

NOTES: UNLESS OTHERWISE SPECIFIED

. MATERIAL:

HOUSING: THERMOPLASTIC; BLACK

SEAL: SILICONE RUBBER

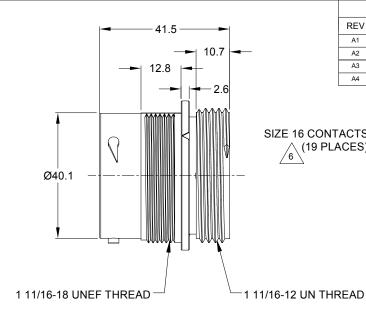
2. MODIFICATIONS: THREADED ADAPTER;

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: AHDP06-24-29S* (* = SEAL TYPE)
- 5. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.
- 6 CONTACT SIZE AND WIRE RANGE:

| CONTACT SIZE | MIN. INSUL O.D. | MAX. INSUL O.D. | TYPICAL WIRE RANGE | CURRENT RATING |
|-----------------|----------------------|----------------------|-----------------------|-------------------|
| 20 | 1.02 mm (.040 in) | 2.10 mm (.083 in) | 16-22 AWG | 7.5 AMPS |
| 16 | 1.35 mm (.053in) | 2.62 mm (.103 in) | 14-20 AWG | 13 AMPS |
| 12 | 2.46 mm (.097 in) | 4.01 mm (.158 in) | 10-14 AWG | 25 AMPS |



Ø43.08±0.12

41.45 +0.2

REVISIONS REV ECO APPR DESCRIPTION DATE BY RELEASE NEW DRAWING 13NOV15 SULLEN TOMMY A1 A2 23NOV17 ROOKIE TOMMY C0765S UPDATE SPECIFICATIONS A3 KASOON TOMMY C0870S Change the appearance of the retaining ring 26JUN18 C1001S CHANGE THE WIRE SIZE BROOK

SIZE 16 CONTACTS (4 PLACES)

(19 PLACES)

(10 PLACES)

(10 PLACES)

(10 PLACES)

(10 PLACES)

(10 PLACES)

(11 PLACES)

(11 PLACES)

(12 PLACES)

(2 PLACES)

(3 PLACES)

(4 PLACES)

(4 PLACES)

(4 PLACES)

(5 PLACES)

(6 PLACES)

(7 PLACES)

(8 PLACES)

(9 PLACES)

(9 PLACES)

(10 PLACES)

(11 PLACES)

RECEP.,24-29 POS, PIN CONT.,STANDARD DIA. SEAL, AHDP

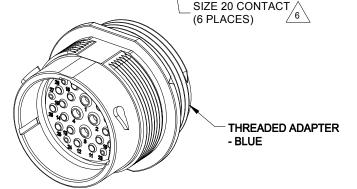
DWG NO: AHDP04-24-29PR-WTA REV: A4

SH:



RECOMMENDED PANEL MOUNTING HOLE

RECOMMENDED PANEL THICKNESS:1.6 TO 4.7MM



| | AHDP04-2 | 4-29PR-\ | NTA | 'TA | | | | | |
|--|---|--|---|--|----------|------|--------------------------|--------------|-----|
| | PART N | PART NUMBER | | DESCRIPTION | | | ITEM | | |
| QUANTITY | | ı | MAT | ERI | ALS | S LI | ST | | |
| | UNLESS OTHERWISE SPECIFIED | | ATURES | DATE | | | mnho | nal | |
| 1) All dimensions a 2) Tolerances are a 1 PL DEC ±0.30 | | DRAWN: | BROOK | 28DEC18 | | | mphe | | |
| 2 PL DEC ±0.15 3 PL DEC ±0.08 | Angles ±1° | CHECKED: | ORION | 28DEC18 | | Sin | e Systems - www.ampher | nol-sine.com | |
| 3) Note reference | Note reference = X ENGINEER: 44724 Morley Drive | | | 200 | | | | | |
| MATERIAL SPECIFICA | TIONS: | APPROVAL: | TOMMY | 28DEC18 | | | Clinton Township, MI 480 | 136 | |
| | | CUSTOMER: | | | 1 | | EP.,24-29 POS, PIN | | |
| | | | 3 IS SUPPLIED ONLY, DESIGN | | | REDU | CED DIA. SEAL, AI | 1DP SERIES | 3 |
| PROCESS SPECIFICA | TIONS: | SPECIFICATIO SHOWN HERE THE AMPHENO OF REPRODUC DIMENSIONS A | NS AND PERFO ON ARE THE PE OL CORPORATI CTION ARE IMP ARE SUBJECT T | ORMANCE DATA ROPERTY OF ON. NO RIGHTS LIED. ALL | B | C- | AHDP04-24-29 | | A4 |
| NEXT ASS T. | | MANUFACTUR | ING VARIATION | IS. | SCALE: N | ONE | | 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 (Machined contacts only) | |
| 3 | CA-5E12 | Pneumatic Crimp Tool, Size 12/16/20 (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) | |
| | 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 | |
| | АТТ-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 | 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 (Machined contacts only) | |
| 3 | CA-5E12 | Pneumatic Crimp Tool, Size 12/16/20 (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 | Туре | |
| 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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ATP Series™ - Contact Size 12 Options

| Machined Contacts, Sockets & Pins | | | | |
|-----------------------------------|--|------|---------------|----------|
| Part Number | Description | Size | 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 |

| DiagnosticGrade™ Machined Contacts, Sockets & Pins • Smaller AWG for Diagnostic Applications • Gold-plated • Increased Mating Cycles • Cost-effective | | | | |
|--|---|------|-----|----------|
| Part Number Description | | Size | AWG | Туре |
| 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 | Part Number | Description | |
| | CA-5D12 | Universal Hand Crimp Tool, Size 12/16/20 (Machined contacts only) | |
| 33 | CA-5E12 | Pneumatic Crimp Tool, Size 12/16/20 (Machined contacts only) | |

| Contact Removal Tools | | | |
|-----------------------|---------------|---|--|
| Part | Part Number | Description | |
| reser unto | ATRT-100 | Used for removal of contacts for A Series™ products | |
| | AT11-337-1205 | Contact Removal Tool, Plastic, Size 12 | |
| | A114017 | Sealing Plug, Size 12, White | |

| Stamped & Formed Contacts, Sockets & Pins | | | | | |
|---|--|------|-------|------------------|--|
| Part Number | Description | Size | AWG | Туре | |
| 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 | Part Number | Description | |
| | MFX-3973 | Crimp Die - Size 12 (S&F contacts only) | |
| | MFX-3985 | Crimp Die - Size 12 (S&F contacts only) 10-12AWG -02XX Series | |
| | ATT-12-00 | Hand Crimp Tool - Size 12, 12AWG (S&F contacts only) | |

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