



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

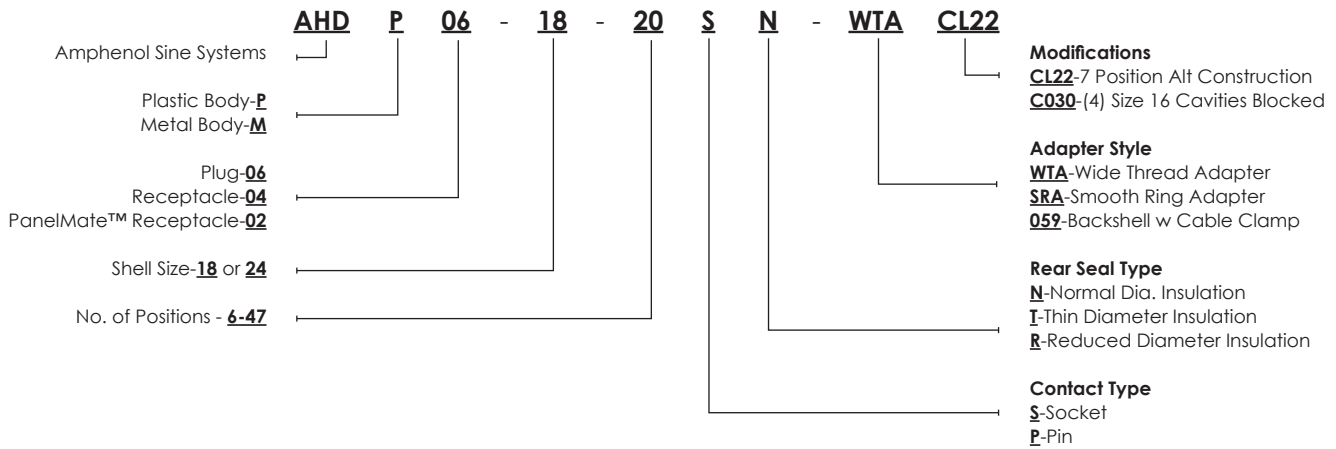


A A Series™ Family



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

DuraMate™ AHDP/AHDM Series - Part Numbering Sequence



DuraMate™ AHDP/AHDM Series - Examples



DM DuraMate™ AHDP

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



DM DuraMate™ AHDP

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



DM DuraMate™ AHDM

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



DM DuraMate™ AHDM

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



DM DuraMate™ AHDM

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



DM DuraMate™ 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

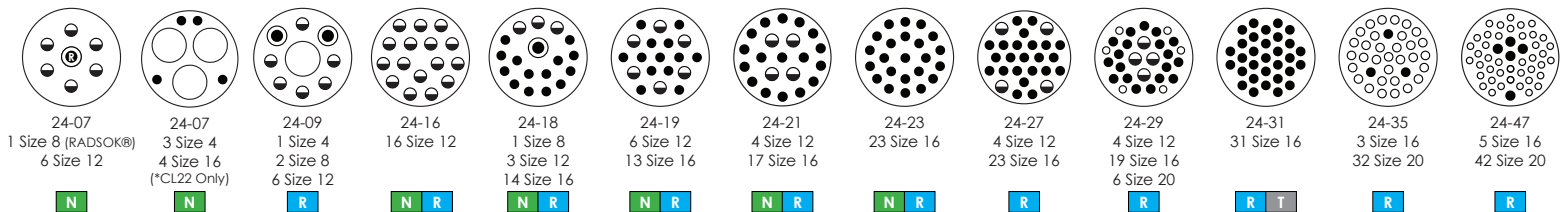
Environmentally-Sealed, Multi-Pin, Heavy-Duty, Plastic, Circular Connectors



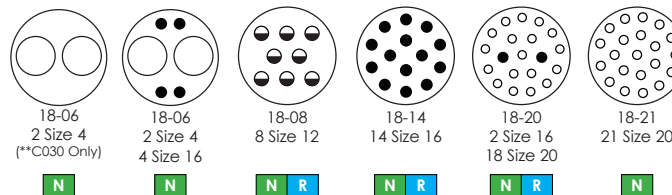
Available in Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47
Available in Size 18 with 6 insert arrangements 6(x2), 8, 14, 20 and 21

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
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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")

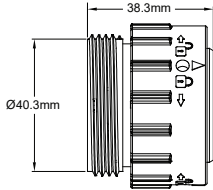
4+ contact is only available for 24-07CL22.

DuraMate™ AHDP - Backshell Options and Accessory Overview

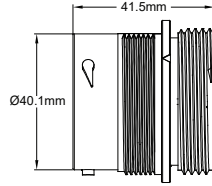


DuraMate™ AHDP - Plug & Receptacle Options (Dimensions in mm)

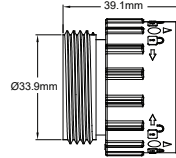
*Refer to page 3 for available insert arrangements



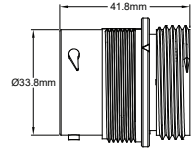
Size 24 Plug
Wide Thread Adapter (WTA)



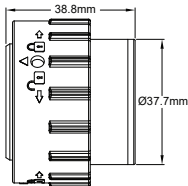
Size 24 Receptacle
Wide Thread Adapter (WTA)



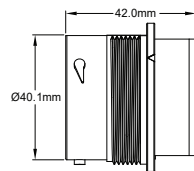
Size 18 Plug
Wide Thread Adapter (WTA)



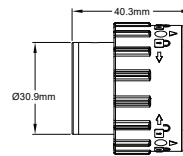
Size 18 Receptacle
Wide Thread Adapter (WTA)



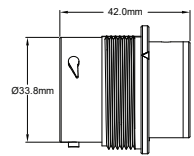
Size 24 Plug
Smooth Ring Adapter (SRA)



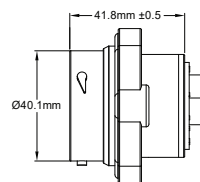
Size 24 Receptacle
Smooth Ring Adapter (SRA)



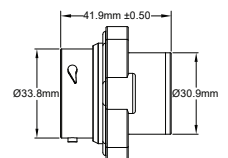
Size 18 Plug
Smooth Ring Adapter (SRA)



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