

AHD AHDSeries™

Circular Thermoplastic Connectors for Diagnostic Applications



Available in 3, 5, 6 and 9 Position

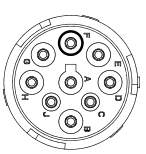
Amphenol Sine Systems **AHD Series™ Connectors** were developed in response to the overwhelming need for an economic alternative to today's existing diagnostic product options. Designed specifically as a cost-conscious, reliable alternative, intermateable to industry standard 6 and 9 pin connectors, 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.

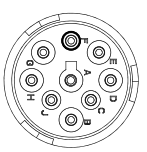
What is J1939? J1939 has become the accepted industry standard and the choice for vehicle diagnostic and data communication for commercial heavy-duty, off-highway, truck, bus, marine propulsion, power generation, industrial pumping, construction, and material handling machines. J1939 is a higher-layer 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 (Reference Individual Datasheets)

IP Rating (in mated condition)	IP68 and IP69K
Max. Current (Amperage)	13A-25A
Max. Voltage Rating	250V
Operating Temperature	-55°C to +125°C
Coupling System	Coupling Ring
Housing Body	Thermoplastic UL94-VO
Contact Types	Stamped & Formed, Machined
Contact Termination	Crimp
Contact Material	Copper Alloy/Gold-Plated
Wire Range	10-20AWG (See datasheets)
Sealing Material	Silicone Rubber
Min. Mating Cycles	>500
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)
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

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 ASeries™ Family



Standard products. Custom solutions

Customer Service +1 800 394 7732

AHD Series™ - Plugs
Note: Refer to individual datasheets on www.amphenol-sine.com for full specs, faceviews, keying location and product dimensions.

Image	Part Number	Description	Contact Size	Amp	Type
	AHD16-3-96S	3 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD16-5-16S	5 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD16-6-12SB010	6 Position, Plug, Socket, Contact Size 12, 25A, 250V, AHD Series™, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	12	25A	-
	AHD16-6-12S	6 Position, Plug, Socket, Contact Size 12, 25A, 250V, AHD Series™, Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	12	25A	-
	AHD16-6-96S	6 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD16-9-96S	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD16-9-96SE	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD16-9-1939S	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD16-9-1939SE	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Coupling Ring, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD17-9-1939S	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Standard Diameter Rear Seal (Red), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD17-9-1939SE	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Coupling Ring, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD16-9-1939S80	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Coupling Ring, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Green Body	16	13A	J1939 Type 2
	AHD16-9-1939S8R	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Coupling Ring, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Green Body	16	13A	J1939 Type 2

Image	Part Number	Description	Contact Size	Amp	Type
	AHD17-9-1939S80	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Standard Diameter Rear Seal (Red), Threaded Rear, Green Body	16	13A	J1939 Type 2
	AHD17-9-1939S8R	9 Position, Plug, Socket, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Reduced Diameter Rear Seal (Green), Threaded Rear, Green Body	16	13A	J1939 Type 2

AHD Series™ - Square Flange Receptacles
Note: Refer to individual datasheets on www.amphenol-sine.com for full specs, faceviews, keying location and product dimensions.

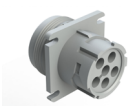
	AHD10-3-96P	3 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD10-5-16P	5 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD10-6-12P-L	6 Position, Square Flange Receptacle, Pin, Contact Size 12, 25A, 250V, AHD Series™, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	12	25A	-
	AHD10-6-96P	6 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD10-9-96P	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD10-9-96PE	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Grey Body	16	13A	-
	AHD10-9-1939P	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD10-9-1939PE	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD10-9-1939PNR	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Without Rear Seal, Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD10-9-1939P80	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Green Body	16	13A	J1939 Type 2
	AHD10-9-1939P8R	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Green Body	16	13A	J1939 Type 2

Image	Part Number	Description	Contact Size	Amp	Type
	AHD10-9-1939PR-P080	9 Position, Square Flange Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Green Body	16	13A	J1939 Type 2

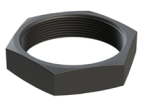
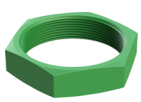
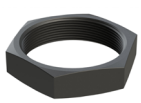
AHD Series™ - In-Line Receptacles
Note: Refer to individual datasheets on **www.amphenol-sine.com** for full specs, faceviews, keying location and product dimensions.

	AHD14-9-96P	9 Position, In-Line Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Grey Body	16	13A	-
	AHD14-9-1939P	9 Position, In-Line Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Black Body	16	13A	J1939 Type 1

AHD Series™ - Jam Nut Receptacles
Note: Refer to individual datasheets on **www.amphenol-sine.com** for full specs, faceviews, keying location and product dimensions.

	AHD10-9-1939P-B022	9 Position, Jam Nut Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD10-9-1939PR-B022	9 Position, Jam Nut Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD17-9-1939PE	9 Position, Jam Nut Receptacle w Extended Shell, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD17-9-1939PES	9 Position, Jam Nut Receptacle w Extended Shell, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 1, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Black Body	16	13A	J1939 Type 1
	AHD10-9-1939P-BP80	9 Position, Jam Nut Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Green Body	16	13A	J1939 Type 2
	AHD10-9-1939PR-BP80	9 Position, Jam Nut Receptacle, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Silicone Rubber Seal (Red), Reduced Diameter Rear Seal (Green), Threaded Rear, Green Body	16	13A	J1939 Type 2
	AHD17-9-1939PES80	9 Position, Jam Nut Receptacle w Extended Shell, Pin, Contact Size 16, 13A, 250V, AHD Series™, J1939 Type 2, Silicone Rubber Seal (Red), Standard Diameter Rear Seal (Red), Threaded Rear, Green Body	16	13A	J1939 Type 2

AHD Series™ - Accessories
Note: Refer to individual datasheets on www.amphenol-sine.com for full specs, faceviews, keying location and product dimensions.

Image	Part Number	Description
	AHD10-3-GKT	3 Position, Gasket, AHD Series™, Foam, Black Body
	AHD10-5-GKT	5 Position, Gasket, AHD Series™, Foam, Black Body
	AHD10-6-GKT	6 Position, Gasket, AHD Series™, Foam, Black Body
	AHD10-9-GKT	9 Position, Gasket, AHD Series™, Foam, Black Body
	AHD18-006	6 Position, Strain Relief w Ty-Wrap, AHD Series™, Thermoplastic/Rubber, Grey Body
	AHD17-PN01	9 Position, Jam Mount Receptacle Nut, For PE/PES Only, AHD Series™, Thermoplastic, Black Body
	AHD17-PN01-GRN	9 Position, Jam Mount Receptacle Nut, For PES80 Only, AHD Series™, Thermoplastic, Green Body
	AHDP18-PN01	9 Position, Jam Mount Receptacle Nut, For -BP80 and -B022 Only, AHD Series™, Thermoplastic, Black Body
	AHD18-009	9 Position, Strain Relief w Ty-Wrap, AHD Series™, Thermoplastic/Rubber, Grey Body
	AHDC-09T	9 Position, Tether, AHD Series™, Rubber, Black Body

AHD Series™ - Caps
Note: Refer to our A Series™ Caps Flyer.

AHD Series™ - Contacts
Note: Refer to individual part number datasheets found at www.amphenol-sine.com or our A Series Contacts Flyer.

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