

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

MA1633

FEDERAL SUPPLY CLASS

RATIONALE

MA1633 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

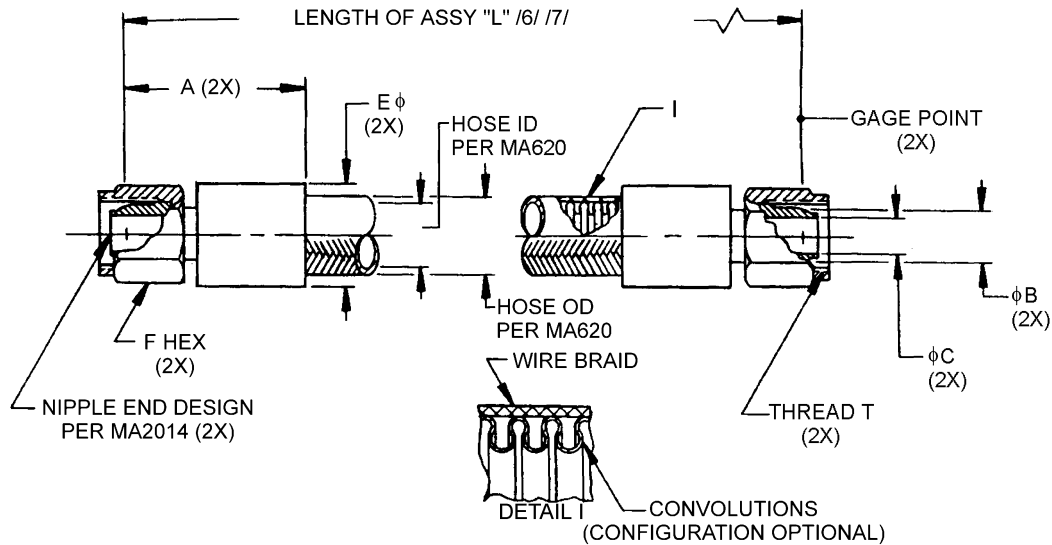


FIGURE 1 - HOSE ASSEMBLY

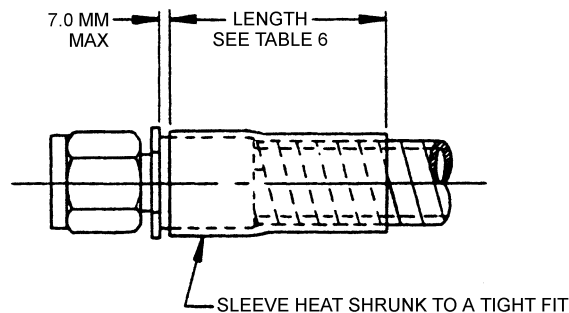
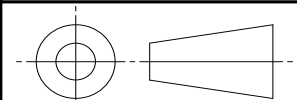


FIGURE 2 - SPIRAL ABRASION COVER /8/

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/MA1633>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: MA620 /3/



AEROSPACE STANDARD

HOSE ASSEMBLY, CONVULUTED, POLYTETRAFLUOROETHYLENE, METALLIC REINFORCED CONDUCTIVE, FLARELESS, STRAIGHT TO STRAIGHT

MA1633
SHEET 1 OF 5

Documents

Copyright 2015 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Fax: 724-776-0790

Tel: +1 724-776-4970 (outside USA)
Email: CustomerService@sae.org

SAE WEB ADDRESS: <http://www.sae.org>

TABLE 1 - ASSEMBLY DIMENSIONS

HOSE ASSY NO. AND SIZE CODE	HOSE ASSEMBLY SIZE DN	THREAD T PER MA1370 4g - 6g	A MAX	B GAGE BASIC	C /10/ MIN	E /11/ MAX WITHOUT SLEEVING	F HEX (REF)
MA1633E	06	MJ12x1.25	28.2	7.5	3.3	14.0	14
MA1633G	10	MJ14x1.5	33.8	9.5	6.5	17.3	17
MA1633H	12	MJ18x1.5	38.6	13.5	8.8	21.8	22
MA1633J	16	MJ22x1.5	43.4	17.5	10.9	24.1	27
MA1633K	20	MJ27x1.5	48.0	21.5	16.1	32.5	32
MA1633M	25	MJ33x1.5	50.8	26.6	21.2	37.3	41
MA1633N	32	MJ42x2	64.3	33.7	27.5	43.2	46
MA1633P	40	MJ50x2	68.3	41.7	33.3	50.8	60

TABLE 2 - ASSEMBLY LENGTH TOLERANCE

HOSE ASSEMBLY LENGTH	TOLERANCE
UNDER 457 mm	±3 mm
457 TO 914 mm EXCLUSIVE	±7 mm
914 TO 1270 mm EXCLUSIVE	±13 mm
1270 mm AND OVER	±1%

TABLE 3 - HOSE OR COVER OUTSIDE DIAMETER

HOSE OR COVER CODE	HOSE OR TYPE OF PROTECTIVE COVER	HOSE SIZE 06	HOSE SIZE 10	HOSE SIZE 12	HOSE SIZE 16	HOSE SIZE 20	HOSE SIZE 25	HOSE SIZE 32	HOSE SIZE 40	UPPER TEMP. LIMIT °C
NONE	HOSE ONLY PER MA620									
B REF	SPIRAL ABRASION /8/	12.8	15.6	21.0	23.7	29.0	34.5	41.4	48.0	130
H ± .8 mm	INTEGRAL FIRESLEEVE /12/	—	21.1	25.7	29.7	34.5	38.3	44.4	50.8	200
N REF	FIRESLEEVE SIL/FG (AS1072)	19.3	22.1	26.2	28.7	34.8	41.4	47.5	54.1	200
	/12/ /13/ /14/									
K ± .8 mm	INTEGRAL ABRASION /9/	12.7	16.0	21.3	23.4	28.8	34.9	40.6	47.5	145
	(BRAIDED) POLYESTER									
J ± .8 mm	INTEGRAL FIRESLEEVE /15/	17.4	20.2	25.3	27.7	33.0	38.9	—	—	200

TABLE 4 - HOSE ASSEMBLY PHYSICAL CHARACTERISTICS

HOSE SIZE DN	OPERATING PRESSURE MAX kPa	PROOF PRESSURE MIN kPa	BURST PRESSURE ROOM TEMP MIN kPa	BURST PRESSURE HIGH TEMP MIN kPa	BEND RADIUS AT INSIDE OF BEND (HOSE ONLY)
06	6900	13 800	27 600	19 300	32
10	6900	13 800	27 600	19 300	57
12	6900	13 800	27 600	19 300	73
16	6900	12 410	24 820	17 240	76
20	6900	12 410	24 820	17 240	95
25	6900	12 410	24 820	17 240	127
32	6900	12 410	24 820	17 240	159
40	5170	10 340	20 680	14 480	191



AEROSPACE STANDARD

HOSE ASSEMBLY, CONVOLUTED,
POLYTETRAFLUOROETHYLENE, METALLIC REINFORCED
CONDUCTIVE, FLARELESS, STRAIGHT TO STRAIGHT

MA1633

SHEET 1 OF 5



Documents

Document Sharing Hub