



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 |



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

| Seal Legend |
|--------------------------|
| Normal |
| Reduced (see datasheets) |



A Series™ Family



Standard products. Custom solutions
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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 |

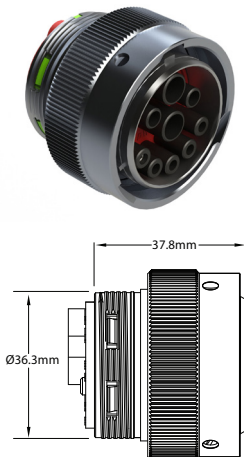
DuraMate™ AHDM/AHDBM ISOBUS 91 Series - Recommended Wire Insulation Overall Diameter (OD)

| 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 (6.0-20.0mm 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 (2.0-6.5mm 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

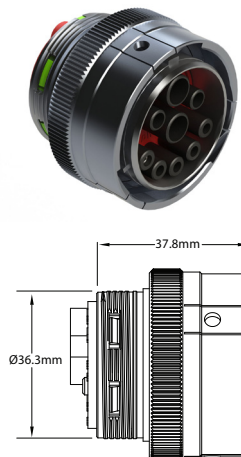


DuraMate™ AHDM ISOBUS 91 Series - Standard Plug (mm)



Size 24 Plug
Wide Thread Adapter

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









Size 24 Plug
Wide Thread Adapter

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






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 - Breakway-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, Breakway-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, Breakway-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, Breakway-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, Breakway-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, Breakway-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, Breakway-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: AHDPBS-010-2405 AHDP Backshell, Conduit, Snap-Over, Straight 180 AHDPBS-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 |

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