

AT Series™



Heavy-Duty, Multi-Pin, 13A-25A, Thermoplastic Connectors

Available in 2, 3, 4, 6, 8, 12, 13 (Mixed), 15 (Mixed) and 18 position

Amphenol Sine Systems' **AT Series™** connectors are a high-performance, IP68 and IP69K rated (in mated condition), thermoplastic, cost-effective solution with superior environmental seals and seal retention capabilities. The connector design incorporates an integral latching system that ensures a definitive electrical and mechanical connection. All of our **AT Series™** connectors offer a wide range of end caps and strain relief options and have been developed to be compatible with all other existing standard products industry-wide. Available in **BoardLock™**, **HYPERBUSS™**, **LED**, **PanelMate™** and **StructurePlus™** options.



Key Features

- Thermoplastic housing with excellent UV resistance
- Wedgelocks ensure proper contact alignment & retention
- Integrated latch for mating ensures a secure connection
- Superior front and rear environmental seals and seal retention
- Compatible with existing standard products industry-wide
- Wide range of end caps and strain relief options

Applications: Heavy Duty, Transportation, Marine, Diagnostic, Alternative Energy, Agricultural and other demanding interconnect architectures.

Specifications Overview (Reference Individual Datasheets)

Operating Temperature	-55°C to +125°C
Max Current Rating (Amp)	2, 3, 4, 6, 8, 12 pos: 13A (Size 16) 13, 15 pos: Mixed 25A (Size 12), 13A (Size 16) 18 pos: 13A (Size 16)
Mating Cycles	>100
IP Rating	IP68 and IP69K (in mated condition)
Wire Range	2, 3, 4, 6, 8, 12 pos: 14-24AWG (Size 16) 13, 15 pos: Mixed 10-14AWG (Size 12), 14-24AWG (Size 16) 18 pos: 14-24AWG (Size 16)
Contacts	Machined and Stamped & Formed Copper-Alloy, Nickel-Plated, Gold-Plating optional
Housing/Latch Material	Thermoplastic/Integrated latch for mating
Sealing Material	Silicone Rubber
Dielectric Withstanding Voltage	Less than 2 mA current leakage @ 1500V AC

Insulation Resistance	1000 megohms minimum at 25°C
Shock	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)
Vibration	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)
Connector Terminal Retention	When subjected to a direct pull, contacts achieve a minimum pull-out force of 25 lbs.
Connector Retention	A mated connector subjected to a pulling force by the exiting wire bundle at 25 lbs. times the number of contacts to a maximum of 100 lbs. applying load for 30 seconds
Thermal Shock	Subjected to 10 cycles at -55°C to +125°C with no cracking, chipping or other damage detrimental to the normal operation of the connector

Custom Color Options











A Series™ Family







Standard products. Custom solutions
Customer Service +1 800 394 7732

Related Items-Product Lines

 <p>BL BoardLock™</p> <p>BoardLock™ connectors combine flanged or flangeless, 180° straight or 90° right angle pin-oriented, wire-to-board versatility with the proven reliability of the A Series™ environmentally-sealed, thermoplastic, connection system.</p>	 <p>HB HYPERBUSS™</p> <p>HYPERBUSS™ connectors are a high-performance, cost-effective solutions used in a variety of interconnect applications where a common "bussed" electrical pathway is required. They contain superior environmental seals and seal retention capabilities.</p>
 <p>PM Panel Mate™</p> <p>PanelMate™ connectors combine flange-mounting options with the proven reliability of the AT, ATP and ATHD Series™ environmentally-sealed, thermoplastic connection systems.</p>	 <p>SP Structure+™</p> <p>StructurePlus™ overmold-compatible connectors are engineered, one-piece, solid body connectors that are specifically designed for cable assembly operations requiring custom molding or shrink tube requirements.</p>
 <p>AT ATSeries™ SR01/02</p> <p>AT SR01/02 Series™ specifically designed wire cavities protect each individual wire seal, eliminating stress on the rear seal, maintaining IP68/69K sealing performance regardless of wire bundle direction or improper installation.</p>	 <p>AT ATSeries™ LED</p> <p>AT Series™ LED (Light Emitting Diode) Plug Connectors, available in a 12V and/or 24V LED plug option, are a highly-visible, field-serviceable, cost-effective solution for quick visual verification of power to help reduce troubleshooting time.</p>
 <p>ARMORIPX™</p> <p>Armor IPX™ Sealed Enclosures provide superior protection for printed circuit boards and electronic control modules in harsh environments and off-road applications.</p>	 <p>AT Integrated Resistors&Diodes</p> <p>AT Series™ Integrated Resistors & Diodes for ideal for Heavy Duty applications where environmentally-sealed, factory-assembled, plug-and-play connectors are needed.</p>

Related Items-Accessories

 <p>A ASeries™ Boots</p> <p>A Series™ Boots provide an optional protective backshell covering for harsh environmental and industrial applications in -28°C to +100°C conditions. For use with AT, ATM and ATP Series™ connectors that do not include an endcap or shrinkboot strain relief.</p>	 <p>A ASeries™ Caps</p> <p>A Series™ Caps are a low-cost alternative to using standard connectors with sealing plugs and provide an optional protective covering for harsh environmental and industrial applications. All caps are IP68 rated (1M of Water for 24 Hrs).</p>
 <p>A ASeries™ Clips</p> <p>A Series™ Clips provide an optional method for mounting AT, ATM, ATP, and ATHD Series receptacles to our plug connectors, and are available in stainless steel, steel with zinc-plating, and plastic.</p>	 <p>A ASeries™ Colors</p> <p>Our A Series™ connectors come in a variety of color modifications for your specific needs. Colors are often used to help differentiate between keying options, but we also offer color modifications across a large number of our A Series™ product lines for your specific project needs.</p>