



DM Dura|Mate™ Family



Environmentally-Sealed, Multi-Pin, Heavy-Duty, Plastic or Metal Circular Connectors

Amphenol Sine Systems' **DuraMate™ Family** of environmentally-sealed, multi-pin, heavy duty, plastic (AHDP) or metal (AHDM/AHDBM) circular connectors provide an economical, quick-connect, bayonet-locking system manufactured to withstand the challenges and complexities of harsh-environment, off-road applications. Our ISOBUS products specifically meet **ISO 11783 standards (for control and communications between tractors, implements and software)** for agricultural applications.

Currently available in the following Series:

DM Dura|Mate™ AHDP **DM Dura|Mate™ AHDM**

DM Dura|Mate™ AHDP ISOBUS 91 Series **DM Dura|Mate™ AHDM/AHDBM ISOBUS 91 Series**

DuraMate™ AHDP (Pgs 3-7): Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47
Size 18 with 6 insert arrangements 6(x2), 8, 14, 20 and 21

DuraMate™ AHDM (Pgs 8-11): Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47
Size 18 with 6 insert arrangements 6(x2), 8, 14, 20 and 21

DuraMate™ AHDP ISOBUS 91 (Pgs 12-16): Size 24, 9 Position

DuraMate™ AHDM/AHDBM ISOBUS 91 (Pgs 17-22): Size 24, 9 Position

Key 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 current configurations incorporating revolutionary RADSOK® contacts
- High strength impact resistant & lightweight thermoplastic or zinc-alloy metal housings
- Low insertion force stamped terminals offer improved manufacturing efficiencies
- Standard WTA (Wide Thread Adapter) provides maximum access to rear grommet and improved serviceability
- Environmentally-sealed and engineered rapid and secure mating system achieves IP68/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 three separate ranges for discrete wire applications

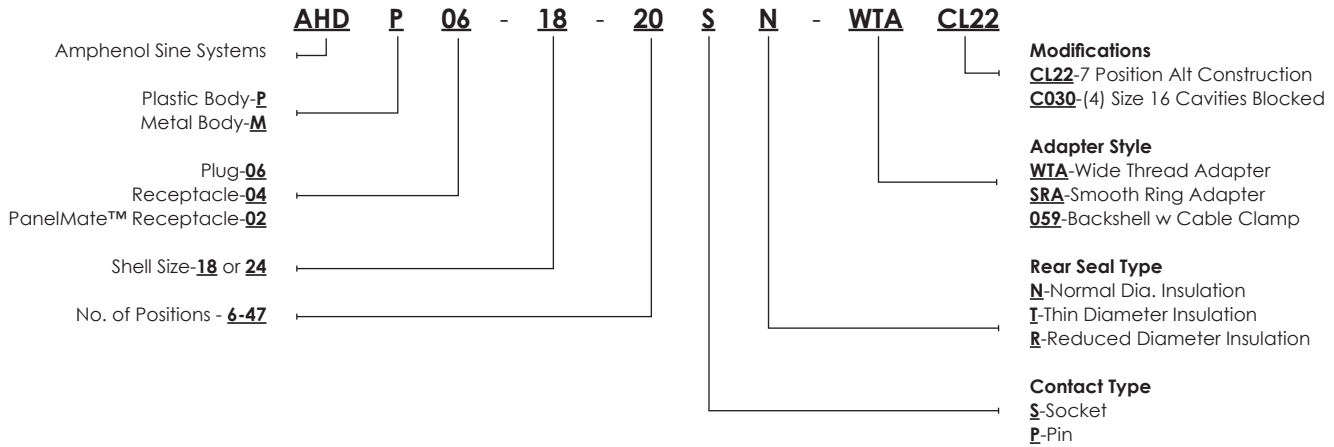


A Series™ Family



Standard products. Custom solutions
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DuraMate™ AHDP/AHDM Series - Part Numbering Sequence



DuraMate™ AHDP/AHDM Series - Examples



DM Dura|Mate™ AHDP

AHDP06-18-20SN-SRA
Plastic Body, Plug, Shell Size 18, No. of Positions 20, Socket, Normal Diameter Insulation, Smooth Ring Adapter



DM Dura|Mate™ AHDP

AHDP02-24-16PR-SRA
Plastic Body, PanelMate™ Receptacle, Shell Size 24, No. of Positions 16, Pin, Reduced Diameter Insulation, Smooth Ring Adapter



DM Dura|Mate™ AHDM

AHDM04-18-08SN
Metal Body, Receptacle, Shell Size 18, No. of Positions 8, Socket, Normal Diameter Insulation



DM Dura|Mate™ AHDM

AHDM06-24-16PR
Metal Body, Plug, Shell Size 24, No. of Positions 16, Pin, Reduced Diameter Insulation



DM Dura|Mate™ AHDM

AHDM06-18-14SR-059
Metal Body, Plug, Shell Size 18, No. of Positions 14, Socket, Reduced Diameter Insulation, Backshell w Cable Clamp



DM Dura|Mate™ AHDM

AHDM04-24-09SR-059
Metal Body, Receptacle, Shell Size 24, No. of Positions 09, Socket, Reduced Diameter Insulation, Backshell w Cable Clamp



DM DuraMate™ AHDP

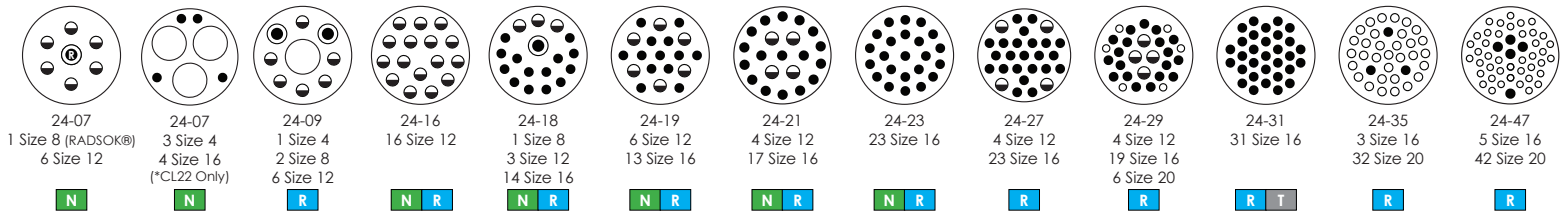
Environmentally-Sealed, Multi-Pin, Heavy-Duty, Plastic, Circular Connectors



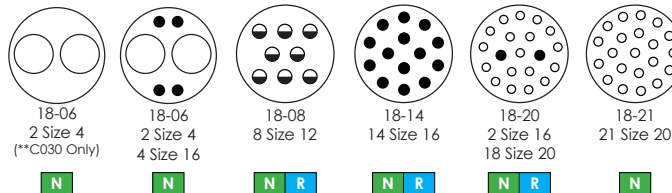
Available in Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47
Available in Size 18 with 6 insert arrangements 6(x2), 8, 14, 20 and 21

The **DuraMate™ AHDP** environmentally-sealed, multi-pin, heavy duty, plastic, circular connector series provides an economical quick-connect bayonet locking system manufactured to withstand the challenges and complexities of harsh environment off-road applications.

- 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 current configurations incorporating revolutionary RADSOK® contacts
- High strength impact resistant & lightweight thermoplastic housings
- Low insertion force stamped terminals offer improved manufacturing efficiencies
- Standard WTA (Wide Thread Adapter) provides maximum access to rear grommet and improved serviceability.
- Environmentally-sealed and engineered rapid and secure mating system achieves IP68/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
- Back shells 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



Contact Legend (Size/Max. Current)		
4/ 100A	8/ 60A	8/ 86A RADSOK®
12/ 25A	16/ 13A	20/ 7.5A



Seal Legend
Normal
Thin
Reduced (See datasheets)

*CL22 - Receptacle with Diagnostic Keying; **C030 - Four Size 16 cavities blocked (1, 2, 5, 6)

A Series™ Family



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

DuraMate™ AHDP - Material & Performance Specifications

Current Rating per Contact	Size 4, 100A; Size 8, 86A; Size 12, 25A; Size 16, 13A; Size 20, 7.5A	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	IP68/69K (in mated condition)	Contact	A Series™ Common System
Mating Cycle Durability	100 Cycles	Compliance	RoHS

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

Contact Size	Typical Wire Range	Normal Seal	Thin Seal	Reduced Seal (See datasheets)	
4	6AWG (16.0-13.0mm ²)	6.63-7.41mm (0.261-0.292")	-	6.63-7.41mm (0.261-0.292")	-
4+	4AWG (25.0-21.0mm ²)	7.9-10.67mm (0.311-0.420")	-	-	-
8	8-10AWG (10.0-5.0mm ²)	4.83-6.10mm (0.190-0.240")	-	3.43-5.59mm (0.135-0.220")	-
12	10-14AWG (6.0-2.0mm ²)	3.43-4.32mm (0.135-0.170")	-	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")	2.23-2.69mm (0.088-.106")	1.35-3.05mm(0.053-0.120")	1.35-2.62mm (0.053-0.103")
20	16-22AWG (1.5-0.35mm ²)	1.02-2.41mm (0.040-.095")	-	1.02-02.41mm (0.040-0.095")	1.02-2.10mm (0.040-0.083")

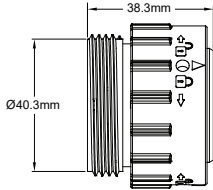
4+ contact is only available for 24-07CL22.

DuraMate™ AHDP - Backshell Options and Accessory Overview

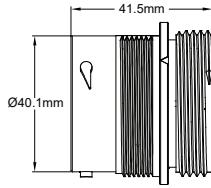


DuraMate™ AHDP - Plug & Receptacle Options (Dimensions in mm)

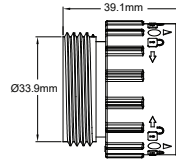
*Refer to page 3 for available insert arrangements



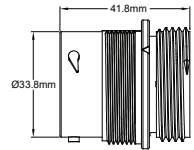
Size 24 Plug
Wide Thread Adapter (WTA)



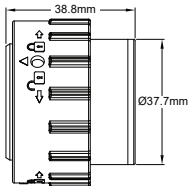
Size 24 Receptacle
Wide Thread Adapter (WTA)



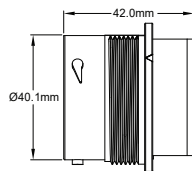
Size 18 Plug
Wide Thread Adapter (WTA)



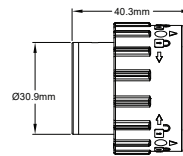
Size 18 Receptacle
Wide Thread Adapter (WTA)



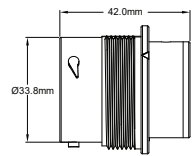
Size 24 Plug
Smooth Ring Adapter (SRA)



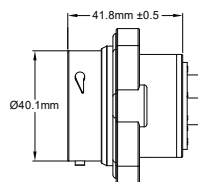
Size 24 Receptacle
Smooth Ring Adapter (SRA)



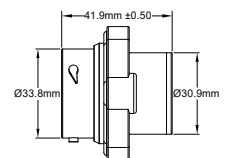
Size 18 Plug
Smooth Ring Adapter (SRA)



Size 18 Receptacle
Smooth Ring Adapter (SRA)



Size 24 Receptacle
PanelMate™ (w SRA)



Size 18 Receptacle
PanelMate™ (w SRA)

DuraMate™ AHDP - Backshell Options and Accessories

Image	Part Number	Description
	AHDPBS-011-2405	Size 24, Backshell, Conduit, Snap Over, Right Angle 90°, DuraMate™ AHDP Note: For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-24NUT Adapter
	AHDPBS-015-1805	Size 18, Backshell, Conduit, Snap Over, Right Angle 90°, Duramate™ AHDP Note: For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-18NUT Adapter
	AHDPBS-010-2405	Size 24, Backshell, Conduit, Snap Over, Straight 180°, DuraMate™ AHDP Note: For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-24NUT Adapter
	AHDPBS-016-1805	Size 18, Backshell, Conduit, Snap Over, Straight 180°, Duramate™ AHDP Note: For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-18NUT Adapter
	AHDPBS-0406-001	Size 24, Backshell, Tie Wrap, Wide Thread Adapter (WTA), DuraMate™ AHDP Note: For use with Wide Thread Adapter (WTA)
	AHDPBS-18-001	Size 18, Backshell, Tie Wrap, Wide Thread Adapter (WTA), Cable Diameter Range 14.5mm - 18.0mm, Duramate™ AHDP 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 Note: For use with Wide Thread Adapter (WTA)
	AHDPBS-0406-003	Size 24, Backshell, Wide Thread Adapter (WTA), 2 PC, Compression Nut Cable Diameter Range 19.5mm - 24.1mm, DuraMate™ AHDP Note: For use with Wide Thread Adapter (WTA)
	AHDPBS-18-002	Size 18, Backshell, Wide Thread Adapter (WTA), 2PC, Compression Nut Cable Diameter Range 14.5mm-18.0mm, Duramate™ AHDP Note: For use with Wide Thread Adapter (WTA)
	AHDPBS-0406-SM01	Size 24, Backshell, Sealed, Cable Grommet, DuraMate™ AHDP Note: For use with Wide Thread Adapter (WTA)
	AHDPBS-18-SM01	Size 18, Backshell, Sealed, Cable Grommet, Duramate™ AHDP Note: For use with Wide Thread Adapter (WTA)
	AHDC06-24	Size 24, Receptacle Cap, Sealed, DuraMate™ AHDP
	AHDC06-18	Size 18, Receptacle Cap, Sealed, DuraMate™ AHDP
	AHDC04-24	Size 24, Plug Cap, Sealed, DuraMate™ AHDP
	AHDC04-18	Size 18, Plug Cap, Sealed, DuraMate™ AHDP
	AHDC04-24-PM	Size 24, Plug Cap, Sealed, Threaded, DuraMate™ AHDP

DuraMate™ AHDP - Backshell Options and Accessories

Image	Part Number	Description
	AHDC04-24-PMT	Size 24, Plug Cap, w Tether, Threaded, Lock Washer, Sealed, DuraMate™ AHDP
	AHDC04-24-T	Size 24, Plug Cap, w Tether, Sealed, DuraMate™ AHDP
	AHDP24-PN01	Size 24, Panel Nut, Duramate™ AHDP
	AHDP18-PN01	Size 18, Panel Nut, DuraMate™ AHDP
	AT14-001-2486	Size 24, Lock Washer, Wave, Duramate™ AHDP
	AT14-002-1886	Size 18, Lock Washer, Wave, DuraMate™ AHDP
	AHDP-16-04477	Size 24, Rubber Flange Seal, Duramate™ AHDP
	AHDP-16-04978	Size 18, Rubber Flange Seal, DuraMate™ AHDP
	A114019	Size 4, Blank Seal Plug
	A114018	Size 8, Blank Seal Plug
	A114017	Size 12/16, Blank Seal Plug
	AT13-217-1605	Size 16, Locking Seal Plug
	AT114009	Size 4, Contact Removal Tool, 6AWG
	AT114008	Size 8, Contact Removal Tool, 8-10AWG
	AT11-027-0405	Size 4, Contact Removal Tool, 4AWG
	AT11-240-2005	Size 20, Contact Removal Tool, 20-22AWG
	AT11-310-1605	Size 16, Contact Removal Tool, 16-20AWG
	AT11-337-1205	Size 12, Contact Removal Tool, 12-14AWG
	AT11-001-3.6M	Size 8, Contact Removal Tool, 7-10AWG



DM Dura|Mate™ AHDM

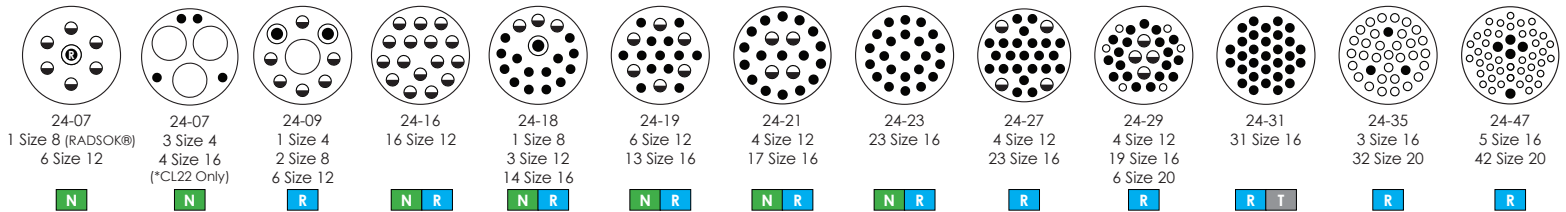
Environmentally-Sealed, Multi-Pin, Heavy-Duty, Metal, Circular Connectors



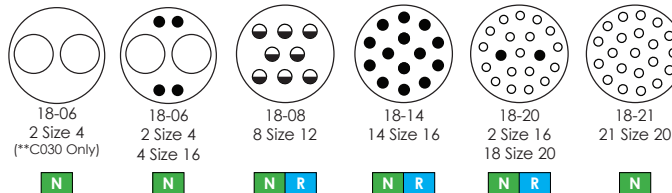
Available in Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47
Available in Size 18 with 6 insert arrangements 6(x2), 8, 14, 20 and 21

The **DuraMate™ AHDM** environmentally-sealed, multi-pin, heavy duty, metal, circular connector series provides an economical quick-connect bayonet locking system manufactured to withstand the challenges and complexities of harsh environment off-road applications.

- 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 current configurations incorporating revolutionary RADSOK® contacts
- High strength impact resistant & lightweight zinc-alloy metal housings
- Low insertion force stamped terminals offer improved manufacturing efficiencies
- Standard WTA(Wide Thread Adapter) provides maximum access to rear grommet and improved serviceability.
- Environmentally-sealed and engineered rapid and secure mating system achieves IP68/IP69K protection (in mated condition) from ingress of dust, water, mud and other contaminants and is vibration resistant.
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- Utilizes A Series™ standard contact system (Stamped & Formed or Machined)
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Contact Legend (Size/Max. Current)		
4/ 100A	8/ 60A	8/ 86A RADSOK®
12/ 25A	16/ 13A	20/ 7.5A



Seal Legend
Normal
Thin
Reduced (See datasheets)

*CL22 - Receptacle with Diagnostic Keying; **C030 - Four Size 16 cavities blocked (1, 2, 5, 6)

A Series™ Family



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

DuraMate™ AHDM - Material & Performance Specifications

Current Rating per Contact	Size 4, 100A; Size 8, 86A; Size 12, 25A; Size 16, 13A; Size 20, 7.5A	Housing Material	Zinc-alloy
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	IP68/69K (in mated condition)	Contact	A Series™ Common System
Mating Cycle Durability	100 Cycles	Compliance	RoHS

DuraMate™ AHDM - Recommended Wire Insulation Overall Diameter (OD)

Contact Size	Typical Wire Range	Normal Seal	Thin Seal	Reduced Seal (See datasheets)	
4	6AWG (16.0-13.0mm ²)	6.63-7.41mm (0.261-0.292")	-	6.63-7.41mm (0.261-0.292")	-
4+	4AWG (25.0-21.0mm ²)	7.9-10.67mm (0.311-0.420")	-	-	-
8	8-10AWG (10.0-5.0mm ²)	4.83-6.10mm (0.190-0.240")	-	3.43-5.59mm (0.135-0.220")	-
12	10-14AWG (6.0-2.0mm ²)	3.43-4.32mm (0.135-0.170")	-	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")	2.23-2.69mm (0.088-.106")	1.35-3.05mm(0.053-0.120")	1.35-2.62mm (0.053-0.103")
20	16-22AWG (1.5-0.35mm ²)	1.02-2.41mm (0.040-.095")	-	1.02-02.41mm (0.040-0.095")	1.02-2.10mm (0.040-0.083")

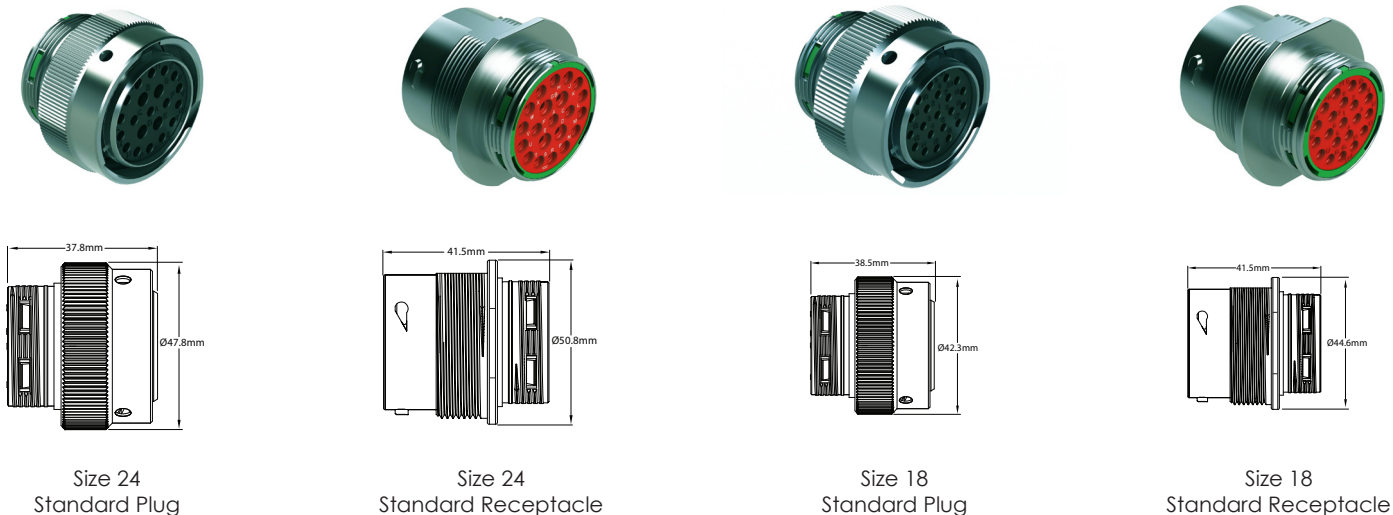
4+ contact is only available for 24-07CL22.

DuraMate™ AHDM - Backshell Options and Accessory Overview










DuraMate™ AHDM - Plug & Receptacle Options (Dimensions in mm)








*Refer to page 8 for available insert arrangements



DuraMate™ AHDM - Backshell Options and Accessories

Image	Part Number	Description
	AHDMBS-24-002	Size 24, Backshell, 2 PC, DuraMate™ AHDM
	AHDMBS-18-002	Size 18, Backshell, 2 PC, DuraMate™ AHDM
	AHDMBS-24-001	Size 24, Backshell, Tie Wrap, End Bell, DuraMate™ AHDM
	AHDMBS-18-001	Size 18, Backshell, Tie Wrap, End Bell, DuraMate™ AHDM
	AHDMBS-24-059	Size 24, Backshell, w Cable Clamp, DuraMate™ AHDM
	AHDMBS-18-059	Size 18, Backshell, w Cable Clamp, DuraMate™ AHDM
	AHDMBS-24-SM01	Size 24, Backshell, Metal, DuraMate™ AHDM
	AHDMBS-18-SM01	Size 18, Backshell, Metal, DuraMate™ AHDM
	AHDM-BS-24NUT	Size 24, Adapter for use with: AHDPBS-010-2405 AHDP Backshell, Conduit, Snap-Over, Straight 180 (See page 6) AHDPBS-011-2405 AHDP Backshell, Conduit, Snap-Over, Right Angle 90 (See page 6)
	AHDM-BS-18NUT	Size 18, Adapter for use with: AHDPBS-015-1805 AHDP Backshell, Conduit, Snap-Over, Straight 180 (See page 6) AHDPBS-016-1805 AHDP Backshell, Conduit, Snap-Over, Right Angle 90 (See page 6)
	AHDC34-24	Size 24, Protective Cap for Plug, DuraMate™ AHDM
	AHDC34-18	Size 18, Protective Cap for Plug, DuraMate™ AHDM
	AHDC36-24	Size 24, Protective Cap for Receptacle, DuraMate™ AHDM
	AHDC36-18	Size 18, Protective Cap for Receptacle, DuraMate™ AHDM

DuraMate™ AHDM - Backshell Options and Accessories

Image	Part Number	Description
	A112264	Size 24, Lockwasher, DuraMate™ AHDM
	A114021	Size 18, Lockwasher, DuraMate™ AHDM
	A112263-90	Size 24, Nut, DuraMate™ AHDM
	A114020-90	Size 18, Nut, DuraMate™ AHDM
	A114019	Size 4, Blank Seal Plug
	A114018	Size 8, Blank Seal Plug
	A114017	Size 12/16, Blank Seal Plug
	AT13-217-1605	Size 16, Locking Seal Plug
	AT114009	Size 4, Contact Removal Tool, 6AWG
	AT114008	Size 8, Contact Removal Tool, 8-10AWG
	AT11-027-0405	Size 4, Contact Removal Tool, 4AWG
	AT11-240-2005	Size 20, Contact Removal Tool, 20-22AWG
	AT11-310-1605	Size 16, Contact Removal Tool, 16-20AWG
	AT11-337-1205	Size 12, Contact Removal Tool, 12-14AWG
	AT11-001-3.6M	Size 8, Contact Removal Tool, 7-10AWG



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



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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)

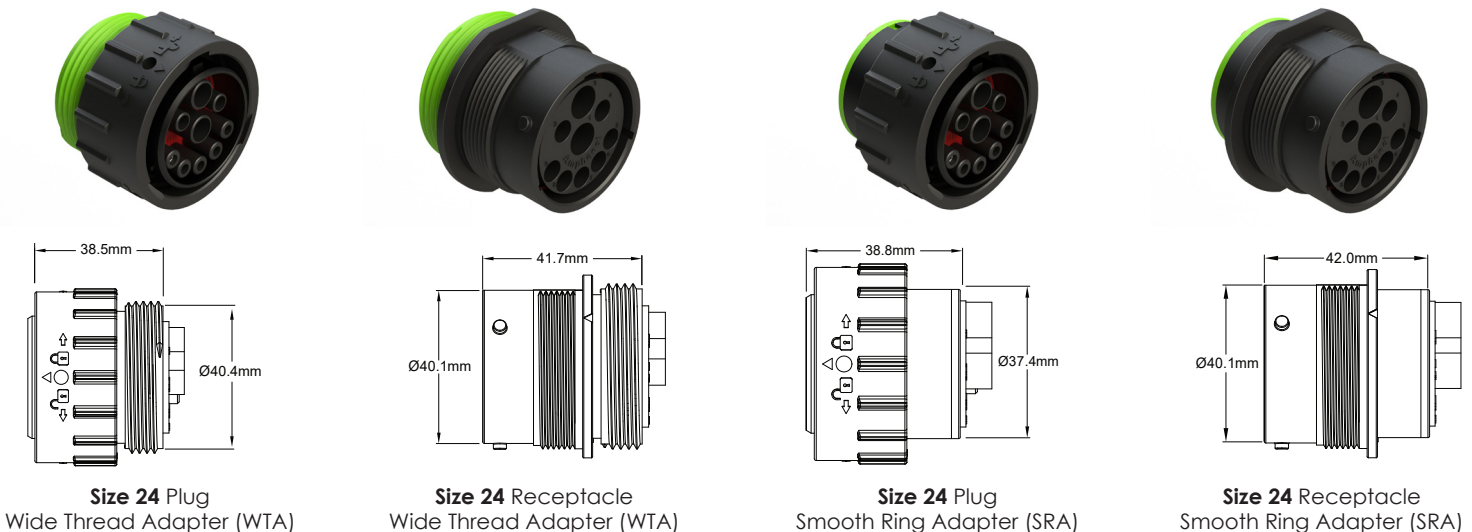
Contact Size	Typical Wire Range	Normal Seal	Reduced Seal	Reduced Seal for 6AWG/16mm ² (Size 8 Contacts Only)
8	6-10AWG (5.0-16.0mm ²)	4.83-6.10mm (0.190-0.240")	3.43-5.59mm (0.135-0.220")	6.50-7.42mm (0.256-0.292")
12	10-14AWG (6.0-2.0mm ²)	3.40-4.32mm (0.134-0.170")	2.46-4.01mm (0.135-0.158")	2.46-4.01mm (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/16mm ² Wire Seal Note: Use AT60-204-08141-16 contacts for 6AWG/16mm ² 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/16mm ² Wire Seal Note: Use AT60-204-08141-16 contacts for 6AWG/16mm ² 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



DM DuraMate™ AHDM/AHDBM ISOBUS 91 Series

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

Available in Size 24, 9 Position

Amphenol Sine Systems' **DuraMate™ AHDM/AHDBM ISOBUS 91 Series** of environmentally-sealed, multi-pin, heavy-duty, circular metal plugs (AHDM) and breakaway metal (AHDBM) plugs & receptacles provide an economical, quick-connect, 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 HD30/HDB36 parts**
- + **Compatible to other industry standard (Circular Bayonet) versions while retaining full breakaway functionality**
- + **AHDM 91 Series Plugs have a jumper (bridged contacts) between Pin 4 & 5**
- + **AHDM/AHDBM 91 Series Receptacles don't have a jumper (bridged contact)**
- + **Options for up to 16mm² power wires**
- + **Full range of backshell options**

Important

- AHDBM 91 Series Plugs are intermateable to other industry standard versions and allow full breakaway functionality if used with suitable breakaway-ready Receptacles (like AHDBM 91 Receptacles)
- AHDM 91 Series Plugs are intermateable to other industry standard versions but do not retain breakaway functionality
- AHDBM 91 Series Receptacles (Circular Bayonet) are intermateable to other industry standard plugs and allow breakaway functionality when used with a breakaway Plugs (like AHDBM 91 Plugs)
- Available upon request and not shown on this flyer: AHDM 91 Series Receptacles (Drop Shaped Bayonet) are not intermateable to all industry standard versions and do not retain breakaway functionality

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 zinc-alloy metal housings
- Low-insertion force stamped terminals offer improved manufacturing efficiencies
- Standard Wide Thread Adapters 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

AHDBM Circular Bayonet Breakaway-Ready Receptacle



AHDM Circular Bayonet Standard Plug

AHDBM Circular Bayonet Breakaway Plug

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



Seal Legend
Normal
Reduced (See datasheets)

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



A Series™ Family



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

DuraMate™ AHDM/AHDBM ISOBUS 91 Series - Material & Performance Specifications

Current Rating per Contact	Size 8, 60A; Size 12, 25A; Size 16, 13A	Housing Material	Zinc-alloy/Aluminum-alloy
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™ AHDM/AHDBM 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")

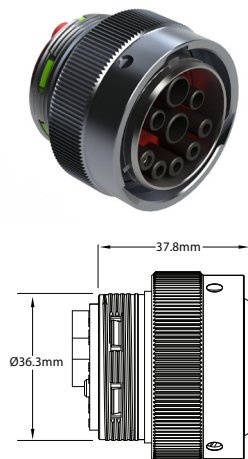
DuraMate™ AHDM/AHDBM ISOBUS 91 Series - Backshell Options and Accessory Overview



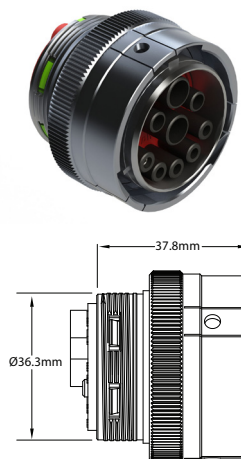
DuraMate™ AHDM ISOBUS 91 Series - Standard Plug (mm)

DuraMate™ AHDBM ISOBUS 91 Series - Breakaway Plug (mm)

DuraMate™ AHDBM ISOBUS 91 Series - Breakaway-Ready Receptacle (mm)



Size 24 Plug
Wide Thread Adapter








Size 24 Plug
Wide Thread Adapter






Size 24 Receptacle
Wide Thread Adapter




DuraMate™ AHDM ISOBUS 91 Series - Standard Plugs

Image	Part Number	Description	Amps	Voltage
	AHDM06-24-91SN	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDM ISOBUS 91 Series, Metal, Normal Seal, Wide Thread Adapter	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDM06-24-91SN-059	Size 24, 9 Pos, Kit, Plug, Socket, DuraMate™ AHDM ISOBUS 91 Series, Metal, Normal Seal, Wide Thread Adapter, Cable Clamp Backshell	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDM06-24-91SR	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDM06-24-91SR-059	Size 24, 9 Pos, Kit, Plug, Socket, DuraMate™ AHDM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Cable Clamp Backshell	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDM06-24-91SR16	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, 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
	AHDM06-24-91SR16-059	Size 24, 9 Pos, Kit, Plug, Socket, DuraMate™ AHDM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Cable Clamp Backshell, 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™ AHDBM ISOBUS 91 Series - Breakaway Plugs

Image	Part Number	Description	Amps	Voltage
	AHDBM06-24-91SN	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Normal Seal, Wide Thread Adapter, Breakaway	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM06-24-91SN-059	Size 24, 9 Pos, Kit, Plug, Socket, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Normal Seal, Wide Thread Adapter, Cable Clamp Backshell, Breakaway	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM06-24-91SR	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Breakaway	Size 8, 60A Size 12, 25A Size 16, 13A	250V



DuraMate™ AHDBM ISOBUS 91 Series - Breakaway Plugs, cont.

Image	Part Number	Description	Amps	Voltage
	AHDBM06-24-91SR-059	Size 24, 9 Pos, Kit, Plug, Socket, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Cable Clamp Backshell, Breakaway	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM06-24-91SR16	Size 24, 9 Pos, Kit, Plug, Socket, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Cable Clamp Backshell, Breakaway, Size 8 Contact, 6AWG/16mm² Wire Seal Note: Use AT62-203-08141-16 contacts for 6AWG/16mm² applications	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM06-24-91SR16-059	Size 24, 9 Pos, Plug, Socket, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Breakaway, Size 8 Contact, 6AWG/16mm² Wire Seal Note: Use AT62-203-08141-16 contacts for 6AWG/16mm² applications	Size 8, 60A Size 12, 25A Size 16, 13A	250V







DuraMate™ AHDBM ISOBUS 91 Series - Breakaway-Ready Receptacles

Image	Part Number	Description	Amps	Voltage
	AHDBM04-24-91PN	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Normal Seal, Wide Thread Adapter, Breakaway-Ready	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM04-24-91PN-059	Size 24, 9 Pos, Kit, Receptacle, Pin, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Normal Seal, Wide Thread Adapter, Cable Clamp Backshell, Breakaway-Ready	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM04-24-91PR	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Breakaway-Ready	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM04-24-91PR-059	Size 24, 9 Pos, Kit, Receptacle, Pin, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Cable Clamp Backshell, Breakaway-Ready	Size 8, 60A Size 12, 25A Size 16, 13A	250V
	AHDBM04-24-91PR16	Size 24, 9 Pos, Receptacle, Pin, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Breakaway-Ready, 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
	AHDBM04-24-91PR16-059	Size 24, 9 Pos, Kit, Receptacle, Pin, DuraMate™ AHDBM ISOBUS 91 Series, Metal, Reduced Seal, Wide Thread Adapter, Cable Clamp Backshell, Breakaway-Ready, 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™ AHDM/AHDBM ISOBUS 91 Series - Backshell Options and Accessories

Image	Part Number	Description
	AHDMBS-24-002	Size 24, Backshell, 2 PC, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	AHDMBS-24-001	Size 24, Backshell, Tie Wrap, End Bell, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	AHDMBS-24-059	Size 24, Backshell, w Cable Clamp, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	AHDMBS-24-SM01	Size 24, Backshell, Metal, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	AHDM-BS-24NUT	Size 24, Adapter for use with: AHPBS-010-2405 AHDP Backshell, Conduit, Snap-Over, Straight 180 AHPBS-011-2405 AHDP Backshell, Conduit, Snap-Over, Right Angle 90
	AHDC34-24	Size 24, Protective Cap for Plug, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	AHDC36-24	Size 24, Protective Cap for Receptacle, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	A112264	Size 24, Lockwasher, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	A112263-90	Size 24, Nut, DuraMate™ AHDM/AHDBM ISOBUS 91 Series
	A114018	Size 8, Blank Seal Plug
	A114017	Size 12/16, Blank Seal Plug
	AT13-217-1605	Size 16, Locking Seal Plug

DuraMate™ AHDM/AHDBM ISOBUS 91 Series - Backshell Options and Accessories, cont.

Image	Part Number	Description
	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/16mm ² 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/16mm ² Wire Range, Contact, Socket, Nickel-plated Note: Refer to Plug/Receptacle datasheets for a complete list of available contacts

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

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