INDUSTRIAL AMPHENOL TRUSTED GLOBALLY Amphenol Sine Systems, USA Amphenol Tuchel Industrial, Germany

Your Interconnect Solutions Expert



ATM v DTM

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.

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, multisealing perimeter against environmental ingress. Contacts are derived from quality copper alloy to ensure an electrically-reliable connection. ATM Series™ connectors are compatible with other existing standard products industry-wide.



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





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ATM Series						DTM Series					
Material Specifications						Material Specifications					
Plug/Receptacle			Contacts			Plug/Receptacle			Contacts		
Shell: Thermoplastic			Pin: Copper Alloy			Shell: Thermoplastic			Pin: Copper Alloy		
Wedge: Thermoplastic			Socket: Copper Alloy			Wedge: Thermoplastic			Socket: Copper Alloy		
Grommet: Silicone Rubber			Finish: Nickel-plated (optional Gold)			Grommet: Silicone Rubber			Finish: Nickel-plated (optional Gold)		
Sealing Plugs						Sealing Plugs					
Thermoplastic: All Sizes						Thermoplastic: All Sizes					
General Specifi	cations			General Specifications							
Dielectric Withstanding Voltage			Insulation Resistance			Dielectric Withstanding Voltage			Insulation Resistance		
Current leak less than 2 milliamps at 1500 VAC			1000 megohms minimum 25°C			Current leak less than 2 milliamps at 1500 VAC			1000 megohms minimum 25°C		
Current Ratings (Contact current rating at 125°C continuous)						Current Ratings (Contact current rating at 125°C continuous)					
Size 20: 7.5A						Size 20: 7.5A					
Submersion			Fluid Resistance			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.			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			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.			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:)						Contact Retention (Contacts withstand a minimum load of:)					
20lbs. (89N) for Size 20						20lbs. (89N) for Size 20					
Thermal Cycle			Durability			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.			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 Resistence					
Contact Size	AWG(mm ²)	Test C (An	Current nps)	Resistance Solids	Resistance Stamped & Formed	Contact Size	AWG(mm ²)	Test ((Ai	Current mps)	Resistance Solids	Resistance Stamped & Formed
20	20 (.50)	7	.5	60	100	20	20 (.50)	5	7.5	60	100
Wire Sealing Range						Wire Sealing Range					
Contact Size	Recommended Wire Insulation O.D.					Contact Size	Recommended Wire Insulation O.D.				
Connact bize			N-Seal			Confidentiale	N-Seal				
20	.053120 (1.35 - 3.05)					20	.053120 (1.35 - 3.05)				



CUSTOM COLORS AVAILABLE

Depending on your needs, we are able to produce your parts in a range of colors giving you complete control over your project.

For more information, contact: Don Hunsucker, Product Manager, +1 586 913 8638, dhunsucker@amphenol-sine.com Eric Schwegman, Sr Business Development Mgr, +1 865 712 4138, eschwegman@amphenol-sine.com

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