

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.

AS3623

FEDERAL SUPPLY CLASS
5306

RATIONALE

AS3623 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

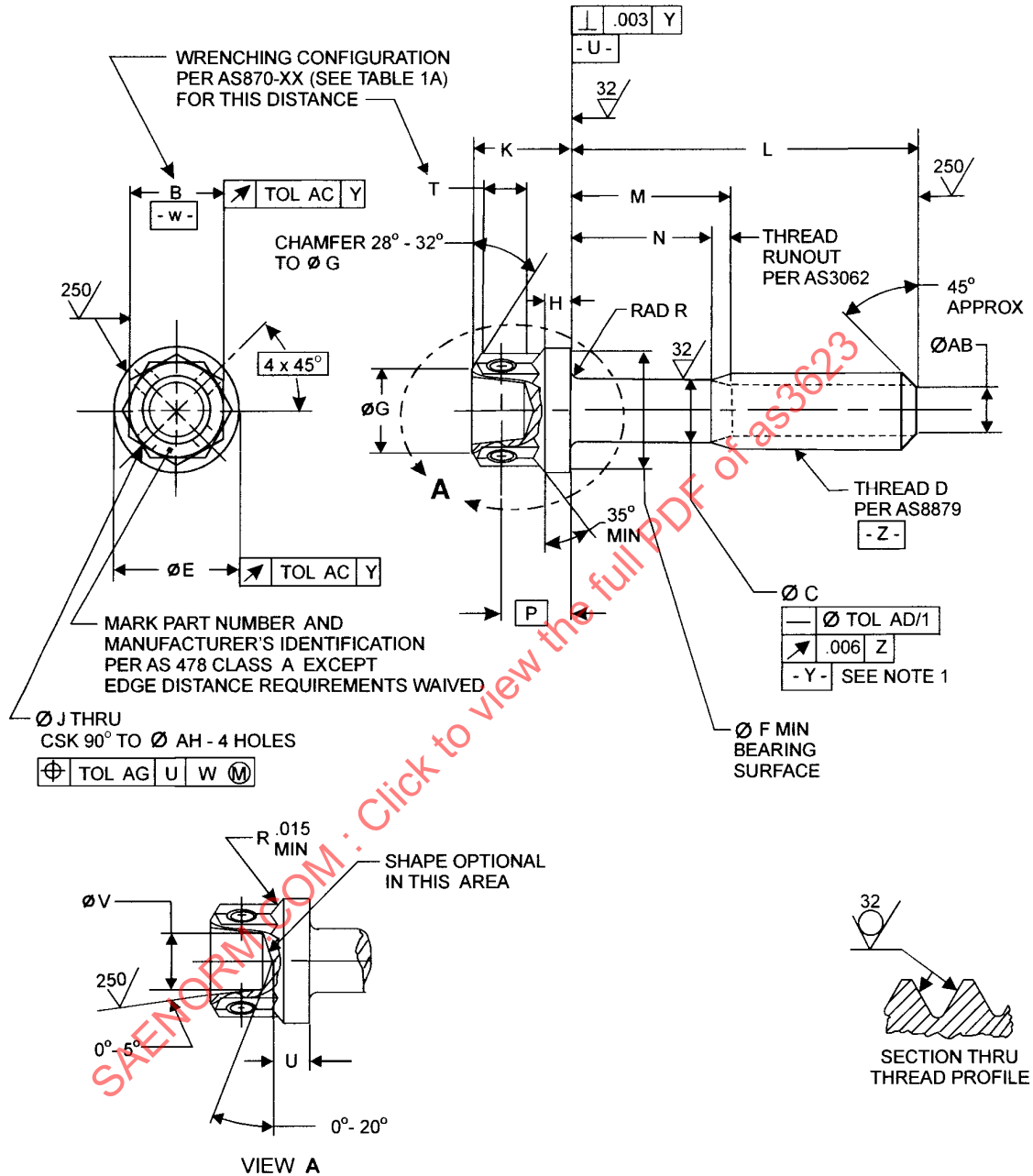


FIGURE 1 - BOLT

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS3623>

CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7475



AEROSPACE STANDARD

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

AS3623
SHEET 1 OF 14

TABLE 1A - DASH NUMBERS AND DIMENSIONS B - H

DASH NO.	D NOMINAL THREAD	B		C	E	F MIN	G	H MIN
		AS870 DASH NO.	NOMINAL SIZE					
-3	.1900 - 32 UNJF - 3A	-08	.2500	.165 - .175	.365 - .385	.335	.240 - .260	.020
-4	.2500 - 28 UNJF - 3A	-10	.3125	.222 - .232	.455 - .475	.425	.302 - .322	.026
-5	.3125 - 24 UNJF - 3A	-12	.3750	.280 - .290	.570 - .590	.540	.365 - .385	.035
-6	.3750 - 24 UNJF - 3A	-14	.4375	.343 - .353	.686 - .706	.656	.428 - .448	.044
-7	.4375 - 20 UNJF - 3A	-16	.5000	.400 - .410	.802 - .822	.772	.490 - .510	.053
-8	.5000 - 20 UNJF - 3A	-18	.5625	.462 - .472	.917 - .937	.887	.552 - .572	.062
-9	.5625 - 18 UNJF - 3A	-20	.6250	.521 - .531	1.032 - 1.052	1.002	.615 - .635	.071
-10	.6250 - 18 UNJF - 3A	-22	.6875	.584 - .594	1.148 - 1.168	1.118	.677 - .697	.080
-12	.7500 - 16 UNJF - 3A	-26	.8125	.704 - .714	1.379 - 1.399	1.349	.802 - .822	.098
-14	.8750 - 14 UNJF - 3A	-30	.9375	.824 - .834	1.610 - 1.630	1.580	.927 - .947	.116
-16	1.0000 - 12 UNJF - 3A	-34	1.0625	.941 - .951	1.841 - 1.861	1.811	1.052 - 1.072	.134

TABLE 1B - DASH NUMBERS AND DIMENSIONS J - AB

DASH NO.	J	K	P	R	T MIN	U	V	AB
-3	.042 - .052	.248 - .268	.188	.015 - .025	.122	.114 - .134	.090 - .110	.110 - .130
-4	.060 - .070	.293 - .313	.219	.020 - .030	.144	.150 - .170	.140 - .160	.164 - .184
-5	.060 - .080	.354 - .374	.286	.026 - .036	.166	.188 - .208	.196 - .216	.219 - .239
-6	.060 - .080	.405 - .425	.335	.033 - .043	.188	.225 - .245	.250 - .270	.281 - .301
-7	.060 - .080	.462 - .482	.392	.039 - .049	.210	.262 - .282	.300 - .320	.334 - .354
-8	.060 - .080	.510 - .530	.440	.045 - .055	.232	.300 - .320	.360 - .380	.396 - .416
-9	.060 - .080	.558 - .578	.488	.051 - .061	.254	.338 - .358	.430 - .450	.452 - .472
-10	.060 - .080	.635 - .655	.525	.058 - .068	.336	.375 - .395	.490 - .510	.514 - .534
-12	.060 - .080	.735 - .755	.620	.070 - .080	.371	.450 - .470	.560 - .580	.630 - .650
-14	.090 - .110	.875 - .895	.715	.082 - .092	.442	.525 - .545	.640 - .660	.744 - .764
-16	.090 - .110	.975 - .995	.790	.095 - .105	.512	.600 - .620	.730 - .750	.854 - .874

TABLE 1C - DASH NUMBERS AND DIMENSIONS AC - AH

DASH NO.	AC	AD	AG	AH
-3	.006	.003	.015	.060 - .070
-4	.007	.003	.015	.080 - .090
-5	.008	.003	.015	.090 - .110
-6	.010	.0025	.020	.090 - .110
-7	.010	.0025	.020	.090 - .110
-8	.012	.002	.020	.090 - .110
-9	.013	.002	.020	.090 - .110
-10	.016	.002	.020	.090 - .110
-12	.017	.002	.020	.090 - .110
-14	.022	.002	.030	.120 - .145
-16	.025	.002	.030	.120 - .145

**AEROSPACE STANDARD**

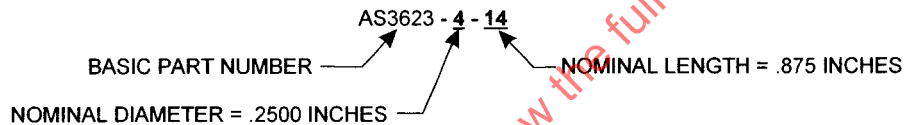
BOLT, MACHINE - DOUBLE HEXAGON EXTENDED
 WASHER HEAD, DRILLED, PD SHANK, COBALT-NICKEL
 ALLOY, UNS R30159, 260 KSI MIN

AS3623
 SHEET 2 OF 14

NOTES:

1. FOR PARTS WITH A MINIMUM SHANK 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 AMS 5842 (UNS R30159).
3. PROCUREMENT SPECIFICATION: AS7475.
4. FLUORESCENT PENETRANT INSPECTION PER ASTM E 1417.
5. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra.
6. BREAK SHARP EDGES .003 - .015, UNLESS OTHERWISE SPECIFIED.
7. DIMENSIONS IN INCHES.
8. DIMENSIONING AND TOLERANCING PER ANSI Y14.5-1982 (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 NOMINAL LENGTH IN SIXTEENTHS (.0625) OF AN INCH.

EXAMPLE OF COMPLETE PART NUMBER:



AS AND AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC. PUBLICATIONS.
ASME IS AN AMERICAN SOCIETY OF MECHANICAL ENGINEERS PUBLICATION.
ASTM IS AN AMERICAN SOCIETY FOR TESTING AND MATERIALS PUBLICATION.

	AEROSPACE STANDARD	AS3623 SHEET 3 OF 14	
	BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED, PD SHANK, COBALT-NICKEL ALLOY, UNS R30159, 260 KSI MIN		

TABLE 2 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .1900 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-3-06	.365 - .385	.088	.025	.710	AS3623-3-27	1.678 - 1.698	1.058	.936	1.592
AS3623-3-07	.428 - .448	.088	.025	.752	AS3623-3-28	1.740 - 1.760	1.120	.998	1.634
AS3623-3-08	.490 - .510	.088	.025	.794	AS3623-3-29	1.802 - 1.822	1.182	1.060	1.676
AS3623-3-09	.552 - .572	.088	.025	.836	AS3623-3-30	1.865 - 1.885	1.245	1.123	1.718
AS3623-3-10	.615 - .635	.088	.025	.878	AS3623-3-31	1.928 - 1.948	1.308	1.186	1.760
AS3623-3-11	.678 - .698	.088	.025	.920	AS3623-3-32	1.990 - 2.010	1.370	1.248	1.802
AS3623-3-12	.740 - .760	.120	.025	.962	AS3623-3-34	2.115 - 2.135	1.495	1.373	1.886
AS3623-3-13	.802 - .822	.183	.060	1.004	AS3623-3-36	2.240 - 2.260	1.620	1.498	1.970
AS3623-3-14	.865 - .885	.245	.123	1.046	AS3623-3-38	2.365 - 2.385	1.745	1.623	2.054
AS3623-3-15	.928 - .948	.308	.186	1.088	AS3623-3-40	2.490 - 2.510	1.870	1.748	2.138
AS3623-3-16	.990 - 1.010	.370	.248	1.130	AS3623-3-42	2.615 - 2.635	1.995	1.873	2.222
AS3623-3-17	1.052 - 1.072	.432	.310	1.172	AS3623-3-44	2.740 - 2.760	2.120	1.998	2.306
AS3623-3-18	1.115 - 1.135	.495	.373	1.214	AS3623-3-46	2.865 - 2.885	2.245	2.123	2.390
AS3623-3-19	1.178 - 1.198	.558	.436	1.256	AS3623-3-48	2.990 - 3.010	2.370	2.248	2.474
AS3623-3-20	1.240 - 1.260	.620	.498	1.298	AS3623-3-50	3.115 - 3.135	2.495	2.373	2.558
AS3623-3-21	1.302 - 1.322	.682	.560	1.340	AS3623-3-52	3.240 - 3.260	2.620	2.498	2.642
AS3623-3-22	1.365 - 1.385	.745	.623	1.382	AS3623-3-54	3.365 - 3.385	2.745	2.623	2.726
AS3623-3-23	1.428 - 1.448	.808	.686	1.424	AS3623-3-56	3.490 - 3.510	2.780	2.748	2.810
AS3623-3-24	1.490 - 1.510	.870	.748	1.466	AS3623-3-58	3.615 - 3.635	2.995	2.873	2.894
AS3623-3-25	1.552 - 1.572	.932	.810	1.508	AS3623-3-60	3.740 - 3.760	3.120	2.998	2.978
AS3623-3-26	1.615 - 1.635	.995	.873	1.550	AS3623-3-62	3.865 - 3.885	3.245	3.123	3.062

**AEROSPACE STANDARD**

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

AS3623
 SHEET 4 OF 14

TABLE 3 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .2500 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-4-07	.428 - .448	.101	.030	1.561	AS3623-4-40	2.490 - 2.510	1.750	1.619	4.354
AS3623-4-08	.490 - .510	.101	.030	1.641	AS3623-4-42	2.615 - 2.635	1.875	1.744	4.514
AS3623-4-09	.552 - .572	.101	.030	1.721	AS3623-4-44	2.740 - 2.760	2.000	1.869	4.673
AS3623-4-10	.615 - .635	.101	.030	1.800	AS3623-4-46	2.865 - 2.885	2.125	1.994	4.833
AS3623-4-11	.678 - .698	.101	.030	1.880	AS3623-4-48	2.990 - 3.010	2.250	2.119	4.992
AS3623-4-12	.740 - .760	.101	.030	1.960	AS3623-4-50	3.115 - 3.135	2.375	2.244	5.152
AS3623-4-13	.802 - .822	.101	.030	2.040	AS3623-4-52	3.240 - 3.260	2.500	2.369	5.312
AS3623-4-14	.865 - .885	.125	.030	2.120	AS3623-4-54	3.365 - 3.385	2.625	2.494	5.471
AS3623-4-15	.928 - .948	.188	.057	2.199	AS3623-4-56	3.490 - 3.510	2.750	2.619	5.631
AS3623-4-16	.990 - 1.010	.250	.119	2.279	AS3623-4-58	3.615 - 3.635	2.875	2.744	5.790
AS3623-4-17	1.052 - 1.072	.312	.181	2.359	AS3623-4-60	3.740 - 3.760	3.000	2.869	5.950
AS3623-4-18	1.115 - 1.135	.375	.244	2.439	AS3623-4-62	3.865 - 3.885	3.125	2.994	6.110
AS3623-4-19	1.178 - 1.198	.438	.307	2.519	AS3623-4-64	3.990 - 4.010	3.250	3.119	6.269
AS3623-4-20	1.240 - 1.260	.500	.369	2.598	AS3623-4-66	4.115 - 4.135	3.375	3.244	6.429
AS3623-4-21	1.302 - 1.322	.562	.431	2.678	AS3623-4-68	4.240 - 4.260	3.500	3.369	6.588
AS3623-4-22	1.365 - 1.385	.625	.494	2.758	AS3623-4-70	4.365 - 4.385	3.625	3.494	6.748
AS3623-4-23	1.428 - 1.448	.688	.557	2.838	AS3623-4-72	4.490 - 4.510	3.750	3.619	6.908
AS3623-4-24	1.490 - 1.510	.750	.619	2.918	AS3623-4-74	4.615 - 4.635	3.875	3.744	7.067
AS3623-4-25	1.552 - 1.572	.812	.681	2.997	AS3623-4-76	4.740 - 4.760	4.000	3.869	7.227
AS3623-4-26	1.615 - 1.635	.875	.744	3.077	AS3623-4-78	4.865 - 4.885	4.125	3.994	7.386
AS3623-4-27	1.678 - 1.698	.938	.807	3.157	AS3623-4-80	4.990 - 5.010	4.250	4.119	7.546
AS3623-4-28	1.740 - 1.760	1.000	.869	3.237	AS3623-4-82	5.115 - 5.135	4.375	4.244	7.706
AS3623-4-29	1.802 - 1.822	1.062	.931	3.317	AS3623-4-84	5.240 - 5.260	4.500	4.369	7.865
AS3623-4-30	1.865 - 1.885	1.125	.994	3.396	AS3623-4-86	5.365 - 5.385	4.625	4.494	8.025
AS3623-4-31	1.928 - 1.948	1.188	1.057	3.476	AS3623-4-88	5.490 - 5.510	4.750	4.619	8.184
AS3623-4-32	1.990 - 2.010	1.250	1.119	3.556	AS3623-4-90	5.615 - 5.635	4.875	4.744	8.344
AS3623-4-34	2.115 - 2.135	1.375	1.244	3.716	AS3623-4-92	5.740 - 5.760	5.000	4.869	8.503
AS3623-4-36	2.240 - 2.260	1.500	1.369	4.035	AS3623-4-94	5.865 - 5.885	5.125	4.994	8.663
AS3623-4-38	2.365 - 2.385	1.625	1.494	4.195	AS3623-4-96	5.990 - 6.010	5.250	5.119	8.823



AEROSPACE STANDARD

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

AS3623
 SHEET 5 OF 14

TABLE 4 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .3125 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-5-08	.490 - .510	.119	.036	2.785	AS3623-5-42	2.615 - 2.635	1.750	1.607	7.590
AS3623-5-09	.552 - .572	.119	.036	2.927	AS3623-5-44	2.740 - 2.760	1.875	1.732	7.875
AS3623-5-10	.615 - .635	.119	.036	3.070	AS3623-5-46	2.865 - 2.885	2.000	1.857	8.159
AS3623-5-11	.678 - .698	.119	.036	3.212	AS3623-5-48	2.990 - 3.010	2.125	1.982	8.444
AS3623-5-12	.740 - .760	.119	.036	3.355	AS3623-5-50	3.115 - 3.135	2.250	2.107	8.729
AS3623-5-13	.802 - .822	.119	.036	3.497	AS3623-5-52	3.240 - 3.260	2.375	2.232	9.014
AS3623-5-14	.865 - .885	.119	.036	3.639	AS3623-5-54	3.365 - 3.385	2.500	2.357	9.299
AS3623-5-15	.928 - .948	.119	.036	3.782	AS3623-5-56	3.490 - 3.510	2.625	2.482	9.583
AS3623-5-16	.990 - 1.010	.125	.036	3.924	AS3623-5-58	3.615 - 3.635	2.750	2.607	9.868
AS3623-5-17	1.052 - 1.072	.188	.045	4.067	AS3623-5-60	3.740 - 3.760	2.875	2.732	10.153
AS3623-5-18	1.115 - 1.135	.250	.107	4.209	AS3623-5-62	3.865 - 3.885	3.000	2.857	10.438
AS3623-5-19	1.178 - 1.198	.312	.170	4.351	AS3623-5-64	3.990 - 4.010	3.125	2.982	10.723
AS3623-5-20	1.240 - 1.260	.375	.232	4.494	AS3623-5-66	4.115 - 4.135	3.250	3.107	11.007
AS3623-5-21	1.302 - 1.322	.438	.294	4.636	AS3623-5-68	4.240 - 4.260	3.375	3.232	11.292
AS3623-5-22	1.365 - 1.385	.500	.357	4.779	AS3623-5-70	4.365 - 4.385	3.500	3.357	11.577
AS3623-5-23	1.428 - 1.448	.562	.420	4.921	AS3623-5-72	4.490 - 4.510	3.625	3.482	11.862
AS3623-5-24	1.490 - 1.510	.625	.482	5.063	AS3623-5-74	4.615 - 4.635	3.750	3.607	12.147
AS3623-5-25	1.552 - 1.572	.688	.544	5.206	AS3623-5-76	4.740 - 4.760	3.875	3.732	12.431
AS3623-5-26	1.615 - 1.635	.750	.607	5.348	AS3623-5-78	4.865 - 4.885	4.000	3.857	12.716
AS3623-5-27	1.678 - 1.698	.812	.670	5.491	AS3623-5-80	4.990 - 5.010	4.125	3.982	13.001
AS3623-5-28	1.740 - 1.760	.875	.732	5.633	AS3623-5-82	5.115 - 5.135	4.250	4.107	13.286
AS3623-5-29	1.802 - 1.822	.938	.794	5.775	AS3623-5-84	5.240 - 5.260	4.375	4.232	13.571
AS3623-5-30	1.865 - 1.885	1.000	.857	5.918	AS3623-5-86	5.365 - 5.385	4.500	4.357	13.855
AS3623-5-31	1.928 - 1.948	1.062	.920	6.060	AS3623-5-88	5.490 - 5.510	4.625	4.482	14.140
AS3623-5-32	1.990 - 2.010	1.125	.982	6.203	AS3623-5-90	5.615 - 5.635	4.750	4.607	14.425
AS3623-5-34	2.115 - 2.135	1.250	1.107	6.469	AS3623-5-92	5.740 - 5.760	4.875	4.732	14.710
AS3623-5-36	2.240 - 2.260	1.375	1.232	6.735	AS3623-5-94	5.865 - 5.885	5.000	4.857	14.955
AS3623-5-38	2.365 - 2.385	1.500	1.357	7.020	AS3623-5-96	5.990 - 6.010	5.125	4.982	15.279
AS3623-5-40	2.490 - 2.510	1.625	1.482	7.305					



AEROSPACE STANDARD

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

AS3623
SHEET 6 OF 14

TABLE 5 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .3750 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-6-09	.552 - .572	.126	.043	4.364	AS3623-6-42	2.615 - 2.635	1.625	1.482	10.460
AS3623-6-10	.615 - .635	.126	.043	4.549	AS3623-6-44	2.740 - 2.760	1.750	1.607	10.829
AS3623-6-11	.678 - .698	.126	.043	4.733	AS3623-6-46	2.865 - 2.885	1.875	1.732	11.199
AS3623-6-12	.740 - .760	.126	.043	4.918	AS3623-6-48	2.990 - 3.010	2.000	1.857	11.568
AS3623-6-13	.802 - .822	.126	.043	5.103	AS3623-6-50	3.115 - 3.135	2.125	1.982	11.938
AS3623-6-14	.865 - .885	.126	.043	5.288	AS3623-6-52	3.240 - 3.260	2.250	2.107	12.307
AS3623-6-15	.928 - .948	.126	.043	5.472	AS3623-6-54	3.365 - 3.685	2.375	2.232	12.677
AS3623-6-16	.990 - 1.010	.126	.043	5.657	AS3623-6-56	3.490 - 3.510	2.500	2.357	13.046
AS3623-6-17	1.052 - 1.072	.126	.043	5.842	AS3623-6-58	3.615 - 3.635	2.625	2.482	13.416
AS3623-6-18	1.115 - 1.135	.126	.043	6.026	AS3623-6-60	3.740 - 3.760	2.750	2.607	13.7851
AS3623-6-19	1.178 - 1.198	.188	.045	6.211	AS3623-6-62	3.865 - 3.885	2.875	2.732	14.155
AS3623-6-20	1.240 - 1.260	.250	.107	6.396	AS3623-6-64	3.990 - 4.010	3.000	2.857	14.524
AS3623-6-21	1.302 - 1.322	.312	.169	6.580	AS3623-6-66	4.115 - 4.135	3.125	2.982	14.894
AS3623-6-22	1.365 - 1.385	.375	.232	6.765	AS3623-6-68	4.240 - 4.260	3.250	3.107	15.263
AS3623-6-23	1.428 - 1.448	.438	.295	6.950	AS3623-6-70	4.365 - 4.385	3.375	3.232	15.633
AS3623-6-24	1.490 - 1.510	.500	.357	7.134	AS3623-6-72	4.490 - 4.510	3.500	3.357	16.002
AS3623-6-25	1.552 - 1.572	.562	.419	7.319	AS3623-6-74	4.615 - 4.635	3.625	3.482	16.372
AS3623-6-26	1.615 - 1.635	.625	.482	7.504	AS3623-6-76	4.740 - 4.760	3.750	3.607	16.741
AS3623-6-27	1.678 - 1.698	.688	.545	7.689	AS3623-6-78	4.865 - 4.885	3.875	3.732	17.111
AS3623-6-28	1.740 - 1.760	.750	.607	7.873	AS3623-6-80	4.990 - 5.010	4.000	3.857	17.480
AS3623-6-29	1.802 - 1.822	.812	.669	8.058	AS3623-6-82	5.115 - 5.135	4.125	3.982	17.850
AS3623-6-30	1.865 - 1.885	.875	.732	8.243	AS3623-6-84	5.240 - 5.260	4.250	4.107	18.219
AS3623-6-31	1.928 - 1.948	.938	.795	8.427	AS3623-6-86	5.365 - 5.385	4.375	4.232	18.589
AS3623-6-32	1.990 - 2.010	1.000	.857	8.612	AS3623-6-88	5.490 - 5.510	4.500	4.357	18.958
AS3623-6-34	2.115 - 2.135	1.125	.982	8.982	AS3623-6-90	5.615 - 5.635	4.625	4.482	19.328
AS3623-6-36	2.240 - 2.260	1.250	1.107	9.351	AS3623-6-92	5.740 - 5.760	4.750	4.607	19.697
AS3623-6-38	2.365 - 2.385	1.375	1.232	9.721	AS3623-6-94	5.865 - 5.885	4.875	4.732	20.066
AS3623-6-40	2.490 - 2.510	1.500	1.357	10.090	AS3623-6-96	5.990 - 6.010	5.000	4.857	20.436



AEROSPACE STANDARD

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

AS3623

SHEET 7 OF 14

TABLE 6 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .4375 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-7-11	.678 - .698	.149	.049	6.824	AS3623-7-44	2.740 - 2.760	1.625	1.465	15.051
AS3623-7-12	.740 - .760	.149	.049	7.073	AS3623-7-46	2.865 - 2.885	1.750	1.590	15.550
AS3623-7-13	.802 - .822	.149	.049	7.323	AS3623-7-48	2.990 - 3.010	1.875	1.715	16.048
AS3623-7-14	.865 - .885	.149	.049	7.572	AS3623-7-50	3.115 - 3.135	2.000	1.840	16.547
AS3623-7-15	.928 - .948	.149	.049	7.821	AS3623-7-52	3.240 - 3.260	2.125	1.965	17.045
AS3623-7-16	.990 - 1.010	.149	.049	8.070	AS3623-7-54	3.365 - 3.385	2.250	2.090	17.544
AS3623-7-17	1.052 - 1.072	.149	.049	8.320	AS3623-7-56	3.490 - 3.510	2.375	2.215	18.541
AS3623-7-18	1.115 - 1.135	.149	.049	8.569	AS3623-7-58	3.615 - 3.635	2.500	2.340	19.040
AS3623-7-19	1.178 - 1.198	.149	.049	8.818	AS3623-7-60	3.740 - 3.760	2.625	2.465	19.538
AS3623-7-20	1.240 - 1.260	.149	.049	9.068	AS3623-7-62	3.865 - 3.885	2.750	2.590	20.037
AS3623-7-21	1.302 - 1.322	.188	.049	9.317	AS3623-7-64	3.990 - 4.010	2.875	2.715	20.536
AS3623-7-22	1.365 - 1.385	.250	.090	9.566	AS3623-7-66	4.115 - 4.135	3.000	2.840	21.034
AS3623-7-23	1.428 - 1.448	.312	.153	9.816	AS3623-7-68	4.240 - 4.260	3.125	2.965	21.533
AS3623-7-24	1.490 - 1.510	.375	.215	10.065	AS3623-7-70	4.365 - 4.385	3.250	3.090	22.032
AS3623-7-25	1.552 - 1.572	.438	.277	10.314	AS3623-7-72	4.490 - 4.510	3.375	3.215	22.530
AS3623-7-26	1.615 - 1.635	.500	.340	10.564	AS3623-7-74	4.615 - 4.635	3.500	3.340	23.029
AS3623-7-27	1.678 - 1.698	.562	.403	10.813	AS3623-7-76	4.740 - 4.760	3.625	3.465	23.527
AS3623-7-28	1.740 - 1.760	.625	.465	11.062	AS3623-7-78	4.865 - 4.885	3.750	3.590	24.026
AS3623-7-29	1.802 - 1.822	.688	.527	11.311	AS3623-7-80	4.990 - 5.010	3.875	3.715	24.525
AS3623-7-30	1.865 - 1.885	.750	.590	11.561	AS3623-7-82	5.115 - 5.135	4.000	3.840	25.023
AS3623-7-31	1.928 - 1.948	.812	.653	11.810	AS3623-7-84	5.240 - 5.260	4.125	3.965	25.522
AS3623-7-32	1.990 - 2.010	.875	.715	12.059	AS3623-7-86	5.365 - 5.385	4.250	4.090	26.020
AS3623-7-34	2.115 - 2.135	1.000	.840	12.558	AS3623-7-88	5.490 - 5.510	4.375	4.215	26.519
AS3623-7-36	2.240 - 2.260	1.125	.965	13.056	AS3623-7-90	5.615 - 5.635	4.500	4.340	27.018
AS3623-7-38	2.365 - 2.385	1.250	1.090	13.555	AS3623-7-92	5.740 - 5.760	4.625	4.465	27.516
AS3623-7-40	2.490 - 2.510	1.375	1.215	14.054	AS3623-7-94	5.865 - 5.885	4.750	4.590	28.015
AS3623-7-42	2.615 - 2.635	1.500	1.340	14.552	AS3623-7-96	5.990 - 6.010	4.875	4.715	28.513



AEROSPACE STANDARD

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

AS3623
 SHEET 8 OF 14

TABLE 7 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .5000 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-8-12	.740 - .760	.155	.055	9.688	AS3623-8-46	2.865 - 2.885	1.625	1.465	20.926
AS3623-8-13	.802 - .822	.155	.055	10.018	AS3623-8-48	2.990 - 3.010	1.750	1.590	21.586
AS3623-8-14	.865 - .885	.155	.055	10.348	AS3623-8-50	3.115 - 3.135	1.875	1.715	22.247
AS3623-8-15	.928 - .948	.155	.055	10.678	AS3623-8-52	3.240 - 3.260	2.000	1.840	22.907
AS3623-8-16	.990 - 1.010	.155	.055	11.008	AS3623-8-54	3.365 - 3.685	2.125	1.965	23.567
AS3623-8-17	1.052 - 1.072	.155	.055	11.338	AS3623-8-56	3.490 - 3.510	2.250	2.090	24.228
AS3623-8-18	1.115 - 1.135	.155	.055	11.668	AS3623-8-58	3.615 - 3.635	2.375	2.215	24.888
AS3623-8-19	1.178 - 1.198	.155	.055	12.009	AS3623-8-60	3.740 - 3.760	2.500	2.340	25.548
AS3623-8-20	1.240 - 1.260	.155	.055	12.339	AS3623-8-62	3.865 - 3.885	2.625	2.465	26.209
AS3623-8-21	1.302 - 1.322	.155	.055	12.670	AS3623-8-64	3.990 - 4.010	2.750	2.590	26.869
AS3623-8-22	1.365 - 1.385	.155	.055	13.000	AS3623-8-66	4.115 - 4.135	2.875	2.715	27.529
AS3623-8-23	1.428 - 1.448	.188	.055	13.330	AS3623-8-68	4.240 - 4.260	3.000	2.840	28.190
AS3623-8-24	1.490 - 1.510	.250	.090	13.661	AS3623-8-70	4.365 - 4.385	3.125	2.965	28.850
AS3623-8-25	1.552 - 1.572	.312	.152	13.991	AS3623-8-72	4.490 - 4.510	3.250	3.090	29.511
AS3623-8-26	1.615 - 1.635	.375	.215	14.321	AS3623-8-74	4.615 - 4.635	3.375	3.215	30.171
AS3623-8-27	1.678 - 1.698	.438	.278	14.651	AS3623-8-76	4.740 - 4.760	3.500	3.340	30.831
AS3623-8-28	1.740 - 1.760	.500	.340	14.982	AS3623-8-78	4.865 - 4.885	3.625	3.465	31.492
AS3623-8-29	1.802 - 1.822	.562	.402	15.312	AS3623-8-80	4.990 - 5.010	3.750	3.590	32.152
AS3623-8-30	1.865 - 1.885	.625	.465	15.642	AS3623-8-82	5.115 - 5.135	3.875	3.715	32.813
AS3623-8-31	1.928 - 1.948	.688	.528	15.973	AS3623-8-84	5.240 - 5.260	4.000	3.840	33.473
AS3623-8-32	1.990 - 2.010	.750	.590	16.303	AS3623-8-86	5.365 - 5.385	4.125	3.965	34.133
AS3623-8-34	2.115 - 2.135	.875	.715	16.963	AS3623-8-88	5.490 - 5.510	4.250	4.090	34.794
AS3623-8-36	2.240 - 2.260	1.000	.840	17.623	AS3623-8-90	5.615 - 5.635	4.375	4.215	35.454
AS3623-8-38	2.365 - 2.385	1.125	.965	18.284	AS3623-8-92	5.740 - 5.760	4.500	4.340	36.114
AS3623-8-40	2.490 - 2.510	1.250	1.090	18.944	AS3623-8-94	5.865 - 5.885	4.625	4.465	36.775
AS3623-8-42	2.615 - 2.635	1.375	1.215	19.605	AS3623-8-96	5.990 - 6.010	4.750	4.590	37.435
AS3623-8-44	2.740 - 2.760	1.500	1.340	20.265					



AEROSPACE STANDARD

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

AS3623
SHEET 9 OF 14

TABLE 8 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .5625 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-9-13	.802 - .822	.172	.061	13.261	AS3623-9-46	2.865 - 2.885	1.500	1.329	26.673
AS3623-9-14	.865 - .885	.172	.061	13.679	AS3623-9-48	2.990 - 3.010	1.625	1.454	27.473
AS3623-9-15	.928 - .948	.172	.061	14.097	AS3623-9-50	3.115 - 3.135	1.750	1.579	28.309
AS3623-9-16	.990 - 1.010	.172	.061	14.515	AS3623-9-52	3.240 - 3.260	1.875	1.704	29.145
AS3623-9-17	1.052 - 1.072	.172	.061	14.933	AS3623-9-54	3.365 - 3.685	2.000	1.829	29.981
AS3623-9-18	1.115 - 1.135	.172	.061	15.351	AS3623-9-56	3.490 - 3.510	2.125	1.954	30.817
AS3623-9-19	1.178 - 1.198	.172	.061	15.769	AS3623-9-58	3.615 - 3.635	2.250	2.079	31.653
AS3623-9-20	1.240 - 1.260	.172	.061	16.187	AS3623-9-60	3.740 - 3.760	2.375	2.204	32.489
AS3623-9-21	1.302 - 1.322	.172	.061	16.605	AS3623-9-62	3.865 - 3.885	2.500	2.329	33.325
AS3623-9-22	1.365 - 1.385	.172	.061	17.023	AS3623-9-64	3.990 - 4.010	2.625	2.454	34.161
AS3623-9-23	1.428 - 1.448	.172	.061	17.441	AS3623-9-66	4.115 - 4.135	2.750	2.579	34.997
AS3623-9-24	1.490 - 1.510	.172	.061	17.859	AS3623-9-68	4.240 - 4.260	2.875	2.704	35.833
AS3623-9-25	1.552 - 1.572	.188	.061	18.277	AS3623-9-70	4.365 - 4.385	3.000	2.829	36.669
AS3623-9-26	1.615 - 1.635	.250	.079	18.695	AS3623-9-72	4.490 - 4.510	3.125	2.954	37.505
AS3623-9-27	1.678 - 1.698	.312	.142	19.113	AS3623-9-74	4.615 - 4.635	3.250	3.079	38.341
AS3623-9-28	1.740 - 1.760	.375	.204	19.531	AS3623-9-76	4.740 - 4.760	3.375	3.204	39.177
AS3623-9-29	1.802 - 1.822	.438	.266	19.949	AS3623-9-78	4.865 - 4.885	3.500	3.329	40.013
AS3623-9-30	1.865 - 1.885	.500	.329	20.367	AS3623-9-80	4.990 - 5.010	3.625	3.454	40.849
AS3623-9-31	1.928 - 1.948	.562	.392	20.785	AS3623-9-82	5.115 - 5.135	3.750	3.579	41.685
AS3623-9-32	1.990 - 2.010	.625	.454	21.203	AS3623-9-84	5.240 - 5.260	3.875	3.704	42.541
AS3623-9-34	2.115 - 2.135	.750	.579	21.621	AS3623-9-86	5.365 - 5.385	4.000	3.829	43.357
AS3623-9-36	2.240 - 2.260	.875	.704	22.457	AS3623-9-88	5.490 - 5.510	4.125	3.954	44.193
AS3623-9-38	2.365 - 2.385	1.000	.829	23.293	AS3623-9-90	5.615 - 5.635	4.250	4.079	45.029
AS3623-9-40	2.490 - 2.510	1.125	.954	24.129	AS3623-9-92	5.740 - 5.760	4.375	4.204	45.865
AS3623-9-42	2.615 - 2.635	1.250	1.079	24.965	AS3623-9-94	5.865 - 5.885	4.500	4.329	46.701
AS3623-9-44	2.740 - 2.760	1.375	1.204	25.801	AS3623-9-96	5.990 - 6.010	4.625	4.454	47.537



AEROSPACE STANDARD

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

AS3623
 SHEET 10 OF 14

TABLE 9 - PART NUMBER AND SHANK LENGTH DIMENSIONS FOR .6250 NOMINAL DIAMETER BOLTS

PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100	PART NUMBER	L	M MAX	N MIN	APPROX. MASS LB/100
AS3623-10-14	.865 - .885	.179	.068	18.156	AS3623-10-48	2.990 - 3.010	1.500	1.329	35.938
AS3623-10-15	.928 - .948	.179	.068	18.679	AS3623-10-50	3.115 - 3.135	1.625	1.454	36.984
AS3623-10-16	.990 - 1.010	.179	.068	19.202	AS3623-10-52	3.240 - 3.260	1.750	1.579	38.030
AS3623-10-17	1.052 - 1.072	.179	.068	19.725	AS3623-10-54	3.365 - 3.685	1.875	1.704	39.076
AS3623-10-18	1.115 - 1.135	.179	.068	20.248	AS3623-10-56	3.490 - 3.510	2.000	1.829	40.122
AS3623-10-19	1.178 - 1.198	.179	.068	20.771	AS3623-10-58	3.615 - 3.635	2.125	1.954	41.168
AS3623-10-20	1.240 - 1.260	.179	.068	21.294	AS3623-10-60	3.740 - 3.760	2.250	2.079	42.214
AS3623-10-21	1.302 - 1.322	.179	.068	21.817	AS3623-10-62	3.865 - 3.885	2.375	2.204	43.260
AS3623-10-22	1.365 - 1.385	.179	.068	22.340	AS3623-10-64	3.990 - 4.010	2.500	2.329	44.306
AS3623-10-23	1.428 - 1.448	.179	.068	22.863	AS3623-10-66	4.115 - 4.135	2.625	2.454	45.352
AS3623-10-24	1.490 - 1.510	.179	.068	23.386	AS3623-10-68	4.240 - 4.260	2.750	2.579	46.398
AS3623-10-25	1.552 - 1.572	.179	.068	23.909	AS3623-10-70	4.365 - 4.385	2.875	2.704	47.444
AS3623-10-26	1.615 - 1.635	.179	.068	24.432	AS3623-10-72	4.490 - 4.510	3.000	2.829	48.490
AS3623-10-27	1.678 - 1.698	.188	.068	24.955	AS3623-10-74	4.615 - 4.635	3.125	2.954	49.536
AS3623-10-28	1.740 - 1.760	.250	.079	25.478	AS3623-10-76	4.740 - 4.760	3.250	3.079	50.582
AS3623-10-29	1.802 - 1.822	.312	.141	26.001	AS3623-10-78	4.865 - 4.885	3.375	3.204	51.628
AS3623-10-30	1.865 - 1.885	.375	.204	26.524	AS3623-10-80	4.990 - 5.010	3.500	3.329	52.674
AS3623-10-31	1.928 - 1.948	.438	.267	27.047	AS3623-10-82	5.115 - 5.135	3.625	3.454	53.720
AS3623-10-32	1.990 - 2.010	.500	.329	27.570	AS3623-10-84	5.240 - 5.260	3.750	3.579	54.766
AS3623-10-34	2.115 - 2.135	.625	.454	28.616	AS3623-10-86	5.365 - 5.385	3.875	3.704	55.812
AS3623-10-36	2.240 - 2.260	.750	.579	29.662	AS3623-10-88	5.490 - 5.510	4.000	3.829	56.858
AS3623-10-38	2.365 - 2.385	.875	.704	30.708	AS3623-10-90	5.615 - 5.635	4.125	3.954	57.904
AS3623-10-40	2.490 - 2.510	1.000	.829	31.754	AS3623-10-92	5.740 - 5.760	4.250	4.079	59.950
AS3623-10-42	2.615 - 2.635	1.125	.954	32.800	AS3623-10-94	5.865 - 5.885	4.375	4.204	59.996
AS3623-10-44	2.740 - 2.760	1.250	1.079	33.846	AS3623-10-96	5.990 - 6.010	4.500	4.329	61.042
AS3623-10-46	2.865 - 2.885	1.375	1.204	34.892					



AEROSPACE STANDARD

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

AS3623
SHEET 11 OF 14