

MS51530B  
 16 FEBRUARY 1988  
 SUPERSEDING  
 MS51530A  
 17 January 1979

# MILITARY SPECIFICATION SHEET

FITTINGS, HYDRAULIC TUBE, FLARED, 37 DEGREE AND FLARELESS, STEEL;  
 TEE, TUBE TO BOSS, BOSS ON RUN, 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.

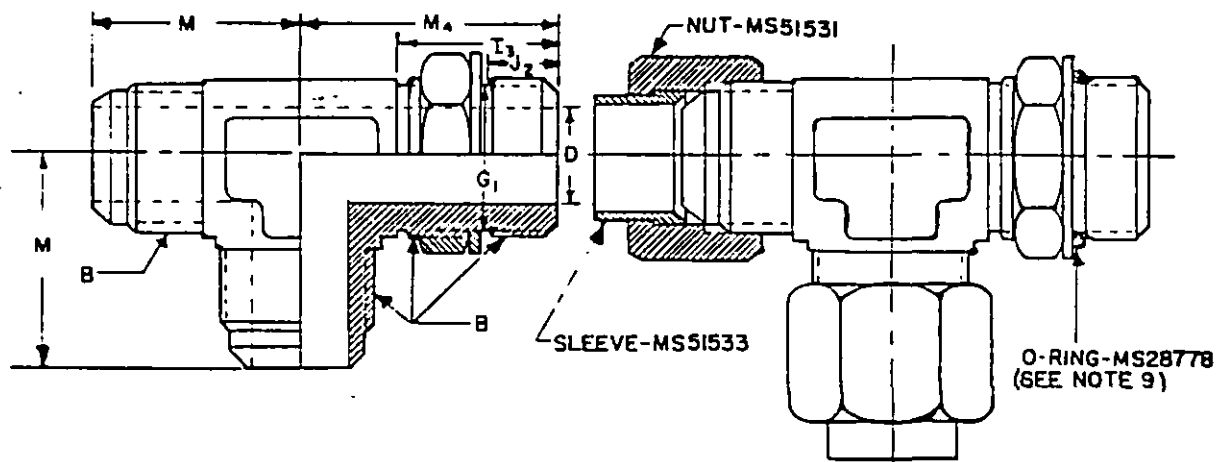


FIGURE 1. Elbow, Tube to Boss, Boss on Run, O-Ring, Flared.

Ⓑ Denotes change

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TABLE I. Dimensional data.

| DASH<br>NUMBER |       | TURE<br>O.D.<br>NOM | B               | D        |              | G <sub>1</sub> | I <sub>3</sub> | J <sub>2</sub>             | M        | M <sub>2</sub> |
|----------------|-------|---------------------|-----------------|----------|--------------|----------------|----------------|----------------------------|----------|----------------|
| BODY           | *ASSY |                     | STRAIGHT THREAD | DIAMETER |              | +.002<br>-.003 |                | FULL<br>THREAD<br>+/- .005 | +/- .030 | +/- .030       |
|                |       |                     |                 | BASIC    | TOLERANCE    |                |                |                            |          |                |
| R2             | A2    | 1/8                 | .3125-24 UNF-2A | .062     | +/- .003     | .250           | .610           | .234                       | .770     | .910           |
| B3             | A3    | 3/16                | .3750-24 UNF-2A | .125     |              | .313           | .610           | .234                       | .830     | .940           |
| B4             | A4    | 1/4                 | .4375-20 UNF-2A | .172     |              | .364           | .700           | .281                       | .890     | 1.030          |
| B5             | A5    | 5/16                | .5000-20 UNF-2A | .234     |              | .427           | .700           | .281                       | .950     | 1.090          |
| B6             | A6    | 3/8                 | .5625-18 UNF-2A | .297     | +/- .004     | .482           | .770           | .312                       | 1.060    | 1.250          |
| B8             | A8    | 1/2                 | .7500-16 UNF-2A | .391     |              | .660           | .880           | .344                       | 1.250    | 1.450          |
| B10            | A10   | 5/8                 | .8750-14 UNF-2A | .484     |              | .773           | 1.020          | .391                       | 1.450    | 1.700          |
| B12            | A12   | 3/4                 | 1.0625-12 UN-2A | .609     |              | .945           | 1.160          | .469                       | 1.660    | 1.940          |
|                |       |                     |                 |          | +/- .005     |                |                |                            |          |                |
| B14            | A14   | 7/8                 | 1.1875-12 UN-2A | .718     | +.007/- .005 | 1.070          | 1.160          | .469                       | 1.730    | 2.000          |
| B16            | A16   | 1                   | 1.3125-12 UN-2A | .844     |              | 1.195          | 1.160          | .469                       | 1.810    | 2.050          |
| B20            | A20   | 1-1/4               | 1.6250-12 UN-2A | 1.078    | +.008/- .005 | 1.507          | 1.160          | .469                       | 2.060    | 2.250          |
| B24            | A24   | 1-1/2               | 1.8750-12 UN-2A | 1.312    |              | 1.756          | 1.160          | .469                       | 2.330    | 2.390          |
| B32            | A32   | 2                   | 2.5000-12 UN-2A | 1.781    | +.010/- .005 | 2.381          | 1.160          | .469                       | 2.060    | 2.890          |

## REQUIREMENTS:

1. MATERIAL: Steel, carbon in accordance with procurement specification.  
Steel, corrosion-resisting in accordance with procurement specification.
2. PROTECTIVE COATING: Cadmium plated in accordance with procurement specification. Zinc plated in accordance with procurement specification. (B) Phosphate coated in accordance with procurement specification. (A phosphate coated locknut with cadmium or zinc plated body is acceptable.) Passivation treatment in accordance with procurement specification.
3. DIMENSIONS AND TOLERANCES: Dimensions and tolerances not shown shall be in accordance with the SAE standards for 37-degree flared fittings (SAE J514).
- (B) 4. THREADS: Threads shall be in accordance with Screw-Thread Standards for Federal Services. FED-STD-H28.
5. PART NUMBER: The MS part number consists of the MS number plus the dash number.
  - a. For body only, cadmium plated, use the MS number, plus the body dash number. Example: MS51530B2.
  - b. For complete assembly (with nut and sleeve), cadmium plated, use the MS number, plus the assembly dash number. Example: MS51530A2.
  - c. For zinc coating add (Z) to the dash number. Example: MS51530B2Z or MS51530A2Z.

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- d. For phosphate coating add (P) to the dash number. Example: MS51530B2P or MS51530A2P.
- e. For corrosion-resisting steel add (S) to the dash number. Example: MS51530B2S or MS51530BA2S.
- 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 fitting.
- 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:

- ⑧ AIR FORCE - 99
- NAVY - OS

PREPARING ACTIVITY:  
ARMY - AR

## REVIEW ACTIVITIES:

- ⑧ AIR FORCE - 82
- ARMY - ER, ME
- DLA-CS

AGENT:  
DLA-CS

## USER ACTIVITIES:

- ARMY - AT
- NAVY - MC, YD

(PROJECT 4730-0914)