

FED. SUPPLY CLASS

5306

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME
PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST
REVISION DATE.

REVISION DATE: NOVEMBER 22, 2013

ISSUE DATE: DECEMBER 1973

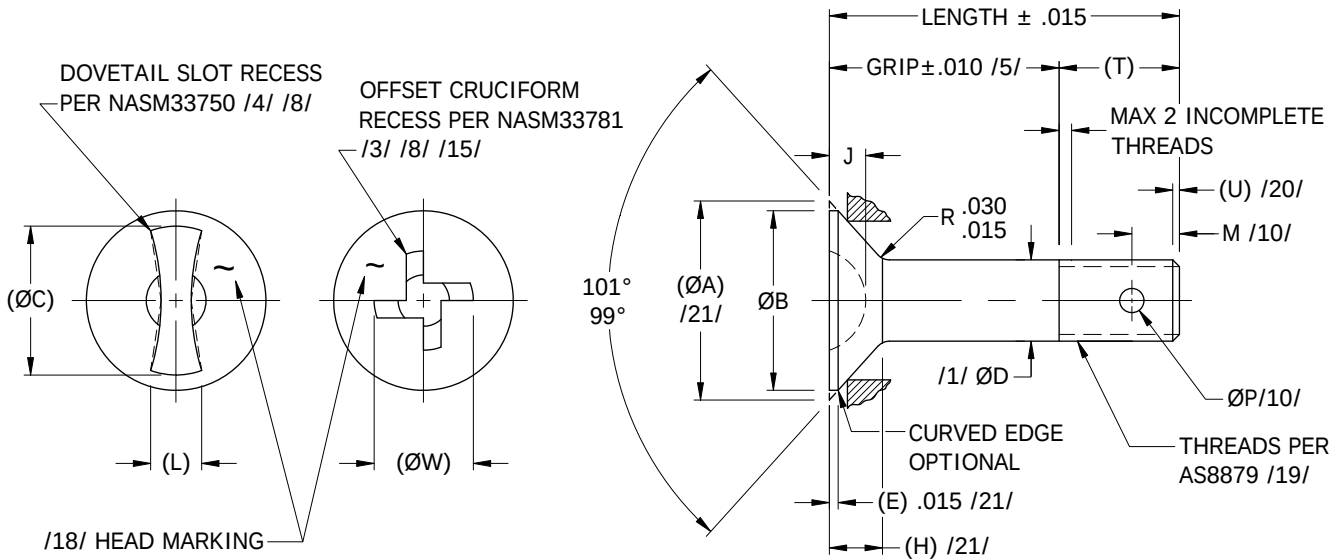


TABLE I – DIMENSIONS AND STRENGTH VALUES

BASIC PART NUMBER	THREAD /19/	(ØA) /21/	ØB MIN	(ØC) /4/	ØD /1/	(H) /21/	J DEPTH		(L) /4/
							OFFSET CRUCIFORM /3/	DOVETAIL SLOT /4/	
NAS1972	.1640-32 UNJC-3A	.337 .329	.280	.265	.1635 .1625	.063	.078 .068	.053 .050	.100
NAS1973	.1900-32 UNJF-3A	.385 .377	.328	.305	.1895 .1885	.080	.090 .080	.045 .042	.110
NAS1974	.2500-28 UNJF-3A	.507 .498	.449	.422	.2495 .2485	.106	.118 .108	.054 .051	.134
NAS1975	.3125-24 UNJF-3A	.635 .625	.577	.490	.3120 .3110	.133	.122 .112	.064 .061	.160
NAS1976	.3750-24 UNJF-3A	.762 .751	.704	.639	.3745 .3735	.160	.145 .135	.088 .084	.198
NAS1977	.4375-20 UNJF-3A	.890 .879	.832	.715	.4370 .4360	.188	.169 .159	.100 .097	.224
NAS1978	.5000-20 UNJF-3A	1.017 1.005	.959	.766	.4995 .4985	.215	.193 .183	.105 .101	.256
NAS1979	.5625-18 UNJF-3A	1.145 1.132	1.087	.877	.5615 .5605	.242	.217 .207	.118 .114	.300
NAS1980	.6250-18 UNJF-3A	1.272 1.258	1.214	1.020	.6240 .6230	.270	.241 .231	.141 .137	.344

⑦ COMPLETELY REVISED

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 7
PROCUREMENT SPECIFICATION NOTED	TITLE BOLT, SHEAR, 100° FLUSH HEAD, OFFSET CRUCIFORM AND DOVETAIL SLOT, 108 KSI Fsu	CLASSIFICATION PART STANDARD
		NAS1972 THROUGH 1980 SHEET 1 OF 6

TABLE I – DIMENSIONS AND STRENGTH VALUES (CONTINUED)

BASIC PART NUMBER	M /10/ + .010 - .000 /10/	ØP + .010 - .000 /10/	(T)	(U) /20/	(ØW) /3/	FIM VALUE		RECESS NUMBER		TENSILE STRENGTH LBF MIN /12/ /22/ /24/	DOUBLE SHEAR STRENGTH LBF MIN /17/
						Y /1/	Z /2/	OFFSET CRUCIFORM /3/	DOVETAIL SLOT /4/		
NAS1972	–	–	.338	.016	.210	.005	.0040	8	2	2,500	4,600
NAS1973	.173 .153	.070	.338	.016	.243	.005	.0040	10	3	3,600	6,100
NAS1974	.188 .168	.076	.425	.018	.320	.006	.0030	1/4	4	6,500	10,600
NAS1975	.191 .171	.076	.469	.021	.352	.007	.0030	5/16	5	10,400	16,600
NAS1976	.207 .187	.106	.578	.021	.422	.009	.0025	3/8	6	15,800	23,900
NAS1977	.211 .191	.106	.594	.025	.493	.009	.0025	7/16	7	21,300	32,500
NAS1978	.226 .206	.106	.735	.025	.563	.010	.0020	1/2	8	28,700	42,400
NAS1979	.228 .208	.141	.840	.028	.633	.010	.0020	9/16	9	36,500	53,700
NAS1980	.259 .239	.141	.902	.028	.703	.010	.0020	5/8	10	46,000	66,300

MATERIAL:

- ALLOY STEEL - 4140 (UNS G41400) PER AMS6382, 4340 (UNS G43406) PER AMS6415 OR AMS6484, OR 8740 (UNS G87400) PER ~~MIL-S-6049~~ AMS6327, AMS6322 OR AMS6325.
- CRES - A286 (UNS S66286) CONFORMING TO THE CHEMISTRY OF AMS5731, AMS5732, AMS5737 OR AMS5853.
- TITANIUM ALLOY - 6AL-6V-2SN (UNS R56620) PER AMS4971.

HEAT TREATMENT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS2759 FOR ALLOY STEEL AND CRES AND AMS-H-81200 OR AMS2801 FOR TITANIUM.

ALLOY STEEL: 180-200 KSI Ft_u. 39 - 43HRC.

CRES: 180-210 KSI Ft_u

TITANIUM ALLOY: 180 KSI Ft_u MIN

- FINISH: ALLOY STEEL - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. BOLTS ARE NOT TO BE PICKLED. IMMEDIATELY AFTER PLATING (WITHIN 1 HOUR) BAKE AT 375 ± 25 °F FOR A MINIMUM OF 23 HOURS.
- CRES - CLEAN AND PASSIVATE PER AMS2700, METHOD 1, TYPE 2 OR TYPE 8, CLASS 4.
- TITANIUM ALLOY - NONE.
- CRES AND TITANIUM ALLOY - OPTIONAL ALUMINUM COAT PER NAS4006, DESIGNATED BY CODE "P". INCLUDE A HALOGEN FREE CETYL ALCOHOL LUBRICANT ON ALL TITANIUM BOLTS.

- CODE: NO LETTER CODE = BOLT, ALLOY STEEL, UNDRILLED.
ADD "D" TO DASH NUMBER FOR DRILLED SHANK.
ADD "H" TO DASH NUMBER FOR DOVETAIL SLOT RECESS.
ADD "T" TO DASH NUMBER FOR OFFSET CRUCIFORM RECESS.
ADD "P" TO DASH NUMBER ON CRES OR TITANIUM BOLTS FOR ALUMINUM COAT.
"T" IN LIEU OF DASH DESIGNATES TITANIUM ALLOY (FORMER "V" CODE).
"C" IN LIEU OF DASH DESIGNATES CORROSION RESISTANT STEEL.
IF MORE THAN ONE CODE LETTER IS USED IN SEQUENCE IN PART NUMBER, ARRANGE LETTERS ALPHABETICALLY.

REVISION

7

NAS1972-1980 2013
SHEET 2

⑦ COMPLETELY REVISED