



PART NUMBER	NOM DIA.	THEO DIA.	A' DIA. MIN.	C MAX.	D DIA.	F DRIVING FLATS	H REF.	J DIA. MAX.	K MAX.	M GAGE PROT.	R RAD.	S MAX.	W GAGE DIA.	HOLE SIZE	BREAK-OFF LIMITS	PREVAILING TORQUE IN. LBS. MIN.	DOUBLE SHEAR STRENGTH LBS. MIN.	TENSILE STRENGTH LBS. MIN.
PLT1009-05(-)	.1635	.290 .282	.253	.268	.1645 .1625	.086 .081	.051	.244	.246	.0302 .0258	.030 .010	.012	.2195 .2193	.168 .165	+0.020 -.068	1.0	3355	750
PLT1009-06(-)	.1980	.357 .349	.313	.303	.1990 .1970	.104 .099	.065	.300	.281	.0385 .0338	.030 .015	.015	.2671 .2669	.202 .199	+0.015 -.073	1.5	5240	1250
PLT1009-08(-)	.2590	.480 .472	.436	.354	.2600 .2580	.135 .130	.091	.384	.325	.0458 .0408	.030 .015	.015	.3731 .3729	.263 .260	+0.010 -.078	2.5	9000	1900
PLT1009-10(-)	.3105	.568 .559	.510	.423	.3115 .3095	.152 .147	.107	.427	.390	.0582 .0524	.040 .020	.020	.4320 .4318	.315 .312	+0.010 -.083	3.5	12000	3250
PLT1009-12(-)	.3735	.698 .688	.632	.510	.3745 .3725	.185 .180	.134	.516	.470	.0654 .0589	.040 .020	.023	.5451 .5449	.378 .375	+0.010 -.093	4.0	19500	5050

SECOND DASH NUMBER	G GRIP	GRIP RANGE		L REF.				
		MIN	MAX	PLT1009				
				-05(-)	-06(-)	-08(-)	-10(-)	-12(-)
-	-	-	-	-	-	-	-	-
-02	.156	.094	.156	.733	.853	-	-	-
-03	.219	.157	.219	.795	.916	.944	-	-
-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	PLT1009				
				-05(-)	-06(-)	-08(-)	-10(-)	-12(-)
-17	1.094	1.032	1.094	1.791	1.819	1.971	2.054	
-18	1.156	1.095	1.156	1.853	1.881	2.033	2.117	
-19	1.219	1.157	1.219	1.916	1.944	2.096	2.179	
-20	1.281	1.220	1.281	1.978	2.006	2.158	2.242	
-21	1.344	1.282	1.344	2.041	2.069	2.221	2.304	
-22	1.406	1.345	1.406	2.103	2.131	2.283	2.367	
-23	1.469	1.407	1.469	2.166	2.194	2.346	2.429	
-24	1.531	1.470	1.531	2.228	2.256	2.408	2.492	
-25	1.594	1.532	1.594	2.291	2.319	2.471	2.554	
-26	1.656	1.595	1.656	2.353	2.381	2.533	2.617	
-27	1.719	1.657	1.719	2.416	2.444	2.596	2.679	
-28	1.781	1.720	1.781	2.478	2.506	2.658	2.742	
-29	1.844	1.782	1.844	2.541	2.569	2.721	2.804	
-30	1.906	1.845	1.906	2.603	2.631	2.783	2.867	
-31	1.969	1.907	1.969	2.666	2.694	2.846	2.929	
-32	2.031	1.970	2.031	2.728	2.756	2.908	2.992	

▲ "G" TOLERANCE: FOR -05 AND -06 SIZES +.030/-0.010; FOR -08 AND -10 SIZES +.040/-0.010; FOR -12 SIZES +.050/-0.010.

**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

DRAWING NO:

PLT1009(-)(-)(-)

DRAWN BY:

B. GEE

DRAWN DATE:

09-21-13

APPROVED BY:

CHECKED DATE:

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Alcoa  
CAGE CODE:

5M902

MONOGRAM  
CAGE CODE:

98524

DCN NO:

14-0705

DCN DATE:

11/08/14

REV:

M

SHEET 1 OF 2



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, APPROXIMATELY 180,000 TO 200,000 PSI TENSILE (HRC 39-43).  
 SLEEVE: AS REQUIRED FOR PERFORMANCE.

FINISH:  $\triangle 8$  " - " 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.  
 " L " NUT & SCREW: ALUMINUM COAT .0002 - .0007 THICK PER NAS4006 AND CETYL ALCOHOL LUBE.  
 SLEEVE: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.

LUBRICANT:  $\triangle 8$  LUBRICANTS LISTED BELOW MAY BE APPLIED TO ANY OR ALL COMPONENTS IF REQUIRED FOR PERFORMANCE.  
 NUT: WWM CARBO-WAX, PARAFFIN WAX AND OR CETYL ALCOHOL PER AS87132.  
 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: PLT 1009 L - 08 - 08

GENERAL NOTES:

1. OUTSIDE DIAMETER OF HEAD OF SCREW AND OUTSIDE DIAMETER OF SLEEVE SHALL NOT EXCEED MAXIMUM "D" DIAMETER.
2. CONCENTRICITY OF NUT HEAD CONICAL SURFACE TO "D" DIAMETER SHALL BE WITHIN .005 T.I.R. (EXCEPT OVER INDENTS).
3. REMOVE ALL LOOSE OR HANGING BURRS.
- $\triangle 4$  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).
- $\triangle 5$  MANUFACTURER'S IDENTIFICATION: LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS. LETTERS "VS" DESIGNATE VOI-SHAN.
6. HEAD MARKINGS ON NUT DEPRESSED .010" MAX, LOCATION OPTIONAL.
- $\triangle 7$  THE PRODUCT DESCRIBED BY THIS DRAWING IS "EQUIVALENT TO" AND "INTERCHANGEABLE WITH" THE MANUFACTURER'S PRODUCT LISTED BELOW EXCEPT FOR THE HEAD IDENTIFICATION MARKINGS AND SELF-LOCKING FEATURE. EXISTING STOCK MAY BE REWORKED TO INCORPORATE THE LOCK. WHEN THESE REWORKED FASTENERS ARE SUPPLIED, THE HEAD IDENTIFICATION MAY BE AS SHOWN BELOW:  
 MONOGRAM...: FF164426-FF375426 SERIES (MARKING: ". ", AND/OR "L" OVERSTAMPED "N").  
 VOI-SHAN...: B12F SERIES (MARKING "VS", "B12", OR " □ " AND "SL").
- $\triangle 8$  STANDARD FINISHES AND LUBES ARE SHOWN ABOVE. REFER TO ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBES, IF REQUIRED.
- $\triangle 9$  HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.  
 EXAMPLE: PLT1008-06-4.5 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.
- $\triangle 10$  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.
- $\triangle 11$  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.
- $\triangle 12$  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.
13. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.



TITLE:  
 VISU-LOK, FASTENER, BLIND  
 INTERNALLY THREADED, EXTERNAL SLEEVE  
 ALLOY STEEL  
 100° REDUCED FLUSH HEAD, SELF LOCKING

DRAWING NO: <b>PLT1009( )-( )-( )</b>	
DRAWN BY: <b>B. GEE</b>	DRAWN DATE: <b>09-21-13</b>
APPROVED BY:	CHECKED DATE:
<b>Alcoa</b> CAGE CODE: <b>5M902</b>	<b>MONOGRAM</b> CAGE CODE: <b>98524</b>
DCN NO: <b>14-0705</b>	REV: <b>M</b>
DCN DATE: <b>11/08/14</b>	<b>SHEET 2 OF 2</b>

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