



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 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

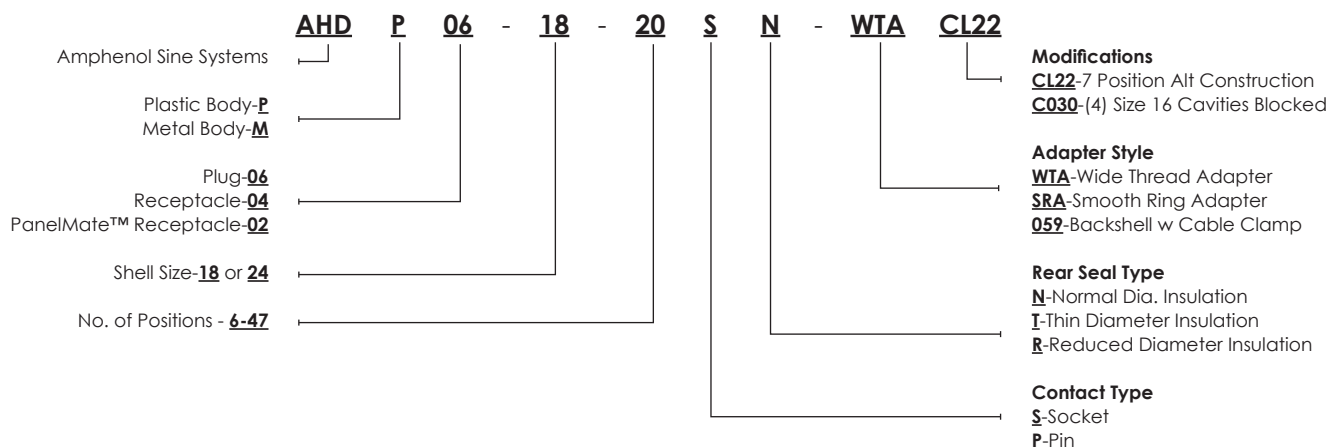


A A Series™ Family



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



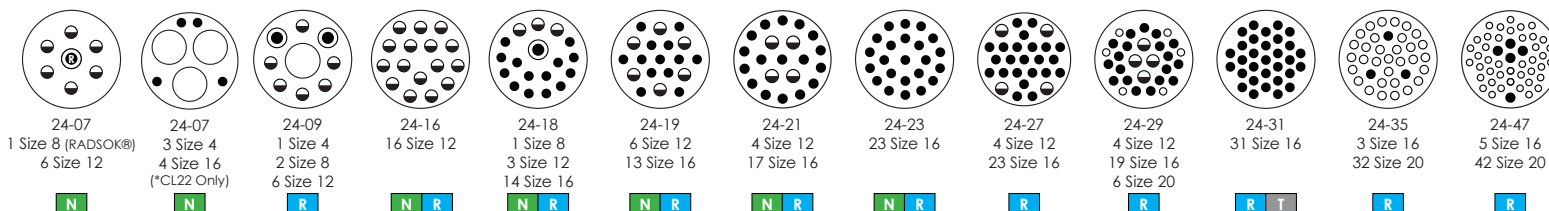
DM Dura|Mate™ AHDM

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

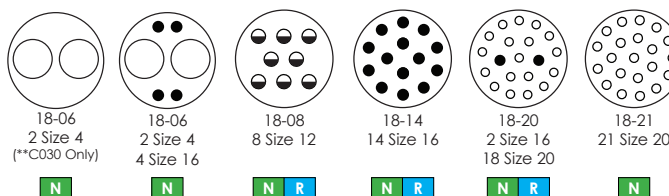
Available in Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47
Available in Size 18 with 6 insert arrangements 6(x2), 8, 14, 20 and 21

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.
- 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 three 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



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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 (0.1350-.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")

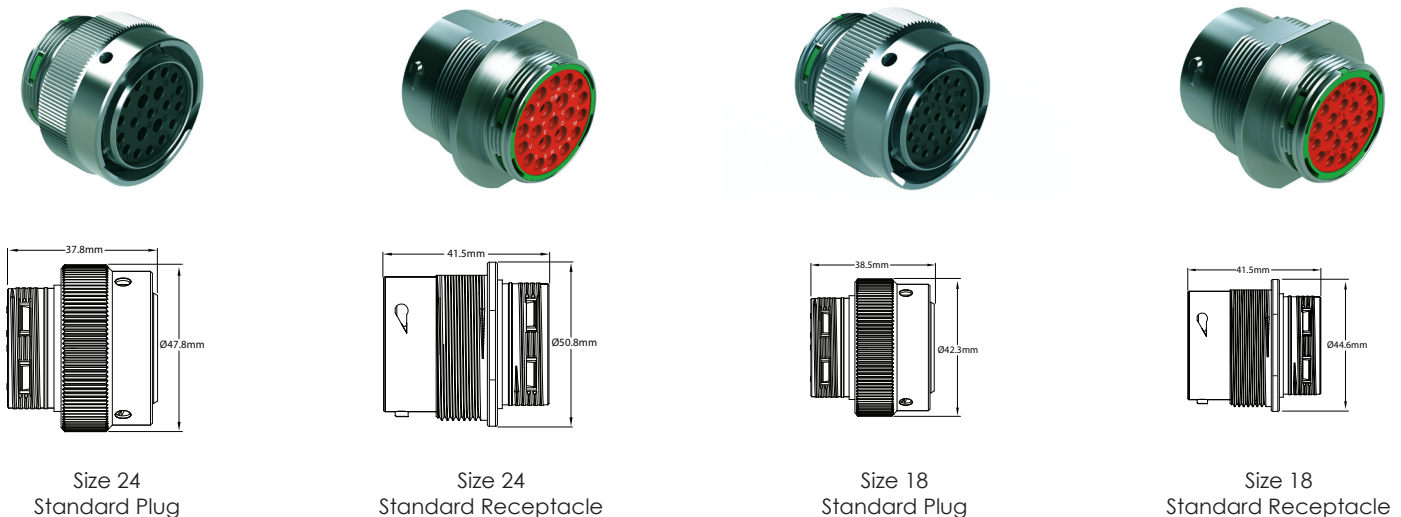
4+ contact is only available for 24-07CL22.

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