

PART NUMBER	A THEO DIA.		A' DIA. MIN.		C MAX.		D DIA.		E DIA. MAX.		F FLATS		H REF.		J DIA. MAX.		K MAX.		L REF.		R RAD.	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
PLT1099-06-(-)	.385 .378	9,78 9,60	.342	8,69	.360	9,14	.2300 .2290	5,84 5,82	.2270	5,76	.104 .099	2,64 2,51	.064	1,62	.315	8,00	.333	8,46	.697	17,7	.030 .015	0,76 0,38
PLT1099-08-(-)	.507 .499	12,88 12,67	.463	11,76	.404	10,26	.2910 .2900	7,39 7,37	.2880	7,31	.135 .130	3,43 3,30	.089	2,26	.401	10,19	.366	9,30	.725	18,4	.030 .015	0,76 0,38
PLT1099-10-(-)	.635 .626	16,13 15,90	.577	14,66	.493	12,52	.3425 .3415	8,70 8,67	.3395	8,62	.152 .147	3,86 3,73	.121	3,07	.442	11,23	.447	11,35	.877	22,3	.040 .020	1,02 0,51
PLT1099-12-(-)	.762 .752	19,35 19,10	.696	17,68	.583	14,80	.4055 .4045	10,30 10,27	.4025	10,22	.185 .180	4,70 4,57	.148	3,76	.531	13,49	.527	13,39	.961	24,4	.040 .020	1,02 0,51

PART NUMBER	S MAX.		V GAGE PROT.		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	IN-LBS	Nm	LBS.	N	LBS.	N
PLT1099-06-(-)	.015	0,38	.0299 .0259	0,759 0,658	.3147 .3143	7,993 7,983	+015 -073	+038 -1,85	-02	.233 .230	5,92 5,84	1.5	0,170	5240	23300	1400	6230
PLT1099-08-(-)	.015	0,38	.0353 .0307	0,897 0,780	.4245 .4241	10,782 10,772	+010 -078	+025 -1,98	-03	.294 .291	7,47 7,39	2.5	0,282	9000	40000	2100	9340
PLT1099-10-(-)	.020	0,51	.0409 .0357	1,039 0,907	.5389 .5385	13,688 13,678	+010 -083	+025 -2,11	-04	.346 .343	8,79 8,71	3.5	0,400	12000	53400	3600	16010
PLT1099-12-(-)	.023	0,58	.0466 .0407	1,184 1,034	.6532 .6528	16,591 16,581	+010 -093	+025 -2,36	-04	.409 .406	10,39 10,32	4.0	0,452	19500	86700	5600	24910

▲ "G" TOLERANCES: FOR -06 SIZES +.030/-010 (+0,762/-0,254mm), FOR -08 & -10 SIZES +.040/-010 (+1,016/-0,254mm), FOR -12 SIZES +.050/-010 (+1,270/-0,254mm).

a TriMas company
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(323) 722-4760 FAX (323) 727-1029

TITLE:
VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE ALLOY STEEL, SELF LOCKING 100° FLUSH HEAD, GROUND SHANK, 1/32" O/S TO PLT114, 1/64" O/S TO PLT1098

DRAWING NO:
PLT1099-(-)-(-)
DRAWN BY:
B. GEE
DRAWN DATE:
12/13/13
APPROVED BY:
CHECKED DATE:

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DCN NO: 14-0755
DCN DATE: 11/13/14
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. APPROXIMATELY 180,000-200,000 PSI TENSILE (HRC 39-43).
 SLEEVE: AS REQUIRED FOR PERFORMANCE.

FINISH:

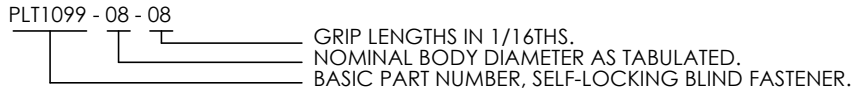
NUT & SCREW: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. CADMIUM PLATE PER NAS672 IS PERMISSIBLE PROVIDED IT IS FOLLOWED BY A DICHROMATE POST TREATMENT PER AMS-QQ-P-416.
 SLEEVE: PASSIVATE PER AMS2700. CADMIUM PLATE PER AMS-QQ-P-416, TYPE 1, CLASS 3.

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:

- CONCENTRICITY OF NUT HEAD CONICAL SURFACE TO "D" DIAMETER SHALL BE WITHIN 0.005" (0,13 mm) T.I.R. (EXCEPT OVER INDENTS)
- REMOVE ALL LOOSE OR HANGING BURRS.
- GROUND SHANK VISU-LOKS SHOULD NOT BE USED, EXCEPT WITH CONSIDERABLE CAUTION, IN APPLICATIONS WHICH EXCEED .0005 INTERFERENCE FIT. GROUND SHANK VISU-LOKS WILL PERFORM SATISFACTORILY WHEN INSTALLED IN THE TABULATED HOLE SIZES.
- 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).
- MANUFACTURER'S IDENTIFICATION:
 LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS.
 LETTERS "VS" DESIGNATE ALCOA.

- HEAD MARKINGS ON NUT DEPRESSED .010" (0,254 mm) MAXIMUM.
- HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.

EXAMPLE: PLT1099-06-4.5 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.

- 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 AND PREVAILING TORQUES DO NOT APPLY.
- 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 "D" MAX + .001". FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS (22,23 NEWTONS).
- 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.
- DIMENSIONS ARE EXCLUSIVE OF LUBRICATION
- PLT1099 IS A 1/64" OVERSIZE VERSION OF PLT114.

SECOND DASH NUMBER	G GRIP		GRIP RANGE			
			MIN		MAX	
	INCH	mm	INCH	mm	INCH	mm
-01	.093	2,36	.032	0,81	.093	2,36
-02	.156	3,96	.094	2,39	.156	3,96
-03	.219	5,56	.157	3,99	.219	5,56
-04	.281	7,14	.220	5,59	.281	7,14
-05	.344	8,74	.282	7,16	.344	8,74
-06	.406	10,31	.345	8,76	.406	10,31
-07	.469	11,91	.407	10,34	.469	11,91
-08	.531	13,49	.470	11,94	.531	13,49
-09	.595	15,11	.532	13,51	.595	15,11
-10	.656	16,66	.595	15,11	.656	16,66
-11	.719	18,26	.657	16,69	.719	18,26
-12	.781	19,84	.720	18,29	.781	19,84
-13	.844	21,44	.782	19,86	.844	21,44
-14	.906	23,01	.845	21,46	.906	23,01
-15	.969	24,61	.907	23,04	.969	24,61
-16	1,031	26,19	.970	24,64	1,031	26,19
-17	1,094	27,79	1,032	26,21	1,094	27,79
-18	1,156	29,36	1,095	27,81	1,156	29,36
-19	1,219	30,96	1,157	29,39	1,219	30,96
-20	1,281	32,54	1,220	30,99	1,281	32,54
-21	1,344	34,14	1,282	32,56	1,344	34,14
-22	1,406	35,71	1,345	34,16	1,406	35,71
-23	1,469	37,31	1,407	35,74	1,469	37,31
-24	1,531	38,89	1,470	37,34	1,531	38,89
-25	1,594	40,49	1,532	38,91	1,594	40,49
-26	1,656	42,06	1,595	40,51	1,656	42,06
-27	1,719	43,66	1,657	42,09	1,719	43,66
-28	1,781	45,24	1,720	43,69	1,781	45,24
-29	1,844	46,84	1,782	45,26	1,844	46,84
-30	1,906	48,41	1,845	46,86	1,906	48,41
-31	1,969	50,01	1,907	48,44	1,969	50,01
-32	2,031	51,59	1,970	50,04	2,031	51,59



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SHEET 2 OF 2