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INCH-POUND

A-A-59440/18
5 December 2012

COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

VALVE, TRAP, STRAINER, STEAM

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

The complete requirements for procuring the valve, trap, strainer, steam 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	/18	-	120
CID number	Applicable CID spec sheet (two digits)		Dash number (see figure 1)

SALIENT CHARACTERISTICS.

Interface and physical dimensions. Valve, trap, strainer, steam supplied to this CID specification sheet shall be as specified herein (see figure 1).

Size. Nominal sizes of 1/4 inch through 1 inch with NPTF-1 threads.

Intended application. This item is for use in steam systems where pressures do not exceed 150 psig (10.3 bar) steam at 150°F (65.6°C) and the liquid is compatible with brass.

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

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

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

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Materials.

Preferred valve material. Preferred material is brass in accordance with ASTM B61.

Brass. Brass shall be in accordance with the following:

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		

Protective Coating. Brass: None.

Caution: Brass with lead contents shall not be used for potable water or oxygen systems.

Mounting. Mounting shall be horizontal.

Pressure. Working Pressure: 150 psi (10.3 bar).

Strainer.

a. Strainer shall be stainless steel.
b. Strainer mesh shall be 100 microns.

Test Pressures. Perform tests in accordance with A-A-59440 using API Standard 598.

a. Shell test pressure 275 psig (19.0 bar).
b. Certification of testing can be used in place of testing if procuring activity accepts.

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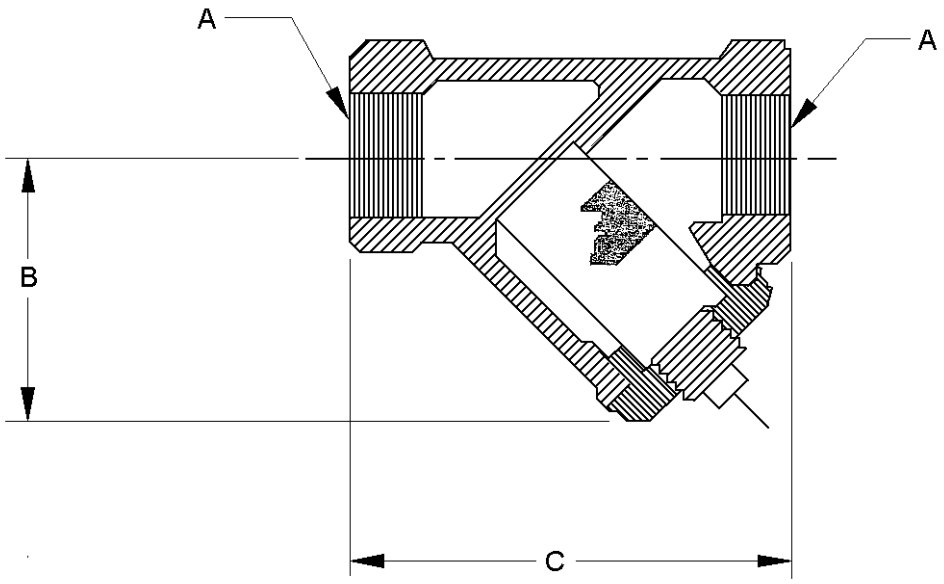

Dash number	Nominal pipe size	A Pipe tread, NPTF-1	B Ref	C Ref
120	1/4	1/4 - 18	1.75	2.25
121	3/8	3/8 - 18	1.75	2.25
122	1/2	1/2 - 14	1.75	2.50
123	3/4	3/4 - 14	2.00	3.00
124	1	1 – 11 1/2	2.38	3.00

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. Oval port having same cross sectional area is acceptable.
5. Measurements across flats of hexagonal wrench pad shall be a standard measurement.

FIGURE 1. Valve, trap, strainer, steam.

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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

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

American Petroleum Institute

API Standard 598 - Valve Inspection and Testing

(Copies of this document are available online at http://www.api.org/Standards/ or from American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005-4070, Tel: 202-682-8000.)

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 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.)

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SAE INTERNATIONAL

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.)

MILITARY INTERESTS:

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

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

CIVIL AGENCY AND COORDINATING ACTIVITIES:

GSA - FSS

Preparing activity:

DLA - CC

(Project 4820-2012-013)

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.dla.mil.