

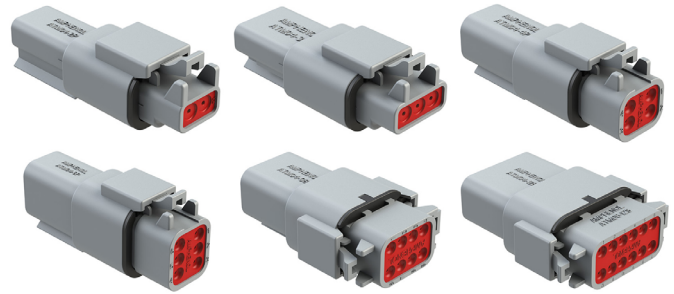


**THE DATASHEET OF
ATM06-12SA**





ATM ATM Series™



Heavy-Duty, Multi-Pin, 7.5A, Thermoplastic Connectors



Available in 2, 3, 4, 6, 8 and 12 positions

Amphenol Sine Systems **ATM Series™ Connectors**, specifically designed for smaller AWG applications, are designed as an IP68 and IP69K rated (in mated condition), high-performance, cost-effective, thermoplastic solution with superior environmental seals and seal retention capabilities. All of our ATM Series™ connectors have been developed to be comparable with all other existing standard products industry-wide. Also available in **BoardLock™** and **PanelMate™ Series** options.

The connector design incorporates an integral latching system that ensures a definitive electrical and mechanical connection. Connector housings are manufactured with a thermoplastic material that is not only durable, but has excellent UV resistance, dielectric/mechanical properties and environmentally RoHS compliant. The sealing system is comprised of an internal and rear silicone, multi-sealing perimeter against environmental ingress. Contacts are derived from quality copper alloy to ensure an electrically-reliable connection.

Applications: Marine, Heavy Equipment, Agricultural, Automotive, Alternative Energy, as well as other demanding interconnect applications

Available in **ATMH Series™**, **ATM Series™ SF01/02**, **BoardLock™ ATM Series** and **PanelMate™ ATM Series**.

ATMH Series™

ATMH Series™ - High Temperature option which features an increased operating temperature range of -55°C to 150°C, ideal for "under the hood" applications, along with an IP68 (1M of water for a period of 24 hours, mated condition) & IP69K (in mated condition) rating.

ATM Series™ SF01/02

ATM Series™ SF01/02 (Snap-Fit Caps) options which features an integrated Snap-Fit Cap enhancement that ensures rear seal stability under uncontrolled, harsh environmental conditions, along with an IP68 and IP69K rating.

BL BoardLock™ ATM

BoardLock™ ATM options, featuring flanged, 90° right angle or 180° straight, wire-to-board functionality, along with an IP67 rating (in mated condition).

PM PanelMate™ ATM

PanelMate™ ATM options, engineered with a one-piece, sealed, flanged design for rapid and secure mounting.

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)

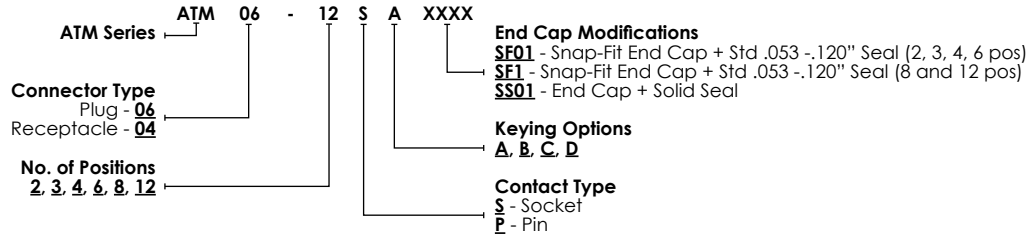
A Series™ Family



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



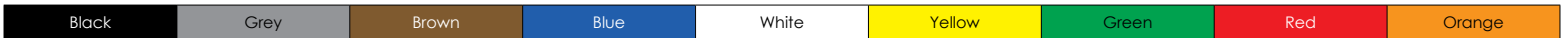
ATM Series™ - Part Numbering Sequence



ATM Series™ - Specifications (See Individual datasheets)

IP Rating (in mated condition)	IP68 and IP69K (See individual datasheets)	Insulation Resistance	1000 megohms min. of 25°C
Max. Current (Amperage)	7.5A (See individual datasheets)	Shock	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)
Max. Voltage Rating	250V	Vibration	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)
Operating Temperature	-55°C to +125°C	Connector Terminal Retention	When subjected to a direct pull, contacts achieve a minimum pull-out force of 25 lbs.
Coupling System	Integrated Latch	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
Housing Body	Thermoplastic UL94-VO	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
Contact Types	Stamped & Formed, Machined	RoHS Compliant	ALL materials meet the requirements of the European Directive. (See website for documentation)
Contact Material	Copper Alloy, Nickel Plated, Gold optional		
Wire Range	16-22AWG (See individual datasheets)		
Sealing Material	Silicone Elastomer		
Min. Mating Cycles	>100		
Flammability Rating	UL94-VO		
Fluid Resistance	Gas, oil, mineral oil, acid bath, basic bath		

Custom Color Options



ATM Series™ - Contacts

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

ATM Series™ - Tooling

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



ATMH Series™



Heavy-Duty, Multi-Pin, 7.5A, High Temperature Thermoplastic Connectors



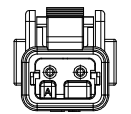
Available in 2 position

Amphenol Sine Systems' **ATMH Series™** connectors, an extension of our ATM Series™, are an IP68/69K rated (mated condition), high-performance, cost-effective solution designed for smaller AWG applications, and ideally suited for "under the hood" applications where higher temperatures are required. While our ATM Series™ connectors have an Operating Temperature Range of -55°C to 125°C, **our ATMH Series™ has an increased operating temperature range of -55°C to 150°C.** All of our ATMH Series™ connectors have been developed to be compatible with other existing standard products industry-wide.

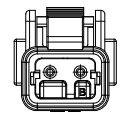
Applications: Marine, Heavy Equipment, Agricultural, Automotive, Alternative Energy, as well as other demanding interconnect applications

ATMH Series™ plugs and receptacles both arrive with an integrated, "unseated", **Terminal Position Assurance (TPA) Lock.** Once the contacts have been installed by the user, the TPA's can then be fully "seated" for proper use. The TPA's are color-coded for their respective keying position: **Keyed A-Grey, Keyed B-Black, Keyed C-Green, and Keyed D-Brown.**

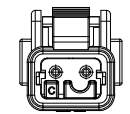
ATMH Series™ Keying Options (Plug TPAs are shown "seated". Receptacle TPAs are hidden from view.)



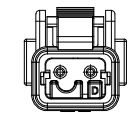
Keyed A Plug
ATMH06-2SA
TPA Color: Grey



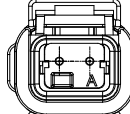
Keyed B Plug
ATMH06-2SB
TPA Color: Black



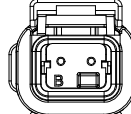
Keyed C Plug
ATMH06-2SC
TPA Color: Green



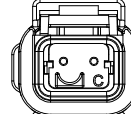
Keyed D Plug
ATMH06-2SD
TPA Color: Brown



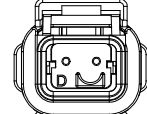
Keyed A Recept
ATMH04-2PA
TPA Color: Grey



Keyed B Recept
ATMH04-2PB
TPA Color: Black



Keyed C Recept
ATMH04-2PC
TPA Color: Green



Keyed D Recept
ATMH04-2PD
TPA Color: Brown

Important: ATMH Series™ plugs and receptacles are capable of mating with ATM Series™ plugs and receptacles, but will only retain the lower ATM Series™ operating temperature range of -55°C to +125°C when mixed.

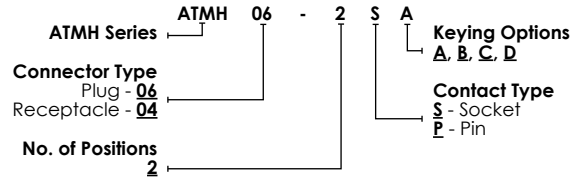
IP Ratings
IP67 rated (Dust tight; 1M of Water for 30 Minutes, in mated condition)
IP68 rated (Dust tight; 1M of Water for 24 Hours, in mated condition)
IP69K rated (Dust tight; High-Pressure Waterproof, 4 Points (0°, 30°, 60°, 90°), in mated condition)

A Series™ Family



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Customer Service +1 800 394 7732

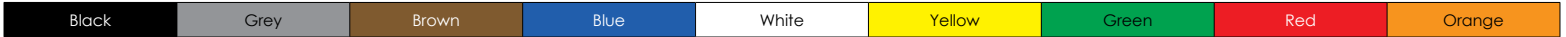
ATMH Series™ - Part Numbering Sequence



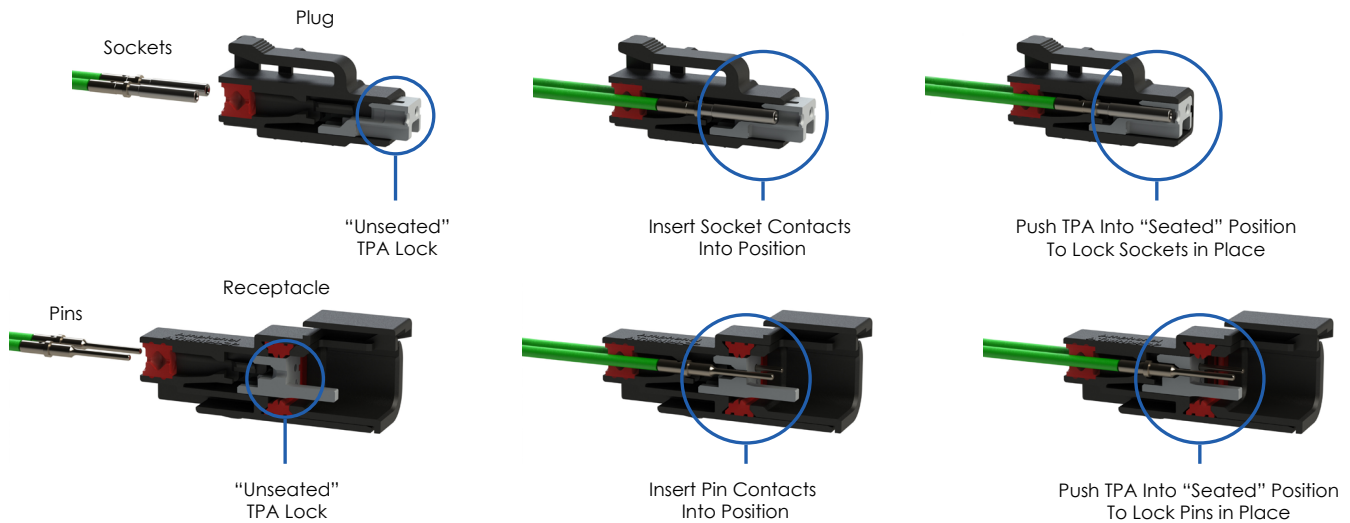
ATMH Series™ - Specifications (See Individual datasheets)

IP Rating (in mated condition)	IP68 and IP69K (See individual datasheets)	Insulation Resistance	1000 megohms min. of 25°C
Max. Current (Amperage)	7.5A (See individual datasheets)	Shock	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)
Max. Voltage Rating	250V	Vibration	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)
Operating Temperature	-55°C to +150°C	Connector Terminal Retention	When subjected to a direct pull, contacts achieve a minimum pull-out force of 25 lbs.
Coupling System	Integrated Latch	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
Housing Body	Thermoplastic UL94-VO	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
Contact Types	Stamped & Formed, Machined	RoHS Compliant	ALL materials meet the requirements of the European Directive. (See website for documentation)
Contact Material	Copper Alloy, Nickel Plated, Gold optional		
Wire Range	16-22AWG (See individual datasheets)		
Sealing Material	Silicone Elastomer		
Min. Mating Cycles	>100		
Flammability Rating	UL94-VO		
Fluid Resistance	Gas, oil, mineral oil, acid bath, basic bath		





Custom Color Options







ATMH Series™ - How to Install Contacts with Terminal Position Assurance (TPA) Locks



ATMH™ Series - Plugs

Image	Part Number	Description	Size	Amp
	ATMH06-2SA	2 Position, Plug, Socket, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Grey), Keyed A, Standard Diameter Rear Seal (Red), Black Body	20	7.5A
	ATMH06-2SB	2 Position, Plug, Socket, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Black), Keyed B, Standard Diameter Rear Seal (Red), Black Body	20	7.5A
	ATMH06-2SC	2 Position, Plug, Socket, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Green), Keyed C, Standard Diameter Rear Seal (Red), Black Body	20	7.5A
	ATMH06-2SD	2 Position, Plug, Socket, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Brown), Keyed D, Standard Diameter Rear Seal (Red), Black Body	20	7.5A

ATMH Series™ - Receptacles

	ATMH04-2PA	2 Position, Receptacle, Pin, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Grey), Keyed A, Standard Diameter Rear Seal (Red), Black Body	20	7.5A
	ATMH04-2PB	2 Position, Receptacle, Pin, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Black), Keyed B, Standard Diameter Rear Seal (Red), Black Body	20	7.5A
	ATMH04-2PC	2 Position, Receptacle, Pin, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Green), Keyed C, Standard Diameter Rear Seal (Red), Black Body	20	7.5A
	ATMH04-2PD	2 Position, Receptacle, Pin, ATMH Series™, High Temperature (+150°C), (TPA) Terminal Position Assurance Lock (Brown), Keyed D, Standard Diameter Rear Seal (Red), Black Body	20	7.5A

ATMH Series™ - Contacts



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

ATMH Series™ - Tooling

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

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

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-  [Amphenol Sine Systems Corp Information](#)

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