



# ATHD Series™ Cable Assemblies



## Available in Single Position Plugs and Receptacles (Size #8 and #12)

Single-ended cordset standard lengths of 1, 2, 4, 5 and 10 Meters. Contact Customer Service for custom cable length options.

Amphenol Sine Systems' **ATHD Series™ Cable Assemblies** are an overmolded, strain relief option based on our **ATHD Series™ Heavy-Duty Power Connectors**, which 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" provide circuit confirmation. Precision machined contact technology maximizes performance and durability while delivering up to 75A of power in our cable assemblies.

Our Plug assemblies feature our **StructurePlus™ ATHD** design, **an engineered, one-piece, solid body construction specifically designed for cable assembly operations**. The added connector structure results in enhanced connection integrity that is an essential component for connecting cable in harsh environments.



**Structure+™ ATHD**



The process utilizes first-quality resins which encapsulate the wire terminations into the connector housing creating a highly functional & compact strain relief to ensure a long service life. Built to exceptional quality standards, the resulting barrier of protection provides **IP68 rated (1M of water for 24 hrs in mated condition)** sealing capability, preventing liquid ingress for a variety of markets such as Heavy Duty, Transportation, Marine, Diagnostic, Military, Alternative Energy and Agricultural.



**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)

**A Series™ Family**



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

Cable Assembly Specifications

Temp Range	-40°C to +100°C
Current Rating	<b>Size 8/8AWG:</b> 75A <b>Size 12/10AWG:</b> 40A <b>Size 12/12AWG:</b> 30A
Max Voltage Rating	600V
Mating Cycles	>100
Sealing Protection	IP68 (1M of water for 24 hrs in mated condition)
Housing/Overmold	PA66/Polyamide
Seals	Silicone Rubber
Contacts	Copper Alloy, Nickel-plated
RoHS Compliant	All connector materials meet the requirements of the EU Directive 2002/95/EC

Cable Specifications

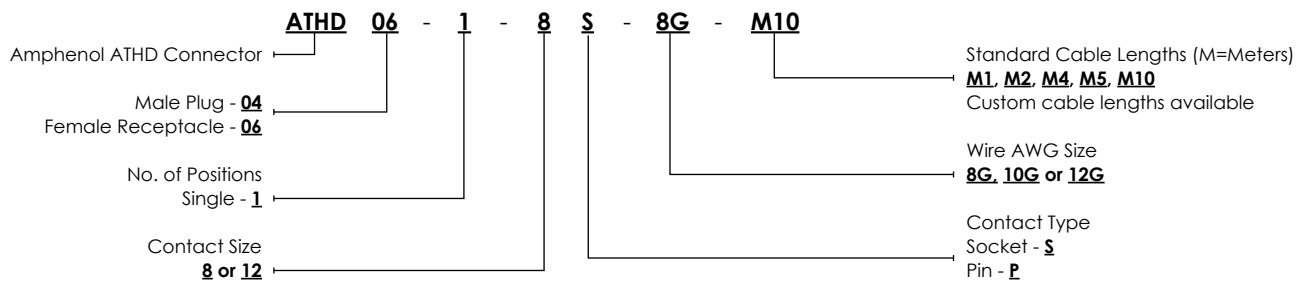
Cable Components	<b>Size 8/8AWG:</b> PVC Insulated Conductors 133x29 Bare Copper, UL1028 <b>Size 12/10AWG:</b> PVC Insulated Conductors 105x30 Bare Copper, UL1015 <b>Size 12/12AWG:</b> PVC Insulated Conductors 65x30 Bare Copper, UL1015
Cable Type	PVC, Black
Cable Approvals	<b>Size 8/8AWG:</b> UL Type AWM, Style 1028, CSA Type TEW, FT1 Flame Rated <b>Size 12/10AWG:</b> UL Type AWM, Style 1015, CSA Type TEW, FT1 Flame Rated <b>Size 12/12AWG:</b> UL Type AWM, Style 1015, CSA Type TEW, FT1 Flame Rated
Cable Resistance	Sunlight and Oil Resistant

**Note:** All datasheets containing specifications and wiring diagrams can be found at [www.amphenol-sine.com](http://www.amphenol-sine.com) under their specific part numbers.

Key Features





Part Numbering Sequence




Single Position - ATHD Series™ Cable Assembly Plugs


Available in M1, M2, M4, M5 and M10 lengths (M = Meters)


Image	Part Number	Description	Size/AWG	Amp
	ATHD06-1-8S-8G-M1	1 Position, Molded Plug, Socket, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 1 Meter Length (Mates to ATHD04-1-8P)	8/8AWG	75A
	ATHD06-1-8S-8G-M2	1 Position, Molded Plug, Socket, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 2 Meter Length (Mates to ATHD04-1-8P)	8/8AWG	75A
	ATHD06-1-8S-8G-M4	1 Position, Molded Plug, Socket, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 4 Meter Length (Mates to ATHD04-1-8P)	8/8AWG	75A
	ATHD06-1-8S-8G-M5	1 Position, Molded Plug, Socket, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 5 Meter Length (Mates to ATHD04-1-8P)	8/8AWG	75A
	ATHD06-1-8S-8G-M10	1 Position, Molded Plug, Socket, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 10 Meter Length (Mates to ATHD04-1-8P)	8/8AWG	75A

	ATHD06-1-12S-10G-M1	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 1 Meter Length (Mates to ATHD04-1-12P)	12/10AWG	40A
	ATHD06-1-12S-10G-M2	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 2 Meter Length (Mates to ATHD04-1-12P)	12/10AWG	40A
	ATHD06-1-12S-10G-M4	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 4 Meter Length (Mates to ATHD04-1-12P)	12/10AWG	40A
	ATHD06-1-12S-10G-M5	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 5 Meter Length (Mates to ATHD04-1-12P)	12/10AWG	40A
	ATHD06-1-12S-10G-M10	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 10 Meter Length (Mates to ATHD04-1-12P)	12/10AWG	40A

	ATHD06-1-12S-12G-M1	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 1 Meter Length (Mates to ATHD04-1-12P)	12/12AWG	30A
	ATHD06-1-12S-12G-M2	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 2 Meter Length (Mates to ATHD04-1-12P)	12/12AWG	30A
	ATHD06-1-12S-12G-M4	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 4 Meter Length (Mates to ATHD04-1-12P)	12/12AWG	30A
	ATHD06-1-12S-12G-M5	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 5 Meter Length (Mates to ATHD04-1-12P)	12/12AWG	30A
	ATHD06-1-12S-12G-M10	1 Position, Molded Plug, Socket, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 10 Meter Length (Mates to ATHD04-1-12P)	12/12AWG	30A


Single Position - ATHD Series™ Cable Assembly Receptacles

	ATHD04-1-8P-8G-M1	1 Position, Molded Receptacle, Pin, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 1 Meter Length (Mates to ATHD06-1-8S)	8/8AWG	75A
	ATHD04-1-8P-8G-M2	1 Position, Molded Receptacle, Pin, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 2 Meter Length (Mates to ATHD06-1-8S)	8/8AWG	75A
	ATHD04-1-8P-8G-M4	1 Position, Molded Receptacle, Pin, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 4 Meter Length (Mates to ATHD06-1-8S)	8/8AWG	75A
	ATHD04-1-8P-8G-M5	1 Position, Molded Receptacle, Pin, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 5 Meter Length (Mates to ATHD06-1-8S)	8/8AWG	75A
	ATHD04-1-8P-8G-M10	1 Position, Molded Receptacle, Pin, Size 8, Single-Ended Cable Assembly, 8AWG, ATHD™ Series, 10 Meter Length (Mates to ATHD06-1-8S)	8/8AWG	75A

	ATHD04-1-12P-10G-M1	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 1 Meter Length (Mates to ATHD06-1-12S)	12/10AWG	40A
	ATHD04-1-12P-10G-M2	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 2 Meter Length (Mates to ATHD06-1-12S)	12/10AWG	40A
	ATHD04-1-12P-10G-M4	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 4 Meter Length (Mates to ATHD06-1-12S)	12/10AWG	40A
	ATHD04-1-12P-10G-M5	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 5 Meter Length (Mates to ATHD06-1-12S)	12/10AWG	40A
	ATHD04-1-12P-10G-M10	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 10AWG, ATHD™ Series, 10 Meter Length (Mates to ATHD06-1-12S)	12/10AWG	40A

Single Position - ATHD Series™ Cable Assembly Receptacles, cont.

Available in M1, M2, M4, M5 and M10 lengths (M = Meters)

Image	Part Number	Description	Size/AWG	Amp
	ATHD04-1-12P-12G-M1	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 1 Meter Length (Mates to ATHD06-1-12S)	12/12AWG	30A
	ATHD04-1-12P-12G-M2	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 2 Meter Length (Mates to ATHD06-1-12S)	12/12AWG	30A
	ATHD04-1-12P-12G-M4	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 4 Meter Length (Mates to ATHD06-1-12S)	12/12AWG	30A
	ATHD04-1-12P-12G-M5	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 5 Meter Length (Mates to ATHD06-1-12S)	12/12AWG	30A
	ATHD04-1-12P-12G-M10	1 Position, Molded Receptacle, Pin, Size 12, Single-Ended Cable Assembly, 12AWG, ATHD™ Series, 10 Meter Length (Mates to ATHD06-1-12S)	12/12AWG	30A

Related Items



## Heavy Duty, Thermoplastic, Power Connectors

Available in Single Position

Amphenol Sine Systems' **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.



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



## Overmold Compatible Connectors for AT, AT LED, ATHD and ATP Series™ Connectors

Available in 1, 2, 3, 4, 6, 8 and 12 position

Amphenol Sine Systems' **StructurePlus™ Family** of overmold compatible connectors are an **engineered, one-piece, solid body construction and are specifically designed for cable assembly operations requiring custom molding or shrink tube requirements.** The added connector structure results in enhanced connection integrity that is an essential component for connecting cable in harsh environments.

**Potential Applications:** Heavy Duty, Transportation, Marine, Diagnostic, Military, Alternative Energy, Agricultural as well as other demanding interconnect applications

