

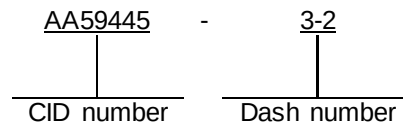
[INCH-POUND]
A-A-59445A
6 August 2013
SUPERSEDING
A-A-59445
22 June 1999

COMMERCIAL ITEM DESCRIPTION

ADAPTER, STRAIGHT, PIPE TO TUBE, PIPE THREAD TO FEMALE SOLDER-JOINT, REFRIGERATION

The General Services Administration has authorized the use
of this commercial item description for all federal agencies.

1. **SCOPE.** This commercial item description (CID) covers the general requirements for wrought copper and copper alloy solder joint pressure fittings for use with copper water tubes in refrigeration systems.
2. **CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN).** This CID uses a classification system which is included in the PIN as shown in the following example (see [7.1](#))



3. SALIENT CHARACTERISTICS.

3.1 Interface and physical dimensions. Fittings supplied to this CID shall be as specified herein (see figure 1).

3.2 Material and finish. Fitting material and finishes shall be copper and copper alloy, as specified in ASME B16.22.

3.3 Design, construction, and performance. Fitting design, construction, and performance shall be in accordance with ASME B16.22.

3.4 Marking. Connectors supplied to this CID shall be marked with the manufacturer's (MFR's) standard commercial PIN. (NOTE: The part number marked on the unit pack shall be the CID PIN.)

3.5 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

Comments, suggestions, or questions on this document should be addressed to: DLA Land and Maritime, Attn: VAI, P.O. Box 3990, Columbus, Ohio, 43218-3990 or emailed to FluidFlow@dlm.mil. Since contact information can change, you may want to verify the currency of this address information using ASSIST Online Database at <https://assist.dla.mil>.

3.6 Workmanship. Connectors shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with 23.403 of the Federal Acquisition Regulation (FAR).

5. PRODUCT CONFORMANCE PROVISIONS.

5.1 Product conformance. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance.

6 PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order.

7. NOTES.

7.1 PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN example.

The PIN procedure is for government purposes and does not constitute a requirement for the contractor. Figure 1, figure 2, and table I are provided for configuration identification.

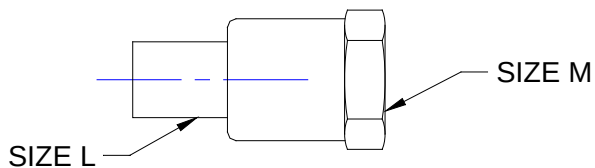


FIGURE 1. Female adapter.

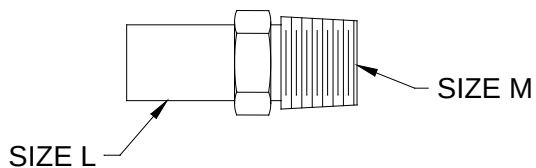


FIGURE 2. Male adapter.

TABLE I. Dash numbers.

Dash numbers		Tube size, inches L x M
Female adapter (figure 1)	Male Adapter (figure 2)	
-3-2F	-3-2	3/8 X 1/4
-3-3F	-3-3	3/8 X 3/8
-4-3F	-4-3	1/2 X 3/8
-4-4F	-4-1	1/2 X 1/2
-4-6F	-4-6	1/2 X 3/4
-5-2F	-5-2	5/8 X 1/4
-5-3F	-5-3	5/8 X 3/8
-5-4F	-5-4	5/8 X 1/2
-5-6F	-5-6	5/8 X 3/4
-6-4F	-6-4	3/4 X 1/2
6-6F	-6-6	3/4 X 3/4
-7-4F	-7-4	7/8 X 1/2
-7-6F	-7-6	7/8 X 3/4
-9-6F	-9-6	1 1/8 X 3/4

The PIN consists of the document identifier and a dash no. (see table I). The dash number denotes size in increments of 1/8 inch.

PIN example AA59445-3-2:

AA59445 - 3-2

 Dash no. (see table I)
 Document identifier

7.2 Environmentally preferable material. Environmentally preferable materials should be used to the maximum extent possible to meet the requirements of this specification. As of the dating of this document, the U.S. Environmentally Protection Agency (EPA) is focusing efforts on reducing 31 priority chemicals. The list of chemicals and additional information is available on their website <http://www.epa.gov/osw/hazard/wastemin/priority.htm> Included in the EPA list of 31 priority chemicals are cadmium, lead, and mercury. Use of these materials on the list should be minimized or eliminated unless needed to meet the requirements specified herein (see Section 3).

7.3 Commercial and Government Entity (CAGE) code. For ordering purposes, inventory control, and submission of these fuse plugs to DLA Land and Maritime under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

7.4 Sources of documents.

FEDERAL REGULATIONS

FAR – Federal Acquisitions Regulations (FAR)

(Copies of this document are available online at <http://www.acquisition.gov/comp/far/index.html> from the U.S. Government Printing Office, 732 North Capital Street, NW, Washington D.C. 20401-0001.)

Other Publications

ASME INTERNATIONAL

ASME B16.22 – Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings

(Copies of these documents are available online at <http://www.asme.org> or from the ASME International, Three Park Avenue, New York, NY 10016-5990.)

7.5 Ordering data. The contractor order should specify the following:

- a. CID document number, revision and CID PIN.
- b. Product conformance provisions.
- c. Packaging requirements.

7.6 Cross reference data. See table II for PIN cross reference data.

TABLE II. Cross reference data.

MS35921		Tube size, inches	AA59445	
MS35921-3-2F	MS35921-3-2	3/8 X 1/4	AA59445-3-2F	AA59445-3-2
MS35921-3-3F	MS35921-3-3	3/8 X 3/8	AA59445-3-3F	AA59445-3-3
MS35921-4-3F	MS35921-4-3	1/2 X 3/8	AA59445-4-3F	AA59445-4-3
MS35921-4-4F	MS35921-4-4	1/2 X 1/2	AA59445-4-4F	AA59445-4-4
MS35921-4-6F	MS35921-4-6	1/2 X 3/4	AA59445-4-6F	AA59445-4-6
MS35921-5-2F	MS35921-5-2	5/8 X 1/4	AA59445-5-2F	AA59445-5-2
MS35921-5-3F	MS35921-5-3	5/8 X 3/8	AA59445-5-3F	AA59445-5-3
MS35921-5-4F	MS35921-5-4	5/8 X 1/2	AA59445-5-4F	AA59445-5-4
MS35921-5-6F	MS35921-5-6	5/8 X 3/4	AA59445-5-6F	AA59445-5-6
MS35921-6-4F	MS35921-6-4	3/4 X 1/2	AA59445-6-4F	AA59445-6-4
MS35921-6-6F	MS35921-6-6	3/4 X 3/4	AA59445-6-6F	AA59445-6-6
MS35921-7-4F	MS35921-7-4	7/8 X 1/2	AA59445-7-4F	AA59445-7-4
MS35921-7-6F	MS35921-7-6	7/8 X 3/4	AA59445-7-6F	AA59445-7-6
MS35921-9-6F	MS35921-9-6	1 1/8 X 3/4	AA59445-9-6F	AA59445-9-6

7.7 National Stock Numbers (NSNs). The following is a list of identified NSNs assigned that correspond to this CID. This list may not be indicative of all possible NSNs associated with this CID (see table III).

TABLE III. NSN's.

NSN	Size
4730-00-266-1835	-5-4
4730-00-941-5915	-5-2
4730-01-049-5819	-4-4
4730-01-096-9126	-3-2

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TABLE III. NSN's -Continued.

4730-01-230-6591	-5-4
4730-01-381-8650	-4-3
4730-01-383-5430	-5-6

7.8 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

MILITARY INTERESTS:

Custodians:

Army - GL
Navy - SH
Air Force - 99
DLA - CC

Review activities:

Army - CE
Navy - MC

CIVIL AGENCY COORDINATING ACTIVITY:
GSA-FSS

Preparing activity:

DLA - CC

(Project 4730-2013-055)

NOTE: The activities listed above were interested in this document as the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil/>.