FEDERAL SUPPLY CLASS
5340

RATIONALE

AS3544 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

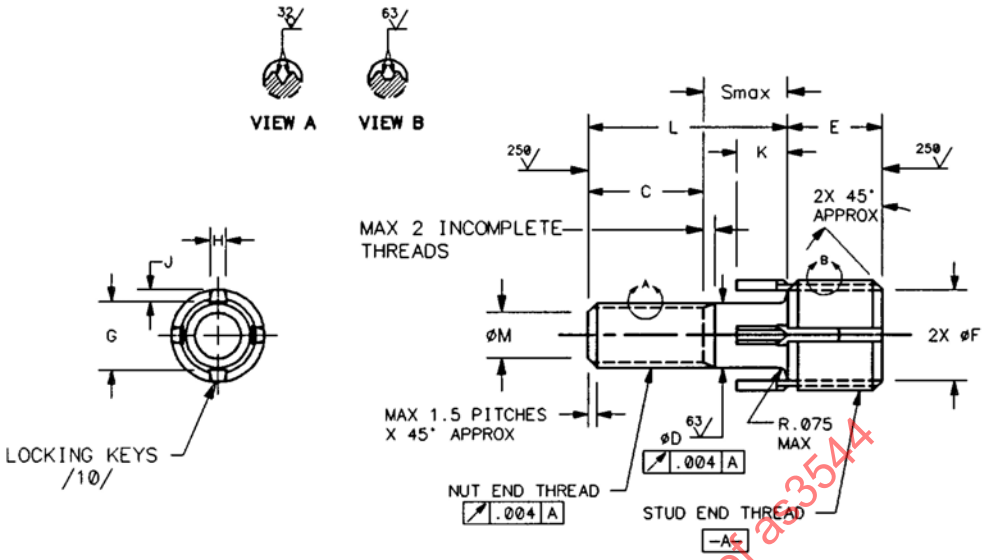


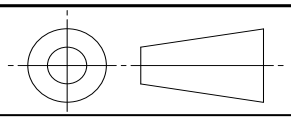
FIGURE 1 - STUD, FINE THREAD, NUT END

TABLE 1 - DIMENSIONS, STUD, FINE THREAD, NUT END

AS3544 DASH NO.	NUT END THREAD AS8879 CLASS 3A	STUD END THREAD FED-STD-H28/2 EXCEPT MODIFIED MINOR DIA SIZE	STUD END THREAD FED-STD-H28/2 EXCEPT MODIFIED MINOR DIA ϕMINOR	C[1] ±.030	ϕD GRIP DIA ±.002	E ±.010	ϕF ±.010	G REF	KEY DIMENSIONS H REF	KEY DIMENSIONS J REF	KEY DIMENSIONS K REF	ϕM ±.010
1	.1640-32UNJC	.3125-18UNC-2A	.256 .249	.450	.161	.312	.250	.220	.068	.040	.130	.120
2	.1900-32UNJF	.3750-16UNC-2A	.320 .312	.500	.187	.312	.310	.284	.068	.040	.130	.150
3	.2500-28UNJF	.4375-14UNC-2A	.383 .375	.560	.247	.375	.375	.344	.068	.040	.190	.200
4	.3125-24UNJF	.5000-13UNC-2A	.440 .432	.660	.310	.437	.430	.407	.068	.040	.190	.260
5	.3750-24UNJF	.5625-12UNC-2A	.503 .495	.660	.372	.500	.495	.469	.068	.040	.190	.320
6	.4375-20UNJF	.6250-11UNC-2A	.565 .551	.800	.435	.625	.550	.532	.068	.040	.190	.375
7	.5000-20UNJF	.6875-11UNS-2A	.625 .615	.800	.497	.688	.615	.595	.068	.040	.190	.435
8	.5625-18UNJF	.8125-16UN-2A	.752 .744	.910	.560	.812	.745	.720	.068	.040	.190	.490
9	.6250-18UNJF	.8750-14UNF-2A	.815 .807	.950	.622	.875	.805	.782	.068	.040	.190	.550

1 THIS DIMENSION DOES NOT APPLY TO DASH NUMBERS ABOVE THE HEAVY LINES IN TABLE 2.

THIRD ANGLE PROJECTION



ISSUED 1999-05 REAFFIRMED 2012-11

CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

STUD, LOCKED IN, KEY LOCKED, UNS S66286,
140 ksi/1200 °F, HEAVY-DUTY,
SELF-BROACHING KEYS

SAE AS3544

TABLE 2 - TABULATED LENGTHS, NUT END

L NUT END +.010	LENGTH DASH NO.	Smax NOMINAL DIAMETER .160	Smax NOMINAL DIAMETER .190	Smax NOMINAL DIAMETER .250	Smax NOMINAL DIAMETER .3125	Smax NOMINAL DIAMETER .375	Smax NOMINAL DIAMETER .4375	Smax NOMINAL DIAMETER .500	Smax NOMINAL DIAMETER .5625	Smax NOMINAL DIAMETER .625
.438	7	.138	.138	--	--	--	--	--	--	--
.500	8	.138	.138	.146	--	--	--	--	--	--
.562	9	.138	.138	.146	.158	--	--	--	--	--
.625	10	.138	.138	.146	.158	.158	--	--	--	--
.688	11	.278	.228	.146	.158	.158	.175	--	--	--
.750	12	.340	.290	.230	.158	.158	.175	.175	--	--
.812	13	.402	.352	.292	.158	.158	.175	.175	.186	--
.875	14	.465	.415	.355	.255	.255	.175	.175	.186	.186
.938	15	.528	.478	.418	.318	.318	.175	.175	.186	.186
1.000	16	.590	.540	.480	.380	.380	.240	.240	.186	.186
1.062	17	.652	.602	.542	.442	.442	.302	.302	.186	.186
1.125	18	.715	.665	.605	.505	.505	.365	.365	.255	.186
1.188	19	.778	.728	.668	.568	.568	.428	.428	.318	.278
1.250	20	.840	.790	.730	.630	.630	.490	.490	.380	.340
1.312	21	.902	.852	.792	.692	.692	.552	.552	.442	.402
1.375	22	.965	.915	.855	.755	.755	.615	.615	.505	.465
1.438	23	1.028	.978	.918	.818	.818	.678	.678	.568	.528
1.500	24	1.090	1.040	.980	.880	.880	.740	.740	.630	.590
1.562	25	1.152	1.102	1.042	.942	.942	.802	.802	.692	.652
1.625	26	1.215	1.165	1.105	1.005	1.005	.865	.865	.755	.715
1.688	27	1.278	1.228	1.168	1.068	1.068	.928	.928	.818	.778
1.750	28	1.340	1.290	1.230	1.130	1.130	.990	.990	.880	.840
1.812	29	1.402	1.352	1.292	1.192	1.192	1.052	1.052	.942	.902
1.875	30	1.465	1.415	1.355	1.255	1.255	1.115	1.115	1.005	.965
1.938	31	1.528	1.478	1.418	1.318	1.318	1.178	1.178	1.068	1.028
2.000	32	1.590	1.540	1.480	1.380	1.380	1.240	1.240	1.130	1.090
2.125	34	1.715	1.665	1.605	1.505	1.505	1.365	1.365	1.255	1.215
2.250	36	1.840	1.790	1.730	1.630	1.630	1.490	1.490	1.380	1.340
2.375	38	1.965	1.915	1.855	1.755	1.755	1.615	1.615	1.505	1.465
2.500	40	2.090	2.040	1.980	1.880	1.880	1.740	1.740	1.630	1.590
2.625	42	2.215	2.165	2.105	2.005	2.005	1.865	1.865	1.755	1.715
2.750	44	2.340	2.290	2.230	2.130	2.130	1.990	1.990	1.880	1.840

DASH NUMBERED PARTS ABOVE THE HEAVY LINE ARE THREADED TO THE STUD END AS SPECIFIED HEREIN. THE MAXIMUM DISTANCE FROM THE STUD END TO THE FIRST FULL THREAD SHALL BE EQUAL TO THE SUM OF THE MAXIMUM FILLET RADIUS AND A MAXIMUM OF TWO COMPLETE THREADS. INCOMPLETE THREADS NOT TO ENTER FILLET AREA.

NOTES:

1. MATERIAL: STEEL, CORROSION-RESISTANT, TYPE A286 (UNS S66286) IN ACCORDANCE WITH AMS 5731, AMS 5734, OR AMS 5737.

   LOCKING KEYS: STEEL, CORROSION-RESISTANT, TYPE 420 (UNS S42000) CHEMICAL COMPOSITION OF QQ-S-763.

2. HEAT TREATMENT: AMS 5731 AND AMS 5734 SHALL BE HEAT TREATED TO 140 ksi Ftu MINIMUM IAW AMS 2759/3.

3. AS AND AMS ARE SAE PUBLICATIONS. ANSI IS AN AMERICAN STANDARDS INSTITUTE PUBLICATION.

4. HARDNESS: 29 TO 38 HRC.

5. SURFACE TREATMENT: PASSIVATED IN ACCORDANCE WITH AMS-QQ-P-35.

6. DIMENSIONS AND TOLERANCING: ASME Y14.5M

7. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.005, ANGULAR DIMENSIONS ±5°.