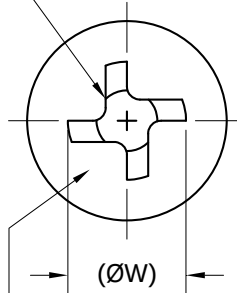


FED. SUPPLY CLASS

5305

OFFSET CRUCIFORM RECESS
PER NASM14191 OR NASM33781
(SEE CODE) /25/

TOL X (M) B (S) C



HEAD MARKING
SEE SHEET 3

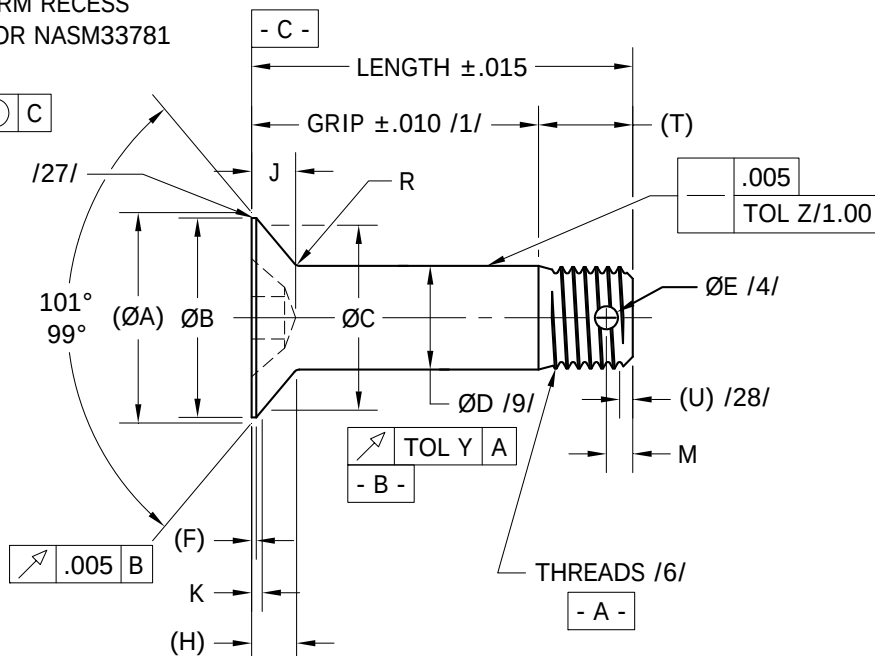


TABLE I - DIMENSIONS

BASIC PART NUMBER	NOMINAL THREAD SIZE	(ØA) /2/	ØB MIN	ØC GAGE /2/ /3/	ØD /2/ /9/	ØE +.010 -.000 /4/	(F) /2/	(H) /2/	J MAX /7/	K /2/ /3/	M +.010 -.000 /4/	R RAD	(T)
NAS1151	.1380-32 UNJC-3A	.279 .269	.221	--	.1375 .1365	--	.015	.057	.066	--	--	.020 .010	.276
NAS1152	.1640-32 UNJC-3A	.337 .328	.280	.2671 .2667	.1635 .1625	--	.015	.068	.078	.0268 .0240	--	.020 .010	.276
NAS1153	.1900-32 UNJF-3A	.385 .376	.328	.3147 .3143	.1895 .1885	.070	.015	.080	.090	.0290 .0263	.117	.020 .010	.276
NAS1154	.2500-28 UNJF-3A	.507 .497	.449	.4245 .4241	.2495 .2485	.076	.015	.106	.118	.0342 .0316	.116	.020 .010	.316
NAS1155	.3125-24 UNJF-3A	.635 .625	.577	.5389 .5385	.3120 .3110	.076	.015	.133	.122	.0395 .0370	.119	.025 .010	.375
NAS1156	.3750-24 UNJF-3A	.762 .752	.704	.6532 .6528	.3745 .3735	.106	.015	.160	.145	.0450 .0426	.120	.030 .015	.391
NAS1157	.4375-20 UNJF-3A	.890 .880	.832	.7676 .7672	.4370 .4360	.106	.015	.188	.169	.0503 .0481	.124	.030 .015	.453
NAS1158	.5000-20 UNJF-3A	1.017 1.007	.959	.8820 .8816	.4995 .4985	.106	.015	.215	.193	.0557 .0537	.123	.030 .015	.453

(15) COMPLETELY REVISED

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 15
PROCUREMENT SPECIFICATION NOTED	TITLE SCREW, TENSION, MACHINE, FLAT 100° FLUSH HEAD, CLOSE TOLERANCE, SHORT THREAD, OFFSET CRUCIFORM AND OFFSET CRUCIFORM- RIBBED, 160 KSI FtU	CLASSIFICATION PART STANDARD
		NAS1151 THRU NAS1158 SHEET 1 OF 7

TABLE II – DIMENSIONS

BASIC PART NUMBER	(U)	(ØW) /7/	X	Y	Z	RECESS PEN /7/	RECESS TORQUE /11/		MINIMUM TENSILE STRENGTH, POUNDS /15/	
							TORQUE INCH POUNDS MIN	RAISED METAL MAX	CRES 140 KSI, TI (4Al-4Mn) /8/ /14/	STEEL, CRES 160 KSI, TI (6Al-4V) /14/
NAS1151	.016	.182 .172	.016	.0045	.0040	.0500 .0395	30 24	.005	1,270	1,450
NAS1152	.016	.215 .205	.016	.0045	.0040	.0595 .0480	50 37	.005	1,960	2,240
NAS1153	.016	.248 .238	.016	.0045	.0040	.0685 .0560	60 50	.005	2,800	3,180
NAS1154	.018	.325 .315	.016	.0045	.0030	.0890 .0750	140 125	.005	5,100	5,820
NAS1155	.021	.357 .347	.024	.0060	.0030	.0860 .0700	220 250	.005	8,120	9,200
NAS1156	.021	.427 .417	.024	.0060	.0025	.1030 .0850	520 430	.006	12,300	14,000
NAS1157	.025	.498 .488	.024	.0060	.0025	.1205 .1005	750 925	.007	12,960	18,900
NAS1158	.025	.568 .558	.024	.0060	.0020	.1375 .1155	900 1,210	.008	17,460	25,600

MATERIAL:

ALLOY STEEL – 4140 (UNS G41400) PER MIL-S-5626 OR AMS6382, 4340 (UNS G43400) PER MIL-S-8844 OR AMS6414, 4340 (UNS G43406) PER AMS6415 OR AMS6484, OR 8740 (UNS G87400) PER MIL-S-6049 OR AMS6322, AMS6325 OR AMS6327.

CRES - A286 (UNS S66286) CONFORMING TO THE CHEMISTRY OF AMS5731, AMS5732, AMS5737 OR AMS5853, DESIGNATED BY "E" CODE.

CRES – A286 (UNS S66286) PER AMS5735, EXCEPT FOR HEAT TREATMENT, DESIGNATED BY "C" CODE. /13/

TITANIUM ALLOY - 6Al-4V (UNS R56400) PER AMS4922, AMS4928 OR AMS4967, DESIGNATED BY "V" CODE.

TITANIUM ALLOY – 4Al-4Mn (UNS R56440) DESIGNATED BY "T" CODE. /8/

HEAT TREAT:

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: 160-180 KSI Ft_u; 95 KSI F_{su} MIN.

CRES: 160-190 KSI Ft_u; 95 KSI F_{su} MIN. /14/

CRES: 140,000 PSI U_{ts} MIN AT ROOM TEMPERATURE. /13/

TITANIUM (6Al-4V): 160 KSI Ft_u MIN.; 95 KSI F_{su} MIN.

TITANIUM (4Al-4Mn): 150,000 PSI U_{ts} MIN. /8/

REVISION

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15 COMPLETELY REVISED



NAS1151 THRU
NAS1158
SHEET 2

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Full document details: AIA NAS1151-1158 2012

FINISH:	ALLOY STEEL: NO CODE LETTER FOLLOWING DASH NUMBER DESIGNATES CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2
	~~ALLOY STEEL: CODE LETTER "W" FOLLOWING DASH NUMBER DESIGNATES CADMIUM PLATE PER AMS-QQ-P-416, TYPE I, CLASS 2. /24/~~
	CRES: NO CODE LETTER FOLLOWING DASH NUMBER DESIGNATES PASSIVATE IN ACCORDANCE WITH AMS2700, METHOD 1, CLASS 4.
	CRES: CODE LETTER "P" FOLLOWING DASH NUMBER DESIGNATES CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.
	CRES: CODE LETTER "A" FOLLOWING DASH NUMBER DESIGNATES ALUMINUM COATING PER NAS4006.
	TITANIUM: NO CODE LETTER FOLLOWING DASH NUMBER DESIGNATES NO FINISH.
	TITANIUM: CODE LETTER "A" FOLLOWING DASH NUMBER DESIGNATES ALUMINUM COATING PER NAS4006.
CODE:	DASH NUMBER DESIGNATES GRIP LENGTH IN .0625 INCREMENTS.
	"A" AFTER DASH NUMBER INDICATES SCREW WITH ALUMINUM COATING, APPLICABLE TO CRES AND TITANIUM ONLY.
	~~"C" IN LIEU OF DASH DESIGNATES, CRES 140 KSI. /13/~~
	"D" AFTER DASH NUMBER DESIGNATES DRILLED THREADS.
	"E" IN LIEU OF DASH DESIGNATES CRES, 160 KSI.
	"P" AFTER DASH NUMBER DESIGNATES TYPE II PLATING (APPLICABLE TO A286 CRES ONLY).
	"R" AFTER DASH NUMBER INDICATES SCREW WITH NASM14191 OFFSET CRUCIFORM RECESS.
	~~"T" IN LIEU OF DASH DESIGNATES 4AI 4Mn TITANIUM ALLOY. /8/~~
	"V" IN LIEU OF DASH DESIGNATES 6AI-4V TITANIUM ALLOY.
	~~"W" AFTER DASH NUMBER DESIGNATES TYPE 1 PLATING. /24/~~
HEAD MARKING:	WHEN MULTIPLE LETTER CODES ARE USED IN SEQUENCE, ARRANGE THE LETTERS ALPHABETICALLY.
	SEE SHEETS 6 AND 7 FOR TABULATIONS OF GRIP AND LENGTH DIMENSIONS. INTERMEDIATE OR LONGER LENGTHS MAY BE SPECIFIED BY USAGE OF WHOLE DASH NUMBERS ONLY.
EXAMPLES OF PART NUMBERS:	IDENTIFY PER NAS1347, TYPE IV, EXCEPT ADD "R" AFTER DASH NUMBER OR FINISH LETTER FOR SIZES .1380-32 THRU .3125-24 INCLUSIVE TO INDICATE THE NASM14191 RECESS.
NAS1154-8	SCREW, ALLOY STEEL, .2500-28 THREAD, .500 GRIP, UNDRILLED THREADS, CADMIUM PLATED PER AMS-QQ-P-416 TYPE II, CLASS 2, NASM33781 RECESS.
NAS1154-8R	SCREW, ALLOY STEEL, .2500-28 THREAD, .500 GRIP, UNDRILLED THREADS, CADMIUM PLATED PER AMS-QQ-P-416 TYPE II, CLASS 2, NASM14191 RECESS.
~~NAS1155C10 /13/~~	~~SCREW, 140 KSI CRES, .3125-24 THREAD, .625 GRIP, UNDRILLED THREADS, PASSIVATED PER AMS2700, METHOD 1, CLASS 4, NASM33781 RECESS.~~
~~NAS1156-12W /24/~~	~~SCREW, ALLOY STEEL, .3750-24 THREAD, .750 GRIP, UNDRILLED THREADS, CADMIUM PLATED PER AMS-QQ-P-416 TYPE I, CLASS 2, NASM33781 RECESS.~~
NAS1156E12P	SCREW, 160 KSI CRES, .3750-24 THREAD, .750 GRIP, UNDRILLED THREADS, CADMIUM PLATED PER AMS-QQ-P-416 TYPE II, CLASS 2, NASM33781 RECESS.
NAS1156V12	SCREW, TITANIUM ALLOY, .3750-24 THREAD, .750 GRIP, UNDRILLED THREADS, NO FINISH, NASM33781 RECESS.
NAS1156V12AD	SCREW, TITANIUM ALLOY, .3750-24 THREAD, .750 GRIP, DRILLED THREADS, ALUMINUM COATING PER NAS4006, NASM33781 RECESS.
NAS1156V12AR	SCREW, TITANIUM ALLOY, .3750-24 THREAD, .750 GRIP, UNDRILLED THREADS, ALUMINUM COATING PER NAS4006, NASM14191 RECESS.

15 COMPLETELY REVISED

REVISION

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NAS1151 THRU
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SHEET 3



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