



DASH NUMBER	BASIC DIAMETER	THREADS PER INCH		ØA MAX/MIN	ØB MAX/MIN	F MAX/MIN	ØG GAGE	H REF	DRIVE SIZE	L REF	N MAX/MIN	Q MAX	R MAX	W REF	X
		UNRC	UNRF												
-98	#8	32	36	.359/.311	.1640/.1585	.040/.034	.2400	.112	T20	1.000	.067/.055	.026	.015	.155	.006
-3	#10	24	32	.411/.359	.1900/.1840	.055/.044	.2440	.127	T20	1.250	.095/.081	.029	.015	.155	.007
-4	1/4	20	28	.531/.480	.2500/.2435	.065/.054	.3314	.162	T30	1.250	.113/.099	.028	.015	.221	.009
-5	5/16	18	24	.656/.600	.3125/.3053	.075/.064	.4047	.198	T30	1.500	.143/.128	.031	.015	.221	.011
-6	3/8	16	24	.781/.720	.3750/.3678	.080/.069	.4854	.234	T40	1.750	.168/.152	.033	.015	.226	.013
-8	1/2	13	20	.937/.872	.5000/.4919	.117/.103	.6500	.251	T55	2.250	.162/.147	.034	.015	.446	.018

LENGTH TOLERANCE			
DIAMETER	TO 1"	OVER 1" TO 2-1/2"	OVER 2-1/2"
ALL	-.03	-.04	-.06

DASH NUMBER	BASIC DIAMETER	TENSILE STRENGTH LBS. MIN.		DOUBLE SHEAR STRENGTH OF BODY LBS. MIN.
		UNRC	UNRF	
-98	#8	2,220	2,240	4,060
-3	#10	2,780	3,180	5,440
-4	1/4	5,070	5,790	9,420
-5	5/16	8,350	9,250	14,720
-6	3/8	12,400	14,000	21,200
-8	1/2	22,800	25,600	37,700

1. MATERIAL: HEAT TREATED ALLOY STEEL.
2. HEAT TREATMENT: 160,000 PSI TENSILE STRENGTH. HRC 36-43.
3. THREAD CLASS: 3A
4. THREAD LENGTH: BOLT LENGTHS EQUAL TO OR SHORTER THAN LISTED IN COLUMN L WILL BE THREADED TO HEAD. FOR BOLTS LONGER THAN LISTED, MINIMUM USABLE THREAD LENGTH SHALL BE $2D+1/2"$, WITH MAXIMUM AT MANUFACTURER'S OPTION.
5. CONCENTRICITY: INTERNAL DRIVE TO BODY DIAMETER WITHIN "X" T.I.R. THREAD TO BODY WITHIN .005 INCH PER INCH OF BODY LENGTH (UNTHREADED PORTION) TOTAL INDICATOR READING TAKEN DIRECTLY UNDER THE HEAD WHEN BOLT IS HELD BY THE FULL THREADS CLOSEST TO THE HEAD AND SHALL NOT EXCEED A MAXIMUM OF .025.

PART NUMBERING: 94234 () - () () - () ()

FINISH = B-CHEMICAL BLACK OXIDE
C-CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2
S-SILVER PLATE PER AMS2410
Z-ZINC PLATE PER ASTM B633, TYPE II

= LENGTH IN SIXTEENTHS

THREAD = C-COARSE
F-FINE

= DASH NUMBER (BASIC DIAMETER)

LOCKING FEATURE = NO LETTER-NO LOCKING FEATURE
E-LOC-WEL PER MIL-F-18240
L-LOC-WEL COMMERCIAL
P-NYLON PLUG
TF-TRU-FLEX

BASIC PART NUMBER

REFERENCE: UNBRAKO 16990 EXCEPT SIX LOBE RECESS

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TOLERANCES $\pm .010$ AND $\pm 2^\circ$

SURFACE ROUGHNESS 125/

UNLESS OTHERWISE NOTED

DRAWN: STEVE FOSTER DATE: 3/02/95

APPROVED: L. KLINE DATE: 6/22/95

APPROVED: R. WAELTZ

SPS

TECHNOLOGIES

FSCM NO. 56878

CUSTODIAN:
JENKINTOWN, PA.

STANDARDS AND SPECIFICATIONS

TITLE

BOLT, 82° FLAT HEAD
SIX LOBE DRIVE-INTERNAL
160 KSI TENSILE STRENGTH

PART NUMBER: 94234 () - () () - () ()

SHEET 1 OF 1

PROJECT 60A61