

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
11000 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.

FORM 09-01

ISSUE DATE: DECEMBER 1996

FED. SUPPLY CLASS

5306

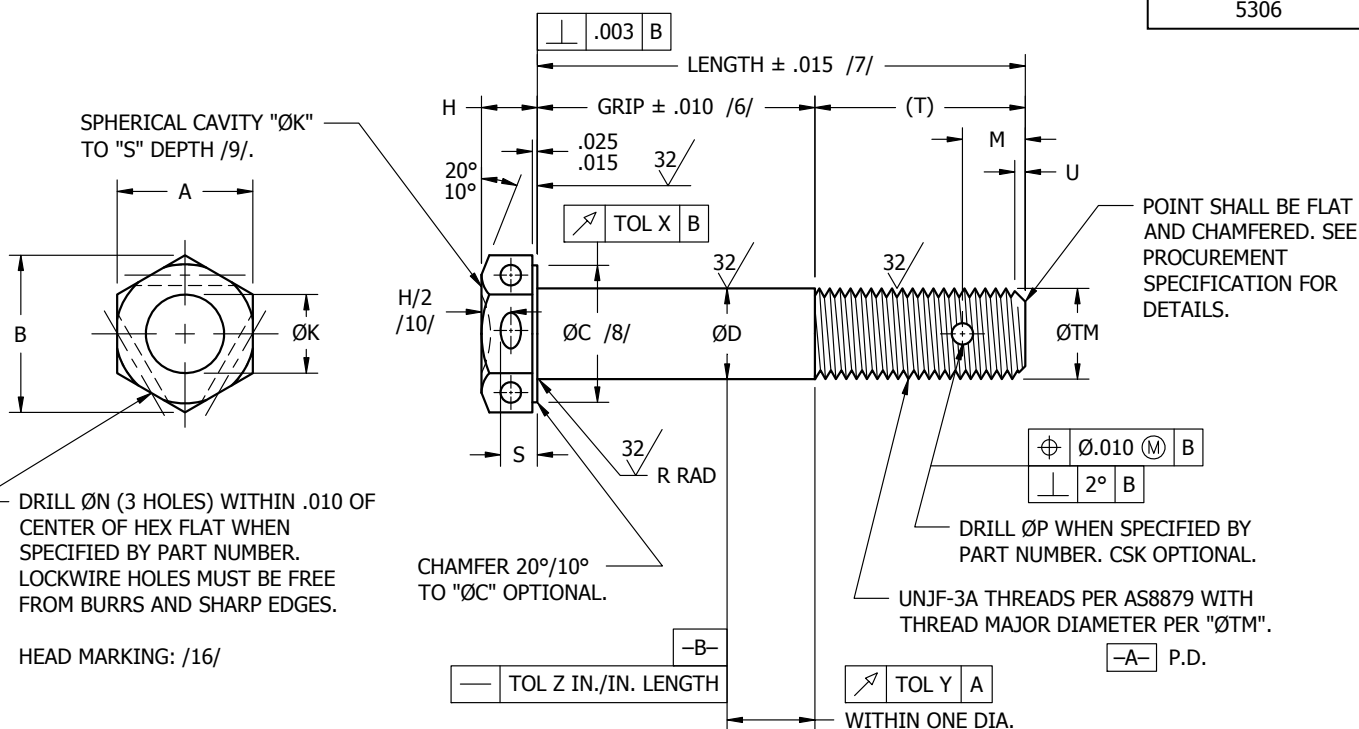
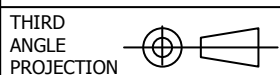


FIGURE 1 – BOLT

TABLE I – DIMENSIONS

BASIC PART NO. /11/	THREAD	A		B MIN	ØC /8/	ØD		H +.015 -.000	ØK ±.010	M	ØN +.010 -.000
		MAX	MIN			MAX	MIN				
NAS9703	.1900-32 UNJF-3A	.376	.367	.410	.335	.1895	.1885	.110	.19	.164	.046
NAS9704	.2500-28 UNJF-3A	.439	.429	.480	.398	.2495	.2485	.125	.25	.178	.046
NAS9705	.3125-24 UNJF-3A	.502	.492	.552	.460	.3120	.3110	.156	.31	.181	.070
NAS9706	.3750-24 UNJF-3A	.564	.554	.623	.523	.3745	.3735	.188	.38	.197	.070
NAS9707	.4375-20 UNJF-3A	.690	.678	.764	.648	.4370	.4360	.219	.44	.201	.070
NAS9708	.5000-20 UNJF-3A	.752	.741	.836	.710	.4995	.4985	.250	.50	.216	.070
NAS9709	.5625-18 UNJF-3A	.877	.865	.978	.835	.5615	.5605	.281	.56	.218	.070
NAS9710	.6250-18 UNJF-3A	.940	.928	1.050	.898	.6240	.6230	.312	.62	.249	.070
NAS9712	.7500-16 UNJF-3A	1.065	1.052	1.191	1.023	.7490	.7480	.375	.75	.252	.070
NAS9714	.8750-14 UNJF-3A	1.252	1.239	1.405	1.210	.8740	.8730	.438	.88	.257	.070
NAS9716	1.0000-12 UNJF-3A	1.440	1.427	1.619	1.398	.9990	.9980	.500	1.00	.264	.070
NAS9718	1.1250-12 UNJF-3A	1.627	1.614	1.832	1.585	1.1240	1.1225	.562	/9/	.357	.070
NAS9720	1.2500-12 UNJF-3A	1.814	1.801	2.046	1.772	1.2490	1.2475	.625	/9/	.389	.070
NAS9722	1.3750-12 UNJF-3A	2.002	1.988	2.256	1.951	1.3740	1.3725	.688	/9/	.430	.070
NAS9724	1.5000-12 UNJF-3A	2.190	2.176	2.470	2.135	1.4490	1.4475	.750	/9/	.480	.070

① COMPLETELY REVISED



PROCUREMENT SPECIFICATION

NOTED

CUSTODIAN

NATIONAL AEROSPACE STANDARDS COMMITTEE

TITLE

**BOLT, HEXAGON HEAD, ALLOY STEEL,
CLOSE TOLERANCE, MINIMUM MAJOR, LONG THREADS**

REVISION

1

CLASSIFICATION
PART STANDARD

NAS9703 THRU
NAS9724
SHEET 1 OF 4

TABLE I – DIMENSIONS (CONTINUED)

BASIC NUMBER /11/	ØP +.010 –.000	R RAD		S +.015 –.000	(T)	ØTM		U MAX	X	Y	Z	ULTIMATE TENSILE MIN LBF /3/	DOUBLE SHEAR MIN LBF
		MAX	MIN			MAX	MIN						
NAS9703	.070	.020	.010	.073	.345	.187	.184	.039	.005	.0045	.004	3,620	5,380
NAS9704	.076	.020	.010	.083	.425	.247	.244	.045	.006	.0045	.003	6,470	9,300
NAS9705	.076	.020	.010	.104	.469	.310	.306	.052	.008	.0045	.003	10,200	14,600
NAS9706	.106	.025	.015	.125	.578	.372	.368	.052	.009	.0045	.0025	15,200	21,000
NAS9707	.106	.025	.015	.146	.694	.435	.430	.062	.010	.006	.0025	20,600	28,600
NAS9708	.106	.030	.020	.167	.735	.497	.492	.062	.011	.006	.002	27,500	37,300
NAS9709	.141	.035	.020	.188	.840	.559	.554	.068	.012	.006	.002	34,800	47,200
NAS9710	.141	.040	.025	.208	.902	.623	.617	.068	.015	.006	.002	43,600	58,300
NAS9712	.141	.045	.030	.250	1.041	.747	.741	.078	.018	.009	.002	63,200	83,900
NAS9714	.141	.050	.035	.292	1.184	.872	.865	.089	.020	.009	.002	86,300	114,000
NAS9716	.141	.060	.045	.333	1.309	.996	.989	.104	.022	.009	.002	112,000	149,000
NAS9718	.141	.070	.055	/9/	1.458	1.121	1.114	.104	.025	.009	.002	144,000	189,000
NAS9720	.141	.075	.060	/9/	1.646	1.246	1.239	.104	.028	.009	.002	180,000	233,000
NAS9722	.141	.080	.060	/9/	1.766	1.371	1.364	.104	.030	.012	.002	219,000	282,000
NAS9724	.141	.080	.060	/9/	1.891	1.496	1.489	.104	.032	.012	.002	263,000	336,000

MATERIAL:

ALLOY STEEL – 4140 (UNS G41400) PER AMS6382; 4340 (UNS G43400) PER AMS6415 OR AMS6484; OR 8740 (UNS G87400) PER MIL-S-6049 AMS6325, AMS6327, OR AMS6322.

HEAT TREATMENT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS2759:
160 TO 180 KSI FTU; 95 KSI FSU

FINISH:

CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.

CODE:

DASH “–” FOLLOWING BASIC PART NUMBER INDICATES UNDRILLED.
CODE LETTER “D” FOLLOWING BASIC PART NUMBER INDICATES DRILLED SHANK.
CODE LETTER “H” FOLLOWING BASIC PART NUMBER INDICATES DRILLED HEAD.
CODE LETTER “DH” FOLLOWING BASIC PART NUMBER INDICATES DRILLED SHANK AND DRILLED HEAD.
THE NUMBER FOLLOWING “–”, “D”, “H”, OR “DH” INDICATES GRIP DASH NUMBER IN .0625 UNITS.

EXAMPLES OF PART NUMBERS:

NAS9704-10 = .2500-28 UNJF-3A THREAD, UNDRILLED, .625 GRIP, CADMIUM PLATED.
NAS9705D6 = .3125-24 UNJF-3A THREAD, DRILLED SHANK, .375 GRIP, CADMIUM PLATED.
NAS9712H14 = .7500-16 UNJF-3A THREAD, DRILLED HEAD, .875 GRIP, CADMIUM PLATED.
NAS9712DH14 = .7500-16 UNJF-3A THREAD, DRILLED HEAD AND DRILLED SHANK, .875 GRIP, CADMIUM PLATED.
NAS9712-10Y = .7500-12 UNJF-3A THREAD, UNDRILLED, .625 GRIP, .0312 OVERSIZE.

REVISION

1

NAS9703 THRU
NAS9724

SHEET 2



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