

INCH - POUND

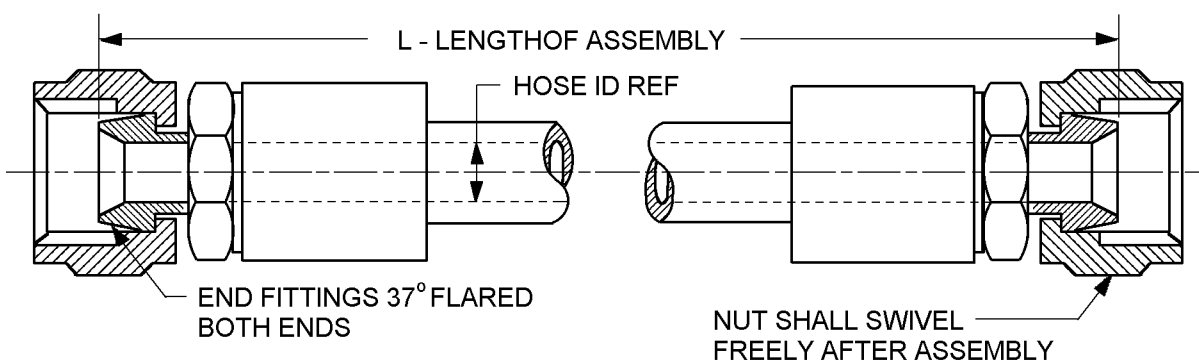
MS52103F
 15 January 2010
 SUPERSEDING
 MS52103E
 1 June 1999

DETAIL SPECIFICATION SHEET

HOSE ASSEMBLY, NONMETALLIC: FUEL AND OIL,
 MEDIUM PRESSURE, FLARED TUBE

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 MIL-DTL-13444.



NOTES:

1. All undimensioned pictorial representations are for reference purposes only.
2. Dimension "L" is the defined length of the hose assembly.
3. Hose assemblies shall be specified in the following length increments:
 - a. Under 24 inches - 1/2 (.500) inch increments (under 60.96 cm - 12.70 mm increments).
 - b. 24 to 36 inches - 1 inch increments (60.96 to 91.44 cm - 25.40 mm increments).
 - c. Over 36 inches - in not less than 2 inch increments (91.44 cm in not less than mm increments).
4. Tolerances shall be as specified in the following:
 - a. $\pm 1/8$ (.125) inch for length under 18 inches (± 3.18 mm for lengths under 457 mm).
 - b. $\pm 1/4$ (.250) inch for lengths from 18 to 36 inches (± 6.35 mm for lengths from 457 to 914 mm).
 - c. $\pm 1/2$ (.500) inch for lengths from 36 to 50 inches (± 12.70 mm for lengths from 914 to 1270 mm).
 - d. $\pm 1\%$ for lengths over 50 inches ($\pm 1\%$ for lengths over 1270 mm).

FIGURE 1. General configuration.

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TABLE I. Hose and fitting thread sizes. 1/ 2/

Dash number	Hose ID ref.	Hose OD ref.	Fitting thread ref
-04	3/16 inch	.484 (12.29)	7/16 - 20UNF-2B
	.188 inch		
	4.78 mm		
-05	1/4 inch	.547 (13.89)	1/2 - 20UNF-2B
	.250 inch		
	6.35 mm		
-06	5/16 inch	.609 (15.47)	9/16 - 18UNF-2B
	.313 inch		
	7.95 mm		
-08	13/32 inch	.734 (18.64)	3/4 - 16UNF-2B
	.406 inch		
	10.31 mm		
-10	1/2 inch	.828 (21.03)	7/8 - 14UNF-2B
	.500 inch		
	12.70 mm		
-12	5/8 inch	.953 (24.21)	1-1/16 - 12UN-2B
	.625 inch		
	15.88 mm		
-16	7/8 inch	1.203 (30.56)	1-5/16 - 12UN-2B
	.875 inch		
	22.23 mm		
-20	1-1/8 inch	1.484 (37.69)	1-5/8 - 12UN-2B
	1.125 inch		
	28.58 mm		
-24	1-3/8 inch	1.722 (43.74)	1-7/8 - 12UN-2B
	1.375 inch		
	34.93 mm		
-32	1-13/16 inch	2.143 (54.43)	2-1/2 - 12UN-2B
	1.813 inch		
	46.05 mm		

1/ Dimensions are in inches2/ Metric equivalents are given for information only.

REQUIREMENTS

Design and configuration: See figure 1 and table I.

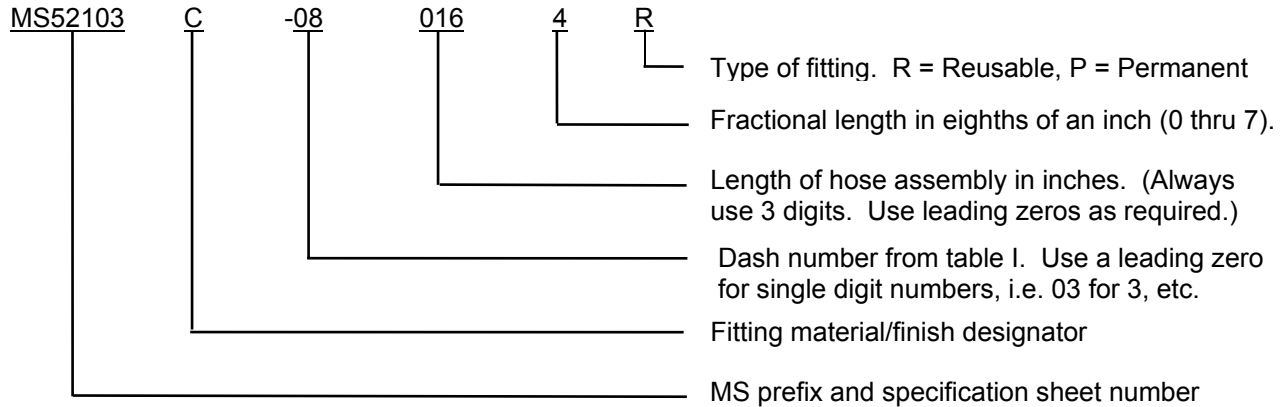
Hose material: The hose used in these assemblies shall be in accordance with MIL-DTL-13444, type III.

Fittings: Fitting shall be in accordance with SAE J516 female 37° flare.

Finish shall meet the salt spray requirements of MIL-DTL-13444.

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Part or Identifying Number (PIN). The PIN's to be used for hose assemblies acquired to this specification are created as shown in the example below.



Fitting material/finish designators:

- A - Carbon steel, cadmium plated.
- B - Brass.
- C - Carbon steel
- S - Corrosion resistant steel.
- Z - Carbon steel, zinc plated.

Cadmium is not recommended. To the users of this document, it is recommended that the use of carbon steel material with cadmium plating be used only when other materials and finishes specified in this document cannot meet performance requirements.

Some existing MS PIN's do not completely fit the above layout, but they should continue to be used without change.

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 document. In addition to MIL-DTL-13444, this document references SAE J516.

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CONCLUDING MATERIAL

Custodians:

Army - AT
Navy - YD
Air Force - 99
DLA - CC

Preparing activity:

DLA - CC

(Project 4720-2009-015)

Review activities:

Army - AR, AV, MI
Navy - AS, MC, SH

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 <http://assist.daps.dla.mil>.