

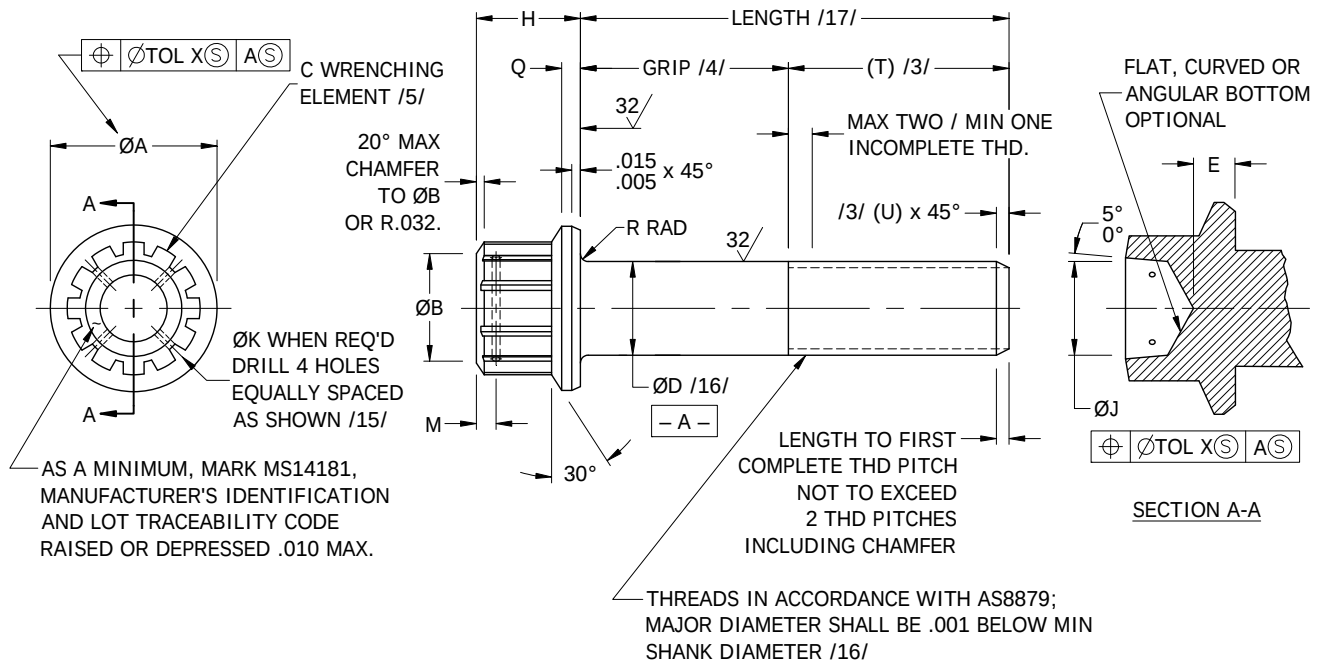


TABLE I - DIMENSIONS AND STRENGTH VALUES

DIA DASH NO.	NOMINAL SIZE	THREAD UNJF-3A /16/	ØA		ØB		C WRENCHING ELEMENT /3/	ØD /16/	
			MAX	MIN	MAX	MIN		MAX	MIN
03	NO. 10	.1900-32	.359	.349	.188	.173	8	.1895	.1885
04	1/4	.2500-28	.470	.460	.250	.235	10	.2495	.2485
05	5/16	.3125-24	.585	.575	.375	.360	12	.3120	.3110
06	3/8	.3750-24	.701	.691	.438	.423	14	.3745	.3735
07	7/16	.4375-20	.817	.807	.500	.485	16	.4370	.4360
08	1/2	.5000-20	.932	.922	.562	.547	20	.4995	.4985
09	9/16	.5625-18	1.047	1.037	.625	.610	22	.5615	.5605
10	5/8	.6250-18	1.163	1.153	.688	.673	24	.6240	.6230
12	3/4	.7500-16	1.394	1.384	.812	.797	28	.7490	.7480
14	7/8	.8750-14	1.625	1.615	.938	.923	32	.8740	.8730
16	1.0	1.0000-12	1.856	1.846	1.062	1.047	38	.9990	.9980

④ COMPLETELY REVISED

THE INTIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS14181, REVISION C, AMENDMENT 1. PART NUMBERS REMAIN MS14181

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 4
PROCUREMENT SPECIFICATION NAS4008 ③	TITLE BOLT, TENSION, NICKEL ALLOY 718, 220 KSI Ft_u, EXTERNAL WRENCHING, SPLINE DRIVE, FLANGED HEAD	CLASSIFICATION PART STANDARD
		MSM14181 SHEET 1 OF 5

TABLE I – DIMENSIONS AND STRENGTH VALUES (CONTINUED)

DIA DASH NO.	E MIN	H ± .010	ØJ +.010 -.030	ØK ± .005	M	Q		R RAD		(T) MIN
						MAX	MIN	MAX	MIN	
03	.113	.205	.100	.037	.062	.037	.017	.022	.016	.408
04	.149	.250	.125			.046	.026	.028	.022	.495
05	.187	.312	.215			.055	.035	.035	.029	.589
06	.224	.337	.260			.064	.044	.043	.033	.659
07	.262	.393	.320	.065	.070	.073	.053	.049	.039	.763
08	.299	.450	.380			.082	.062	.055	.045	.838
09	.336	.505	.440			.091	.071	.061	.051	.935
10	.374	.562	.500			.100	.080	.068	.058	1.005
12	.449	.600	.570		.094	.118	.098	.080	.070	1.173
14	.523	.700	.650			.136	.116	.093	.083	1.348
16	.599	.800	.740			.154	.134	.105	.095	1.546
					.125					

TABLE I – DIMENSIONS AND STRENGTH VALUES (CONTINUED)

DIA DASH NO.	(U)	BEARING AREA (MEAN DIA) SQ. IN.	TENSILE STRENGTH (LBF)			DOUBLE SHEAR STRENGTH LBF MIN.	STRESS RUPTURE AT 800 °F (LBF) /13/	TOLERANCE	
			ROOM TEMPERATURE		AT 800 °F MIN. /13/			X	Z /16/
			MAX.	MIN.					
03	.039	.0517	5,640	4,770	3,810	7,100	2,670	.004	.004
04	.045	.0914	10,080	8,540	6,830	12,300	4,780	.005	
05	.052	.1442	15,960	13,500	10,800	19,200	7,560	.006	
06		.2106	24,700	20,900	16,720	27,650	11,700	.008	
07	.063	.2896	33,480	28,300	22,640	37,600	15,840	.009	.006
08		.3786	44,640	37,800	30,240	49,100	21,160	.010	
09	.089	.4808	56,570	47,900	38,320	62,150	26,820	.011	
10		.5945	70,820	59,900	47,920	76,700	33,540	.012	
12		.7512	100,800	86,900	69,500	109,857	48,700	.015	
14		1.1673	137,000	119,000	95,000	149,640	66,600	.018	
16	.100	1.5465	179,000	155,000	124,000	195,565	86,800	.020	.009

MATERIAL: NICKEL ALLOY 718 WITH CHEMISTRY OF AMS5662 (UNS N07718), AMS5663 (UNS N07718) OR AMS5962 (UNS N07718).

HEAT TREAT: MATERIAL MUST BE PROCESSED TO YIELD 220 KSI MINIMUM ULTIMATE TENSILE STRENGTH WITH THE PYROMETRY REQUIREMENTS OF AMS2750.

FINISH: PASSIVATE PER AMS2700, METHOD 1, TYPE 2 OR TYPE 8, CLASS 4 EXCEPT CADMIUM PLATED PARTS. CADMIUM PLATED PARTS PER AMS-QQ-P-416, TYPE II, CLASS 2, UP TO 450 °F APPLICATION ENVIRONMENT.

LUBRICANT: SOLID FILM LUBRICANT PER AS5272, TYPE I.

PERFORMANCE: PER NAS4008 NASM5604, WITH THE ADDITION OF THE FOLLOWING QUALIFICATION TESTS:

- STRESS RUPTURE PER NASM1312-10 WITH VALUES AS TABULATED IN TABLE I. (QUALIFICATION TEST ONLY.)
- ELEVATED TEMPERATURE TENSILE STRENGTH PER NASM1312-18 WITH VALUES AS TABULATED IN TABLE I. (QUALIFICATION TEST ONLY.)
- AFTER AGING, MATERIAL DUCTILITY SHALL BE NOT LESS THAN 8% ELONGATION AND 15% REDUCTION OF AREA WHEN TESTED PER ASTM E 8. (QUALIFICATION AND CONFORMANCE TEST.)

④ COMPLETELY REVISED

REVISION

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NASM14181

SHEET 2



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