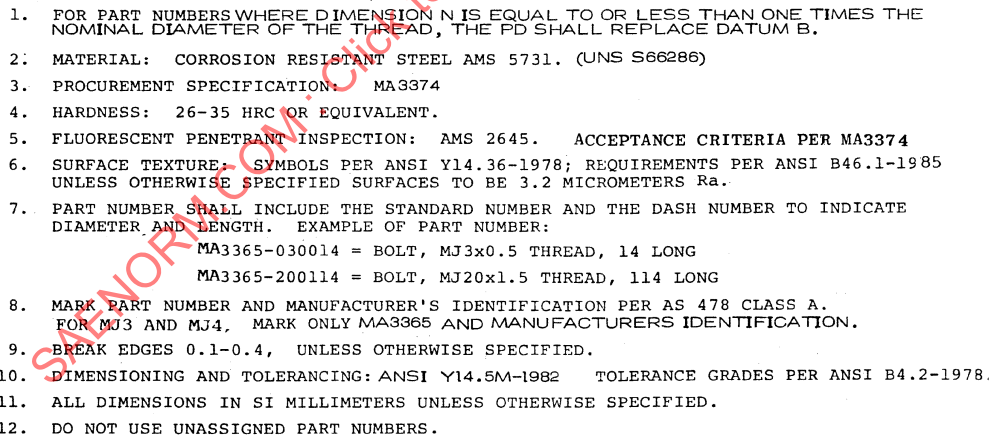
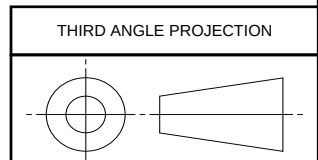


MA3365 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.



SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/MA3365>



MA3365
SHEET 1 OF 7

TABLE I

PART NUMBER SEE NOTE 7	NON DIA REF	THREAD T	C	D	E MIN	F	G MIN	H
MA3365-030XXX	3	MJ3x0.5-4h6h	1.8-2.3	3.1-3.4	7.6	6.85-7.00	h12	6.5 0.2-0.5
MA3365-040XXX	4	MJ4x0.7-4h6h	2.6-3.1	3.6-3.9	8.7	7.85-8.00		7.5 0.2-0.5
MA3365-050XXX	5	MJ5x0.8-4h6h	3.0-4.0	2.7-3.0	9.8	8.78-9.00		8.4 0.2-0.5
MA3365-060XXX	6	MJ6x1-4h6h	3.7-4.7	3.2-3.5	12.0	10.73-11.00		10.3 0.2-0.5
MA3365-070XXX	7	MJ7x1-4h6h	4.7-5.7	3.7-4.0	13.2	11.73-12.00	h13	11.3 0.2-0.5
MA3365-080XXX	8	MJ8x1-4h6h	5.7-6.7	4.2-4.5	15.5	13.73-14.00		13.3 0.3-0.6
MA3365-100XXX	10	MJ10x1.25-4h6h	7.4-8.4	4.7-5.0	18.9	16.73-17.00		16.3 0.3-0.6
MA3365-120XXX	12	MJ12x1.25-4h6h	9.4-10.4	5.7-6.0	21.1	18.67-19.00		18.3 0.3-0.6
MA3365-140XXX	14	MJ14x1.5-4h6h	11.1-12.1	6.7-7.0	24.5	21.67-22.00		21.3 0.3-0.6
MA3365-160XXX	16	MJ16x1.5-4h6h	13.1-14.1	7.7-8.0	26.8	23.67-24.00		23.3 0.3-0.6
MA3365-180XXX	18	MJ18x1.5-4h6h	15.1-16.1	8.7-9.0	30.2	26.67-27.00		26.3 0.3-0.6
MA3365-200XXX	20	MJ20x1.5-4h6h	17.1-18.1	9.7-10.0	33.6	29.67-30.00		29.3 0.3-0.6

PART NUMBER SEE NOTE 7	NOM DIA REF	J MIN	K h12	P	R	W	Y	AA MAX	AC	AD	AE H13
MA3365-030XXX	3	6.4	2.90-3.00	0.10	0.2-0.4	0.15	0.0030	7.25	—	1.55	1.00-1.14
MA3365-040XXX	4	7.4	3.88-4.00	0.12	0.2-0.4	0.20	0.0030	8.25	—	1.80	1.00-1.14
MA3365-050XXX	5	8.3	4.88-5.00	0.12	0.3-0.5	0.25	0.0030	9.25	3.70	1.35	1.00-1.14
MA3365-060XXX	6	10.2	5.88-6.00	0.12	0.5-0.7	0.30	0.0030	11.25	4.50	1.60	1.40-1.54
MA3365-070XXX	7	11.2	6.85-7.00	0.15	0.5-0.7	0.35	0.0030	12.25	4.95	1.85	1.40-1.54
MA3365-080XXX	8	13.2	7.85-8.00	0.15	0.5-0.7	0.40	0.0030	14.25	5.80	2.10	1.40-1.54
MA3365-100XXX	10	16.0	9.85-10.00	0.15	0.6-0.8	0.50	0.0025	17.25	7.10	2.35	1.60-1.74
MA3365-120XXX	12	18.0	11.82-12.00	0.18	0.6-0.9	0.60	0.0025	19.25	7.90	2.85	1.60-1.74
MA3365-140XXX	14	21.0	13.82-14.00	0.18	0.8-1.1	0.70	0.0025	22.25	9.20	3.35	1.60-1.74
MA3365-160XXX	16	23.0	15.82-16.00	0.18	0.8-1.1	0.75	0.0025	24.25	10.05	3.85	1.60-1.74
MA3365-180XXX	18	26.0	17.82-18.00	0.18	1.0-1.3	0.75	0.0025	27.25	11.30	4.35	1.60-1.74
MA3365-200XXX	20	29.0	19.79-20.00	0.21	1.0-1.3	0.75	0.0025	30.25	12.60	4.85	1.60-1.74

TABLE II

L LENGTH	DASH NO SEE NOTE	MJ3x0.5-4h6h			MJ4x0.7-4h6h			
		M MAX	N MIN	APPROX MASS kg/100	DASH NO SEE NOTE	M MAX	N MIN	APPROX MASS kg/100
13.7-14.3	030014	2.0	0.4	0.173	—	—	—	—
15.7-16.3	030016	4.0	1.5	0.181	—	—	—	—
17.7-18.3	030018	6.0	3.5	0.190	040018	4.0	1.1	0.307
19.7-20.3	030020	8.0	5.5	0.199	040020	6.0	3.1	0.322
21.7-22.3	030022	10.0	7.5	0.208	040022	8.0	5.1	0.338
23.7-24.3	030024	12.0	9.5	0.216	040024	10.0	7.1	0.353
25.7-26.3	030026	14.0	11.5	0.225	040026	12.0	9.1	0.369
27.7-28.3	030028	16.0	13.5	0.234	040028	14.0	11.1	0.384
29.7-30.3	030030	18.0	15.5	0.243	040030	16.0	13.1	0.400
31.7-32.3	030032	20.0	17.5	0.252	040032	18.0	15.1	0.415
33.7-34.3	030034	22.0	19.5	0.260	040034	20.0	17.1	0.431
35.7-36.3	030036	24.0	21.5	0.269	040036	22.0	19.1	0.446
37.7-38.3	030038	26.0	23.5	0.278	040038	24.0	21.1	0.462
39.7-40.3	030040	28.0	25.5	0.287	040040	26.0	23.1	0.477
41.7-42.3	030042	30.0	27.5	0.295	040042	28.0	25.1	0.493
43.7-44.3	—	—	—	—	040044	30.0	27.1	0.508
45.7-46.3	—	—	—	—	040046	32.0	29.1	0.523
47.7-48.3	—	—	—	—	040048	34.0	31.1	0.539
49.7-50.3	—	—	—	—	040050	36.0	33.1	0.554
51.7-52.3	—	—	—	—	040052	38.0	35.1	0.570
53.7-54.3	—	—	—	—	040054	40.0	37.1	0.585
55.7-56.3	—	—	—	—	040056	42.0	39.1	0.601



METRIC AEROSPACE STANDARD

BOLT, MACHINE - HEX HEAD, DRILLED, FULL
SHANK, LONG THREAD, AMS 5731, METRICMA3365
SHEET 2 OF 7

TABLE II (CONTINUED)

L LENGTH	MJ5x0.8-4h6h				MJ6x1-4h6h			
	DASH NO. SEE NOTE	M MAX	N MIN	APPROX MASS kg/100	DASH NO. SEE NOTE	M MAX	N MIN	APPROX MASS kg/100
19.7-20.3	050020	4.0	0.9	0.409	—	—	—	—
21.7-22.3	050022	6.0	2.9	0.434	060022	4.0	0.7	0.673
23.7-24.3	050024	8.0	4.9	0.459	060024	6.0	2.5	0.708
25.7-26.3	050026	10.0	6.9	0.484	060026	8.0	4.5	0.744
27.7-28.3	050028	12.0	8.9	0.508	060028	10.0	6.5	0.779
29.7-30.3	050030	14.0	10.9	0.533	060030	12.0	8.5	0.814
31.7-32.3	050032	16.0	12.9	0.558	060032	14.0	10.5	0.850
33.7-34.3	050034	18.0	14.9	0.582	060034	16.0	12.5	0.885
35.7-36.3	050036	20.0	16.9	0.607	060036	18.0	14.5	0.920
37.7-38.3	050038	22.0	18.9	0.632	060038	20.0	16.5	0.956
39.7-40.3	050040	24.0	20.9	0.656	060040	22.0	18.5	0.991
41.7-42.3	050042	26.0	22.9	0.681	060042	24.0	20.5	1.026
43.7-44.3	050044	28.0	24.9	0.706	060044	26.0	22.5	1.061
45.7-46.3	050046	30.0	26.9	0.731	060046	28.0	24.5	1.097
47.7-48.3	050048	32.0	28.9	0.755	060048	30.0	26.5	1.132
49.7-50.3	050050	34.0	30.9	0.780	060050	32.0	28.5	1.167
51.7-52.3	050052	36.0	32.9	0.805	060052	34.0	30.5	1.203
53.7-54.3	050054	38.0	34.9	0.829	060054	36.0	32.5	1.238
55.7-56.3	050056	40.0	36.9	0.854	060056	38.0	34.5	1.273
57.7-58.3	050058	42.0	38.9	0.879	060058	40.0	36.5	1.309
59.7-60.3	050060	44.0	40.9	0.904	060060	42.0	38.5	1.344
63.7-64.3	050064	48.0	44.9	0.953	060064	46.0	42.5	1.415
67.7-68.3	050068	52.0	48.9	1.002	060068	50.0	46.5	1.485
71.7-72.3	—	—	—	—	060072	54.0	50.5	1.556
75.7-76.3	—	—	—	—	060076	58.0	54.5	1.627
79.7-80.3	—	—	—	—	060080	62.0	58.5	1.697
83.7-84.3	—	—	—	—	060084	66.0	62.5	1.768

TABLE II (CONTINUED)

L LENGTH	MJ7x1-4h6h				MJ8x1-4h6h			
	DASH NO. SEE NOTE	M MAX	N MIN	APPROX. MASS kg/100	DASH NO. SEE NOTE	M MAX	N MIN	APPROX. MASS kg/100
23.7-24.3	070024	4.0	0.7	0.987	—	—	—	—
25.7-26.3	070026	6.0	2.5	1.036	080026	4.0	0.7	1.464
27.7-28.3	070028	8.0	4.5	1.086	080028	6.0	2.5	1.531
29.7-30.3	070030	10.0	6.5	1.136	080030	8.0	4.5	1.598
31.7-32.3	070032	12.0	8.5	1.186	080032	10.0	6.5	1.664
33.7-34.3	070034	14.0	10.5	1.236	080034	12.0	8.5	1.731
35.7-36.3	070034	16.0	12.5	1.286	080036	14.0	10.5	1.798
37.7-38.3	070038	18.0	14.5	1.336	080038	16.0	12.5	1.865
39.7-40.3	070040	20.0	16.5	1.385	080040	18.0	14.5	1.932
41.7-42.3	070042	22.0	18.5	1.435	080042	20.0	16.5	1.999
43.7-44.3	070044	24.0	20.5	1.485	080044	22.0	18.5	2.066
45.7-46.3	070046	26.0	22.5	1.535	080046	24.0	20.5	2.132
47.7-48.3	070048	28.0	24.5	1.585	080048	26.0	22.5	2.199
49.7-50.3	070050	30.0	26.5	1.635	080050	28.0	24.5	2.266
51.7-52.3	070052	32.0	28.5	1.684	080052	30.0	26.5	2.333
53.7-54.3	070054	34.0	30.5	1.734	080054	32.0	28.5	2.400
55.7-56.3	070056	36.0	32.5	1.784	080056	34.0	30.5	2.467
57.7-58.3	070058	38.0	34.5	1.834	080058	36.0	32.5	2.534
59.7-60.3	070060	40.0	36.5	1.884	080060	38.0	34.5	2.600
63.7-64.3	070064	44.0	40.5	1.983	080064	42.0	38.5	2.734
67.7-68.3	070068	48.0	44.5	2.083	080068	46.0	42.5	2.868
71.7-72.3	070072	52.0	48.5	2.183	080072	50.0	46.5	3.002
75.7-76.3	070076	56.0	52.5	2.283	080076	54.0	50.5	3.135
79.7-80.3	070080	60.0	56.5	2.382	080080	58.0	54.5	3.269
83.7-84.3	070084	64.0	60.5	2.482	080084	62.0	58.5	3.403
87.7-88.3	070088	68.0	64.5	2.582	080088	66.0	62.5	3.537
91.7-92.3	070092	72.0	68.5	2.681	080092	70.0	66.5	3.670
95.7-96.3	070096	76.0	72.5	2.781	080096	74.0	70.5	3.804
99.7-100.3	—	—	—	—	080100	78.0	74.5	3.938
103.7-104.3	—	—	—	—	080104	82.0	78.5	4.071
107.7-108.3	—	—	—	—	080108	86.0	82.5	4.205
111.7-112.3	—	—	—	—	080112	90.0	86.5	4.339

TABLE II (CONTINUED)

L LENGTH	MJ10x1.25 - 4h6h				MJ12x1.25 - 4h6h			
	DASH NO. SEE NOTE	M MAX	N MIN	APPROX MASS kg/100	DASH NO. SEE NOTE	M MAX	N MIN	APPROX MASS. kg/100
31.7-32.3	100032	6.0	2.0	2.648	—	—	—	—
33.7-34.3	100034	8.0	4.0	2.752	—	—	—	—
35.7-37.3	100036	10.0	6.0	2.857	120036	6.0	2.0	4.261
37.7-38.3	100038	12.0	8.0	2.961	120038	8.0	4.0	4.417
39.7-40.3	100040	14.0	10.0	3.066	120040	10.0	6.0	4.572
41.7-42.3	100042	16.0	12.0	3.170	120042	12.0	8.0	4.727
43.7-44.3	100044	18.0	14.0	3.275	120044	14.0	10.0	4.882
45.7-46.3	100046	20.0	16.0	3.379	120046	16.0	12.0	5.037
47.7-48.3	100048	22.0	18.0	3.483	120048	18.0	14.0	5.192
49.7-50.3	100050	24.0	20.0	3.588	120050	20.0	16.0	5.347
51.7-52.3	100052	26.0	22.0	3.692	120052	22.0	18.0	5.502
53.7-54.3	100054	28.0	24.0	3.797	120054	24.0	20.0	5.658
55.7-56.3	100056	30.0	26.0	3.901	120056	26.0	22.0	5.813
57.7-58.3	100058	32.0	28.0	4.006	120058	28.0	24.0	5.968
59.7-60.3	100060	34.0	30.0	4.110	120060	30.0	26.0	6.123
63.7-64.3	100064	38.0	34.0	4.319	120064	34.0	30.0	6.433
67.7-68.3	100068	42.0	38.0	4.528	120068	38.0	34.0	6.744
71.7-72.3	100072	46.0	42.0	4.737	120072	42.0	38.0	7.054
75.7-76.3	100076	50.0	46.0	4.946	120076	46.0	42.0	7.364
79.7-80.3	100080	54.0	46.0	5.155	120080	50.0	46.0	7.674
83.7-84.3	100084	58.0	54.0	5.364	120084	54.0	50.0	7.985
87.7-88.3	100088	62.0	58.0	5.573	120088	58.0	54.0	8.295
91.7-92.3	100092	66.0	62.0	5.782	120092	62.0	58.0	8.605
95.7-96.3	100096	70.0	66.0	5.991	120096	66.0	62.0	8.915
99.7-100.3	100100	74.0	70.0	6.200	120100	70.0	66.0	9.226
103.7-104.3	100104	78.0	74.0	6.409	120104	74.0	70.0	9.536
107.7-108.3	100108	82.0	78.0	6.618	120108	78.0	74.0	9.846
111.7-112.3	100112	86.0	82.0	6.827	120112	82.0	78.0	10.157
115.7-116.3	100115	90.0	86.0	7.036	120116	86.0	82.0	10.467
119.7-120.3	100120	94.0	90.0	7.244	120120	90.0	86.0	10.777
123.7-124.3	100124	98.0	94.0	7.453	120124	94.0	90.0	11.087
127.7-128.3	100128	102.0	98.0	7.662	120128	98.0	94.0	11.398
131.7-132.3	100132	106.0	102.0	7.871	120132	102.0	98.0	11.708
135.7-136.3	100136	110.0	106.0	8.080	120136	106.0	102.0	12.018
139.7-140.3	100140	114.0	110.0	8.289	120140	110.0	106.0	12.328
143.7-144.3	—	—	—	—	120144	114.0	110.0	12.639
147.7-148.3	—	—	—	—	120148	118.0	114.0	12.949
151.7-152.3	—	—	—	—	120152	122.0	118.0	13.259
155.7-156.3	—	—	—	—	120156	126.0	122.0	13.570
159.7-160.3	—	—	—	—	120160	130.0	126.0	13.880
163.7-164.3	—	—	—	—	120164	134.0	130.0	14.190
167.7-168.3	—	—	—	—	120168	138.0	134.0	14.500



METRIC AEROSPACE STANDARD

BOLT, MACHINE - HEX HEAD, DRILLED, FULL
SHANK, LONG THREAD, AMS 5731, METRICMA3365
SHEET 5 OF 7