



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







18 x Size 16 Contacts Configuration

Amphenol Sine Systems' **AT Series™** connectors are a high-performance, IP68/69K rated (mated), thermoplastic, cost-effective solution with superior environmental seals and seal retention capabilities available in 2, 3, 4, 6, 8, 12, 13 (Mixed), 15 (Mixed) and 18 position. 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. The 18 Position is available in a **PanelMate™** option.

Key Features

- Optional keying A, B, C, D and E (color-specified)
 Optional SR02 Strain Relief protects each wire cavity to maximize sealing integrity
- Plug and receptacle housings are pre-assembled with internal rear seals and covers
- Superior front and rear environmental seals and seal retention capabilities provide a multi-sealing perimeter against environmental ingress

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

| Operating Temperature | -55°C to +125°C |
|---------------------------------|---|
| Max Current Rating (Amperage) | 13A |
| Mating Cycle Durability | >100 |
| IP Rating | IP68/69K (in mated condition) |
| Wire Range | Size 16 (14-20AWG) contacts |
| Contacts | Available in 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 milliamps 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 |













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

| Position - AT Ser | Part Number | Description | Size | Amp |
|--|------------------|---|------|-----|
| integer in the second s | AT16-18SA-K004 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key A, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SB-K004 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key B, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SC-K004 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key C, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SD-K004 | 18 Position, Plug, Socket, AT Series TM , Reduced Diameter Rear Seal (Green), End Cap, Key D, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SE-K004 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key E, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18\$A-EK02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key A, Gray Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SC-EK02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key C, Green Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SD-EK02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key D, Brown Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SE-EK02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key E, Gray Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18\$A-\$R02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key A, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SB-SR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key B, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SC-SR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key C, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SD-SR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key D, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SE-SR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key E, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SA-EKSR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key A, Grey Body (No Add'l Wedgelock Required) | 16 | 13A |

| 18 Position - AT Series™ Plugs, cont. | | | | |
|--|------------------|---|------|-----|
| Image | Part Number | Description | Size | Amp |
| | AT16-18SC-EKSR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key C, Green Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SD-EKSR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key D, Brown Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18SE-EKSR02 | 18 Position, Plug, Socket, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key E, Grey Body (No Add'l Wedgelock Required) | 16 | 13A |
| 18 Position - AT Series | ™ Receptacles | | | |
| | AT16-18PA-K004 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key A, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PB-K004 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key B, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PC-K004 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key C, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PD-K004 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key D, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PE-K004 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key E, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PA-EK02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key A, Grey Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PC-EK02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key C, Green Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PD-EK02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key D, Brown Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PE-EK02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), End Cap, Key E, Grey Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PA-SR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key A, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PB-SR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key B, Black Body (No Add'l Wedgelock Required) | 16 | 13A |
| | AT16-18PC-SR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key C, Black Body (No Add'l Wedgelock Required) | 16 | 13A |

| 18 Position - AT Series™ Receptacles, cont. | | | | | |
|---|---------------------|---|------|-----|--|
| Image | Part Number | Description | Size | Amp | |
| | AT16-18PD-SR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key D, Black Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PE-SR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key E, Black Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PA-EKSR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key A, Grey Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PC-EKSR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key C, Green Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PD-EKSR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key D, Brown Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PE-EKSR02 | 18 Position, Receptacle, Pin, AT Series™, Reduced Diameter Rear Seal (Green), SR02 Strain Relief, Key E, Grey Body (No Add'l Wedgelock Required) | 16 | 13A | |
| 18 Position - PanelMa | ate™ AT Receptacles | | | | |
| | AT16-18PA-PM11 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), End Cap, Keyed A, Grey Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PB-PM11 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), End Cap, Keyed B, Black Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PC-PM11 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), End Cap, Keyed C, Green Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PD-PM11 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), End Cap, Keyed D, Brown Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PE-PM11 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), End Cap, Keyed E, Grey Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PA-PM15 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), Strain Relief, Keyed A, Grey Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PB-PM15 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), Strain Relief, Keyed B, Black Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PC-PM15 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), Strain Relief, Keyed C, Green Body (No Add'l Wedgelock Required) | 16 | 13A | |
| | AT16-18PD-PM15 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), Strain Relief, Keyed D, Brown Body (No Add'l Wedgelock Required) | 16 | 13A | |



18 Position - **PanelMate™ AT** Receptacles, cont.

| Image | Part Number | Description | Size | Amp |
|-------|----------------|--|------|-----|
| | AT16-18PE-PM15 | 18 Position, Receptacle with Flange, Pin, PanelMate™ AT, Self-Threading, Gasket, Reduced Diameter Rear Seal (Green), Strain Relief, Keyed E, Grey Body (No Add'l Wedgelock Required) | 16 | 13A |

18 Position - AT Series™ Accessories

| AT16-1518S-CAP | Protective Cover for 12, 15, 18 Position AT Series™ Plugs, Black Body | - |
|----------------|---|---|
| ATBS-PS-1805 | Backshell for 15 & 18 Pos, AT Series™, Black Body | - |
| AT11-310-1605 | Contact Removal Tool, Plastic, Size 16 | - |

For more information, contact: Customer Service, +1 800 394 7732, csr@amphenol-sine.com

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