

INCH-POUND

MS17243D  
18 November 2004  
SUPERSEDING  
MS17243C  
13 April 1978

DETAIL SPECIFICATION SHEET

VALVES, ANGLE, SHUT-OFF,  
PACKED, RECEIVER, REFRIGERANT-12

Inactive for new design after  
1 June 1998.

This specification is approved for use by all Departments and  
Agencies of the Department of Defense.

The requirements for acquiring the product described shall consist of this specification.

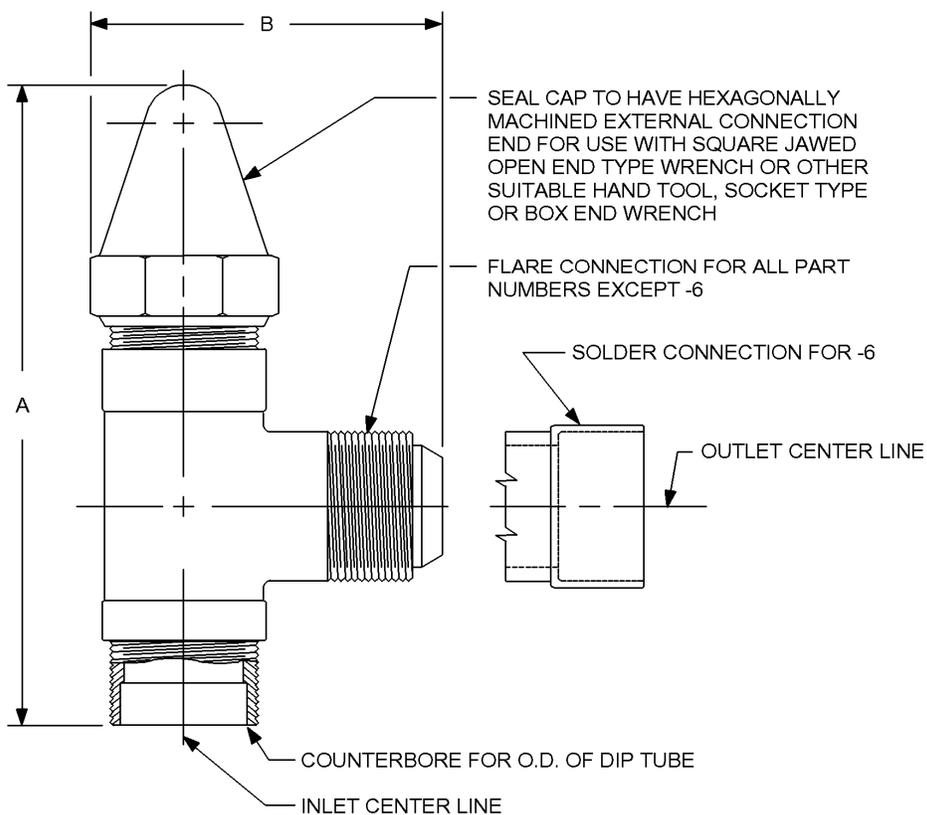


FIGURE 1. Angle shut-off receiver valve, Refrigerant-12.

## MS17243D

TABLE I. Valve dimensions.

Dash number	Size inlet NPT	Size outlet		A max (mm)	B max (mm)
		O.D. flare	O.D. solder		
-1	1/4	1/4	-	3.625 (92.08)	1.625 (41.28)
-2	3/8	3/8	-	4.000 (101.60)	2.000 (50.80)
-3	3/8	1/2	-	4.2509 (107.98)	2.000 (50.80)
-4	1/2	1/2	-	4.500 (114.30)	2.250 (57.15)
-5	1/2	5/8	-	5.000 (127.00)	2.500 (63.50)
-6	3/4	-	7/8	6.000 (152.40)	2.750 (69.85)
-7	1/2	3/8	-	4.500 (114.30)	2.250 (57.15)

## NOTES:

1. Dimensions are in inches.
2. Metrics are given for general information only.

## REQUIREMENTS

Intended use. Valves covered in this specification are intended for use in a refrigerating system as a means of shutting off the system's charge of refrigerant and containing it in the liquid receiver or condenser receiver.

Materials. Valve body and seal cap - brass or steel.  
Ring gasket - soft copper.  
Valve stem (including integral plug) - commercial bronze or steel treated to resist corrosion.

Operating conditions. Maximum operating pressure: 350 psig.  
Maximum operating temperature: 200°F.

Connection ends. Inlet - Male pipe thread in accordance with SAE-J513.  
Outlet (all except -6) - Flare tube male thread in accordance with SAE-J513.  
Outlet (-6 only) - Solder tube female socket in accordance with ASME B16.22 for O.D. tube size 7/8 inch.

Type. Angle, packed, back-seating or non-back-seating key-operated plug element, with gasketed seal cap, valve stem shank to be 3/16, 1/4, or 5/16 inch square shape.

Identification of product. The Part or Identifying Number (PIN) for the valve consists of the MS number plus the dash number. Example: MS17243-1.

Standard product. Valves delivered under this specification shall be the manufacturer's standard commercial catalog product, except for any modifications and additional requirements specified herein.

## MS17243D

**Design and construction.** The valves shall be of the angle, packed, back-seating, or nonbackseating type with a gasketed seal cap. A wrench grip shall be provided on each valve. Threads and the seating surface of the flare connection shall be protected with plastic caps or by other means to prevent damage during handling.

**Finish.** Finish shall be the manufacturer's standard commercial finish.

**Marking.** The manufacturer's standard identification and other data standard with the manufacturer shall be placed on all valves. Unmarked valves will be accepted where the manufacturer's standard practice does not require marking.

**Workmanship.** All parts of the finished valves shall be clean and free from pits, sprues, scale, flux or extraneous material. External surfaces shall be free from burrs and sharp edges. Passages shall be clean and free from pits, sprues, scale, flux and foreign material.

**Angle valve leak test.** The angle valve, with the seat open and the discharge end blocked, shall be submerged in water and a pressure of 350 pound-per-square-inch gage pressure of air shall be applied to the intake to check for body leakage. The pressure shall be released and the seat closed and the discharge end unblocked. The valve shall be submerged in water again and the same pressure applied. Any leakage through the body or by the seat shall be cause for failure of this test.

**Order of precedence.** For design feature purposes, this standard takes precedence over procurement documents referenced herein.

**Note.** The procurement specification, MIL-V-22854, was cancelled without replacement on 16 February 1993.

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

**Referenced documents.** This document references following:

ASME B16.22  
SAE-J513

## CONCLUDING MATERIAL

**Custodians:**  
Army – GL  
Navy – SH  
Air Force – 99  
DLA – CC

**Preparing activity:**  
DLA - CC  
(Project 4820-0863-000)

**Review activities:**  
Army – AT, CR4  
Navy – MC, SA, YD  
Air Force - 71

**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 <http://assist.daps.dla.mil>.