



Amphenol Sine Systems

AT Series

Material Specifications				
Plug/Receptacle		Contacts		
Shell: Thermoplastic		Pin: Copper Alloy		
Wedge: Thermoplastic		Socket: Copper Alloy		
Grommet: Silicone Rubber		Finish: Nickel-plated (optional Gold)		
Sealing Plugs				
Thermoplastic: 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)				
Size 16: 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 Resistance				
CONTACT SIZE	WIRE GAUGE AWG(mm ²)	TEST CURRENT (AMPS)	RESISTANCE SOLIDS	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)	

DT Series

Material Specifications				
Plug/Receptacle		Contacts		
Shell: Thermoplastic		Pin: Copper Alloy		
Wedge: Thermoplastic		Socket: Copper Alloy		
Grommet: Silicone Rubber		Finish: Nickel-plated (optional Gold)		
Sealing Plugs				
Thermoplastic: 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)				
Size 16: 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 Resistance				
CONTACT SIZE	WIRE GAUGE AWG(mm ²)	TEST CURRENT (AMPS)	RESISTANCE SOLIDS	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.			
	N-SEAL		E-SEAL	
#16	.088 - .145 (2.24 - 3.68)		.053 - .120 (1.35 - 3.05)	

