

PART NUMBER	NOM DIA.	A THEO DIA.	A' DIA. MIN.	C MAX.	D DIA.	E DIA. MAX.	F DRIVING FLATS	H REF.	J DIA. MAX.	K MAX.	M GAGE PROT.	R RAD.	S MAX.	W GAGE DIA.	BREAK-OFF LIMITS	PREVAILING TORQUE IN. LBS. MIN	DOUBLE SHEAR STRENGTH LBS. MIN	TENSILE STRENGTH LBS. MIN
PLT1093-05(-)	.179	.2612 .2564	.241	.293	.1836 .1826	.1790	.086 .081	.034	.244	.272	.0178 .0153	.030 .010	.010	.2195 .2193	+.088 -.000	1.0	4000	900
PLT1093-06(-)	.214	.3016 .2966	.270	.328	.2186 .2176	.2140	.104 .099	.037	.300	.312	.0246 .0218	.030 .015	.015	.2440 .2438	+.088 -.000	1.5	6100	1400
PLT1093-08(-)	.275	.3948 .3898	.363	.379	.2796 .2786	.2750	.135 .130	.050	.384	.351	.0271 .0242	.030 .015	.015	.3314 .3312	+.098 -.000	2.5	10100	2100
PLT1093-10(-)	.326	.4739 .4689	.442	.448	.3306 .3296	.3260	.152 .147	.062	.427	.426	.0296 .0266	.040 .020	.015	.4047 .4045	+.103 -.000	3.5	13200	3600
PLT1093-12(-)	.389	.5604 .5554	.529	.535	.3936 .3926	.3890	.185 .180	.072	.516	.495	.0321 .0290	.040 .020	.015	.4854 .4852	+.103 -.000	4.0	21100	5600

SECOND DASH NUMBER	G GRIP	GRIP RANGE		L REF.				
		MIN	MAX	PLT1093				
				-05(-)	-06(-)	-08(-)	-10(-)	-12(-)
-	-	-	-	-	-	-	-	-
-02	.156	.094	.156	.733	.853	-	-	-
-03	.219	.157	.219	.795	.916	.944	1.096	-
-04	.281	.220	.281	.858	.978	1.006	1.158	1.242
-05	.344	.282	.344	.920	1.041	1.069	1.221	1.304
-06	.406	.345	.406	.983	1.103	1.131	1.283	1.367
-07	.469	.407	.469	1.045	1.166	1.194	1.346	1.429
-08	.531	.470	.531	1.108	1.228	1.256	1.408	1.492
-09	.594	.532	.594	1.170	1.291	1.319	1.471	1.554
-10	.656	.595	.656	1.233	1.353	1.381	1.533	1.617
-11	.719	.657	.719	1.295	1.416	1.444	1.596	1.679
-12	.781	.720	.781	1.358	1.478	1.506	1.658	1.742
-13	.844	.782	.844	1.420	1.541	1.569	1.721	1.804
-14	.906	.845	.906	1.483	1.603	1.631	1.783	1.867
-15	.969	.907	.969	1.545	1.666	1.694	1.846	1.929
-16	1.031	.970	1.031	1.608	1.728	1.756	1.908	1.992

SECOND DASH NUMBER	G GRIP	GRIP RANGE		L REF.				
		MIN	MAX	PLT1093				
				-05(-)	-06(-)	-08(-)	-10(-)	-12(-)
-17	1.094	1.032	1.094					
-18	1.156	1.095	1.156		1.791	1.819	1.971	2.054
-19	1.219	1.157	1.219		1.853	1.881	2.033	2.117
-20	1.281	1.220	1.281		1.916	1.944	2.096	2.179
-21	1.344	1.282	1.344		1.978	2.006	2.158	2.242
-22	1.406	1.345	1.406		2.041	2.069	2.221	2.304
-23	1.469	1.407	1.469		2.103	2.131	2.283	2.367
-24	1.531	1.470	1.531		2.166	2.194	2.346	2.429
-25	1.594	1.532	1.594		2.228	2.256	2.408	2.492
-26	1.656	1.595	1.656		2.291	2.319	2.471	2.554
-27	1.719	1.657	1.719		2.353	2.381	2.533	2.617
-28	1.781	1.720	1.781		2.416	2.444	2.596	2.679
-29	1.844	1.782	1.844		2.478	2.506	2.656	2.742
-30	1.906	1.845	1.906		2.541	2.569	2.721	2.804
-31	1.969	1.907	1.969		2.603	2.631	2.783	2.867
-32	2.031	1.970	2.031		2.666	2.694	2.846	2.929
					2.728	2.756	2.908	2.992

▲ "G" TOLERANCE: FOR -05 AND -06 SIZES +.030/-010; FOR -08 AND -10 SIZES +.040/-010; FOR -12 SIZES +.050/-010.

**MONOGRAM AEROSPACE FASTENERS**  
a TriMas company  
3423 SOUTH GARFIELD AVENUE  
COMMERCE, CALIFORNIA 90040  
(323) 722-4760 FAX (323) 727-1029

TITLE:  
VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE ALLOY STEEL  
100° REDUCED FLUSH HEAD, SELF-LOCKING GROUND SHANK, 1/64" OVERSIZE

DRAWING NO:  
**PLT1093(-)(-)(-)**

DRAWN BY:  
B. GEE

APPROVED BY:

DRAWN DATE:  
12/10/13

CHECKED DATE:

ECN NO:  
14-0748

ECN DATE:  
11/12/14

REV:  
H

SHEET 1 OF 2

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Alcoa  
CAGE CODE:  
5M902

MONOGRAM  
CAGE CODE:  
98524



PROCUREMENT SPEC: ESCBB-2, CLASS I EXCEPT AS SPECIFIED HEREIN

MATERIAL:

NUT & SCREW: ALLOY STEEL: 4130 PER AMS-S-6758, 4140 PER AMS6382 OR AMS6349 OR 8740 PER AMS6322.
SLEEVE: CORROSION RESISTANT STEEL: 303 OR 304 PER AMS-QQ-S-763, AMS5639 OR AMS5641.

HEAT TREAT:

NUT & SCREW: HEAT TREAT PER AMS2759 TO HRC 39-46.
SLEEVE: AS REQUIRED FOR PERFORMANCE.

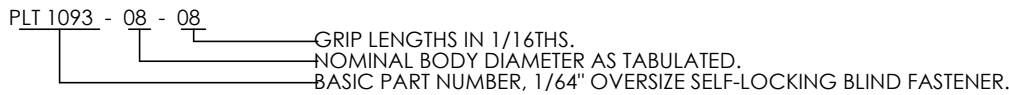
6 FINISH:

NUT & SCREW: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. CADMIUM PLATE PER NAS672 IS PERMISSIBLE PROVIDED IT IS FOLLOWED BY A DICHROMATE POST TREATMENT PER AMS-QQ-P-416.
SLEEVE: PASSIVATE PER AMS2700. CADMIUM PLATE PER AMS-QQ-P-416, TYPE I, CLASS 3.

6 LUBRICANT:

LUBRICANTS LISTED BELOW MAY BE APPLIED TO ANY OR ALL COMPONENTS IF REQUIRED FOR FASTENER PERFORMANCE:
NUT: WWM CARBO-WAX, PARAFFIN WAX, AND/OR CETYL ALCOHOL PER MIL-L-87132.
SCREW & SLEEVE: DRY FILM LUBE PER AS5272 OR MIL-PRF-81329, WWM CARBO-WAX, PARAFFIN WAX, AND/OR CETYL ALCOHOL PER AS87132.

PART CODE & EXAMPLE:



GENERAL NOTES:

- 1. CONCENTRICITY OF NUT HEAD CONICAL SURFACE TO "D" DIAMETER SHALL BE WITHIN .005 T.I.R. (EXCEPT OVER INDENTS).
2. REMOVE ALL LOOSE OR HANGING BURRS.
3. LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT AND APPROXIMATELY .040" ABOVE THE INTERSECTION OF THE NUT NOSE ANGLE AND O.D. (MEAN GRIP OF FASTENER).
4. MANUFACTURER'S IDENTIFICATION: LETTER "N" DESIGNATES MONOGRAM/AEROSPACE FASTENERS. LETTERS "VS" DESIGNATE VOI-SHAN. PART MARKING: "1093"
5. HEAD MARKINGS ON NUT DEPRESSED .010 MAX. LOCATION OPTIONAL.
6. STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. REFER TO SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.
7. HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.
EXAMPLE: PLT1093-06-4.5 INDICATES A NOMINAL GRIP LENGTH OF 4.5 SIXTEENTHS = 0.281". THE GRIP RANGE FOR THESE HALF-GRIP SIZES WILL BE NOMINAL GRIP +.031"/-.030". THE BASIC "G" DIMENSION WILL BE NOMINAL GRIP +.031" AND THE OVERALL SCREW LENGTH "L" DIMENSION MAY VARY AT MANUFACTURER'S OPTION.
8. STANDARD GRIP LENGTHS ARE AS TABULATED. SHORTER OR LONGER GRIPS THAN THOSE LISTED MAY BE AVAILABLE AS SPECIALS. ON GRIP LENGTHS SHORTER THAN THOSE LISTED, THE BREAKOFF LIMITS AND PREVAILING TORQUES AS TABULATED DO NOT APPLY.
9. DISTORTION OF "D" DIAMETER SHALL NOT PREVENT INSERTION OF THE FASTENER INTO A RING GAUGE OF LENGTH EQUAL TO ONE DIAMETER AND DIAMETER EQUAL TO MAXIMUM "D" + .001". FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS.
10. DIMENSIONS "A", "A'", AND "H" ARE FOR ENGINEERING REFERENCE PURPOSES ONLY AND ARE NOT TO BE USED FOR INSPECTION PURPOSES. THESE DIMENSIONS ARE THEORETICAL VALUES DERIVED FROM "D", "S", "V", "W" AND HEAD ANGLE DIMENSIONS.
11. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.



TITLE: VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE ALLOY STEEL 100° REDUCED FLUSH HEAD, SELF-LOCKING GROUND SHANK, 1/64" OVERSIZE

Table with drawing information: DRAWING NO: PLT1093-( )-( )

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