

FED. SUPPLY CLASS

5320

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209THIS 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 19-01

REVISION DATE: JUNE 28, 2019

ISSUE DATE: NOVEMBER 1957

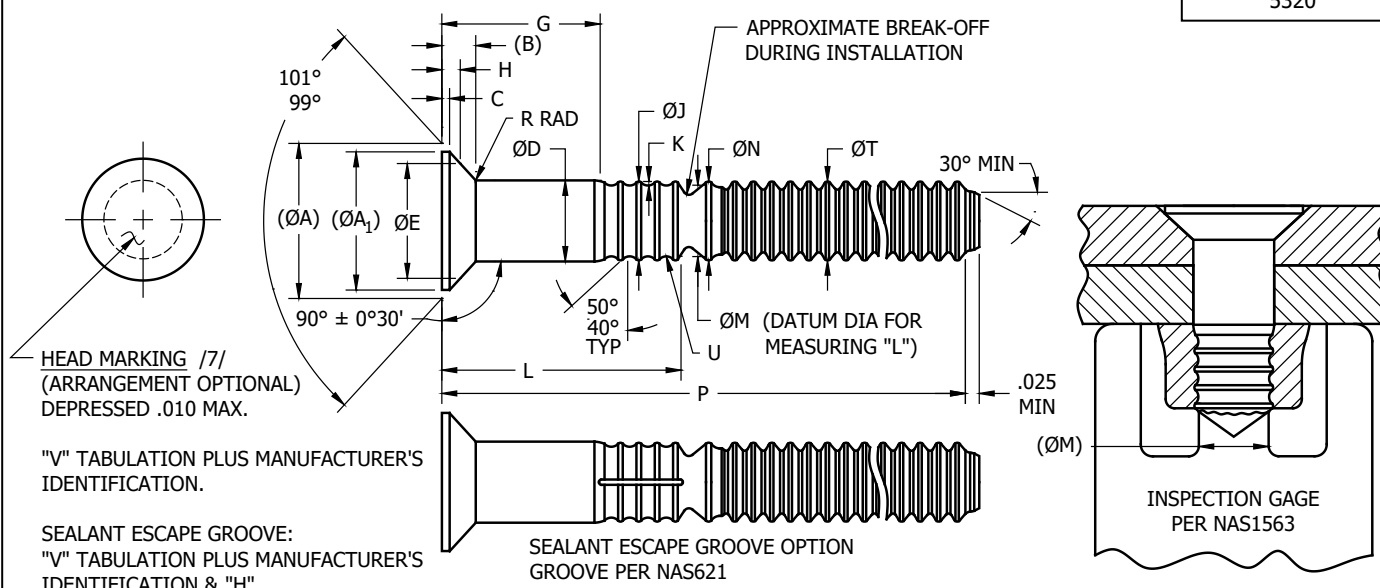


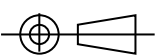
TABLE I – DIMENSIONS

BASIC PART NO.	NOM SIZE	ØD SHANK	(ØA) MAX /4/	(ØA ₁) MIN /4/	(B) MAX /4/	C MAX	GAGE			ØJ	K	ØM GAGE	ØN	R RAD	ØT MAX	U /6/	V HEAD MARKING /7/
							ØE /5/ +.0002 -.0000	H PROTRUSION /5/									
								NOM	±TOL								
NAS2105	.1640	.1640 .1635	.332	.298	.071	.010	.2830	.0183	.0018	.158 .152	.012 .008	.136	.158 .144	.020 .010	.158	4	2105V
NAS2106	.1900	.1895 .1890	.386	.344	.083	.013	.3270	.0224	.0019	.185 .177	.015 .011	.164	.185 .169	.030 .020	.183	4	2106V
NAS2108	.2500	.2495 .2490	.507	.455	.109	.017	.4318	.0290	.0020	.242 .235	.018 .014	.224	.242 .221	.030 .020	.243	4	2108V
NAS2110	.3125	.3120 .3115	.634	.574	.136	.020	.5449	.0346	.0021	.305 .294	.023 .017	.268	.305 .276	.040 .030	.299	5	2110V
NAS2112	.3750	.3745 .3740	.762	.693	.164	.023	.6580	.0404	.0024	.368 .361	.027 .021	.339	.368 .336	.040 .030	.359	5	NAS2112V

MATERIAL:

TITANIUM ALLOY – 6Al-4V (UNS R56400) PER AMS4928 OR AMS4967.

HEAT TREATMENT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS-H-81200 OR AMS2801:
MINIMUM SHEAR STRENGTH: 95 KSI.THIRD
ANGLE
PROJECTIONCUSTODIAN
NATIONAL AEROSPACE STANDARDS COMMITTEE

REVISION

6

PROCUREMENT
SPECIFICATION

NAS621

TITLE

BOLT, LOCK, TENSION, 100° HEAD (NASM24694),
PULL-TYPE, TITANIUM ALLOYCLASSIFICATION
PART STANDARDNAS2105
THRU NAS2112
SHEET 1 OF 3

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY CONFORMANCE OF ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF ITEMS FOR ANY PARTICULAR APPLICATION OR (2) THE EXISTENCE OF OR APPLICABILITY THERETO OF PATENT OR TRADEMARKS RIGHTS.

FINISH:

NO PROTECTIVE FINISH REQUIRED.

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 MATERIAL CODE WHEN SEALANT ESCAPE GROOVE IS REQUIRED.

⑥

EXAMPLES OF PART NUMBER:

⑥

NAS2106V08 = Ø.1900 6AI-4V TITANIUM ALLOY LOCK BOLT, 100° FLUSH HEAD, PULL TYPE, .500 GRIP.

NAS2106VH08 = Ø.1900 6AI-4V TITANIUM ALLOY LOCK BOLT, 100° FLUSH HEAD, SEALANT ESCAPE GROOVE, PULL TYPE, .500 GRIP.

NOTES:

- (1) DIMENSIONS IN INCHES AND APPLY 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/ GAGE PROTRUSION "H": SEE NAS621 FOR THE RECOMMENDED PRACTICE FOR INSPECTING HEAD CHARACTERISTICS.
- /6/ NUMBER OF LOCKING GROOVES.
- /7/ HEAD MARKING: "NAS" MAY BE INCLUDED IN HEAD MARKING AT OPTION OF FASTENER MANUFACTURER.
- (8) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (9) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (10) 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.
- (11) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.

REVISION

6

NAS2105
THRU NAS2112
SHEET 2



Documents
Document Sharing Hub