# Your Interconnect Solutions Expert





Amphenol Sine Systems **ATP Series™ Connectors** are designed as a high-performance, cost-effective, thermoplastic solution to be used within the Marine, Heavy Equipment, Agricultural, Automotive, Alternative Energy,

as well as other demanding interconnect applications. Available in 2 and 4 pin options, our ATP Series™ Connectors contain superior environmental seals, seal retention capabilities and are designed for use with 10-14 AWG with size 12 contacts handling up to 25 amps. In addition, all of our AT Series™ connectors have been developed to be completely compatible with all other existing standard products industry-wide.



Amphenol P/N	Deutsch P/N	Description
ATP06-2S	DTP06-2S	Plug, 2-Way
ATP06-2S-BLK	DTP06-2S-E004	Plug, 2-Way, Black
ATP06-2S-EC01	DTP06-2S-E003	Plug, 2-Way, End Cap
ATP06-4S	DTP06-4S	Plug, 4-Way
ATP06-4S-BLK	DTP06-4S-E004	Plug, 4-Way, Black
ATP06-4S-EC01	DTP06-4S-E003	Plug, 4-Way, End Cap
ATP06-4S-RD01	DTP06-4S-C015	Plug, 4-Way, Reduced Seal
ATP06-4S-RD01BLK	DTP06-4S-CE02	Plug, 4-Way, Black, Reduced Seal
AWP-2S	WP-2S	Wedgelock, Plug
AWP-4S	WP-4S	Wedgelock, Plug



Durability	No electrical/mechanical defects after 100 cycles of mating/unmating.	
Corrosion Resistance	No evidence of corrosion after 48 hours of salt spray per MIL-STD1344, method 1001.	
Contact Current Rating	#12 size contacts rated at 25 amps continuous at +125°C. Current is fully rated without derating curve.	
Operating Temperature	-55°C to +125°C	
Submersion	A mated connection, properly wired, placed in an oven at +125°C for 1 hour, then placed immediately in a depth of water 1 meter deep for 4 hours without loss of electronic performance.	
Vibration	Continued continuity without degradation to mechanical or physical attributes following vibration. (max acceleration 20 g's at Sine sweep of 10-2000Hz)	









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

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### ATP Series™ Material Specifications

Plug/Receptacle	Contacts
Shell: Thermoplastic	Pin: Copper Alloy
Wedge: Thermoplastic	Socket: Copper Alloy
Seals: Silicone Elastomer	Finish: Nickel-plated (optional Gold)

# ATP Series™ 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 12 contact: 25A

#### Corrosion Resistance

Connectors show no evidence of corrosion after exposure to 48 hours of salt spray per MIL - STD 1344, method 1001.

Submersion	Fluid Resistance	
IP67. 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	

# Contact Retention Contacts withstand a minimum load of:

70lbs. for Size 12 contacts.

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.	
Physical Shock	Contact Millivolt Drop	
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".	No. 16 contacts - 60 millivolt drop using 16 AWG wire (less drop through wire). Test current 13 amps.	

### **Contact Resistance**

Contact Size	Wire Guage AWG(mm²)	Test Current (Amps)	Resistance Solids	Resistance Stamped & Formed
#12	12	25	60 µV	100 μV

### Wire Sealing Range

Contact Size	Recommended Wire Insulation O.D.	
Confact size	Standard (S-Seal)	Thin Wall (RD-Seal)
#12	.134170 (3.40 - 4.32)	.097158 (2.46 - 4.01)

# **DTP Series**

### **DTP Material Specifications**

Plug/Receptacle	Contacts
Shell: Thermoplastic	Pin: Copper Alloy
Wedge: Thermoplastic	Socket: Copper Alloy
Seals: Silicone Elastomer	Finish: Nickel-plated (optional Gold)

## **DTP 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 12 contact: 25 amps

### Corrosion Resistance

Connectors show no evidence of corrosion after exposure to 48 hours of salt spray per MIL - STD 1344, method 1001.

Submersion	Fluid Resistance
IP67. 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
Maintains continuity and exhibits no mechanical or physical damage after vibration levels of 20 G's at 10-2000 Hz.	Operative at temperatures from -55°C to +125°C. Continuous at rated current.

# Contact Retention Contacts withstand a minimum load of:

70lbs. for Size 12 contacts.

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.
Physical Shock	Contact Millivolt Drop
No unlocking, unmating or other unsat- isfactory results during or after 50 G's in each of three usually perpendicular planes. No electrical discontinuities longer	No. 16 contacts - 60 millivolt drop using 16 AWG wire (less drop through wire). Test current 13 amps.

## Contact Resistance

213, Condition "C'

than 1 microsecond. MIL-STD 202. Method

Contact Size	Wire Guage AWG(mm2)	Test Current (Amps)	Resistance Solids	Resistance Stamped & Formed	
#12	12	25	60 μV	100 μV	

# Wire Sealing Range

Contact Size	Recommended Wire Insulation O.D.			
Corridor size	Standard	Thin Wall (E-Seal)		
#12	.134170 (3.40 - 4.32)	.097158 (2.46 - 4.01)		

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