

MILITARY SPECIFICATION SHEET

FITTINGS, HYDRAULIC TUBE, FLARED 37 DEGREE AND FLARELESS, STEEL;  
ADAPTER, STRAIGHT, TUBE TO BOSS, O-RING, 37 DEGREE FLARED

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 the issue of the following specification listed in that  
issue of the Department of Defense Index of Specifications and Standards (DoDISS)  
specified in the solicitation: MIL-F-18866.

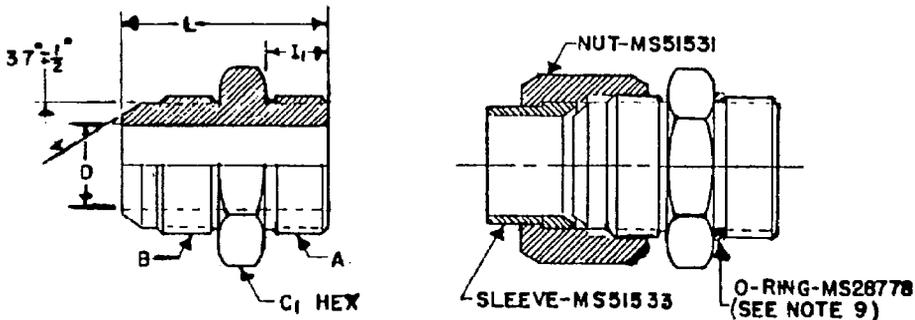


FIGURE 1. Adapter, Tube to Boss, O-Ring, Flared.

Ⓑ Denotes change

TABLE I. Dimensional data.

(B)

DASH NUMBER		TUBE O.D. NOM	A	B	C <sub>1</sub>	D		I <sub>1</sub>	L
BODY	ASSY		STRAIGHT THREAD	STRAIGHT THREAD	HEX FLAT NOM	DIAMETER		+/- .005	+/- .020
						BASIC	TOLERANCE		
B2	A2	1/8	.3125-24 UNF-2A	.3125-24 UNF-2A	7/16	.062		.297	1.060
B3	A3	3/16	.3750-24 UNF-2A	.3750-24 UNF-2A	1/2	.125		.297	1.100
B4	A4	1/4	.4375-20 UNF-2A	.4375-20 UNF-2A	9/16	.172		.360	1.230
**B4-5	**A4-5	1/4	.5000-20 UNF-2A	.4375-20 UNF-2A	5/8	.172	+/- .003	.360	1.230
**B4-6	**A4-6	1/4	.5625-18 UNF-2A	.4375-20 UNF-2A	11/16	.172		.391	1.290
B5	A5	5/16	.5000-20 UNF-2A	.5000-20 UNF-2A	5/8	.234		.360	1.230
B6	A6	3/8	.5625-18 UNF-2A	.5625-18 UNF-2A	11/16	.297		.391	1.300
**B6-8	**A6-8	3/8	.7500-16 UNF-2A	.5625-18 UNF-2A	7/8	.297		.438	1.380
B8	A8	1/2	.7500-16 UNF-2A	.7500-16 UNF-2A	7/8	.391		.438	1.480
**B8-10	**A8-10	1/2	.8750-14 UNF-2A	.7500-16 UNF-2A	1	.391	+/- .004	.500	1.600
**B8-12	**A8-12	1/2	1.0625-12 UN-2A	.7500-16 UNF-2A	1-1/4	.391		.594	1.760
B10	A10	5/8	.8750-14 UNF-2A	.8750-14 UNF-2A	1	.484		.500	1.700
**B10-12	**A10-12	5/8	1.0625-12 UN-2A	.8750-14 UNF-2A	1-1/4	.484		.594	1.860
B12	A12	3/4	1.0625-12 UN-2A	1.0625-12 UN-2A	1-1/4	.609		.594	1.970
**B12-16	**A12-16	3/4	1.3125-12 UN-2A	1.0625-12 UN-2A	1-1/2	.609	+/- .005	.594	1.990
B14	A14	7/8	1.1875-12 UN-2A	1.1875-12 UN-2A	1-3/8	.718		.594	1.990
**B14-16	**A14-16	7/8	1.3125-12 UN-2A	1.1875-12 UN-2A	1-1/2	.718		.594	2.020
B16	A16	1	1.3125-12 UN-2A	1.3125-12 UN-2A	1-1/2	.844		.594	2.040
**B16-12	**A16-12	1	1.0625-12 UN-2A	1.3125-12 UN-2A	1-3/8	.844	+ .007/- .005	.594	2.040
**B16-20	**B16-20	1	1.6250-12 UN-2A	1.3125-12 UN-2A	1-7/8	.844		.594	2.120
B20	A20	1-1/4	1.6250-12 UN-2A	1.6250-12 UN-2A	1-7/8	1.078		.594	2.170
B24	A24	1-1/2	1.8750-12 UN-2A	1.8750-12 UN-2A	2-1/8	1.312	+ .008/- .005	.594	2.370
B32	A32	2	2.5000-12 UN-2A	2.5000-12 UN-2A	2-3/4	1.781	+ .010/- .005	.594	2.780

\*\*Not recommended for new design

#### REQUIREMENTS:

- MATERIAL:** Steel, carbon in accordance with procurement specification.  
Steel, corrosion-resisting in accordance with procurement specification.
- PROTECTIVE COATING:** Cadmium plated in accordance with procurement specification. Zinc plated in accordance with procurement specification. Phosphate coated in accordance with procurement specification. Passivation treatment in accordance with procurement specification.
- DIMENSIONS AND TOLERANCES:** Dimensions and tolerances not shown shall be in accordance with the SAE standards for 37-degree flared fittings (SAE J514).
- THREADS:** Threads shall be in accordance with Screw-Thread Standards for Federal Services, FED-STD-H28.

(B)

5. PART NUMBER: The MS part number consists of the MS number plus the dash number.
- For body only, cadmium plated, use the MS number, plus the body dash number. Example: MS51525B2.
  - For complete assembly (with nut and sleeve), cadmium plated, use the MS number, plus the assembly dash number. Example: MS51525A2.
  - For zinc coating add (Z) to the dash number. Example: MS51525B2Z or MS51525A2Z.
  - For phosphate coating add (P) to the dash number. Example: MS51525B2P or MS51525A2P.
  - For corrosion-resisting steel add (S) to the dash number. Example: MS51525B2S or MS51525A2S.
6. The illustration is for identification purposes only and is not intended to restrict designs or shapes not dimensioned.
- \*7. Procure the O-ring separately and install immediately before installation of the fittings.
8. After 17 January 1979 bodies will be used for production only and SHALL NOT be stocked for maintenance. Existing stock of bodies should be used until depleted.
9. In the event of a conflict between the text of this Military Specification Sheet and the reference cited herein, the text of this Military Specification Sheet shall take precedence.
10. Referenced Government (or non-Government) documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this Military Specification Sheet to the extent specified herein.

## CUSTODIAN:

② AIR FORCE - 99  
NAVY - OS

PREPARING ACTIVITY:  
ARMY - AR

## REVIEW ACTIVITIES:

② AIR FORCE - 82  
ARMY - ER, ME  
DLA-CS

AGENT:  
DLA-CS

## USER ACTIVITIES:

ARMY - AT  
NAVY - MC, YD

(PROJECT 4730-0910)