

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.	BREAK-OFF LIMITS	PREVAILING TORQUE IN. LBS. MIN.	SHEAR STRENGTH LBS. MIN.	TENSILE STRENGTH LBS. MIN.
PLT1016-05-(-)	.1635	.332 .325	.296	.268	.1645 .1625	.086 .081	.069	.244	.271	.0276 .0238	.030 .010	.012	.2671 .2667	+0.020 -.068	1.0	1625	820
PLT1016-06-(-)	.1980	.385 .378	.342	.303	.1990 .1970	.104 .099	.077	.300	.309	.0299 .0259	.030 .015	.015	.3147 .3143	+0.015 -.078	1.5	2410	1400
PLT1016-08-(-)	.2590	.507 .499	.463	.354	.2600 .2580	.135 .130	.102	.384	.350	.0353 .0307	.030 .015	.015	.4245 .4241	+0.010 -.088	2.5	4170	2100
PLT1016-10-(-)	.3105	.635 .626	.577	.423	.3115 .3095	.152 .147	.134	.427	.406	.0409 .0357	.040 .020	.020	.5389 .5385	+0.010 -.093	3.5	6500	3600
PLT1016-12-(-)	.3735	.762 .752	.696	.510	.3745 .3725	.185 .180	.160	.516	.479	.0466 .0407	.040 .020	.023	.6532 .6528	+0.010 -.093	4.0	8220	5650

SECOND DASH NUMBER	G GRIP	GRIP RANGE		PLT1016													
		MIN	MAX	-05-(-)		-06-(-)		-08-(-)		-10-(-)		-12-(-)					
				L	B	L	B	L	B	L	B	L	B				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-02	.156	.094	.156	.733	.545	.853	.590	-	-	-	-	-	-	-	-	-	-
-03	.219	.157	.219	.795	.608	.916	.653	.944	.744	-	-	-	-	-	-	-	-
-04	.281	.220	.281	.858	.670	.978	.715	1.006	.806	1.158	.912	1.242	1.072	-	-	-	-
-05	.344	.282	.344	.920	.733	1.041	.778	1.069	.869	1.221	.975	1.304	1.135	-	-	-	-
-06	.406	.345	.406	.983	.795	1.103	.840	1.131	.931	1.283	1.035	1.367	1.197	-	-	-	-
-07	.469	.407	.469	1.045	.858	1.166	.903	1.194	.994	1.346	1.100	1.429	1.260	-	-	-	-
-08	.531	.470	.531	1.108	.920	1.228	.965	1.256	1.056	1.408	1.162	1.492	1.322	-	-	-	-
-09	.594	.532	.594	1.170	.983	1.291	1.028	1.319	1.119	1.471	1.225	1.554	1.385	-	-	-	-
-10	.656	.595	.656	1.233	1.045	1.353	1.090	1.381	1.181	1.533	1.287	1.617	1.447	-	-	-	-
-11	.719	.657	.719	1.295	1.108	1.416	1.153	1.444	1.244	1.596	1.350	1.679	1.510	-	-	-	-
-12	.781	.720	.781	1.358	1.170	1.478	1.215	1.506	1.306	1.658	1.412	1.742	1.572	-	-	-	-
-13	.844	.782	.844	1.420	1.233	1.541	1.278	1.569	1.369	1.721	1.475	1.804	1.635	-	-	-	-
-14	.906	.845	.906	1.483	1.295	1.603	1.338	1.631	1.431	1.783	1.537	1.867	1.697	-	-	-	-
-15	.969	.907	.969	1.545	1.358	1.666	1.403	1.694	1.494	1.846	1.600	1.929	1.760	-	-	-	-
-16	1.031	.970	1.031	1.608	1.420	1.728	1.465	1.756	1.556	1.908	1.662	1.992	1.822	-	-	-	-

SECOND DASH NUMBER	G GRIP	GRIP RANGE		PLT1016													
		MIN	MAX	-05-(-)		-06-(-)		-08-(-)		-10-(-)		-12-(-)					
				L	B	L	B	L	B	L	B	L	B				
-17	1.094	1.032	1.094	-	-	1.791	1.528	1.819	1.619	1.971	1.725	2.054	1.885	-	-	-	-
-18	1.156	1.095	1.156	-	-	1.853	1.590	1.881	1.681	2.033	1.787	2.117	1.947	-	-	-	-
-19	1.219	1.157	1.219	-	-	1.916	1.653	1.944	1.744	2.096	1.850	2.179	2.010	-	-	-	-
-20	1.281	1.220	1.281	-	-	1.978	1.715	2.006	1.806	2.158	1.912	2.242	2.072	-	-	-	-
-21	1.344	1.282	1.344	-	-	2.041	1.778	2.069	1.869	2.221	1.973	2.304	2.135	-	-	-	-
-22	1.406	1.345	1.406	-	-	2.103	1.840	2.131	1.931	2.283	2.037	2.367	2.197	-	-	-	-
-23	1.469	1.407	1.469	-	-	2.166	1.903	2.194	1.994	2.346	2.100	2.429	2.260	-	-	-	-
-24	1.531	1.470	1.531	-	-	2.228	1.965	2.256	2.056	2.408	2.162	2.492	2.322	-	-	-	-
-25	1.594	1.532	1.594	-	-	2.291	2.028	2.319	2.119	2.471	2.225	2.554	2.395	-	-	-	-
-26	1.656	1.595	1.656	-	-	2.353	2.090	2.381	2.181	2.533	2.287	2.617	2.447	-	-	-	-
-27	1.719	1.657	1.719	-	-	2.416	2.153	2.444	2.244	2.596	2.350	2.679	2.510	-	-	-	-
-28	1.781	1.720	1.781	-	-	2.478	2.215	2.506	2.306	2.658	2.412	2.742	2.572	-	-	-	-
-29	1.844	1.782	1.844	-	-	2.541	2.278	2.569	2.369	2.721	2.475	2.084	2.635	-	-	-	-
-30	1.906	1.845	1.906	-	-	2.603	2.340	2.631	2.431	2.783	2.537	2.867	2.697	-	-	-	-
-31	1.969	1.907	1.969	-	-	2.666	2.403	2.694	2.494	2.846	2.600	2.929	2.706	-	-	-	-
-32	2.031	1.970	2.031	-	-	2.728	2.465	2.756	2.556	2.908	2.662	2.992	2.822	-	-	-	-

▲ "G" TOLERANCE: FOR -05 AND -06 SIZES +.030/-010; FOR -08 & -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 HIGH TEMPERATURE (A-286 ALLOY) 100° FLUSH HEAD, SELF LOCKING REDUCED BREAKOFF, HIGH SHEAR STRENGTH**

DRAWING NO:  
**PLT1016-(-)-(-)**  
DRAWN BY:  
**B. GEE**  
APPROVED BY:  
**B. GEE**  
DRAWN DATE:  
**09/25/13**  
CHECKED DATE:

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**Alcoa**  
CAGE CODE:  
**5M902**

**MONOGRAM**  
CAGE CODE:  
**98524**  
DCN NO:  
**14-0709**  
DCN DATE:  
**11/08/14**  
REV:  
**K**  
SHEET 1 OF 2



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

MATERIAL: NUT, SCREW & SLEEVE: CORROSION RESISTANT STEEL, TYPE A-286 PER AMS5731, AMS5732 OR AMS5737.

HEAT TREAT: NUT & SCREW: SOLUTION HEAT TREATED AND AGED TO A CORE HARDNESS OF HRC 30-45. ALL CORE HARDNESS READINGS ARE TAKEN ON MOUNTED SPECIMEN, USING A BRALE PENETRATOR AND A 30 KG LOAD (ROCKWELL 30N)

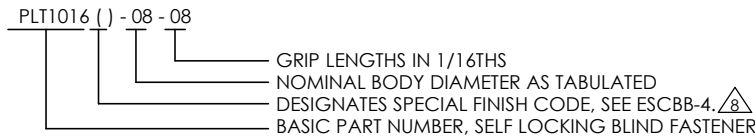
SLEEVE: SOLUTION TREATED.

FINISH:  $\triangle 8$  NUT, SCREW & SLEEVE: PASSIVATE PER AMS2700  $\triangle 8$

LUBRICANT:  $\triangle 8$  LUBRICANTS LISTED BELOW MAY BE APPLIED TO ANY OR ALL COMPONENTS IF REQUIRED FOR PERFORMANCE:

DRY FILM LUBE PER AS5272 TYPE I OR MIL-PRF-81329, WWM CARBO-WAX, PARAFFIN WAX AND OR CETYL ALCOHOL PER AS87132  $\triangle 9$

PART CODE & EXAMPLE:



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).
  - $\triangle 5$ . 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.
  - $\triangle 6$ . MANUFACTURER'S IDENTIFICATION:  
LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS.  
LETTERS "VS" DESIGNATE VOI-SHAN.
  7. HEAD MARKINGS ON NUT DEPRESSED .010" MAX.
  - $\triangle 8$ . STANDARD FINISHES AND LUBES ARE SHOWN ABOVE. REFER TO ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBES, IF REQUIRED.
  - $\triangle 9$ . HEAD OF NUT TO BE COLORED YELLOW.
  - $\triangle 10$ . HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.
- EXAMPLE: PLT1016-06-4.5 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".  
EXCEPT: THE GRIP RANGE FOR -1.5 GRIP SHALL BE MAX GRIP = 0.125", MIN GRIP = 0.078".  
THE BASIC "G" DIMENSION WILL BE NOMINAL GRIP +.031" AND THE OVERALL SCREW LENGTH "L" DIMENSION MAY VARY AT MANUFACTURER'S OPTION.
- $\triangle 11$ . 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.
  - $\triangle 12$ . 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.

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INTERNALLY THREADED, EXTERNAL SLEEVE  
HIGH TEMPERATURE (A-286 ALLOY)  
100° FLUSH HEAD, SELF LOCKING  
REDUCED BREAKOFF, HIGH SHEAR STRENGTH

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		DCN DATE: <b>11/08/14</b>	<b>SHEET 2 OF 2</b>