

MS9746 (ASG)

MARK PART NO. AND MANUFACTURER'S IDENTIFICATION PER AS 478 CLASS A

WRENCHING CONFIGURATION PER AS 870 FOR THIS DISTANCE

32/

.495

.389

.250

.125 MIN

.030 R

.020 R

32

MAXIMUM 2 INCOMPLETE THREADS (SEE NOTE 4)

CHAMFER .047 X 45° APPROX

.5625 NOM

.232 MIN

5° MAX

45°

.370 DIA

140° MIN

.472 DIA

.462

.500-20 UNJF-3A MIL-S-8879

THIS SURFACE MUST BE SQUARE WITH SHANK WITHIN .003 FIR.

35° MIN TO ROOT OF DOUBLE HEXAGON

.015 R MAX

CHAMFER 28°-32° TO .562 DIA

.750

.070 DIA 4 HOLES EQUALLY SPACED AS SHOWN CSK 90° TO .100 DIA

SECTION THRU THREAD PROFILE

FED SUP CLASS 5306

| PART NO. | L | K | APPROX WEIGHT LB/100 |
|-----------|-------|-----------|----------------------|
| MS9746-04 | .812 | .105-.125 | 7.93 |
| MS9746-05 | .875 | .105-.125 | 8.23 |
| MS9746-06 | .938 | .105-.125 | 8.53 |
| MS9746-07 | 1.000 | .105-.125 | 8.82 |
| MS9746-08 | 1.062 | .105-.125 | 9.12 |
| MS9746-09 | 1.125 | .105-.125 | 9.42 |
| MS9746-10 | 1.188 | .105-.125 | 9.72 |
| MS9746-11 | 1.250 | .105-.125 | 10.02 |
| MS9746-12 | 1.312 | .105-.125 | 10.32 |
| MS9746-13 | 1.375 | .105-.125 | 10.62 |
| MS9746-14 | 1.438 | .125-.188 | 10.92 |
| MS9746-15 | 1.500 | .190-.250 | 11.22 |
| MS9746-16 | 1.562 | .252-.312 | 11.52 |
| MS9746-17 | 1.625 | .315-.375 | 11.82 |
| MS9746-18 | 1.688 | .378-.438 | 12.11 |
| MS9746-19 | 1.750 | .440-.500 | 12.41 |
| MS9746-20 | 1.812 | .502-.562 | 12.71 |
| MS9746-21 | 1.875 | .565-.625 | 13.01 |

| PART NO. | L | K | APPROX WEIGHT LB/100 |
|-----------|-------|-------------|----------------------|
| MS9746-22 | 2.000 | .690-.750 | 13.61 |
| MS9746-23 | 2.125 | .815-.875 | 14.21 |
| MS9746-24 | 2.250 | .940-1.000 | 14.80 |
| MS9746-25 | 2.375 | 1.065-1.125 | 15.40 |
| MS9746-26 | 2.500 | 1.190-1.250 | 16.00 |
| MS9746-27 | 2.625 | 1.315-1.375 | 16.60 |
| MS9746-28 | 2.750 | 1.440-1.500 | 17.20 |
| MS9746-29 | 2.875 | 1.565-1.625 | 17.80 |
| MS9746-30 | 3.000 | 1.690-1.750 | 18.39 |
| MS9746-31 | 3.125 | 1.815-1.875 | 18.99 |
| MS9746-32 | 3.250 | 1.940-2.000 | 19.59 |
| MS9746-33 | 3.375 | 2.065-2.125 | 20.19 |
| MS9746-34 | 3.500 | 2.190-2.250 | 20.78 |
| MS9746-35 | 3.625 | 2.315-2.375 | 21.39 |
| MS9746-36 | 3.750 | 2.440-2.500 | 21.98 |
| MS9746-37 | 3.875 | 2.565-2.625 | 22.58 |
| MS9746-38 | 4.000 | 2.690-2.750 | 23.16 |
| MS9746-39 | 4.125 | 2.815-2.875 | 23.75 |

| PART NO. | L | K | APPROX WEIGHT LB/100 |
|-----------|-------|-------------|----------------------|
| MS9746-40 | 4.250 | 2.940-3.000 | 24.37 |
| MS9746-41 | 4.375 | 3.065-3.125 | 24.97 |
| MS9746-42 | 4.500 | 3.190-3.250 | 25.57 |
| MS9746-43 | 4.625 | 3.315-3.375 | 26.17 |
| MS9746-44 | 4.750 | 3.440-3.500 | 26.76 |
| MS9746-45 | 4.875 | 3.565-3.625 | 27.36 |
| MS9746-46 | 5.000 | 3.690-3.750 | 27.96 |
| MS9746-47 | 5.125 | 3.815-3.875 | 28.56 |
| MS9746-48 | 5.250 | 3.940-4.000 | 29.16 |
| MS9746-49 | 5.375 | 4.065-4.125 | 29.76 |
| MS9746-50 | 5.500 | 4.190-4.250 | 30.35 |
| MS9746-51 | 5.625 | 4.315-4.375 | 30.95 |
| MS9746-52 | 5.750 | 4.440-4.500 | 31.55 |
| MS9746-53 | 5.875 | 4.565-4.625 | 32.15 |
| MS9746-54 | 6.000 | 4.690-4.750 | 32.74 |

- SHANK SHALL BE STRAIGHT WITHIN .002 PER INCH OF BOLT LENGTH.
- THE RUNOUT OF THREAD PD IN RELATION TO THE SHANK SHALL BE WITHIN .006 FIR.
- THE RUNOUT OF THE SHANK IN RELATION TO THE WASHER FACE DIAMETER AND DOUBLE HEXAGON OD SHALL BE WITHIN .012 FIR.
- INCOMPLETE THREADS NOT TO ENTER FILLET.
- MATERIAL: CRES AMS 5643.
- HARDNESS: ROCKWELL C32-38.
- MANUFACTURING SPECIFICATION: AMS 7474.
- FLUORESCENT PENETRANT INSPECTION PER AMS 2645.
- SURFACE TEXTURE: USAS B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
- BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm .010$, ANGULAR DIMENSIONS $\pm 5^\circ$.
- DO NOT USE UNASSIGNED PART NUMBERS.

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THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE MILITARY SERVICES BY THE SAE AEROSPACE PART STANDARDS DIV.

P.A. UASP - 11

Other Cost Navy - AS

TITLE BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED PD SHANK, CRES AMS 5643, .500-20 UNJF-3A

PROCUREMENT SPECIFICATION SUPERSEDES:

MILITARY STANDARD

MS9746 (ASG)

SHEET 1 OF 1

This military standard is approved by the Department of the Air Force and the Naval Air Systems Command and is mandatory for use by these activities. All other military activities are required to employ this standard where applicable.

Review activities: UASP - R2, 85

DD FORM 672-1 (Limited coordination)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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