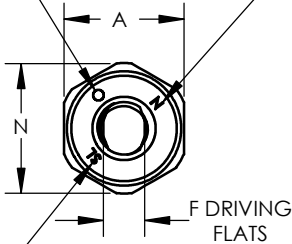
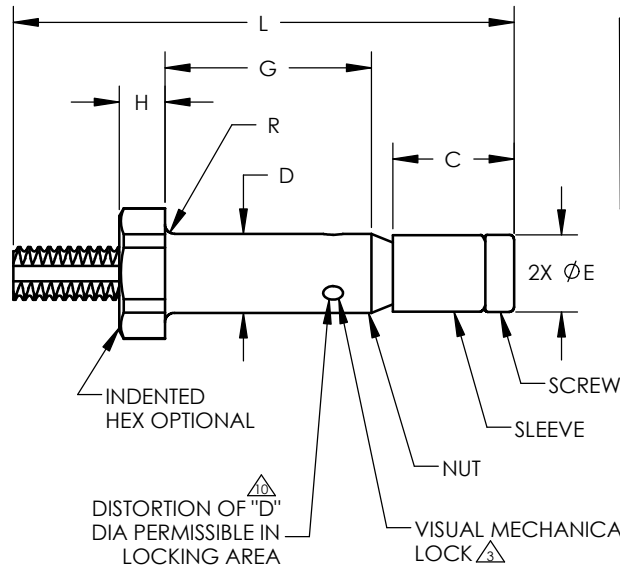


ALLOY IDENTIFICATION  
O INDICATES A-286 ALLOY

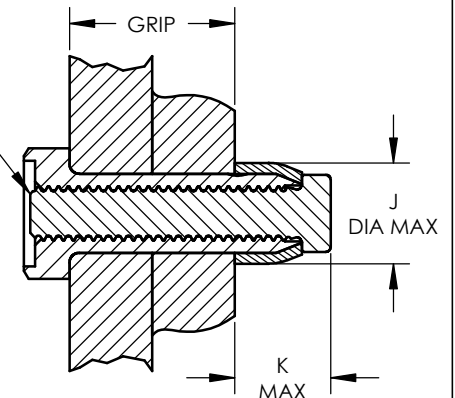
MANUFACTURER'S IDENTIFICATION  
MONOGRAM = "N"  
VOI-SHAN = "VS"



"SL" INDICATES SELF LOCKING



BREAKOFF LIMITS  
(MEASURED FROM SKIN SURFACE)



TYPICAL INSTALLATION

PART NUMBER	NOM DIA	A	C MAX	D DIA	E DIA. MAX.	F DRIVING FLATS	H MAX	J DIA MAX	K MAX	N MIN	R RAD	HOLE SIZE	BREAK-OFF LIMITS	PREVAILING TORQUE IN. LBS. MIN	DOUBLE SHEAR STRENGTH LBS. MIN	TENSILE STRENGTH LBS. MIN
PLT224-05-()	.1640	.250 .244	.285	.1645 .1635	.1625	.086 .081	.096	.244	.257	.272	.020	.1680 .010	+.088 +.000	1.0	3150	900
PLT224-06-()	.2021	.312 .305	.320	.2026 .2016	.1980	.104 .099	.113	.300	.288	.340	.025	.2060 .2030	+.103 +.015	1.5	4600	1400
PLT224-08-()	.2645	.375 .367	.355	.2651 .2641	.2590	.135 .130	.135	.384	.325	.409	.025	.2685 .2655	+.130 +.032	2.5	7900	2100
PLT224-10-()	.3115	.437 .429	.449	.3120 .3110	.3095	.152 .147	.160	.427	.396	.479	.030	.3150 .3120	+.130 +.027	3.5	11350	3600
PLT224-12-()	.3740	.500 .491	.525	.3745 .3735	.3725	.185 .180	.190	.516	.473	.548	.030	.3780 .3750	+.130 +.027	4.0	16450	5600

SECOND DASH NUMBER	G GRIP	GRIP RANGE		L REF.				
		MIN	MAX	PLT224				
				-05-()	-06-()	-08-()	-10-()	-12-()
-01	.093	.031	.093	.733	.874	-	-	-
-02	.156	.094	.156	.795	.936	1.006	1.158	-
-03	.219	.157	.219	.858	.999	1.069	1.221	1.367
-04	.281	.220	.281	.920	1.061	1.131	1.283	1.429
-05	.344	.282	.344	.983	1.124	1.194	1.346	1.492
-06	.406	.345	.406	1.045	1.186	1.256	1.408	1.554
-07	.469	.407	.469	1.108	1.249	1.319	1.471	1.617
-08	.531	.470	.531	1.170	1.311	1.381	1.533	1.679
-09	.594	.532	.594	1.233	1.374	1.444	1.596	1.742
-10	.656	.595	.656	1.295	1.436	1.506	1.658	1.804
-11	.719	.657	.719	1.358	1.499	1.569	1.721	1.867
-12	.781	.720	.781	1.420	1.561	1.631	1.783	1.929
-13	.844	.782	.844	1.483	1.624	1.694	1.846	1.992
-14	.906	.845	.906	1.545	1.686	1.756	1.908	2.054
-15	.969	.907	.969	1.608	1.749	1.819	1.971	2.117
-16	1.031	.970	1.031	1.670	1.811	1.881	2.033	2.179

SECOND DASH NUMBER	G GRIP	GRIP RANGE		L REF.				
		MIN	MAX	PLT224				
				-05-()	-06-()	-08-()	-10-()	-12-()
-17	1.094	1.032	1.094	1.874	1.944	2.096	2.242	
-18	1.156	1.095	1.156	1.936	2.006	2.158	2.304	
-19	1.219	1.157	1.219	1.999	2.069	2.221	2.367	
-20	1.281	1.220	1.281	2.061	2.131	2.283	2.429	
-21	1.344	1.282	1.344	2.124	2.194	2.346	2.492	
-22	1.406	1.345	1.406	2.186	2.256	2.408	2.554	
-23	1.469	1.407	1.469	2.249	2.319	2.471	2.617	
-24	1.531	1.470	1.531	2.311	2.381	2.533	2.679	
-25	1.594	1.532	1.594	2.374	2.444	2.596	2.742	
-26	1.656	1.595	1.656	2.436	2.506	2.658	2.804	
-27	1.719	1.657	1.719	2.499	2.569	2.721	2.867	
-28	1.781	1.720	1.781	2.561	2.631	2.783	2.929	
-29	1.844	1.782	1.844	2.624	2.694	2.846	2.992	
-30	1.906	1.845	1.906	2.686	2.756	2.908	3.054	
-31	1.969	1.907	1.969	2.749	2.819	2.971	3.117	
-32	2.031	1.970	2.031	2.811	2.881	3.033	3.179	

NOT AVAILABLE IN -05 DIAMETER

▲ "G" TOLERANCE: FOR -05 AND -06 SIZES +.030/-0.10; FOR -08 & -10 SIZES +.040/-0.10; FOR -12 SIZES +.050/-0.10.

TITLE:

VISU-LOK, FASTENER, BLIND  
INTERNALLY THREADED, EXTERNAL SLEEVE  
HIGH TEMPERATURE (A-286 ALLOY)  
PROTRUDING HEX HEAD, SELF LOCKING  
GROUND SHANK

DRAWING NO:

PLT224-()-( )

DRAWN BY:

G.MARTINEZ

DRAWN DATE:

06-22-13

APPROVED BY:

CHECKED DATE:



PROCUREMENT SPEC: ESCBB-2 CLASS II, 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 TO 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: NUT, SCREW, & SLEEVE: PASSIVATE PER AMS2700.

LUBRICANT: 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.

PART CODE & EXAMPLE: PLT224 - 05 - 05

GRIP LENGTHS IN 1/16THS  
NOMINAL BODY DIAMETER AS TABULATED  
BASIC PART NUMBER, SELF LOCKING BLIND FASTENER

GENERAL NOTES:

1. OUTSIDE DIAMETER OF HEAD OF SCREW AND OUTSIDE DIAMETER OF SLEEVE SHALL NOT EXCEED MAXIMUM "D" DIAMETER.
2. REMOVE ALL LOOSE OR HANGING BURRS.
3. 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).
4. THE PREVAILING TORQUE SHALL CONFORM TO THE VALUES AS TABULATED, WHEN TESTED IN ACCORDANCE WITH SPECIFICATION ESCBB-2. HOWEVER, PREVAILING TORQUES FOR THE PLT224-05-01 AND PLT224-06-01 SHALL BE RECORDED THRU A ROTATION OF ONLY 360° OF THE NUT.
5. MANUFACTURER'S IDENTIFICATION: (REFER TO NOTE 7 FOR INTERIM IDENTIFICATION)  
LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS.  
LETTERS "VS" DESIGNATE VOI-SHAN.
6. HEAD MARKINGS ON NUT DEPRESSED .010 MAX. LOCATION OPTIONAL.
7. STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. REFER TO SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.
8. HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.  
  
EXAMPLE: PLT224-06-4.5 INDICATES A NOMINAL GRIP LENGTH OF 4.5 SIXTEENTHS = .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.
9. GROUND SHANK VISU-LOKS SHOULD NOT BE USED, EXCEPT WITH CONSIDERABLE CAUTION, IN APPLICATIONS WHICH EXCEED APPROXIMATELY .0005" INTERFERENCE. GROUND SHANK VISU-LOKS WILL PERFORM SATISFACTORILY WHEN INSTALLED IN THE TABULATED HOLE SIZES.
10. 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.
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.
12. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.



TITLE: VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE HIGH TEMPERATURE (A-286 ALLOY) PROTRUDING HEX HEAD, SELF LOCKING GROUND SHANK

DRAWING NO: <b>PLT224-( )-( )</b>	
DRAWN BY: <b>G.MARTINEZ</b>	DRAWN DATE: <b>06-22-13</b>
APPROVED BY:	CHECKED DATE:

**PROPRIETARY AND CONFIDENTIAL:**  
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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.

<b>Alcoa</b> CAGE CODE: <b>5M902</b>	<b>MONOGRAM</b> CAGE CODE: <b>98524</b>	ECN NO: <b>14-0679</b>	REV: <b>D</b>
		ECN DATE: <b>11/04/14</b>	<b>SHEET 2 OF 2</b>