

TYPICAL INSTALLATION

PART NUMBER	NOM DIA.		A THEO DIA.		A' DIA. MIN.		C MAX.		D DIA.		F FLATS		H REF.		J DIA. MAX.		K REF.	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
PLT5175-05(-)	.1635	4.153	.332 .325	8.43 8.25	.296	7.52	.285	7.24	.1645 .1625	4.178 4.128	.086 .081	2.18 2.06	.069	1.75	.244	6.20	.257	6.53
PLT5175-06(-)	.1890	4.800	.385 .378	9.78 9.60	.342	8.69	.320	8.13	.1900 .1880	4.826 4.775	.104 .099	2.64 2.52	.081	2.06	.300	7.62	.288	7.31
PLT5175-08(-)	.2480	6.299	.507 .499	12.88 12.67	.463	11.76	.365	9.27	.2490 .2470	6.325 6.274	.135 .130	3.43 3.30	.107	2.72	.384	9.75	.320	8.13
PLT5175-10(-)	.3105	7.887	.635 .626	16.13 15.90	.577	14.66	.440	11.18	.3115 .3095	7.912 7.861	.152 .147	3.86 3.73	.134	3.40	.427	10.85	.396	10.06
PLT5175-12(-)	.3735	9.487	.762 .752	19.35 19.10	.696	17.68	.525	13.34	.3745 .3725	9.512 9.462	.185 .180	4.70 4.57	.160	4.06	.516	13.11	.473	12.01

PART NUMBER	R RAD.		S MAX.		V GAGE DIA.		W GAGE DIA.		BREAK-OFF LIMITS		MINIMUM AVAILABLE GRIP LENGTH	HOLE SIZE		PREVAILING TORQUE MIN.		DOUBLE SHEAR STRENGTH MIN.		TENSILE STRENGTH MIN.	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm		INCH	mm	IN-LB	Nm	LBS.	N	LBS.	N
PLT5175-05(-)	.030 .010	0.77 0.25	.012	0.30	.0276 .0238	0.701 0.605	.2671 .2667	6.784 6.774	+0.20 -.068	+0.51 -1.73	-02	.168 .165	4.27 4.19	1.0	0.113	3150	14010	900	4000
PLT5175-06(-)	.030 .015	0.77 0.38	.015	0.38	.0299 .0259	0.759 0.658	.3147 .3143	7.993 7.983	+0.15 -.073	+0.38 -1.85	-02	.193 .190	4.90 4.82	1.5	0.170	4200	18680	1400	6200
PLT5175-08(-)	.030 .015	0.77 0.38	.015	0.38	.0353 .0307	0.897 0.800	.4245 .4241	10.782 10.772	+0.10 -.078	+0.25 -1.98	-03	.252 .249	6.40 6.32	2.5	0.282	7200	32020	2100	9300
PLT5175-10(-)	.040 .020	1.02 0.51	.020	0.51	.0409 .0357	1.039 0.907	.5389 .5385	13.688 13.678	+0.10 -.083	+0.25 -2.11	-04	.315 .312	8.00 7.92	3.5	0.400	11350	50480	3600	16000
PLT5175-12(-)	.040 .020	1.02 0.51	.023	0.58	.0466 .0407	1.184 1.034	.6532 .6528	16.591 16.581	+0.10 -.093	+0.25 -2.36	-04	.378 .375	9.60 9.52	4.0	0.452	16450	73170	5600	24900

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

TITLE:  
**VISU-LOK® II, FASTENER, BLIND  
100° FLUSH TENSION HEAD, SELF-LOCKING  
75 KSI SHEAR TITANIUM ALLOY**

DRAWING NO:  
**PLT5175(-)(-)(-)**

DRAWN BY: **G.MARTINEZ** DRAWN DATE: **08-15-13**

APPROVED BY: *J. Moran* CHECKED DATE: **11/20/17**

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** ECN NO: **17-0339** ECN DATE: **11/20/17**

SHEET 1 OF 2



PROCUREMENT SPEC: PLT 5000, CLASS 5, TYPE I

MATERIAL:  
 NUT & SCREW: 6AL-4V TITANIUM PER AMS4928 OR AMS4967.  
 SLEEVE: 303 OR 304 CORROSION RESISTANT STEEL PER AMS5639 OR AMS5641 OR A286 PER AMS5731, AMS5732 OR AMS5737.  
 DRIVE NUT: MILD STEEL.  
 HEAT TREAT:  
 NUT & SCREW: HEAT TREAT PER AMS-H-81200 TO 95 KSI FSU MIN. MAX. HYDROGEN 125 PPM.  
 SLEEVE & DRIVE NUT: AS REQUIRED FOR PERFORMANCE.

FINISH:  
 (-) NUT & SCREW: NONE.  
 SLEEVE: PASSIVATE PER AMS2700.  
 DRIVE NUT: CORROSION RESISTANT COATING, COLOR GRAY.

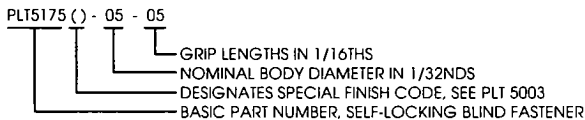
\*AD\* NUT: ANODIZE PER AMS2488, TYPE II.  
 SCREW: NONE.  
 SLEEVE: PASSIVATE PER AMS2700.  
 DRIVE NUT: CORROSION RESISTANT COATING, COLOR GRAY.

\*X\* NUT: IVD ALUMINUM COAT PER MIL-DTL-83488, CLASS 3, TYPE II.  
 SCREW: CONVERSION COATING OPTIONAL.  
 SLEEVE: PASSIVATE PER AMS2700. CONVERSION COATING OPTIONAL.  
 DRIVE NUT: CORROSION RESISTANT COATING, COLOR GRAY.

LUBRICANT:  
 (-) & \*AD\* NUT, SCREW & SLEEVE: DRY FILM LUBE AND CETYL ALCOHOL OPTIONAL AND AS REQUIRED.

\*X\* NUT: CARBO WAX, PARAFFIN WAX, TIOLON X-20, OR CETYL ALCOHOL AS REQUIRED FOR PERFORMANCE (CLEAR TO WHITE).  
 SCREW & SLEEVE: LUBRICANTS USED ON SLEEVES AND SCREWS MUST NOT CONTAIN SULFIDES OR GRAPHITE. EXAMPLES OR ACCEPTABLE LUBES ARE TIOLON X-20, TIOLON A-20, AND KAL-GARD FC-2, AND THOSE LUBRICANTS LISTED ABOVE FOR THE NUT COMPONENT.

PART CODE & EXAMPLE:



GENERAL NOTES:

- 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).
- FASTENER IDENTIFICATION:  
 "5175" IN TWO QUADRANTS, OPTIONAL HEAD MARKING FOR -05, -10 AND -12 SIZES. "5170" IN TWO QUADRANTS. HEAD MARKINGS DEPRESSED .010" (0.254mm MAX.), POSITION OPTIONAL.
- HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.  
 EXAMPLE: PLT5175-06-4.5 INDICATES A NOMINAL GRIP LENGTH OF 4.5 SIXTEENTHS (0.281" = 7.14 mm). THE GRIP RANGE FOR THESE HALF-GRIP SIZES WILL BE NOMINAL GRIP +.031"/-.030" (+0.79/-0.79 mm).
- 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" MAX + .001". FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS (22.23 NEWTONS).
- \*G\* TOLERANCES: FOR -05 & -06 SIZES +.030"/-.010" (+0.762mm/-0.254mm); FOR -08 & -10 SIZES +.040"/-.010" (1.016mm/-0.254mm); FOR -12 SIZES +.050"/-.010" (+1.270mm/-0.254mm).

SECOND DASH NUMBER	5 G GRIP		GRIP RANGE						L REF.							
			MIN		MAX		PLT5175									
			INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
-02	.156	3.96	.094	2.39	.156	3.96	1.166	29.616	1.256	31.902			-	-	-	-
-03	.219	5.56	.157	3.99	.219	5.56	1.229	31.217	1.319	33.503	1.416	35.966	-	-	-	-
-04	.281	7.14	.220	5.59	.281	7.14	1.291	32.791	1.381	35.077	1.478	37.541	1.833	46.558	2.022	51.359
-05	.344	8.74	.282	7.16	.344	8.74	1.354	34.392	1.444	36.678	1.541	39.141	1.896	48.158	2.085	52.959
-06	.406	10.31	.345	8.76	.406	10.31	1.416	35.966	1.506	38.252	1.603	40.716	1.958	49.733	2.147	54.534
-07	.469	11.91	.407	10.34	.469	11.91	1.479	37.567	1.569	39.853	1.666	42.316	2.021	51.333	2.210	56.134
-08	.531	13.49	.470	11.94	.531	13.49	1.541	39.141	1.631	41.427	1.728	43.891	2.083	52.908	2.272	57.709
-09	.594	15.11	.532	13.51	.595	15.11	1.604	40.742	1.694	43.028	1.791	45.491	2.146	54.508	2.335	59.309
-10	.656	16.66	.595	15.11	.656	16.66	1.666	42.316	1.756	44.602	1.853	47.066	2.208	56.083	2.397	60.884
-11	.719	18.26	.657	16.69	.719	18.26	1.729	43.917	1.819	46.203	1.916	48.666	2.271	57.683	2.460	62.484
-12	.781	19.84	.720	18.29	.781	19.84	1.791	45.491	1.881	47.777	1.978	50.241	2.333	59.258	2.522	64.059
-13	.844	21.44	.782	19.86	.844	21.44	1.854	47.092	1.944	49.378	2.041	51.841	2.396	60.858	2.585	65.659
-14	.906	23.01	.845	21.46	.906	23.01	1.916	48.666	2.006	50.952	2.103	53.416	2.458	62.433	2.647	67.234
-15	.969	24.61	.907	23.04	.969	24.61	1.979	50.267	2.069	52.553	2.166	55.016	2.521	64.033	2.710	68.834
-16	1.031	26.19	.970	24.64	1.031	26.19	2.041	51.841	2.131	54.127	2.228	56.591	2.583	65.608	2.772	70.409
-17	1.094	27.79	1.032	26.21	1.094	27.79			2.194	55.728	2.291	58.191	2.646	67.208	2.835	72.009
-18	1.156	29.36	1.095	27.81	1.156	29.36			2.256	57.302	2.353	59.766	2.708	68.783	2.897	73.584
-19	1.219	30.96	1.157	29.39	1.219	30.96			2.319	58.903	2.416	61.366	2.771	70.383	2.960	75.184
-20	1.281	32.54	1.220	30.99	1.281	32.54			2.381	60.477	2.478	62.941	2.833	71.958	3.022	76.759
-21	1.344	34.14	1.282	32.56	1.344	34.14			2.444	62.078	2.541	64.541	2.896	73.558	3.085	78.359
-22	1.406	35.71	1.345	34.16	1.406	35.71			2.506	63.652	2.603	66.116	2.958	75.133	3.147	79.934
-23	1.469	37.31	1.407	35.74	1.469	37.31			2.569	65.253	2.666	67.716	3.021	76.733	3.210	81.534
-24	1.531	38.89	1.470	37.34	1.531	38.89			2.631	66.827	2.728	69.291	3.083	78.308	3.272	83.109
-25	1.594	40.49	1.532	38.91	1.594	40.49			2.694	68.428	2.791	70.891	3.146	79.908	3.335	84.709
-26	1.656	42.06	1.595	40.51	1.656	42.06			2.756	70.002	2.853	72.466	3.208	81.483	3.397	86.284
-27	1.719	43.66	1.657	42.09	1.719	43.66			2.819	71.603	2.916	74.066	3.271	83.083	3.460	87.884
-28	1.781	45.24	1.720	43.69	1.781	45.24			2.881	73.177	2.978	75.641	3.333	84.658	3.522	89.459
-29	1.844	46.84	1.782	45.26	1.844	46.84			2.944	74.778	3.041	77.241	3.396	86.258	3.585	91.059
-30	1.906	48.41	1.845	46.86	1.906	48.41			3.006	76.352	3.103	78.816	3.458	87.833	3.647	92.634
-31	1.969	50.01	1.907	48.44	1.969	50.01			3.069	77.953	3.166	80.416	3.521	89.433	3.710	94.234
-32	2.031	51.59	1.970	50.04	2.031	51.59			3.131	79.527	3.228	81.991	3.583	91.008	3.772	95.809

NOT AVAILABLE IN -05 DIAMETER

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

TITLE:  
**VISU-LOK® II, FASTENER, BLIND  
 100° FLUSH TENSION HEAD, SELF-LOCKING  
 75 KSI SHEAR TITANIUM ALLOY**

DRAWING NO:  
**PLT5175(-)-(-)-(-)**

DRAWN BY: G.MARTINEZ  
 DRAWN DATE: 08-15-13

APPROVED BY: *J. Swann*  
 CHECKED DATE: 11/22/10

ECN NO: 17-0339  
 ECN DATE: 11/20/17

MONOGRAM CAGE CODE: 98524  
 Alcoa CAGE CODE: 5M902

REV: F  
 SHEET 2 OF 2

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.