brass connector body.**

### Contact:

**Amphenol SV Microwave**  
[svmicrowave.com](http://svmicrowave.com)

### Features & Benefits:

- **High temperature, tapered dielectric design**
- **Outstanding Passive Intermodulation (PIM) performance**
- **Higher breakdown voltage path compared to standard TNC connectors**



## Type N Coaxial Connectors

### Description:

**SV Microwave manufactures high performance Type N connectors that are durable, weatherproof, medium-size connectors with consistent performance through 11 GHz. This industry standard is commonly used for high power Military and Aerospace applications.**

### Contact:

**Amphenol SV Microwave**  
[svmicrowave.com](http://svmicrowave.com)

### Features & Benefits:

- **Dielectric Withstanding Voltage of 3000 VRMS (Max)**
- **Outstanding Passive Intermodulation (PIM) performance**
- **Design optimized for Space applications through the use of tri alloy plating**

# RF INTERCONNECTS



## SCRF Connectors

Description:

Originally developed for space applications, SVMicrowave's high performance SC connectors offer excellent passive intermodulation performance through the use of tri alloy plating. The tapered conical dielectric design provides excellent voltage breakdown performance and resistance to multipaction.

Contact:

Amphenol SV Microwave  
svmicrowave.com

Features & Benefits:

- Dielectric Withstanding Voltage of 3000 VRMS (Max)
- Outstanding Passive Intermodulation (PIM) performance
- Design optimized for Space applications through the use of tri alloy plating



## ZMA Series Coaxial Connectors

Description:

SVMicrowave's ZMA connector is designed to perform through 18 GHz with overlapping PTFE dielectrics for higher power applications. The unique design of this connector provides a high coupling force in a quarter turn bayonet package which is ideal for extreme vibration applications where there is insufficient room for threaded or conventional push-on connectors.

Contact:

Amphenol SV Microwave  
svmicrowave.com

Features & Benefits:

- Dielectric Withstanding Voltage of 2500 VRMS (Max)
- Bayonet coupling installs with just a quarter turn
- Multiple keying configurations available to protect against mis-mating

# CABLING & CABLE HARNESSSES



## Harnesses and Cable Assemblies

### Description:

**Interconnect harnesses and cable assemblies are the link between mechanical controls and accessories, electronic components, and software on complex and demanding systems in aerospace, ground vehicle, and electronic applications, specifically engine and power distribution applications. Our harnesses are typically open-loomed or over-braided to precise electrical systems, environmental, and mechanical requirements. They meet RTCA DO160 and MIL-STD-810 qualification standards.**

### Contact:

**Amphenol Borisch Technologies**  
[borisch.com](http://borisch.com)

### Features & Benefits:

- **Open-Loom Harnesses**
- **Over-Braided Harnesses and Cables**
- **Over-Molded Harnesses and Cables**
- **Cable Assemblies: Point-to-Point, Pigtail, Inside-of-Box Assemblies**



## Custom Molded Cables for Harsh Environments

### Description:

**Amphenol offers high performance injection-molded cable assemblies (PVC, TPU, LSZH, and Polyurethane). Amphenol performs potting and encapsulation with MIL-M 24041 epoxies. Our mold library supports most Amphenol and Mil-Spec connectors. With vast adhesion studies made on new plating materials, superior over-molding is achieved.**

### Contact:

**Amphenol PCD**  
[amphenolpcd.com](http://amphenolpcd.com)

### Features & Benefits:

- **Superior performance**
- **MIL-M 24041 epoxies**
- **Perfected Overmold Technology**

# CABLING & CABLE HARNESSSES



## MIL-22992 Class L Heavy Duty Power Cables

### Description:

**Amphenol MIL-22992 Class L cable assemblies are suited for Industrial and Military applications. These connectors and cable assemblies are designed to meet demands, ranging from 40 to 200 amps, for military shelters, vehicles, and remote power generation.**

### Contact:

**Amphenol PCD**  
**[amphenolpcd.com](http://amphenolpcd.com)**

### Features & Benefits:

- **Military & Industrial applications**
- **40-200 amps**
- **Heavy Duty & Rugged**

# COMPLEX SYSTEMS & ASSEMBLIES



## Bus bars

### Description:

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

### Contact:

**Amphenol Air LB France**  
[amphenol-airlb.fr](http://amphenol-airlb.fr)

### Features & Benefits:

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



## Custom Power Solutions

### Description:

**Often times an off-the-shelf power connector cannot be fit into an application, requiring a custom connector. Whether it is a slight derivative product or a brand new design, Amphenol's in-house engineering staff of power experts and host of advanced connector technology can design and build a custom connector.**

### Contact:

**Amphenol Aerospace**  
[amphenol-aerospace.com](http://amphenol-aerospace.com)

### Features & Benefits:

- **In-house machining/milling capability to customize to mechanical packaging on the connector**
- **Mechining of dielectric materials allows AAO to create custom inserts for any requirements**
- **Pick and choose exactly what you need including contact termination, coupling style, number of conductors, etc.**



# Amphenol

Turkey&MiddleEast

[www.amphenol.com.tr](http://www.amphenol.com.tr)

[www.amphenol-middle-east.com](http://www.amphenol-middle-east.com)