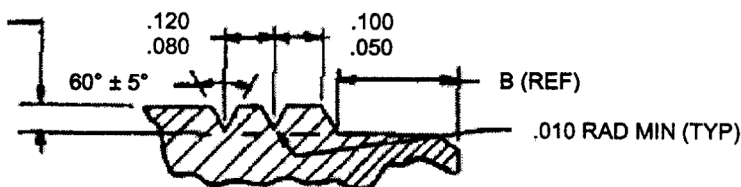


RATIONALE

1. NOTE 14: NEW WORDING FOR PROCUREMENT NOTE.
2. WARNING NOTE ADDED FOR RESTRICTED MATERIAL.
3. THE 8 IN NOTE 8 AND TABLE 1 IS CHANGED TO /8/.
4. UPDATE: DELETED NOTE 12 PERTAINING TO MS21921F.
5. ERROR CORRECTIONS.

.025/.010 FOR -1 & -2 SIZE
.050/.010 FOR -4 & LARGER



DETAIL A (TITANIUM PARTS ONLY)

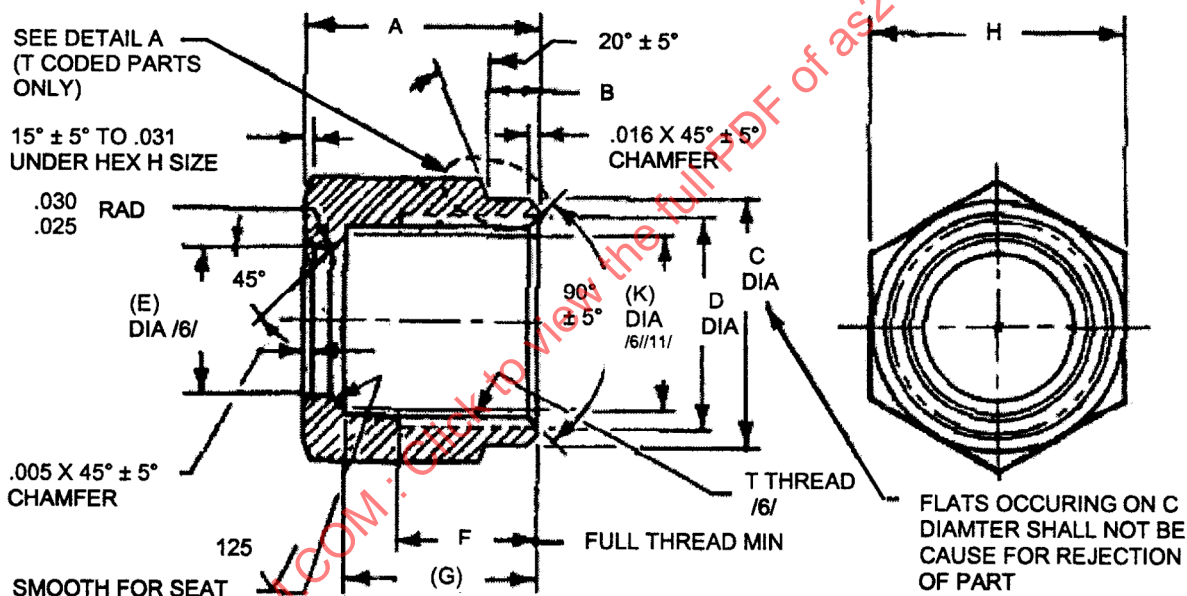
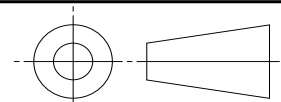


FIGURE 1 - NUT, SLEEVE COUPLING, FLARELESS

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /14/ AS18280

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

NUT, SLEEVE COUPLING, FLARELESS

SAE AS21921B
SHEET 1 OF 4

TABLE 1A - DIMENSIONS A-E

DASH NO. /8/	NOMINAL TUBE SIZE	T THREAD /6/ AS8879	A ±.010	B ±.010	C +.005 -.000	D ±.016	E /6/ +.005 -.000
-2	.125	.3125-24 UNJF-3B	.53	.14	.365	.328	.171
-3	.188	.3750-24 UNJF-3B	.58	.10	.427	.391	.232
-4	.250	.4375-20 UNJF-3B	.72	.18	.552	.453	.300
-5	.313	.5000-20 UNJF-3B	.76	.18	.615	.516	.366
-6	.375	.5625-18 UNJF-3B	.80	.18	.677	.578	.425
-8	.500	.7500-16 UNJF-3B	.86	.18	.865	.766	.552
-10	.625	.8750-14 UNJF-3B	.98	.22	.990	.891	.690
-12	.750	1.0625-12 UNJ-3B	1.00	.24	1.240	1.078	.826
-16	1.000	1.3125-12 UNJ-3B	1.05	.26	1.490	1.328	1.074
-20	1.250	1.6250-12 UNJ-3B	1.05	.26	1.990	1.641	1.330
-24	1.500	1.8750-12 UNJ-3B	1.03	.22	2.236	1.891	1.580
-32	2.000	2.5000-12 UNJ-3B	1.12	.22	2.865	2.562	2.080

TABLE 1B - DIMENSIONS F-K

DASH NO. /8/	F MIN	G ±.010 /12/	H	K ±.010 /6/ /11/	WEIGHT, LB/EA, APPROX, REF.		
					STEEL	AL ALLOY	TI ALLOY
-2	.360	.425	.371- .378		.008	.003	.004
-3	.366	.429	.434- .441		.010	.004	.005
-4	.431	.547	.558- .565		.028	.010	.016
-5	.444	.562	.621- .628		.032	.012	.018
-6	.422	.578	.684- .691		.037	.014	.021
-8	.516	.609	.871- .878		.070	.025	.040
-10	.578	.687	.996-1.003		.083	.031	.047
-12	.562	.687	1.246-1.253		.148	.054	.085
-16	.562	.687	1.496-1.503		.220	.078	.126
-20	.562	.678	1.984-2.016	1.482	.470	.181	.271
-24	.562	.678	2.230-2.270	1.731	.530	.250	.305
-32	.562	.687	2.855-2.895	2.295	.860	.413	.495

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

1. MATERIAL:

SEE PROCUREMENT SPECIFICATION.
 ALLOY STEEL
 ALUMINUM ALLOY
 CORROSION RESISTANT STEEL
 TITANIUM ALLOY

2. FINISH: SEE PROCUREMENT SPECIFICATION.

3. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.

4. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.005, ANGLES ±0°30'.

5. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1; UNLESS OTHERWISE SPECIFIED MACHINED SURFACES SHALL BE 125 Ra.

/6/ CIRCULAR SURFACES OF DIAMETERS E, K, AND THREAD T SHALL BE CONCENTRIC WITHIN .005 TIR.

7. INTERCHANGEABILITY RELATIONSHIP: MS21917 AND MS21921 PARTS IDENTIFIED BY THE SAME DASH NUMBERS ARE FUNCTIONALLY INTERCHANGEABLE. USE MS21921 AND MS21922 AS ASSEMBLY WHEN SUBSTITUTING FOR MS21917 AND MS21918.

/8/ PART NUMBERS:

DASH "" IN PART NUMBER FOR 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE TABLE 2 /A/
ADD "V(SIZE)P" IN PLACE OF DASH FOR CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED
ADD "V" IN PLACE OF DASH FOR CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
ADD "D" AFTER DASH NUMBER FOR ALUMINUM ALLOY (2024): CANCELLED AND REPLACED, SEE TABLE 2 /C/
ADD "W" AFTER DASH NUMBER FOR ALUMINUM ALLOY (7075)
ADD "J" AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL (TYPE 304)
ADD "K" AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL (TYPE 316)
ADD "R" AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL (TYPE 321)
ADD "S" AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL (TYPE 347): CANCELLED, SEE TABLE 2 /D/
ADD "T" AFTER DASH NUMBER FOR TITANIUM ALLOY (6AL-4V)

EXAMPLES OF PART NUMBERS:

MS21921-4	NUT, .250 TUBING, 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE TABLE 2 /A/
MS21921V4P	NUT, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED
MS21921V4	NUT, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
MS21921-4D	NUT, .250 TUBING, ALUMINUM ALLOY (2024) IS CANCELLED AND REPLACED, SEE TABLE 2 /C/
MS21921-4W	NUT, .250 TUBING, ALUMINUM ALLOY (7075)
MS21921-4J	NUT, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 304)
MS21921-4K	NUT, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 316)
MS21921-4R	NUT, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 321)
MS21921-4S	NUT, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 347) IS CANCELLED, SEE TABLE 2 /D/
MS21921-4T	NUT, .250 TUBING, TITANIUM ALLOY (6AL-4V)

9. TITANIUM SHALL NOT BE USED FOR OXYGEN SYSTEMS.

10. SEE TABLE 2 FOR CANCELLED AND SUPERSEDED DOCUMENT AND PART NUMBERS.

/11/ USE TAP DRILL DIA FOR K EXCEPT IN SIZES 20, 24 AND 32.

12. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

13. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.

14. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST PRI-QPL-AS18280 FOR THIS STANDARD. SEE <http://www.eauditnet.com> FOR CURRENT QPL ONLINE.

15. A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

16. INTERPRETATION OF DRAWING PER ARP4296.