

| 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. | HOLE SIZE | BREAK-OFF LIMITS | PREVAILING TORQUE IN. LBS. MIN. | DOUBLE SHEAR STRENGTH LBS. MIN. | TENSILE STRENGTH LBS. MIN. |
|----------------|-------------|----------------|--------------------|-----------|----------------|-----------------------|-----------|-------------------|-----------|--------------------|--------------|-----------|-------------------|--------------|---------------------|---------------------------------------|--|----------------------------------|
| PLT1010-05-() | .1635 | .2612 .2564 | .241 | .285 | .1645 .1625 | .086 .081 | .040 | .244 | .257 | .0265 .0237 | .030 .010 | .010 | .1992 .1990 | .168 .165 | +.020 068 | 1.0 | 3150 | 750 |
| PLT1010-06-() | .1980 | .3016 .2966 | .270 | .320 | .1990 .1970 | .104 .099 | .047 | .300 | .288 | .0246 .0218 | .030 .015 | .015 | .2440 .2438 | .202 .199 | +.015 073 | 1.5 | 4600 | 1250 |
| PLT1010-08-() | .2590 | .3948 .3898 | .363 | .355 | .2600 .2580 | .135 .130 | .061 | .384 | .320 | .0271 .0242 | .030 .015 | .015 | .3314 .3312 | .263 .260 | +.010 078 | 2.5 | 7900 | 1900 |
| PLT1010-10-() | .3105 | .4739 .4689 | .442 | .440 | .3115 .3095 | .152 .147 | .068 | .427 | .396 | .0296 .0266 | .040 .020 | .015 | .4047 .4045 | .315 .312 | +.010 083 | 3.5 | 11350 | 3250 |
| PLT1010-12-() | .3735 | .5604 .5554 | .529 | .525 | .3745 .3725 | .185 .180 | .078 | .516 | .473 | .0321 .0290 | .040 .020 | .015 | .4854 .4852 | .378 .375 | +.010 093 | 4.0 | 16450 | 5050 |

| SECOND | | <u></u> | <u> 1</u> | L REF. | | | | | | | |
|--------|-----------|------------|-----------|---------|--------|--------|--------|--|--|--|--|
| DASH | G GRIP | GRIP RANGE | | PLT1010 | | | | | | | |
| NUMBER | | MIN | MAX | -05-() | -06-() | -08-() | -10-() | -12-() 1.242 1.304 1.367 1.429 1.492 1.554 1.617 1.679 1.742 1.804 1.867 1.929 | | | |
| - | - | - | - | - | - | - | - | - | | | |
| -02 | .156 | .094 | .156 | .733 | .853 | - | - | - | | | |
| -03 | .219 | .157 | .219 | .795 | .916 | .944 | - | - | | | |
| -04 | .281 | .220 | .281 | .858 | .978 | 1.006 | 1.158 | 1.242 | | | |
| -05 | .344 | .282 | .344 | .920 | 1.041 | 1.069 | 1.221 | 1.304 | | | |
| -06 | .406 | .345 | .406 | .983 | 1.103 | 1.131 | 1.283 | 1.367 | | | |
| -07 | .469 | .407 | .469 | 1.045 | 1.166 | 1.194 | 1.346 | 1.429 | | | |
| -08 | .531 | .470 | .531 | 1.108 | 1.228 | 1.256 | 1.408 | 1.492 | | | |
| -09 | .594 | .532 | .594 | 1.170 | 1.291 | 1.319 | 1.471 | 1.554 | | | |
| -10 | .656 | .595 | .656 | 1.233 | 1.353 | 1.381 | 1.533 | 1.617 | | | |
| -11 | .719 | .657 | .719 | 1.295 | 1.416 | 1.444 | 1.596 | 1.679 | | | |
| -12 | .781 | .720 | .781 | 1.358 | 1.478 | 1.506 | 1.658 | 1.742 | | | |
| -13 | .844 | .782 | .844 | 1.420 | 1.541 | 1.569 | 1.721 | 1.804 | | | |
| -14 | .906 | .845 | .906 | 1.483 | 1.603 | 1.631 | 1.783 | 1.867 | | | |
| -15 | .969 | .907 | .969 | 1.545 | 1.666 | 1.694 | 1.846 | 1.929 | | | |
| -16 | 1.031 | .970 | 1.031 | 1.608 | 1.728 | 1.756 | 1.908 | 1.992 | | | |

| SECOND | | <u></u> | <u> </u> | L REF. | | | | | | | |
|--------|-----------|---------|------------|--------------------|--------|--------|--------|---|--|--|--|
| DASH | G GRIP | GRIP K | GRIP RANGE | | | LT1010 | | 2.054 2.117 2.179 2.242 2.304 2.367 2.429 2.492 2.554 2.617 2.679 2.742 2.804 2.867 2.929 | | | |
| NUMBER | | MIN | MAX | -05-() | -06-() | -08-() | -10-() | -12-() | | | |
| -17 | 1.094 | 1.032 | 1.094 | | 1.791 | 1.819 | 1.971 | 2.054 | | | |
| -18 | 1.156 | 1.095 | 1.156 | | 1.853 | 1.881 | 2.033 | 2.117 | | | |
| -19 | 1.219 | 1.157 | 1.219 | | 1.916 | 1.944 | 2.096 | 2.179 | | | |
| -20 | 1.281 | 1.220 | 1.281 | | 1.978 | 2.006 | 2.158 | 2.242 | | | |
| -21 | 1.344 | 1.282 | 1.344 | | 2.041 | 2.069 | 2.221 | 2.304 | | | |
| -22 | 1.406 | 1.345 | 1.406 | | 2.103 | 2.131 | 2.283 | 2.367 | | | |
| -23 | 1.469 | 1.407 | 1.469 | | 2.166 | 2.194 | 2.346 | 2.429 | | | |
| -24 | 1.531 | 1.470 | 1.531 | NOT AVAILABLE | 2.228 | 2.256 | 2.408 | 2.492 | | | |
| -25 | 1.594 | 1.532 | 1.594 | IN -05 DIAMFTER | 2.291 | 2.319 | 2.471 | 2.554 | | | |
| -26 | 1.656 | 1.595 | 1.656 | DI WHEILIN | 2.353 | 2.381 | 2.533 | 2.617 | | | |
| -27 | 1.719 | 1.657 | 1.719 | | 2.416 | 2.444 | 2.596 | 2.679 | | | |
| -28 | 1.781 | 1.720 | 1.781 | | 2.478 | 2.506 | 2.658 | 2.742 | | | |
| -29 | 1.844 | 1.782 | 1.844 | | 2.541 | 2.569 | 2.721 | 2.804 | | | |
| -30 | 1.906 | 1.845 | 1.906 | | 2.603 | 2.631 | 2.783 | 2.867 | | | |
| -31 | 1.969 | 1.907 | 1.969 | | 2.666 | 2.694 | 2.846 | 2.929 | | | |
| -32 | 2.031 | 1.970 | 2.031 | | 2.728 | 2.756 | 2.908 | 2.992 | | | |

▲ "G" TOLERANCE: FOR -05 AND -06 SIZES +.030/-.010; FOR -08 AND -10 SIZES +.040/-.010; FOR -12 SIZES +.050/-.010.



a TriMas company

3423 SOUTH GARFIELD AVENUE COMMERCE, CALIFORNIA 90040 (323) 722-4760 FAX (323) 727-1029

VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE **TITANIUM** 100° REDUCED FLUSH HEAD, SELF LOCKING 75 KSI SHEAR

B. GEE APPROVED BY **MONOGRAM** Alcoa

DRAWING NO:

PLT1010()-()-() DRAWN BY: 09-21-13 CHECKED DATE: 14-0706

TITLE:

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.

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5M902

98524 11/08/14 SHEET 1 OF 2





PROCUREMENT SPEC: ESCBB-9, CLASS I, EXCEPT AS SPECIFIED HEREIN.

MATERIAL: NUT & SCREW: 6AL-4V TITANIUM PER AMS4928 OR AMS4967.

SLEEVE: CORROSION RESISTANT STEEL.

HEAT TREAT: NUT & SCREW: HEAT TREAT PER AMS-H-81200 MAX. HYDROGEN 125 PPM.

SLEEVE: AS REQUIRED FOR PERFORMANCE.

FINISH: \(\frac{7}{\}\) "-" NUT & SCREW: NONE.

SLEEVE: PASSIVATE PER AMS2700.

" L " NUT: ALUMINUM COAT (.0002 - .0007) THICK PER NAS4006.

SLEEVE: PASSIVATE PER AMS2700 ALUMINUM COAT (.0002 - .0007 THICK) PER NAS4006.

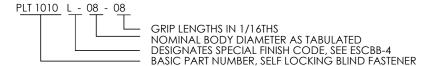
SCREW: NONE.

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

DRY FILM LUBE PER AS5272 OR MIL-PRF-81329, WWM CARBO-WAX, PARAFFIN WAX AND/OR CETYL ALCHOHOL

PER AS87132.

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.

4. LOCK

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).

<u>/5.</u>

MANUFACTURER'S IDENTIFICATION: LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS. LETTERS "VS" DESIGNATE VOI-SHAN.

6. HEAD MARKINGS ON NUT DEPRESSED .010" MAX, LOCATION OPTIONAL.



STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. REFER TO SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.



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

EXAMPLE: PLT1010-06-4.5 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".

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 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.



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.



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.

12. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.

TITLE:



3423 SOUTH GARFIELD AVENUE COMMERCE, CALIFORNIA 90040 (323) 722-4760 FAX (323) 727-1029 VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE TITANIUM 100° REDUCED FLUSH HEAD, SELF LOCKING

PLT1010()-()-()

DRAWN BY:

B. GEE

APPROVED BY:

DCN NO:
14-0706
DCN DATE:

98524

DCN NO:
14-0706
DCN DATE:
11/08/14

SHEET 2 OF 2

DRAWING NO:

Alcoa

5M902

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