

[INCH-POUND]
A-A-59440
13 August 1999
SUPERSEDING
MIL-C-1203C
31 July 1973

COMMERCIAL ITEM DESCRIPTION

COCKS, DRAIN, COCKS, PLUG, AND COCKS, SHUTOFF, SCREW STEM

The General Services Administration has authorized the use of this Commercial Item Description (CID) for all federal agencies.

1. **SCOPE.** This CID covers the requirements for drain, plug, and shutoff cocks in nominal sizes of 1/8-inch through 2-inch. There are numerous applications for each type of cock, but primarily they are used to control the flow of liquids and gasses out of or between a variety of containers. The cocks covered in this CID and the CID Specification Sheets contained herein are intended for commercial/industrial applications.

2. **CLASSIFICATION.** The characteristics of the cocks are contained in the schematics and charts found in the CID specification sheet. The charts list the dash numbers that are included in the Part Identification Number (PIN) for the various styles of cocks (see 7.1).

3. SALIENT CHARACTERISTICS.

3.1 **General.** All cocks shall meet the requirements of this CID with respect to their individual illustrations, tables, and notes found in their respective CID specification sheet. Illustrations for the individual cocks in the CID specification sheets are for identification purposes only and not intended to restrict designs or shapes not dimensioned.

3.2 **Pressure Rating.** All cocks procured commercially shall meet the pounds per square inch (PSI) requirements according to the individual illustrations and notes found in their respective CID specification sheet unless otherwise specified by the contract or order (see 7.2). Example: 125 PSI in lieu of 150 PSI.

3.3 **Design and Construction.** Cocks supplied under this CID shall be made of the materials specified under the salient characteristics section of this CID and materials specified in the notes sections found in their respective CID specification sheet unless otherwise stated in the contract or order. The cock bodies shall be provided with hexagonal wrenching surfaces. Handles for the cocks shall be of the materials specified in their respective CID specification sheet unless otherwise stated in the contract or order, other handle materials shall be corrosion resistant, non-toxic materials in accordance with the manufacturer's standard practice. All cock threading shall be in accordance with ANSI B1.20.3 and ANSI B1.20.5. When specified, one or both end connections shall be of the compression type (see 7.2). When material for a part is not definitely specified, the material shall be of the type normally used by the manufacturer in cocks having the same body and pressure ratings as specified in their respective CID specification sheet. All parts of the end item shall be interchangeable with other items of the same model number. All replacement parts shall be interchangeable with their respective original parts.

Beneficial Comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Defense Supply Center, Columbus, ATTN: DSCC-VAI, 3990 East Broad Street, Columbus, OH 43216-5000, or telephone (614) 692-0538

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3.4 Plugs and Stems. Plugs and stems shall be made of the materials defined in their respective CID specification sheet unless otherwise stated in the contractor order. The ports in plugs shall be either round, oval or flat-way except that in no case shall the flow area through the port be less than the area of the adjacent flow passages. Spring-adjusted plugs shall be held tight against the seat by a spring made of phosphor bronze or tempered spring brass or in accordance with the notes sections found in their respective CID specification sheet. Screw-adjusted plugs shall be secured by means of a slotted-head brass screw, a brass nut, or in accordance with the notes sections found in their respective CID specification sheet, in such a manner as to eliminate the tendency of the screw or nut to be loosened by the operation of the plug. The fit of the screw or nut shall be sufficiently tight to prevent loosening by vibration.

3.5 Performance. The cocks shall close tightly to the extent that, when tested in accordance with the seat test pressure specified in their respective CID specification sheet, any internal leakage past the seat and, for spring key cocks, any external leakage at the plug stem shall not exceed two (2) cubic centimeters per hour. For cocks with screw stems and screw keys, there shall be no external leakage past the stem or plug at the specified seat test pressure in the notes sections of the respective CID specification sheet. The leakage limitations shall be attained with the plug or stem adjusted so that the maximum tangential force required to operate the cock will not exceed an amount produced by normal manual application without the use of extension levers or special tools or wrenches. The cock shall also be capable of being operated against the full working pressure applied to one side of the closed cock without the use of auxiliary levers or wrenches.

3.6 Size. The tables for the individual types of cocks found in their respective CID specification sheet list the permissible variation in dimensions for each individual illustration. The external dimensions of the cocks should not limit procurement unless the end applications restrict these dimensions. Aside from the external dimensions of the cocks, all other requirements shall remain in effect unless otherwise stated in the contract or order.

3.7 Finish. All surfaces of the cocks shall have the natural or machined finish normally produced by commercial manufacturing processes and techniques established as standard practice by the valve and fitting industry.

3.8 Marking. Cocks shall be marked with the manufacturer's name or identifying symbol.

4. REGULATORY REQUIREMENTS.

4.1 Recycled/Recovered Materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. QUALITY ASSURANCE PROVISIONS.

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

5.2 Market Acceptance. The following market acceptance criteria are necessary to document the quality of the product to be provided under this CID:

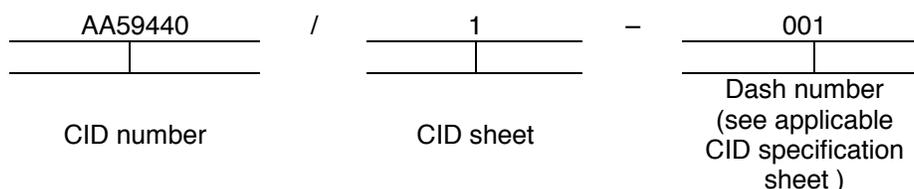
- a. The company producing the item must have been producing a product meeting the requirements of this CID for at least 5 years.
- b. The company must have an annual corporate sales volume over \$400,000.
- c. Average annual sales over the last 5 years of 2000 units that either entirely, or in part, meet the requirements of this CID.

6. PACKAGING.

6.1 Preservation, Packing, and Marking. Preservation, packing, and marking shall be as specified by the contract or order (see 7.2).

7. NOTES.

7.1 Parts Identification Number (PIN). The PIN should be used for Government purposes to buy commercial products conforming to the requirements of this CID. The part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor. The tables below the diagrams of the cocks give the dash numbers for the various styles. The following is an example of the PIN numbering system for CID A-A-59440:



7.2 Ordering Data. The contract or order should specify the following:

- a. CID document number, revision, and CID PIN
- b. Quality assurance provisions (see 5)
- c. Packaging requirements (see 6.1)
- d. When one or both end connections shall be of the compression type (see 3.3)
- e. Pressure rating required, if less than rating on relevant CID specification sheet (see 3.2)

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

Anderson Brass Company
1629 West Bobo Newsome Highway
P. O. Box 2558-T
Hartsville, SC 29550
Phone: (800) 476-9876

AWD MFG & Sales Company
291 E. Broad Street
P.O. Box 1057
Westerville, OH 54221-0487
Phone: (614) 890-7958

Case J I Company
700 State Street
Racine, WI 53404
Phone: (414) 636-7601

Conbraco Industries, Inc.
P.O. Box 247
Matthewes, NC 28106-0247
Phone: (704) 841-6135

Dana Corporation
Dana Weatherhead Division
1100 North Dana Avenue
Vinita, OK 74301
Phone: (918) 256-7571

Dayco Eastman Products
1440 N. 24th Street
P.O. Box 847
Manitowoc, WI 54221-0487
Phone: (920) 683-7061

Detroit Diesel
13400 W. Outer Drive
Redford, MI 48239-4001
Phone: (313) 592-5826

Essex Brass Corporation
P. O. Box 629-TR
Warren, MI 48090-0629
Phone: (810) 757-8200

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Legend Valve and Fitting Inc.
51180 Celeste Street
Shelby Township, MI 48315
Phone: (800) 752-2082

Lukenheimer Co.
P. O. Box 141451
Cincinnati, OH 45250
Phone: (513) 471-8258

McClung-Logan Equipment Company
8450 Quarry Road
Manassas, VA 20110
Phone: (703) 690-4340

Parker-Hannifin Corporation
Brass Products Division
300 Parker Drive
Otsego, MI 49708-1472
Phone: (616) 694-2531

Waukesha Engine Division
Dresser Industries Inc.
1000 W St. Paul Avenue
Waukesha, WI 53188
Phone: (414) 549-2998

7.4 Source of Documents.

7.4.1 The Federal Acquisition Regulation (FAR) is available from the Superintendent of Documents, Congressional Sales Office, U.S. Government Printing Office, Washington, DC 20402.

7.4.2 ANSI Standards can be obtained from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036.

7.4.3 ASTM Standards are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

7.4.4 SAE Standards are available from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.

7.5 Schematics and Charts of Cocks. The CID specification sheets provide schematics and dimensional charts for procurement purposes. The illustrations are for identification purposes only and not intended to restrict designs or shapes not dimensioned. Table I is a cross reference table which provides a tracking record starting with the NSN to the MS part number to the current CID PIN dash number to the commercial manufacturer and their part number.

7.6 Government Users. To acquire information on obtaining these cocks from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-VAI, 3990 East Broad Street, Columbus, OH 43216-5000, or telephone (614) 692-0538.

MILITARY INTERESTS:

Custodians:
Army - CR4
Air Force - 99
Navy - SH
DLA - CC

Review activities:
Army - CE, GL, MI
NAVY - MC
Air Force - 82

Civil Agency and Coordinating Activities:
GSA - FSS

Preparing activity:
DLA - CC

(Project 4820-0778-05)

Table 1
NSN/MS PART NUMBER/CID PIN EXTENSION/COMMERCIAL PART NUMBER TRACKING RECORD

COMPANY	MS SHEET	SPEC. SHEET	CID PIN EXT	Parker-Hannifin Corp.	Dayco Eastman Products	Anderson Brass Co.	Dana Corp.	McClung-Logan Equipment Co.	Waukesha Engine	Essex Brass Co.	Detroit Diesel	AWD MFG and Sales Co.	Case JI Co.	Combraco Industries Inc.	Lukentheimer Co.	Legend Valve and Fitting Inc.	Automatic Controls
4820-00-0884-0880	MS35782-1	A-A-59440/1	001	DC603-2	200-E	247V-J	131-10130		59129	DC100-1/8	72582	66044	10988	72219	37239	1BX/2	9K117
4820-00-1720-4488	MS35782-2	A-A-59440/1	002	DC603-4	201-E	247V-L	131-10370			DC100-1/4							
4820-00-174-0339	MS35782-3	A-A-59440/1	003	DC603-6	202-E	247V-N	131-10230		73413A								
4820-01-219-7933	MS35782-4	A-A-59440/1	004	DC604-2	320-E		131-10535	E0114981									
4820-00-752-0040	MS35782-5	A-A-59440/1	005	DC604-4	326E		131-10545	E0103847									
4820-00-849-1220	MS35782-6	A-A-59440/1	006	DC604-6	322-E		131-10270	E0118536									
4820-00-276-9041	MS35782-7	A-A-59440/1	007		323-E		131-10108										
4820-01-229-1725	MS35782-8	A-A-59440/1	008														
4820-00-275-2224	MS35783-1	A-A-59440/2	009		302-E		131-16667										
4820-00-845-1096	MS35783-2	A-A-59440/2	010		303-E		131-16680				148344	6660	A27862				
4820-00-555-9761	MS35784-1	A-A-59440/3	011	DC601-2	41-E	H30C-J				63							
4820-00-293-4268	MS35784-2	A-A-59440/3	012	DC601-4	42-E	H30C-L	134-96905										
4820-00-272-3346	MS35784-3	A-A-59440/3	013	DC601-6	43-E												
4820-00-826-2190	MS35785-1	A-A-59440/4	014											41-650-04	980 1/8		
4820-00-197-4984	MS35785-2	A-A-59440/4	015											41-660-04	980 1/4		
4820-00-061-4769	MS35785-3	A-A-59440/4	016											41-140-04	980 3/8		
4820-00-554-8391	MS35785-4	A-A-59440/4	017											41-150-04	980 1/2		
4820-00-921-3610	MS35785-5	A-A-59440/4	018											41-630-04	476 1/8		Penberthy Bronze Drain Cock Singel Male 1/8
4820-00-057-0694	MS35785-6	A-A-59440/4	019											41-640-04	476 1/4		Penberthy Bronze Drain Cock Singel Male 1/4
4820-00-410-1925	MS35785-7	A-A-59440/4	020											41-080-04	476 3/8		Penberthy Bronze Drain Cock Singel Male 3/8
4820-00-272-3332	MS35787-1	A-A-59440/5	021											41-290-04	479 1/8		
4820-01-193-0255	MS35787-2	A-A-59440/5	022											41-300-04	479 1/4		
4820-01-422-2608	MS35787-3	A-A-59440/5	023											41-320-04			
4820-00-272-3335	MS35787-4	A-A-59440/5	024														
4820-00-272-3335	MS35787-5	A-A-59440/5	025														
4820-00-449-0491	MS35787-6	A-A-59440/5	026														
4820-00-539-9224	MS35932-1	A-A-59440/6	027	V406P-4	108-HD-02	210C-J											
4820-00-539-9224	MS35932-2	A-A-59440/6	028	V406P-4	108-HD-03	210C-L	134-96749										
4820-00-821-4863	MS35932-3	A-A-59440/6	029		108-HD-06	210C-N	134-96709										
4820-00-541-3541	MS35934-1	A-A-59440/7	030	NV109P-2	394-C-02	V1B2-J	131-56800								1178 1/8		
4820-00-865-6946	MS35934-2	A-A-59440/7	031	NV109P-4	394-C-04	V1B2-L	131-56805								1178 1/4		
4820-01-068-2983	MS35934-3	A-A-59440/8	032	V403P-2-2		H132C-J									1037-1/8		
4820-00-277-1765	MS35934-4	A-A-59440/8	033	V403P-4-4		H132C-L									1037-1/4		
4820-01-011-4087	MS35934-5	A-A-59440/8	034	V403P-6-6		132C-N									1037-1/2		
4820-00-448-5221	MS35934-6	A-A-59440/8	035			132C-P									1037-1/2		
4820-00-629-0871	MS35934-7	A-A-59440/9	036			362BV-J	8804								1177-1/8		
4820-00-263-3019	MS35934-8	A-A-59440/9	037	XV502SS-4-20		362BV-L	8809								1177-1/4		
4820-00-272-3354	MS35934-9	A-A-59440/9	038	XV502SS-6-20											1177-3/8		