



Threads. Threads are dryseal NPTF-1 in accordance with A-A-59440.

NPTF-1 dryseal threads. NPTF-1 dryseal threads seal pressure tight joints without sealant compound. The engineering principle and design are explained in ASME B1.20.3.

Materials.

Brass. Brass shall be in accordance with the following commercial standards:

ASTM B16/B16M	ASTM B121/B121M	ASTM B505/B505M	SAE AMS4845
ASTM B22	ASTM B124/B124M	ASTM B584	SAE AMS4855
ASTM B30	ASTM B148	ASTM B763	SAE AMS4860
ASTM B36/B36M	ASTM B176	ASTM B770	SAE AMS4862
ASTM B61	ASTM B271		SAE AMS4890
ASTM B62	ASTM B369		

Handle. Handle may be steel hot rolled or cold rolled in accordance with QQ-S-698 or a commonly accepted industry standard.

Protective coating.

- a. Brass: None.
- b. Steel:
  - (1) Cadmium in accordance with SAE-AMS-QQ-P-416, type II, class 2.
  - (2) Zinc in accordance with ASTM B633, type II, 12.7  $\mu\text{m}$  (50 microinches) minimum.

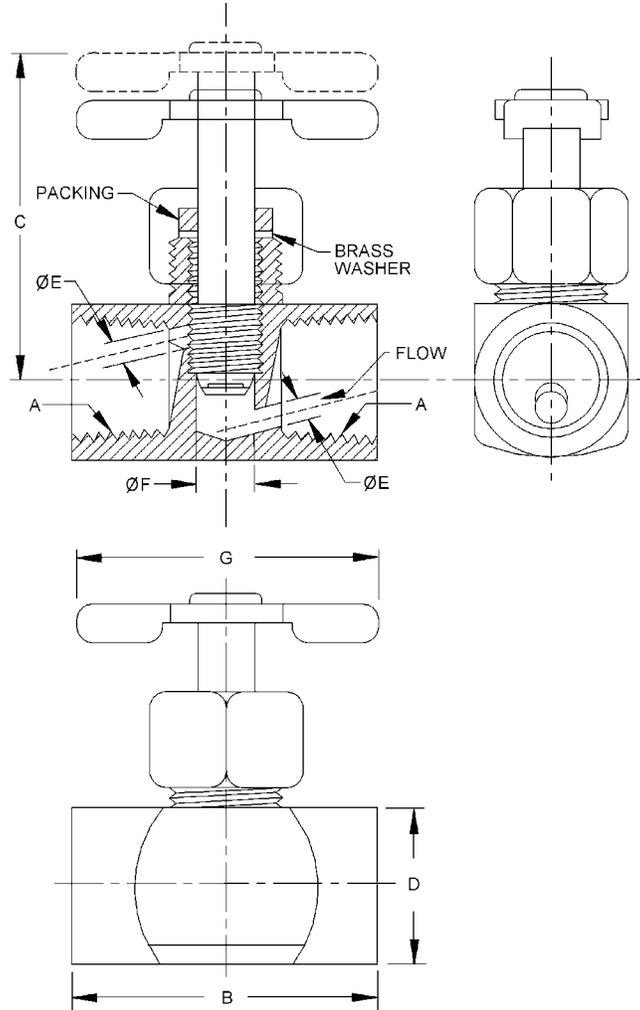
Caution:

Cadmium shall not be used in potable water or oxygen systems.  
Brass shall not have any lead contents.

Test pressures.

- a. Shell: 150 psig (10.3 bar).
- b. Seat: 50 psig (3.45 bar).

A-A-59440/7B



Dash number	Handle plating	A pipe thread NPTF-1	B max (mm)	C max (mm)	D diameter min (mm)	E diameter min (mm)	F diameter max (mm)	G max (mm)
030	Zinc	1/8-27	1.13 (28.7)	1.03 (26.1)	.50 (12.7)	.16 (4.0)	.19 (4.8)	1.39 (35.3)
031	Zinc	1/4-18	1.62 (41.1)	1.27 (32.3)	.69 (17.5)	.16 (4.0)	.19 (4.8)	1.39 (35.3)
032	Cadmium	1/8-27	1.13 (28.7)	1.03 (26.1)	.50 (12.7)	.16 (4.0)	.19 (4.8)	1.39 (35.3)
033	Cadmium	1/4-18	1.62 (41.1)	1.27 (32.3)	.69 (17.5)	.16 (4.0)	.19 (4.8)	1.39 (35.3)

FIGURE 1. Valve, plug, three way, threaded type.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are  $\pm 0.010$  inch (0.25 mm).
4. Measurement across flats of hexagonal wrench pad may be a standard measurement.
5. Flow of liquid should be toward the valve seat not toward the stem threads.

FIGURE 1. Valve, plug, three way, threaded type - Continued.

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification section for PIN format example.

Source of documents.

Commercial Item Description

A-A-59440 - Cock-Valves and Valves, General Requirements for

Federal Specification

QQ-S-698 - Steel, Sheet and Strip, Low Carbon

(Copies of these documents are available online at <https://assist.daps.dla.mil/quicksearch/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

Other Publications

ASME INTERNATIONAL

ASME B1.20.3 - DrySeal Pipe Threads

(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)

ASTM INTERNATIONAL

- ASTM B16/B16M - Free-Cutting Brass Rod, Bar and Shapes for use in Screw Machines
- ASTM B22 - Bronze Castings for Bridges and Turntables
- ASTM B30 - Copper Alloys in Ingot Form
- ASTM B36/B36M - Brass Plate, Sheet, Strip, and Rolled Bar
- ASTM B61 - Steam or Valve Bronze Castings
- ASTM B62 - Composition Bronze or Ounce Metal Castings
- ASTM B121/B121M - Leaded Brass Plate, Sheet, Strip, and Rolled Bar
- ASTM B124/B124M - Copper and Copper Alloy Forging Rod, Bar, and Shapes
- ASTM B148 - Aluminum-Bronze Sand Castings
- ASTM B176 - Copper-Alloy Die Castings
- ASTM B271 - Copper-Base Alloy Centrifugal Castings
- ASTM B369 - Copper-Nickel Alloy Castings
- ASTM B505/B505M - Copper Alloy Continuous Castings
- ASTM B584 - Copper Alloy Sand Castings for General Applications
- ASTM B633 - Electrodeposited Coatings of Zinc on Iron and Steel
- ASTM B763 - Copper Alloy Sand Castings for Valve Applications
- ASTM B770 - Copper-Beryllium Alloy Sand Castings for General Applications

(Copies of these documents are available online at <http://www.astm.org> or from the ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

SAE INTERNATIONAL

- SAE-AMS-QQ-P-416 - Plating, Cadmium (Electrodeposited)
- SAE AMS4845 - Tin Bronze Castings, Sand and Centrifugal  
87.5CU - 10SN - 2ZN as Cast
- SAE AMS4855 - Leaded Red Brass, Sand and Centrifugal Castings  
85CU - 5.0SN - 5.0PB - 5.0ZN as Cast
- SAE AMS4860 - Manganese Bronze, Sand and Centrifugal Castings  
58CU - 39ZN - 1.2FE - 1.0AL - 0.80MN as Cast
- SAE AMS4862 - Manganese Bronze, Sand and Centrifugal Castings  
63CU - 24ZN - 6.2AL - 3.8MN - 3.0FE High Strength, as Cast
- SAE AMS4890 - Copper-Beryllium Alloy Castings  
97CU - 2.1BE - 0.52CO - 0.28SI Solution Heat Treated (TBOO)

(Copies of these documents are available on line at [www.sae.org](http://www.sae.org) from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, and Tel: 877-606-7323 [inside USA and Canada] or 724-776-4970 [outside USA], email at [CustomerService@sae.org](mailto:CustomerService@sae.org).)

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>MFR's CAGE</u>	<u>MFR's name and address</u>
01276	Eaton Aeroquip Inc. 14615 Lone Oak Rd. Eden Prairie, MN 55344 952-294-2032/888-258-0222 <a href="mailto:jeffnoe@eaton.com">jeffnoe@eaton.com</a>
93061	Parker-Hannifin Corp Brass Products Division 300 Parker Drive Otsego, MI 49708-1472 260-636-2104 <a href="mailto:dwsanders@Parker.com">dwsanders@Parker.com</a>
20969	Essex Brass Corp 23500 Pinewood Warren, MI 48091-3122 586-757-8200 <a href="mailto:bpushman@essexbrass.com">bpushman@essexbrass.com</a>

Military standard (MS) supersession data. This CID replaces the following MS as shown in table I.

TABLE I. MS supersession data.

Dash number (see figure 1) AA59440/7	Superseded MS
030 Steel (zinc plated)	MS35934-1
031 Steel (zinc plated)	MS35934-2
032 Steel (Cadmium plated)	MS35934-1
033 Steel (Cadmium plated)	MS35934-2

1/ These parts were originally listed in MS35935 as a single part type. Due to special handling/disposal and corrosion resistance requirements the parts have been separated in this CID.

Part number P/N supersession data. These CID specification sheet PINs supersede the following MFR's P/N's as shown in table II. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE II. PIN supersession data.

Dash number (see figure 1) AA59440/7	MFR's CAGE	MFR's P/N 1/
030	01276	6800
031	01276	6805
032		
033		

1/ The manufacturer's P/N shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see marking paragraph of A-A-59440.

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

MILITARY INTERESTS:

Custodians:  
 Army - AR  
 Navy - SH  
 Air Force - 99  
 DLA - CC

Review activities:  
 Army - CR4, GL, MI  
 Navy- AS, MC, SA

CIVIL AGENCY AND COORDINATING ACTIVITIES:

GSA - FSS  
 Preparing activity:  
 DLA - CC

(Project 4820-2011-037)

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