

REV.
A

AS3658

RATIONALE

AS3658A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

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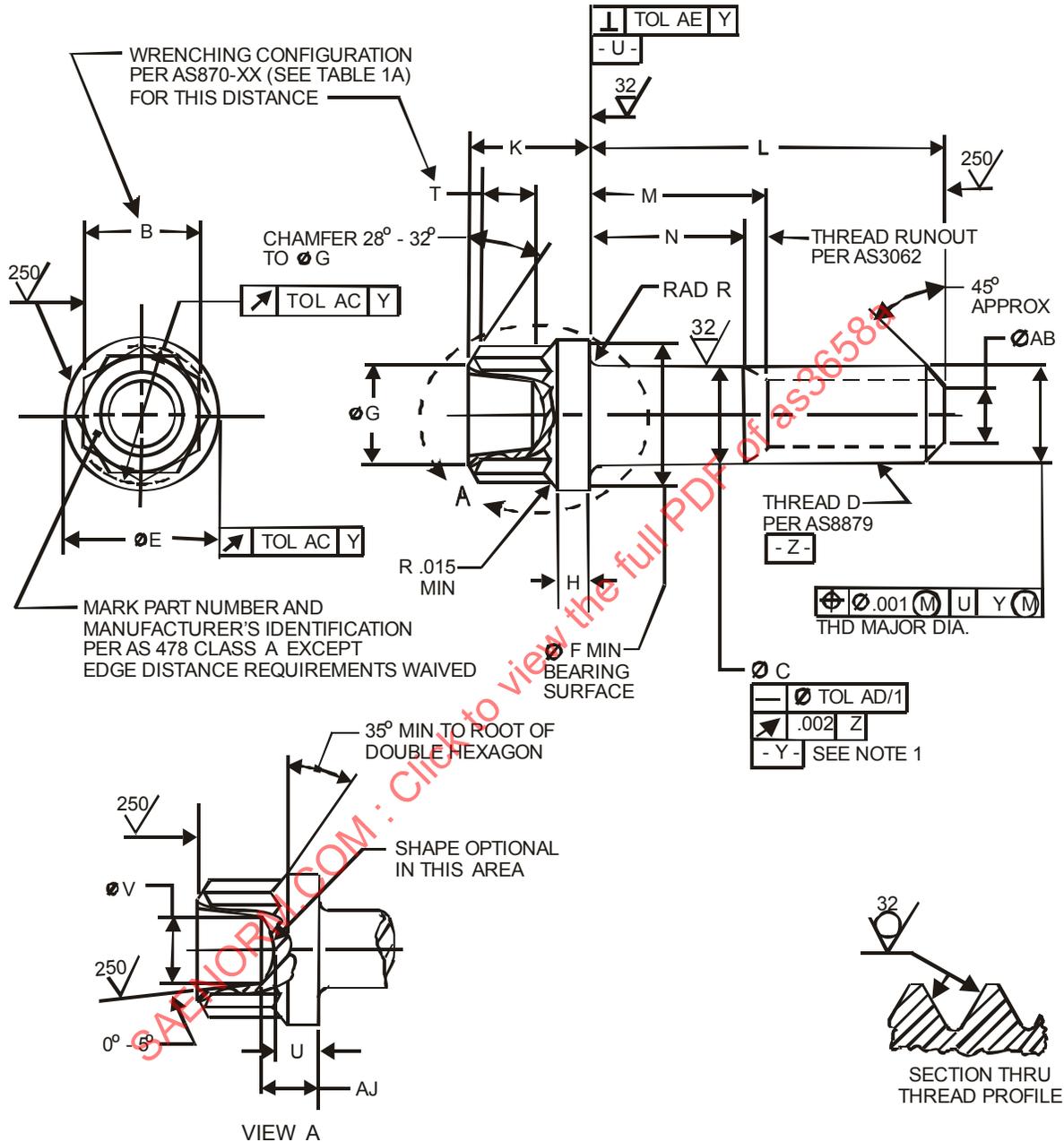
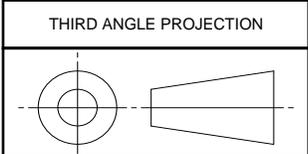


FIGURE 1 - BOLT

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CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7475



AEROSPACE STANDARD

BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, CLOSE TOLERANCE SHANK, COBALT-NICKEL ALLOY, UNS R30159, 260 KSI MIN

AS3658
SHEET 1 OF 12

REV. A

ISSUED 2007-10 REVISED 2009-06 REAFFIRMED 2014-04

TABLE 1A - DASH NUMBERS AND DIMENSIONS B - F

DASH NO.	NOMINAL THREAD D		B		C	E	F MIN
	DESIGNATION	MODIFIED MAJOR DIA.	AS870 DASH NO.	NOMINAL SIZE			
-3	.1900 - 32 UNJF - 3A MOD	.1840 - .1875	-08	.2500	.1885 - .1895	.365 - .385	.335
-4	.2500 - 28 UNJF - 3A MOD	.2435 - .2475	-10	.3125	.2485 - .2495	.455 - .475	.425
-5	.3125 - 24 UNJF - 3A MOD	.3053 - .3100	-12	.3750	.3110 - .3120	.570 - .590	.540
-6	.3750 - 24 UNJF - 3A MOD	.3678 - .3725	-14	.4375	.3735 - .3745	.686 - .706	.656
-7	.4375 - 20 UNJF - 3A MOD	.4294 - .4350	-16	.5000	.4360 - .4370	.802 - .822	.772
-8	.5000 - 20 UNJF - 3A MOD	.4919 - .4975	-18	.5625	.4985 - .4995	.917 - .937	.887
-9	.5625 - 18 UNJF - 3A MOD	.5538 - .5600	-20	.6250	.5610 - .5620	1.032 - 1.052	1.002
-10	.6250 - 18 UNJF - 3A MOD	.6163 - .6225	-22	.6875	.6235 - .6245	1.148 - 1.168	1.118
-12	.7500 - 16 UNJF - 3A MOD	.7406 - .7475	-26	.8125	.7485 - .7495	1.379 - 1.399	1.349
-14	.8750 - 14 UNJF - 3A MOD	.8647 - .8725	-30	.9375	.8735 - .8745	1.610 - 1.630	1.580
-16	1.0000 - 12 UNJF - 3A MOD	.9886 - .9975	-34	1.0625	.9985 - .9995	1.841 - 1.861	1.811

TABLE 1B - DASH NUMBERS AND DIMENSIONS G - AB & AJ

DASH NO.	G	H MIN	K	R	T MIN	U	V	AB	AJ MAX
-3	.240 - .260	.020	.248 - .268	.015 - .025	.122	.114 - .134	.090 - .110	.130 - .150	.154
-4	.302 - .322	.026	.293 - .313	.020 - .030	.144	.150 - .170	.140 - .160	.184 - .204	.199
-5	.365 - .385	.035	.354 - .374	.026 - .036	.166	.188 - .208	.196 - .216	.239 - .259	.247
-6	.428 - .448	.044	.405 - .425	.033 - .043	.188	.225 - .245	.250 - .270	.301 - .321	.294
-7	.490 - .510	.053	.462 - .482	.039 - .049	.210	.262 - .282	.300 - .320	.354 - .374	.340
-8	.552 - .572	.062	.510 - .530	.045 - .055	.232	.300 - .320	.360 - .380	.416 - .436	.389
-9	.615 - .635	.071	.558 - .578	.051 - .061	.254	.338 - .358	.430 - .450	.472 - .492	.440
-10	.677 - .697	.080	.635 - .655	.058 - .068	.336	.375 - .395	.490 - .510	.534 - .554	.488
-12	.802 - .822	.098	.735 - .755	.070 - .080	.371	.450 - .470	.560 - .580	.650 - .670	.576
-14	.927 - .947	.116	.875 - .895	.083 - .093	.442	.525 - .545	.640 - .660	.764 - .784	.665
-16	1.052 - 1.072	.134	.975 - .995	.095 - .105	.512	.600 - .620	.730 - .750	.874 - .894	.756

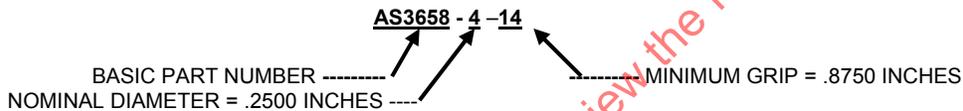
TABLE 1C - DASH NUMBERS, AND GEOMETRIC TOLERANCES .

DASH NO.	AC	AD	AE
-3	.006	.001	.003
-4	.007	.001	.003
-5	.008	.001	.003
-6	.010	.0008	.003
-7	.010	.0008	.003
-8	.012	.0006	.003
-9	.013	.0006	.003
-10	.016	.0006	.003
-12	.017	.0006	.003
-14	.022	.0006	.005
-16	.025	.0006	.005

NOTES:

1. FOR PARTS WITH A MINIMUM GRIP LENGTH (DIM 'N') EQUAL TO OR LESS THAN 1.5D THE THREAD PD (DATUM Z) SHALL REPLACE DATUM Y.
2. MATERIAL: COBALT-NICKEL ALLOY PER AMS5842 (UNS R30159).
3. PROCUREMENT SPECIFICATION: AS7475.
4. FLUORESCENT PENETRANT INSPECTION PER ASTM E1417.
5. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 µin Ra.
6. BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
7. DIMENSIONS IN INCHES.
8. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982 (ASME PUBLICATION).
9. DO NOT USE UNASSIGNED PART NUMBERS.
10. THE PART NUMBER SHALL CONSIST OF THE BASIC PART NUMBER, FIRST DASH NUMBER DESIGNATING THE NOMINAL DIAMETER AND THE SECOND DASH NUMBER DESIGNATING THE MINIMUM GRIP IN SIXTEENTHS (.0625) OF AN INCH.

EXAMPLE OF COMPLETE PART NUMBER: -



11. A CHANGE BAR (L) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

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	AEROSPACE STANDARD	AS3658 SHEET 3 OF 12	REV. A
	BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, CLOSE TOLERANCE SHANK, COBALT-NICKEL ALLOY, UNS R30159, 260 KSI MIN		

TABLE 2 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.1900 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-3-02	.125	.198	.610 - .630	0.986	AS3658-3-18	1.125	1.198	1.610 - 1.630	1.842
AS3658-3-03	.188	.261	.673 - .693	1.040	AS3658-3-19	1.188	1.260	1.672 - 1.692	1.895
AS3658-3-04	.250	.322	.734 - .754	1.093	AS3658-3-20	1.250	1.322	1.734 - 1.754	1.948
AS3658-3-05	.312	.385	.797 - .817	1.146	AS3658-3-21	1.312	1.384	1.796 - 1.816	2.002
AS3658-3-06	.375	.448	.860 - .880	1.200	AS3658-3-22	1.375	1.448	1.860 - 1.880	2.056
AS3658-3-07	.438	.510	.922 - .942	1.253	AS3658-3-23	1.438	1.510	1.922 - 1.942	2.109
AS3658-3-08	.500	.572	.984 - 1.004	1.306	AS3658-3-24	1.500	1.572	1.984 - 2.004	2.162
AS3658-3-09	.562	.634	1.046 - 1.066	1.360	AS3658-3-25	1.562	1.634	2.046 - 2.066	2.216
AS3658-3-10	.625	.698	1.110 - 1.130	1.414	AS3658-3-26	1.625	1.698	2.110 - 2.130	2.270
AS3658-3-11	.688	.760	1.172 - 1.192	1.467	AS3658-3-27	1.688	1.760	2.172 - 2.192	2.323
AS3658-3-12	.750	.822	1.234 - 1.254	1.520	AS3658-3-28	1.750	1.822	2.234 - 2.254	2.376
AS3658-3-13	.812	.884	1.296 - 1.316	1.574	AS3658-3-29	1.812	1.884	2.296 - 2.316	2.430
AS3658-3-14	.875	.948	1.360 - 1.380	1.628	AS3658-3-30	1.875	1.948	2.360 - 2.380	2.484
AS3658-3-15	.938	1.010	1.422 - 1.442	1.681	AS3658-3-31	1.938	2.010	2.422 - 2.442	2.538
AS3658-3-16	1.000	1.072	1.484 - 1.504	1.734	AS3658-3-32	2.000	2.072	2.484 - 2.504	2.591
AS3658-3-17	1.062	1.134	1.546 - 1.566	1.788					

TABLE 3 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.2500 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-4-02	.125	.206	.715 - .735	1.920	AS3658-4-18	1.125	1.206	1.715 - 1.735	3.404
AS3658-4-03	.188	.269	.778 - .798	2.013	AS3658-4-19	1.188	1.269	1.778 - 1.798	3.496
AS3658-4-04	.250	.331	.840 - .860	2.106	AS3658-4-20	1.250	1.331	1.840 - 1.860	3.589
AS3658-4-05	.312	.393	.902 - .922	2.198	AS3658-4-21	1.312	1.393	1.902 - 1.922	3.682
AS3658-4-06	.375	.456	.965 - .985	2.291	AS3658-4-22	1.375	1.456	1.965 - 1.985	3.774
AS3658-4-07	.438	.519	1.028 - 1.048	2.384	AS3658-4-23	1.438	1.519	2.028 - 2.048	3.867
AS3658-4-08	.500	.581	1.090 - 1.110	2.476	AS3658-4-24	1.500	1.581	2.090 - 2.110	3.960
AS3658-4-09	.562	.643	1.152 - 1.172	2.569	AS3658-4-25	1.562	1.643	2.152 - 2.172	4.052
AS3658-4-10	.625	.706	1.215 - 1.235	2.662	AS3658-4-26	1.625	1.706	2.215 - 2.235	4.145
AS3658-4-11	.688	.769	1.278 - 1.298	2.755	AS3658-4-27	1.688	1.769	2.278 - 2.298	4.238
AS3658-4-12	.750	.831	1.340 - 1.360	2.847	AS3658-4-28	1.750	1.831	2.340 - 2.360	4.331
AS3658-4-13	.812	.893	1.402 - 1.422	2.940	AS3658-4-29	1.812	1.893	2.402 - 2.422	4.423
AS3658-4-14	.875	.955	1.465 - 1.485	3.032	AS3658-4-30	1.875	1.956	2.465 - 2.485	4.516
AS3658-4-15	.938	1.019	1.528 - 1.548	3.125	AS3658-4-31	1.938	1.019	2.528 - 2.548	4.609
AS3658-4-16	1.000	1.081	1.590 - 1.610	3.218	AS3658-4-32	2.000	2.081	2.590 - 2.610	4.702
AS3658-4-17	1.062	1.143	1.652 - 1.672	3.311					

TABLE 4 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.3125 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-5-03	.188	.281	.896 - .916	3.606	AS3658-5-22	1.375	1.468	2.083 - 2.103	6.357
AS3658-5-04	.250	.343	.958 - .978	3.751	AS3658-5-23	1.438	1.531	2.146 - 2.166	6.502
AS3658-5-05	.312	.405	1.020 - 1.040	3.896	AS3658-5-24	1.500	1.593	2.208 - 2.228	6.647
AS3658-5-06	.375	.468	1.083 - 1.103	4.040	AS3658-5-25	1.562	1.655	2.270 - 2.290	6.792
AS3658-5-07	.438	.531	1.146 - 1.166	4.185	AS3658-5-26	1.625	1.718	2.333 - 2.353	6.936
AS3658-5-08	.500	.593	1.208 - 1.228	4.330	AS3658-5-27	1.688	1.781	2.396 - 2.416	7.081
AS3658-5-09	.562	.655	1.270 - 1.290	4.475	AS3658-5-28	1.750	1.843	2.458 - 2.478	7.226
AS3658-5-10	.625	.718	1.333 - 1.353	4.620	AS3658-5-29	1.812	1.905	2.520 - 2.540	7.371
AS3658-5-11	.688	.781	1.396 - 1.416	4.764	AS3658-5-30	1.875	1.968	2.583 - 2.603	7.516
AS3658-5-12	.750	.843	1.458 - 1.478	4.909	AS3658-5-31	1.938	2.031	2.646 - 2.666	7.660
AS3658-5-13	.812	.905	1.520 - 1.540	5.054	AS3658-5-32	2.000	2.093	2.708 - 2.728	7.805
AS3658-5-14	.875	.968	1.583 - 1.603	5.199	AS3658-5-33	2.062	2.155	2.770 - 2.790	7.950
AS3658-5-15	.938	1.031	1.646 - 1.666	5.344	AS3658-5-34	2.125	2.218	2.833 - 2.853	8.095
AS3658-5-16	1.000	1.093	1.708 - 1.728	5.488	AS3658-5-35	2.188	2.281	2.896 - 2.916	8.240
AS3658-5-17	1.062	1.155	1.770 - 1.790	5.633	AS3658-5-36	2.250	2.343	2.958 - 2.978	8.384
AS3658-5-18	1.125	1.218	1.833 - 1.853	5.778	AS3658-5-37	2.312	2.405	3.020 - 3.040	8.529
AS3658-5-19	1.188	1.281	1.896 - 1.916	5.923	AS3658-5-38	2.375	2.468	3.083 - 2.103	8.674
AS3658-5-20	1.250	1.343	1.958 - 1.978	6.068	AS3658-5-39	2.438	2.531	3.146 - 3.166	8.819
AS3658-5-21	1.312	1.405	2.020 - 2.040	6.212	AS3658-5-40	2.500	2.593	3.208 - 3.228	8.964

TABLE 5 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.3750 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-6-03	.188	.281	.983 - 1.003	5.698	AS3658-6-22	1.375	1.468	2.170 - 2.190	9.659
AS3658-6-04	.250	.343	1.045 - 1.065	5.906	AS3658-6-23	1.438	1.531	2.233 - 2.253	9.868
AS3658-6-05	.312	.405	1.107 - 1.127	6.115	AS3658-6-24	1.500	1.593	2.295 - 2.315	10.076
AS3658-6-06	.375	.468	1.170 - 1.190	6.323	AS3658-6-25	1.562	1.655	2.357 - 2.377	10.285
AS3658-6-07	.438	.531	1.233 - 1.253	6.532	AS3658-6-26	1.625	1.718	2.420 - 2.440	10.493
AS3658-6-08	.500	.593	1.295 - 1.315	6.740	AS3658-6-27	1.688	1.781	2.483 - 2.503	10.702
AS3658-6-09	.562	.655	1.357 - 1.377	6.949	AS3658-6-28	1.750	1.843	2.545 - 2.565	10.910
AS3658-6-10	.625	.718	1.420 - 1.440	7.157	AS3658-6-29	1.812	1.905	2.607 - 2.627	11.118
AS3658-6-11	.688	.781	1.483 - 1.503	7.366	AS3658-6-30	1.875	1.968	2.670 - 2.690	11.327
AS3658-6-12	.750	.843	1.545 - 1.565	7.574	AS3658-6-31	1.938	2.031	2.733 - 2.753	11.536
AS3658-6-13	.812	.905	1.607 - 1.627	7.783	AS3658-6-32	2.000	2.093	2.795 - 2.815	11.744
AS3658-6-14	.875	.968	1.670 - 1.690	7.991	AS3658-6-33	2.062	2.155	2.857 - 2.877	11.952
AS3658-6-15	.938	1.031	1.733 - 1.753	8.200	AS3658-6-34	2.125	2.218	2.920 - 2.940	12.161
AS3658-6-16	1.000	1.093	1.795 - 1.815	8.408	AS3658-6-35	2.188	2.281	2.983 - 3.003	12.370
AS3658-6-17	1.062	1.155	1.857 - 1.877	8.617	AS3658-6-36	2.250	2.343	3.045 - 3.065	12.578
AS3658-6-18	1.125	1.218	1.920 - 1.940	8.825	AS3658-6-37	2.312	2.405	3.107 - 3.127	12.786
AS3658-6-19	1.188	1.281	1.983 - 2.003	9.034	AS3658-6-38	2.375	2.468	3.170 - 3.190	12.995
AS3658-6-20	1.250	1.343	2.045 - 2.065	9.242	AS3658-6-39	2.438	2.531	3.233 - 3.253	13.204
AS3658-6-21	1.312	1.405	2.107 - 2.127	9.451	AS3658-6-40	2.500	2.593	3.295 - 3.315	13.412

TABLE 6 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.4375 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-7-03	.188	.298	1.112 - 1.132	8.822	AS3658-7-26	1.625	1.735	2.549 - 2.569	15.347
AS3658-7-04	.250	.360	1.174 - 1.194	9.106	AS3658-7-27	1.688	1.798	2.612 - 2.632	15.631
AS3658-7-05	.312	.422	1.236 - 1.256	9.390	AS3658-7-28	1.750	1.860	2.674 - 2.694	15.915
AS3658-7-06	.375	.485	1.299 - 1.319	9.674	AS3658-7-29	1.812	1.922	2.736 - 2.756	16.199
AS3658-7-07	.438	.548	1.362 - 1.382	9.957	AS3658-7-30	1.875	1.985	2.799 - 2.819	16.482
AS3658-7-08	.500	.610	1.424 - 1.444	10.241	AS3658-7-31	1.938	2.048	2.862 - 2.882	16.766
AS3658-7-09	.562	.672	1.486 - 1.506	10.525	AS3658-7-32	2.000	2.110	2.924 - 2.944	17.050
AS3658-7-10	.625	.735	1.549 - 1.569	10.808	AS3658-7-33	2.062	2.172	2.986 - 3.006	17.333
AS3658-7-11	.688	.798	1.612 - 1.632	11.092	AS3658-7-34	2.125	2.235	3.049 - 3.069	17.617
AS3658-7-12	.750	.860	1.674 - 1.694	11.376	AS3658-7-35	2.188	2.298	3.112 - 3.132	17.901
AS3658-7-13	.812	.922	1.736 - 1.756	11.660	AS3658-7-36	2.250	2.360	3.174 - 3.194	18.184
AS3658-7-14	.875	.985	1.799 - 1.819	11.943	AS3658-7-37	2.312	2.422	3.236 - 3.256	18.468
AS3658-7-15	.938	1.048	1.862 - 1.882	12.227	AS3658-7-38	2.375	2.485	3.299 - 3.319	18.752
AS3658-7-16	1.000	1.110	1.924 - 1.944	12.511	AS3658-7-39	2.438	2.548	3.362 - 3.382	19.036
AS3658-7-17	1.062	1.172	1.986 - 2.006	12.794	AS3658-7-40	2.500	2.610	3.424 - 3.444	19.319
AS3658-7-18	1.125	1.235	2.049 - 2.069	13.078	AS3658-7-41	2.562	2.672	3.486 - 3.506	19.603
AS3658-7-19	1.188	1.298	2.112 - 2.132	13.362	AS3658-7-42	2.625	2.735	3.549 - 3.569	19.887
AS3658-7-20	1.250	1.360	2.174 - 2.194	13.645	AS3658-7-43	2.688	2.798	3.612 - 3.632	20.170
AS3658-7-21	1.312	1.422	2.236 - 2.256	13.929	AS3658-7-44	2.750	2.860	3.674 - 3.694	20.454
AS3658-7-22	1.375	1.485	2.299 - 2.319	14.213	AS3658-7-45	2.812	2.922	3.736 - 3.756	20.738
AS3658-7-23	1.438	1.548	2.362 - 2.382	14.496	AS3658-7-46	2.875	2.985	3.799 - 3.819	21.021
AS3658-7-24	1.500	1.610	2.424 - 2.444	14.780	AS3658-7-47	2.938	3.048	3.862 - 3.882	21.305
AS3658-7-25	1.562	1.672	2.486 - 2.506	15.064	AS3658-7-48	3.000	3.110	3.924 - 3.944	21.589

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TABLE 7 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.5000 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-8-04	.250	.360	1.262 - 1.282	11.871	AS3658-8-31	1.938	2.048	2.950 - 2.970	21.877
AS3658-8-05	.312	.422	1.324 - 1.344	12.241	AS3658-8-32	2.000	2.110	3.012 - 3.032	22.247
AS3658-8-06	.375	.485	1.387 - 1.407	12.612	AS3658-8-33	2.062	2.172	3.074 - 3.094	22.618
AS3658-8-07	.438	.548	1.450 - 1.470	12.982	AS3658-8-34	2.125	2.235	3.137 - 3.157	22.994
AS3658-8-08	.500	.610	1.512 - 1.532	13.353	AS3658-8-35	2.188	2.298	3.200 - 3.220	23.365
AS3658-8-09	.562	.672	1.574 - 1.594	13.724	AS3658-8-36	2.250	2.360	3.262 - 3.282	23.735
AS3658-8-10	.625	.735	1.637 - 1.657	14.094	AS3658-8-37	2.312	2.422	3.324 - 3.344	24.106
AS3658-8-11	.688	.798	1.700 - 1.720	14.465	AS3658-8-38	2.375	2.485	3.387 - 3.407	24.476
AS3658-8-12	.750	.860	1.762 - 1.782	14.835	AS3658-8-39	2.438	2.548	3.450 - 3.470	24.847
AS3658-8-13	.812	.922	1.824 - 1.844	15.206	AS3658-8-40	2.500	2.610	3.512 - 3.532	25.218
AS3658-8-14	.875	.985	1.887 - 1.907	15.577	AS3658-8-41	2.562	2.672	3.574 - 3.594	25.588
AS3658-8-15	.938	1.048	1.950 - 1.970	15.947	AS3658-8-42	2.625	2.735	3.637 - 3.657	25.959
AS3658-8-16	1.000	1.110	2.012 - 2.032	16.318	AS3658-8-43	2.688	2.798	3.700 - 3.720	26.329
AS3658-8-17	1.062	1.172	2.074 - 2.094	16.688	AS3658-8-44	2.750	2.860	3.762 - 3.782	26.700
AS3658-8-18	1.125	1.235	2.137 - 2.157	17.059	AS3658-8-45	2.812	2.922	3.824 - 3.844	27.071
AS3658-8-19	1.188	1.298	2.200 - 2.220	17.430	AS3658-8-46	2.875	2.985	3.887 - 3.907	27.441
AS3658-8-20	1.250	1.360	2.262 - 2.282	17.800	AS3658-8-47	2.938	3.048	3.950 - 3.970	27.812
AS3658-8-21	1.312	1.422	2.324 - 2.344	18.171	AS3658-8-48	3.000	3.110	4.012 - 4.032	28.182
AS3658-8-22	1.375	1.485	2.387 - 2.407	18.541	AS3658-8-49	3.062	3.172	4.074 - 4.094	28.553
AS3658-8-23	1.438	1.548	2.450 - 2.470	18.912	AS3658-8-50	3.125	3.235	4.137 - 4.157	28.924
AS3658-8-24	1.500	1.610	2.512 - 2.532	19.283	AS3658-8-51	3.188	3.298	4.200 - 4.220	29.294
AS3658-8-25	1.562	1.672	2.574 - 2.594	19.653	AS3658-8-52	3.250	3.360	4.262 - 4.282	29.665
AS3658-8-26	1.625	1.735	2.637 - 2.657	20.024	AS3658-8-53	3.312	3.422	4.324 - 4.344	30.035
AS3658-8-27	1.688	1.798	2.700 - 2.720	20.394	AS3658-8-54	3.375	3.485	4.387 - 4.407	30.406
AS3658-8-28	1.750	1.860	2.762 - 2.782	20.765	AS3658-8-55	3.438	3.548	4.450 - 4.470	30.777
AS3658-8-29	1.812	1.922	2.824 - 2.844	21.136	AS3658-8-56	3.500	3.610	4.512 - 4.532	31.148
AS3658-8-30	1.875	1.985	2.887 - 2.907	21.506					

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TABLE 8 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.5625 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-9-04	.250	.371	1.378 - 1.398	17.240	AS3658-9-31	1.938	2.059	3.066 - 3.086	29.906
AS0513-9-05	.312	.433	1.440 - 1.460	17.709	AS3658-9-32	2.000	2.121	3.128 - 3.148	30.375
AS3606-9-06	.375	.496	1.503 - 1.523	18.178	AS3658-9-33	2.062	2.183	3.190 - 3.210	30.844
AS3658-9-07	.438	.559	1.566 - 1.586	18.647	AS3658-9-34	2.125	2.246	3.253 - 3.273	31.313
AS3658-9-08	.500	.621	1.628 - 1.648	19.116	AS3658-9-35	2.188	2.309	3.316 - 3.336	31.782
AS3658-9-09	.562	.683	1.690 - 1.710	19.585	AS3658-9-36	2.250	2.371	3.378 - 3.398	32.251
AS3658-9-10	.625	.746	1.753 - 1.773	20.055	AS3658-9-37	2.312	2.433	3.440 - 3.460	32.720
AS3658-9-11	.688	.809	1.816 - 1.836	20.524	AS3658-9-38	2.375	2.496	3.503 - 3.523	33.189
AS3658-9-12	.750	.871	1.878 - 1.898	20.993	AS3658-9-39	2.438	2.599	3.566 - 3.586	33.659
AS3658-9-13	.812	.933	1.940 - 1.960	21.462	AS3658-9-40	2.500	2.621	3.628 - 3.648	34.128
AS3658-9-14	.875	.996	2.003 - 2.023	21.931	AS3658-9-41	2.562	2.683	3.690 - 3.710	34.597
AS3658-9-15	.938	1.059	2.066 - 2.086	22.400	AS3658-9-42	2.625	2.746	3.753 - 3.773	35.066
AS3658-9-16	1.000	1.121	2.128 - 2.148	22.869	AS3658-9-43	2.688	2.809	3.816 - 3.836	35.534
AS3658-9-17	1.062	1.183	2.190 - 2.210	23.338	AS3658-9-44	2.750	2.871	3.878 - 3.898	36.004
AS3658-9-18	1.125	1.246	2.253 - 2.273	23.807	AS3658-9-45	2.812	2.933	3.940 - 3.960	36.473
AS3658-9-19	1.188	1.309	2.316 - 2.336	24.276	AS3658-9-46	2.875	2.996	4.003 - 4.023	36.942
AS3658-9-20	1.250	1.371	2.378 - 2.398	24.746	AS3658-9-47	2.938	3.059	4.066 - 4.086	37.411
AS3658-9-21	1.312	1.433	2.440 - 2.460	25.215	AS3658-9-48	3.000	3.121	4.128 - 4.148	37.880
AS3658-9-22	1.375	1.496	2.503 - 2.523	25.684	AS3658-9-49	3.062	3.183	4.190 - 4.210	38.350
AS3658-9-23	1.438	1.559	2.566 - 2.586	26.153	AS3658-9-50	3.125	3.246	4.253 - 4.273	38.819
AS3658-9-24	1.500	1.621	2.628 - 2.648	26.622	AS3658-9-51	3.188	3.309	4.316 - 4.336	39.288
AS3658-9-25	1.562	1.683	2.690 - 2.710	27.091	AS3658-9-52	3.250	3.371	4.378 - 4.398	39.757
AS3658-9-26	1.625	1.746	2.753 - 2.773	27.560	AS3658-9-53	3.312	3.433	4.440 - 4.460	40.226
AS3658-9-27	1.688	1.809	2.816 - 2.836	28.029	AS3658-9-54	3.375	3.496	4.503 - 4.523	40.695
AS3658-9-28	1.750	1.871	2.878 - 2.898	28.498	AS3658-9-55	3.438	3.559	4.566 - 4.586	41.164
AS3658-9-29	1.812	1.933	2.940 - 2.960	28.968	AS3658-9-56	3.500	3.621	4.628 - 4.648	41.633
AS3658-9-30	1.875	1.996	3.003 - 3.023	29.437					

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TABLE 9 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR 0.6250 NOMINAL DIAMETER BOLTS

PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100	PART NUMBER	N MIN (GRIP)	M MAX	L	APPROX. MASS LB/100
AS3658-10-05	.312	.433	1.527 - 1.547	23.860	AS3658-10-31	1.938	2.059	3.153 - 3.173	38.916
AS3658-10-06	.375	.496	1.590 - 1.610	24.439	AS3658-10-32	2.000	2.121	3.215 - 3.235	39.495
AS3658-10-07	.438	.559	1.653 - 1.673	25.018	AS3658-10-33	2.062	2.183	3.277 - 3.297	40.074
AS3658-10-08	.500	.621	1.715 - 1.735	25.597	AS3658-10-34	2.125	2.246	3.340 - 3.360	40.653
AS3658-10-09	.562	.683	1.777 - 1.797	26.176	AS3658-10-35	2.188	2.309	3.403 - 3.423	41.232
AS3658-10-10	.625	.746	1.840 - 1.860	26.755	AS3658-10-36	2.250	2.371	3.465 - 3.485	41.812
AS3658-10-11	.688	.809	1.903 - 1.923	27.331	AS3658-10-37	2.312	2.433	3.527 - 3.547	42.391
AS3658-10-12	.750	.871	1.965 - 1.985	27.914	AS3658-10-38	2.375	2.496	3.590 - 3.610	42.970
AS3658-10-13	.812	.933	2.027 - 2.047	28.493	AS3658-10-39	2.438	2.599	3.653 - 3.673	43.549
AS3658-10-14	.875	.996	2.090 - 2.110	29.072	AS3658-10-40	2.500	2.621	3.715 - 3.735	44.128
AS3658-10-15	.938	1.059	2.153 - 2.173	29.651	AS3658-10-41	2.562	2.683	3.777 - 3.797	44.707
AS3658-10-16	1.000	1.121	2.215 - 2.235	30.230	AS3658-10-42	2.625	2.746	3.840 - 3.860	45.286
AS3658-10-17	1.062	1.183	2.277 - 2.297	30.809	AS3658-10-43	2.688	2.809	3.903 - 3.923	45.865
AS3658-10-18	1.125	1.246	2.340 - 2.360	31.388	AS3658-10-44	2.750	2.871	3.965 - 3.985	46.444
AS3658-10-19	1.188	1.309	2.403 - 2.423	31.967	AS3658-10-45	2.812	2.933	4.027 - 4.047	47.024
AS3658-10-20	1.250	1.371	2.465 - 2.485	32.546	AS3658-10-46	2.875	2.996	4.090 - 4.110	47.603
AS3658-10-21	1.312	1.433	2.527 - 2.547	33.125	AS3658-10-47	2.938	3.059	4.153 - 4.173	48.182
AS3658-10-22	1.375	1.496	2.590 - 2.610	33.704	AS3658-10-48	3.000	3.121	4.215 - 4.235	48.761
AS3658-10-23	1.438	1.559	2.653 - 2.673	34.283	AS3658-10-49	3.062	3.183	4.277 - 4.297	49.340
AS3658-10-24	1.500	1.621	2.715 - 2.735	34.862	AS3658-10-50	3.125	3.246	4.340 - 4.360	49.919
AS3658-10-25	1.562	1.683	2.777 - 2.797	35.442	AS3658-10-51	3.188	3.309	4.403 - 4.423	50.498
AS3658-10-26	1.625	1.746	2.840 - 2.860	36.021	AS3658-10-52	3.250	3.371	4.465 - 4.485	51.077
AS3658-10-27	1.688	1.809	2.903 - 2.923	36.600	AS3658-10-53	3.312	3.433	4.527 - 4.547	51.656
AS3658-10-28	1.750	1.871	2.965 - 2.985	37.179	AS3658-10-54	3.375	3.496	4.590 - 4.610	52.235
AS3658-10-29	1.812	1.933	3.027 - 3.047	37.758	AS3658-10-55	3.438	3.559	4.653 - 4.673	52.814
AS3658-10-30	1.875	1.996	3.090 - 3.110	38.337	AS3658-10-56	3.500	3.621	4.715 - 4.735	53.384

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