

INCH-POUND

MIL-DTL-52525/40B

1 December 2008

SUPERSEDING

MIL-DTL-52525/40A

30 June 1998

DETAIL SPECIFICATION SHEET

FITTINGS, HOSE, CRIMP TYPE, SPLIT-FLANGE, STRAIGHT

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-52525.

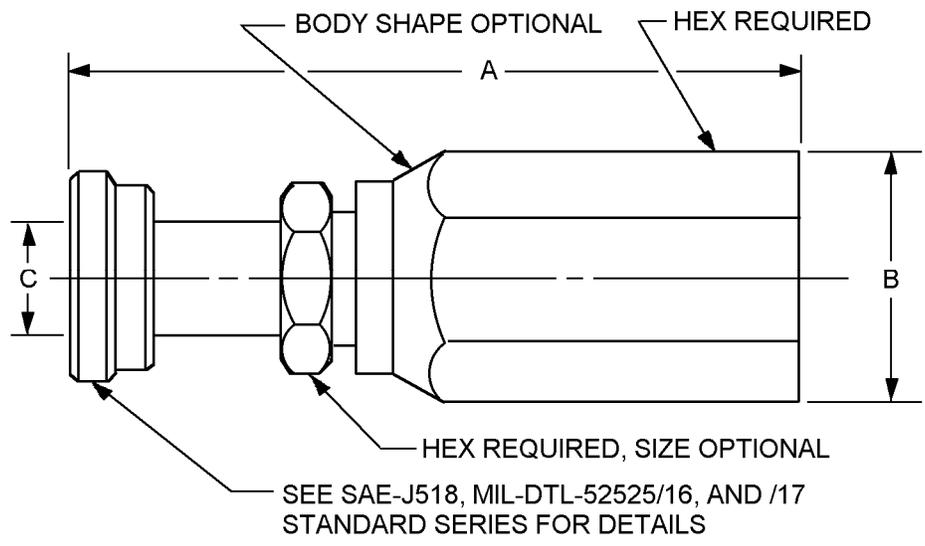


FIGURE 1. Fitting, hose, screw-on to 4-bolt split-flange, straight.

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Part or Identifying Number (PIN)	Hose			Tube		Flange dash size
	dash no.	ID inches (mm)	OD inches (mm)	dash no.	OD inches (mm)	
M52525/40-08-08	-08	.50 (12.70)	.94 (23.88)	-08	.50 (12.70)	-08
M52525/40-12-12	-12	.75 (19.05)	1.21 (30.73)	-12	.75 (19.05)	-12
M52525/40-16-16	-16	1.00 (25.40)	1.50 (38.10)	-16	1.00 (25.40)	-16

PIN	A max inches (cm)	B max inches (mm)	C min inches (mm)
M52525/40-08-08	4.50 (11.43)	1.29 (32.77)	.35 (8.89)
M52525/40-12-12	6.00 (15.24)	1.73 (43.94)	.56 (14.22)
M52525/40-16-16	7.00 (17.78)	2.02 (51.31)	.75 (19.05)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 1. Fitting, hose, screw-on to 4-bolt split-flange, straight - Continued.

REQUIREMENTS:

The fittings described herein are for use with hose in accordance with MIL-DTL-52471/9, type 100R12, 4-spiral-wrap reinforcement hose and hose assemblies in accordance with MIL-DTL-52471/10.

The fittings shall be as specified on figure 1 and in tables I and II.

If fittings are to be used on an oxygen hose, see MIL-DTL-52525.

Materials and finishes shall be in accordance with MIL-DTL-52525 and in table I. All finishes shall be capable of withstanding 96 hours minimum of salt spray.

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TABLE I. Material and finish identification codes. 1/ 2/

PIN code material/plating finish	Material	Plating finish
A	Aluminum alloy 6061 or 7075	Anodize in accordance with MIL-A-8625, type II.
AN		Anodize in accordance with MIL-A-8625, type II and NAVAIR trivalent chromium pretreatment (TCP) in accordance with MIL-DTL-81706, type 2, class A.
BN		Bare aluminum with NAVAIR TCP in accordance with MIL-DTL-81706, type 2, class A.
C	Steel	Cadmium plating in accordance with SAE-AMS-C-81562, type II, class 3 or SAE-AMS-QQ-P-416, type II, class 2.
CN		Cadmium plating in accordance with SAE-AMS-C-81562, type II, class 3 or SAE-AMS-QQ-P-416, type II, class 2 and NAVAIR TCP in accordance with MIL-DTL-81706, type 2, class A.
YC	Chrome-molybdenum steel alloy 4130	Cadmium plating in accordance with SAE-AMS-C-81562, type II, class 3 or SAE-AMS-QQ-P-416, type II, class 2.
YN		Cadmium plating in accordance with SAE-AMS-C-81562, type II, class 3 or SAE-AMS-QQ-P-416, type II, class 2 and NAVAIR TCP in accordance with MIL-DTL-81706, type 2, class A.
F	Steel	NAVAIR TCP in accordance with MIL-DTL-81706, type 2, class A.
FN	Chrome-molybdenum steel alloy 4130	
G	Steel	Zinc plating with colorless passivate in accordance with ASTM B633, type V, Fe/Zn 25.
YG	Chrome-molybdenum steel alloy 4130	
H	Steel	Zinc phosphate finish in accordance MIL-DTL-16232, type Z, class1. 3/
YH	Chrome-molybdenum steel alloy 4130	
J	Steel	Zinc plating with chromate conversion in accordance with ASTM B633; type II or III, Fe/Zn 5, or ASTM B695, type II, class 5.
YJ	Chrome-molybdenum steel alloy 4130	
K	Nickel-copper alloy UNS N04400	No additional finish.
M	High-chromium nickel alloy UNS N06690	No additional finish.
N	Steel	Zinc aluminum in accordance with ASTM F1136, grade 3, NC.
YN	Chrome-molybdenum steel alloy 4130	
P	Steel	Zinc plating with colorless passivate in accordance with ASTM B633, type VI, Fe/Zn 5.
YP	Chrome-molybdenum steel alloy 4130	
S	Corrosion resistant steel	No additional finish. Passivation in accordance with SAE-AMS2700, type 6 or 7.
SN		Passivation above and NAVAIR TCP in accordance with MIL-DTL-81706, type 2, class A.
T	Titanium	Anodize in accordance with SAE-AMS2488, type 2.
V	Steel	Zinc-nickel in accordance with SAE-AMS2417, type 1.
W	Steel	Any zinc plating above.
YW	Chrome-molybdenum steel alloy 4130	
Z	Steel	Any zinc plating above with NAVAIR TCP in accordance with MIL-DTL-81706, type 2, class A.
YZ	Chrome-molybdenum steel alloy 4130	

1/ All materials and finishes shall be in accordance with MIL-DTL-52525.

2/ Embitterment test need not be run.

3/ Zinc phosphate finish is hexavalent chromium free.

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The operating pressure shall be as specified in table II. Maximum operating pressures are for low carbon steel fittings consult manufacturer for values on other materials.

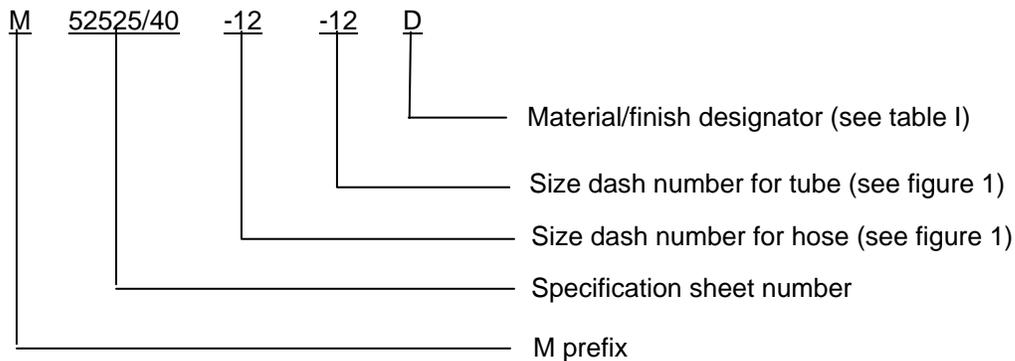
TABLE II. Maximum operating pressures of fittings. 1/ 2/

SAE dash size	Hose ID Inches (mm)	psi	MPa
-08	.50 (12.70)	5000	34.5
-12	.75 (19.05)	4000	27.6
-16	1.00 (25.40)	4000	27.6

1/ Dimensions are in inches.

2/ Metric equivalents are given for information only.

PIN: The PIN consists of the letter "M" the specification sheet number, a dash, a number for the hose size a dash, a number for tube size, and a material finish designator.



PIN example: M52525/40-12-12D, describes a split flange for a .750 inch (19.05 mm) hose, with a .750 inch (19.05 mm) flange, aluminum with an anodized finish.

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

Color identification. Color identification shall be in accordance with SAE-AS4841.

Marking shall include the manufacturer's name or trademark, size, and hose identifier 100R12. Location of marking is optional.

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Harmonization to SAE-J516 cross reference PIN in table III is for reference only. SAE style fittings may not have the same material/finish as required by MIL-DTL-52525 and legacy with MIL-DTL-52471.

TABLE III. Harmonization to SAE-J516 cross reference PIN. 1/

PIN	SAE PIN
M52525/40-08-08	SAE J516 8-8 F490177
M52525/40-12-12	SAE J516 12-12 F490177
M52525/40-16-16	SAE J516 16-16 F490177

1/ Material and finish designators are omitted from PIN's, see table I and SAE-J846.

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. In addition to MIL-DTL-52525, this document references the following:

MIL-A-8625	MIL-DTL-81706	SAE-AMS2488
MIL-DTL-16232	ASTM B633	SAE-AMS2700
MIL-DTL-52471	ASTM B695	SAE-AS4841
MIL-DTL-52471/9	ASTM F1136	SAE-J516
MIL-DTL-52471/10	SAE-AMS-C-81562	SAE-J518
MIL-DTL-52525/16	SAE-AMS-QQ-P-416	SAE-J846
MIL-DTL-52525/17	SAE-AMS2417	

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:  
DLA - CC

(Project 4730-2007-097)

Review activities:

Army - CR4  
Navy - AS, CG, MC, SA, YD

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>.