



Our high-performance, cost-effective, thermoplastic rectangular AT Series™ Connectors encompass a wide range of products, serving a variety of industries, and are available in a variety of custom colors for your specific needs. The same applies for the rest of our rectangular & circular thermoplastic products falling under the A Series™ product line. Contact Customer Service today for info.



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

Amphenol Sine Systems AT Series™ Connectors are designed as a high-performance, cost-effective solution to be used within the Heavy Equipment, Agricultural, Automotive, Military, Alternative Energy and other demanding interconnect architectures. They contain superior environmental seals, seal retention capabilities, feature our RockSolid™ Contact technology and have been developed to be completely compatible with other existing standard products industry-wide.

### MATERIAL SPECIFICATIONS

Plug/Receptacle	Contacts
<b>Shell:</b> Thermoplastic	<b>Pin:</b> Copper Alloy
<b>Wedge:</b> Thermoplastic	<b>Socket:</b> Copper Alloy
<b>Grommet:</b> Silicone Rubber	<b>Finish:</b> Nickel-plated (optional Gold)
Sealing Plugs	
<b>Thermoplastic:</b> All Sizes	

### GENERAL SPECIFICATIONS

Dielectric Withstanding Voltage	Insulation Resistance
Current leak less than 2 milliamps at 1500 VAC	1000 megohms minimum 25°C
Current Ratings (Contact current rating at 125°C continuous)	
<b>Size 16:</b> 13 amps	
Submersion	Fluid Resistance
Wired and mated connection will withstand immersion under three feet of water without loss of electronic qualities or leakage.	Connectors show no damage when exposed to most fluids used in industrial application.
Vibration	Temperature
No unlocking or unmating. Exhibits no mechanical or physical damage after sinusoidal vibration levels of 20G's at 10 to 2000 Hz in each of the three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond.	Operative at temperatures from -55°C to +125°C. Continuous at rated current.
Contact Retention Contacts withstand a minimum load of:	
25lbs. (89N) for Size 16	
Thermal Cycle	Durability
No cracking, chipping or leaking after 20 test cycles from -55°C to +125°C.	No electrical or mechanical defects after 100 cycles of engagement and disengagement.

### CONTACT RESISTENCE

CONTACT SIZE	WIRE GAUGE AWG(mm <sup>2</sup> )	TEST CURRENT (AMPS)	RESISTANCE SOLDS	RESISTANCE STAMPED & FORMED
16	20 (.50)	7.5	60	100
	18 (.80)	10	60	100
	16 (1.0)	13	60	100
	14 (2.0)	13	60	100

### WIRE SEALING RANGE

CONTACT SIZE	RECOMMENDED WIRE INSULATION O.D.	
	S-SEAL	RD-SEAL
#16	.088 - .145 (2.24 - 3.68)	.053 - .120 (1.35 - 3.05)

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