INCH-POUND MIL-DTL-8795/1 17 September 2007

## **DETAIL SPECIFICATION SHEET**

# HOSE ASSEMBLY, REUSABLE, HYDRAULIC, FUEL, AND OIL RESISTANT, 3/16 INCH THROUGH 3 INCH TUBE SIZES

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-8795.

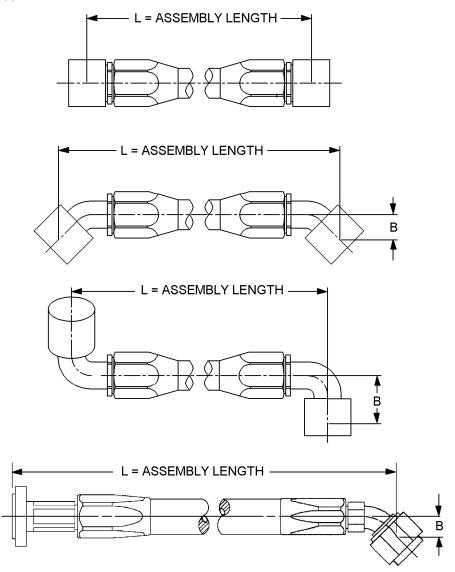


FIGURE 1. Hose assembly dimensions.

AMSC N/A FSC 4720

#### NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents given are for information only.
- 3. Unless otherwise specified, tolerances are as follows:
  - a. Length (L) less than 18 inch: ±.125 inch (45.72 cm ±3.18 mm).
  - b. Length (L) from 18 to 36 inch ±.250 inch (45.72 to 91.44 cm ±6.35 mm).
  - c. Length (L) from 36 to 50 inch: ±.500 inch (91.44 to 127 cm ±12.70 mm).
  - d. Length (L) greater than 50 inch.: ±1.0% (127 cm ± 10%).
- 4. Elbow fitting drop height "B" is as specified in the applicable specification sheet (see table I).
- 5. Length "L" to be measured between centers of nipple ends along a straight line parallel to hose length with hose laid out horizontally and straight.

FIGURE 1. Hose assembly dimensions - Continued.

MIL-DTL-8794 dash size number, see table I.

TABLE I. Dash size to hose diameter. 1/2/

Dash	Inside diameter (ID) of MIL-DTL-8794 hose				Outer diameter (OD)	
size number	fraction inches	decimal inches	mm	Tolerance inches (mm)	MIL-DTL-	8794 hose s (mm)
-3 <u>3</u> /	1/8	.125	3.18	+.019 (0.48) 000	.453 (11.51)	
-4	3/16	.188	4.78	+.026 (.66) 000	.516 (13.11)	+.023 (0.58)
-5	1/4	.250	6.35	+.031 (0.79) 000	.578 (14.68)	016 (0.41)
-6	5/16	.313	7.95		.672 (17.07)	
-8	13/32	.406	10.31		.766 (19.46)	
-10	1/2	.500	12.70	+.039 (0.99) 000	.922 (23.42)	±.023 (0.58)
-12	5/8	.625	15.88	+.042 (1.07) 000	1.078 (27.38)	
-16	7/8	.875	22.23		1.234 (31.34)	±.031 (0.79)
-20	1 -1/8	1.125	28.58	+.047 (1.19) 000	1.500 (38.10)	
-24	1 - 3/8	1.375	34.93		1.750 (44.45)	
-32	1 - 3/16	1.813	46.05		2.219 (56.36)	
-40	2 - 3/8	2.375	60.33	+.062 (1.57) 000	2.875 (73.03)	±.047 (1.19)
-48	3	3.000	76.20		3.563 (90.50)	

<sup>1/</sup> Dimensions are in inches.

<sup>2/</sup> Metric equivalents are given for information only.

<sup>3/</sup> Hydraulic applications for size -3 is prohibited.

Designators for fittings, see table II.

TABLE II. Hose fitting.

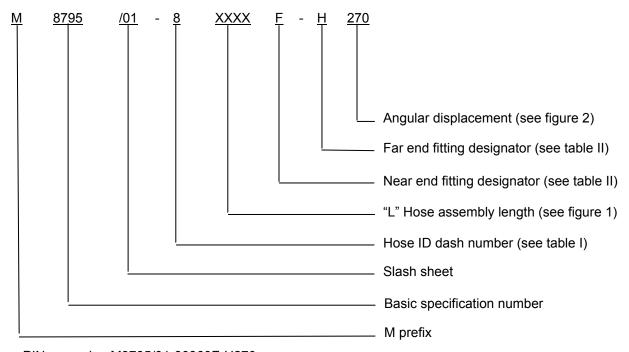
Designator	Specification sheet	Description
А	MIL-DTL-5070/1	90° nipple assembly, adapter, hose to tube, reusable, brazeless, one-piece design, hydraulic (1/4 inch through 2)
В	MIL-DTL-5070/2	45° nipple assembly, adapter, hose to tube, reusable, brazeless, one-piece design (1/4 inch through 2 inch tube sizes)
С	MS24587 <u>1</u> /	Adapter assembly, straight, hose to tube
D	MS24588	Nipple, adapter, hose to tube (3/16 inch through 3/4 inch only)
E	MS24589	Nipple, adapter, hose to tube (1 inch through 2 inch only)
F	MS27224	90° swivel nut assembly, adapter, hose to tube (1/4 inch through 2 inch)
G	MS27226	45° swivel nut assembly, adapter, hose to tube
Н	MS27228	90° flange assembly, adapter, hose to tube
J	MS27230	45° flange assembly, adapter, hose to tube
K	MS27232	Straight flange assembly adapter, hose to flange
L	MS27239	Nipple, straight, adapter, hose to tube, 1/4 inch through 3 inch tube sizes
М	MS28746	Fitting end - hose, swivel, detachable, 45° flange, 4 bolt

<sup>1/</sup> For straight to straight hose assemblies use MS28741.

#### REQUIREMENTS:

Hose assemblies. Hose assemblies shall consist of hose in accordance with MIL-DTL-8794 and adapters in accordance with MIL-DTL-5070.

Part or Identifying Number (PIN):

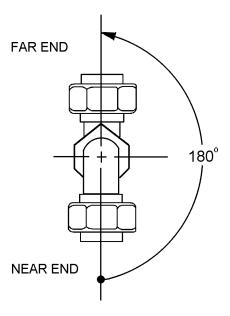


PIN example: M8795/01-80360F-H270

Hose length. Length of hose assembly in inches. Always use 4 digits, use leading zeros as required. 4<sup>th</sup> digit is fractional lengths in 1/8 inch increments (0 thru 7) (see figure 1).

When specifying two different fitting types, the fitting designators shall be put in alphabetical order. (see table I).

Angular displacement. Displacement angle may have any number of degrees up to 360 (000 is not acceptable). Always use 3 digits, use leading zeros as required (see figure 2). Not applicable for straight to straight fittings or straight to any angle fittings, leave blank.



# NOTE:

- 1. Angular displacement for hose assemblies with elbow fittings on both ends shall have the angular displacement between elbows, measured counter-clockwise from the centerline of the nearest fitting, positioned at six-o' clock, to the centerline of the other fitting (see SAE J517).
- 2. The near end of the connector shall be put in alphabetical order relative to the far end. (see table I). Example: Near end adapter F, far end G.
- 3. Angular displacement shall be measured in degrees with a tolerance of ±3° for lengths up to 2 feet (610 mm) and ±5° for all lengths over 2 feet (610 mm).
- 4. The angular displacement shall be expressed in three digits.
- 5. Making the angular determination in the wrong direction will result in an unacceptable part.

FIGURE 2. Angular displacement (near end).

Referenced documents. In addition to MIL-DTL-8795, this document references the following:

MIL-DTL-8794	MS27226
MIL-DTL-5070	MS27228
MIL-DTL-5070/1	MS27230
MIL-DTL-5070/2	MS27232
MS24587	MS27239
MS24588	MS28746
MS24589	SAE J517
MS27224	

# **CONCLUDING MATERIAL**

Custodians: Preparing activity:

Army - AV DLA - CC

Navy - AS Air Force - 99 (Project 4720-2006-024)

Review activities:

DLA - CC

Army - AT, MI Navy - CG, MC, SA

Air Force - 11, 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 <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a>.