

## NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL:

HOUSING: THERMOPLASTIC; BLACK SEAL: SILICONE RUBBER

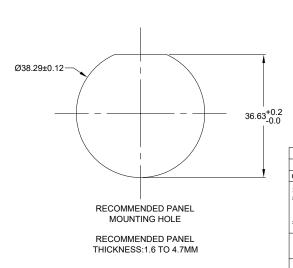
2. MODIFICATIONS: SMOOTH RING ADAPTER; REDUCED DIA. WIRE SEAL;

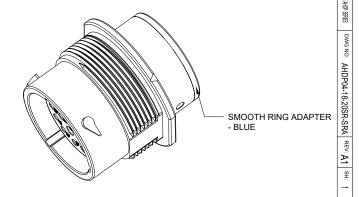
## 3. SPECIFICATIONS:

- 3.1 OPERATING TEMPERATURE: -55°C TO +125°C.
- 3.2 DIELECTRIC WITHSTANDING VOLTAGE: LESS THAN 2 MILLIAMPS CURRENT LEAKAGE @ 1500 VOLTS AC.
- 3.3 INSULATION RESISTANCE: 1000 MEGOHM MIN @ 25°C.
- 3.4 MOISTURE RESISTANCE: IP67&IP69K ( MATED CONDITION ).
- 3.5 MATING CYCLE DURABILITY: 100 CYCLES
- 3.6 RoHS COMPLIANT
- 4. MATING PART: AHDP06-18-20P\* (\* = SEAL TYPE)
- 5. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.



| CONTACT | MIN. INSUL          | MAX. INSUL           | TYPICAL                   | CURRENT  |
|---------|---------------------|----------------------|---------------------------|----------|
| SIZE    | O.D.                | O.D.                 | WIRE RANGE                | RATING   |
| 20      | 1.02 mm<br>(.040in) | 2.41 mm<br>(.095 in) | 16-22 AWG<br>(1.5-0.5mm²) | 7.5 AMPS |
| 16      | 1.35 mm<br>(.053in) | 3.05mm<br>(.120 in)  | 14-20 AWG<br>(2.0-0.5mm²) | 13 AMPS  |





|                                                                                                                      | AHDP04-18-20SR-SRA |                                                                      | -SRA                                                    | REF:HDP24-18-20SE |                                         |             |                         |     |   |   |
|----------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------|---------------------------------------------------------|-------------------|-----------------------------------------|-------------|-------------------------|-----|---|---|
|                                                                                                                      | PART NUMBER        |                                                                      | DESCRIPTION                                             |                   |                                         |             | ITEM                    | ] - |   |   |
| QUANTITY                                                                                                             | MATERIALS LIST     |                                                                      |                                                         |                   |                                         | ST          |                         |     | - |   |
| 1) All dimensions a                                                                                                  | WISE SPECIFIED     | SIGN                                                                 | NATURES                                                 | DATE              |                                         | Λ           | mnhc                    | nol |   |   |
| Tolerances are a PL DEC ±0.30                                                                                        |                    | DRAWN:                                                               | IAN.XIAO                                                | 19/AUG/20         |                                         |             | mphe                    |     |   |   |
| 2 PL DEC ±0.15<br>3 PL DEC ±0.08                                                                                     | Angles ±1°         | CHECKED:                                                             | ORION.LI                                                | 20/AUG/20         | 44724 Morley Drive                      |             | nol-sine.com            |     |   |   |
| 3) Note reference                                                                                                    | = <u>x</u>         | ENGINEER:                                                            |                                                         |                   |                                         |             | 000                     |     |   |   |
| MATERIAL SPECIFICA                                                                                                   | TIONS:             | APPROVAL:                                                            | TOMMY.XIE                                               | 21/AUG/20         |                                         |             | Clinton Township, MI 48 | 036 |   | 1 |
|                                                                                                                      |                    | CUSTOMER:                                                            |                                                         |                   | RECEPT, 18 SZ, 20 SOCKET, REVERSE ARRAN |             |                         | IT, |   |   |
|                                                                                                                      |                    |                                                                      | IG IS SUPPLIED F                                        |                   |                                         | AHDP SERIES |                         |     |   |   |
| PROCESS SPECIFICATIONS: SPECIFICATIONS AND SHOWN HEREON ARE THE AMPHENOL CORE OF REPRODUCTION AND DIMENSIONS ARE SHE |                    | ONS AND PERFO<br>EON ARE THE PR<br>IOL CORPORATIO<br>ICTION ARE IMPL | RMANCE DATA<br>ROPERTY OF<br>DN. NO RIGHTS<br>LIED. ALL | B                 | C-                                      | AHDP04-18-2 |                         | 41  |   |   |
| NEXT ASSY:                                                                                                           |                    |                                                                      | RING VARIATION                                          | S.                | SCALE                                   |             | SHEET 1 OF              | 1   |   |   |

## **ATM Series™** - Contact Size 20 Options

| Machined Contacts, Sockets & Pins |                                        |      |       |          |  |  |
|-----------------------------------|----------------------------------------|------|-------|----------|--|--|
| Part Number                       | Description                            | Size | AWG   | Туре     |  |  |
| AT60-010-2031                     | Male Contact - Pin, Gold-plated        | 20   | 16-18 | Machined |  |  |
| AT62-005-20141                    | Female Contact - Socket, Gold-plated   | 20   | 16-18 | Machined |  |  |
| AT60-010-20141                    | Male Contact - Pin, Nickel-plated      | 20   | 16-18 | Machined |  |  |
| AT62-005-2031                     | Female Contact - Socket, Nickel-plated | 20   | 16-18 | Machined |  |  |
| AT60-202-2031                     | Male Contact - Pin, Gold-plated        | 20   | 20-22 | Machined |  |  |
| AT62-201-2031                     | Female Contact - Socket, Gold-plated   | 20   | 20-22 | Machined |  |  |
| AT60-202-20141                    | Male Contact - Pin, Nickel-plated      | 20   | 20-22 | Machined |  |  |
| AT62-201-20141                    | Female Contact - Socket, Nickel-plated | 20   | 20-22 | Machined |  |  |

| Tooling - Machined Contacts |             |                                                                      |  |  |
|-----------------------------|-------------|----------------------------------------------------------------------|--|--|
| Part                        | Part Number | Description                                                          |  |  |
|                             | CA-5D12     | Universal Hand Crimp Tool, Size 12/16/20<br>(Machined contacts only) |  |  |
| 3                           | CA-5E12     | Pneumatic Crimp Tool, Size 12/16/20<br>(Machined contacts only)      |  |  |

| Contact Removal Tools |               |                                                     |  |
|-----------------------|---------------|-----------------------------------------------------|--|
| Part                  | Part Number   | Description                                         |  |
| from hard             | ATRT-100      | Used for removal of contacts for A Series™ products |  |
|                       | AT11-240-2005 | Contact Removal Tool, Plastic, Size 20              |  |
|                       | AT13-204-2005 | Sealing Plug, Size 20, White                        |  |

| Stamped & Formed Contacts, Sockets & Pins |                                        |      |       |                  |  |  |
|-------------------------------------------|----------------------------------------|------|-------|------------------|--|--|
| Part Number                               | Description                            | Size | AWG   | Туре             |  |  |
| AT60-20-0144                              | Male Contact - Pin, Gold-plated        | 20   | 16-22 | Stamped & Formed |  |  |
| AT62-20-0144                              | Female Contact - Socket, Gold-plated   | 20   | 16-22 | Stamped & Formed |  |  |
| AT60-20-0244                              | Male Contact - Socket, Gold-plated     | 20   | 16-22 | Stamped & Formed |  |  |
| AT62-20-0244                              | Female Contact - Socket, Gold-plated   | 20   | 16-22 | Stamped & Formed |  |  |
| AT60-20-0122                              | Male Contact - Pin, Nickel-plated      | 20   | 16-22 | Stamped & Formed |  |  |
| AT62-20-0122                              | Female Contact - Socket, Nickel-plated | 20   | 16-22 | Stamped & Formed |  |  |
| AT60-20-0222                              | Male Contact - Socket, Nickel-plated   | 20   | 16-22 | Stamped & Formed |  |  |
| AT62-20-0222                              | Female Contact - Socket, Nickel-plated | 20   | 16-22 | Stamped & Formed |  |  |
| AT60-20-0277                              | Male Contact - Socket, Tin-plated      | 20   | 16-22 | Stamped & Formed |  |  |
| AT62-20-0277                              | Female Contact - Socket, Tin-plated    | 20   | 16-22 | Stamped & Formed |  |  |
| AT60-20-0422                              | Male Contact - Socket, Nickel-plated   | 20   | 20-22 | Stamped & Formed |  |  |
| AT62-20-0444                              | Female Contact - Socket, Gold-plated   | 20   | 20-22 | Stamped & Formed |  |  |

| Tooling - Stamped & Formed Contacts |             |                                                               |  |  |
|-------------------------------------|-------------|---------------------------------------------------------------|--|--|
| Part                                | Part Number | Description                                                   |  |  |
|                                     | MFX-3974    | Crimp Die - Size 20 (\$&F contacts only)                      |  |  |
| 3                                   | MFX-3976    | Crimp Die - Size 20 (S&F contacts only) 20-22AWG -04XX Series |  |  |
|                                     | MFX-3978    | Crimp Die - Size 20 (S&F contacts only) 20-22AWG -02XX Series |  |  |
|                                     | ATT-20-00   | Hand Crimp Tool - Size 20, 20AWG (S&F contacts only)          |  |  |

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## **AT Series™** - Contact Size 16 Options

| Machined Contacts, Sockets & Pins |                                        |    |       |          |  |
|-----------------------------------|----------------------------------------|----|-------|----------|--|
| Part Number                       | ber Description                        |    | AWG   | Туре     |  |
| 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                        | Part Number | Description                                                          |  |  |
|                             | CA-5D12     | Universal Hand Crimp Tool, Size 12/16/20<br>(Machined contacts only) |  |  |
| 3                           | CA-5E12     | Pneumatic Crimp Tool, Size 12/16/20<br>(Machined contacts only)      |  |  |

|      | Contact Removal Tools |                                                     |  |  |  |
|------|-----------------------|-----------------------------------------------------|--|--|--|
| Part | Part Number           | Description                                         |  |  |  |
| 3    | ATRT-100              | Used for removal of contacts for A Series™ products |  |  |  |
|      | AT11-310-1605         | Contact Removal Tool, Plastic, Size 16              |  |  |  |
|      | A114017               | Sealing Plug, Size 16, White                        |  |  |  |

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

| Tooling - Stamped & Formed Contacts |             |                                                         |  |  |
|-------------------------------------|-------------|---------------------------------------------------------|--|--|
| Part                                | Part Number | Description                                             |  |  |
|                                     | MFX-3950    | Crimp Die - Size 16, 18-20AWG (S&F contacts only)       |  |  |
|                                     | MFX-3953    | Crimp Die - Size 16, 16-18AWG (S&F contacts only)       |  |  |
|                                     | MFX-3975    | Crimp Die - Size 16, 14-16AWG (S&F contacts only)       |  |  |
|                                     | MFX-3990    | Crimp Die - Size 16, 20-22AWG (S&F contacts only)       |  |  |
|                                     | ATT-16-00   | Hand Crimp Tool - Size 16, 14-16AWG (S&F contacts only) |  |  |
|                                     | ATT-16-01   | Hand Crimp Tool - Size 16, 18-20AWG (S&F contacts only) |  |  |
|                                     | ATT-1612-03 | Hand Crimp Tool - Size 16, 20-22AWG (S&F contacts only) |  |  |

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