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Amphenol Sine Systems, USA Amphenol Tuchel Industrial, Germany

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High-Performance Rectangular Connectors Perfect For Smaller AWG Applications

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

Amphenol Sine Systems' ATM Series™ connectors are a high-performance, cost-effective 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 completely compatible with all 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

ATM Series[™] Part Numbering Sequence



please contact your Sales Representative.



Customer Service +1 800 394 7732



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Features & Benefits

Current Capacity	Size 20, 7.5A		
Wire Range	Size 20 contacts will accept wire ranges of 16 thru 22AWG		
Temperature	Operating temperature range: -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		

Product Material

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

Standard ATM Series[™] Contacts (Sockets and Pins)

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

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

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