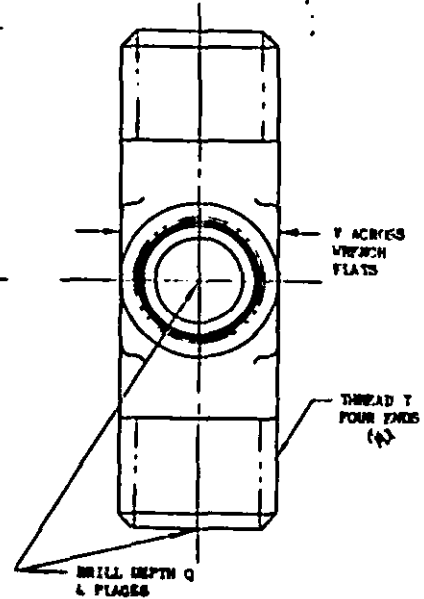
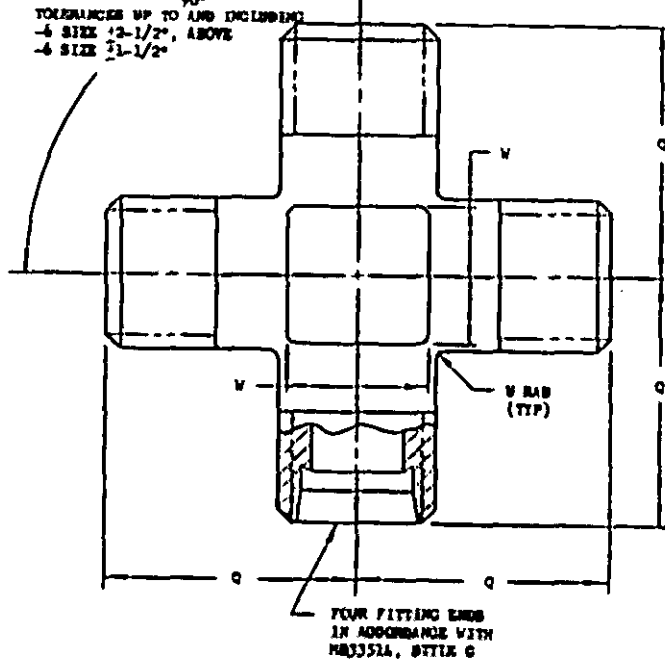


Revised activities: Navy - 11  
Army - 11, 12, 13, 14, 15  
Navy - 06  
Army - 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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90°  
TOLERANCES UP TO AND INCLUDING  
-6 SIZE 12-1/2", ABOVE  
-6 SIZE 12-1/2"



NOM. NO.	TUBE OD	THREAD T 107 HIL-B-0079	Q 1/32	V RAD	W	V APPROX	WT LB		
							STEEL	AL ALLOY	TI ALLOY
-3	1/8	.3125-36 UNF-3A	1/3	1/16	3/32	5/32	.026	.020	.032
-3	1/8	.3750-36 UNF-3A	13/16	1/16	3/8	3/8	.071	.085	.040
-4	1/8	.4375-36 UNF-3A	7/8	1/16	7/16	3/8	.083	.070	.049
-5	5/16	.5000-36 UNF-3A	15/16	1/8	1/2	15/32	.115	.085	.066
-6	3/8	.5625-36 UNF-3A	1-1/32	3/32	9/16	1/2	.134	.055	.077
-8	1/2	.7500-36 UNF-3A	1-1/4	1/8	3/4	11/16	.115	.115	.181
-10	5/8	.8750-36 UNF-3A	1-13/32	1/8	7/8	25/32	.120	.160	.259
-12	3/4	1.0625-36 UNF-3A	1-9/16	1/8	1-1/16	29/32	.680	.260	.392
-16	1	1.3125-36 UNF-3A	1-23/32	1/8	1-5/16	1-3/32	1.000	.351	.577
-20	1-1/8	1.6250-36 UNF-3A	1-7/8	1/8	1-5/8	1-5/16	1.593	.600	.920
-26	1-1/2	1.8750-36 UNF-3A	2	1/8	1-7/8	1-1/2	1.980	.727	1.132
-32	2	2.0000-36 UNF-3A	2-7/16	1/4	2-5/16	2-1/32			

(c) PARTS WITH THREADS IN ACCORDANCE WITH HIL-B-0079 OF THE SAME THREAD SIZE, PITCH AND FLANGE CLASS ARE ACCEPTABLE FOR PRODUCTION UNTIL 1 JULY 1981. THIS PART WITH HIL-B-0079 FLANGE WILL NOT BE PRODUCED WITHOUT THE EXISTING SPECS ARE TO BE USED UNTIL EXHAUSTED.

SEE SHEET 2 FOR NOTES.

DISPOSED CHAPOS

P.A. Navy - 06 Other Code Navy - 99 Army - 01	INTERNATIONAL INTERPRET SEE NOTE 7	TITLE CROSS, FLANGELESS TUBE	MILITARY STANDARD MS21906
DOCUMENT SPECIFICATION HIL-T-18380	SUPERSEDED:		SHEET 1 OF 2

DD FORM 672-K (Coordinated)  
ASB use only

PREVIOUS EDITIONS OF THIS FORM AND DERIVATIVE.

PROJECT NO 4730-0750

APPROVED 4 Oct 51 REVISED 4 28 Jun 51 2 May 56 13 May 58 27 Aug 60 24 JUNE 1981

FED. SUP CLASS  
4730

## NOTES:

1. MATERIAL: CARBON STEEL - FORGINGS  
ALUMINUM ALLOY - FORGINGS  
CORROSION RESISTANT STEEL - FORGINGS  
TITANIUM ALLOY - FORGINGS

(E)

SEE PROCUREMENT SPECIFICATION

NOTE: PARTS MADE FROM 1137 OR 1141 FORGINGS QUALIFIED TO MIL-F-18280C SHALL NOT BE SUPPLIED AFTER 30 JUNE 1984.

2. FINISH: SEE PROCUREMENT SPECIFICATION.

3. BREAK ALL SHARP EDGES AND REMOVE ALL BURRS AND SLIVERS.

4. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: FRACTIONS:  $\frac{1}{16}$ .

5. PART NUMBERS:

NO CODE LETTER IN PART NUMBER FOR CARBON STEEL.

ADD D IN PLACE OF DASH FOR ALUMINUM ALLOY (2014).

ADD W IN PLACE OF DASH FOR ALUMINUM ALLOY (7075).

ADD C AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL, TYPE 302, 303, 304, 316, OR 321.

ADD J IN PLACE OF DASH FOR CORROSION RESISTANT STEEL, TYPE 304.

ADD K IN PLACE OF DASH FOR CORROSION RESISTANT STEEL, TYPE 316.

ADD S AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL, TYPE 304 AND 347. PARTS ARE NOT TO BE MANUFACTURED

FROM TYPE 304L STEEL AFTER 27 JUNE 1969.

ADD T AFTER DASH NUMBER FOR TITANIUM ALLOY (6AL-4V).

## EXAMPLE PART NUMBER:

MS21906-4 = CROSS, 1/4 TUBING, CARBON STEEL.

MS21906D4 = CROSS, 1/4 TUBING, ALUMINUM ALLOY (2014).

MS21906W4 = CROSS, 1/4 TUBING, ALUMINUM ALLOY (7075).

MS21906C4 = CROSS, 1/4 TUBING, CORROSION RESISTANT STEEL, TYPE 304.

MS21906K4 = CROSS, 1/4 TUBING, CORROSION RESISTANT STEEL, TYPE 316.

MS21906S4 = CROSS, 1/4 TUBING, CORROSION RESISTANT STEEL, TYPE 347.

MS21906-4T = CROSS, 1/4 TUBING TITANIUM ALLOY (6AL-4V).

6. PARTS CODED C ARE INACTIVE FOR DESIGN AFTER 27 JUNE 1969. PARTS CODED C MAY BE USED UNTIL STOCKS ARE EXHAUSTED. PARTS CODED J OR K MAY BE USED IN LIEU OF PARTS CODED C.

ITEMS CODED "C" ON PREVIOUS ISSUES OF THIS STANDARD ARE NO LONGER TO BE FURNISHED, UNLESS OTHERWISE SPECIFIED. PARTS CODED J, K, OR S (AT SUPPLIER'S OPTION) SHALL BE FURNISHED IN LIEU OF "C" CODED PARTS.

7. CERTAIN PROVISIONS (SCREW THREADS) OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT ASCC AIR STD 17/13. WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL AFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED.

8. TITANIUM NOT RECOMMENDED FOR USE IN OXYGEN SYSTEMS.
9. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
10. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

APPROVED 1 Oct 51 REVISED (E) FOR CHANGES SEE SHEETS 1 AND 2.

P.A. Navy - AS Other Code USAF - 99 Army - AV	INTERNATIONAL INTEREST  SEE NOTE 7	TITLE  CROSS, FLARELESS TUBE	MILITARY STANDARD  MS21906
PROCUREMENT SPECIFICATION MIL-F-18280	SUPERSEDES:	SHEET 2 OF 2	

DD FORM 672-1 (Coordinated)

ASD use only

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

Review activities: Navy -  
USAF - 11  
Army - AR, AT  
DLA - CSUser activities: Navy - CS  
Army - GL, GR, HE, AF