



PROPRIETARY INFORMATION
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DRAWING NUMBER
SPS-B-94705

ISSUE DATE
 5/30/97

REVISION

- ① 3/23/98
- ② 1/28/99
- ③ 1/15/01
- ④ 3/31/03
- ⑤ 10/13/04

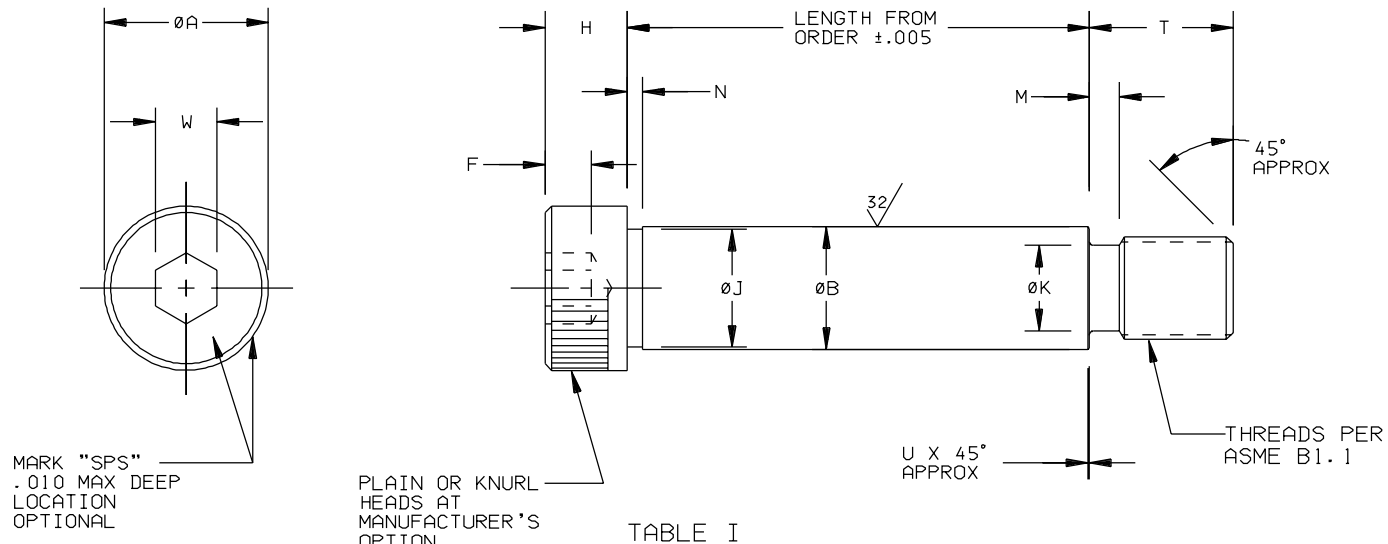


TABLE I

DASH NUMBER	NOMINAL SHLDR Ø	THREAD SERIES		ØA	ØB	F MIN	H	ØJ MIN	ØK		N MAX	M MAX	T +.000 -.020	U MAX	W NOM
		UNRC-3A	UNRF-3A						UNRC	UNRF					
4	.250	.1900-24	.1900-32	.375 .357	.248 .247	.094	.188 .182	.227	.142 .133	.156 .147	.093	.083	.375	.005	.125
5	.312	.2500-20	.2500-28	.438 .419	.3105 .3095	.117	.219 .213	.289	.193 .182	.210 .201	.093	.100	.437	.005	.156
6	.375	.3125-18	.3125-24	.562 .543	.373 .372	.141	.250 .244	.352	.249 .237	.265 .256	.093	.111	.500	.005	.187
8	.500	.3750-16	.3750-24	.750 .729	.498 .497	.188	.313 .306	.477	.304 .291	.327 .318	.093	.125	.625	.008	.250
10	.625	.5000-13	.5000-20	.875 .853	.623 .622	.234	.375 .368	.602	.414 .397	.443 .432	.093	.154	.750	.008	.312
12	.750	.6250-11	.6250-18	1.000 .977	.748 .747	.281	.500 .492	.727	.521 .502	.561 .549	.093	.182	.875	.008	.375
14	.875	.7500-10	.7500-16	1.125 1.000	.873 .872	.375	.625 .616	.852	.638 .616	.678 .665	.093	.200	1.000	.008	.500
16	1.000	.7500-10	.7500-16	1.312 1.287	.998 .997	.375	.625 .616	.977	.638 .616	.678 .665	.125	.200	1.000	.008	.500
20	1.250	.8750-9	.8750-14	1.750 1.723	1.248 1.247	.469	.750 .741	1.227	.750 .726	.796 .778	.125	.222	1.125	.008	.625
24	1.500	1.1250-7	1.1250-12	2.125 2.095	1.498 1.496	.656	1.000 .980	1.478	.964 .934	1.022 1.014	.125	.286	1.500	.008	.875
28	1.750	1.2500-7	1.2500-12	2.375 2.345	1.748 1.746	.750	1.125 1.105	1.728	1.089 1.059	1.147 1.139	.125	.286	1.750	.008	1.000
32	2.000	1.5000-6	1.5000-12	2.750 2.720	1.998 1.996	.937	1.250 1.230	1.978	1.307 1.277	1.397 1.389	.125	.333	2.000	.008	1.250

TABLE II

DASH NUMBER	NOMINAL SHLDR Ø	THREAD SERIES		TENSILE STRENGTH IN POUNDS		DOUBLE SHEAR STRENGTH OF BODY LBS. MIN.	RECOMMENDED SEATING TORQUE INCH POUNDS	
		UNRC-3A	UNRF-3A	UNRC-3A	UNRF-3A		UNRC	UNRF
4	.250	.1900-24	.1900-32	2,220	2,720	9,100	45	52
5	.312	.2500-20	.2500-28	4,160	5,080	14,300	112	128
6	.375	.3125-18	.3125-24	7,060	8,240	20,700	230	255
8	.500	.3750-16	.3750-24	10,640	12,710	36,900	388	441
10	.625	.5000-13	.5000-20	19,810	23,450	57,700	990	1,115
12	.750	.6250-11	.6250-18	31,670	37,880	83,300	1,975	2,236
14	.875	.7500-10	.7500-16	47,680	55,570	113,500	3,490	3,900
16	1.000	.7500-10	.7500-16	47,680	55,570	148,300	3,490	3,900
20	1.250	.8750-9	.8750-14	66,230	76,060	232,000	5,610	6,200
24	1.500	1.1250-7	1.1250-12	110,000	129,000	334,000	12,000	12,500
28	1.750	1.2500-7	1.2500-12	141,000	163,000	455,000	16,000	17,500
32	2.000	1.5000-6	1.5000-12	205,000	242,000	595,000	30,000	30,800

THE TENSILE STRENGTH IS BASED ON A STRESS OF 160 KSI MINIMUM AND THE AREA AT MINIMUM NECK "ØK".
 THE SHEAR STRENGTH IS BASED ON A STRESS OF 95 KSI MINIMUM AND THE AREA AT MINIMUM SHOULDER "ØB".

THE RECOMMENDED SEATING TORQUES LISTED SERVE AS GUIDELINES ONLY.
 EVEN WHEN USING THE RECOMMENDED SEATING TORQUES, THE INDUCED LOADS OBTAINED
 MAY VARY AS MUCH AS ±25% DEPENDING UPON THE UNCONTROLLED VARIABLES SUCH AS MATING MATERIAL,
 PLATING, LUBRICATION, SURFACE FINISH, HARDNESS, BOLT/JOINT COMPLIANCE, METHOD OF TIGHTENING, ETC.
 HOWEVER, THE BEST WAY TO DETERMINE THE CORRECT TORQUE IS TO RUN TESTS ON THE PARTICULAR JOINT BY TIGHTENING
 SAMPLE BOLTS UNTIL THEY JUST BEGIN TO YIELD. THE OPTIMUM TORQUE IS 80% OF THIS VALUE.

TOLERANCES ±.010 AND ±2°
 SURFACE ROUGHNESS 125
 UNLESS OTHERWISE NOTED
 DRAFTED IN ACCORDANCE WITH ANSI Y14.5M-1982
 DRAWN BY: STEVE FOSTER DATE: 5/30/97
 APPROVED: S FOSTER DATE: 10/26/04
 APPROVED: F CICCARONE

FSCM NO. 56878
 CUSTODIAN:
 JENKINTOWN, PA.
 TITLE
**BOLT, SHOULDER, HEXAGON RECESS
 95,000 PSI ULTIMATE SHEAR STRENGTH
 ALLOY STEEL**

STANDARDS AND SPECIFICATIONS
 NASM21472
 EXCEPT AS NOTED
 PART NUMBER:
 94705()-() ()-() ()
 SHEET 1 OF 2



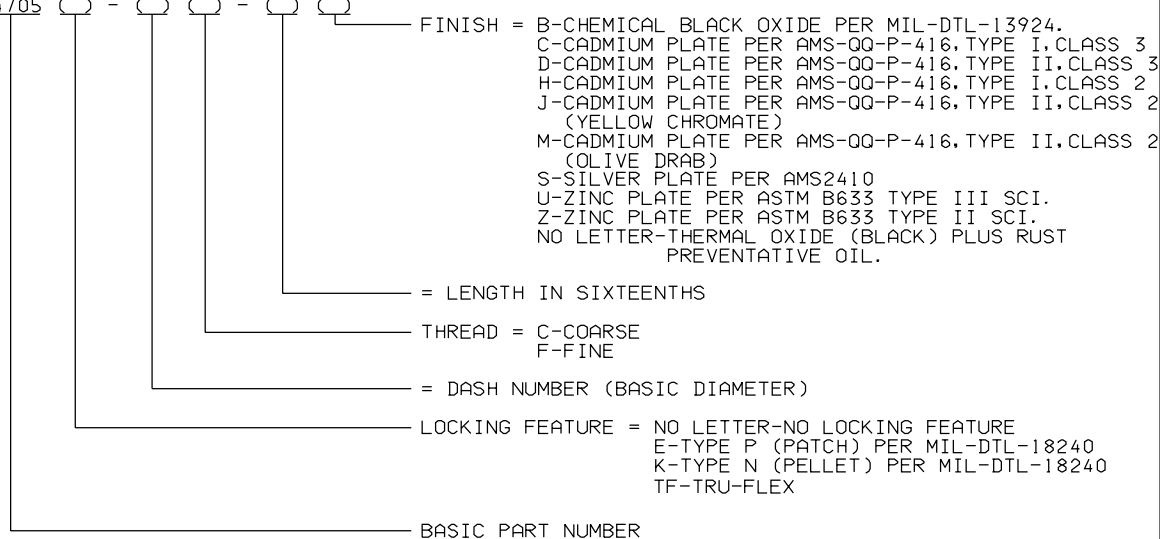
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1. MATERIAL: ALLOY STEEL PER CHEMISTRY OF ASTM A574.
2. HEAT TREATMENT: PER THE REQUIREMENTS OF ASTM A574.
3. FINISH: SEE NOTE 5.
4. DIMENSIONS, GEOMETRIC TOLERANCE PER ASME B18.3 - INCLUDING MANUFACTURING NOTES NOT LISTED IN THIS DRAWING.
5. PART NUMBERING: 94705 () - () () - () ()



6. THREAD SIZES NOT LISTED IN TABLE VA OR VB OF MIL-DTL-18240. ONLY A POSITIVE INDICATION OF TORQUE IS REQUIRED FOR 5 UNSEATED INSTALLATION AND REMOVALS.

TOLERANCES ±.010 AND ±2"
 SURFACE ROUGHNESS 125
 UNLESS OTHERWISE NOTED

DRAFTED
 IN ACCORDANCE
 WITH ANSI Y14.5M
 1982



PART NUMBER:
 94705 () - () () - () ()