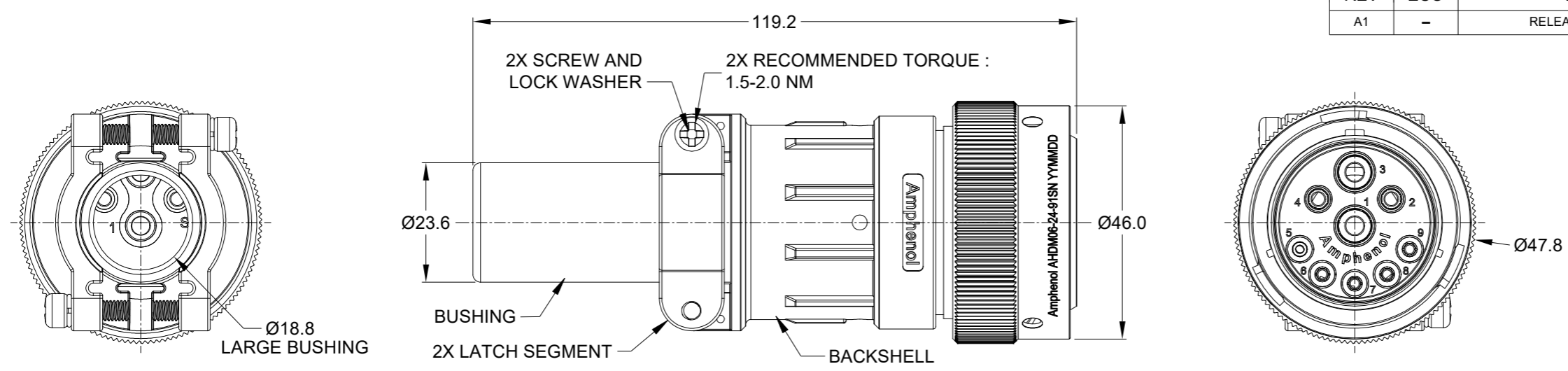
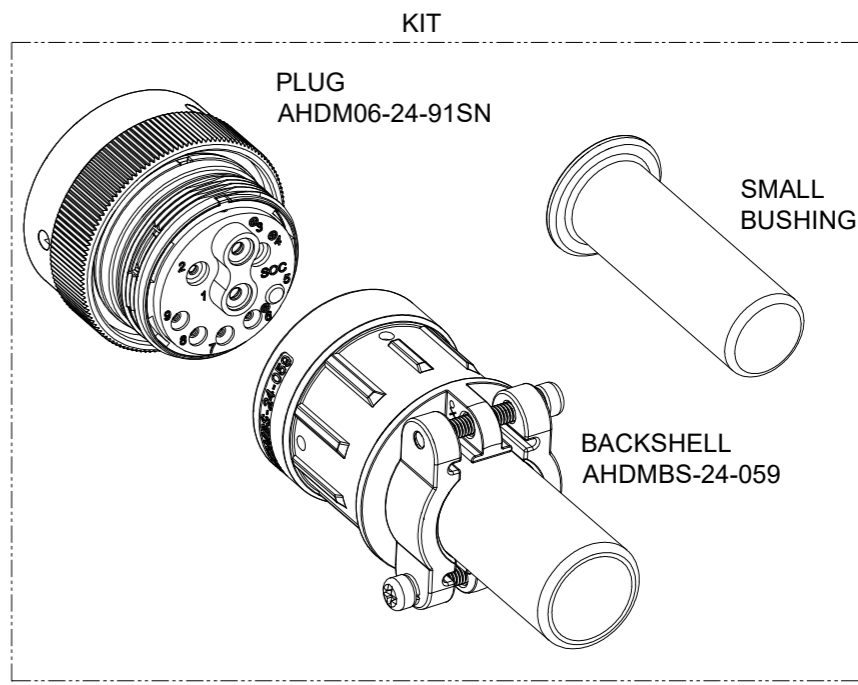
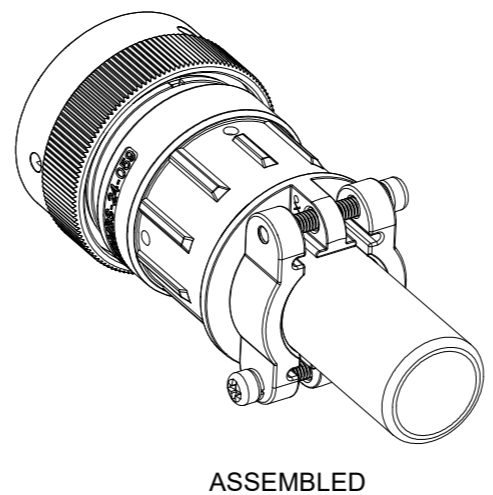


| REVISIONS |     |                     |           |     |       |
|-----------|-----|---------------------|-----------|-----|-------|
| REV       | ECO | DESCRIPTION         | DATE      | BY  | APPR  |
| A1        | -   | RELEASE NEW DRAWING | 04/JAN/22 | IAN | TOMMY |



NOTES: UNLESS OTHERWISE SPECIFIED

- PLUG MATERIAL:
  - SHELL: ZINC ALLOY, NICKEL PLATED
  - COUPLING RING: ALUMINUM ALLOY, ANODIZE
  - INSERT AND RETAINING RING: THERMOPLASTIC
  - SEAL: SILICONE RUBBER
- BACKSHELL MATERIAL:
  - SHELL: ALUMINIUM ALLOY, NICKEL PLATED;
  - LATCH SEGMENT: ALUMINIUM ALLOY, NICKEL PLATED;
  - SCREW AND LOCK WASHER: STAINLESS STEEL;
  - BUSHING: EPDM.
- SPECIFICATIONS:
  - OPERATING TEMPERATURE: -55°C TO +125°C.
  - DIELECTRIC WITHSTANDING VOLTAGE: LESS THAN 2 MILLIAMPS CURRENT LEAKAGE @ 1500 VOLTS AC.
  - INSULATION RESISTANCE: 1000 MEGOHM MIN @ 25°C.
  - MOISTURE RESISTANCE:
    - IP68(IM OF WATER FOR A PERIOD OF 24 HOURS,MATED CONDITION);
    - IP69K(MATED CONDITION).
  - MATING CYCLE DURABILITY: 100 CYCLES
  - RoHS COMPLIANT
- APPLY TO CABLE OD SIZE:  $\varnothing 11.20$ - $\varnothing 24.08$  . CAN BE USED:
  - WITH LARGE AND SMALL BUSHINGS IN PLACE.
  - WITH ONLY LARGE BUSHING IN PLACE.
  - WITH BOTH BUSHINGS REMOVED.
- ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.
- SEE SPECIFIC PLUG DRAWING FOR:
  - CONTACT SIZE AND WIRE RANGE.
  - RETAINING RING COLOR.
  - MATING PART(S).
  - CONTACT LAYOUT AND ALL OTHER SPECIFICATIONS.



| QUANTITY | PART NUMBER        | DESCRIPTION          | ITEM |
|----------|--------------------|----------------------|------|
|          | AHDM06-24-91SN-059 | REF:HD36-24-91SN-059 |      |

| MATERIALS LIST   |      |   |              |
|--|------|---|--------------|
| <b>UNLESS OTHERWISE SPECIFIED</b><br>1) All dimensions are in metric(mm).<br>2) Tolerances are as follows:<br>1 PL DEC $\pm 0.30$<br>2 PL DEC $\pm 0.15$<br>3 PL DEC $\pm 0.08$<br>Fractions $\pm 1/64$<br>Angles $\pm 1^\circ$<br>3) Note reference = $\triangle$ |      | <b>SIGNATURES</b><br>DRAWN: IAN.XIAO 04/JAN/22<br>CHECKED: SULLEN.ZHANG 04/JAN/22<br>ENGINEER:<br>APPROVAL: TOMMY.XIE 05/JAN/22<br>CUSTOMER:  |              |
| MATERIAL SPECIFICATIONS:<br><br>PROCESS SPECIFICATIONS:<br><br>NEXT ASSY:  |      | <b>Amphenol</b><br>Sine Systems - www.amphenol-sine.com<br>44724 Morley Drive<br>Clinton Township, MI 48036<br>DURAMATE AHDM PLUG, SIZE 24, WD THD,<br>KIT W/ CABLE CLAMP BACKSHELL<br>THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. |              |
| SIZE   | TYPE | DWG NO:   | REVISION     |
| B  | C-   | AHDM06-24-91SN-059  | A1           |
| SCALE:   | NONE | DURAMATE  | SHEET 1 OF 1 |

TITLE: DURAMATE AHDM PLUG, SIZE 24, WD THD, KIT PLUG AND BACKSHELL SZ 24  
 DWG NO: AHDM06-24-91SN-059  
 REV: A1  
 SH: 1  
 OF: 1

## A Series™ - Contact Size 8 Options (Works with: ATHD and DuraMate Series)

| Machined Contacts, Pins and Sockets |  |      |      |          |      |
|-------------------------------------|--|------|------|----------|------|
| Part Number                         | Description  | Size | AWG  | Type     | Amps |
| AT60-204-08141                      | Male Contact - Pin, Copper Alloy, Nickel-Plated      | 8    | 8-10 | Machined | 60A  |
| AT62-203-08141                      | Female Contact - Socket, Copper Alloy, Nickel-Plated | 8    | 8-10 | Machined | 60A  |
| AT60-204-08141-16                   | Male Contact - Pin, Copper Alloy, Nickel-Plated      | 8    | 6    | Machined | 60A  |
| AT62-203-08141-16                   | Female Contact - Socket, Copper Alloy, Nickel-Plated | 8    | 6    | Machined | 60A  |

| Tooling - Machined Contacts |  |
|-----------------------------|--|
| Part Number                 | Description  |
| WA23                        | Heavy Duty Pneumatic Crimp Tool<br>-Uses Universal Positioner Part No. WA23-101DA and Crimp Locator MFX-3961 |
| WA23-2                      | Die Assembly<br>-for CA-5E12 Heavy Duty Pneumatic Crimp Tool, Size 8   |
| WA23-3                      | Die Assembly<br>-for CA-5E12 Heavy Duty Pneumatic Crimp Tool, Size 6   |
| WA23-10                     | Contact Locator, Size 6 and Size 8   |
| 96-978-22                   | Crimper and Dies<br>-for Size 10mm <sup>2</sup> -185mm <sup>2</sup> Wires                                    |
| AT114008                    | Contact Removal Tool, Plastic, Size 8, 8-10AWG   |

# A Series™ - Contact Size 12 Options (Works with: AHD-6, ATP, ATHD, DuraMate and PanelMate Series)

| Machined Contacts, Sockets & Pins |  |      |       |          |
|-----------------------------------|--|------|-------|----------|
| Part Number                       | Description                            | Size | AWG   | Type     |
| *AT60-204-12141-10                | Male Contact - Pin, Nickel-plated      | 12   | 10-12 | Machined |
| *AT62-203-12141-10                | Female Contact - Socket, Nickel-plated | 12   | 10-12 | Machined |
| AT60-220-1231                     | Male Contact - Pin, Gold-plated        | 12   | 12-14 | Machined |
| AT62-210-1231                     | Female Contact - Socket, Gold-plated   | 12   | 12-14 | Machined |
| AT60-204-12141                    | Male Contact - Pin, Nickel-plated      | 12   | 12-14 | Machined |
| AT62-203-12141                    | Female Contact - Socket, Nickel-plated | 12   | 12-14 | Machined |

\*Works with ATP Series only

| DiagnosticGrade™ Machined Contacts, Sockets & Pins   |  |      |     |          |
|--|--|------|-----|----------|
| • Smaller AWG for Diagnostic Applications • Gold-plated • Increased Mating Cycles • Cost-effective |  |      |     |          |
| Part Number  | Description  | Size | AWG | Type     |
| 65-54749   | Male Contact - DiagnosticGrade™, Pin, Gold-plated      | 12   | 20  | Machined |
| AT62-210-1231-1820   | Female Contact - DiagnosticGrade™, Socket, Gold-plated | 12   | 20  | Machined |

| Tooling - Machined Contacts |  |
|-----------------------------|--|
| Part Number                 | Description  |
| AUTK-12                     | Hand Crimp Tool, Size 12   |
| AUTK-100                    | Universal Heavy Duty Contact Crimping Tool Kit, Size 12/16/20      |
| CA-5D12                     | Universal Hand Crimp Tool, Size 12/16/20                           |
| CA-5E12                     | Pneumatic Crimp Tool, Size 12/16/20                                |
| M300-25A                    | Hand Crimp Tool used with Crimp Locator MFX-3966, Size 12, 10AWG   |
| MFX-3966                    | Contact Locator used with Hand Crimp Tool M300-25A, Size 12, 10AWG |

| Contact Removal Tools (For both Machined or Stamped & Formed Contacts) |  |
|--|--|
| Part Number  | Description                            |
| ATRT-100   | Contact and Wedgelock Extraction Tool  |
| AT11-337-1205  | Contact Removal Tool, Plastic, Size 12 |

| Sealing Plugs (For both Machined or Stamped & Formed Contacts) |                              |
|--|------------------------------|
| Part Number  | Description                  |
| A114017  | Sealing Plug, Size 12, White |

| Stamped & Formed Contacts, Sockets & Pins |  |      |       |                  |
|---|--|------|-------|------------------|
| Part Number                               | Description                            | Size | AWG   | Type             |
| AT60-12-0244                              | Male Contact - Pin, Gold-plated        | 12   | 10-12 | Stamped & Formed |
| AT62-12-0244                              | Female Contact - Socket, Gold-plated   | 12   | 10-12 | Stamped & Formed |
| AT60-12-0222                              | Male Contact - Pin, Nickel-plated      | 12   | 10-12 | Stamped & Formed |
| AT62-12-0222                              | Female Contact - Socket, Nickel-plated | 12   | 10-12 | Stamped & Formed |
| AT60-12-0144                              | Male Contact - Pin, Gold-plated        | 12   | 12-14 | Stamped & Formed |
| AT62-12-0144                              | Female Contact - Socket, Gold-plated   | 12   | 12-14 | Stamped & Formed |
| AT60-12-0166                              | Male Contact - Pin, Nickel-plated      | 12   | 12-14 | Stamped & Formed |
| AT62-12-0166                              | Female Contact - Socket, Nickel-plated | 12   | 12-14 | Stamped & Formed |

| Tooling - Stamped & Formed Contacts |   |
|-------------------------------------|---|
| Part Number                         | Description                                 |
| MFX-3973                            | Crimp Die - Size 12                         |
| MFX-3985                            | Crimp Die - Ssize 12, 10-12AWG -02XX Series |
| ATT-12-00                           | Hand Crimp Tool - Size 12, 12AWG            |
| ATT-12-01                           | Hand Crimp Tool - Size 12, 10AWG            |

# A Series™ - Contact Size 16 Options (Works with: AT, ATV, AHD-9, ARC, DuraMate and PanelMate Series)

| Machined Contacts, Sockets & Pins |  |      |       |          |
|-----------------------------------|--|------|-------|----------|
| Part Number                       | Description                            | Size | AWG   | Type     |
| AT60-215-1631                     | Male Contact - Pin, Gold-plated        | 16   | 14    | Machined |
| AT62-209-1631                     | Female Contact - Socket, Gold-plated   | 16   | 14    | Machined |
| AT60-215-16141                    | Male Contact - Pin, Nickel-plated      | 16   | 14    | Machined |
| AT62-209-16141                    | Female Contact - Socket, Nickel-plated | 16   | 14    | Machined |
| AT60-202-1631                     | Male Contact - Pin, Gold-plated        | 16   | 16-20 | Machined |
| AT62-201-1631                     | Female Contact - Socket, Gold-plated   | 16   | 16-20 | Machined |
| AT60-202-16141                    | Male Contact - Pin, Nickel-plated      | 16   | 16-20 | Machined |
| AT62-201-16141                    | Female Contact - Socket, Nickel-plated | 16   | 16-20 | Machined |
| AT60-202-1631-22                  | Male Contact - Pin, Gold-plated        | 16   | 22-24 | Machined |
| AT62-201-1631-22                  | Female Contact - Socket, Gold-plated   | 16   | 22-24 | Machined |
| AT60-202-16141-22                 | Male Contact - Pin, Nickel-plated      | 16   | 22-24 | Machined |
| AT62-201-16141-22                 | Female Contact - Socket, Nickel-plated | 16   | 22-24 | Machined |

| Tooling - Machined Contacts |   |
|-----------------------------|---|
| Part Number                 | Description   |
| AUTK-16                     | Hand Crimp Tool, Size 16                                      |
| AUTK-100                    | Universal Heavy Duty Contact Crimping Tool Kit, Size 12/16/20 |
| CA-5D12                     | Universal Hand Crimp Tool, Size 12/16/20                      |
| CA-5E12                     | Pneumatic Crimp Tool, Size 12/16/20                           |

| Contact Removal Tools (For both Machined or Stamped & Formed Contacts) |  |
|--|--|
| Part Number  | Description                            |
| ATRT-100   | Contact and Wedgelock Extraction Tool  |
| AT11-310-1605  | Contact Removal Tool, Plastic, Size 16 |

| Sealing Plugs (For both Machined or Stamped & Formed Contacts) |   |
|--|---|
| Part Number  | Description                                     |
| A114017  | Sealing Plug, Size 16, White                    |
| A114017-SR   | Sealing Plug, Size 16, SR01 Series, Black       |
| AT13-217-1605  | Locking Sealing Plug, Size 16, Grey             |
| AT13-217-1605-SR   | Locking Sealing Plug, Size 16, SR01 Series, Red |

| Stamped & Formed Contacts, Sockets & Pins |  |      |       |                  |
|---|--|------|-------|------------------|
| Part Number                               | Description                            | Size | AWG   | Type             |
| AT60-14-0122                              | Male Contact - Pin, Nickel-plated      | 16   | 14-18 | Stamped & Formed |
| AT62-14-0122                              | Female Contact - Socket, Nickel-plated | 16   | 14-18 | Stamped & Formed |
| AT60-14-0144                              | Male Contact - Pin, Gold-plated        | 16   | 14-18 | Stamped & Formed |
| AT62-14-0144                              | Female Contact - Socket, Gold-plated   | 16   | 14-18 | Stamped & Formed |
| AT60-16-0122                              | Male Contact - Pin, Nickel-plated      | 16   | 16-18 | Stamped & Formed |
| AT62-16-0122                              | Female Contact - Socket, Nickel-plated | 16   | 16-18 | Stamped & Formed |
| AT60-16-0144                              | Male Contact - Pin, Gold-plated        | 16   | 16-18 | Stamped & Formed |
| AT62-16-0144                              | Female Contact - Socket, Gold-plated   | 16   | 16-18 | Stamped & Formed |
| AT60-16-0622                              | Male Contact - Pin, Nickel-plated      | 16   | 16-20 | Stamped & Formed |
| AT62-16-0622                              | Female Contact - Socket, Nickel-plated | 16   | 16-20 | Stamped & Formed |
| AT60-16-0644                              | Male Contact - Pin, Gold-plated        | 16   | 16-20 | Stamped & Formed |
| AT62-16-0644                              | Female Contact - Socket, Gold-plated   | 16   | 16-20 | Stamped & Formed |
| AT60-16-0677                              | Male Contact - Pin, Tin-plated         | 16   | 16-20 | Stamped & Formed |
| AT62-16-0677                              | Female Contact - Socket, Tin-plated    | 16   | 16-20 | Stamped & Formed |
| AT60-16-0822                              | Male Contact - Pin, Nickel-plated      | 16   | 20-22 | Stamped & Formed |
| AT62-16-0822                              | Female Contact - Socket, Nickel-plated | 16   | 20-22 | Stamped & Formed |
| AT60-16-0844                              | Male Contact - Pin, Gold-plated        | 16   | 20-22 | Stamped & Formed |
| AT62-16-0844                              | Female Contact - Socket, Gold-plated   | 16   | 20-22 | Stamped & Formed |

| Tooling - Stamped & Formed Contacts |                                     |
|-------------------------------------|-------------------------------------|
| MFX-3950                            | Crimp Die - Size 16, 18-20AWG       |
| MFX-3953                            | Crimp Die - Size 16, 16-18AWG       |
| MFX-3975                            | Crimp Die - Size 16, 14-16AWG       |
| MFX-3990                            | Crimp Die - Size 16, 20-22AWG       |
| ATT-16-00                           | Hand Crimp Tool - Size 16, 14-16AWG |
| ATT-16-01                           | Hand Crimp Tool - Size 16, 18-20AWG |
| ATT-1612-03                         | Hand Crimp Tool - Size 16, 20-22AWG |