

REVISIONS

DATE

05/APR/21

-NORMAL SEAL,RED 6 BY

SULLEN TOMMY

APPR

SH:

DESCRIPTION

RELEASE NEW DRAWING

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## NOTES: UNLESS OTHERWISE SPECIFIED

- 1. MATERIAL: HOUSING: THERMOPLASTIC, BLACK SEAL: SILICONE RUBBER THREADED INSERT: STAINLESS STEEL
- 2. MODIFICATIONS: FLANGE MOUNT; NORMAL DIA. WIRE SEAL
- 3. SPECIFICATIONS:
  - 3.1 CURRENT RATING: 13 AMPS
  - 3.2 OPERATING TEMPERATURE: -55°C TO +125°C
  - 3.3 DIELECTRIC WITHSTANDING VOLTAGE: LESS THAN 2 MILLIAMPS CURRENT LEAKAGE @ 1500 VOLTS AC
  - 3.4 INSULATION RESISTANCE: 1000 MEGOHMS MIN @ 25°C
- 3.5 MOISTURE RESISTANCE:
  - IP68 ( IM OF WATER FOR A PERIOD OF 24 HOURS, MATED CONDITION ):
  - IP69K( MATED CONDITION )
- 3.6 MATING CYCLE DURABILITY: 100 CYCLES
- 3.7 RoHS COMPLIANT
- 4. MATING PART: ARC16-24SX\* PLUG (X = A,B,C,D KEYS; \* = ALL MODIFICATIONS)

## 5. SEE SHEET 2 FOR OTHER KEY ARRANGEMENTS

6. CONTACT SIZE AND REAR SEAL WIRE RANGE:

-3.8

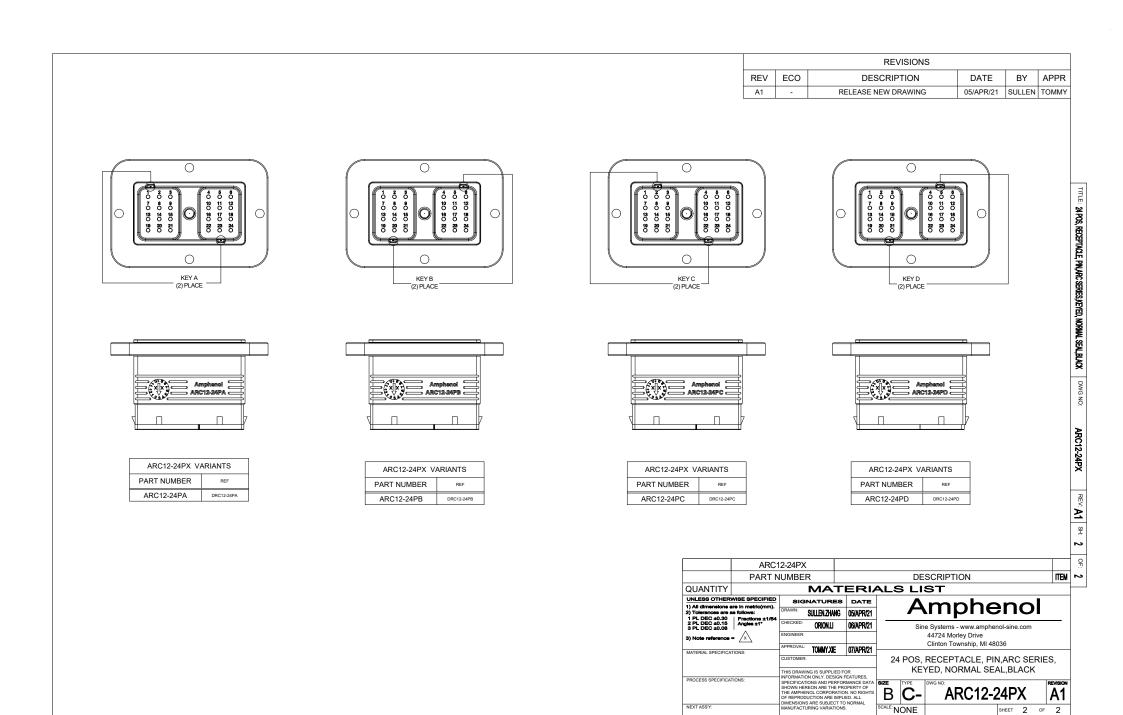
| CONTACT | MIN. INSUL | MAX. INSUL | TYPICAL                      |
|---------|------------|------------|------------------------------|
| SIZE    | O.D.       | O.D.       | WIRE RANGE                   |
| 16      | 2.54 mm    |            | 14 - 20 AWG                  |
| 10      | (.100 in)  | (.134 in)  | (2.0 - 0.5 mm <sup>2</sup> ) |

7. RECEPTACLE IS SUPPLIED WITH DUST CAP

RECOMMENDED SCREW: 8-32 [ M4 ] TORQUE: 20 - 25 IN-LB [ 2.26 - 2.82 Nm ]

9. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY

|   | SEE S                    | SHEET 2   | 2                             |  |                                      |      |                |           |      |
|---|--------------------------|---|-------------------------------|--|--------------------------------------|------|----------------|-----------|------|
|   | PART N                   | IUMBEI  | ₹                             |  | DESCRIPTION                          |      |                |           | ITEM |
| QUANTITY  |                          |   | MA                            | [ERI   | ALS                                  | S LI | ST             |           |      |
|   | WISE SPECIFIED           | SIG   | NATURE                        | S DATE   | Amphenol                             |      |                |           |      |
| 1) All dimensions a<br>2) Tolerances are a<br>1 PL DEC ±0.30                  |                          | DRAWN:  | SULLEN.ZHAN                   | G 05/APR/21  |                                      |      | ипрпе          |           |      |
| 2 PL DEC ±0.30 Fractions ±1/64<br>2 PL DEC ±0.15 Angles ±1°<br>3 PL DEC ±0.08 |                          | CHECKED:  | ORION.LI                      | 06/APR/21  | Sine Systems - www.amphenol-sine.com |      |                |           |      |
| 3) Note reference = X   |                          | ENGINEER:   |                               |  | 44724 Morley Drive                   |      |                |           |      |
| MATERIAL SPECIFICA  | MATERIAL SPECIFICATIONS: |   | TOMMY.XIE                     | 07/APR/21  | Clinton Township, MI 48036           |      | -              |           |      |
|   |                          |   |                               |  | 24                                   |      | RECEPTACLE, PI |           | ES,  |
|   |                          |   | NG IS SUPPLIED                |  |                                      |      |                | AL,BLACK  |      |
| PROCESS SPECIFICATIONS:   |                          | SPECIFICAT<br>SHOWN HER<br>THE AMPHE<br>OF REPROD | IONS AND PERI<br>REON ARE THE | FORMANCE DATA<br>PROPERTY OF<br>TION. NO RIGHTS<br>IPLIED. ALL | size<br>B                            | C-   | ARC12-2        | 24PX      | A1   |
| NEXT ASS'Y:   |                          |   | UFACTURING VARIATIONS.        |  | SCALE: N                             | ONE  |                | SHEET 1 O | F 2  |



NEXT ASS'Y:

SCALE: NONE

SHEET 2 OF 2

## **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-p |   | 16 | 16-20 | Machined |  |
| AT60-202-16141                                | Male Contact - Pin, Nickel-plated                   |    | 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                             | AT60-202-16141-22 Male Contact - Pin, Nickel-plated |    | 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) |  |  |  |
| 5                           | CA-5E12                 | Pneumatic Crimp Tool, Size 12/16/20<br>(Machined contacts only)      |  |  |  |

| Contact Removal Tools |               |   |  |  |
|-----------------------|---------------|---|--|--|
| Part                  | Part Number   | Description   |  |  |
|                       | ATRT-100      | Used for removal of contacts for A Series™ products |  |  |
|                       | AT11-310-1605 | Contact Removal Tool, Plastic, Size 16              |  |  |
| 4                     | 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) |  |  |

Amphenol Sine Systems 44724 Morley Drive Clinton Township, MI 48036 USA www.amphenol-sine.com 09/2021