

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

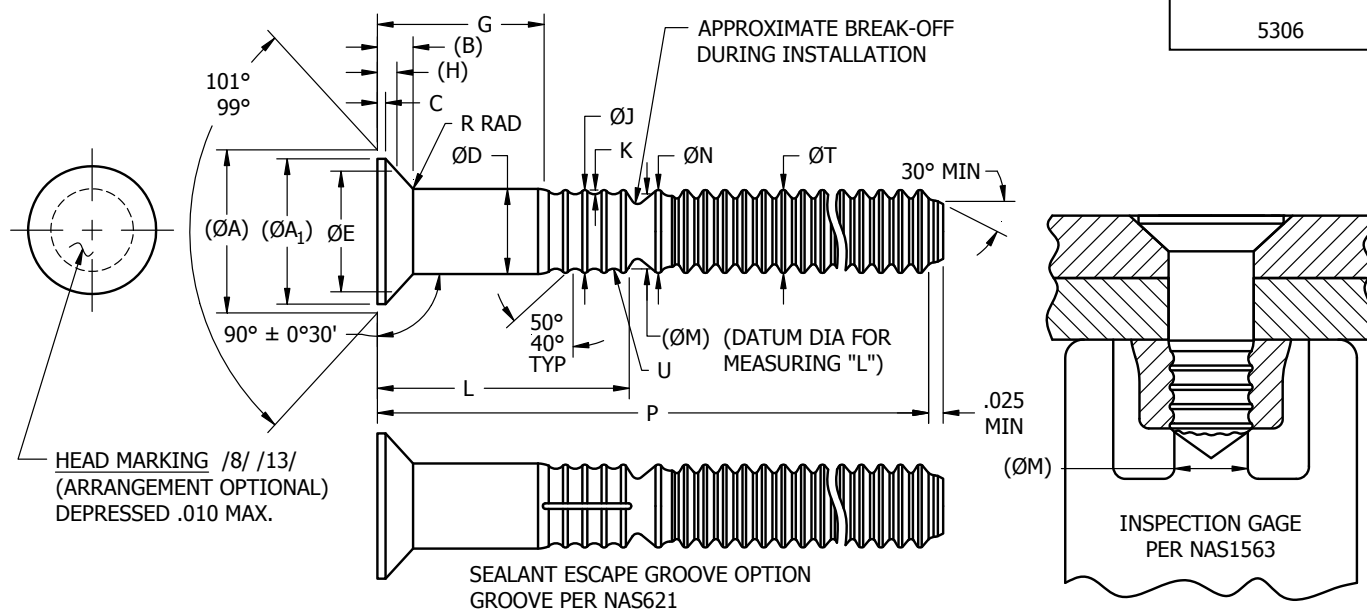


TABLE I – DIMENSIONS

BASIC PART NO.	STANDARD		OVERSIZE		(ØA)	(ØA ₁)	(B)	C	ØE	(H)		ØJ	K	(ØM)	ØN	R RAD	ØT MAX	U /7/	V HEAD MARKING /8/
	NOM SIZE	ØD SHANK	NOM SIZE	ØD SHANK	MAX /4/	MIN /4/	MAX /4/ /5/	MAX	+ .0002 - .0000 /6/	GAGE PROT				GAGE					
										/6/	NOM ±TOL								
NAS2115	.164	.1640 .1635	—	—	.292	.263	.055	.008	.2558	.0130	.0018	.158 .152	.012 .008	.136	.158 .144	.020 .010	.158	4	NAS2115
NAS2116	.190	.1895 .1890	.203	.2026 .2021	.357	.316	.071	.013	.2980	.0224	.0019	.185 .177	.015 .011	.164	.185 .169	.030 .020	.183	4	NAS2116
NAS2118	.250	.2495 .2490	.266	.2651 .2646	.480	.428	.098	.017	.4048	.0290	.0020	.242 .235	.018 .014	.224	.242 .221	.030 .220	.243	4	NAS2118
NAS2120	.312	.3120 .3115	.328	.3276 .3271	.568	.508	.108	.020	.4789	.0346	.0021	.305 .294	.023 .017	.268	.305 .276	.040 .030	.299	5	NAS2120
NAS2122	.375	.3745 .3740	.391	.3901 .3896	.698	.629	.137	.023	.5940	.0404	.0024	.368 .361	.027 .021	.339	.368 .336	.040 .030	.359	5	NAS2122

MATERIAL:

TITANIUM ALLOY – 6Al-4V (UNS R56400) PER PROCUREMENT SPECIFICATION.

HEAT TREATMENT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS-H-81200 OR AMS2801:
95 KSI Fsu.

FINISH:

NO PROTECTIVE FINISH REQUIRED.

① COMPLETELY REVISED

THIRD ANGLE PROJECTION		CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 1
PROCUREMENT SPECIFICATION NAS621	TITLE BOLT, LOCK, TENSION, 100° HEAD (MS20426), STANDARD AND OVERSIZE, PULL-TYPE, TITANIUM ALLOY	①	CLASSIFICATION PART STANDARD MS2115 THRU MS2122 SHEET 1 OF 3

REVISION DATE: MAY 31, 2012

ISSUE DATE: DECEMBER 1973

LUBRICATION:

CHLORINE FREE CETYL ALCOHOL.

CODE:

DASH NUMBER DESIGNATES NOMINAL GRIP IN .0625 INCREMENTS
ADD "V" AFTER BASIC PART NUMBER FOR 6AI-4V TITANIUM ALLOY.
ADD "H" AFTER BASIC NUMBER WHEN SEALANT ESCAPE GROOVE IS REQUIRED.
ADD "A" SUFFIX IF OVERSIZE IS REQUIRED.

EXAMPLES OF PART NUMBER:

NAS2116V08 = Ø.190 DIA 6AI-4V TITANIUM ALLOY PIN, 100° FLUSH HEAD, (MS20426) PULL TYPE, .500 GRIP.
NAS2116VH08 = Ø.190 DIA 6AI-4V TITANIUM ALLOY PIN, 100° FLUSH HEAD, (MS20426) SEALANT ESCAPE GROOVE, PULL TYPE, .500 GRIP.
NAS2116V08A = Ø.203 DIA 6AI-4V TITANIUM ALLOY PIN, 100° FLUSH HEAD, (MS20426) PULL TYPE, .500 GRIP, OVERSIZE SHANK DIAMETER.
NAS2116VH08A = Ø.203 DIA 6AI-4V TITANIUM ALLOY PIN, 100° FLUSH HEAD, (MS20426) SEALANT ESCAPE GROOVE, PULL TYPE, .500 GRIP, OVERSIZE SHANK DIAMETER.

NOTES:

- (1) DIMENSIONS IN INCHES AND APPLY AFTER FINISH AND PRIOR TO THE APPLICATION OF LUBRICATION UNLESS OTHERWISE SPECIFIED.
- (2) FOR RECOMMENDED HOLE SIZES, SEE NAS618.
- (3) FOR COLLAR SELECTION, MINIMUM TENSILE STRENGTH, AND INSPECTION GAGE, SEE NAS1080.
- /4/ DIMENSIONS "(ØA)", "(ØA₁)" & "(B)": INCLUDED FOR ENGINEERING REFERENCE PURPOSES ONLY, NOT FOR INSPECTION PURPOSES. VALUES "(ØA)", "(ØA₁)" & "(B)": CALCULATED LIMITS RESULTING FROM TOLERANCES ON "C", "ØD", "ØE", "(H)" & HEAD ANGLE.
- /5/ OVERSIZE HEAD HEIGHT MAXIMUM IS .006 LESS THAN SHOWN IN COLUMN "B".
- /6/ GAGE PROTRUSION "(H)": SEE NAS621 FOR THE RECOMMENDED PRACTICE FOR INSPECTING HEAD CHARACTERISTICS.
- /7/ NUMBER OF LOCKING GROOVES.
- /8/ HEAD MARKING: "NAS" MAY BE INCLUDED IN HEAD MARKING AT OPTION OF FASTENER MANUFACTURER.
- (9) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (10) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (11) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.

REVISION
1
NAS2115 THRU NAS2122
SHEET 2

① COMPLETELY REVISED