

HEAD MARKINGS DEPRESSED .010 INCH (0.254 mm MAX.) (POSITION OPTIONAL)

PART NUMBER	NOM DIA.		A THEO DIA.		A' DIA. MIN.		C MAX.		D DIA.		F DRIVING FLATS		H REF.		J DIA. MAX.		K MAX.	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
PLT1086-05-(-)	.1635	4.153	.2612 .2564	6.63 6.51	.241	6.12	.268	7.26	.1645 .1625	4.178 4.128	.086 .081	2.18 2.06	.040	1.02	.244	6.20	.246	6.25
PLT1086-06-(-)	.1980	5.029	.3016 .2966	7.66 7.53	.270	6.86	.303	7.70	.1990 .1970	5.055 5.044	.104 .099	2.64 2.51	.047	1.19	.300	7.62	.281	7.14
PLT1086-08-(-)	.2590	6.579	.3948 .3898	10.03 9.90	.363	9.22	.354	8.99	.2600 .2580	6.604 6.553	.135 .130	3.43 3.30	.061	1.55	.384	9.75	.325	8.26
PLT1086-10-(-)	.3105	7.887	.4739 .4689	12.04 11.91	.442	11.23	.423	10.74	.3115 .3095	7.912 7.861	.152 .147	3.86 3.73	.068	1.73	.427	10.85	.390	9.91
PLT1086-12-(-)	.3735	9.487	.5604 .5554	14.23 14.11	.529	13.44	.510	12.95	.3745 .3725	9.512 9.462	.185 .180	4.70 4.57	.078	1.96	.516	13.11	.470	11.94

PART NUMBER	M GAGE PROT.		R RAD.		S MAX.		W GAGE DIA.		BREAK-OFF LIMITS		PREVAILING TORQUE MIN.		DOUBLE SHEAR STRENGTH MIN.		TENSILE STRENGTH MIN.	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	IN-LBS	Nm	LBS.	N	LBS.	N
PLT1086-05-(-)	.0265 .0237	0.673 0.602	.030 .010	0.76 0.25	.010	0.25	.1992 .1990	5.060 5.055	+0.088 -0.000	+2.23 -0.00	1.0	0.113	3355	14900	900	4000
PLT1086-06-(-)	.0250 .0210	0.635 0.533	.030 .015	0.76 0.38	.015	0.38	.2441 .2439	6.200 6.192	+0.088 -0.000	+2.23 -0.00	1.5	0.170	5240	23300	1400	6220
PLT1086-08-(-)	.0278 .0232	0.706 0.590	.030 .015	0.76 0.38	.015	0.38	.3315 .3313	8.420 8.415	+0.098 -0.000	+2.49 -0.00	2.5	0.282	9000	40000	2100	9340
PLT1086-10-(-)	.0296 .0266	0.752 0.676	.040 .020	1.02 0.51	.015	0.38	.4047 .4045	10.279 10.274	+1.103 -0.000	+2.62 -0.00	3.5	0.400	12000	53400	3600	16010
PLT1086-12-(-)	.0321 .0290	0.815 0.737	.040 .020	1.02 0.51	.015	0.38	.4854 .4852	12.329 12.324	+1.103 -0.000	+2.62 -0.00	4.0	0.452	19500	86700	5600	24900

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
REDUCED FLUSH HEAD, SELF LOCKING

DRAWING NO:
PLT1086-(-)-(-)

DRAWN BY:
B. GEE

DRAWN DATE:
10/16/13

APPROVED BY:

CHECKED DATE:

PROPRIETARY AND CONFIDENTIAL:
NOTICE: THIS DRAWING IS PART OF THE PROPRIETARY ARTICLE HEREIN DISCLOSED, OWNED BY MONOGRAM AEROSPACE FASTENERS. ANY PARTY BY ACCEPTING THIS DOCUMENT ASSUME CUSTODY THEREOF AND AGREES:
A: THE INFORMATION SET FORTH HEREIN IS GIVEN IN CONFIDENCE AND THIS DOCUMENT WILL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART, NOR ITS CONTENTS REVEALED IN ANY MANNER TO ANY PERSON EXCEPT TO MEET THE PURPOSE FOR WHICH IT WAS DELIVERED.
B: WITHOUT THE WRITTEN CONSENT OF MONOGRAM AEROSPACE FASTENERS, THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN UNDER NO CIRCUMSTANCES WILL BE USED IN THE MANUFACTURE OR REPRODUCTION OF THE ARTICLE DISCLOSED, AND THE DELIVERY OF THIS DOCUMENT SHALL NOT CONSTITUTE ANY RIGHT OR LICENSE TO DO SO.

Alcoa
CAGE CODE:
5M902

MONOGRAM
CAGE CODE:
98524

DCN NO:
14-0742

DCN DATE:
11/11/14

REV:
F

SHEET 1 OF 2



PROCUREMENT SPEC: ESCBB-2, CLASS 1 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.

FINISH $\triangle 5$:

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.

LUBRICATION $\triangle 5$:

LUBRICANTS LISTED BELOW MAY BE APPLIED TO ANY OR ALL COMPONENTS IF REQUIRED FOR PERFORMANCE.

DRY FILM LUBRICANT PER AS5272 TYPE 1 OR MIL-PRF-81329 PARAFFIN WAX, WWM CARBO-WAX, AND/OR CETYL ALCOHOL AS87132.

GENERAL NOTES:

- OUTSIDE DIAMETER OF HEAD OF SCREW AND OUTSIDE DIAMETER OF SLEEVE SHALL NO BE GREATER THAN MAXIMUM "D" DIAMETER.
- CONCENTRICITY OF NUT HEAD CONICAL SURFACE TO "D" DIAMETER SHALL BE WITHIN 0.005" (0,076 mm) T.I.R., EXCEPT OVER INDENTATIONS.
- REMOVE ALL LOOSE OR HANGING BURRS.
- LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT AND APPROXIMATELY .040" (1,02 mm) ABOVE THE INTERSECTION OF THE NUT NOSE ANGLE AND O.D. (MEAN GRIP OF FASTENER).

$\triangle 5$ STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. SEE SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.

$\triangle 6$ HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.

EXAMPLE:

PLT1086-06-4.5 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.

$\triangle 7$ STANDARD GRIP LENGTHS ARE SHOWN 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 DO NOT APPLY.

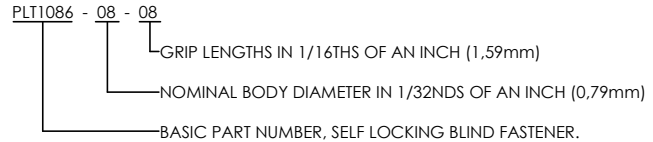
$\triangle 8$ DISTORTION OF "D" DIAMETER SHALL NOT PREVENT INSERTION OF THE FASTENER INTO A RING GAUGE OF LENGTH EQUAL TO ONE DIAMETER AND DIAMETER EQUAL TO MAXIMUM "D" + .001". FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS (22,23 NEWTONS).

SECOND DASH NUMBER	$\triangle G$ GRIP						L. REF.										
	$\triangle 6$		$\triangle 7$		GRIP RANGE		-05(-)		-06(-)		-08(-)		-10(-)		-12(-)		
	MIN	MAX	MIN	MAX	MIN	MAX	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-02	.156	3,96	.094	2,39	.156	3,96	.733	18,62	.853	21,66	-	-	-	-	-	-	-
-03	.219	5,56	.157	3,99	.219	5,56	.795	20,19	.916	23,27	.944	23,978	1,096	27,838	-	-	-
-04	.281	7,14	.220	5,59	.281	7,14	.858	21,80	.978	24,84	1,006	25,557	1,158	29,413	1,242	31,547	-
-05	.344	8,74	.282	7,16	.344	8,74	.920	23,37	1,041	26,441	1,069	27,153	1,221	31,013	1,304	33,122	-
-06	.406	10,31	.345	8,76	.406	10,31	.983	24,97	1,103	28,016	1,131	28,727	1,283	32,588	1,367	34,722	-
-07	.469	11,91	.407	10,34	.469	11,91	1,045	26,543	1,166	29,616	1,194	30,328	1,346	34,188	1,429	36,230	-
-08	.531	13,49	.470	11,94	.531	13,49	1,108	28,143	1,228	31,191	1,256	31,902	1,408	35,763	1,492	36,897	-
-09	.594	15,09	.532	13,51	.594	15,11	1,170	29,718	1,291	32,791	1,319	33,503	1,471	37,363	1,554	39,472	-
-10	.656	16,66	.595	15,11	.656	16,66	1,233	31,318	1,353	34,366	1,381	35,077	1,533	38,938	1,617	41,072	-
-11	.719	18,26	.657	16,69	.719	18,26	1,295	32,893	1,416	35,966	1,444	36,678	1,596	40,538	1,679	42,647	-
-12	.781	19,84	.720	18,29	.781	19,84	1,358	34,493	1,478	37,541	1,506	38,252	1,658	42,113	1,742	44,247	-
-13	.844	21,44	.782	19,86	.844	21,44	1,420	36,068	1,541	39,141	1,569	39,853	1,721	43,713	1,804	45,822	-
-14	.906	23,01	.845	21,46	.906	23,01	1,483	37,668	1,603	40,716	1,631	41,427	1,783	45,288	1,867	47,422	-
-15	.969	24,61	.907	23,04	.969	24,61	1,545	39,243	1,666	42,316	1,694	43,028	1,846	46,888	1,929	48,997	-
-16	1,031	26,19	.970	24,64	1,031	26,19	1,608	40,843	1,728	43,891	1,756	44,602	1,908	48,463	1,992	50,597	-
-17	1,094	27,79	1,032	26,21	1,094	27,79			1,791	45,491	1,819	46,203	1,971	50,063	2,054	52,172	-
-18	1,156	29,36	1,095	27,81	1,156	29,36			1,853	47,066	1,881	47,777	2,033	51,638	2,117	53,772	-
-19	1,219	30,96	1,157	29,39	1,219	30,96			1,916	48,667	1,944	49,378	2,096	53,238	2,179	55,347	-
-20	1,281	32,54	1,220	30,99	1,281	32,54			1,978	50,241	2,006	50,952	2,158	54,813	2,242	56,947	-
-21	1,344	34,14	1,282	32,56	1,344	34,14			2,041	51,841	2,069	52,553	2,221	56,413	2,304	58,522	-
-22	1,406	35,71	1,345	34,16	1,406	35,71			2,103	53,416	2,131	54,127	2,283	57,988	2,367	60,122	-
-23	1,469	37,31	1,407	35,74	1,469	37,31			2,166	55,016	2,194	55,728	2,346	59,588	2,429	61,697	-
-24	1,531	38,89	1,470	37,34	1,531	38,89			2,228	56,591	2,256	57,302	2,408	61,163	2,492	63,297	-
-25	1,594	40,49	1,532	38,91	1,594	40,49			2,291	58,191	2,319	58,903	2,471	62,763	2,554	64,872	-
-26	1,656	42,06	1,595	40,51	1,656	42,06			2,353	59,766	2,381	60,477	2,533	64,338	2,617	66,472	-
-27	1,719	43,66	1,657	42,09	1,719	43,66			2,416	61,366	2,444	62,078	2,596	65,938	2,679	68,047	-
-28	1,781	45,24	1,720	43,69	1,781	45,24			2,478	62,941	2,506	63,652	2,658	67,513	2,742	69,647	-
-29	1,844	46,84	1,782	45,26	1,844	46,84			2,541	64,541	2,569	65,253	2,721	69,113	2,804	71,222	-
-30	1,906	48,41	1,845	46,86	1,906	48,41			2,603	66,116	2,631	66,927	2,783	70,688	2,867	72,822	-
-31	1,969	50,01	1,907	48,44	1,969	50,01			2,666	67,716	2,694	68,428	2,846	72,288	2,929	74,397	-
-32	2,031	51,59	1,970	50,04	2,031	51,59			2,728	69,291	2,756	70,002	2,908	73,863	2,992	75,997	-

NOT AVAILABLE IN .05 DIAMETER

- $\triangle G$ TOLERANCES: FOR -05 & -06 SIZES: $\begin{matrix} +.030 & +0.77 \\ -.010 & (-0.25) \end{matrix}$ mm;
- FOR -08 & -10 SIZES: $\begin{matrix} +.040 & +1.02 \\ -.010 & (-0.25) \end{matrix}$ mm;
- FOR -12 SIZES: $\begin{matrix} +.050 & +1.27 \\ -.010 & (-0.25) \end{matrix}$ mm.

PART CODE & EXAMPLE:



GENERAL NOTES (CONTINUED):

9. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.

$\triangle 10$ 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.



TITLE:

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

DRAWING NO:

PLT1086-(-)-(-)

DRAWN BY:

B. GEE

DRAWN DATE:

10/16/13

APPROVED BY:

CHECKED DATE:

PROPRIETARY AND CONFIDENTIAL:
 NOTICE: THIS DRAWING IS PART OF THE PROPRIETARY ARTICLE HEREIN DISCLOSED, OWNED BY MONOGRAM AEROSPACE FASTENERS. ANY PARTY BY ACCEPTING THIS DOCUMENT ASSUME CUSTODY THEREOF AND AGREES:
 A: THE INFORMATION SET FORTH HEREIN IS GIVEN IN CONFIDENCE AND THIS DOCUMENT WILL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART, NOR ITS CONTENTS REVEALED IN ANY MANNER EXCEPT TO MEET THE PURPOSE FOR WHICH IT WAS DELIVERED.
 B: WITHOUT THE WRITTEN CONSENT OF MONOGRAM AEROSPACE FASTENERS, THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN UNDER NO CIRCUMSTANCES WILL BE USED IN THE MANUFACTURE OR REPRODUCTION OF THE ARTICLE DISCLOSED, AND THE DELIVERY OF THIS DOCUMENT SHALL NOT CONSTITUTE ANY RIGHT OR LICENSE TO DO SO.

Alcoa
CAGE CODE:
5M902

MONOGRAM
CAGE CODE:
98524

DCN NO:
14-0742
DCN DATE:
11/11/14

REV:
F
SHEET 2 OF 2