

MIL-C-7078/10A(AS)

16 June 1978

SUPERSEDING

MIL-C-7078/10(AS)

5 August 1970

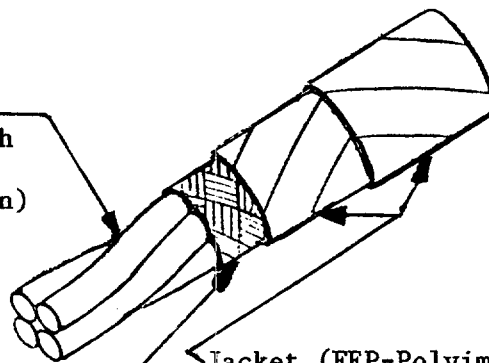
MILITARY SPECIFICATION SHEET

CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-81381/13 BASIC WIRES,
COPPER SHIELD, FEP-POLYIMIDE TAPE JACKET, 600-VOLT, 150°C

This specification sheet is approved for use by the Naval Air Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the cable described herein shall consist of this document and the issues in effect of Specification MIL-C-7078 and Specification Sheet MIL-W-81381/13.

MIL-W-81381/13 Basic Wires
(Silver-Coated High Strength
Copper Alloy Conductor,
FEP-Polyimide Tape Insulation)



FEP - Fluorinated Ethylene Propylene

Shield (Tin-Coated Copper Strands)

SHIELDED JACKETED CABLE

REQUIREMENTS:

CONSTRUCTION DETAILS: See above Figure and Table I

VOLTAGE RATING: 600 Volts (rms), at sea level

TEMPERATURE RATING: 150°C (302°F) max conductor temperature

COLD BEND: Required

WET DIELECTRIC TEST AFTER COLD BEND: 1000 Volts (rms)

THERMAL SHOCK TEST: 230 ±2°C (446 ±3.6°F) See Note 1.

HEAT RESISTANCE: Required. Test temperature, 230 ±2°C (446 ±3.6°F)

See Note 1. Supplementary wet dielectric test not required.

JACKET FLAWS (SPARK TEST): 1500 volts (rms)

DRY DIELECTRIC: 2500 volts (rms)

(Requirements continued on Page 3)

(A) denotes changes

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TABLE I

Cable part no.	Gage of shield strands (AWG)	Thickness of taped jacket (inch) (min)	Major diameter of shielded jacketed cable (inch) (max)	Weight of shielded jacketed cable (lb/1000 ft)	
				(nom) ^{1/}	(max)
M7078/10-26-1	38	.0035	.067	4.3	4.4
M7078/10-26-2			.110	7.2	7.4
M7078/10-26-3			.116	9.2	9.5
M7078/10-26-4			.125	12.0	12.4
M7078/10-26-5			.136	14.0	14.6
M7078/10-26-6			.147	16.2	16.8
M7078/10-26-7			.147	17.7	18.4
M7078/10-24-1			.072	5.2	5.4
M7078/10-24-2			.120	9.7	10.1
M7078/10-24-3			.127	11.6	12.7
M7078/10-24-4			.138	15.2	15.8
M7078/10-24-5			.150	17.9	18.6
M7078/10-24-6			.162	20.8	21.7
M7078/10-24-7			.162	23.0	23.9
M7078/10-22-1			.078	6.6	6.8
M7078/10-22-2			.132	11.5	11.9
M7079/10-22-3			.140	15.3	15.8
M7078/10-22-4			.152	20.0	20.7
M7078/10-22-5			.166	24.0	24.7
M7078/10-22-6			.180	27.9	28.8
M7078/10-22-7			.180	31.0	32.1
M7078/10-20-1	38	.0035	.086	8.7	8.9
M7078/10-20-2			.148	15.6	16.0
M7078/10-20-3			.157	21.1	21.6
M7078/10-20-4			.172	27.7	28.5
M7078/10-20-5			.187	33.3	34.3
M7078/10-20-6			.204	39.0	40.3
M7078/10-20-7			.204	43.7	45.2

^{1/} Nominal values are given for information only. Nominal values are not requirements.

REQUIREMENTS (Continued):

- (A) SHIELD STRAND ADHESION: Metallic adhesion (blocking) between the tin-coated strands of the cable shield in the initial or "as received" condition shall be cause for rejection of the cable. In quality conformance inspection, shield strand adhesion shall be a Group I characteristic, one specimen to be examined from each sample unit.

PART NUMBER: Part numbers in this specification sheet are coded as in the following example:

<u>M7078/10</u>	-	<u>24</u>	-	<u>1</u>
specification		size number		quantity of conductors
sheet number		of basic wires		(basic wires) in cable

Note 1: The temperature specified for thermal shock test and heat resistance test in this specification sheet exceeds the service temperature of tin-coated copper and is intended for testing of the cable jacket only. Discoloration or metallic adhesion of tin-coated shield strands due to these tests shall not be cause for rejection.

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MIL-C-7078/10A(AS) Cable, Electric, Aerospace Vehicle, ... etc.

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