



| REVISIONS | | | |
|-----------|-----------------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| F | REVISED PER ECO 14757 | 05/25/23 | H.J. |

AERO ELECTRIC PART NUMBER

AE9 24 W 11 - 23 S N - XXX

AERO ELECTRIC MODIFICATION NUMBER

- SHELL POLARIZATION**
N = NORMAL
A, B, C, D AND E
- NOTE: ALL MINOR KEYS ARE ROTATED TO PROVIDE SHELL POLARIZATION, THE MASTER KEY REMAINS FIXED.
- CONTACT STYLE**
P = PIN
S = SOCKET
- A = PIN (CONNECTORS USED WITH OTHER THAN STANDARD CONTACTS.)
B = SOCKET
- INSERT ARRANGEMENT**
PER MIL-STD-1560
9-23, 11-23, 13-23, 15-23, 17-23, 19-23, 21-23, 23-23, 25-23
- SHELL SIZE**
9, 11, 13, 15, 17, 19, 21, 23 AND 25
- CLASS/MATERIAL/FINISH**
W - ALUMINUM, OLIVE DRAB CADMIUM OVER NICKEL
F - ALUMINUM, ELECTROLESS NICKEL
E - STAINLESS STEEL, PASSIVATED
L - STAINLESS STEEL, ELECTRODEPOSITED NICKEL, NON-FIREWALL
BZ - NICKEL ALUMINUM BRONZE, NON-FIREWALL
Z - ALUMINUM, BLACK ZINC NICKEL
- CONNECTOR STYLE**
24 = JAM NUT RECEPTACLE
- AERO PRODUCT IDENTIFIER**
HIGH DENSITY SERIES IN D38999, SERIES III CONNECTOR HOUSING

| SHELL SIZE | MS SHELL CODE | A | | B MTG. FLAT | | C HEX | | D | | E THREAD TRIPLE START | F NO OF TEETH | G | | J THREAD | K ACCESSORY THREAD |
|------------|---------------|------------|----------|-------------------|----------------|-------|-------|-------------------|----------------|-----------------------|-----------------|-------------------|----------------|-----------------|--------------------|
| | | INCH ±.016 | MM ±0.40 | INCH +.004 -0.006 | MM +0.10 -0.15 | INCH | MM | INCH +.024 -0.000 | MM +0.60 -0.00 | | | INCH +.035 -0.004 | MM +0.90 -0.10 | | |
| 09 | A | 1.063 | 27.00 | .651 | 16.53 | .945 | 24.00 | .555 | 14.10 | .6250-.1P-.3L | 12 | .087 | 2.20 | M17x1.0-6g.100R | M12x1.0-6g.100R |
| 11 | B | 1.252 | 31.80 | .751 | 19.07 | 1.063 | 27.00 | | | .7500-.1P-.3L | 16 | | | M20x1.0-6g.100R | M15x1.0-6g.100R |
| 13 | C | 1.374 | 34.90 | .938 | 23.82 | 1.260 | 32.00 | | | .8750-.1P-.3L | 20 | | | M25x1.0-6g.100R | M18x1.0-6g.100R |
| 15 | D | 1.500 | 38.10 | 1.062 | 26.97 | 1.417 | 36.00 | | | 1.000-.1P-.3L | 24 | | | M28x1.0-6g.100R | M22x1.0-6g.100R |
| 17 | E | 1.626 | 41.30 | 1.187 | 30.15 | 1.457 | 37.00 | | | 1.187-.1P-.3L | 28 | | | M32x1.0-6g.100R | M25x1.0-6g.100R |
| 19 | F | 1.811 | 46.00 | 1.312 | 33.32 | 1.614 | 41.00 | | | 1.250-.1P-.3L | 32 | | | M35x1.0-6g.100R | M28x1.0-6g.100R |
| 21 | G | 1.937 | 49.20 | 1.437 | 36.50 | 1.811 | 46.00 | | | 1.375-.1P-.3L | 36 | | | M38x1.0-6g.100R | M31x1.0-6g.100R |
| 23 | H | 2.063 | 52.40 | 1.562 | 39.67 | 1.969 | 50.00 | | | 1.500-.1P-.3L | 40 | | | M41x1.0-6g.100R | M34x1.0-6g.100R |
| 25 | J | 2.189 | 55.60 | 1.687 | 42.85 | 2.017 | 51.23 | 1.625-.1P-.3L | 44 | M44x1.0-6g.100R | M37x1.0-6g.100R | | | | |

| PART NUMBER | | MILITARY PART NUMBER | | | WIRE RANGE | CONTACT SIZE |
|--------------------------------|--------------------------------|-------------------------|---------------|----------------|------------|--------------|
| PIN CONTACT | SOCKET CONTACT | INSERTION/REMOVAL TOOLS | SEALING PLUGS | CRIMPING TOOLS | | |
| 5290-004-23H1 OR M39029/18-177 | 5090-003-231H OR M39029/17-172 | M81969/16-04 (PLASTIC) | MS27488-22-2 | M22520/2-01 | 28-22 | 23 |

MATERIAL:

- RECEPTACLE SHELL.....: MACHINED ALUMINUM ALLOY
STAINLESS STEEL
NICKEL ALUMINUM BRONZE
- HEX NUT.....: MACHINED ALUMINUM ALLOY
STAINLESS STEEL
NICKEL ALUMINUM BRONZE
- CONTACT RETENTION CLIP.....: BERYLLIUM COPPER
- GROMMET, INTERFACIAL SEAL.....: SILICONE/FLUOROSILICONE ELASTOMER
- PERIPHERAL SEAL, "O" RING.....: SILICONE/FLUOROSILICONE ELASTOMER
- INSULATOR.....: THERMOSET

5 INSERTION/REMOVAL TOOL USED ON THIS CONNECTOR SHALL NOT BE PROVIDED WITH THE CONNECTOR. NOTE: DO NOT USE THIS TOOL TO EXTRACT WIRE INSULATION DIAMETER GREATER THAN .045.

4 MARKING: "AERO", AERO PART NUMBER & MFG DATE CODE SHALL BE LOCATED APPROXIMATELY WHERE SHOWN.

3 A QUANTITY OF CRIMP CONTACTS CONSISTING OF THE NORMAL COMPLIMENT AND NO SEALING PLUGS WILL BE INCLUDED IN THE PACKAGE.

2 RED COLOR BAND IS A FULLY MATED INDICATOR, IT IS VISIBLE WHEN UNMATED AND FULLY COVERED WHEN COMPLETELY MATED.

1 BLUE COLOR BAND DESIGNATES REAR RELEASE CONTACT RETENTION SYSTEM.

NOTES UNLESS OTHERWISE SPECIFIED:

| | | | | | | | | | |
|----------------|--|--|----------|---------------|----------|---|-------|---|--------|
| PROJECTION | APPLICATION | UNLESS OTHERWISE SPECIFIED INTERPRET DWG PER MIL-STD-100 ALL DIMENSIONS IN INCHES PART TO BE FREE OF BURRS ALL DIM APPLY BEFORE PLATING ✓ ALL MACHINED SURFACES MAX. RUNOUT .005 FIM BREAK SHARP EDGES .005 MAX MACHINE FILLET RADI .006 MAX .XX ±.010 .XXX ±.005 ANGLES ±0°30' DO NOT SCALE DRAWING | DRAWN | S. STRASER | 05/10/10 | AERO ELECTRIC CONNECTOR, Inc. 2280 208th Street Torrance, California 90501 CON:SYS™ | | | |
| | --CONFIDENTIAL INFORMATION-- CONFIDENTIAL INFORMATION OF CONESYS, INC. IS CONTAINED IN THIS DRAWING. THE TRANSMISSION, USE, OR REVELATION OF ANY PORTION OF THIS DRAWING OUTSIDE OF THE ENTITY TO WHOM IT WAS SENT, WITHOUT WRITTEN AUTHORIZATION OF CONESYS, INC. IS PROHIBITED. | | TSR 2879 | CHECK | | | | TITLE THREADED RECEPTACLE CONNECTOR, JAM NUT CLASSES "F", "E", "L", "Z" & "BZ" REF: MIL-DTL-38999, SERIES III | |
| | | | APVD | H. JAMSHIDIAN | 05/10/10 | DWG. NO. | AE924 | REV | F |
| | | | MATERIAL | N/A | | SIZE | C | CAGE CODE | 59976 |
| | | | FINISH | N/A | | SCALE | N/A | SHEET | 1 OF 1 |