



DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
P.O. BOX 3990
COLUMBUS, OHIO 43218-3990

January 27, 2016

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: **This is a 2nd coordination of an ID due to new information:**

Initial Drafts of Revisions to: CAGE Code 037Z3, Detailed Drawings 89015E, 89017D, and 89019E.

Project Number(s): 5935-2016-E01, E02, and E03

These initial drafts for these subject documents are now available for viewing and downloading from the DLA Land and Maritime-VA Web site:

<http://www.landandmaritime.dla.mil/programs/milspec/>

Major changes to these documents include **Update to “Sources of Documents (in Red) and addition of related NSN’s (in Red)**, updates to Title Block Headings, Associated Documents, Vendor Information, and incorporation of dated ‘Notices of Revision’. Material Numbers for these items have not been identified. However, vendor part numbers for specific configurations that are available from your firm should be listed on the enclosed Certificates of Compliance (CoC). See the attached examples of a DLA Part or Identifying Number (PIN) on each of the 3 (three) partially filled out (fillable) CoC forms (attached).

Please return comments to this Center no later than close of business 30 days from the date of the letter. Any further coordination concerning these documents will be circulated only to firms and organizations that furnish comments or reply that they have an interest. Since Navy-EC is the custodian for this document, all Navy review activities should forward their comments directly to this DLA Center.

Manufacturers desiring to be listed as a source of supply, which meet the requirements of these drawings, are requested to complete and submit (to the address shown below) updated versions of the enclosed Certificates of Compliance (CoC) along with any comments, on each of the 3 (three) subject drawings. **These CoC’s must be signed by an ‘Officer’ of the company (Vice President, Production Manager, etc.). “Joslyn Sunbank Company, LLC” has already responded and does not need to comply, in order to remain on the drawings as an approved source of supply.**

If these documents are of interest to you, please provide your comments or suggested changes. The point of contact for these documents is Mr. Jenkins, phone number 614-692-0560, facsimile transmission, 614-692-6939, e-mail Howard.E.Jenkins@dla.mil, or may be mailed via the US Postal Service to DLA LAND AND MARITIME, ATTN: VAI (Attention: Howard Jenkins), P.O. Box 3990, Columbus, OH 43218-3990.

SUBJECT: This is a 2nd coordination of an ID due to new information:
Initial Drafts of Revisions to: CAGE Code 037Z3, Detailed Drawings 89015E,
89017D, and 89019E.
Project Number(s): 5935-2016-E01, E02, and E03 - continued.

Attachments:
3 (CoC)
3 (Initial Draft Drawings)

Sincerely,

/ SIGNED /

ABDONASSER M. ABDOUNI
Chief,
Interconnection Branch

cc:
DLA:
LSA (Land and Maritime)

MILITARY: (Related Documents: MIL-DTL-38999 & SAE AS85049)
Air Force – 85, 19, 99 (Brad Steiner)
Navy – AS, EC, MC, SH, OS (Dwight Tabit)
Army – CR, AR, MI (George Tanner)
Missile Defense Agency – MDA (Barry Birdsong)

INDUSTRY:
89015: TE Connectivity (Frank Hungate), Glenair (Bea Martin),
Joslyn Sunbank (Vikki Gilman), Electro Adapter (Jim Alderson).
89017: TE Connectivity (Frank Hungate), Glenair (Bea Martin),
Joslyn Sunbank (Vikki Gilman), Electro Adapter (Jim Alderson),
J-Tech (Bobbie Gentile).
89019: TE Connectivity (Frank Hungate), Glenair (Bea Martin),
Joslyn Sunbank (Vikki Gilman), Electro Adapter (Jim Alderson).

Distribution List:

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Vikki.Gilman@esterline.com; jalderson@electro-adapter.com;
msarmstr@TE.com; dwight.tabit@navy.mil; george.a.tanner.civ@mail.mil;

REVISIONS

| LTR | DESCRIPTION | DATE | APPROVED |
|-----|--|--------------|-----------------|
| A | Add source 06090. | 28 Feb 91 | Richard Marbais |
| B | Add dimension "Z". Editorial changes throughout. | 22 Sept 93 | Randy Larson |
| C | Update format. Correcting references. Correcting address list of sources. | 16 July 02 | Robert Heber |
| D | NOR: Page 2, figure 1: Relocate "W" dia leader to show inside dimension braid not outside dimension. | 07 May 2004 | Richard Taylor |
| E | Update title block, associated documents, vendor information, and incorporate NOR, Revision 'D'. | DRAFT | |

CURRENT DESIGN ACTIVITY CAGE CODE 037Z3
HAS CHANGED NAMES TO:
DLA LAND AND MARITIME
COLUMBUS, OHIO 43218-3990

Prepared in accordance with ASME Y14.100

| | | | | | | | | | | | | | | | | | | |
|----------------------------|-------------|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|
| REV | E | E | E | E | E | | | | | | | | | | | | | |
| PAGE | 1 | 2 | 5 | 6 | 7 | | | | | | | | | | | | | |
| REV STATUS OF PAGES | REV | E | E | C | C | E | E | E | | | | | | | | | | |
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|--|--|----------------------------------|--|---------------------------------|--|--|----------|-----------|--|--|--|----------|--|--|--|--|--|--|
| PMIC N/A | PREPARED BY Jeffery Tunstall | | DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO 43216-5000 | | | | | | | | | | | | | | | |
| Original date of drawing 25 Sept 89 | CHECKED BY Abdo Abdouni | | TITLE CONNECTOR ACCESSORIES, ELECTRICAL, ADAPTER, SHRINK BOOT, RF/EMI, 45° CATEGORY 3C (FOR MIL-DTL-38999 SERIES III and IV CONNECTORS) | | | | | | | | | | | | | | | |
| | APPROVED BY Robert Heber | | | | | | | | | | | | | | | | | |
| | SIZE A | CAGE CODE 037Z3 | | DWG. NO. 89019 | | | | | | | | | | | | | | |
| | REV | E | PAGE | | | | 1 | OF | | | | 7 | | | | | | |

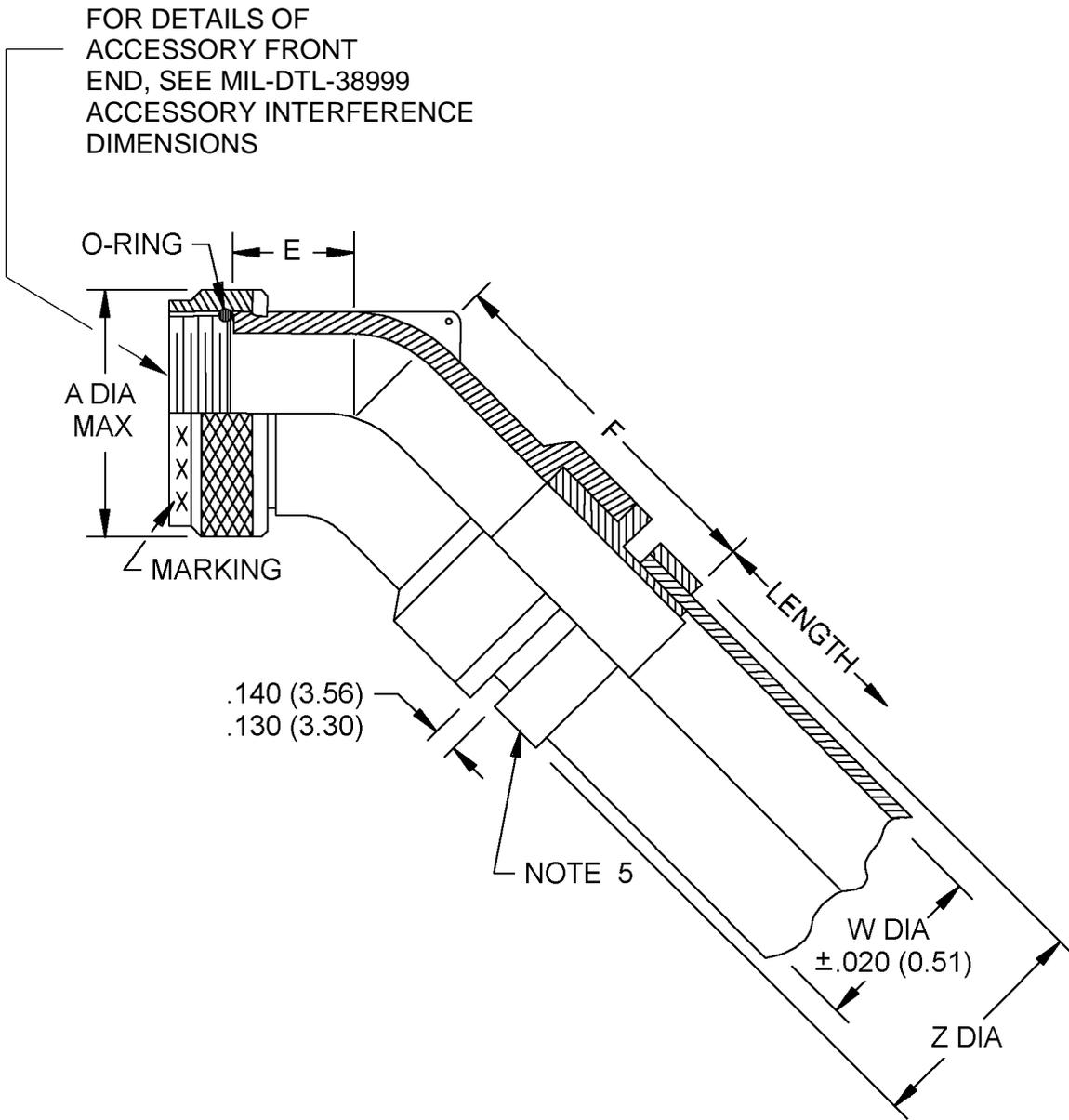


FIGURE 1. Dimensions and configuration.

| | | | |
|--|------------------|---------------------------|-------------------------|
| DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OH 43216-5000 | SIZE A | CAGE CODE 037Z3 | DWG NO. 89019 |
| | | REV E | PAGE 2 |

| Dash number | A max dia | E max | F max | Max cable accommodation range |
|-------------|--------------|---------------|----------------|-------------------------------|
| -09 | .75 (19.1) | .820 (20.83) | 1.710 (43.43) | 01 |
| -11 | .85 (21.6) | .840 (19.05) | 1.710 (43.43) | 03 |
| -13 | 1.00 (25.4) | .870 (20.83) | 1.830 (4.96) | 05 |
| -15 | 1.15 (29.2) | .890 (22.10) | 1.830 (46.48) | 07 |
| -17 | 1.25 (31.8) | .920 (23.52) | 1.920 (48.79) | 09 |
| -19 | 1.40 (35.6) | .950 (23.52) | 2.030 (51.56) | 10 |
| -21 | 1.55 (39. 4) | .970 (24.64) | 2.220 (56.83) | 12 |
| -23 | 1.65 (41.9) | 1.020 (23.52) | 2.220(56.83) | 13 |
| -25 | 1.85 (47.0) | 1.020 (25.91) | 2.370 60.20) | 14 |

FIGURE 1. Dimensions and configuration – Continued.

| | | | |
|--|----------|--------------|---------------|
| DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OH 43216-5000 | SIZE | CAGE CODE | DWG NO. |
| | A | 037Z3 | 89019 |
| | | REV E | PAGE 3 |

| Cable accommodation range | W dia ± .020 (0.51) | Z dia | |
|---------------------------|---------------------------|------------------|------------------|
| | | Min | Max |
| 01 | .250 (6.35) | .425 (10.80) | .560 (14.22) |
| 02 | .312 (7.92) | .487 (12.37) | .630 (16.00) |
| 03 | .375 (9.53) | .550 (13.97) | .690 (17.53) |
| 04 | .438 (11.13) | .613 (15.57) | .750 (19.05) |
| 05 | .500 (12.70) | .675 (17.15) | .820 (20.83) |
| 06 | .562 (14.27) | .737 (18.72) | .890 (22.61) |
| 07 | .625 (15.88) | .800 (20.32) | .950 (24.13) |
| 08 | .688 (17.48) | .863 (21.92) | 1.020 (25.91) |
| 09 | .750 (19.05) | .925 (23.50) | 1.120 (28.45) |
| 10 | .812 (20.62) | .987 (25.07) | 1.200 (30.48) |
| 11 | .875 (22.23) | 1.050 (26.67) | 1.270 (32.26) |
| 12 | .938 (23.83) | 1.090 (27.69) | 1.260 (32.00) |
| 13 | 1.000 (25.40) | 1.175 (29.85) | 1.370 (34.80) |
| 14 | 1.125 (28.58) | 1.300 (33.02) | 1.470 (37.34) |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are for information only.
3. Metric equivalents are in parentheses.
4. Dimensions apply after plating.
5. Shield termination method optional.

FIGURE 1. Dimensions and configuration – Continued.

| | | | |
|--|----------|--------------|---------------|
| DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OH 43216-5000 | SIZE | CAGE CODE | DWG NO. |
| | A | 037Z3 | 89019 |
| | | REV E | PAGE 4 |

REQUIREMENTS: Shall be in accordance with SAE-AS85049, category 3C.

Design and construction: See figure 1.

Interface dimensions shall conform to MIL-DTL-38999 series III and IV.

Pull test: With backshell suitably clamped, the braid shall withstand a tensile load of 150 pounds without movement of the braid or clamping device.

Electrical resistance: When measured with a 4-terminal bridge at room temperature, the resistance will not exceed 1 milliohm. The measurement being taken shall be from a point on the braid within 1 inch of the adapter and a point the body of the adapter.

Thermal aging: After being subjected to a temperature of 150°C for 168 hours, the electrical resistance, measured as above, will not exceed 1 milliohm.

Material and finish:

Accessory components shall be as shown in table I.

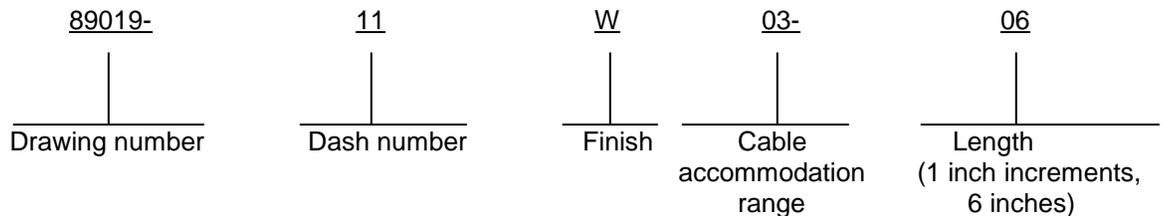
TABLE I. Material and finish.

| Components | Material | Finish |
|-----------------|---|---|
| All metal parts | Aluminum alloy in accordance with SAE-AS85049 | See SAE-AS85049 N <u>1</u> /, W <u>2</u> / |
| Braided shield | Copper | Tin |
| O-ring | In accordance with SAE-AS85049 | NA |

1/ N is Electroless nickel - In accordance with AMS2404. -65 to +200 °C (Not for Navy use) (For space application only).

2/ W is Cadmium - Olive drab over suitable underplate, 1,000 hour salt spray -65 to +175 °C (W finish is not for use in space application)

Part or Identifying Number (PIN): The PIN shall be in accordance with the following:



Marking: Marking shall be in accordance with SAE-AS85049 except the PIN shall be stated above.

Application: Use to adapt SAE AS85049/140 and SAE-AS85049 /141 type shrink boots.

| | | | |
|--|----------|--------------|---------------|
| DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OH 43216-5000 | SIZE | CAGE CODE | DWG NO. |
| | A | 037Z3 | 89019 |
| | REV | E | PAGE 5 |

QUALIFICATION:

Qualification inspection: Qualification inspection for the backshells specified herein shall not be required.

Conformance inspection: Shall be in accordance with SAE-AS85049.

Inspection of packaging: Shall be in accordance with SAE-AS85049.

Method of inspection: Method of inspection shall be in accordance with SAE-AS85049.

SOURCE OF DOCUMENTS:

ASME INTERNATIONAL

ASME Y14.100 - Engineering Drawing and Related Documentation Practices

(Copies of this document are available online at <https://www.asme.org>.)

DEPARTMENT OF DEFENSE SPECIFICATION

MIL-DTL-38999 - Connectors, Electrical, Circular, Miniature, High Density, Quick Disconnect (Bayonet, Threaded, or Breech Coupling), Environment Resistant with Crimp Removable Contacts or Hermetically Sealed with Fixed, Solderable Contacts General Specification for

(Copies of this document are available online at <http://quicksearch.dla.mil>.)

SAE INTERNATIONAL

SAE-AMS2404 - Nickel, Electroless, Plating
SAE-AS85049 - Connector Accessories, Electrical, General Specification for
SAE-AS85049/140 - Connector Accessories, Electrical Boots, Heat-Shrinkable, Straight, Category 9
SAE-AS85049/141 - Connector Accessories, Electrical Boots, Heat-Shrinkable, 90 Degrees, Category 9

(Copies of these documents are available online at <http://standards.sae.org>.)

COMMENTS:

Comments on this drawing should be directed to DLA Land and Maritime - VAI, Post Office Box 3990, Columbus, Ohio 43218-3990 or telephone (614) 692-7702, facsimile (614) 692-6939, or submit comments by email to CircularConnector@dla.mil.

CERTIFICATE OF COMPLIANCE

The certificate of compliance (CoC) submitted to DLA Land and Maritime - VAI, prior to listing as an approved source of supply, shall state that the manufacturer's product meets the requirements stated herein.

Approved sources of supply. Approved sources of supply are listed herein. Additional sources will be added as they become available. The vendors listed herein have agreed to this drawing and a certificate of compliance has been submitted to DLA Land and Maritime - VAI.

| | | | |
|--|----------|--------------|---------------|
| DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OH 43216-5000 | SIZE | CAGE CODE | DWG NO. |
| | A | 037Z3 | 89019 |
| | REV | E | PAGE 6 |

| DLA drawing PIN | CAGE codes | | | | Material numbers |
|--------------------|------------|----------------------|----------------------|------------------------|--------------------------------------|
| | 06324 | 07418 | 31461 | 06090 | |
| <u>1/</u> | | | | | |
| 89019-xxxx-xx | 319HB001 | S2382- xxxxAxx-xx | E4032Axx xxxxxx55 | TXR40AX45 -xxxxA12J | 5935-01-512-9518 5935-01-512-9519 |

1/ Parts must be purchased to this DLA PIN to assure that all performance requirements and tests are met. See 'Part or Identifying Number (PIN)' format on Page 5.

| Vendor CAGE <u>number</u> | Vendor name <u>and address</u> |
|------------------------------|--|
| 06090 | Tyco/Electronics Corporation 501 Oakside Ave Side Redwood City, CA 94063-3800 |
| 06324 | Glenair, Incorporated 1211 Air Way Glendale, CA 91201-2405 |
| 07418 | Sunbank Electronics, Incorporated 1740 Commerce Way Paso Robles, CA 93446-3620 |
| 31461 | Electro Adapter, Incorporated 20640 Nordhoff Street Chatsworth, CA 91311-6114 |

| | | | |
|--|----------|--------------|---------------|
| DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OH 43216-5000 | SIZE | CAGE CODE | DWG NO. |
| | A | 037Z3 | 89019 |
| | REV | E | PAGE 7 |