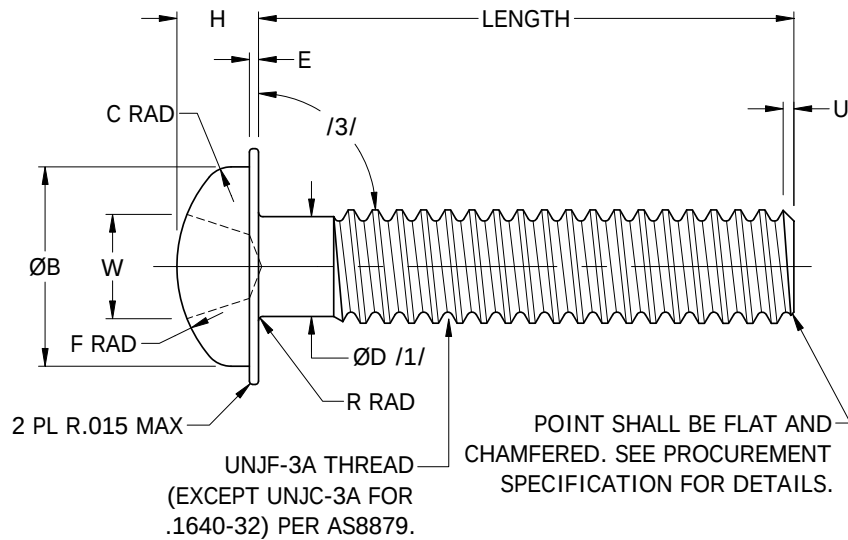
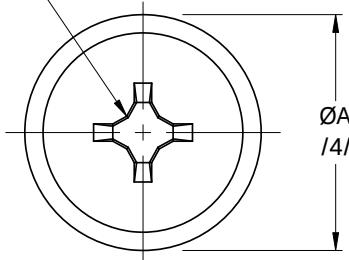


FED. SUPPLY CLASS

5305

CRUCIFORM RECESS
PER NAS7100.
SEE TABLE BELOW.



UNJF-3A THREAD
(EXCEPT UNJC-3A FOR
.1640-32) PER AS8879.

TABLE I – DIMENSIONS AND STRENGTH VALUES

BASIC NUMBER	THREAD SIZE	ØA ±.015 /4/	ØB ±.010	C RAD	ØD /1/	E	F RAD	H	R RAD	U MAX	RECESS		RECESS SIZE	/5/
											W	PENE- TRATION		
NAS8302	.1640-32	.369	.294	.110 .050	.164 .141	.031 .026	.340 .270	.092 .072	.020 .010	.039	.169 .156	.085 .061	2	35
NAS8303	.1900-32	.428	.353	.110 .050	.190 .167	.037 .030	.430 .370	.105 .085	.020 .010	.039	.184 .171	.101 .077	2	50
NAS8304	.2500-28	.563	.488	.130 .070	.250 .224	.048 .040	.500 .440	.135 .115	.020 .010	.045	.253 .240	.118 .094	3	125

MATERIAL: ALLOY STEEL – 4340 (UNS G43406) PER MIL-S-5000 AMS6415 OR AMS6484, OR 8740 (UNS G87400) PER MIL-S-6049 AMS6322, AMS6325 OR AMS6327.

HEAT TREAT: DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS2759.

ALLOY STEEL: 160-180 KSI Ft_u

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

CODE: DASH NUMBER INDICATES LENGTH IN .0625 INCREMENTS, ROUNDED TO TWO DECIMAL PLACES.
SEE TABLE II FOR TABULATIONS OF LENGTH DIMENSIONS.
INTERMEDIATE OR LONGER LENGTHS MAY BE SPECIFIED BY USE OF WHOLE DASH NUMBERS ONLY.
USE OF .25 INCREMENTS IS RECOMMENDED FOR SCREWS OVER 3 INCHES LONG.

EXAMPLE OF PART NUMBER:

NAS8303-10 = SCREW, .1900-32 THREAD, .62 LONG.

③ COMPLETELY REVISED

THIRD ANGLE PROJECTION		CUSTODIAN		REVISION	
		NATIONAL AEROSPACE STANDARDS COMMITTEE		3	
PROCUREMENT SPECIFICATION	NOTED	TITLE		CLASSIFICATION PART STANDARD	
		SCREW, MACHINE, WASHER HEAD, FULL THREAD, CRUCIFORM RECESS, ALLOY STEEL		NAS8302 THRU NAS8304	



Documents
SHEET 1 OF 2

- NOTES: /1/ DIAMETER OF UNTHREADED PORTION OF SCREW SHALL NOT BE LESS THAN MINIMUM PITCH DIAMETER NOR MORE THAN MAXIMUM MAJOR DIAMETER OF THREAD.
- (2) SCREWS LESS THAN 2 DIAMETERS IN LENGTH – COMPLETE THREADS SHALL EXTEND TO WITHIN 2 PITCHES OF BEARING SURFACE OF HEAD AND INCOMPLETE THREADS MAY EXTEND UP TO BEARING SURFACE.
SCREWS 2 DIAMETERS THRU 2 INCHES IN LENGTH – COMPLETE THREADS SHALL EXTEND TO WITHIN 2 PITCHES OF TANGENCY OF “R” AND INCOMPLETE THREADS MAY EXTEND UP TO “R” FILLET AREA.
SCREWS LONGER THAN 2 INCHES – COMPLETE THREADS SHALL EXTEND A MINIMUM OF 1.75 INCHES FROM END OF SCREW AND INCOMPLETE THREADS MAY EXTEND UP TO “R” FILLET AREA.
INCOMPLETE THREADS – SEE NAS4002.
- /3/ BEARING SURFACE SQUARENESS – WITHIN .003 FIM WITH THREAD PITCH DIAMETER.
- /4/ CONCENTRICITY: OUTSIDE “ØA” TO THREAD PITCH DIAMETER WITHIN .008 FIM.
- /5/ MINIMUM TORQUE VALUE (IN-LBF) WHICH RECESS MUST DEVELOP DURING REMOVAL MODE WITH APPROPRIATE NAS8500 THRU 8506 DRIVER USING 5 LBF MAXIMUM END LOAD. CAM OUT OF THE DRIVER OR EXCESSIVE DEFORMATION OF THE RECESS SHALL BE CAUSE FOR REJECTION OF THE LOT.
- (6) HEAD MARKING SHALL BE RAISED OR DEPRESSED (.010 MAX) AND ARRANGED AS FOLLOWS:
MARK WITH BASIC PART NUMBER (“NAS” OPTIONAL) EXCEPT MARK .1640-32 WITH “8”.
MARK WITH MANUFACTURER’S SYMBOL OR TRADEMARK.
LENGTH DASH NUMBER AND RECESS NUMBERS ENCIRCLED.
RECESS NUMBER TO BE APPROXIMATELY 25% LARGER THAN OTHER NUMBERS.
- (7) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (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.

PROCUREMENT SPECIFICATION:

NAS4002, EXCEPT AS NOTED. RECESS TORQUE VALUES SHALL NOT APPLY. COLD WORK OF HEAD TO SHANK FILLET IS NOT REQUIRED. TENSILE VALUES PER NAS4002 FOR PAN HEAD SCREWS ONLY.
PACKAGING PER NAS 4002. REQUIREMENTS ON SIZE .164 SHALL BE IN ACCORDANCE WITH NAS4002.

TABLE II – DASH NUMBER FOR PREFERRED LENGTH

DASH NO	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LENGTH	.19	.25	.31	.38	.44	.50	.56	.62	.69	.75	.81	.88	.94	1.00
TOL	+.00 -.03													
DASH NO	18	20	22	24	26	28	30	32	34 TO 96					
LENGTH	1.12	1.25	1.38	1.50	1.62	1.75	1.88	2.00	2.12 TO 6.00					
TOL	+.00 -.06								+.00 -.09					

REVISION

3

NAS8302 THRU NAS8506
SHEET 2

③ COMPLETELY REVISED