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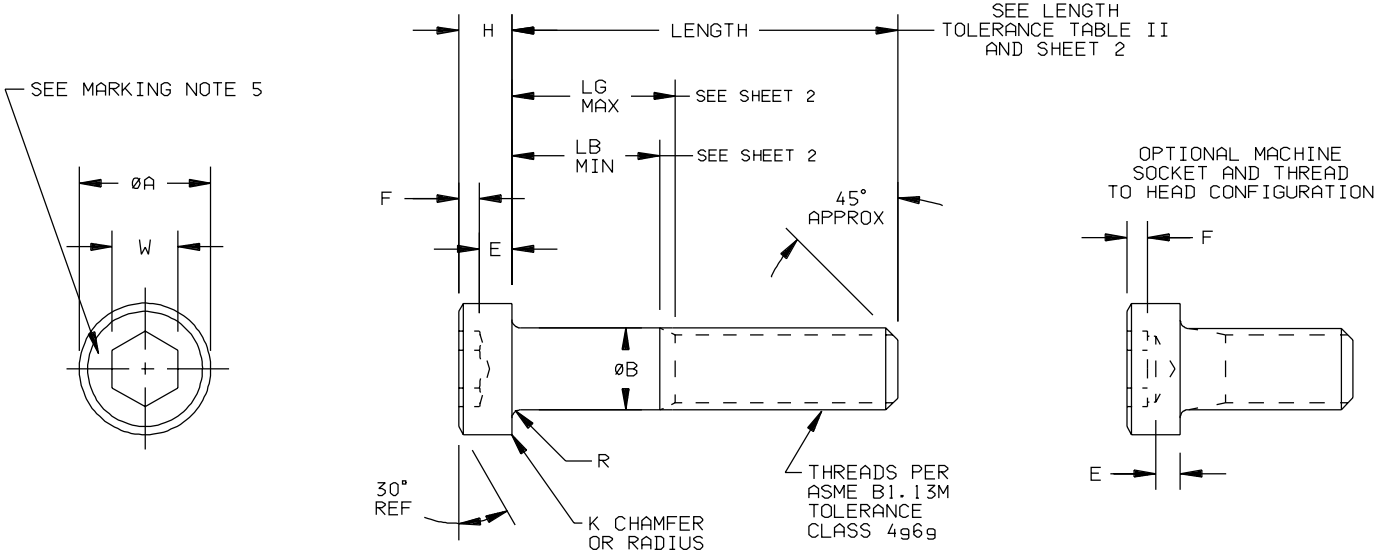


TABLE I

NOM. DIA.	THREADS	ØA MAX	ØB		E MIN	F MIN	H MAX	K MAX	R MIN	W NOM	TENSILE STRENGTH kN MIN (a)	DOUBLE SHEAR STRENGTH kN (REF ONLY)
			MAX	MIN								
M4	MJ4X0.7	7.0	4.00	3.82	1.06	1.48	2.8	0.13	0.20	3.0	9.1	16.5
M5	MJ5X0.8	8.5	5.00	4.82	1.39	1.85	3.5	0.13	0.20	4.0	14.7	25.7
M6	MJ6X1	10.0	6.00	5.82	1.65	2.09	4.0	0.20	0.25	5.0	20.9	37.0
M8	MJ8X1.25	13.0	8.00	7.78	2.24	2.48	5.0	0.20	0.40	6.0	38.1	65.8
M10	MJ10X1.5	16.0	10.00	9.78	2.86	3.36	6.5	0.20	0.40	8.0	60.3	102.9
M12	MJ12X1.75	18.0	12.00	11.73	3.46	4.26	8.0	0.25	0.60	10.0	87.6	148.2
M16	MJ16X2	24.0	16.00	15.73	4.91	4.76	10.0	0.25	0.60	12.0	162.9	263.4
M20	MJ20X2.5	30.0	20.00	19.67	6.10	6.07	12.5	0.40	0.80	14.0	254.6	411.5

a). ULTIMATE TENSILE STRENGTH IS CALCULATED USING TENSILE STRESS AREA PER APPENDIX B OF ASME B1.13M AND 1040MPa STRESS LEVEL

TABLE II

LENGTH TOLERANCE, mm	
NOMINAL SCREW LENGTH	TOLERANCE
UP TO 50, INCL	±0.25
OVER 50 TO 80, INCL	±0.5
OVER 80 INCL	±0.7

1. MATERIAL: A286 PER CHEMISTRY OF AMS 5731, AMS 5737 OR AMS 5853.
2. HEAT TREATMENT: 1100MPa MINIMUM MATERIAL STRENGTH.
3. FINISH: SEE NOTE 5.
4. DIMENSIONS AND GEOMETRIC TOLERANCING PER ASME B18.3.1M - INCLUDING MANUFACTURING NOTES NOT LISTED IN THIS DRAWING.
5. MARK SPS* MANUFACTURER'S IDENTIFICATION, LOCATION OPTIONAL ON TOP OR SIDE OF HEAD.
6. PART NUMBER: 95844()-()-() ()

FINISH: C = CADMIUM PLATE PER AMS-QQ-P-416, TYPE I, CLASS 3.
 D = CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3.
 H = CADMIUM PLATE PER AMS-QQ-P-416, TYPE I, CLASS 2.
 J = CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. (YELLOW CHROMATE)
 M = CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. (OLIVE DRAB)
 S = SILVER PLATE PER AMS 2410.
 U = ZINC PLATE PER ASTM B633 TYPE III SCI.
 Z = ZINC PLATE PER ASTM B633 TYPE II SCI.
 NO LETTER = PASSIVATE PER ASTM A967 OR EQUIVALENT.
 LENGTH IN MILLIMETERS
 DIAMETER PER TABULATION
 LOCKING FEATURE - NO LETTER = NO LOCKING FEATURE
 E = TYPE P (PATCH) PER MIL-DTL-18240
 K = TYPE N (PELLET) PER MIL-DTL-18240.
 BASIC PART NUMBER

7. DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES ±0.25 AND ±2°	FSCM NO. 56878	TITLE	STANDARDS AND SPECIFICATIONS
SURFACE ROUGHNESS 3.2	CUSTODIAN: JENKINTOWN, PA.	SCREW, SOCKET HEAD CAP, LOW HEAD, HEXAGON RECESS, A286 1040MPa Ft _u	ASTM F837M EXCEPT AS NOTED
UNLESS OTHERWISE NOTED			PART NUMBER:
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APPROVED: F CICCARONE			



TABLE III

FOR LENGTHS SHORTER THAN LISTED, (LENGTHS ABOVE HEAVY LINE)
SCREWS WILL BE THREADED AS CLOSE TO THE HEAD AS PRACTICABLE (APPROX. WITHIN 2 THREAD PITCHES).

BODY AND GRIP LENGTHS FOR FLAT HEAD SOCKET SCREWS																
NOM. DIA.	M4		M5		M6		M8		M10		M12		M16		M20	
NOM LENGTH	LG	LB	LG	LB	LG	LB	LG	LB	LG	LB	LG	LB	LG	LB	LG	LB
20																
25																
30	10.0	6.5														
35	15.0	11.5	13.0	9.0	11.0	6.0										
40	20.0	16.5	18.0	14.0	16.0	11.0										
45	25.0	21.5	23.0	19.0	21.0	16.0	17.0	10.7								
50	30.0	26.5	28.0	24.0	26.0	21.0	22.0	15.7	18.0	10.5						
55	35.0	31.5	33.0	29.0	31.0	26.0	27.0	20.7	23.0	15.5						
60	40.0	36.5	38.0	34.0	36.0	31.0	32.0	25.7	28.0	20.5	24.0	15.2				
65	45.0	41.5	43.0	39.0	41.0	36.0	37.0	30.7	33.0	25.5	29.0	20.2				
70	50.0	46.5	48.0	44.0	46.0	41.0	42.0	35.7	38.0	30.5	34.0	25.2	26.0	16.0		
80	60.0	56.5	58.0	54.0	56.0	51.0	52.0	45.7	48.0	40.5	44.0	35.2	36.0	26.0		
90			68.0	64.0	66.0	61.0	62.0	55.7	58.0	50.5	54.0	45.2	46.0	36.0	38.0	25.5
100			78.0	74.0	76.0	71.0	72.0	65.7	68.0	60.5	64.0	55.2	56.0	46.0	48.0	35.5
110					86.0	81.0	82.0	75.7	78.0	70.5	74.0	65.2	66.0	56.0	58.0	45.5
120					96.0	91.0	92.0	85.7	88.0	80.5	84.0	75.2	76.0	66.0	68.0	55.5
130							102.0	95.7	98.0	90.5	94.0	85.2	86.0	76.0	78.0	65.5
140							112.0	105.7	108.0	100.5	104.0	95.2	96.0	86.0	88.0	75.5
150							122.0	115.7	118.0	110.5	114.0	105.2	106.0	96.0	98.0	85.5
160							132.0	125.7	128.0	120.5	124.0	115.2	116.0	106.0	108.0	95.5
180									148.0	140.5	144.0	135.2	136.0	126.0	128.0	115.5
200									168.0	160.5	164.0	155.2	156.0	146.0	148.0	135.5
220											184.0	175.2	176.0	166.0	168.0	155.5
240											204.0	195.2	196.0	186.0	188.0	175.5
260													216.0	206.0	208.0	195.5
300													256.0	246.0	248.0	235.5

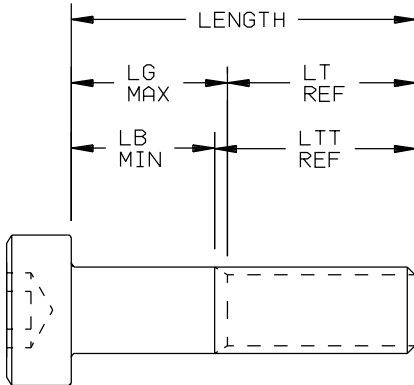


TABLE IV

NOM. DIA.	LT THREAD LENGTH MIN	LTT TOTAL THREAD LENGTH MAX
M4	20.0	23.5
M5	22.0	26.0
M6	24.0	29.0
M8	28.0	34.3
M10	32.0	39.5
M12	36.0	44.8
M16	44.0	54.0
M20	52.0	64.5

THE LENGTH OF COMPLETE THREAD "LT" SHALL BE CONTROLLED BY THE GRIP LENGTH "LG" AS DESCRIBED IN NOTE A), AND THE LENGTH OF TOTAL THREAD "LTT" SHALL BE CONTROLLED BY THE BODY LENGTH "LB" AS SET FORTH IN NOTE B). THE "LT" MINIMUM AND "LTT" MAXIMUM VALUES SHOWN IN TABLE IV ARE REFERENCE DIMENSIONS INTENDED FOR CALCULATION PURPOSES ONLY IN ACCORDANCE WITH NOTE C). SEE SKETCH ABOVE.

- A) THE GRIP LENGTH "LG" SHALL BE MAXIMUM AND REPRESENTS THE MINIMUM DESIGN GRIP LENGTH OF THE SCREW. IT SHALL BE MEASURED, PARALLEL TO THE AXIS OF SCREW, FROM THE BEARING SURFACE OF THE HEAD TO THE FACE OF A "GO" THREAD RING GAGE, HAVING THE COUNTERSINK AND/OR COUNTERBORE REMOVED, WHICH HAS BEEN ASSEMBLED BY HAND AS FAR AS THE THREAD WILL PERMIT. THE "LG" MAXIMUM LENGTH IS A CRITERION FOR ACCEPTANCE AND SHALL CONFORM TO THE VALUES GIVEN IN TABLE III OR, FOR DIAMETER/LENGTH COMBINATIONS NOT SHOWN THEREIN, SHALL BE AS CALCULATED PER NOTE C).
- B) THE BODY LENGTH "LB" SHALL BE MINIMUM AND REPRESENTS THE MINIMUM FULL BODY LENGTH OF THE SCREW. IT SHALL BE MEASURED, PARALLEL TO THE AXIS OF THE SCREW, FROM THE BEARING SURFACE OF THE HEAD TO THE TOP OF THE EXTRUSION ANGLE OR TO THE LAST SCRATCH OF THE THREAD. THE "LB" MINIMUM LENGTH IS A CRITERION FOR ACCEPTANCE AND SHALL CONFORM TO THE VALUES GIVEN IN TABLE III OR, FOR DIAMETER/LENGTH COMBINATIONS NOT SHOWN THEREIN, SHALL BE AS CALCULATED IN ACCORDANCE WITH NOTE C).
- C) FOR SCREWS OF NOMINAL LENGTHS NOT LISTED IN TABLE III AND FOR NOMINAL SIZES LARGER THAN 24mm, THE MAXIMUM GRIP LENGTH "LG" AND MINIMUM BODY LENGTH "LB" SHALL BE DETERMINED FROM THE FOLLOWING FORMULAS:
 $LG = L - LT$
 $LB = L - LTT$
 WHERE: L = NOMINAL SCREW LENGTH; LT = MINIMUM THREAD LENGTH FROM TABLE IV;
 LTT = MAXIMUM TOTAL THREAD LENGTH FROM TABLE IV.
 SCREWS HAVING NOMINAL LENGTHS FALLING BETWEEN THOSE FOR WHICH "LG" AND "LB" VALUES ARE TABULATED IN TABLE IV, SHALL HAVE "LG" AND "LB" DIMENSIONS CONFORMING TO THOSE OF THE NEXT SHORTER TABULATED NOMINAL LENGTH FOR THE RESPECTIVE SCREW SIZES.

TOLERANCES ±0.25 AND ±2*
SURFACE ROUGHNESS 3.2
UNLESS OTHERWISE NOTED

DRAFTED IN ACCORDANCE WITH ANSI Y14.5M 1982



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