ALCOA Fastening Systems

CUSTODIAN: ENGINEERING STANDARD COMMITTEE FOR BLIND BOLTS
3423 SOUTH GARFIELD AVENUE
LOS ANGELES, CALIFORNIA 90040

PROCUREMENT SPECIFICATIONS:

PROCUREMENT SPECIFICATION = PLT 5000, CLASS 5, TYPE I
PART NUMBER ASSIGNMENT = PLT 5001
INSTALLATION AND REMOVAL = PLT 5002
SPECIAL LUBE AND FINISH = PLT 5003

MATERIAL: NUT & SCREW: 6AL-4V TITANIUM PER AMS 4928 OR AMS 4967.
SLEEVE: CORROSION RESISTANT STEEL.

HEAT TREAT: NUT & SCREW: HEAT TREAT PER MIL-H-81200. MAX. HYDROGEN 125 PPM.
SLEEVE: AS REQUIRED FOR PERFORMANCE.

FINISH & "W": NUT & SCREW: NONE.
SLEEVE: PASSIVATE PER QQ-P-35.

LUBRICANT: SOLID DRY FILM LUBRICANT PER THE CHEMICAL REQUIREMENTS OF AS5272,
TYPE I OR EVERLUBE 812 PER MIL-L-81228. PARAFLIN WAX OR Cetyl ALCOHOL
PER MIL-L-87132 MAY BE APPLIED TO ANY OR ALL COMPONENTS AS REQUIRED FOR
PERFORMANCE. (SEE PLT8003 FOR SPECIAL LUBRICANTS AND FINISHES)

PART CODE & EXAMPLE:

PLT8017 - 12 - 8

GRIP LENGTHS IN 1/6THS (SEE TABLE II).

NOMINAL BODY DIAMETER AS TABULATED

FINISH CODE

BASIC PART NUMBER, SELF LOCKING BLIND FASTENER.

GENERAL NOTES:

1.) CONCENTRICITY OF NUT HEAD CONICAL SURFACE TO "D" DIAMETER SHALL BE WITHIN .005 T.I.R. (EXCEPT OVER INCIDENTS)

2.) REMOVE ALL LOOSE OR HANGING BURRS.

3.) THESE PARTS HAVE A CLOSE TOLERANCE (.0005) GROUND SHANK AND ARE INTENDED FOR USE IN UP TO .0055 DIAMETRAL INTERFERENCE FIT APPLICATIONS.

4.) 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 OD. (MEAN GRIP OF FASTENER).

5.) MANUFACTURER'S IDENTIFICATION:
LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS.
LETTERS "VS" DESIGNATE ALCOA.

6.) HEAD MARKINGS ON NUT DEPRESSED .010 MAX.

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

PLT 6017-6-4.5 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.

8.) STANDARD GRIP LENGTHS ARE SHOWN IN TABLE II, SHORTER OR LONGER GRIPS
THAN THOSE LISTED MAY BE AVAILABLE AS SPECIALS. ON GRIP LENGTHS
SHORTER THAN THOSE LISTED, THE BREAK-OFF LIMITS AND PREVAILING TORQUE VALUES
SHOWN IN TABLE I DO NOT APPLY.

9.) 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.

10.) DIMENSIONS "A", "A+" AND "W" 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.

11.) DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.

ALCOA
CODE IDENT. NO. 5M902

APPROVED DATE
09-22-87 EDN 5112

REV. LETTER AND DATE
6 EDN 84934
01-13-88

MONOGRAM AEROSPACE FASTENERS

CODE IDENT. NO. 98524

STANDARD

PLT8017
(EQUIV. PLT8007)

U.S. PATENT NO. 3843544 AND 4747202
EUROPEAN PATENT NO. 0213680

VISU-LOK® II FASTENER, BLIND
INTERNAL THREAD, EXTERNAL SLEEVE
TITANIUM, SELF LOCKING, CLOSE TOLERANCE
100" FLUSH HEAD, GROUND SHANK,
1/2"-20 V/S TO PLT8010, 1/8"-20 V/S TO PLT8016

FOR ALUMINUM APPLICATION, SHANK "D" MEASUREMENT MAY INCREASE .0002 INCH OVER THE MAXIMUM DIAMETER AND DECREASE .0005 INCH UNDER THE MINIMUM DIAMETER.