

MS51890A  
 16 FEBRUARY 1988  
 SUPERSEDING  
 MS51890  
 25 April 1975

MILITARY SPECIFICATION SHEET

FITTINGS, HYDRAULIC TUBE, FLARED 37 DEGREE AND FLARELESS, STEEL;  
 CAP ASSEMBLY, TUBE, FLARELESS TYPE, HYDRAULIC

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.

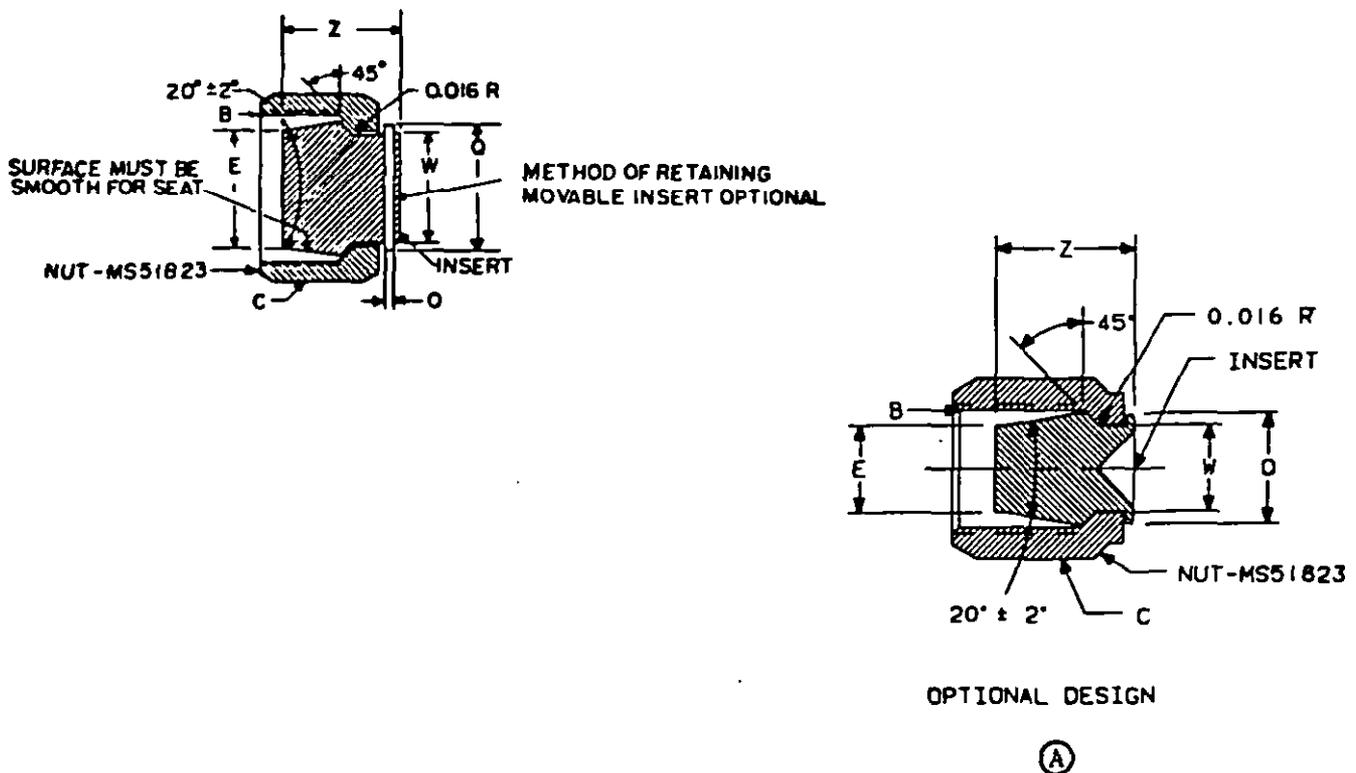


FIGURE 1. Cap Assembly, Tube, Flareless, Hydraulic.

Ⓐ Denotes change

## MS51890A

TABLE I. Dimensional Data

(A)

DASH NUMBER	TUBE O.D. NOM	B STRAIGHT THREAD CLASS 2B	C HEX FLAT NOM	E DIAMETER +0.005 -0.000	O THICKNESS +/-0.016	Q MAX	W DIAMETER +0.004 -0.000	Z LENGTH +/-0.09
1	1/8	.3125-24 UNF-2A	3/8	0.126	0.05	0.25	0.125	0.49
2	3/16	.3750-24 UNF-2A	7/16	0.187	0.05	0.25	0.181	0.57
3	1/4	.4375-20 UNF-2A	9/16	0.252	0.05	0.38	0.246	0.64
4	5/16	.5000-20 UNF-2A	5/8	0.315	0.05	0.50	0.310	0.66
5	3/8	.5625-18 UNF-2A	11/16	0.377	0.05	0.50	0.372	0.68
6	1/2	.7500-16 UNF-2A	7/8	0.503	0.06	0.62	0.498	0.84
7	5/8	.8750-14 UNF-2A	1	0.630	0.06	0.75	0.625	0.85
8	3/4	1.0625-12 UN-2A	1-1/4	0.755	0.06	0.88	0.750	0.84
9	7/8	1.1875-12 UN-2A	1-3/8	0.875	0.06	1.00	0.875	0.87
10	1	1.3125-12 UN-2A	1-1/2	1.005	0.09	1.25	1.000	0.99
11	1-1/4	1.6250-12 UN-2A	2	1.257	0.12	1.50	1.250	1.10
12	1-1/2	1.8750-12 UN-2A	2-1/4	1.507	0.16	1.75	1.500	1.21
13	2	2.5000-12 UN-2A	2-7/8	2.000	0.16	2.25	2.000	1.18

## 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 coated in accordance with procurement specification. Phosphate coated in accordance with procurement specification. Passivation treatment in accordance with procurement specification.
3. DIMENSIONS AND TOLERANCES: Dimension and tolerances not shown shall be in accordance with SAE Standards for Flareless Tube Fittings (SAE J514).
- (A) 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 cadmium plated use the MS number plus the dash number.  
Example: MS51890-1.

MS51890A

- b. For zinc coating add (Z) to the dash number. Example:  
MS51890-1Z.
  - c. For phosphate coating add (P) to the dash number. Example:  
MS51890-1P.
  - d. For corrosion-resisting add (SS) to the dash number.  
Example: MS51890-1SS
6. The illustration is for identification and is not intended to restrict designs or shapes not dimensioned.
7. 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.
8. 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.

CUSTODIANS:

- Ⓐ AIR FORCR - 99
- NAVY - SH

REVIEW ACTIVITIES:

- Ⓐ AIR FORCE - 82
- ARMY - AT, ME
- DLA-CS

USER ACTIVITIES:

- Navy - MC, OS

PREPARING ACTIVITY:  
ARMY - AR

AGENT:  
DLA-CS

(Project 4730-0916)