

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

REV.
A

AS3163™

FEDERAL SUPPLY CLASS
5310

RATIONALE

UPDATE THREAD SPECIFICATION TO AS8879, UPDATE DIMENSIONING AND TOLERANCING TO ANSI Y14.5M-1982, ADD CORROSION PROTECTION NOTE, ADD NOTE FOR EXISTING INVENTORY, DELETE SI DIMENSIONS, UPDATE SURFACE TEXTURE NOTE, UPDATE REFERENCES, FIGURE 1 REDRAWN, AND GENERAL EDITORIAL UPDATE.

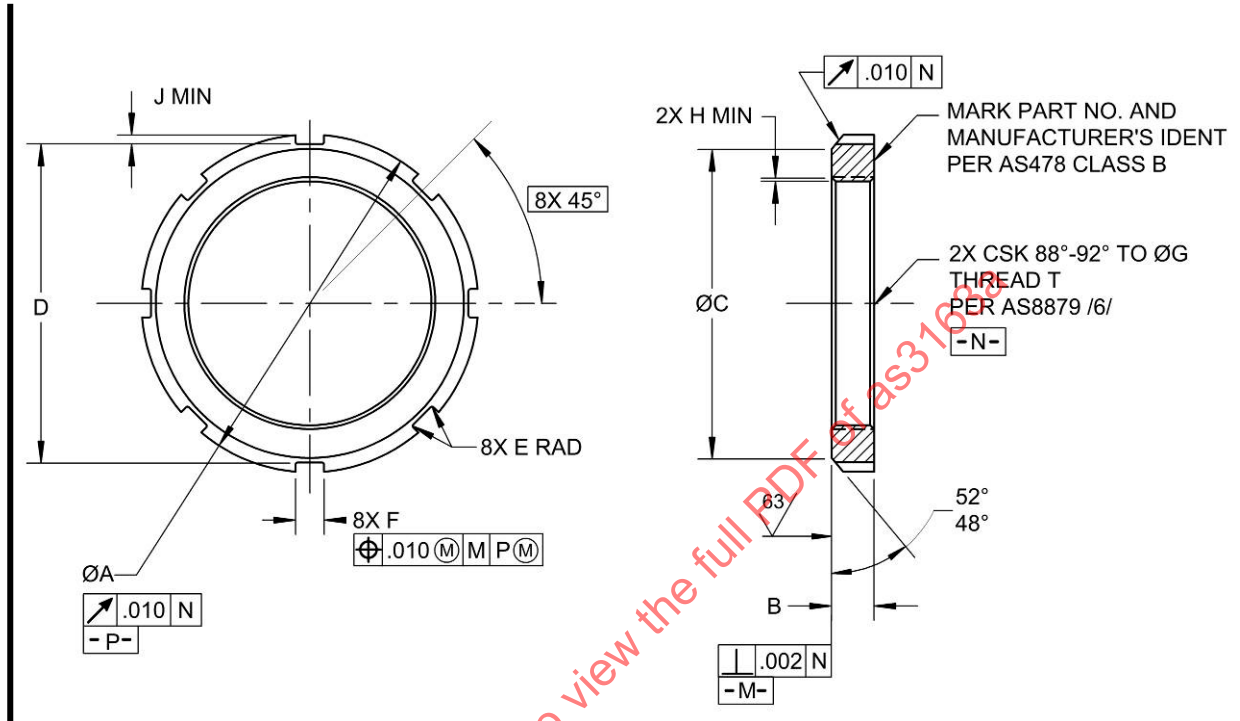
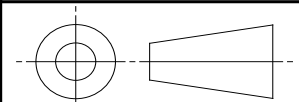


FIGURE 1 - NUT, PLAIN

For more information on this standard, visit
<https://www.sae.org/standards/content/AS3163A>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

NUT, PLAIN - O.D. SLOTS, KEY WASHER LOCKED,
LOW ALLOY STEEL (SAE 8740), AS8879

AS3163™
SHEET 1 OF 4

REV.
A

TABLE 1A – PART NUMBERS AND DIMENSIONS T, ØA, B, ØC, D, AND E

PART NUMBER	T THREAD /1/	ØA	B	ØC	D	E
AS3163-04	.5000-28UNJEF-3B	1.032-1.052	.178-.198	.839-.859	.912-.932	.000-.020
AS3163-05	.5625-24UNJEF-3B	1.094-1.114	.209-.229	.902-.922	.974-.994	.000-.020
AS3163-06	.6250-24UNJEF-3B	1.157-1.177	.209-.229	.964-.984	1.037-1.057	.000-.020
AS3163-07	.6875-24UNJEF-3B	1.297-1.317	.209-.229	1.105-1.125	1.178-1.198	.000-.020
AS3163-08	.7500-20UNJEF-3B	1.376-1.396	.240-.260	1.183-1.203	1.256-1.276	.005-.025
AS3163-09	.8125-20UNJEF-3B	1.454-1.474	.240-.260	1.261-1.281	1.334-1.354	.005-.025
AS3163-10	.8750-20UNJEF-3B	1.516-1.536	.240-.260	1.324-1.344	1.396-1.416	.005-.025
AS3163-11	.9375-20UNJEF-3B	1.579-1.599	.240-.260	1.386-1.406	1.459-1.479	.005-.025
AS3163-12	1.0000-20UNJEF-3B	1.704-1.724	.271-.291	1.449-1.469	1.521-1.541	.005-.025
AS3163-13	1.0625-18UNJEF-3B	1.797-1.817	.271-.291	1.542-1.562	1.615-1.635	.005-.025
AS3163-14	1.1250-18UNJEF-3B	1.860-1.880	.271-.291	1.605-1.625	1.678-1.698	.005-.025
AS3163-15	1.1875-18UNJEF-3B	1.923-1.943	.271-.291	1.668-1.688	1.740-1.760	.005-.025
AS3163-16	1.2500-18UNJEF-3B	1.985-2.005	.271-.291	1.730-1.750	1.802-1.822	.005-.025
AS3163-17	1.3125-18UNJEF-3B	2.047-2.067	.271-.291	1.792-1.812	1.865-1.885	.005-.025
AS3163-18	1.3750-18UNJEF-3B	2.110-2.130	.271-.291	1.855-1.875	1.928-1.948	.005-.025
AS3163-19	1.4375-18UNJEF-3B	2.173-2.193	.271-.291	1.918-1.938	1.990-2.010	.010-.030
AS3163-20	1.5000-18UNJEF-3B	2.235-2.255	.271-.291	1.980-2.000	2.052-2.072	.010-.030
AS3163-21	1.5625-18UNJEF-3B	2.297-2.317	.271-.291	2.042-2.062	2.115-2.135	.010-.030
AS3163-22	1.6250-18UNJEF-3B	2.360-2.380	.302-.322	2.105-2.125	2.178-2.198	.010-.030
AS3163-23	1.6875-18UNJEF-3B	2.423-2.443	.302-.322	2.168-2.188	2.240-2.260	.010-.030
AS3163-24	1.7500-16UNJ-3B	2.516-2.536	.302-.322	2.261-2.281	2.334-2.354	.010-.030
AS3163-25	1.8125-16UNJ-3B	2.579-2.599	.302-.322	2.324-2.344	2.396-2.416	.010-.030
AS3163-26	1.8750-16UNJ-3B	2.641-2.661	.302-.322	2.386-2.406	2.459-2.479	.010-.030
AS3163-27	1.9375-16UNJ-3B	2.704-2.724	.302-.322	2.449-2.469	2.521-2.541	.010-.030
AS3163-28	2.0000-16UNJ-3B	2.766-2.786	.302-.322	2.511-2.531	2.584-2.604	.010-.030
AS3163-29	2.0625-16UNJS-3B	2.829-2.849	.302-.322	2.574-2.594	2.646-2.666	.010-.030
AS3163-30	2.1250-16UNJ-3B	2.891-2.911	.302-.322	2.636-2.656	2.709-2.729	.010-.030
AS3163-31	2.1875-16UNJS-3B	2.954-2.974	.302-.322	2.699-2.719	2.771-2.791	.010-.030
AS3163-32	2.2500-16UNJ-3B	3.016-3.036	.302-.322	2.761-2.781	2.834-2.854	.010-.030
AS3163-33	2.3125-16UNJS-3B	3.079-3.099	.302-.322	2.824-2.844	2.896-2.916	.010-.030
AS3163-34	2.3750-16UNJ-3B	3.141-3.161	.302-.322	2.886-2.906	2.959-2.979	.010-.030
AS3163-35	2.4375-16UNJS-3B	3.204-3.224	.302-.322	2.949-2.969	3.021-3.041	.010-.030
AS3163-36	2.5000-16UNJ-3B	3.266-3.286	.302-.322	3.011-3.031	3.084-3.104	.010-.030

/1/ SEE TABLE 2 FOR DIMENSIONS OF UNJS-3B THREADS.

	AEROSPACE STANDARD	AS3163™ SHEET 2 OF 4	REV. A
	NUT, PLAIN - O.D. SLOTS, KEY WASHER LOCKED, LOW ALLOY STEEL (SAE 8740), AS8879		

TABLE 1B – PART NUMBERS, DIMENSIONS F, G, H, AND APPROX. MASS

PART NUMBER	F	ØG	H MIN	APPROX. MASS LB/100
AS3163-04	.120-.130	.500-.520	.010	2.95
AS3163-05	.120-.130	.562-.582	.012	3.82
AS3163-06	.120-.130	.625-.645	.012	4.13
AS3163-07	.120-.130	.688-.708	.012	5.38
AS3163-08	.178-.198	.750-.770	.016	6.75
AS3163-09	.178-.198	.812-.832	.016	7.43
AS3163-10	.178-.198	.875-.895	.016	7.87
AS3163-11	.178-.198	.938-.958	.016	8.31
AS3163-12	.178-.198	1.000-1.020	.016	10.46
AS3163-13	.178-.198	1.062-1.082	.018	11.69
AS3163-14	.178-.198	1.125-1.145	.018	12.26
AS3163-15	.178-.198	1.188-1.208	.018	12.82
AS3163-16	.178-.198	1.250-1.270	.018	13.36
AS3163-17	.178-.198	1.312-1.332	.018	13.90
AS3163-18	.178-.198	1.375-1.395	.018	14.47
AS3163-19	.240-.260	1.438-1.458	.018	14.88
AS3163-20	.240-.260	1.500-1.520	.018	15.36
AS3163-21	.240-.260	1.562-1.582	.018	15.90
AS3163-22	.240-.260	1.625-1.645	.018	18.44
AS3163-23	.240-.260	1.688-1.708	.018	19.07
AS3163-24	.240-.260	1.750-1.770	.021	20.84
AS3163-25	.240-.260	1.812-1.832	.021	21.50
AS3163-26	.240-.260	1.875-1.895	.021	22.14
AS3163-27	.240-.260	1.938-1.958	.021	22.80
AS3163-28	.240-.260	2.000-2.020	.021	23.44
AS3163-29	.240-.260	2.062-2.082	.021	24.11
AS3163-30	.240-.260	2.125-2.145	.021	24.75
AS3163-31	.240-.260	2.188-2.208	.021	25.41
AS3163-32	.240-.260	2.250-2.270	.021	26.05
AS3163-33	.240-.260	2.312-2.332	.021	26.71
AS3163-34	.240-.260	2.375-2.395	.021	27.35
AS3163-35	.240-.260	2.438-2.458	.021	28.02
AS3163-36	.240-.260	2.500-2.520	.021	28.65

TABLE 2 – THREAD DIMENSIONS FOR UNJS-3B

PART NUMBER	T THREAD	MINOR DIAMETER	PITCH DIAMETER	MAJOR DIAMETER MIN
AS3163-29	2.0625-16UNJS-3B	2.0017-2.0102	2.0219-2.0271	2.0625
AS3163-31	2.1875-16UNJS-3B	2.1267-2.1352	2.1469-2.1521	2.1875
AS3163-33	2.3125-16UNJS-3B	2.2517-2.2602	2.2719-2.2773	2.3125
AS3163-35	2.4375-16UNJS-3B	2.3767-2.3852	2.3969-2.4023	2.4375



AEROSPACE STANDARD

NUT, PLAIN - O.D. SLOTS, KEY WASHER LOCKED,
LOW ALLOY STEEL (SAE 8740), AS8879

AS3163™
SHEET 3 OF 4

**REV.
A**