



# DM DuraMate™ AHDP

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

Available in Size 18 with 8 insert arrangements 2, 6, 8, 14(x3), 20 and 21  
Available in Size 24 with 13 insert arrangements 7(x2), 9, 16, 18, 19, 21, 23, 27, 29, 31, 35 and 47

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 keyway bayonet design ensures proper mating of connectors
- High density signal and mixed power insert configurations
- High current configurations incorporating revolutionary RADSOK® contacts
- Low insertion force stamped terminals offer improved manufacturing efficiencies
- 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.
- Wire entry sealing available in four separate ranges for discrete wire applications
- Wide Thread Adapters (WTA) provide an enhanced threading for use with our wide variety of screw-on or clamshell backshells
- Smooth Ring Adapters (SRA) are designed for use without backshells for a smaller footprint
- Backshell Ring Adapters (BRA) allow for use with other compatible industry-standard snap-on backshells
- Utilizes A Series™ standard contact system (Stamped & Formed or Machined)



### 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



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DuraMate™ AHDP - Insert Arrangements <sup>(1)</sup> C030 - 6 Position/2 Used (Size 4); <sup>(2)</sup> C041 - Receptacle w Diagnostic Keying; <sup>(3)</sup> CL20 - Plug w Diagnostic Keying; <sup>(4)</sup> CL22 - 7 Position Alt Construction)

Size 18	Size 18	Size 18	Size 18	Size 18	Size 18	Size 18	Size 18
18-06 <sup>(1)</sup> 2 Size 4	18-06 2 Size 4, 4 Size 16	18-08 8 Size 12	18-14 14 Size 16	18-14 <sup>(2)</sup> 14 Size 16	18-14 <sup>(3)</sup> 14 Size 16	18-20 2 Size 16, 18 Size 20	18-21 21 Size 20
Normal	Normal	Normal	Reduced	Normal	Reduced	Normal	Reduced

Size 24	Size 24	Size 24	Size 24	Size 24	Size 24	Size 24	Size 24	Size 24	Size 24
24-07 1 Size 8 (RADSOX®) 6 Size 12	24-07 <sup>(4)</sup> 3 Size 4, 4 Size 16	24-09 1 Size 4, 2 Size 8 6 Size 12	24-16 16 Size 12	24-18 1 Size 8, 3 Size 12 14 Size 16	24-19 6 Size 12, 13 Size 16	24-21 4 Size 12, 17 Size 16	24-23 23 Size 16	24-27 4 Size 12, 23 Size 16	24-29 4 Size 12, 19 Size 16 6 Size 20
Normal	Normal	Reduced	Normal	Reduced	Normal	Reduced	Normal	Reduced	Reduced

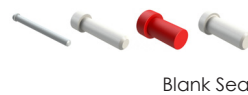
Size 24	Size 24	Size 24
24-31 31 Size 16	24-35 3 Size 16, 32 Size 20	24-47 5 Size 16, 42 Size 20
Reduced	Thin	Reduced

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


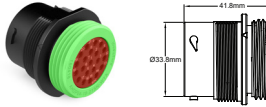

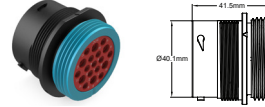

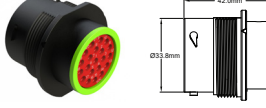

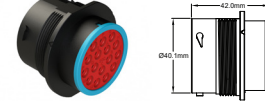

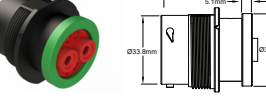

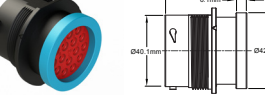
DuraMate™ AHDP - Recommended Wire Insulation Overall Diameter (OD) 4+ contact is only available for 24-07CL22

Contact Size	Typical Wire Range	Normal Seal	Thin Seal	Reduced Seal (See datasheets)	
4+	4AWG (25.0-21.0mm <sup>2</sup> )	7.9-10.67mm (0.311-0.420")	-	-	-
4	6AWG (16.0-13.0mm <sup>2</sup> )	6.63-7.41mm (0.261-0.292")	-	6.63-7.41mm (0.261-0.292")	-
8	8-10AWG (10.0-5.0mm <sup>2</sup> )	4.83-6.10mm (0.190-0.240")	-	3.43-5.59mm (0.135-0.220")	-
12	10-14AWG (6.0-2.0mm <sup>2</sup> )	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 <sup>2</sup> )	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 <sup>2</sup> )	1.02-2.41mm (0.040-.095")	-	1.02-02.41mm (0.040-0.095")	1.02-2.10mm (0.040-0.083")

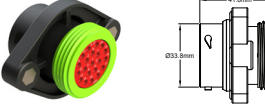

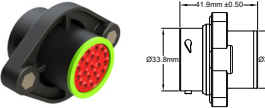
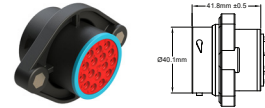
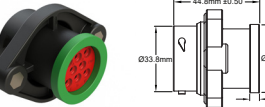

DuraMate™ AHDP - Backshell Options and Accessory Overview



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

Size 18 Plug	Size 18 Receptacle	Size 24 Plug	Size 24 Receptacle
Wide Thread Adapter (WTA) 	Wide Thread Adapter (WTA) 	Wide Thread Adapter (WTA) 	Wide Thread Adapter (WTA) 
Smooth Ring Adapter (SRA) 	Smooth Ring Adapter (SRA) 	Smooth Ring Adapter (SRA) 	Smooth Ring Adapter (SRA) 
Backshell Ring Adapter (BRA) 	Backshell Ring Adapter (BRA) 	Backshell Ring Adapter (BRA) 	Backshell Ring Adapter (BRA) 

DuraMate™ AHDP w PanelMate™ - Receptacle Options (Dimensions in mm)

Size 18 Plug	Size 18 Receptacle	Size 24 Plug	Size 24 Receptacle
-	PanelMate™ with Wide Thread Adapter (WTA) 	-	PanelMate™ with Wide Thread Adapter (WTA) 
-	PanelMate™ with Smooth Ring Adapter (SRA) 	-	PanelMate™ with Smooth Ring Adapter (SRA) 
-	PanelMate™ with Backshell Ring Adapter (BRA) 	-	PanelMate™ with Backshell Ring Adapter (BRA) 

DuraMate™ AHDP - Backshell Options and Accessories

Image	Part Number	Description
	AHDPBS-015-1805	Size 18, Backshell, Conduit, Snap Over, Right Angle 90°, DuraMate™ AHDP <b>Note:</b> For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-18NUT Adapter
	AHDPBS-15L017-1805	Size 18, Backshell, Conduit, Snap-Over, Right Angle 180°, DuraMate™ AHDP <b>Note:</b> For use with Backshell Ring Adapter (BRA)
	AHDPBS-011-2405	Size 24, Backshell, Conduit, Snap Over, Right Angle 90°, DuraMate™ AHDP <b>Note:</b> For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-24NUT Adapter
	AHDPBS-11L017-2405	Size 24, Backshell, Conduit, Snap-Over, Right Angle 180°, DuraMate™ AHDP <b>Note:</b> For use with Backshell Ring Adapter (BRA)
	AHDPBS-016-1805	Size 18, Backshell, Conduit, Snap Over, Straight 180°, DuraMate™ AHDP <b>Note:</b> For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-18NUT Adapter
	AHDPBS-16L017-1805	Size 18, Backshell, Conduit, Snap-Over, Straight, DuraMate™ AHDP <b>Note:</b> For use with Backshell Ring Adapter (BRA)
	AHDPBS-010-2405	Size 24, Backshell, Conduit, Snap Over, Straight 180°, DuraMate™ AHDP <b>Note:</b> For use with Wide Thread Adapter (WTA). May also be used on DuraMate™ AHDM with P/N AHDM-BS-24NUT Adapter
	AHDPBS-10L017-2405	Size 24, Backshell, Conduit, Snap-Over, Straight, DuraMate™ AHDP <b>Note:</b> For use with Backshell Ring Adapter (BRA)
	AHDPBS-0406-001	Size 24, Backshell, Tie Wrap, Wide Thread Adapter (WTA), DuraMate™ AHDP <b>Note:</b> 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 <b>Note:</b> 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 <b>Note:</b> 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 <b>Note:</b> 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 <b>Note:</b> For use with Wide Thread Adapter (WTA)
	AHDPBS-0406-SM01	Size 24, Backshell, Sealed, Cable Grommet, DuraMate™ AHDP <b>Note:</b> For use with Wide Thread Adapter (WTA)
	AHDPBS-18-SM01	Size 18, Backshell, Sealed, Cable Grommet, DuraMate™ AHDP <b>Note:</b> 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

DuraMate™ AHDP - Backshell Options and Accessories, cont.

Image	Part Number	Description
	AHDC04-24-PM	Size 24, Plug Cap, Sealed, Threaded, DuraMate™ AHDP
	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
	AT13-204-2005	Size 20, Blank Seal Plug
	AT11-027-0405	Size 4+, Contact Removal Tool, 4AWG
	AT114009	Size 4, Contact Removal Tool, 6AWG
	AT11-001-3.6M	Size 8, Contact Removal Tool, 7-10AWG
	AT114008	Size 8, Contact Removal Tool, 8-10AWG
	AT11-337-1205	Size 12, Contact Removal Tool, 12-14AWG
	AT11-310-1605	Size 16, Contact Removal Tool, 16-20AWG
	AT11-240-2005	Size 20, Contact Removal Tool, 20-22AWG