

NOTICE

ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL'S) MAY CONTINUE TO BE MANDATORY FOR DoD CONTRACTS. REQUIREMENTS RELATING TO QPL'S HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

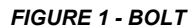


TABLE 1 - DIMENSIONS AND PART NUMBERS

PART NUMBER	L	K	APPROX WEIGHT LB/100	PART NUMBER	L	K	APPROX WEIGHT LB/100
MS9890-04	.802- .822	.105- .125	7.99	MS9890-31	2.990-3.010	1.690-1.750	18.74
MS9890-05	.865- .885	.105- .125	8.28	MS9890-32	3.115-3.135	1.815-1.875	19.35
MS9890-06	.928- .948	.105- .125	8.59	MS9890-33	3.240-3.260	1.900-2.000	19.96
MS9890-07	.990-1.010	.105- .125	8.90	MS9890-34	3.365-3.385	2.065-2.125	20.58
MS9890-08	1.052-1.072	.105- .125	9.22	MS9890-35	3.490-3.510	2.190-2.250	21.20
MS9890-09	1.115-1.135	.105- .125	9.54	MS9890-36	3.615-3.635	2.315-2.375	21.81
MS9890-10	1.178-1.198	.105- .125	9.86	MS9890-37	3.740-3.760	2.440-2.500	22.42
MS9890-11	1.240-1.260	.105- .125	10.18	MS9890-38	3.865-3.885	2.565-2.625	23.04
MS9890-12	1.302-1.322	.105- .125	10.48	MS9890-39	3.990-4.010	2.690-2.750	23.66
MS9890-13	1.365-1.385	.105- .125	10.78	MS9890-40	4.115-4.135	2.815-2.875	24.27
MS9890-14	1.428-1.448	.128- .188	11.09	MS9890-41	4.240-4.260	2.940-3.000	24.88
MS9890-15	1.490-1.510	.190- .250	11.40	MS9890-42	4.365-4.385	3.065-3.125	25.49
MS9890-16	1.552-1.572	.252- .312	11.71	MS9890-43	4.490-4.510	3.190-3.250	26.10
MS9890-17	1.615-1.635	.315- .375	12.02	MS9890-44	4.615-4.635	3.315-3.375	26.71
MS9890-18	1.678-1.698	.378- .438	12.33	MS9890-45	4.740-4.760	3.440-3.500	27.32
MS9890-19	1.740-1.760	.440- .500	12.64	MS9890-46	4.865-4.885	3.565-3.625	27.98
MS9890-20	1.802-1.822	.502- .562	12.93	MS9890-47	4.990-5.010	3.690-3.750	28.59
MS9890-21	1.865-1.885	.565- .625	13.24	MS9890-48	5.115-5.135	3.815-3.875	29.20
MS9890-22	1.928-1.948	.628- .688	13.55	MS9890-49	5.240-5.260	3.940-4.000	29.81
MS9890-23	1.990-2.010	.690- .750	13.86	MS9890-50	5.365-5.385	4.065-4.125	30.42
MS9890-24	2.115-2.135	.815- .875	14.45	MS9890-51	5.490-5.510	4.190-4.250	31.03
MS9890-25	2.240-2.260	.940-1.000	15.04	MS9890-52	5.615-5.635	4.315-4.375	31.64
MS9890-26	2.365-2.385	1.065-1.125	15.68	MS9890-53	5.740-5.760	4.440-4.500	32.25
MS9890-27	2.490-2.510	1.190-1.250	16.30	MS9890-54	5.865-5.885	4.565-4.625	32.86
MS9890-28	2.615-2.635	1.315-1.375	16.91	MS9890-55	5.990-6.010	4.690-4.750	33.47
MS9890-29	2.740-2.760	1.440-1.500	17.52				
MS9890-30	2.865-2.885	1.565-1.625	18.13				

NOTES:

- 1/ FOR PART NUMBERS MS9890-04 THROUGH MS9890-23, DATUM **Z** SHALL REPLACE DATUM **Y**.
2. MATERIAL: AMS5616 CORROSION AND HEAT RESISTANT STEEL (COMPOSITION SIMILAR TO UNS S41800).
- 3/ PROCUREMENT SPECIFICATION: AS7470, EXCEPT HEAD SHALL BE UPSET.
4. HARDNESS: 32 TO 38 HRC.
- 5/ HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT. COLD ROLLING SHALL BE SUFFICIENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS PER AS7470.
6. MAGNETIC PARTICLE INSPECTION PER ASTM E1444/E1444M.
7. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra, EXCEPT UPSET HEAD.
8. BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
9. DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5-2018.
10. UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
11. DO NOT USE UNASSIGNED PART NUMBERS.

	AEROSPACE STANDARD	AS9890™ SHEET 2 OF 3	REV. C
	(R) BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, CRES UNS S41800, 5000-20 UNJF		