

INCH-POUND

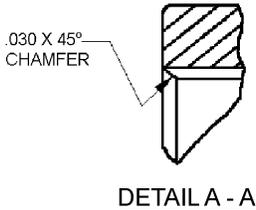
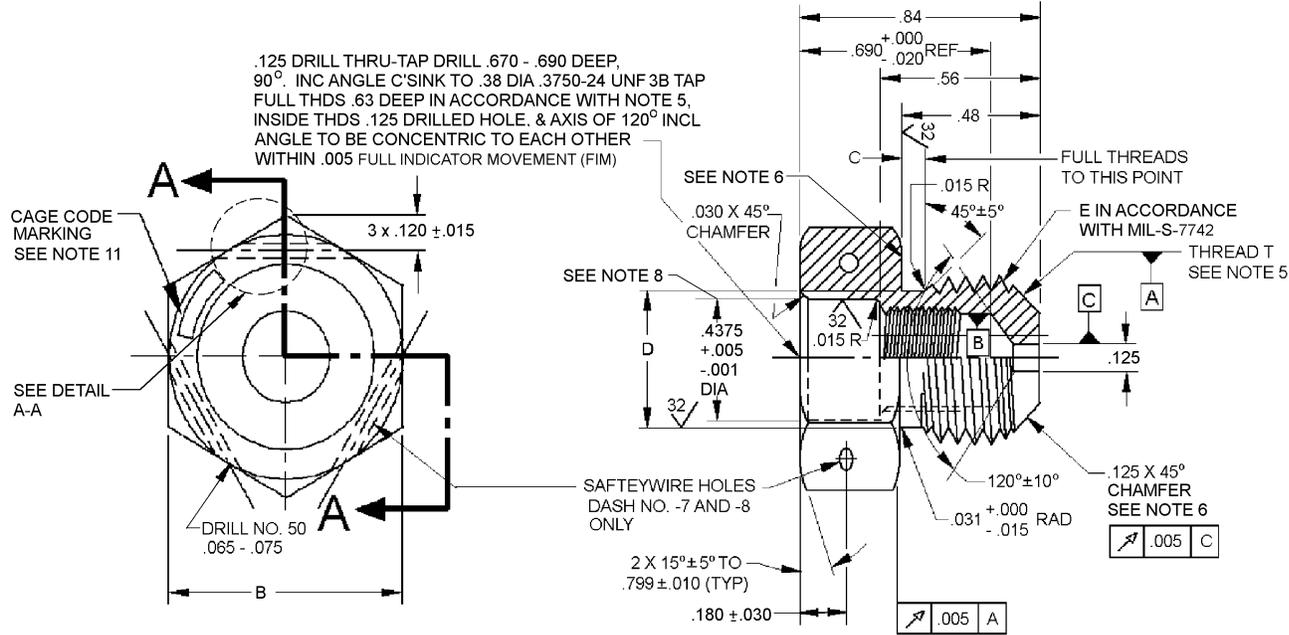
MS27612M  
 1 August 2013  
 SUPERSEDING  
 MS27612L  
 30 August 2012

DETAIL SPECIFICATION SHEET

ADAPTER, HYDRAULIC BLEEDER VALVE, AIRCRAFT WHEEL BRAKE

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet.



SECTION A - A

Inches	mm	Inches	mm
.001	0.03	.120	3.05
.005	0.13	.125	3.18
.006	0.15	.180	4.57
.010	0.25	.4375	11.113
.015	0.38	.48	12.2
.020	0.51	.56	14.2
.030	0.76	.63	16.0
.031	0.79	.690	17.5
.065	1.65	.799	20.29
.075	1.91	.84	21.3

FIGURE 1. Adapter dimensions and configuration.

MS27612M

Part or Identifying Number (PIN) (see note 9)	T Thread Size (see note 5)	B $\begin{matrix} +.003 \\ -.004 \\ (+0.08 \text{ mm} \\ -0.10 \text{ mm}) \end{matrix}$	C inch (mm)	D Dia. $\begin{matrix} +.002 \\ -.003 \\ (+0.05 \text{ mm} \\ -0.08 \text{ mm}) \end{matrix}$
MS27612-5	.5625-18UNJF-3A	.8130 (20.650 mm)	.083 $\begin{matrix} +.015 \\ -.000 \end{matrix}$	.481 (12.22 mm)
MS27612-7			$\left( \begin{matrix} 2.11 \\ +0.38 \\ -0.00 \end{matrix} \right)$	
MS27612-6	.7500-16UNJF-3A	1.000 (25.40 mm)	.100 $\begin{matrix} +.009 \\ -.006 \end{matrix}$	.660 (16.76 mm)
MS27612-8			$\left( \begin{matrix} 2.54 \\ +0.23 \\ -0.15 \end{matrix} \right)$	

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Dimensioning and tolerancing in accordance with ASME Y14.5. Unless otherwise specified, tolerances for decimals  $\pm .005$  inch (0.13 mm), angles  $\pm 5^\circ$ .
4. Surface texture: Symbols in accordance with ASME Y14.36, requirements in accordance with ASME B46.1. Unless otherwise specified, surfaces to be 150  $\mu\text{in } R_a$ , except as noted.
5. Thread T in accordance with MIL-S-7742.
6. This surface to be a smooth conical surface free from burrs, tool marks and visible flat spots. Annular tool marks will be allowed to 100  $\mu\text{in } R_a$  maximum.
7. "D" DIA and outside thread shall be concentric within .005 inch (0.13 mm) FIM.
8. .4375 inch (11.113 mm) DIA and inside thread shall be concentric within .002 inch (0.05 mm) FIM.
9. MS27612-7 and -8 adapters with safety wire holes are preferred for new design.
10. Remove sharp edges, burr and slivers.
11. Marking of part shall be any permanent marking method that will not damage the part. The minimum character height shall be 1/16 inch (.0625 inch) (1.57 mm).

FIGURE 1. Adapter dimensions and configuration - Continued.

MS27612M

REQUIREMENTS

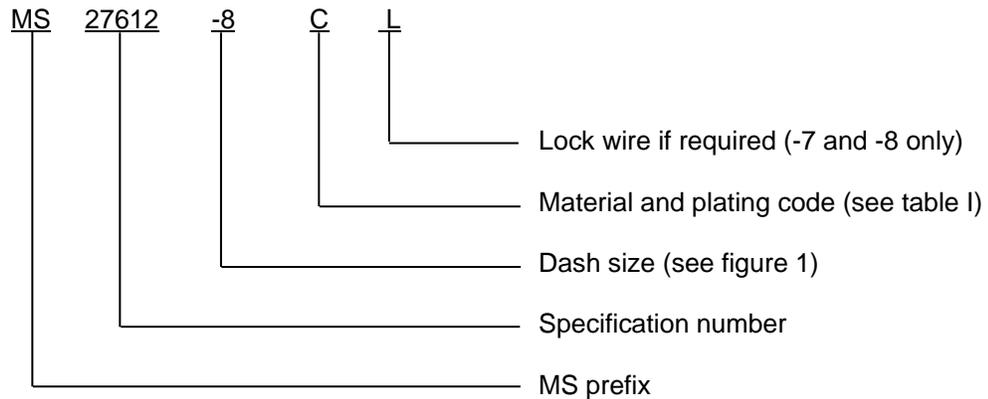
Material and plating requirements and codes, see table I.

TABLE I. Materials and platings.

Material and plating code	Material/plating
C	Carbon steel bar in accordance with ASTM A108 (1117 or 12L14) or ASTM A576, (grade 1117 UNS G11170). Cadmium plating in accordance with SAE-AMS-QQ-P-416, type II, class 3, 200µ inches to 300µ inches (5.08 µm to 7.62 µm) thick.
CZ	Carbon steel bar in accordance with ASTM A108 or ASTM A576, (grade 1117 UNS G11170 or 12L14). Zinc plating in accordance with ASTM B633, type VI, FeZn 25.
F	Alloy steel bar in accordance with or SAE-AMS6370 (type 4130, UNS G41300) or SAE-AMS-S-6758 (SAE 4130), SAE-AMS6349 (SAE 4140, UNS G41400) or SAE-AMS6382 (SAE 4140, UNS G41400). Cadmium plating in accordance with SAE-AMS-QQ-P-416, type II, class 3, 200µ inches to 300µ inches (5.08 µm to 7.62 µm) thick.
FZ	Alloy steel bar in accordance with or SAE-AMS6370 (type 4130, UNS G41300) or SAE-AMS-S-6758 (SAE 4130), SAE-AMS6349 (SAE 4140, UNS G41400) or SAE-AMS6382 (SAE 4140, UNS G41400). Zinc plating in accordance with ASTM B633, type VI, FeZn 25.
S	Corrosion resistant steel in accordance with SAE-AMS5659, SAE-AMS5862, ASTM A564/A564M (UNS S15500 or type XM-12) or SAE-AMS5665 (UNS N06600). Passivate in accordance with SAE-AMS2700, type 6 or 7.

Platings. All platings shall be capable of meeting the 96 hour salt spray test in accordance with ASTM B117. Fluid passages, other openings, and internal threads shall not be subject to the plating thickness requirement and may have bare areas provided they are protected with a light film of oil.

PIN example:



MS27612M

Guidance on use of alternative parts with less hazardous or non-hazardous materials. This specification provides an alternate material, corrosion resistant steel, and zinc finish via the PIN. Users should select the PIN with the least hazardous material that meets the form, fit, and function requirements of their application.

Marking: Part shall be permanently marked with the MS PIN, and include the manufacturers CAGE.

Table II provides a detailed cross-reference of superseded MS27612 PINs, new MS27612 PINs, and preferred MS27612 PINs.

TABLE II. Cross-reference data.

Superseded MS PIN	New MS PIN	Preferred MS PIN
MS27612-5	MS27612-5C	MS27612-7CL
MS27612-6	MS27612-6C	MS27612-8CL
MS27612-7	MS27612-7CL	MS27612-7CL
MS27612-8	MS27612-8CL	MS27612-8CL

Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

Referenced documents shall be of the issue in effect on date of invitations for bid.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

Referenced documents. This document references the following:

- |                 |                  |
|-----------------|------------------|
| MIL-S-7742      | SAE-AMS-S-6758   |
| ASME B46.1      | SAE-AMS-QQ-P-416 |
| ASME Y14.5      | SAE-AMS2700      |
| ASME Y14.36     | SAE-AMS5659      |
| ASTM A108       | SAE-AMS5665      |
| ASTM A564/A564M | SAE-AMS5862      |
| ASTM A576       | SAE-AMS6349      |
| ASTM B117       | SAE-AMS6370      |
| ASTM B633       | SAE-AMS6382      |

MS27612M

CONCLUDING MATERIAL

Custodians:

Army - AV  
Navy - AS  
Air Force - 99  
DLA - CC

Preparing activity:

DLA-CC

(Project 4820-2013-008)

Review activities:

Army - AT  
Navy - MC, SA  
Air Force - 70, 71

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.