



# AHD AHD Series™

## Circular Thermoplastic Connectors for Diagnostic Applications

Available in 6 and 9 Position

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 a smooth, non-sealing option for controlled applications, an environmentally-sealed, threaded option for more demanding applications, as well as J1939 Type 1 (Black Body) and Type 2 (Green Body) options.

**What is J1939?** J1939 has become the accepted industry standard and the choice for vehicle diagnostic and data communication for commercial heavy-duty, off-highway, truck, bus, marine propulsion, power generation, industrial pumping, construction, and material handling machines. J1939 is a higher-layer protocol based on Controller Area Network (CAN). Adopted widely by the diesel engine industry, it provides diagnostic data such as vehicle engine speed, temperature, oil temperature, exhaust emissions, and other customizable options.

### AHD Series™ - Specifications

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
UI Approval	Certified and compliant
Contact Current Rating	At +125°C, continuous, less thru wire: #12 contact = 25A max. current; #16 contact = 13A max. current
Physical Shock	No locking, unmating or other unsatisfactory result after 50 g's in each of 3 mutually perpendicular planes.
Dielectrical Strength	1500 volts minimum
Vibration	Maintains continuity and exhibits no mechanical or physical damage after vibration. (20 g's at 10-2000 Hz)
Operating Temperature Range	-55°C TO +125°C at rated current
Insulation Resistance	1000 megohms minimum at 25°C.
Durability	No electric or mechanical defects after 100 cycles of engagement and disengagement.
Corrosion Resistance	No evidence of corrosion after exposure to 48 hrs of salt spray per MIL-STD 1344 method 1001
Housings	Thermoplastic
Seals	Silicone Elastomer
Contacts	Copper Alloy/Gold plated



## What Are The Differences Between J1939 Type 1 and 2?

Type 1 (Black Body)	Pin	Type 2 (Green Body)
Ground	A	Ground
Battery	B	Battery
J1939 + 250kb	C	J1939 + 500kb
J1939 - 250kb	D	J1939 - 500kb
J1939 Shield	E	J1939 Shield
J1708+	F	J1708+ / J1939 + 250kb
J1708-	G	J1708- / J1939 - 250kb
OEM Specific	H	OEM Specific
OEM Specific	J	OEM Specific


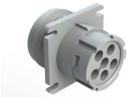

A A Series™ Family



Standard products. Custom solutions



#### 6 Position - AHD Series™ Plugs and Receptacles

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

Image	Part Number	Description	Type
	AHD16-6-12SB010	6 Position, Plug, AHD Series™, Threaded Rear, Coupling Ring, Grey Body	-
	AHD10-6-12P-L	6 Position, Square Flange Receptacle, AHD Series™, Threaded Rear, Grey Body	-
	AHD16-6-12S	6 Position, Plug, AHD Series™, Threaded Rear, No Coupling Ring, Grey Body	-






#### 6 Position - AHD Series™ Accessories

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

	AHD18-006	6 Position, Strain Relief with Ty-Wrap, AHD Series™, Grey Body	-
	AHDC-16-6	6 Position, Receptacle Cap, AHD Series™, Grey Body	-













#### 9 Position - AHD Series™ Plugs and Receptacles

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

	AHD16-9-96S	9 Position, Plug, AHD Series™, Threaded Rear, Coupling Ring, Grey Body	-
	AHD16-9-96SE	9 Position, Plug, AHD Series™, Threaded Rear, Coupling Ring, Reduced Diameter Seal, Grey Body	-
	AHD10-9-96P	9 Position, Square Flange Receptacle, AHD Series™, Threaded Rear, Grey Body	-
	AHD14-9-96P	9 Position, In-Line Receptacle, AHD Series™, Threaded Rear, Grey Body	-
	AHD10-9-96PE	9 Position, Square Flange Receptacle, AHD Series™, Reduced Diameter Seal, Grey Body	-



9 Position - AHD Series™ Accessories

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

Image	Part Number	Description	Type
	AHD18-009	9 Position, Strain Relief with Ty-Wrap, AHD Series™, Grey Body	-
	AHDC-09T	9 Position, Tether for AHD17-9-1939, AHD Series™, Black Body	-
	AHDC-16-9	9 Position, Receptacle Cap, AHD Series™, Grey Body	-
	AHDC-16-9-BLK	9 Position, Receptacle Cap, AHD Series™, Black Body	-
	AHDC-16-9-OBDBK	9 Position, Receptacle Cap, AHD Series™, OBD, Black Body	-
	AHDC-16-9-OBDBGN	9 Position, Receptacle Cap, AHD Series™, OBD, Green Body	-
	AHDC169-T	9 Position, Receptacle Cap, AHD Series™, Rubber Tether, Grey Body	-
	AHDC169-T-BLK	9 Position, Receptacle Cap, AHD Series™, Rubber Tether, Black Body	-
	AHDC169-TM	9 Position, Receptacle Cap, AHD Series™, Metal Tether, Grey Body	-
	AHDC169-TMBLK	9 Position, Receptacle Cap, AHD Series™, Metal Tether, Black Body	-
	AHDC169-TMOBDBK	9 Position, Receptacle Cap, AHD Series™, Metal Tether, OBD, Black Body	-
	AHDC169-TMOBDGN	9 Position, Receptacle Cap, AHD Series™, Metal Tether, OBD, Green Body	-






## 9 Position - AHD Series™ Accessories

 (See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

Image	Part Number	Description	Type
	AHDC169-T-OBDBK	9 Position, Receptacle Cap, AHD Series™, Rubber Tether, OBD, Black Body	-
	AHDC169-T-OBDBGN	9 Position, Receptacle Cap, AHD Series™, Rubber Tether, OBD, Green Body	-





## 9 Position - AHD Series™ J1939 Plugs (Type 1 and 2)

 (See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

	AHD16-9-1939S	9 Position, Plug, AHD Series™ J1939, Type 1, Threaded Rear, Coupling Ring, Black Body	1
	AHD16-9-1939S80	9 Position, Plug, AHD Series™ J1939, Type 2, Threaded Rear, Coupling Ring, Green Body	2
	AHD16-9-1939S8R	9 Position, Plug, AHD Series™ J1939, Type 2, Threaded Rear, Coupling Ring, Reduced Diameter Seal, Green Body	2
	AHD16-9-1939SE	9 Position, Plug, AHD Series™ J1939, Type 1, Threaded Rear, Coupling Ring, Reduced Diameter Rear Seal, Black Body	1
	AHD17-9-1939S	9 Position, Plug, AHD Series™ J1939, Type 1, Threaded Rear, No Coupling Ring, Black Body	1


## 9 Position - AHD Series™ J1939 Receptacles (Type 1 and 2)

 (See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

	AHD10-9-1939P	9 Position, Square Flange Receptacle, AHD Series™ J1939, Type 1, Threaded Rear, Black Body	1
	AHD10-9-1939P80	9 Position, Square Flange Receptacle, AHD Series™ J1939, Type 2, Threaded Rear, Green Body	2
	AHD10-9-1939P8R	9 Position, Square Flange Receptacle, AHD Series™ J1939, Type 2, Threaded Rear, Reduced Diameter Seal, Green Body	2
	AHD10-9-1939P-B022	9 Position, Jam Mount Receptacle, AHD Series™ J1939, Type 1, Threaded Rear, Black Body	1

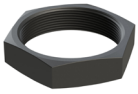
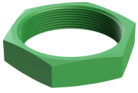

9 Position - AHD Series™ J1939 Receptacles (Type 1 and 2)

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

Image	Part Number	Description	Type
	AHD10-9-1939P-BP80	9 Position, Jam Mount Receptacle, AHD Series™ J1939, Type 2, Threaded Rear, Green Body	2
	AHD10-9-1939PE	9 Position, Square Flange Receptacle, AHD Series™ J1939, Type 1, Threaded Rear, Reduced Diameter Rear Seal, Black Body	1
	AHD10-9-1939PNR	9 Position, Square Flange Receptacle, AHD Series™ J1939, Type 1, Threaded Rear, Without Seal, Black Body	1
	AHD10-9-1939PR-B022	9 Position, Jam Mount Receptacle, AHD Series™ J1939, Type 1, Threaded Rear, Reduced Diameter Rear Seal, Black Body	1
	AHD10-9-1939PR-BP80	9 Position, Jam Mount Receptacle, AHD Series™ J1939, Type 2, Threaded Rear, Reduced Diameter Rear Seal, Green Body	2
	AHD10-9-1939PR-P080	9 Position, Square Flange Receptacle, AHD Series™ J1939, Type 2, Threaded Rear, Reduced Diameter Rear Seal, Green Body	2
	AHD14-9-1939P	9 Position, In-Line Receptacle, AHD Series™ J1939, Type 1, Threaded Rear, Black Body	1
	AHD17-9-1939PE	9 Position, Jam Nut Receptacle, Extended Shell, AHD Series™ J1939, Type 1, Threaded Rear, Reduced Diameter Rear Seal, Black Body	1
	AHD17-9-1939PES	9 Position, Jam Nut Receptacle, Extended Shell, AHD Series™ J1939, Type 1, Threaded Rear, Black Body	1
	AHD17-9-1939PES80	9 Position, Jam Nut Receptacle, Extended Shell, AHD Series™ J1939 Type 2, Threaded Rear, Green Body	2

9 Position - AHD Series™ J1939 Accessories

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for full specs, faceviews, keying location and product dimensions.)

Image	Part Number	Description	Type
	AHD17-PN01	9 Position, Jam Mount Receptacle Nut, AHD Series™ J1939, 35mm, Black Body	-
	AHD17-PN01-GRN	9 Position, Jam Mount Receptacle Nut, AHD Series™ J1939, 35mm, Green Body	-
	AHDC-09T	9 Position, Tether for AHD17-9-1939, AHD Series™, Black Body	-

AHD Series™ Contact Options

(See individual datasheets on [www.amphenol-sine.com](http://www.amphenol-sine.com) for all contact options and tooling.)

Part Number	Description	Contact Size
AT60-204-12141	Male Pin, Size12, Solid, 12-14AWG, Nickel Plated	12
AT62-203-12141	Female Socket, Size12, Solid, 12-14AWG, Nickel Plated	12
AT60-220-1231	Male Pin, Size12, Solid, 12-14AWG, Gold Plated	12
AT62-210-1231	Female Socket, Size12, Solid, 12-14AWG, Gold Plated	12
AT60-12-0166	Male Pin, Size12, Stamped & Formed, 12-14AWG, Nickel Plated	12
AT62-12-0166	Female Socket, Size12, Stamped & Formed, 12-14AWG, Nickel Plated	12
AT60-12-0144	Male Pin, Size12, Stamped & Formed, 12-14AWG, Gold Plated	12
AT62-12-0144	Female Socket, Size12, Stamped & Formed, 12-14AWG, Gold Plated	12
AT60-14-0122	Male Contact, Size 16, Stamped & Formed, 14-16AWG, Nickel Plated	16
AT60-14-0144	Male Contact, Size 16, Stamped & Formed, 14-16AWG, Gold Plated	16
AT60-202-1631	Male Pin, Size 16, Machined, 16-20AWG, Gold Plated	16
AT60-202-16141	Male Pin, Size 16, Machined, 16-20AWG, Nickel Plated	16
AT62-16-0122	Female Contact, Size 16, Stamped & Formed, 16-18AWG, Nickel Plated	16
AT62-16-0144	Female Contact, Size 16, Stamped & Formed, 16-18AWG, Gold Plated	16