

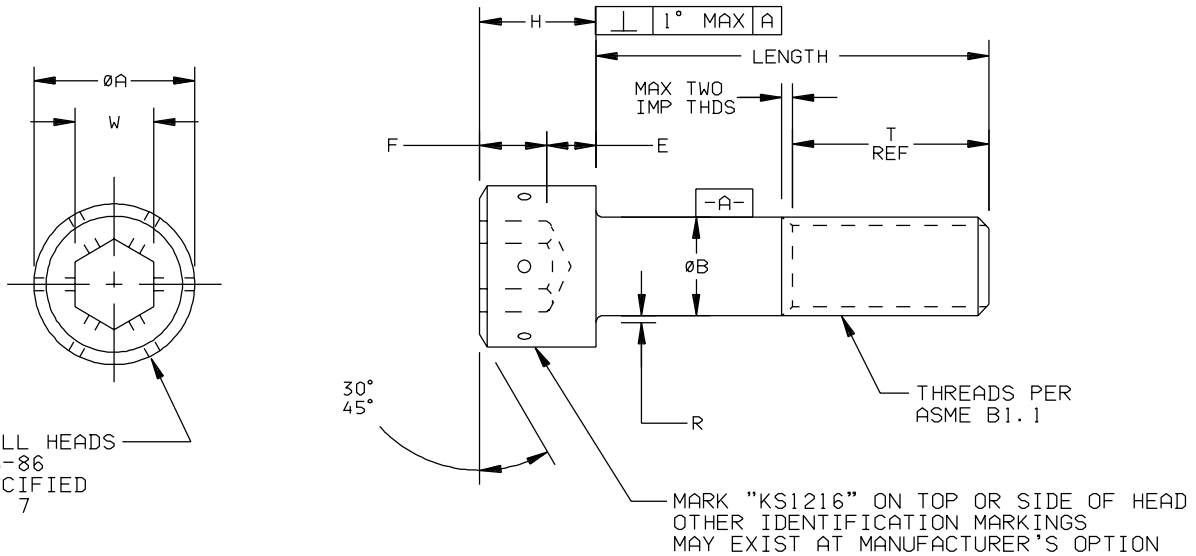


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DRAWING NUMBER
SD. 300. 78794

ISSUE DATE
7/21/87

REVISION
16 3/31/03



CROSSDRILL HEADS
PER FF-S-86
WHEN SPECIFIED
SEE NOTE 7

DASH NUMBER	THREADS CLASS 3A	ØA	ØB	E MIN	F MIN	H	R FILLET EXT	T REF	W NOM	TENSILE LBS. MIN
256	.086-56 UNRC	.140	.086	.029	.038	.086	.008	.625	.0781	590
264	.086-64 UNRF	.134	.0822			.083	.004			630
348	.099-48 UNRC	.161	.099			.099	.008			780
356	.099-56 UNRF	.154	.0949	.034	.044	.095	.004	.625	.0781	840
440	.112-40 UNRC	.183	.112			.112	.009			970
448	.112-48 UNRF	.176	.1075	.038	.051	.108	.005	.750	.0937	1,060
540	.125-40 UNRC	.205	.125	.043	.057	.125	.010	.750	.0937	1,270
544	.125-44 UNRF	.198	.1202			.121	.006			1,330
632	.138-32 UNRC	.226	.138			.138	.010			1,450
640	.138-40 UNRF	.218	.1329	.047	.064	.134	.006	.750	.1093	1,620
832	.164-32 UNRC	.270	.164			.164	.012			2,240
836	.164-36 UNRF	.262	.1585	.056	.077	.159	.007	.875	.1406	2,360
1024	.190-24 UNRC	.312	.190	.065	.090	.190	.014	.875	.1562	2,800
1032	.190-32 UNRF	.303	.184			.185	.009			3,200
420	.250-20 UNRC	.375	.250	.095	.120	.250	.014	1.000	.1875	5,090
428	.250-28 UNRF	.365	.2435			.244	.009			5,820
518	.312-18 UNRC	.469	.3125	.119	.151	.312	.017	1.125	.2500	8,380
524	.312-24 UNRF	.457	.3053			.306	.012			9,280
616	.375-16 UNRC	.562	.375	.143	.182	.375	.020	1.250	.3125	12,400
624	.375-24 UNRF	.550	.3678			.368	.015			14,000
714	.437-14 UNRC	.656	.4375	.166	.213	.438	.023	1.375	.3750	17,000
720	.437-20 UNRF	.642	.4294			.430	.018			19,000
813	.500-13 UNRC	.750	.500	.190	.245	.500	.026	1.500	.3750	22,700
820	.500-20 UNRF	.735	.4919			.492	.020			25,600
1011	.625-11 UNRC	.938	.625	.238	.307	.625	.032	1.750	.5000	36,200
1018	.625-18 UNRF	.921	.6163			.616	.024			41,000
1210	.750-10 UNRC	1.125	.750	.285	.370	.750	.039	2.000	.6250	53,500
1216	.750-16 UNRF	1.107	.7406			.740	.030			59,700
1409	.875-9 UNRC	1.312	.875	.333	.432	.875	.044	2.250	.7500	73,900
1414	.875-14 UNRF	1.293	.8647			.864	.034			81,500
1608	1.000-8 UNRC	1.500	1.000			1.000	.050			96,900
1612	1.000-12 UNRF							2.500	.7500	106,000
1614	1.000-14 UNRS	1.479	.9886	.380	.495	.988	.040			109,000
1807	1.125-7 UNRC	1.688	1.125	.428	.557	1.125	.055	2.812	.8750	122,000
1812	1.125-12 UNRF	1.665	1.1086			1.111	.045			137,000
2007	1.250-7 UNRC	1.875	1.250	.475	.620	1.250	.060	3.125	.8750	155,000
2012	1.250-12 UNRF	1.852	1.2336			1.236	.050			171,000
2206	1.375-6 UNRC	2.062	1.375	.523	.682	1.375	.065	3.437	1.0000	185,000
2212	1.375-12 UNRF	2.038	1.3568			1.360	.055			210,000
2406	1.500-6 UNRC	2.250	1.500	.570	.745	1.500	.070	3.750	1.0000	225,000
2412	1.500-12 UNRF	2.224	1.4818			1.485	.060			253,000

THE TENSILE STRENGTH IS BASED ON 160 KSI STRESS LEVEL AT ROOM TEMPERATURE AND THE AREA PER ASME B1.1.

TOLERANCES ±.010 AND ±2° SURFACE ROUGHNESS 125/ UNLESS OTHERWISE NOTED DRAFTED IN ACCORDANCE WITH ASME Y14.5M DRAWN BY: STEVE FOSTER APPROVED: L. KLINE APPROVED: S. FOSTER	FSCM NO. 56878 CUSTODIAN: JENKINTOWN, PA. DATE: 11/01/96 DATE: 4/2/03	TITLE SCREW, SOCKET HEAD CAP, HEXAGON RECESS A286, 160 KSI UTS APPLICATIONS TO 1,000°F	STANDARDS AND SPECIFICATIONS FF-S-86 EXCEPT AS NOTED PART NUMBER: KS1216 SHEET 1 OF 2
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1. MATERIAL: A286 PER CHEMISTRY OF AMS 5731, AMS 5737 OR AMS 5853.
2. HEAT TREAT: TO MEET THE MINIMUM ULTIMATE TENSILE REQUIREMENTS OF 160 KSI.
3. MANUFACTURING REQUIREMENTS: HEADS SHALL BE FORGED.
SOCKET MAY BE FORGED OR MACHINED.
THREADS TO BE ROLLED AFTER PRECIPITATION HEAT TREATMENT.
4. DIMENSIONS, GEOMETRIC TOLERANCE PER ASME B18.3 - INCLUDING MANUFACTURING NOTES NOT LISTED ON THIS DRAWING.
5. LENGTH TOLERANCE:

DIAMETER	UP TO 1" INCL.	OVER 1" TO 2-1/2" INCL.	OVER 2-1/2" TO 6" INCL.	OVER 6"
.086 THRU .375	-.030	-.040	-.060	-.120
7/16 THRU 3/4	-.030	-.060	-.080	-.120
7/8 THRU 1-1/8	-.050	-.100	-.140	-.200

6. PARTS LONGER THAN "T REF" WILL HAVE A MINIMUM THREAD LENGTH AS TABULATED ON SHEET 1.
PARTS EQUAL TO OR SHORTER THAN "T REF" WILL BE THREADED TO HEAD.

7. PART NUMBERING: KS1216() - () () - () ()

FINISH = B = CHEMICAL BLACK OXIDE PER MIL-DTL-13924
C = CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2
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 AMS2410
U = ZINC PLATE PER ASTM B633 TYPE III SC1
Z = ZINC PLATE PER ASTM B633 TYPE II SC1
NO LETTER = PASSIVATE PER AMS-QQ-P-35

= LENGTH IN SIXTEENTHS

CROSSDRILLED HEAD = NO LETTER - NO CROSSDRILL HOLE IN HEAD
H1 - 1 HOLE THRU
H2 - 2 HOLES THRU
H3 - 3 HOLES THRU

DASH NUMBER 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
M = NYTEMP PATCH
TF = TRU-FLEX

BASIC PART NUMBER

8. PERFORMANCE REQUIREMENTS OF MIL-DTL-18240 APPLY TO SCREWS WITH NON-METALLIC LOCKING FEATURES, INCLUDING NYTEMP. (R)
9. THREAD SIZES NOT LISTED IN TABLE VA OR VB OF MIL-DTL-18240, ONLY A POSITIVE INDICATION OF TORQUE IS REQUIRED FOR 5 UNSEATED INSTALLATIONS AND REMOVALS.

(R) NYTEMP IS A REGISTERED TRADEMARK OF NYLOK FASTENER CORPORATION

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

DRAFTED
IN ACCORDANCE
WITH ASME Y14.5M



PART NUMBER:
KS1216

SHEET 2 OF 2