

What are AHD Series™ Connectors?

Amphenol Sine Systems AHD Series™ Connectors were developed in response to the overwhelming need for an economic alternative to today's existing diagnostic product options. Designed specifically as a cost-conscious, reliable alternative, intermateable to industry standard 6 and 9 pin connectors, the AHD Series™ is ideal for any situation where either controlled and/or uncontrolled environmental conditions exist.

Amphenol Sine Systems AHD Series™ Connectors offer both a smooth, non-sealing option for controlled applications, as well as an environmentally-sealed, threaded option for more demanding applications. The same applies for our DiagnosticGrade™ Cable Assemblies in that we provide both options for our customers.

Features and Advantages

INTEGRATED ALIGNMENT KEYS	Tactile verification for blind mating
STRONG THERMOPLASTIC HOUSING	Extended service life
OPERATING TEMPERATURE RANGE	-55°C TO +125°C - Wide range compatibility
ECONOMICALLY SOUND	Low overall cost
RoHS COMPLIANT	Environmentally friendly
UL Approval	Certified and compliant

Performance Criteria

CONTACT CURRENT RATING	DiagnosticGrade™ / Military Style: At +125°C, continuous, less thru wire: #12 contact = 25 amps max. current; #16 contact = 13 amps max. current
PHYSICAL SHOCK	Military Style: No locking, unmating or other unsatisfactory result after 50 g's in each of three mutually perpendicular planes.
DIELECTRICAL STRENGTH	DiagnosticGrade™ / Military Style: 1500 volts minimum
VIBRATION	Military Style: Maintains continuity and exhibits no mechanical or physical damage after vibration. (20 g's at 10-2000 Hz)
TEMPERATURE	DiagnosticGrade™ / Military Style: Operating temperature range: -55°C TO +125°C at rated current.
INSULATION RESISTANCE	DiagnosticGrade™ / Military Style: 1000 megohms minimum at 25°C.
DURABILITY	DiagnosticGrade™ / Military Style: No electric or mechanical defects after 100 cycles of engagement and disengagement.
CORROSION RESISTANCE	DiagnosticGrade™ / Military Style: Connectors show no evidence of corrosion after exposure to 48 hours of salt spray per MIL-STD 1344 method 1001.

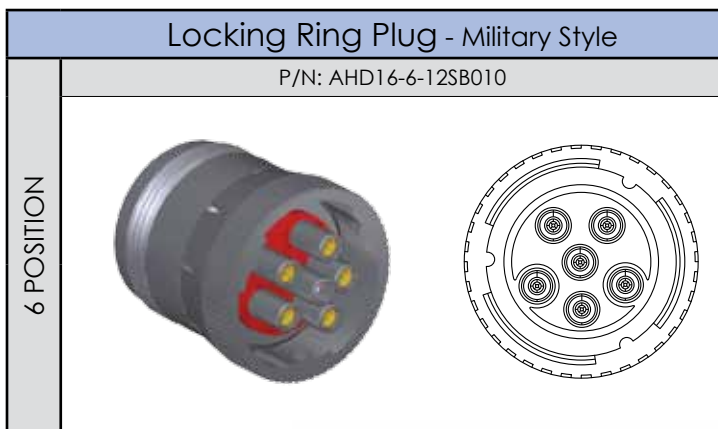
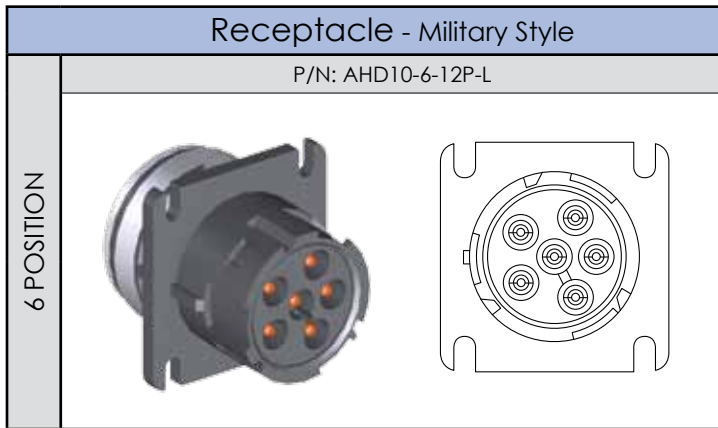
Product Material

HOUSINGS	Thermoplastic
SEALS	Silicone Elastomer
CONTACTS	Copper Alloy/Gold plated



AHD Series™ Receptacles, Plugs and Caps - 6 Pin

The AHD Series™ products listed below provide a quick connection between Amphenol Sine Systems 6 Pin products and equivalent industry 6 Pin products.



AHD Series™ Receptacles and Plugs - 9 Pin (J1939)

The AHD Series™ products listed below provide a quick connection between Amphenol Sine Systems 9 Pin products and equivalent industry 9 Pin products.

Receptacle - Military Style	
P/N: AHD10-9-1939P	
9 POSITION	

Smooth Shell Plug - DiagnosticGrade™	
P/N: AHD17-9-1939S (available w/out Rear Seal)	

Receptacle	
P/N: AHD10-9-96P	
9 POSITION	

In-line Receptacle	
P/N: AHD14-9-1939P	

Locking Ring Plug - Military Style	
P/N: AHD16-9-1939S	
9 POSITION	

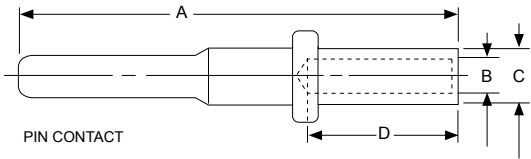
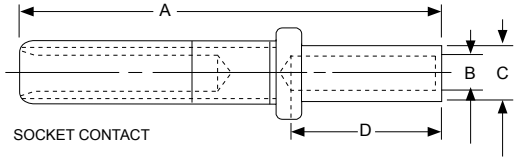
Locking Ring Plug (Non J1939) - Military Style	
P/N: AHD16-9-96S	

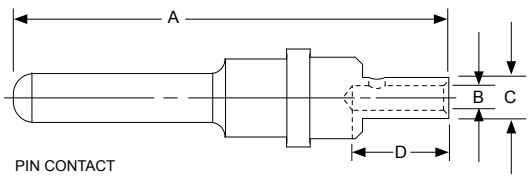
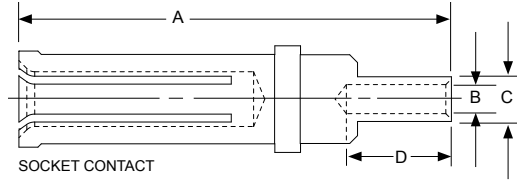
In-line Receptacle	
P/N: AHD14-9-96P	
9 POSITION	

Receptacle Cap - Military Style	
P/N: AHDC-16-9	

Pin Contacts, Socket Contacts and Tooling

The AHD Series™ products listed below provide a quick connection between Amphenol Sine Systems 6 Pin products and equivalent industry 6 Pin products. **Note:** All dimensions are in Inches.

Military-Style Solid Crimp							
							
Part Numbers (Fits AT Series™ and AHD Series™)	Size/ Type	A Max	B Min	C Max	D Min	Wire Gauge Range	Recomm'd Strip Length
AT60-202-1631 (Gold) AT60-202-16141 (Nickel)	16 PIN	.821	.066	.103	.250	16 and 18	.250-.312
AT62-201-1631 (Gold) AT62-201-16141 (Nickel)	16 SOC	.759	.066	.103	.250	16 and 18	.250-.312
Part Numbers (Fits AHD Series™ only)	Size/ Type	A Max	B Min	C Max	D Min	Wire Gauge Range	Recomm'd Strip Length
AT60-220-1231 (Gold)	12 PIN	.821	.098	.151	.250	12 and 14	.250-.312
AT62-210-1231 (Gold)	12 SOC	.759	.098	.151	.250	12 and 14	.250-.312

DiagnosticGrade™ - Solid Crimp							
							
Part Numbers (Fits AT Series™ and AHD Series™)	Size/ Type	A Max	B Min	C Max	D Min	Wire Gauge Range	Recomm'd Strip Length
65-54756 (Gold)	16 PIN	.826	.047	.078	.165	20	.250-.303
65-54757 (Gold)	16 SOC	.763	.047	.078	.165	20	.250-.303
Part Numbers (Fits AHD Series™ only)	Size/ Type	A Max	B Min	C Max	D Min	Wire Gauge Range	Recomm'd Strip Length
65-54749 (Gold)	12 PIN	.826	.047	.078	.165	20	.250-.303
65-54748 (Gold)	12 SOC	.763	.047	.078	.165	20	.250-.303

