INDUSTRIAL AMPHENOL

Amphenol Sine Systems, **USA** Amphenol Tuchel Industrial, **GmbH**

www.amphenol-sine.com





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



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

Amphenol Sine Systems' **ATM Series™** connectors are an IP67-rated (mated condition), high-performance, costeffective solution specifically designed for smaller AWG applications, while still maintaining the strengths of the AT Series™ product line. All of our ATM Series™ connectors have been developed to be compatible with other existing standard products industry-wide.

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





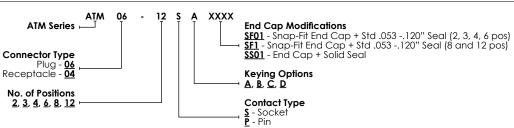


Standard products. Custom solutions Customer Service +1 800 394 7732





ATM Series[™] - Part Numbering Sequence



ATM Series[™] - Features & Benefits

Current Capacity	Size 20, 7.5A
Wire Range	Size 20 contacts will accept wire ranges of 16 thru 22AWG
Operating Temperature	-55°C to +125°C at rated current
IP Rating	IP67 (in mated condition)
Dielectric Value	Meets or exceeds 1500 volts minimum
Drop Test	Shall not become detached or loosened when placed at 750mm and dropped to concrete eight times
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 89 lbs.
Connector Retention	A mated connector subjected to a pulling force by the exiting wire bundle at 89 lbs. times the number of contacts to a maximum of 356 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
Insulation Resistance	Insulation resistance at 25°C shall be greater than 20 megohms when 1000 VDC are applied
Mating Cycle Durability	Following 100 cycles of connection engagement and disengagement, degradation either mechanical or electrical is not evident
Contact Millivolt Drop	Size 20 contacts with 20AWG conductor - 60mV (solid contact) drop max; 100mV (stamped & formed contact) drop max at 7.5A test current

ATM Series[™] - Product Material

Housings	Thermoplastic
Seals	Silicone Elastomer
Secondary Locks	Thermoplastic
Contacts	Copper Alloy, Nickel Plated, Gold optional

ATM SeriesTM - Contacts (For a complete contact list, see individual ATM Plug and Receptacle datasheets.)

Part Number	Description	Size	AWG	Туре
AT62-201-2031	Female Contact - Socket, Gold-plated	20-22	20	Solid
AT60-202-2031	Male Contact - Pin, Gold-plated	20-22	20	Solid
AT62-201-20141	Female Contact - Socket, Nickel-plated	20-22	20	Solid
AT60-202-20141	Male Contact - Pin, Nickel-plated	20-22	20	Solid
AT62-20-0144	Female Contact - Socket, Gold-plated	16-22	20	Stamped & Formed
AT60-20-0144	Male Contact - Pin, Gold-plated	16-22	20	Stamped & Formed
AT62-20-0122	Female Contact - Socket, Nickel-plated	16-22	20	Stamped & Formed
AT60-20-0122	Male Contact - Pin, Nickel-plated	16-22	20	Stamped & Formed



Amphenol Sine Systems, **USA** Amphenol Tuchel Industrial, **GmbH**

www.amphenol-sine.com



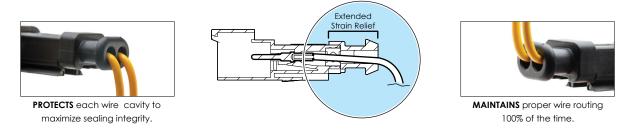


Extended Strain Relief Series



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

Amphenol Sine Systems' **ATM Series™ SR01** connectors are a high-performance, thermoplastic, cost-effective solution with specifically-designed, wire cavities that protect each individual wire seal, eliminating stress on the rear seal while maintaining an IP68/69K rated (mated) performance regardless of wire bundle direction or improper installation. **The ATM Series™ SR01 meets all the performance criteria and specifications of the ATM Series™**, is available in a wide variety of custom colors, and accepts all **A Series™** Size 20 contacts. Required wedgelock sold seperately.



ATM ATMSeries SR01 Standard 1.35mr

Standard Diameter Rear Seals (Red) -1.35mm (.053") - 3.05mm (.120")

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

Key Features

- Heat-shrink capable shroud for applications requiring heat shrink (The use of heat shrink is NOT required to meet existing IP standards)
- Enhanced Sealing Plugs for simplified insertion/removal, improved retention capabilities and include a positive 'stop' for full insertion verification
- 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 sealing
- Compatible with existing standard products industry-wide





Standard vs SR01

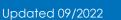


Heat-Shrink Capable Shroud





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





Specifications

opoenications	· · · · · · · · · · · · · · · · · · ·		
Operating Temperature	-55°C to +125°C		Continued continuity without degradation to mechanical or physical attributes following
Max Current Rating (Amp)	7.5A	Vibration	vibration. (Max acceleration 20 g's at Sine
Mating Cycles	>100		sweep of 10-2000Hz)
IP Rating	IP68/69K (in mated condition)	Connector Terminal Retention	When subjected to a direct pull, contacts
Wire Range	Size 20, 16-22AWG		achieve a minimum pull-out force of 25 lbs.
Contacts	Machined; Stamped & Formed; Copper Alloy, Nickel-Plated Gold plating optional	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/Latch Material	Thermoplastic/Integrated latch for mating		Subjected to 10 cycles at -55°C to +125°C
Sealing Material	Silicone Rubber	Thermal Shock	with no cracking, chipping or other damage
Dielectric Withstanding Voltage	Less than 2 mA current leakage @ 1500V AC	monnaioneek	detrimental to the normal operation of the connector
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)		

Custom Color Options

Black	Grey	Brown	Blue	White	Yellow	Green	Red	Orange

Part Numbering Sequence (2, 3, 4 and 6 position)



Part Numbering Sequence (08 and 12 position)



2 Position - ATM SeriesTM SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief)

Image	Part Number	Description	Size	Amp
	ATM06-2S-SR01BK	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01BL	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01BN	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01GN	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01GY	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01OR	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01RD	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01WT	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A
	ATM06-2S-SR01YL	2 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-2S. Keyed Options Available.)	20	7.5A



2 Position - ATM SeriesTM SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief), cont.

Image	Part Number	Description	Size	Amp
	AWM-2S	2 Position, Plug Wedgelock, Orange	-	-
A Constanting of the second se	AWM-2SA	2 Position, Plug Wedgelock, Keyed A, Grey	-	-
	AWM-2SB	2 Position, Plug Wedgelock, Keyed B, Black	-	-

3 Position - ATM SeriesTM SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief)

	ATM06-3S-SR01BK	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01BL	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01BN	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01GN	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01GY	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01OR	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01RD	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01WT	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-3S.)	20	7.5A
	ATM06-3S-SR01YL	3 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-3S.)	20	7.5A
	AWM-3S	3 Position, Plug Wedgelock, Orange	-	-

4 Position - ATM Series™ SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief)

	ATM06-4S-SR01BK	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01BL	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01BN	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01GN	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-4S.)	20	7.5A
and the second s	ATM06-4S-SR01GY	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01OR	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01RD	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01WT	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-4S.)	20	7.5A
	ATM06-4S-SR01YL	4 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-4S.)	20	7.5A
	AWM-4S	4 Position, Plug Wedgelock, Orange	-	-



6 Position - ATM Series™ SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief)

Image	Part Number	Description	Size	Amp
	ATM06-6S-SR01BK	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01BL	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01BN	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01GN	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01GY	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01OR	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01RD	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01WT	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-6S.)	20	7.5A
	ATM06-6S-SR01YL	6 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-6S.)	20	7.5A
	AWM-6S	6 Position, Plug Wedgelock, Orange	-	-

8 Position - ATM Series™ SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief)

	ATM06-08SA-SR1GY	8 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Grey Body (Requires Wedgelock AWM-8S.)	20	7.5A
	ATM06-08SB-SR1BK	8 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed B, Black Body (Requires Wedgelock AWM-8S.)	20	7.5A
	ATM06-08SC-SR1GN	8 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed C, Green Body (Requires Wedgelock AWM-8S.)	20	7.5A
	ATM06-08SD-SR1BN	8 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed D, Brown Body (Requires Wedgelock AWM-8S.)	20	7.5A
	AWM-8S	8 Position, Plug Wedgelock, Orange	-	-

12 Position - ATM Series™ SR01 Plugs and Wedgelocks (Plug shown in Standard Grey w Black Strain Relief)

	ATM06-12SA-SR1GY	12 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Grey Body (Requires Wedgelock AWM-12S.)	20	7.5A
	ATM06-12SB-SR1BK	12 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Black Body (Requires Wedgelock AWM-12S.)	20	7.5A
and and	ATM06-12SC-SR1GN	12 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Green Body (Requires Wedgelock AWM-12S.)	20	7.5A
	ATM06-12SD-SR1BN	12 Position, Plug, Socket, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Brown Body (Requires Wedgelock AWM-12S.)	20	7.5A
	AWM-12S	12 Position, Plug Wedgelock, Orange	-	-



2 Position - ATM Series™ SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief)

Image	Part Number	Description	Size	Amp
	ATM04-2P-SR01BK	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01BL	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01BN	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01GN	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01GY	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01OR	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01RD	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01WT	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
	ATM04-2P-SR01YL	2 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-2P. Keyed Options Available.)	20	7.5A
-	AWM-2P	2 Position, Receptacle Wedgelock, Orange	-	-
No.	AWM-2PA	2 Position, Receptacle Wedgelock, Keyed A, Grey	-	-
	AWM-2PB	2 Position, Receptacle Wedgelock, Keyed B, Black	-	-

3 Position - ATM Series™ SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief)

	ATM04-3P-SR01BK	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01BL	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01BN	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01GN	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01GY	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01OR	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01RD	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-3P.)	20	7.5A
	ATM04-3P-SR01WT	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-3P.)	20	7.5A
*	ATM04-3P-SR01YL	3 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-3P.)	20	7.5A
	AWM-3P	3 Position, Receptacle Wedgelock, Orange	-	-



4 Position - ATM Series™ SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief)

Image	Part Number	Description	Size	Amp
	ATM04-4P-SR01BK	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-4P.)	20	7.5A
	ATM04-4P-SR01BL	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-4P.)	20	7.5A
	ATM04-4P-SR01BN	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-4P.)	20	7.5A
	ATM04-4P-SR01GN	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-4P.)	20	7.5A
Cla	ATM04-4P-SR01GY	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-4P.)	20	7.5A
	ATM04-4P-SR01OR	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-4P.)	20	7.5A
	ATM04-4P-SR01RD	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-4P.)	20	7.5A
	ATM04-4P-SR01WT	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-4P.)	20	7.5A
*	ATM04-4P-SR01YL	4 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-4P.)	20	7.5A
	AWM-4P	4 Position, Receptacle Wedgelock, Orange	-	-

6 Position - ATM Series™ SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief)

	ATM04-6P-SR01BK	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Black Body (Requires Wedgelock AWM-6P.)	20	7.5A
	ATM04-6P-SR01BL	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Blue Body (Requires Wedgelock AWM-6P.)	20	7.5A
	ATM04-6P-SR01BN	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Brown Body (Requires Wedgelock AWM-6P.)	20	7.5A
	ATM04-6P-SR01GN	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Green Body (Requires Wedgelock AWM-6P.)	20	7.5A
Pag	ATM04-6P-SR01GY	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Grey Body (Requires Wedgelock AWM-6P.)	20	7.5A
37	ATM04-6P-SR01OR	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Orange Body (Requires Wedgelock AWM-6P.)	20	7.5A
	ATM04-6P-SR01RD	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Red Body (Requires Wedgelock AWM-6P.)	20	7.5A
	ATM04-6P-SR01WT	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, White Body (Requires Wedgelock AWM-6P.)	20	7.5A
	ATM04-6P-SR01YL	6 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Yellow Body (Requires Wedgelock AWM-6P.)	20	7.5A
1	AWM-6P	6 Position, Receptacle Wedgelock, Orange	-	-

8 Position - ATM Series™ SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief)

	ATM04-08PA-SR1GY	8 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Grey Body (Requires Wedgelock AWM-8P.)	20	7.5A
	ATM04-08PB-SR1BK	8 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed B, Black Body (Requires Wedgelock AWM-8P.)	20	7.5A
	ATM04-08PC-SR1GN	8 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed C, Green Body (Requires Wedgelock AWM-8P.)	20	7.5A
	ATM04-08PD-SR1BN	8 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed D, Brown body (Requires Wedgelock AWM-8P.)	20	7.5A



Amphenol Sine Systems, **USA** Amphenol Tuchel Industrial, **GmbH**

www.amphenol-sine.com

8 Position - ATM SeriesTM SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief), cont.

Image	Part Number	Description	Size	Amp
1	AWM-8P	8 Position, Receptacle Wedgelock, Orange	-	-

12 Position - ATM SeriesTM SR01 Receptacles and Wedgelocks (Receptacle shown in Standard Grey w Black Strain Relief)

	ATM04-12PA-SR1GY	12 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed A, Grey Body (Requires Wedgelock AWM-12P.)	20	7.5A
	ATM04-12PB-SR1BK	12 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed B, Black Body (Requires Wedgelock AWM-12P.)	20	7.5A
and a second	ATM04-12PC-SR1GN	12 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed C, Green Body (Requires Wedgelock AWM-12P.)	20	7.5A
	ATM04-12PD-SR1BN	12 Position, Receptacle, Pin, Standard Diameter Rear Seal (Red), SR01 Strain Relief, Keyed D, Brown body (Requires Wedgelock AWM-12P.)	20	7.5A
	AWM-12P	12 Position, Receptacle Wedgelock, Orange	-	-

ATM Series[™] SR01 Accessories

	ATM13-217-2005-SR	Blank Locking Sealing Plug, Blue, Replaces Size 20 Contacts	20	_	
--	-------------------	---	----	---	--

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

© 2018 Amphenol Sine Systems Corporation, 44274 Morley Drive, Clinton Township MI 48036 USA. www.amphenol-sine.com. Customer Service +1 800 394 7732 Every effort has been made to ensure that the information contained in this document is accurate at the time of publication. Specifications or information stated in this document are subject to change without notice.

INDUSTRIAL@AMPHENOL TRUSTED GLOBALLY

Amphenol Sine Systems, USA Amphenol Tuchel Industrial, GmbH

www.amphenol-sine.com





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), highperformance, 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 SeriesTM Keying Options (Plug TPAs are shown "seated". Receptacle TPAs are hidden from view.)



Keyed A Plua

ATŃH06-2SĂ

TPA Color: Grey











Keved C Plua ATMH06-2S0 **TPA Color: Green**









ASeries[™] Family











Keved C Recen ATMH04-2PC TPA Color: Green

Keved D Recep ATMH04-2PD **TPA Color: Brown**

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

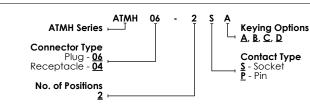




Customer Service +1 800 394 7732



ATMH Series[™] - Part Numbering Sequence



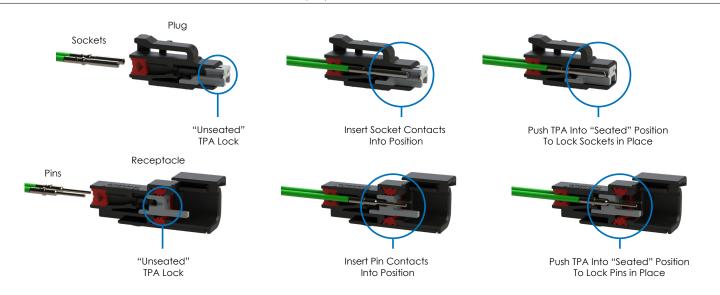
ATMH Series[™] - Features & Benefits

Current Capacity	Size 20, 7.5A
Wire Range	Size 20 contacts will accept wire ranges of 16-22AWG
Operating Temperature	-55°C to +150°C at rated current
IP Rating	IP68 (1M of water for a period of 24 hours, mated condition) & IP69k (in mated condition)
Dielectric Value	Meets or exceeds 1500 volts minimum
Drop Test Shall not become detached or loosened when placed at 750mm and dropped to concrete eight times	
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 89 lbs.
Connector Retention	A mated connector subjected to a pulling force by the exiting wire bundle at 89 lbs. times the number of contacts to a maximum of 356 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
Insulation Resistance	Insulation resistance at 25°C shall be greater than 20 megohms when 1000 VDC are applied
Mating Cycle Durability	Following 100 cycles of connection engagement and disengagement, degradation either mechanical or electrical is not evident
Contact Millivolt Drop	Size 20 contacts with 20AWG conductor - 60mV (solid contact) drop max; 100mV (stamped & formed contact) drop max at 7.5A test current

ATMH Series[™] - Product Material

Housings	Thermoplastic
Seals	Silicone Elastomer
Terminal Position Assurance Lock Thermoplastic	
Contacts Copper Alloy, Nickel Plated, Gold optional	

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





2 Position - ATMH[™] Series Plugs

Image	Part Number	Description	Size	Amp
A CONTRACTOR	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
and the second se	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
A STATE	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

2 Position - 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 (For a complete contact list, see individual ATMH Series™ Plug and Receptacle datasheets.)

Part Number	Description	Size	AWG	Туре
AT62-201-2031	Female Contact - Socket, Gold-plated	20-22	20	Solid
AT60-202-2031	Male Contact - Pin, Gold-plated	20-22	20	Solid
AT62-201-20141	Female Contact - Socket, Nickel-plated	20-22	20	Solid
AT60-202-20141	Male Contact - Pin, Nickel-plated	20-22	20	Solid
AT62-20-0144	Female Contact - Socket, Gold-plated	16-22	20	Stamped & Formed
AT60-20-0144	Male Contact - Pin, Gold-plated	16-22	20	Stamped & Formed
AT62-20-0122	Female Contact - Socket, Nickel-plated	16-22	20	Stamped & Formed
AT60-20-0122	Male Contact - Pin, Nickel-plated	16-22	20	Stamped & Formed

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

© 2016 Amphenol Sine Systems Corporation, 44724 Morley Drive, Clinton Township MI 48036 USA. www.amphenol-sine.com. Customer Service +1 800 394 7732 Every effort has been made to ensure that the information contained in this document is accurate at the time of publication. Specifications or information stated in this document are subject to change without notice.

INDUSTRIAL@AMPHENOL TRUSTED GLOBALLY

Technical Specifications

www.amphenol-sine.com



(ATM) ATMSeries[™] 2-Wire CAN



J1939/15 2-Wire CAN Connectors

Amphenol Sine Systems' **ATM Series™ 2-Wire CAN System** is offered in accordance with SAE J1939/15 requirements and can provide low amperage power splits. The "Y-Splitter" has three connection points and is used in conjunction with a standard ATM2S connector with specialized keyways identifying Inlet 1 and Outlet 2, and 2 position keyed plugs/receptacles with end caps and molded-in 120Ω resistors for network terminations.

Applications: Heavy Equipment, Agriculture, Construction, Transportation, Off-Road, Mining, Industrial, Railway, Automotive, Diagnostics, Marine, Water Resistance, Harsh Environments

IP67

	Temperature Range	-55°C - +125°C	Min. Mating Cycles	> 100	
	Max. Current (AMP)	7.5A	IP Rating	IP67 in mated condition	
	Voltage Rating (AC/DC)	250V	Wire Range	20-22AWG	
	Contact Resistance	< 15mΩ	Housing Body	Thermoplastic	
	Contacts	Copper Alloy, Gold Plating	Insulation Resistance	1000 megohms at 25°C	
	Contact Size	20	Dielectric Withstanding Voltage	Less than 2 mA current leakage @ 1500V AC	

Part Number	Description	Amperage	Voltage	AWG
ATM04-2P-P007	ATM, 6 Position, 2 Position Receptacle, Y Splitter (Contacts & Wedgelock Included)	7.5A	250	20-22
ATM04-2P-RA120GY	ATM, 2 Position, Receptacle, A Key, 120 OHM Resistor, Gray (Contacts & Wedgelock Included)	7.5A	250	20-22
ATM04-2P-RB120BK	ATM, 2 Position, Receptacle, B Key, 120 OHM Resistor, Black (Contacts & Wedgelock Included)	7.5A	250	20-22
ATM06-2S-R120GRY	ATM, 2 Position, Plug, A Key, 120 OHM, 1/2W, Gray, Endcap (Contacts & Wedgelock Included)	7.5A	250	20-22
ATM06-2S-RB120BK	ATM, 2 Position, Plug, B Key, 120 OHM Resistor, Black (Contacts & Wedgelock Included)	7.5A	250	20-22
AWM-2PA	ATM, 2 Position Pin Wedgelock, A Keyed	NA	NA	NA
AWM-2PB	ATM, 2 Position Pin Wedgelock, B Keyed	NA	NA	NA
AWM-2SA	ATM, 2 Position Socket Wedgelock, A Keyed	NA	NA	NA
AWM-2SB	ATM, 2 Position Socket Wedgelock, B Keyed	NA	NA	NA







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

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

© 2019 Amphenol Sine Systems Corporation, 44274 Morley Drive, Clinton Township MI 48036 USA. www.amphenol-sine.com. Customer Service +1 800 394 7732 Every effort has been made to ensure that the information contained in this document is accurate at the time of publication. Specifications or information stated in this document are subject to change without notice. Updated 06/2020