

NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL:

HOUSING: THERMOPLASTIC; BLACK
SEAL: SILICONE RUBBER
THREADED INSERT: STAINLESS STEEL

M5X0.8-6H 8mm(2X) DEEP
THREADED INSERT

RECOMMENDED TORQUE
VALUES: 1.9-2.2 N.m

2. MODIFICATIONS: SMOOTH RING ADAPTER (SRA);
REDUCED DIA. WIRE SEAL;
SEALED PANEL MOUNT

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

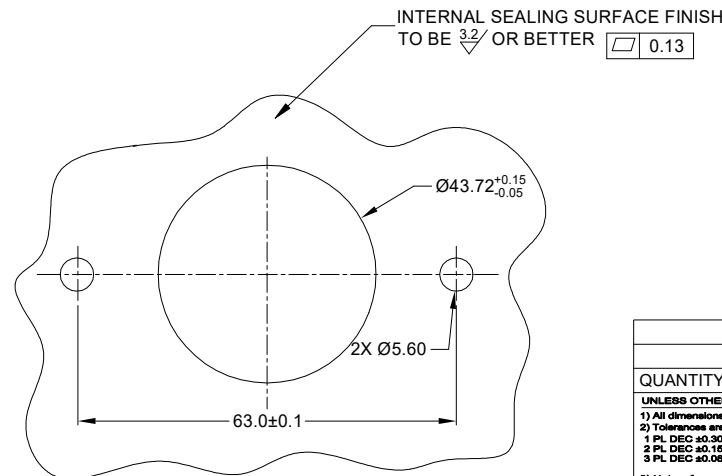
4. MATING PART: AHDP06-24-29P* (* = SEAL TYPE)

5. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

6. RECEPTACLE IS SUPPLIED WITH DUST CAP (NOT SHOW)

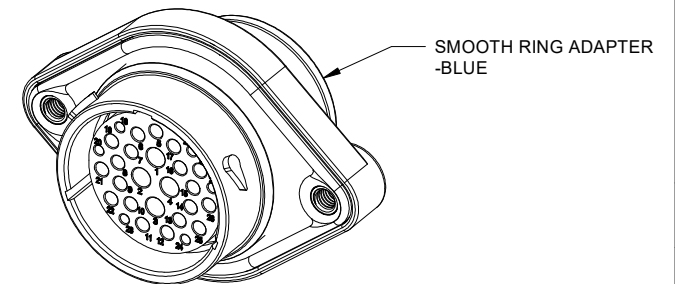
△ CONTACT SIZE AND WIRE RANGE:


| 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 (1.5-0.35mm²) | 7.5 AMPS |
| 16 | 1.35 mm (.053 in) | 2.62 mm (.103 in) | 14-20 AWG (2.0-0.5mm²) | 13 AMPS |
| 12 | 2.46 mm (.097 in) | 4.01 mm (.158 in) | 10-14 AWG (6.0-2.0mm²) | 25 AMPS |



RECOMMENDED PANEL
MOUNTING HOLE

RECOMMENDED PANEL
THICKNESS: 1.6 TO 4.7MM



| | | | | |
|---|--|--|--|-------------|
| AHDP02-24-29SR-SRA | | DESCRIPTION | | ITEM |
| PART NUMBER | | | | |
| QUANTITY | | MATERIALS LIST | | |
| UNLESS OTHERWISE SPECIFIED 1) All dimensions are in metric(mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 2 PL DEC ±0.16 3 PL DEC ±0.08 3) Note reference =  | | SIGNATURES | | DATE |
| | | DRAWN: LOUIE | | 12JUN/20 |
| | | CHECKED: ORION | | 13JUN/20 |
| | | ENGINEER: | | |
| MATERIAL SPECIFICATIONS: | | APPROVAL: TOMMY | | 14JUN/20 |
| | | CUSTOMER: | | |
| PROCESS SPECIFICATIONS: | | 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. | | |
| | | | | |
| NEXT ASSY: | | SCALE: NONE | | |
| | | DURAMATE | | |
| | | SHEET 1 OF 1 | | |
| | | | | |

| | | | |
|---------------------------------------|------|--------------------|----------|
| Amphenol | | | |
| Sine Systems - www.amphenol-sine.com | | | |
| 44724 Morley Drive | | | |
| Clinton Township, MI 48036 | | | |
| 29 POS, RECEPTACLE, SOCKET, PANELMATE | | | |
| AHDP SIZE 24, RD SEAL, SRA | | | |
| SIZE | TYPE | DWG NO: | REVISION |
| B | C- | AHDP02-24-29SR-SRA | A1 |

TITLE: 29 POS. RECEPTACLE, SOCKET, PANELMATE APP SIZE 24, RD SEAL, SRA

DWG NO: AHDP02-24-29SR-SRA

REV: A1

SH: 1

OF: 1

A Series™ - Contact Size 20 Options (Works with: ATM, DuraMate and PanelMate Series)

| Machined Contacts, Sockets & Pins | | | | |
|-----------------------------------|--|------|-------|----------|
| Part Number | Description | Size | AWG | Type |
| 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 Number | Description |
| AUTK-20 | Hand Crimp Tool, Size 20 |
| 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 |

| Stamped & Formed Contacts, Sockets & Pins | | | | |
|---|--|------|-------|------------------|
| Part Number | Description | Size | AWG | Type |
| 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 | |
|-------------------------------------|---|
| MF3-3974 | Crimp Die - Size 20 |
| MF3-3976 | Crimp Die - Size 20 (20-22AWG -04XX Series) |
| MF3-3978 | Crimp Die - Size 20 (20-22AWG -02XX Series) |
| ATT-20-00 | Hand Crimp Tool - Size 20 (20AWG) |

| Contact Removal Tools (For both Machined or Stamped & Formed Contacts) | |
|--|--|
| Part Number | Description |
| ATRT-100 | Contact and Wedgelock Extraction Tool |
| AT11-240-2005 | Contact Removal Tool, Plastic, Size 20 |

| Sealing Plugs (For both Machined or Stamped & Formed Contacts) | |
|--|--|
| Part Number | Description |
| AT13-204-2005 | Sealing Plug, Size 20, White |
| AT13-204-2005-SR | Sealing Plug, Size 20, SR01 Series, Black |
| ATM13-217-2005 | Locking Sealing Plug, Size 20, Grey |
| ATM13-217-2005-SR | Locking Sealing Plug, Size 20, SR01 Series, Blue |

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 | |
|-------------------------------------|-------------------------------------|
| MF3-3950 | Crimp Die - Size 16, 18-20AWG |
| MF3-3953 | Crimp Die - Size 16, 16-18AWG |
| MF3-3975 | Crimp Die - Size 16, 14-16AWG |
| MF3-3990 | 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 |

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 |