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Solutions Guide

Product Line Overview

Amphenol

Industrial Products Group

Value-Add Custom Connectors and Cable Assemblies

Amphenol Sine Systems offers custom molded cable assembly solutions across all our standard product lines. If one of our standard products doesn't fit your specific needs, our Engineers will work with you to custom design a solution specific to your application. Whether you are looking for a customized connector solution, a complete turn-key cable assembly solution, custom wiring to simplify machine assembly or a specific mold color, Amphenol Sine Systems is your one source for proven, reliable and innovative results.




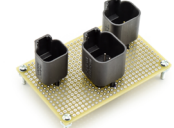













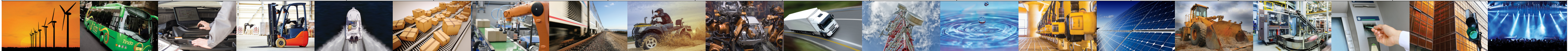



















Audio & Lighting Connectors

Amphenol Audio, branded as Entertainment@Amphenol, headquartered in Melbourne, Australia, and represented in North America by Amphenol Sine Systems, provides an extensive range of professional connector and cabling solutions specifically for the Audio, Lighting, Broadcast and Entertainment markets. A broad range of products are offered including XLR, Phone, Speaker and Power Plugs, Circular and Rectangular Multipins, Ethernet Data and Coaxial connectors.

Providing an extensive range of professional Audio & Entertainment Lighting connector products.

| XLR In-Line | XLR Chassis & PCB | Power | Ethernet | 1/4" & 3.5mm |
|---|---|--|---|--|
| AC and AX Series | AC Series | HP Series | Locking RJ45- XLRnet Series | Phone Plugs & Jacks |
| | | | | |
| AC 3, 4, 5, 6A & 7 pos. | 3, 4, 5, 6A & 7 pos. | 3 pole, 25A / 250 VAC | Class D, Cat5E, Cat6 Performance Options | 1/4" & 3.5mm |
| AX 3, 4 & 5 pos. | A & B Type w/ H or V PCB tails | Power "In" Blue/Keying | Cable Kit retrofits to preassembled RJ45 assemblies | Musicians & Pro Series Plugs |
| Satin Nickel or Matte Black | D & P Type flange Chassis Mount | Power "Out" Gray/Keying | H & V /Shielded or Non Shielded PCB Options | Satin Nickel or Matte Black |
| Gold Contacts Optional | Satin Nickel or Matte Black | Screw Terminals on In-Lines | w/wo Integral LED's | Gold Contacts Optional |
| Multi-Color Coding Options | Gold Contacts Optional | Chassis w/wo Terminal Barriers | Feed-Thru and IDC Chassis Options | Stereo or Mono w/ several switching and grounding options on Jacks |
| Mini XLR | Loud Speaker | Dante | RCA | Multipin |
| G Series | SP, EP and AP Series | Digital Network Adapters | M Series | MP-41 & MP-62/5 Series |
| | | | | |
| 3, 4, 5 & 6 pos. | SP 2 & 4 pole, 30A 250 VAC | Dante "IN" to Analog "OUT" | Robust Diecast Shell w/ Flexible Grommet | MP-41 13, 19, 25, 37, 54, 85 & 150 pos. |
| In-Line, Bulkhead and PCB M & F Options | PG Gland & Strain Relief Options | Single or Dual Channel Balanced Analog Outputs | 6 Color Coding Options | 13A, 200V 13-85 pos. / 7.5A, 200 V 150 pos. |
| Positive Latchlock | EP & AP 3, 4, 5 & 6 pos. 20A / 8 pos. 15A | Rugged Overmolded Construction | Gold Plated Contacts | MP-62/5 39 & 61 pos. |
| Bright Nickel or Black Shell Finish | M & F In-Line & Chassis Options | Molded Cable Strain Relief | | |
| | Satin Nickel or Matte Black | | | |

| Series | AHD Series™ | AHDP Dura Mate™ | AT Series™ | AT Board Lock Series™ | ATM Series™ | ATP Series™ | Hydro Net™ Multi-Hub | Magna Mate™ | Multi Mate™ Distributed Power System | Panel Mate™ | C091 A/D Circular | C091 B Circular | C091 D+ Circular | C16-3 Circular | C16-L Circular | eco mate™ Aquarius™ Waterproof | eco mate™ Circular |
|---|--|--|--|---|--|--|--|---|--|--|---|---|---|---|--|--|--|
| Product Image |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Typical Applications | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Marine, NMEA Networks | Heavy Equipment, Transportation, Marine, Battery Storage, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy | Industrial Automation, Motion Control, Process Control Equipment, Wireless Infrastructure | Industrial Automation, Motion Control, Process Control Equipment, Wireless Infrastructure | Industrial Automation, Motion Control, Process Control Equipment, Wireless Infrastructure | Industrial Automation, On-Machine, Process Control, Alternative Energy, Traffic Control | Alternative Energy, Industrial Automation, On-Machine, Process Control | Alternative Energy, Off-Road, Instrumentation, Building Automation, Telecom, Traffic Control | Alternative Energy, Industrial Automation, On-Machine, Process Control |
| Coupling System | Bayonet | Twist Lock & Push-On | Integral Latch | Intergral Latch | Integral Latch | Integral Latch | Intergral Latch & Threaded (M12) | Intergral Latch | Intergral Latch | Intergral Latch | Metal Screw | Bayonet | Metal Screw | Quick Locking | Quick Locking | Bayonet Coupling | Threaded |
| Contact Positions | 7-31 | 7-47 | 2-13 | 2-13 | 2-13 | 2-4 | 4-5 | 4 | 2-4 | 2-13 | 2-14 | 2-14 | 2-14 | 3-20 | 5 | 8, 10, 12 and 14 | 4 & 7 |
| Housing Material | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Thermoplastic | Metal | Plastic | Metal | Plastic | Plastic | Plastic | Plastic |
| AWG | 10-20 AWG | 7-20 AWG | 14-20 AWG | 12 & 16 AWG | 16-22 AWG | 12-14 AWG | 16 & 20 AWG | 8-12 AWG | 12 & 20 AWG | 12-20 AWG | 18 -28 AWG | 18-28 AWG | 18 -28 AWG | 10-28 AWG | 8-14 AWG | 12-28 AWG | 14-26 AWG |
| Contact Current Ratings | 13A | 7.5 to 80A | 13A | 13 to 25A | 7.5A | 25A | 13 to 25A | 180 A | 13 to 25A | 13 to 25A | Up to 300V/5A | Up to 300V/5A | Up to 300V/5A | 5 to 40A | 50A | Up to 500V/23A | 10 to 20A |
| IP Ratings | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP40/67 mated | IP40 mated | IP40 mated | IP65 mated | IP68 mated | IP68/69K mated | IP67 mated |
| Mating Cycles | 100+ | 100+ | 100+ | 100+ | 100+ | 100+ | 100+ | 100+ | 100+ | 100+ | Up to 1000 | Up to 1000 | Up to 1000 | 500+ | 500+ | 500+ | 500+ |
| Contact Types | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, "PC Tail" | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Machined, Stamped & Formed | Screw and Crimp Termination | Screw and Crimp Termination | Machined, Stamped & Formed, PC Tail | Screw, Solder and Crimp Termination |
|  | | | | | | | | | | | | | | | | | |
| Series | eco mate RM™ Circular | eco mate RTHP™ Circular | RADSOK® Ground Mate™ | heavy mate E/EE Rectangular | heavy mate M Rectangular | M23 Circular | M23 Hybrid DNC Circular | M23 Motion Cables | M40 Circular | sensor mate M12 | sensor mate M12 Ethernet | sensor mate M12 X-Code | miniBOSS™ M22 | PowerBOSSlite™ M35 | PowerBOSS™ M40 with CheckMate™ | Smart Card C700 | VersaBOSS™ VFD Cables |
| Product Image |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Typical Applications | Motion Control, Industrial Automation, On-Machine, Robotics, Rail transit | Motion Control, Industrial Automation, On-Machine, Robotics | Battery Storage, Heavy Equipment, Industrial Automation, On-Machine | Industrial Automation, On-Machine, Rail Transit, Process Control, Robotics | Industrial Automation, On-Machine, Rail Transit, Process Control, Robotics | Motion Control, Industrial Automation, On-Machine, Packaging, Alternative Energy | Motion Control, Industrial Automation, On-Machine, Packaging, Alternative Energy | Motion Control, Industrial Automation, On-Machine, Packaging, Allen-Bradley 2090 Series | Motion Control, Industrial Automation, On-Machine, Packaging, Alternative Energy | Industrial Automation, On-Machine, Marine, Process Control, Robotics, Motion Control | Industrial Automation, On-Machine, Process Control, Robotics, Motion Control | Industrial Automation, On-Machine, Process Control, Robotics, Motion Control | Industrial Automation, On-Machine, Process Control, Robotics | Industrial Automation, On-Machine, Process Control, Robotics | Industrial Automation, On-Machine, Process Control, Robotics | Point of Sales Terminals, Digital Decoders, Vending | Industrial Automation, On-Machine, Process Control, Robotics |
| Coupling System | Metal Bayonet Locking | Metal Bayonet Locking | Press-fit | Quick Latching | Quick Latching | Metal Threaded & Quick Locking | Metal Threaded | Metal Threaded & Quick Locking | Metal Threaded & Quick Locking | Plastic & Metal Threaded | Metal Threaded | Metal Threaded | Metal Threaded | Metal Threaded | Metal Quick Connect | Push, Push-Pull, Push-Push, Pushmatic | Metal Bayonet Locking |
| Contact Positions | 3-48 | 1-3 | 1 | 6-48 | 1-140 | 6-19 | 2 Pwr + PE + Signal + 4 Ethernet | 6-19 | 6-8 | 3-8 | 4 | 8 | 2-6 | 3 & 4 | 6 | 6-20 | 9 |
| Housing Material | Metal | Metal | Metal | Metal | Metal | Metal | Metal | Metal | Metal | Overmolded | Overmolded | Overmolded | Overmolded | Overmolded | Overmolded | Metal & Plastic | Overmolded |
| AWG | 14-30 AWG | 8 to 0/0 AWG | 8-12 AWG | 10-20 AWG | 28 to 000 AWG | 12-28 AWG | 14-28 AWG | 12-28 AWG | 8-18 AWG | 18 to 24 AWG | 24 AWG | 26 AWG | 12 to 18 AWG | 10 AWG | 8 & 10 AWG | 28 AWG | 12 to 18 AWG |
| Contact Current Ratings | 13 to 45A | 86 to 300A | 180A | 10 to 22A | 10 to 300A | 7 to 30A | 0.5 to 18A | 7 to 30A | 30 to 75A | 2 to 12A | Cat 5e | Cat 6a | 8 to 20A | 25 & 30A | 25 & 32A | N/A | 20A |
| IP Ratings | IP67 mated | IP67 mated | Up to IP65 mated | IP65, IP67 & IP68 mated | IP65, IP67 & IP68 mated | IP67 mated | IP67 mated | IP67 mated | IP67 mated | IP67 & IP68 mated | IP67 mated | IP67 mated | IP67 mated | IP67 Mated | IP67 Mated | N/A | IP67 Mated |
| Mating Cycles | 250+ | 250+ | 1,000+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500+ | 500,000+ | 500+ |
| Contact Types | Machined, Stamped & Formed, PC Tail | Machined RADSOK® | Machined RADSOK® | Crimp (Turned and Stamped & Formed), Screw, Push-In, Cage Clamp | Crimp (Turned and Stamped & Formed) | Machined | Machined | Machined | Machined | Machined, Stamped & Formed, Machined (Field Installable) | Machined | Machined | Machined | Machined | Machined | Chip/Magnetic Stripe | Machined |