



DM Dura|Mate™ Family

Plastic and Metal Circular Connectors for Heavy Duty Applications



Amphenol Sine Systems' **DuraMate™ Family** of environmentally-sealed, multi-pin, heavy duty, plastic (AHDP) or metal (AHDM), circular connectors provides an economical, quick-connect, bayonet locking system manufactured to withstand the challenges and complexities of harsh environment off-road applications.

Currently available in **DuraMate™ AHDP Series** and **DuraMate™ AHDM Series** options.



Key Features:

- **DuraMate™ AHDP: Size 24 with 12 insert arrang.** (7(x2), 9, 18, 19, 21, 23, 27, 29, 31, 35 and 47); **Size 18 with 6 insert arrang.** (6(x2), 8, 14, 20 and 21)
- **DuraMate™ AHDM: Size 24 with 12 insert arrang.** (7(x2), 9, 18, 19, 21, 23, 27, 29, 31, 35 and 47); **Size 18 with 6 insert arrang.** (6(x2), 8, 14, 20 and 21)
- 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 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 three separate ranges for discrete wire applications



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DM DuraMate™ AHDP

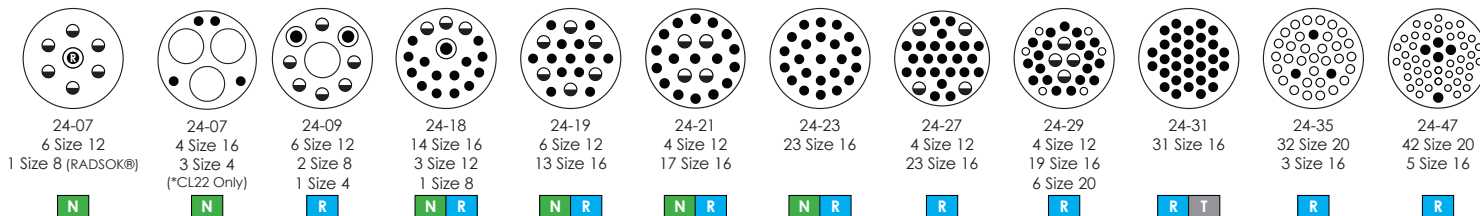
Plastic Circular Connectors for Heavy Duty Applications

Available in Size 24 with 12 insert arrangements (7(x2), 9, 18, 19, 21, 23, 27, 29, 31, 35 and 47)

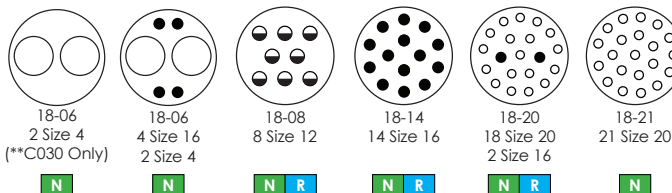
Available in Size 18 with 6 insert arrangements (6(x2), 8, 14, 20 and 21)

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 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
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- 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) | | | | | |
|------------------------------------|------------|------------|----------------------|-----------|------------|
| 20/ 7.5A | 16/ 13A | 12/ 25A | 8/ 86A RADSOK® | 8/ 60A | 4/ 100A |



| Seal Legend | | |
|-------------|------|---------|
| Normal | Thin | Reduced |

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

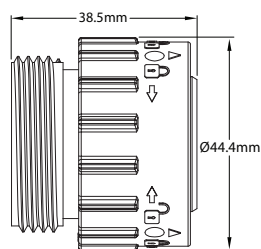


A Series™ Family

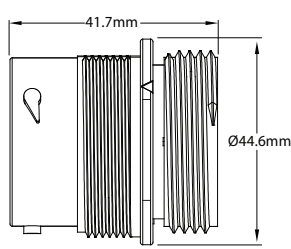


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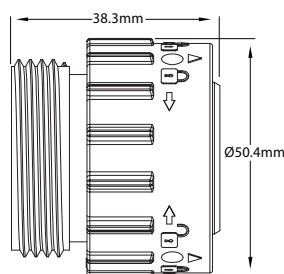
- 1 Wide threaded adapter for increased serviceability and connector access
- 2 Highly visible indicators for quick alignment and 100% positive mating
- 3 Enclosed 1-piece threaded backshell with low-cost strain relief
- 4 Optional backshells available
- 5 Contact removal tools
- 6 RADSOX® contacts
- 7 Metal Wave Washer
- 8 Plastic Panel Nut
- 9 Plastic Caps



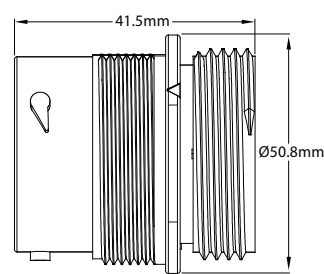
Shell Size 18 Plug



Shell Size 18 Receptacle



Shell Size 24 Plug



Shell Size 24 Receptacle

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 -12mA 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 |

Recommended Wire Insulation Overall Diameter (OD)

| Contact Size | Normal Seal | Thin Seal | Reduced Seal |
|--------------|---------------------------------|---------------------------------|---------------------------------|
| 20 | 1.02mm (.040") - 2.10mm (.083") | - | 1.02mm (.040") - 2.41mm (.095") |
| 16 | 2.54mm (.100") - 3.40mm (.134") | 2.23mm (.088") - 3.40mm (.134") | 1.35mm (.053") - 3.05mm (.120") |
| 12 | 3.43mm (.135") - 4.32mm (.170") | - | 2.46mm (.097") - 4.01mm (.158") |
| 8 | 4.83mm (.190") - 6.10mm (.240") | - | 3.43mm (.135") - 5.59mm (.220") |
| 4 | 6.63mm (.261") - 7.41mm (.292") | - | 6.63mm (.261") - 7.41mm (.292") |

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

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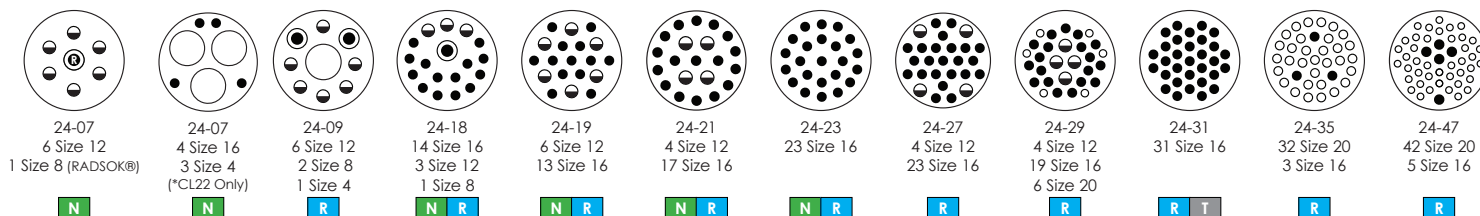
DM Dura|Mate™ AHDM

Metal Circular Connectors for Heavy Duty Applications

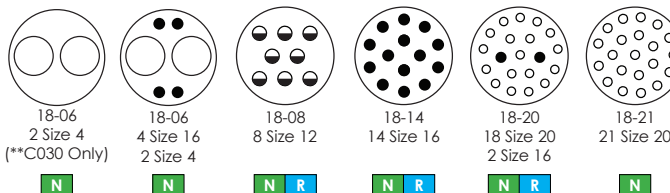
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The **DuraMate™ AHDM** environmentally-sealed, multi-pin, heavy duty, metal, circular connector series provides an economical quick-connect bayonet locking system manufactured to withstand the challenges and complexities of harsh environment off-road 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.
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② Optional backshells available

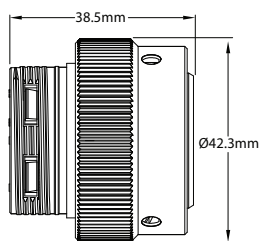
③ Contact removal tools

④ RADSOK® contacts

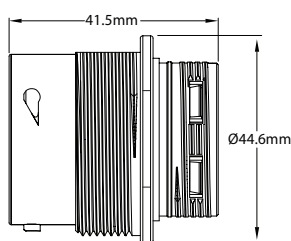
⑤ Metal Panel Nut

⑥ Metal Locking Washer

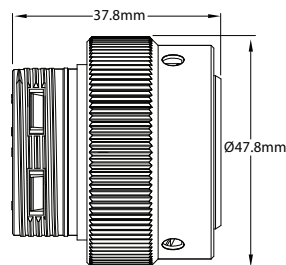
⑦ Metal Caps



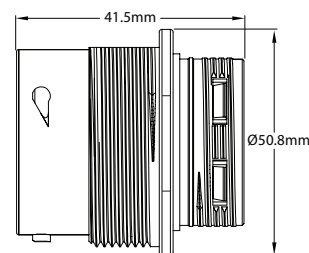
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Shell Size 24 Plug



Shell Size 24 Receptacle

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