





Overmold Compatible Connectors



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

Amphenol Sine Systems' **Structure+™ Family** of overmold compatible connectors are 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. The **Structure+™ Family** of connectors consist of **AT**, **ATP** and **ATHD Series™** connectors and offer complete environmental sealing to IP67/69K (in mated condition).

Key Features

- Available in 1 position (Structure+™ ATHD) and 2, 3, 4, 6, 8 and 12 position (Structure+™ AT and Structure+™ ATP)
- 13A (Structure+™ AT Series); 25A (Structure+™ ATP); 25-60A (Structure+™ ATHD)
- Intermatable with industry standard connectors
- Engineered one-piece solid body construction, eliminates previously required snap-on-back shell
- Improved longevity and reliability

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

Technical Specifications

Operating Temperature	-55°C to +125°C
Max Current	13A (Structure+™ AT) 25A (Structure+™ ATP) 25-60A (Structure+™ ATHD)
Housing/Wedge Body	Thermoplastic
Seals	Silicone Elastomer
Wire Range (AWG)	14-20AWG (Structure+™ AT) 10-14AWG (Structure+™ ATP) 6AWG (Structure+™ ATHD)
Contacts	Copper Alloy, Nickel-Plated
IP Rating	IP67 mated condition (Structure+™ AT/ATP) IP69K mated condition (Structure+™ ATHD)
Vibration	Continued continuity without degradation to mechanical or physical attributes following vibra- tion. (max acceleration 20 g's at Sine sweep of 10-2000Hz)
Dielectric Value	Less than 2 milliamps current leakage at 1500V AC

Corrosion Resistance	No evidence of corrosion after 48 hours of salt spray per MIL-STD1344, method 1001.
Fluid Resistance	Connectors show no damage when exposed to most fluids used in industrial application.
Insulation Resistance	1000 megohms minimum 25°C
Thermal Cycle	No cracking, chipping or leaking after 20 test cycles from -55°C to +125°C.
Physical Shock	No unlocking, unmating or other unsatisfactory results during or after 50 G's in each of three usually perpendicular planes. No electrical discontinuities longer than 1 microsecond. MIL-STD 202. Method 213, Condition "C".
Vibration	Maintains continuity and exhibits no mechanical or physical damage after vibration levels of 20 G's at 10-2000 Hz.
Mating Cycles	>100





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Armor IPX Series[™] Enclosures & Headers

Image	Part Number	Description	Contact Size	Amperage
	AT06-2S-OMBLK	2 Position, Plug, Socket, Structure Plus™ AT, Black	16	13
	AT06-2S-OMBLU	2 Position, Plug, Socket, Structure Plus™ AT, Blue	16	13
	AT06-2S-OMBRN	2 Position, Plug, Socket, Structure Plus™ AT, Brown	16	13
	AT06-2S-OMGRN	2 Position, Plug, Socket, Structure Plus™ AT, Green	16	13
and the second s	AT06-2S-OMGRY	2 Position, Plug, Socket, Structure Plus™ AT, Gray	16	13
	AT06-2S-OMRED	2 Position, Plug, Socket, Structure Plus™ AT, Red	16	13
and the second s	AT06-2S-OMWHT	2 Position, Plug, Socket, Structure Plus™ AT, White	16	13
	AT06-2S-OMYEL	2 Position, Plug, Socket, Structure Plus™ AT, Yellow	16	13
	AW2S	2 Position, Plug Wedgelock, Structure Plus™ AT, Green	n/a	n/a
	AW2S-A	2 Position, Plug Wedgelock, Structure Plus™ AT, Keyed A, Grey	n/a	n/a
	AW2S-B	2 Position, Plug Wedgelock, Structure Plus™ AT, Keyed B, Black	n/a	n/a
	AW2S-C	2 Position, Plug Wedgelock, Structure Plus™ AT, Keyed C, Green	n/a	n/a
	AW2S-D	2 Position, Plug Wedgelock, Structure Plus™ AT, Keyed D, Brown	n/a	n/a
	AT06-3S-OMBLK	3 Position, Plug, Socket, Structure Plus™ AT, Black	16	13



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

Image	Part Number	Description	Contact Size	Amperage
	AT06-3S-OMBLU	3 Position, Plug, Socket, Structure Plus™ AT, Blue	16	13
	AT06-3S-OMBRN	3 Position, Plug, Socket, Structure Plus™ AT, Brown	16	13
	AT06-3S-OMGRN	3 Position, Plug, Socket, Structure Plus™ AT, Green	16	13
	AT06-3S-OMGRY	3 Position, Plug, Socket, Structure Plus™ AT, Grey	16	13
	AT06-3S-OMRED	3 Position, Plug, Socket, Structure Plus™ AT, Red	16	13
	AT06-3S-OMWHT	3 Position, Plug, Socket, Structure Plus™ AT, White	16	13
	AT06-3S-OMYEL	3 Position, Plug, Socket, Structure Plus™ AT, Yellow	16	13
	AW3S	3 Position, Plug Wedgelock, Structure Plus™ AT, Green	n/a	n/a
	AT06-4S-OMBLK	4 Position, Plug, Socket, Structure Plus™ AT, Black	16	13
	AT06-4S-OMBLU	4 Position, Plug, Socket, Structure Plus™ AT, Blue	16	13
	AT06-4S-OMBRN	4 Position, Plug, Socket, Structure Plus™ AT, Brown	16	13
	AT06-4S-OMGRN	4 Position, Plug, Socket, Structure Plus™ AT, Green	16	13
(Cores	AT06-4S-OMGRY	4 Position, Plug, Socket, Structure Plus™ AT, Grey	16	13
	AT06-4S-OMRED	4 Position, Plug, Socket, Structure Plus™ AT, Red	16	13



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

Image	Part Number	Description	Contact Size	Amperage
(Cores	AT06-4S-OMWHT	4 Position, Plug, Socket, Structure Plus™ AT, White	16	13
	AT06-4S-OMYEL	4 Position, Plug, Socket, Structure Plus™ AT, Yellow	16	13
	AW4S	4 Position, Plug Wedgelock, Structure Plus™ AT, Green	n/a	n/a
	AT06-6S-OMBLK	6 Position, Plug, Socket, Structure Plus™ AT, Black	16	13
	AT06-6S-OMBLU	6 Position, Plug, Socket, Structure Plus™ AT, Blue	16	13
	AT06-6S-OMBRN	6 Position, Plug, Socket, Structure Plus™ AT, Brown	16	13
	AT06-6S-OMGRN	6 Position, Plug, Socket, Structure Plus™ AT, Green	16	13
	AT06-65-OMGRY	6 Position, Plug, Socket, Structure Plus™ AT, Grey	16	13
	AT06-6S-OMRED	6 Position, Plug, Socket, Structure Plus™ AT, Red	16	13
	AT06-6S-OMWHT	6 Position, Plug, Socket, Structure Plus™ AT, White	16	13
	AT06-6S-OMYEL	6 Position, Plug, Socket, Structure Plus™ AT, Yellow	16	13
	AW6S	6 Position, Plug Wedgelock, Structure Plus™ AT, Green	n/a	n/a
	AW6S-2BLU	6 Position, Plug Wedgelock, Structure Plus™ AT, Keyed 2, Blue	n/a	n/a
	AT06-08SA-OMGRY	8 Position, Plug, Socket, Structure Plus™ AT, Grey	16	13



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

Image	Part Number	Description	Contact Size	Amperage
	AT06-08SB-OMBLK	8 Position, Plug, Socket, Structure Plus™ AT, Black	16	13
	AT06-08SC-OMGRN	8 Position, Plug, Socket, Structure Plus™ AT, Green	16	13
	AT06-08SD-OMBRN	8 Position, Plug, Socket, Structure Plus™ AT, Brown	16	13
	AW8S	8 Position, Plug Wedgelock, Structure Plus™ AT, Green	n/a	n/a
	AT06-12SA-OMGRY	12 Position, Plug, Socket, Structure Plus™ AT, Grey	16	13
	AT06-12SB-OMBLK	12 Position, Plug, Socket, Structure Plus™ AT, Black	16	13
	AT06-12SC-OMGRN	12 Position, Plug, Socket, Structure Plus™ AT, Green	16	13
	AT06-12SD-OMBRN	12 Position, Plug, Socket, Structure Plus™ AT, Brown	16	13
	AW12S	12 Position, Plug Wedgelock, Structure Plus™ AT, Green	n/a	n/a

	AT06-25-LED1224V-OM	2 Position, Plug, Socket, Structure Plus™ AT LED, 12V/24V, RVP Circuit	16	13	
	AT06-2S-LED1224VR-OM	2 Position, Plug, Socket, Structure Plus™ AT LED, 12V/24V, RVP Circuit, Red. Diam. Seal	16	13	

ATHD06-1-12S-OM	1 Position, Plug, Socket, Structure Plus™ ATHD, Socket	12	25
ATHD06-1-8S-OM	1 Position, Plug, Socket, Structure Plus™ATHD, Socket	8	60



Image	Part Number	Description	Contact Size	Amperage
	ATP06-6S-OMBLK	6 Position, Plug, Socket, Structure Plus™ ATP, Black	12	25
	ATP06-6S-OMBLU	6 Position,Plug, Socket, Structure Plus™ ATP, Blue	12	25
	ATP06-6S-OMBRN	6 Position, Plug, Socket, Structure Plus™ ATP, Brown	12	25
	ATP06-6S-OMGRN	6 Position, Plug, Socket, Structure Plus™ ATP, Green	12	25
	ATP06-6S-OMGRY	6 Position, Plug, Socket, Structure Plus™ ATP, Grey	12	25
	ATP06-6S-OMRED	6 Position, Plug, Socket, Structure Plus™ ATP, Red	12	25
	ATP06-6S-OMWHT	6 Position, Plug, Socket, Structure Plus™ ATP, White	12	25
	ATP06-6S-OMYEL	6 Position, Plug, Socket, Structure Plus™ ATP, Yellow	12	25
	ATP06-6S-OMRDBLK	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Black	12	25
	ATP06-6S-OMRDBLU	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Blue	12	25
	ATP06-6S-OMRDBRN	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Brown	12	25
	ATP06-6S-OMRDGRN	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Green	12	25
	ATP06-6S-OMRDGRY	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Grey	12	25
	ATP06-6S-OMRDRED	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Red	12	25



Image	Part Number	Description	Contact Size	Amperage
	ATP06-6S-OMRDWHT	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, White	12	25
	ATP06-6S-OMRDYEL	6 Position, Plug, Socket, Structure Plus™ ATP, Reduced Diameter Seal, Yellow	12	25
	AWP-6S	6 Position, Plug Wedgelock, Structure Plus™ ATP, Orange	n/a	n/a
	AWP-6SA	6 Position, Plug Wedgelock, Structure Plus™ ATP, Keyed A, Orange	n/a	n/a
	AWP-6SB	6 Position, Plug Wedgelock, Structure Plus™ ATP, Keyed B, Black	n/a	n/a

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

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