

INCH-POUND

MS21430B
 9 February 2009
 SUPERSEDING
 MS21430A
 6 December 1977

DETAIL SPECIFICATION SHEET

VALVE, CHECK, FUEL AND AIR,
 POPPET TYPE, ZERO, LEAK

Inactive for new design after
 15 October 1998.

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

The requirements for acquiring the product described herein shall consist of this specification sheet and
 MIL-V-7899, "Valve, Check, Aircraft Fuel System".

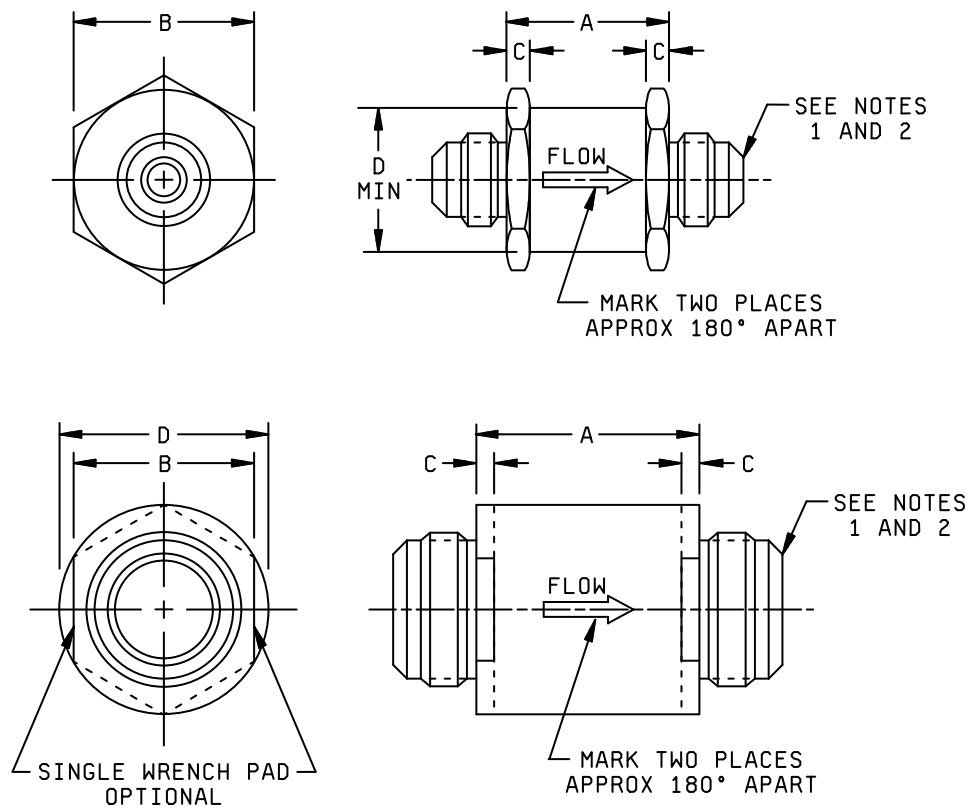


FIGURE 1. Check valve.

MS21430B

Dash number size	Tubing O.D. (nominal)		A ±.030 inch (±.762 mm)		B ±.015 inch (±.381 mm)		C min		D dia max	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
-4	.250	6.35	1.34	34.036	1.000	25.40	.215	5.461	1.005	25.527
-6	.375	9.525	1.50	38.10	1.062	26.975	.215	5.461	1.065	27.051
-8	.500	12.70	1.56	39.624	1.250	31.75	.265	6.731	1.255	31.877
-10	.625	15.875	1.56	39.624	1.250	31.75	.265	6.731	1.255	31.877
-12	.750	19.050	2.06	52.324	1.500	38.10	.265	6.731	1.505	38.227
-16	1.000	25.40	2.37	60.198	1.875	47.625	.275	6.985	1.875	47.625
-20	1.250	31.75	2.69	68.326	2.500	63.5	.325	8.255	2.505	63.627
-24	1.500	38.10	3.05	77.470	2.750	69.85	.395	10.033	2.755	69.977
-32	2.000	50.80	3.80	96.52	3.125	79.375	.395	10.033	3.500	88.9

NOTES:

1. Dimensions are in inches. Millimeters are given for general information only.
2. Style 1 - Both ends in accordance with SAE AS4395, Style E, except hex.
3. Style 2 - Inlet end in accordance with SAE AS4396, Style E, except hex, and outlet end in accordance with SAE AS4395, Style E, except hex.
4. Remove all burrs and break sharp edges (.016 inch (.406 mm) maximum).
5. Referenced documents shall be of the issue in effect on date of invitation for bid.
6. Unless otherwise noted, tolerances are ± .010 inch (± .254 mm).

FIGURE 1. Check valve - Continued.

Class	Low temperature fuel and ambient		High temperature			
			Fuel		Ambient	
A	-55°C	(-67°F)	57°C	(135°F)	71°C	(160°F)
B	-55°C	(-67°F)	94°C	(200°F)	177°C	(350°F)
C	-55°C	(-67°F)	150°C	(300°F)	315°C	(600°F)

TABLE I. Valve Classification.

MS21430B

REQUIREMENTS

Intended use. These low pressure check valves are suitable for use with hydrocarbon fuels, fuel vapors, and air.

Materials. Materials shall comply to requirements listed in the procurement specification, MIL-V-7899.

Finish. Finish shall comply to requirements listed in the procurement specification, MIL-V-7899.

Qualification. Check valves furnished under this specification shall be products which are qualified for listing on qualified products list QPL-7899.

Locking of parts. Threaded parts shall be locked or safe-tied in accordance with National Aerospace Standard NASM 33540, "General Practices for Safety Wiring, Safety Cabling, and Cotter Pinning". Safety cable is allowed as an alternate to safety wire. Self-locking nuts shall not be used where loosening or disengagement could result in the nut or other parts entering the fuel system. The use of lockwashers or staking is prohibited.

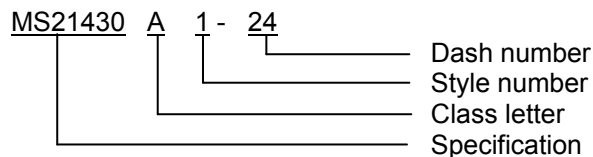
Marking. The valve assembly shall be marked in accordance with MIL-STD-130, "Identification Marking of U.S. Military Property". The information should contain at least the following:

- (1) Valve, Check.
- (2) MS part number .
- (3) Manufacturer's part number.
- (4) Manufacturer's name or trade mark.

Valve characteristic: See figure 1.

Valve classification: See table I.

Part or Identifying Number (PIN). The PIN is as follows:



Note: MIL-V-7899, "Valve, Check, Aircraft Fuel System", is the procurement specification.

Reference documents. This document references the following:

MIL-V-7899, "Valve, Check, Aircraft Fuel System".

MIL-STD-130, "Identification Marking of U.S. Military Property".

NASM 33540, "Safety Wiring, Safety Cabling, for Cotter Pinning, General Practices for".

SAE AS4395, "Fitting End, Flared, Tube Connection, Design Standard".

SAE AS4396, "Fitting End, Bulkhead, Flared, Tube Connection, Design Standard".

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

MS21430B

Custodians:

Army – AV
Navy - AS
Air Force - 99

Preparing activity:

DLA - CC

(Project 4820-2008-006)

Reviewer activities:

Army – CR4, MI
Air Force - 71

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