INCH-POUND

A-A-59440/2B
21 May 2012
SUPERSEDING
A-A-59440/2A
23 May 2005

COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

COCK-VALVE, DRAIN, WITH HOSE BIB, 150 PSI, NON-FLAMMABLE LIQUID OR GAS, NPTF-1 THREADS

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

The complete requirements for procuring the cock-valve, drain, with hose bib, 150 psi, non-flammable liquid or gas, NPTF-1 threads described herein shall consist of this document and the issue in effect of A-A-59440.

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification sheet uses a classification system which is included in the PIN as shown in the following example (see NOTES).

AA59440	/02	-	002	Blank or C
CID number	Applicable CID spec sheet (two digits)		Dash number (see figure 1)	Handle plating (see figure 1)

SALIENT CHARACTERISTICS.

Interface and physical dimensions. Cock-valves, drain, with hose bib, 150 psi, non-flammable liquid or gas, NPTF-1 threads supplied to this CID specification sheet shall be as specified herein (see figure 1).

Sizes. Nominal sizes of 1/8 inch through 1/4 inch with NPTF-1 threads are covered by this CID.

Intended applications. These items are for use in non-flammable liquid or gas systems where pressures do not exceed 150 psig (10.34 bar) at 150°F (66°C).

Permissible variations in dimensions. Figure 1 lists the permissible variation in dimensions for each size. The external dimensions of the cock-valve should not limit procurement unless the end item applications restrict these dimensions.

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

Materials.

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

ASTM B16/B16M	ASTM B121/B121M	ASTM B427	SAE AMS4845
ASTM B22	ASTM B124/B124M	ASTM B505/B505M	SAE AMS4855
ASTM B30	ASTM B148	ASTM B584	SAE AMS4860
ASTM B36/B36M	ASTM B176	ASTM B763	SAE AMS4862
ASTM B61	ASTM B271	ASTM B770	SAE AMS4890
ASTM B62	ASTM B369	ASTM B806	

Carbon steel. Cast, forged, or machined carbon steel shall be in accordance with QQ-S-698.

Handle. Handle may be hot rolled or cold rolled steel conforming to QQ-S-698 or another commonly accepted industry standard.

Protective coating:

a. Brass: None.
b. Carbon 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 µm (50 microinches) minimum.

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

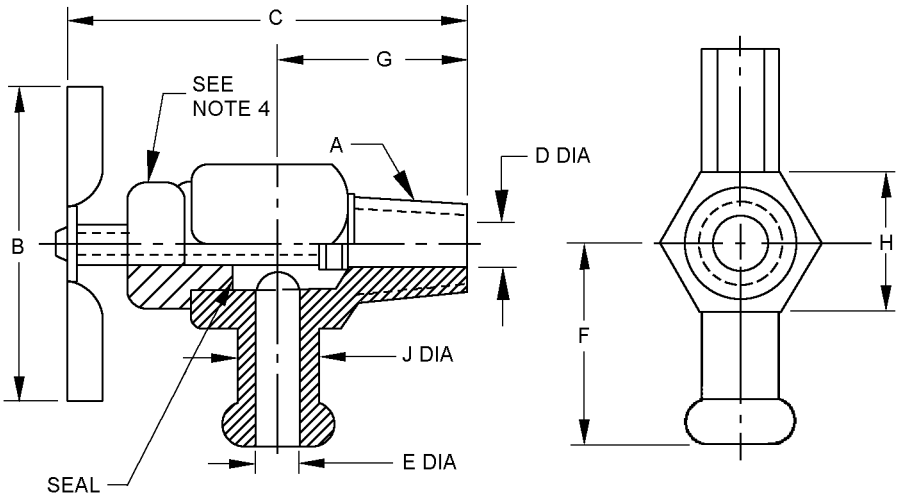
Test pressures:

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

Valve bodies. Valve bodies shall be provided with hexagonal wrenching surfaces.

Valve stem. Drain valves shall be designed to prevent the valve stem from being inadvertently removed.

Optional designs. Figure 1 is for identification purposes only and is not intended to restrict designs or shapes not dimensioned.



Dash No.	Handle plating	A pipe thread NPTF-1	B max (mm)	C open max (mm)	D diameter min	E diameter +.03 -.06 (+0.8 mm) (-1.5 mm)	F max (mm)	G max (mm)	H ±.015 (0.38 mm)	J diameter max (mm)
009	Zinc	1/8-27	1.38 (35.1)	1.88 (47.8)	.19 (4.8)	.25 (6.4)	.88 (22.4)	.78 (19.8)	.56 or .62 (14.2 or 15.7)	.34 (8.6)
009B	Brass									
009C	Cadmium									
010	Zinc	1/4-18	1.38 (35.1)	2.00 (50.8)	.22 (5.6)	.25 (6.4)	.88 (22.4)	.78 (19.8)	.56 or .62 (14.2 or 15.7)	.34 (8.6)
010B	Brass									
010C	Cadmium									

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are ±.010 inch (0.25 mm).
4. Diameter of hole shall be adequate to allow drainage through the valve.
5. Thread “A” shall be a modified NPTF-1, the effective NPTF-1 thread is shortened by one thread on the small end.

FIGURE 1. Dimensions and configuration cock-valve, drain, with hose bib.

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

FEDERAL SPECIFICATION

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

COMMERCIAL ITEM DESCRIPTION

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

(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

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 B427	-	Gear Bronze 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
ASTM B806	-	Copper Alloy Permanent Mold 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 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.)

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.)

MFR's CAGE	MFR's name and address
01276	Eaton Aeroquip Inc. 14615 Lone Oak Rd. Eden Prairie, MN 55344 952-294-2032/888-258-0222 jeffenoe@eaton.com
93061	Parker-Hannifin Corp Brass Products Division 300 Parker Drive Otsego, MI 49708-1472 260-636-2104 dwsanders@Parker.com

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

TABLE I. MS supersession data.

CID PIN 1/	Superseded MS
AA59440/1-009	MS35783-1
AA59440/2-009C	MS35783-1
AA59440/2-010	MS35783-2
AA59440/2-010C	MS35783-2

1/ These parts were originally listed in MS35783 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. P/N supersession data.

Dash number (see table I) AA59440/1	MFR's CAGE	MFR's P/N 1/
009	01276	131-16667
009C		
010	01276	131-16680
010C		

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.

National stock number (NSN). The following is a list of NSN's assigned which correspond to this CID specification sheet. The list in table III is for information only and may not be indicative of all possible NSN's associated with the CID specification sheet. For up to date information on assigned NSN's, please contact the aforementioned DLA Land and Maritime office listed in A-A-59440.

TABLE III. NSN's.

Dash number (see figure 1) AA59440/1	NSN
010	4820-00-845-1096

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 - AT, AV, CR4, MI
Navy– AS, MC, SA

CIVIL AGENCY AND COORDINATING ACTIVITIES:

GSA - FSS

Preparing activity

DLA - CC

(Project 4820-2011-032)

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.