

INCH-POUND

MS28884F  
 2 April 2009  
 SUPERSEDING  
 MS28884E  
 10 January 1977

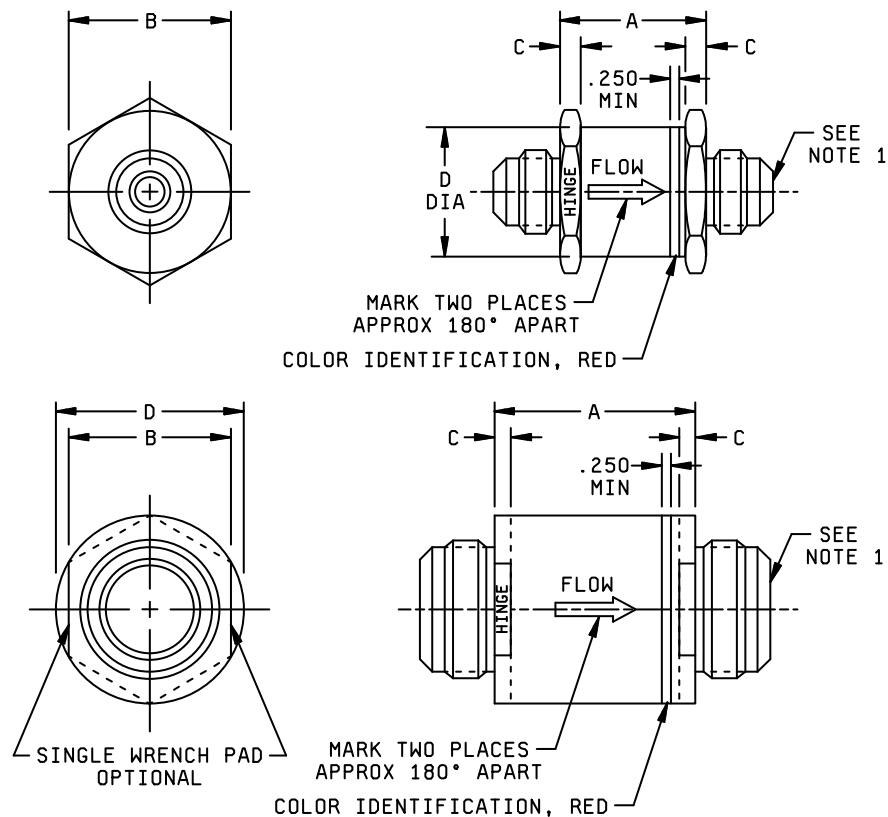
## DETAIL SPECIFICATION SHEET

VALVE, FUEL CHECK, LOW PRESSURE,  
FLARED TUBE CONNECTION

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, "Valves, Check, Aircraft Fuel System".

FIGURE 1. Check valve.

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Dash number size	Tubing O.D. (nominal)		A ±.031 inch (±.787 mm)		B (for tolerances see note 3)		C min		D dia max	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
-4	.250	6.35	1.563	39.700	1.063	27.000	.125	3.175	1.066	27.076
-6	.375	9.525	1.563	39.700	1.063	27.000	.125	3.175	1.066	27.076
-8	.500	12.70	1.674	42.520	1.187	30.150	.125	3.175	1.190	30.226
-10	.625	15.875	1.782	45.263	1.187	30.150	.250	6.35	1.253	31.826
-12	.750	19.050	2.063	52.400	1.500	38.100	.250	6.35	1.503	38.176
-16	1.000	25.40	2.375	60.325	1.812	46.025	.250	6.35	1.820	46.228
-20	1.250	31.75	2.688	68.275	2.500	63.500	.312	7.925	2.508	63.703
-24	1.500	38.10	3.063	77.800	2.750	69.850	.375	9.525	2.758	70.053
-32	2.000	50.80	3.813	96.850	3.125	79.375	.312	7.925	3.500	88.900

## NOTES:

- Both ends in accordance with SAE AS4395, "Fitting End, Flared, Tube Connection, Design Standard", style E for applicable tube size, except hex.
- Dimensions are in inches. Millimeters are given for general information only.
- Tolerances for B dimension are as shown below:

Dash number size	B (tolerance)	B (tolerance)
	Inch	mm
-4, -6, -8, -10, -12	+0.003 -0.006	(+.076) (-.152)
-16, -20, -24	+0.008 -0.016	(+.203) (-.406)
-32	± .010	(± .254)

- The marking "hinge" is applicable only to swing type check valves.
- Remove all burrs and break sharp edges (.016 inch (.406 mm) maximum).
- Referenced documents shall be of the issue in effect on date of invitation for bid.
- For design features, this standard takes precedence over procurement documents referenced herein.
- Unless otherwise noted, tolerances are ± .010 inch (± .254 mm).

FIGURE 1. Check valve - Continued.

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TABLE I. Valve classification.

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)

## 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 sheet shall be products which are qualified for listing on Qualified Products List, QPL-7899. An online listing of products qualified to this specification may be found in the Qualified Products Database (QPD) at <http://assist.daps.dla.mil/quicksearch/> or <http://assist.daps.dla.mil>.

Locking of parts. Threaded parts shall be locked or safe-tied in accordance with National Aerospace Standard NASM 33540, "Safety Wiring, Safety Cabling, Cotter Pinning, General Practices for". 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:

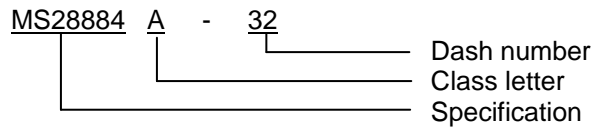
- (1) Valve, Check.
- (2) MS part number.
- (3) Manufacturer's part number.
- (4) Manufacturer's name or trade mark.

Valve characteristic: See figure 1.

Valve classification: See table I.

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



Reference documents. This document references the following:

MIL-V-7899, "Valves, Check, Aircraft Fuel System".  
MIL-STD-130, "Identification Marking of U.S. Military Property".  
NASM 33540, "Safety Wiring, Safety Cabling, Cotter Pinning, General Practices for".  
SAE AS4395, "Fitting End, 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.

Custodians:  
Army – AV  
Navy - AS  
Air Force - 99  
DLA - CC

Preparing activity:  
DLA - CC

(Project 4820-2009-013)

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://assist.daps.dla.mil/quicksearch/> or <http://www.assist.daps.dla.mil> .