

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 reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

AS81044/13

FEDERAL SUPPLY CLASS
6145

NOTICE

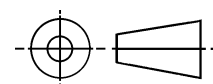
THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MIL-W-81044/13B AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MIL-W-81044/13B. ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED.

THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT.

UNDER DEPARTMENT OF DEFENSE POLICIES AND PROCEDURES, ANY QUALIFICATION REQUIREMENTS AND ASSOCIATED QUALIFIED PRODUCTS LISTS ARE MANDATORY FOR DOD CONTRACTS. ANY REQUIREMENT RELATING TO QUALIFIED PRODUCTS LISTS (QPL'S) HAS NOT BEEN ADOPTED BY SAE AND IS NOT PART OF THIS SAE TECHNICAL DOCUMENT.

SAENORM.COM : Click to view the full PDF of as81044 - 13

THIRD ANGLE PROJECTION



ISSUED 2000-09 REAFFIRMED 2007-11

PREPARED BY SAE SUBCOMMITTEE AE-8D

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

WIRE, ELECTRIC, CROSSLINKED POLYALKENE
INSULATED, SILVER-COATED HIGH STRENGTH COPPER
ALLOY, LIGHT WEIGHT, 600-VOLT, 150°C

AS81044/13
SHEET 1 OF 3

Copyright 2007 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: 724-776-4970 (outside USA)
Email: CustomerService@sae.org SAE WEB ADDRESS: <http://www.sae.org>

THE COMPLETE REQUIREMENTS FOR PROCURING THE WIRE DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE ISSUE IN EFFECT OF SPECIFICATION MIL-W-81044.

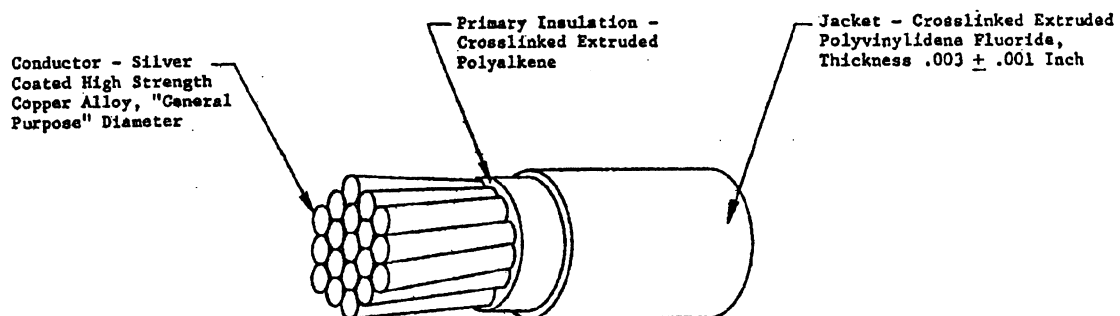


TABLE I. CONSTRUCTION DETAILS

Part No. 1/	Wire size	Stranding (Number of strands X AWG gage of strands)	Diameter of stranded conductor (inches)		Finished wire			
					Resistance at 20°C (68°F) (ohms/1000 ft) (max)	Diameter (inches)	Weight (lbs/1000 ft)	
			(min)	(max)			(nom) 2/	(max)
M81044/13-30-*	30	7 X 38	.011	.012	117.4	.027 ± .002	.67	.71
M81044/13-28-*	28	7 X 36	.014	.015	74.4	.030 ± .002	.91	.96
M81044/13-26-*	26	19 X 38	.018	.020	44.8	.034 ± .002	1.3	1.4
M81044/13-24-*	24	19 X 36	.023	.025	28.4	.040 ± .002	2.0	2.1
M81044/13-22-*	22	19 X 34	.029	.032	17.5	.047 ± .002	2.9	3.1
M81044/13-20-*	20	19 X 32	.037	.040	10.7	.055 ± .002	4.4	4.6

1/ PART NO.: The asterisks in the part number column, Tables I and II, shall be replaced by color code designators in accordance with MIL-STD-681. Examples: Size 20, white - M81044/13-20-9; white with orange stripe - M81044/13-20-93.

2/ Nominal values are for information only. Nominal values are not requirements.

TABLE II. PERFORMANCE DETAILS

Part No.	Abrasion resistance (Procedure II)				Bend testing				
	Resistance (inches of tape) (min) (initial and after immersion)	Weight support bracket	Weight (lbs)	Tension load (lbs)	Mandrel diameter (inches) (+3%)			Test load (lbs) (+3%)	
					Life cycle test and accelerated aging test 1/	Cold bend test	Wrap test	Life cycle test and accelerated aging test 1/	Cold bend test
M81044/13-30-*	18	A	.19	1.0	.375	.375	.188	.25	.50
M81044/13-28-*	20	A	.19	1.0	.375	.375	.188	.25	.50
M81044/13-26-*	22	A	.19	1.0	.50	.50	.250	.25	.50
M81044/13-24-*	18	A	.38	1.0	.50	.50	.250	.38	.50
M81044/13-22-*	20	A	.38	1.0	.75	.75	.250	.38	1.0
M81044/13-20-*	22	A	.38	1.0	.75	.75	.250	.38	1.0

1/ Also for bend tests after immersion.