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AS9306

FEDERAL SUPPLY CLASS
5307

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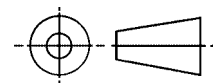
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THIRD ANGLE PROJECTION



ISSUED 1999-12 REAFFIRMED 2004-07

PREPARED BY SAE COMMITTEE E-25

PROCUREMENT SPECIFICATION: AMS 7452-73

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

STUD, SHOULDERED AND STEPPED, HEXAGON
WRENCHING, STEEL, .250-28 UNF-3A X .3125-24 UNF-3A

AS9306
SHEET 1 OF 4

CHAMFER 30° TO $\phi .500$ (OPPOSITE SIDE OPTIONAL)

A

188

C

B TO FULL THD

63

63

THREAD RUNOUT IAW AS3062-79

THREAD PD

-A-

CHAMFER .031 X 45° APPROX

.250-28 UNF-3A SEE REQT 5 THREAD PD

R .015 .005

SEE REQT 8

R .025 .015

63

.120 $\pm .030$

.016 OR CHAMFER

CHAMFER .047 X 45° APPROX

.3125-24 UNF-3A SEE REQT 5

-	.003/1	Ⓢ
/	.006	A
/	.015	B

THREAD RUNOUT IAW AS3062-79

THREAD PD

-B-

.502 .492

.561 MIN

.500

32

SECTION THRU THREAD PROFILE BOTH ENDS

DASH NO.	A	B +0.00 -060	C	L REF	APPROX WEIGHT LBS/100	DASH NO.	A	B +0.00 -060	C	L REF	APPROX WEIGHT LBS/100
-001	.438	<u>1/</u>	.500	1.125	2.54	-050	.500	<u>1/</u>	.500	1.188	2.66
-002	.438	<u>1/</u>	.562	1.188	2.66	-051	.500	<u>1/</u>	.562	1.250	2.77
-003	.438	<u>1/</u>	.625	1.250	2.77	-052	.500	<u>1/</u>	.625	1.312	2.88
-004	.438	<u>1/</u>	.688	1.312	2.88	-053	.500	<u>1/</u>	.688	1.375	2.99
-005	.438	<u>1/</u>	.750	1.375	2.99	-054	.500	<u>1/</u>	.750	1.438	3.11
-006	.438	<u>1/</u>	.812	1.438	3.11	-055	.500	<u>1/</u>	.812	1.500	3.22
-007	.438	<u>1/</u>	.875	1.500	3.22	-056	.500	<u>1/</u>	.875	1.562	3.33
-008	.438	<u>1/</u>	.938	1.562	3.33	-057	.500	<u>1/</u>	.938	1.625	3.45
-009	.438	.125	1.000	1.625	3.45	-058	.500	.125	1.000	1.688	3.56
-010	.438	.188	1.062	1.688	3.56	-059	.500	.188	1.062	1.750	3.67
-011	.438	.250	1.125	1.750	3.67	-060	.500	.250	1.125	1.812	3.79
-012	.438	.312	1.188	1.812	3.79	-061	.500	.312	1.188	1.875	3.90
-013	.438	.375	1.250	1.875	3.90	-062	.500	.375	1.250	1.938	4.01
-014	.438	.438	1.312	1.938	4.01	-063	.500	.438	1.312	2.000	4.13
-015	.438	.500	1.375	2.000	4.13	-064	.500	.500	1.375	2.062	4.24
-016	.438	.562	1.438	2.062	4.24	-065	.500	.562	1.438	2.125	4.35
-017	.438	.625	1.500	2.125	4.35	-066	.500	.625	1.500	2.188	4.47
-018	.438	.688	1.562	2.188	4.47	-067	.500	.688	1.562	2.250	4.58
-019	.438	.750	1.625	2.250	4.58	-068	.500	.750	1.625	2.312	4.69
-020	.438	.812	1.688	2.312	4.69	-069	.500	.812	1.688	2.375	4.81
-021	.438	.875	1.750	2.375	4.81	-070	.500	.875	1.750	2.438	4.92
-022	.438	.938	1.812	2.438	4.92	-071	.500	.938	1.812	2.500	5.03
-023	.438	1.000	1.875	2.500	5.03	-072	.500	1.000	1.875	2.562	5.15
-024	.438	1.062	1.938	2.562	5.15	-073	.500	1.062	1.938	2.625	5.26
-025	.438	1.125	2.000	2.625	5.26	-074	.500	1.125	2.000	2.688	5.32

TABLE I. DASH NUMBERS AND DIMENSIONS - CONTINUED

DASH NO.	A	B + .000 - .060	C	L REF	APPROX WEIGHT LBS/100	DASH NO.	A	B + .000 - .060	C	L REF	APPROX WEIGHT LBS/100
-100	.562	1/	.500	1.250	2.77	-150	.625	1/	.500	1.312	2.88
-101	.562	1/	.562	1.312	2.88	-151	.625	1/	.562	1.375	2.99
-102	.562	1/	.625	1.375	2.99	-152	.625	1/	.625	1.438	3.11
-103	.562	1/	.688	1.438	3.11	-153	.625	1/	.688	1.500	3.22
-104	.562	1/	.750	1.500	3.22	-154	.625	1/	.750	1.562	3.33
-105	.562	1/	.812	1.562	3.33	-155	.625	1/	.812	1.625	3.45
-106	.562	1/	.875	1.625	3.45	-156	.625	1/	.875	1.688	3.56
-107	.562	1/	.938	1.688	3.56	-157	.625	1/	.938	1.750	3.67
-108	.562	.125	1.000	1.750	3.67	-158	.625	.125	1.000	1.812	3.79
-109	.562	.188	1.062	1.812	3.79	-159	.625	.188	1.062	1.875	3.90
-110	.562	.250	1.125	1.875	3.90	-160	.625	.250	1.125	1.938	4.01
-111	.562	.312	1.188	1.938	4.01	-161	.625	.312	1.188	2.000	4.13
-112	.562	.375	1.250	2.000	4.13	-162	.625	.375	1.250	2.062	4.24
-113	.562	.438	1.312	2.062	4.24	-163	.625	.438	1.312	2.125	4.35
-114	.562	.500	1.375	2.125	4.35	-164	.625	.500	1.375	2.188	4.47
-115	.562	.562	1.438	2.188	4.47	-165	.625	.562	1.438	2.250	4.58
-116	.562	.625	1.500	2.250	4.58	-166	.625	.625	1.500	2.312	4.69
-117	.562	.688	1.562	2.312	4.69	-167	.625	.688	1.562	2.375	4.81
-118	.562	.750	1.625	2.375	4.81	-168	.625	.750	1.625	2.438	4.92
-119	.562	.812	1.688	2.438	4.92	-169	.625	.812	1.688	2.500	5.03
-120	.562	.875	1.750	2.500	5.03	-170	.625	.875	1.750	2.562	5.15
-121	.562	.938	1.812	2.562	5.15	-171	.625	.938	1.812	2.625	5.26
-122	.562	1.000	1.875	2.625	5.26	-172	.625	1.000	1.875	2.688	5.32
-123	.562	1.062	1.938	2.688	5.32	-173	.625	1.062	1.938	2.750	5.37
-124	.562	1.125	2.000	2.750	5.37	-174	.625	1.125	2.000	2.812	5.46

1/ THREAD TO HEAD. MAXIMUM TWO INCOMPLETE THREADS.

REQUIREMENTS:

1. **MATERIAL:** STEEL IN ACCORDANCE WITH AMS 6322-80.
2. **FINISH:** CADMIUM PLATE IN ACCORDANCE WITH AMS 2400-80.
3. **HARDNESS:** 26-32HRC.
4. **DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
5. **THREADS:** THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 22.
6. **SURFACE TEXTURE:** SURFACE TEXTURE, SHALL BE IN ACCORDANCE WITH AS291-64.
7. **MAGNETIC PARTICLE INSPECTION:** MAGNETIC PARTICLE INSPECTION SHALL BE IN ACCORDANCE WITH AMS 2640-83.
8. **MARKING:** MATERIAL IDENTIFICATION AND MARKING IN ACCORDANCE WITH AMS 2800-76. DEPRESSED .010 MAX.
9. **TOLERANCE:** UNLESS OTHERWISE SPECIFIED, TOLERANCES SHALL BE LINEAR DIMENSIONS ± 0.10 , ANGULAR DIMENSIONS $\pm 5^\circ$.
10. **EDGES:** BREAK SHARP EDGES .003-.015, UNLESS OTHERWISE SPECIFIED.
11. **MANUFACTURING SPECIFICATION:** AMS 7471.
12. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS9306- 001



ASH NUMBER

BASIC MS NUMBER

MS9306-001
INDICATES:STUD, SHOULDERED AND STEPPED, HEXAGON
WRENCHING, STEEL, .250-28 UNF-3A X .3125-24 UNF-
3A; LENGTH 1.125.