



DM DuraMate™ AHDP ISOBUS 91 Series

Environmentally-Sealed, Multi-Pin, Heavy-Duty, Plastic Circular ISOBUS Connectors



Available in Size 24, 9 Position

Amphenol Sine Systems' **DuraMate™ AHDP ISOBUS 91 Series** of environmentally-sealed, multi-pin, heavy duty, circular plastic (AHDP) plugs & receptacles provide an economical, quick-connect, circular bayonet locking system **designed to meet ISO 11783 standards (for control and communications between tractors, implements and software) and withstand the challenges and complexities of harsh environment, off-road, agricultural applications.**

Key ISOBUS 91 Series Features

- + **One-to-one alternative for all HDP20 parts**
- + **Compatible to other industry standard circular bayonet versions**
- + **AHDP 91 Series Plugs have a jumper (bridged contacts) between Pin 4 & 5**
- + **AHDP 91 Series Receptacles do not have a jumper (bridged contact)**
- + **Options for up to 6AWG/16mm² power wires**
- + **Full range of backshell options**

Contact Legend (Size/Max. Current)			
8/ 60A 6AWG	8/ 60A 8-10AWG	12/ 25A	16/ 13A



N R

24-09
2 Size 8
2 Size 12
5 Size 16

Seal Legend
Normal
Reduced <small>(See datasheets)</small>

DuraMate™ Features

- 3 key-way bayonet design ensures proper mating of connectors
- High density signal and mixed power insert configurations
- Operating temperature range: -55°C to +125°C
- High-strength, impact resistant & lightweight thermoplastic housings
- Low-insertion force stamped terminals offer improved manufacturing efficiencies
- Standard WTA (Wide Thread Adapter) and SRA (Smooth Ring Adapter) options provide maximum access to rear grommet and improved serviceability with a wide variety of backshell options
- Environmentally-sealed and engineered rapid and secure mating system achieves IP67/IP69K protection (in mated condition) from ingress of dust, water, mud and other contaminants and is vibration resistant
- Sealing features consisting of durable high-temperature silicone provide barrier from lubricating oils, hydraulic fluids and fossil fuels
- Backshells maintain a compression-fit design to resist maximum pull-out forces and facilitate strain-relief for jacketed cable ranges
- Utilizes A Series™ standard contact system (Stamped & Formed or Machined)
- Wire entry sealing available in four separate ranges for discrete wire applications



A Series™ Family



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

DuraMate™ AHDP ISOBUS 91 Series - Material & Performance Specifications

Current Rating per Contact	Size 8, 60A; Size 12, 25A; Size 16, 13A	Housing Material	Thermoplastic
Operating Temperature	-55°C to +125°C	Insulation Insert	Thermoplastic
Dielectric Withstanding Voltage	Current Leakage -2mA at 1500 VAC	Seal	Silicone Rubber
Degree of Protection	IP67/69K (in mated condition)	Contact	A Series™ Common System
Mating Cycle Durability	100 Cycles	Compliance	RoHS

DuraMate™ AHDP ISOBUS 91 Series - Recommended Wire Insulation Overall Diameter (OD)

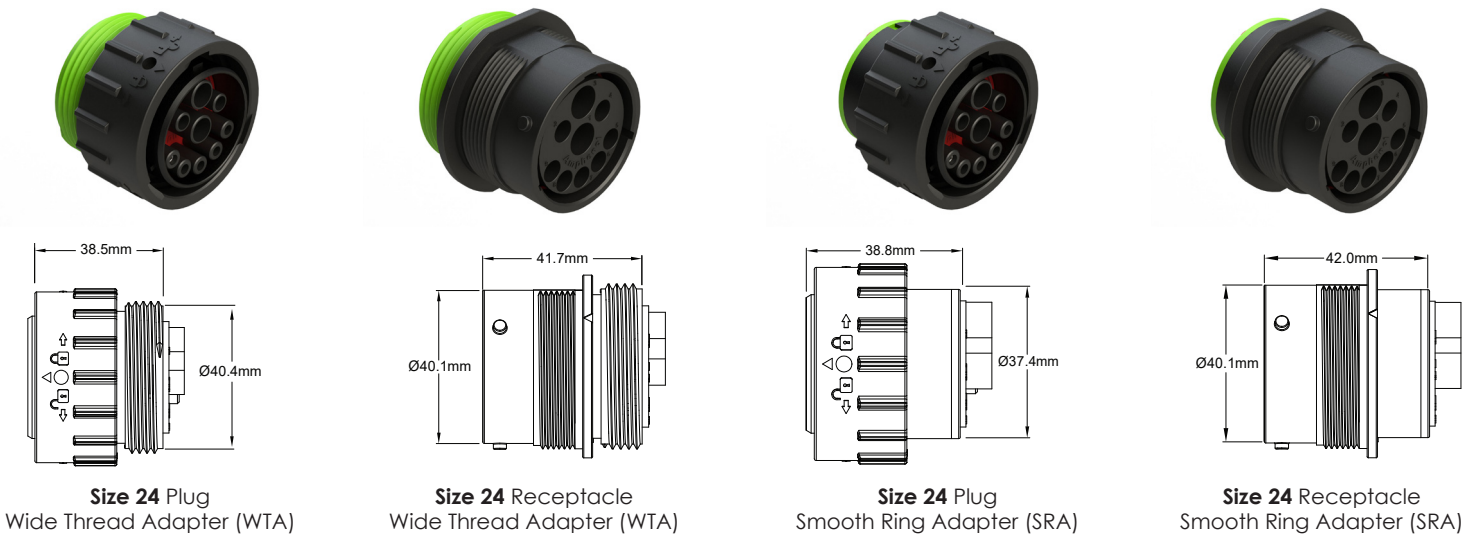
Contact Size	Typical Wire Range	Normal Seal	Reduced Seal	Reduced Seal for 6AWG/16mm ² (Size 8 Contacts Only)
8	6-10AWG (5.0-16.0mm ²)	4.83-6.10mm (0.190-0.240")	3.43-5.59mm (0.135-0.220")	6.50-7.42mm (0.256-0.292")
12	10-14AWG (6.0-2.0mm ²)	3.40-4.32mm (0.134-0.170")	2.46-4.01mm (0.135-0.158")	2.46-4.01mm (0.135-0.158")
16	14-20AWG (2.0-0.5mm ²)	2.54-3.40mm (0.100-0.134")	1.35-3.05mm (0.053-0.120")	1.35-3.05mm (0.053-0.120")z

DuraMate™ AHDP ISOBUS 91 Series - Backshell Options and Accessory Overview



DuraMate™ AHDP ISOBUS 91 Series - Standard Plug & Receptacle (mm) w Wide Thread Adapter (WTA)




DuraMate™ AHDP ISOBUS 91 Series - Standard Plug & Receptacle (mm) w Smooth Ring Adapter (SRA)



DuraMate™ AHDP ISOBUS 91 Series - Standard Plugs

Image	Part Number	Description	Amps	Voltage
	AHDP06-24-91SN-SRA	Size 24, 9 Position, Plug, Socket, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Normal Dia. Seal, Smooth Ring Adapter (SRA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP06-24-91SN-WTA	Size 24, 9 Position, Plug, Socket, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Normal Dia. Seal, Wide Thread Adapter (WTA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP06-24-91SR-SRA	Size 24, 9 Position, Plug, Socket, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Smooth Ring Adapter (SRA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP06-24-91SR-WTA	Size 24, 9 Position, Plug, Socket, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Wide Thread Adapter (WTA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP06-24-91SR16-SRA	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Smooth Ring Adapter (SRA), Size 8 Contact, 6AWG/16mm ² Wire Seal Note: Use AT62-203-08141-16 contacts for 6AWG/16mm ² applications	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP06-24-91SR16-WTA	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Wide Thread Adapter (WTA), Size 8 Contact, 6AWG/16mm ² Wire Seal Note: Use AT62-203-08141-16 contacts for 6AWG/16mm ² applications	Size 8, 60A Size 12, 25A Size 16, 13A	250V

DuraMate™ AHDP ISOBUS 91 Series - Standard Receptacles

Image	Part Number	Description	Amps	Voltage
	AHDP04-24-91PN-SRA	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Normal Dia. Seal, Smooth Ring Adapter (SRA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP04-24-91PN-WTA	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Normal Dia. Seal, Wide Thread Adapter (WTA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP04-24-91PR-SRA	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Smooth Ring Adapter (SRA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V















DuraMate™ AHDP ISOBUS 91 Series - Standard Receptacles, cont.

Image	Part Number	Description	Amps	Voltage
	AHDP04-24-91PR-WTA	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Wide Thread Adapter (WTA)	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP04-24-91PR16-SRA	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Smooth Ring Adapter (SRA), Size 8 Contact, 6AWG/16mm² Wire Seal Note: Use AT60-204-08141-16 contacts for 6AWG/16mm² applications	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDP04-24-91PR16-WTA	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDP ISOBUS 91 Series, Plastic, Reduced Dia. Seal, Wide Thread Adapter (WTA), Size 8 Contact, 6AWG/16mm² Wire Seal Note: Use AT60-204-08141-16 contacts for 6AWG/16mm² applications	Size 8, 60A Size 12, 25A Size 16, 13A	250V

DuraMate™ AHDP ISOBUS 91 Series - Backshell Options and Accessories

Image	Part Number	Description
	AHDPBS-011-2405	Size 24, Backshell, Conduit, Snap Over, Right Angle 90°, DuraMate™ AHDP ISOBUS 91 Series Note: For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-24NUT Adapter
	AHDPBS-010-2405	Size 24, Backshell, Conduit, Snap Over, Straight 180°, DuraMate™ AHDP ISOBUS 91 Series Note: For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-24NUT Adapter
	AHDPBS-0406-001	Size 24, Backshell, Tie Wrap, Wide Thread Adapter (WTA), DuraMate™ AHDP ISOBUS 91 Series Note: For use with Wide Thread Adapter (WTA)
	AHDPBS-0406-002	Size 24, Backshell, Wide Thread Adapter (WTA), 2 PC, Compression Nut, Cable Diameter Range 14.5mm - 18.0mm, DuraMate™ AHDP ISOBUS 91 Series
	AHDPBS-0406-003	Size 24, Backshell, Wide Thread Adapter (WTA), 2 PC, Compression Nut, Cable Diameter Range 19.5mm - 24.1mm, DuraMate™ AHDP ISOBUS 91 Series
	AHDPBS-0406-SM01	Size 24, Backshell, Sealed, Cable Grommet, DuraMate™ AHDP ISOBUS 91 Series
	AHDC06-24	Size 24, Receptacle Cap, Sealed, DuraMate™ AHDP ISOBUS 91 Series

DuraMate™ AHDP ISOBUS 91 Series - Backshell Options and Accessories, cont.

Image	Part Number	Description
	AHDC04-24-PM	Size 24, Plug Cap, Sealed, Threaded, DuraMate™ AHDP ISOBUS 91 Series
	AHDC04-24-PMT	Size 24, Plug Cap, w Tether, Threaded, Lock Washer, Sealed, DuraMate™ AHDP ISOBUS 91 Series
	AHDP24-PN01	Size 24, Panel Nut, DuraMate™ AHDP ISOBUS 91 Series
	AT14-001-2486	Size 24, Lock Washer, Wave, DuraMate™ AHDP ISOBUS 91 Series
	AHDP-16-04477	Size 24, Rubber Flange Seal, DuraMate™ AHDP ISOBUS 91 Series
	A114018	Size 8, Blank Seal Plug
	A114017	Size 12/16, Blank Seal Plug
	AT13-217-1605	Size 16, Locking Seal Plug
	AT11-310-1605	Size 16, Contact Removal Tool, Light Blue, 16-20AWG
	AT11-337-1205	Size 12, Contact Removal Tool, Orange, 12-14AWG
	AT11-001-3.6M	Size 8, Contact Removal Tool, Black, 7-10AWG
	AT114008	Size 8, Contact Removal Tool, Green, 8-10AWG
	AT60-204-08141-16	Size 8, 6AWG/16mm² Wire Range, Contact, Pin, Nickel-plated Note: Refer to Plug/Receptacle datasheets for a complete list of available contacts
	AT62-203-08141-16	Size 8, 6AWG/16mm² Wire Range, Contact, Socket, Nickel-plated Note: Refer to Plug/Receptacle datasheets for a complete list of available contacts