

Solutions Guide




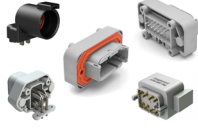





Product Line Overview

[Digital Edition]

China
Amphenol Sine Systems
www.amphenol-sine.com.cn
Shen Zhen, China 518108

North America
Amphenol Sine Systems
www.amphenol-sine.com
Clinton Township, Michigan 48036
Nogales, Sonora, Mexico 84094

Germany
Amphenol Tuchel GmbH
www.amphenol.de
Heilbronn, Germany 74080









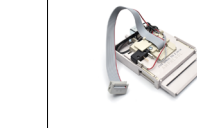
	AT Series™	ATM Series™	ATP Series™	BoardLock™ Family	PanelMate™ Family	AHD Series™	DuraMate™ Family	Armor IPX™ Enclosures	HYPERBUSS™ Family
Product Image									
Typical Applications	Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy	Heavy Equipment, Transportation, Marine, Diagnostic, 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	Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy	Heavy Equipment, Transportation, Marine, Alternative Energy	Heavy Equipment, Transportation, Agriculture, Marine, Diagnostic, Military, Alternative Energy
Coupling System	Integral Latch	Integral Latch	Integral Latch	Integral Latch	Integral Latch	Bayonet	Bayonet	Clip	Integral Latch
Contact Positions	2-18	2-12	2, 4 & 6	2-13	2-13	6 & 9	2-47	Dependent on Header	2, 4, 6, 8, 12 & 18
Housing Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic & Metal	Thermoplastic	Thermoplastic
AWG	14 thru 22AWG	16 thru 22AWG	10 thru 14AWG	12 & 16AWG	12 thru 22AWG	10 thru 20AWG	7 thru 22AWG	N/A	N/A
Contact Current Ratings	Up to 13A	7.5A	25A	13A	Up to 25A	Up to 25A	Up to 80A	N/A	Up to 25A (per contact)
IP Ratings	IP67 mated	IP67 mated	Up to IP68 (1M in water for 24 hrs)	Up to IP68 (1M in water for 24 hrs)	Up to IP68 (1M in water for 24 hrs)	IP67 mated	IP67/69K mated	IP67/69K mated	Up to IP68 (1M in water for 24 hrs)
Mating Cycles	100+	100+	100+	100+	100+	100+	100+	100	100+
Contact Types	Machined, Stamped & Formed	Machined, Stamped & Formed	Machined, Stamped & Formed	Machined, PC Tail	Machined, Stamped & Formed	Machined, Stamped & Formed	Machined, Stamped & Formed	Dependent on Header	Machined, Stamped & Formed



	ATHD Series™	AT LED Series™	ecomate® C16	ecomate® Aquarius™	ecomate® Plastic	ecomate® RM	ecomate® RM High Amperage	heavymate® E/EE	heavymate® M
Product Image									
Typical Applications	Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy	Heavy Equipment, Transportation, Marine, Diagnostic, Alternative Energy	Industrial Automation, On-Machine, Process Control, Alternative Energy, Traffic Control	Alternative Energy, Off-Road, Instrumentation, Building Automation, Telecom, Traffic Control	Alternative Energy, Industrial Automation, On-Machine, Process Control	Motion Control, Industrial Automation, On-Machine, Robotics, Rail transit	Motion Control, Industrial Automation, On-Machine, Robotics	Industrial Automation, On-Machine, Rail Transit, Process Control, Robotics	Industrial Automation, On-Machine, Rail Transit, Process Control, Robotics
Coupling System	Integral Latch	Integral Latch	Bayonet Coupling	Bayonet Coupling	Threaded	Metal Bayonet Locking	Metal Bayonet Locking	Quick Latching	Quick Latching
Contact Positions	Single Pole	2	3-20	3-32	4 & 7	3-48	1-3	6-48	1-140
Housing Material	Thermoplastic	Thermoplastic	Plastic	Plastic	Plastic	Metal	Metal	Metal	Metal
AWG	4-14AWG	14 thru 20AWG	10 thru 28AWG	10 thru 28AWG	14 thru 26AWG	14 thru 30AWG	3/0-0 thru 16AWG	12 thru 20AWG	000 thru 28AWG
Contact Current Ratings	Up to 100A	Up to 13A	Up to 50A	Up to 600V/45A	Up to 16A	Up to 45A	Up to 300A	Up to 22A	Up to 300A
IP Ratings	IP67/69K mated	IP67 mated	IP65 mated	IP67/69K mated	IP67 mated	IP67 mated	IP67 mated	IP65, 67, 68, 69K mated	IP65, 67, 68 mated
Mating Cycles	100+	100+	500+	500+	500+	500+	500+	500+	500+
Contact Types	Machined	Machined, Stamped & Formed	Screw and Crimp Termination	Machined, Stamped & Formed, PC Tail	Screw, Solder and Crimp Termination	Machined, Stamped & Formed, PC Tail	Machined RADSOK®	Crimp (Turned/Stamped & Formed), Screw, Push-In, Cage Clamp	Crimp (Turned and Stamped & Formed)

	MagnaMate™ ATHP	MultiMate™ Distributed Power System	C091 A, D, D+ (M16)	C091 B (M16)	(M16) C091 AISG/RET Cable Assemblies	microBOSS™ M12	microBOSS™ M12 Ethernet	miniBOSS™ M22	M23 Elite Power & Signal
Product Image									
Typical Applications	Heavy Equipment, Transportation, Marine, Battery Storage, 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	Wireless Infrastructure, Harsh Environment	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, Packaging, Alternative Energy
Coupling System	Integral Latch	Integral Latch	Metal Screw	Bayonet	Metal Screw	Plastic & Metal Threaded	Metal Threaded	Metal Threaded	Metal Threaded & Quick Locking
Contact Positions	2 + HVIL	2-4	2-14	3-14	4, 5, 6	3, 4, 5	4	2-6	6-19
Housing Material	Thermoplastic	Thermoplastic	Metal	Plastic	Metal	Overmolded	Overmolded	Overmolded	Metal
AWG	8 thru 14AWG	12 & 20AWG	18 thru 28AWG	18 thru 28AWG	18 thru 22AWG	18 thru 24AWG	24AWG	12 thru 18AWG	12 thru 28AWG
Contact Current Ratings	Up to 180A	Up to 25A	Up to 300V/5A	Up to 300V/5A	Up to 300V/5A	4A	Cat 5e	Up to 20A	Up to 30A
IP Ratings	IP67 mated	IP67 mated	IP40, 65, 67, 68, 69K mated	IP40 mated	IP68 mated	IP67, 68 mated	IP67 mated	IP67 mated	IP67 mated
Mating Cycles	100+	100+	Up to 1000	Up to 1000	Up to 1000	500+	500+	500+	500+
Contact Types	Machined RADSOK®	Machined, Stamped & Formed	Stamped & Formed, Solder and PC Tail	Stamped & Formed, Solder and PC Tail	Stamped & Formed	Machined, Stamped & Formed	Machined	Machined	Machined



	M23 Motion Cables	M40 Power	PowerBOSS™ M40 with CheckMate™	PowerBOSS™ M29	PowerBOSSlite™ M35	VersaBOSS™ VFD Cables	RADSOK® GroundMate™	44 Series Circular	Smart Card C700
Product Image									
Typical Applications	Motion Control, Industrial Automation, On-Machine, Packaging, Allen-Bradley 2090 Series	Motion Control, Industrial Automation, On-Machine, Packaging, Alternative Energy	Industrial Automation, On-Machine, Process Control, Robotics	Industrial Automation, On-Machine, Process Control, Robotics, Motion Control	Industrial Automation, On-Machine, Process Control, Robotics	Industrial Automation, On-Machine, Process Control, Robotics	Battery Storage, Heavy Equipment, Industrial Automation, On-Machine	Automotive, Traffic Control, Marine, Industrial, Mining Ventilation Systems, RV	Point of Sales Terminals, Digital Decoders, Vending
Coupling System	Metal Threaded & Quick Locking	Metal Threaded & Quick Locking	Metal Quick Connect	Metal Threaded	Metal Threaded	Metal Bayonet Locking	Press-fit	Push-Pull	Push, Push-Pull, Push-Push, Pushmatic
Contact Positions	6-19	6-8	6	4	3 & 4	9	1	1-6	6-20
Housing Material	Metal	Metal	Overmolded	Overmolded	Overmolded	Overmolded	Metal	Thermoplastic Rubber	Metal & Plastic
AWG	12 thru 28AWG	8 thru 18AWG	8 & 10AWG	12AWG	10AWG	12 thru 18AWG	8 thru 12AWG	18-14AWG	28AWG
Contact Current Ratings	Up to 30A	Up to 75A	25 & 32A	Up to 29A	25 & 30A	20A	180A	8A	N/A
IP Ratings	IP67 mated	IP67 mated	IP67 Mated	IP68 mated	IP67 Mated	IP67 Mated	Up to IP65 mated	IP65/67	N/A
Mating Cycles	500+	500+	500+	500+	500+	500+	1,000+	25 Max	500,000+
Contact Types	Machined	Machined	Machined	Machined	Machined	Machined	Machined RADSOK®	Stamped & Formed	Chip/Magnetic Stripe

Custom Connector and Molded Cable Assembly Solutions

We offer custom 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. For more examples: www.amphenol-sine.com/custom-solutions



Professional Audio & Lighting Connectors

Entertainment@Amphenol is the global brand-name of Amphenol Audio, based in Australia, and is represented in North America by Amphenol Sine Systems. This branding better represents the extensive range of pro-audio, broadcast, video display & lighting products available worldwide. A broad range of products are offered including XLR, Phone, Speaker and Power Plugs, Multipins, Ethernet Data and Coaxial connectors. For product info: www.amphenol-sine.com/entertainmentamphenol



XLR	Loud Speaker	Power	Amphe-Dante™ Adapters	XLRnet Ethernet
AC and AX Series	SP, EP and AP Series	HP & HPT Series	Amphe-Dante™ Digital Network Adapters	Locking RJ45 - XLRnet Series
3, 4, 5, 6A & 7 pos.	SP 2 & 4 pole, 30A 250 VAC	3 pole, 25A / 250 VAC	Dante "IN" to Analog "OUT" Analog "IN" to Dante "OUT"	Class D, Cat5E, Cat6 Performance Options
A & B Type w/ H or V PCB tails	PG Gland & Strain Relief Options	Power "In" Blue/Keying Power "Out" Gray/Keying	Single or Dual Channel Bi-Directional-USB & AES3/EBU	Cable Kit Retrofits to Preassembled RJ45 Assemblies
Satin Nickel or Matte Black	EP & AP 3, 4, 5 & 6 pos. 20A / 8 pos. 15A	HPT has circuit-breaking and IP65 capabilities	Rugged Overmolded Tamper- Proof Construction	H & V /Shielded or Non Shielded PCB Options
Gold Contacts Optional	M & F In-Line & Chassis Options	Screw Terminals on In-Lines	Best-in-Class AX Series XLRs	w/wo Integral LED's
Multi-Color Coding Options	Satin Nickel or Matte Black	Chassis w/wo Terminal Barriers	Molded Cable Strain Relief	Feedthrough and IDC Chassis Options
Data Chassis Mounts	1/4" & 3.5mm	RCA	Mini XLR	Multipin
AC Multimedia Series	Phone Plugs & Jacks	M Series	G Series	MP-41 & MP-62/5 Series
HDMI/USB 3 Type A	1/4" & 3.5mm	Robust Diecast Shell w/ Flexible Grommet	3, 4, 5 & 6 pos.	MP-41 13, 19, 25, 37, 54, 85 & 150 pos.
Feedthrough Adapters	Musician, Q & Pro Series Plugs	6 Color Coding Options- Backshell/Insert Color	In-Line, Bulkhead and PCB M & F Options	13A, 200V 13-85 pos. / 7.5A, 200 V 150 pos.
Nickel or Black Shell Finish	Satin Nickel or Matte Black	Gold Plated Contacts	Positive Latchlock	MP-62/5 39 & 61 pos.
D Type Chassis Mount Feed-throughs	Gold Contacts Optional	D Type Panel Mount Available in Nickel or Black Finish	Nickel Shell Finish	w/wo Dust Caps
Panel Mount	Stereo or Mono w/ Several Switching and Grounding Options on Jacks	Panel mount utilizes standard 'D' type housing	Compatible with Industry Standard Mini XLRs	Optional Factory-Installed Contacts Available