



# ATHD ATHD Series™



## Heavy Duty, Thermoplastic, Power Connectors

### Available in Single Position

Our **ATHD Series™** Heavy Duty Power Connectors provide an environmentally-sealed connection system and solution to field splices and terminals in harsh environments. Safety features include an integral latch to prevent inadvertent disconnect and an audible/tactile "click" provides circuit confirmation. Precision machined contact technology maximizes performance and durability while delivering up to 100A of power.

Available in **In-Line (Wire-to-Wire)**, **BoardLock™**, **PanelMate™** and **StructurePlus™** options. Also available as cable assemblies in a variety of standard lengths.



**Applications:** Heavy Duty, Transportation, Marine, Diagnostic, Military, Alternative Energy and Agricultural

### Key Features

- Intermatable with industry standard connectors
- Circular, Thermoplastic Housing
- Integral Latch Prevents Inadvertent Disconnect
- In-line (Wire-to-Wire), BoardLock™ or PanelMate™ Options
- Customized project-specific colors



ATHD Series™ - Specifications (Reference Individual Datasheets)

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| IP Rating (in mated condition) | IP68 and IP69K (See datasheets)                                                                |
| Max. Current (Amperage)        | Up to 100A                                                                                     |
| Max. Voltage Rating            | Up to 1000V                                                                                    |
| Operating Temperature          | -40°C to +125°C                                                                                |
| Coupling System                | Integrated Latch                                                                               |
| Housing Body                   | Thermoplastic UL94-VO                                                                          |
| Contact Types                  | Stamped & Formed, Machined, Solder                                                             |
| Contact Material               | Copper Alloy                                                                                   |
| Wire Range                     | 4-14AWG (See datasheets)                                                                       |
| Sealing Material               | Silicone Rubber                                                                                |
| Min. Mating Cycles             | >100                                                                                           |
| Flammability Rating            | UL94-VO                                                                                        |
| Fluid Resistance               | Gas, oil, mineral oil, acid bath, basic bath                                                   |
| Insulation Resistance          | 1000 megohms min. of 25°C                                                                      |
| RoHS Compliant                 | ALL materials meet the requirements of the European Directive. (See website for documentation) |

### Available Modifications

- **-BMXX** - BoardLock™ ATHD/ATFHD Receptacle
- **-L009** - PanelMate™ ATHD Receptacle for inside mounting
- **-L013** - PanelMate™ ATHD Receptacle for outside mounting
- **-OM** - StructurePlus™ ATHD Overmold Capable
- **-E003** - Endcap



-BMXX



-L009



-L013



-OM



-E003

### IP Ratings

IP67 rated (Dust tight; 1M of Water for 30 Minutes, in mated condition)

IP68 rated (Dust tight; 1M of Water for 24 Hours, in mated condition)

IP69K rated (Dust tight; High-Pressure Waterproof, 4 Points (0°, 30°, 60°, 90°), in mated condition)



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

ATHD Series™ - Plugs

**Note:** Refer to individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.

| Image                                                                             | Part Number       | Description                                                     | Contact Size | Amp  |
|-----------------------------------------------------------------------------------|-------------------|-----------------------------------------------------------------|--------------|------|
|  | ATHD06-1-4S       | Single Position, Plug, Pin, ATHD™ Series, Black Body            | 4            | 100A |
|  | ATHD06-1-4S-E003  | Single Position, Plug, Socket, ATHD™ Series, Endcap, Black Body | 4            | 100A |
|  | ATHD06-1-8S       | Single Position, Plug, Socket, ATHD™ Series, Black Body         | 8            | 60A  |
|  | ATHD06-1-8S-E003  | Single Position, Plug, Socket, ATHD™ Series, Endcap, Black Body | 8            | 60A  |
|  | ATHD06-1-12S      | Single Position, Plug, Socket, ATHD™ Series, Black Body         | 12           | 25A  |
|  | ATHD06-1-12S-E003 | Single Position, Plug, Socket, ATHD™ Series, Endcap, Black Body | 12           | 25A  |

StructurePlus™ ATHD - Plugs

**Note:** Refer to individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.

|                                                                                    |                 |                                                                       |    |      |
|------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------|----|------|
|  | ATHD06-1-4S-OM  | Single Position, Plug, Socket, StructurePlus™ ATHD Series, Black body | 4  | 100A |
|  | ATHD06-1-8S-OM  | Single Position, Plug, Socket, StructurePlus™ ATHD Series, Black Body | 8  | 60A  |
|  | ATHD06-1-12S-OM | Single Position, Plug, Socket, StructurePlus™ ATHD Series, Black      | 12 | 25A  |

ATHD Series™ - Receptacles

**Note:** Refer to individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.

|                                                                                     |                  |                                                                    |   |      |
|-------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------|---|------|
|  | ATHD04-1-4P      | Single Position, Receptacle, Pin, ATHD™ Series, Black Body         | 4 | 100A |
|  | ATHD04-1-4P-E003 | Single Position, Receptacle, Pin, ATHD™ Series, Endcap, Black Body | 4 | 100A |
|  | ATHD04-1-8P      | Single Position, Receptacle, Pin, ATHD™ Series, Black Body         | 8 | 60A  |
|  | ATHD04-1-8P-E003 | Single Position, Receptacle, Pin, ATHD™ Series, Endcap, Black Body | 8 | 60A  |

| Image                                                                            | Part Number       | Description                                                        | Contact Size | Amp |
|----------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------|--------------|-----|
|  | ATHD04-1-12P      | Single Position, Receptacle, Pin, ATHD™ Series, Black Body         | 12           | 25A |
|  | ATHD04-1-12P-E003 | Single Position, Receptacle, Pin, ATHD™ Series, Endcap, Black Body | 12           | 25A |

**BoardLock™ ATHD Series - Receptacles**

**Note:** Refer to individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.

|                                                                                     |                   |                                                                                                                                  |    |      |
|-------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------|----|------|
|    | ATHD04-1-4P-BM11  | Single Position, Receptacle, Pin, Size 4, Gold-Plated, BoardLock™ ATHD Series, Keyed A, Self-Threading, No Potting, Black Body   | 4  | 100A |
|    | ATHD04-1-4P-BM12  | Single Position, Receptacle, Pin, Size 4, Gold-Plated, BoardLock™ ATHD Series, Keyed A, Self-Threading, Potting, Black Body      | 4  | 100A |
|    | ATHD04-1-4P-BM13  | Single Position, Receptacle, Pin, Size 4, Nickel-Plated, BoardLock™ ATHD Series, Keyed A, Self-Threading, No Potting, Black Body | 4  | 100A |
|    | ATHD04-1-4P-BM14  | Single Position, Receptacle, Pin, Size 4, Nickel-Plated, BoardLock™ ATHD Series, Keyed A, Self-Threading, Potting, Black Body    | 4  | 100A |
|   | ATHD04-1-8P-BM11  | Single Position, Receptacle, Pin, Size 8, Gold-Plated, BoardLock™ ATHD Series, Self-Threading, No Potting, Black Body            | 8  | 60A  |
|  | ATHD04-1-8P-BM12  | Single Position, Receptacle, Pin, Size 8, Gold-Plated, BoardLock™ ATHD Series, Self-Threading, Potting, Black Body               | 8  | 60A  |
|  | ATHD04-1-8P-BM13  | Single Position, Receptacle, Pin, Size 8, Nickel-Plated, BoardLock™ ATHD Series, Self-Threading, No Potting, Black Body          | 8  | 60A  |
|  | ATHD04-1-8P-BM14  | Single Position, Receptacle, Pin, Size 8, Nickel-Plated, BoardLock™ ATHD Series, Self-Threading, Potting, Black Body             | 8  | 60A  |
|  | ATHD04-1-12P-BM11 | Single Position, Receptacle, Pin, Size 12, Gold-Plated, BoardLock™ ATHD Series, Self-Threading, No Potting, Black Body           | 12 | 25A  |
|  | ATHD04-1-12P-BM12 | Single Position, Receptacle, Pin, Size 12, Gold-Plated, BoardLock™ ATHD Series, Self-Threading, Potting, Black Body              | 12 | 25A  |
|  | ATHD04-1-12P-BM13 | Single Position, Receptacle, Pin, Size 12, Tin-Plated, BoardLock™ ATHD Series, Self-Threading, No Potting, Black Body            | 12 | 25A  |
|  | ATHD04-1-12P-BM14 | Single Position, Receptacle, Pin, Size 12, Tin-Plated, BoardLock™ ATHD Series, Self-Threading, Potting, Black Body               | 12 | 25A  |

**BoardLock™ ATFHD Series - Receptacles**

**Note:** Refer to individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.

|                                                                                     |                   |                                                                                                  |   |      |
|-------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------|---|------|
|  | ATFHD13-1-4P-BM11 | Single Position, Receptacle, Pin, Gold-Plated, BoardLock™ ATFHD Series, Self-Tapping, Black Body | 4 | 100A |
|-------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------|---|------|

| Image                                                                             | Part Number       | Description                                                                                        | Contact Size | Amp  |
|-----------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------|--------------|------|
|  | ATFHD13-1-4P-BM13 | Single Position, Receptacle, Pin, Nickel-Plated, BoardLock™ ATFHD Series, Self-Tapping, Black Body | 4            | 100A |

PanelMate™ ATHD Series - Receptacles

**Note:** Refer to individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.

|                                                                                   |                   |                                                                                                                                                                          |    |      |
|-----------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|  | ATHD04-1-4P-L009  | Single Position, Receptacle with Inside Mount Sealed Flange, Pin, Size 4, PanelMate™ ATHD Series, Self-Threading, Gasket, Standard Diameter Rear Seal (Red), Black Body  | 4  | 100A |
|  | ATHD04-1-4P-L013  | Single Position, Receptacle with Outside Mount Sealed Flange, Pin, Size 4, PanelMate™ ATHD Series, Self-Threading, Gasket, Standard Diameter Rear Seal (Red), Black Body | 4  | 100A |
|  | ATHD04-1-8P-PM05  | Single Position, Receptacle with Flange, Pin, Size 8, PanelMate™ ATHD Series, Threaded Insert, Gasket, Standard Diameter Rear Seal (Red), Black Body                     | 8  | 60A  |
|  | ATHD04-1-8P-PM11  | Single Position, Receptacle with Flange, Pin, Size 8, PanelMate™ ATHD Series, Self-Threading, Gasket, Standard Diameter Rear Seal (Red), Black Body                      | 8  | 60A  |
|  | ATHD04-1-12P-PM05 | Single Position, Receptacle with Flange, Pin, Size 12, PanelMate™ ATHD Series, Threaded Insert, Gasket, Standard Diameter Rear Seal (Red), Black Body                    | 12 | 25A  |
|  | ATHD04-1-12P-PM11 | Single Position, Receptacle with Flange, Pin, Size 12, PanelMate™ ATHD Series, Self-Threading, Gasket, Standard Diameter Rear Seal (Red), Black Body                     | 12 | 25A  |

ATHD Series™ - Contacts

**Note:** Refer to individual part number datasheets found at [www.amphenol-sine.com](http://www.amphenol-sine.com) or our [A Series Contacts Flyer](#).