

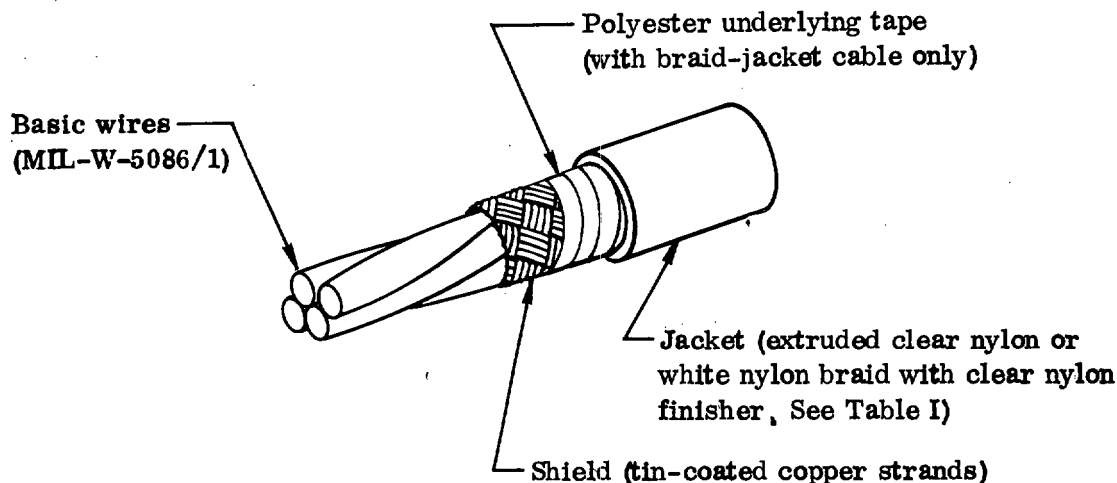
MIL-C-7078/3

12 August 1970

SUPERSEDING**MILITARY SPECIFICATION SHEET See "Supersession Data"****CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-5086/1 BASIC WIRES,
COPPER SHIELD, NYLON JACKET, 600-VOLT, 105° C**

This specification is mandatory 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-5086/1.

**SHIELDED JACKETED CABLE****REQUIREMENTS:****CONSTRUCTION DETAILS:** See above Figure and Table I**VOLTAGE RATING:** 600 Volts (rms)**TEMPERATURE RATING:** 105° C (221° F) max conductor temperature**COLD BEND:** Required for extruded-jacket cable only**WET DIELECTRIC TEST AFTER COLD BEND:** Not required**THERMAL SHOCK TEST:** Required for extruded-jacket cable only**HEAT RESISTANCE:** Required for extruded-jacket cable only. Test temperature

130 ±2° C (266 ±3.6° F). Supplementary wet dielectric test not required

JACKET FLAWS (SPARK TEST): 1000 Volts (rms)**DRY DIELECTRIC:** 1500 volts (rms)

FSC 6145

MIL-C-7078/3

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

M7078/3 - 22 - 1
 specification size number quantity of conductors
 sheet number of basic wires (basic wire) in cable

TABLE I

Cable part no.	Gage of shield strands (AWG)	Thickness of extruded jacket 1/ (in.) (min)	Major diameter of shielded jacketed cable (in.) (max)	Weight of shielded jacketed cable (lb/1000 ft)	
				(nom.) 2/	(max)
M7078/3-22-1	36 ↓ ↓ ↓ ↓ ↓ ↓	.005	.112	10.2	11.4
M7078/3-22-2		.006	.186	18.3	20.3
M7078/3-22-3		.006	.197	23.5	26.1
M7078/3-22-4		.006	.216	29.2	32.5
M7078/3-22-5		.007	.238	35.7	39.7
M7078/3-22-6		.007	.260	41.6	46.2
M7078/3-22-7		.007	.260	.260	46.0
M7078/3-20-1	36 ↓ ↓ ↓ ↓ ↓ ↓	.005	.122	12.4	13.9
M7078/3-20-2		.006	.206	23.1	25.4
M7078/3-20-3		.006	.219	30.4	33.5
M7078/3-20-4		.007	.242	38.5	42.3
M7078/3-20-5		.007	.265	47.0	51.7
M7078/3-20-6		Braid	.287	55.1	59.3
M7078/3-20-7		↓	.287	.287	61.5
M7078/3-18-1	36 ↓ ↓ ↓ ↓ ↓ ↓	.005	.132	15.9	17.1
M7078/3-18-2		.007	.228	29.7	31.7
M7078/3-18-3		.007	.242	40.4	42.7
M7078/3-18-4		.007	.266	51.4	54.3
M7078/3-18-5		Braid	.289	61.9	64.5
M7078/3-18-6		↓	.317	73.0	76.0
M7078/3-18-7		↓	.317	.317	81.8
M7078/3-16-1	36 ↓ ↓ ↓ ↓ ↓ ↓	.005	.142	18.6	20.0
M7078/3-16-2		.007	.248	34.9	37.0
M7078/3-16-3		.007	.264	48.3	51.0
M7078/3-16-4		Braid	.287	61.0	63.5
M7078/3-16-5		↓	.317	74.4	77.5
M7078/3-16-6		↓	.347	87.8	91.5
M7078/3-16-7		↓	.347	.347	98.8

MIL-C-7078/3

TABLE I (Continued)

Cable part no.	Gage of shield strands (AWG)	Thickness of extruded jacket 1/ (in.)(min)	Major diameter of shielded jacketed cable (in.)(max)	Weight of shielded jacketed cable (lb/1000 ft)	
				(nom.) 2/	(max)
M7078/3-14-1	36 ↓	.005	.162	25.4	27.1
M7078/3-14-2		.007	.288	49.0	51.6
M7078/3-14-3		Braid	.304	67.8	70.4
M7078/3-14-4		↓	.336	86.9	90.1
M7078/3-14-5		↓	.371	106.6	111.0
M7078/3-14-6		↓	.407	126.4	131.7
M7078/3-14-7		↓	.407	143.1	149.1
M7078/3-12-1	36 ↓	.006	.184	34.8	37.3
M7078/3-12-2		Braid	.325	67.2	70.2
M7078/3-12-3		↓	.347	94.9	98.9
M7078/3-12-4		↓	.384	124.7	129.2
M7078/3-12-5		↓	.425	151.7	158.0
M7078/3-12-6		↓	.467	180.6	188.1
M7078/3-12-7		↓	.467	205.6	214.2
M7078/3-10-1	36 ↓	.006	.206	48.7	51.3
M7078/3-10-2		Braid	.369	93.8	97.7
M7078/3-10-3		↓	.394	134.4	140.0
M7078/3-10-4		↓	.437	174.3	181.6
M7078/3-10-5		↓	.484	214.5	223.4
M7078/3-10-6		↓	.533	256.2	266.9
M7078/3-10-7		↓	.533	293.1	305.3

1/ When thickness of extruded jacket is specified in the above table, the cable shall be made with an extruded jacket. When braid is indicated, the cable shall be made with an underlying tape and a braid jacket.

2/ Nominal values for weight of shielded jacketed cable are given for information only. Nominal values are not requirements.

SUPERSESSON DATA: This specification sheet includes the requirements for the "A" dash number cables of MS25313. The individual cables of the specification sheet replace and supersede the "A" dash number cables of corresponding basic wire size and quantity of conductors in MS25313. Examples: Part number M7078/3-22-1 cable of this specification sheet replaces and supersedes dash number -A221 cable of MS25313; part number M7078/3-20-7 cable of the specification sheet replaces and supersedes dash number -A207 cable of MS25313.

MIL-C-7078/3

Custodians:

Navy - AS
Army - EL

Preparing activity:

Navy - AS
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Review activities:

Navy - EC, OS
Army - EL, MI
DSA - IS

User activities:

Army - AV, MU

Review/user information is current as of the date of this document. For future coordination of changes to this document, draft circulation should be based on the information in the current Federal Supply Classification Listing of DOD Standardization Documents.

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