

INCH-POUND

MS51840D
 7 January 2011
 SUPERSEDING
 MS51840C
 21 April 1983

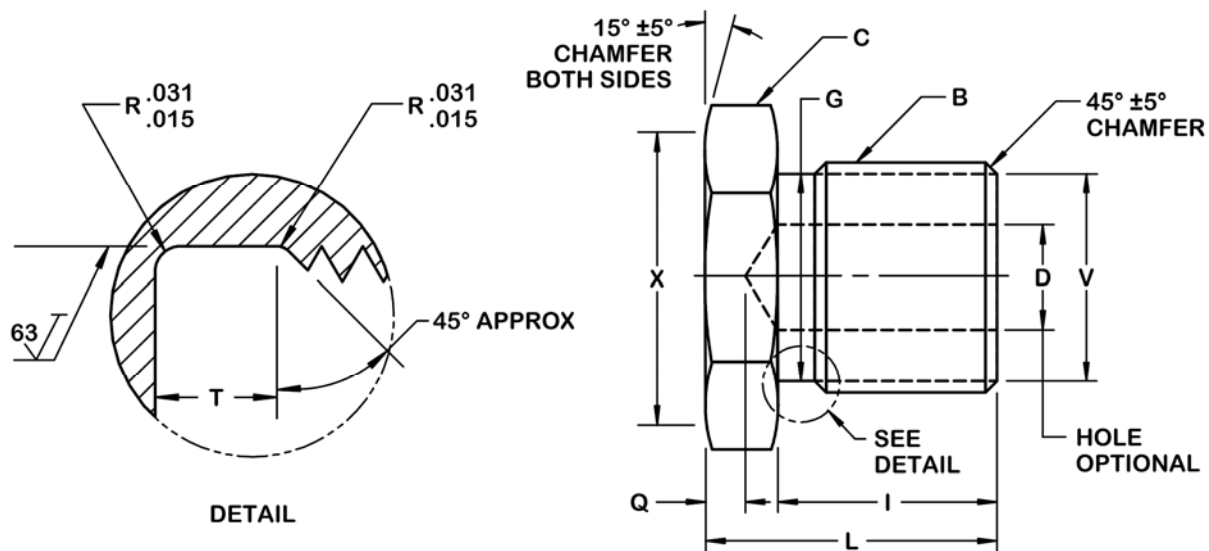
DETAIL SPECIFICATION SHEET

PLUG, MACHINE THREAD, O-RING

Reactivated after 7 January 2011 and may be used for
 new and existing designs and acquisitions.

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 and SAE J514, "Hydraulic Tube Fittings".



NOTES:

1. All dimensions are in inches.
2. Dash numbers and dimensions are shown in [table I](#).

FIGURE 1. Machine thread o-ring plug.

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TABLE I. Dash numbers and dimensions.

Dash no.	TubeOD (ref)	(B) Straight thread	(C) Hex (across flats)		(D) Dia ± 0.015	(G) Dia $+0.002 - 0.003$	(I) ± 0.005	(L) ± 0.02	(Q) Min	(T) $+0.015 - 0.000$	(V) Dia ± 0.015	(X) Dia $+0.000 - 0.015$
			Max	Min								
21	0.125	.313-24UNF-2A	0.439	0.430	0.093	0.250	0.297	0.60	0.06	0.063	0.250	0.438
22	0.188	.375-24UNF-2A	0.502	0.492	0.125	0.313	0.297	0.60	0.08	0.063	0.310	0.500
23	0.250	.438-20UNF-2A	0.564	0.553	0.203	0.364	0.360	0.67	0.10	0.075	0.365	0.563
24	0.313	.500-20UNF-2A	0.627	0.616	0.234	0.427	0.360	0.67	0.12	0.075	0.425	0.625
25	0.375	.563-18UNF-2A	0.690	0.679	0.297	0.482	0.391	0.73	0.16	0.083	0.480	0.688
26	0.500	.750-16UNF-2A	0.877	0.865	0.422	0.660	0.438	0.80	0.22	0.094	0.660	0.875
27	0.625	.875-14UNF-2A	1.002	0.990	0.500	0.773	0.500	0.93	0.25	0.107	0.775	1.000
28	0.750	1.063-12UN-2A	1.252	1.239	0.656	0.945	0.594	1.09	0.25	0.125	0.945	1.250
29	0.875	1.188-12UN-2A	1.377	1.364	0.718	1.070	0.594	1.09	0.25	0.125	1.070	1.375
30	1.000	1.313-12UN-2A	1.502	1.489	0.875	1.195	0.594	1.12	0.25	0.125	1.195	1.500
31	1.250	1.625-12UN-2A	1.877	1.863	1.093	1.507	0.594	1.20	0.25	0.125	1.505	1.875
32	1.500	1.875-12UN-2A	2.127	2.113	1.344	1.756	0.594	1.27	0.25	0.125	1.755	2.125
33	2.000	2.500-12UN-2A	2.752	2.738	1.813	2.381	0.594	1.43	0.30	0.125	2.380	2.750

REQUIREMENTS:

1. Dimensions. Dimensions shall be in accordance with [figure 1](#) and [table I](#).

2. Materials.

2.1 Carbon steel shall be in accordance with SAE AIR4127 and shall conform to one of the following SAE numerical designations of steel by composition: 1113, 1117, 1118, or 1137.

2.2 Corrosion resistant steel (CRES) shall be in accordance with ASTM A582/A582M, type 303, condition A, or alternatively, ASTM A276, types 304 or 316, condition A.

3. Finish.

3.1 Carbon steel shall be cadmium plated in accordance with SAE AMS-QQ-P-416, type II, class 3, or phosphate coated in accordance with MIL-DTL-16232, type M, class 1.

3.2 CRES shall be cleaned and descaled in accordance with ASTM A380.

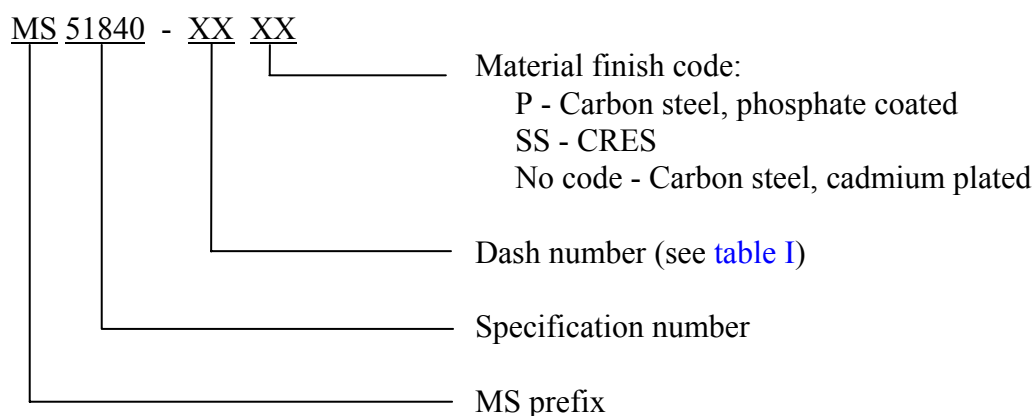
4. Threads. Threads shall be in accordance with FED-STD-H28/2.

5. Sampling. Unless otherwise specified, sampling for conformance inspection shall be in accordance with ASQ Z1.4, inspection level II, with the acceptance quality limit (AQL) as specified in the contract. Sampling for tests of fittings shall be in accordance with ASQ Z1.4, inspection level S-2, with the AQL as specified in the contract.

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NOTES:

1. For design feature and testing purposes, this document takes precedence over procurement specification SAE J514.
2. Unless otherwise specified, issues of referenced documents will be of the issue in effect on the date of solicitation.
3. The part or identifying number (PIN) to be used for machine thread o-ring plugs acquired to this specification sheet is created as follows:



Example of reference part number: MS51840-21P

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.

Custodians:
 Army - AR
 Navy - OS
 DLA - GS

Preparing Activity:
 DLA - GS4
 (Project 5365-2010-001)

Review Activities:
 Army - CR, CR4, EA, GL
 Navy - MC

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 database at <https://assist.daps.dla.mil/>.