

MIL-C-7078/16 (AS)

5 August 1970

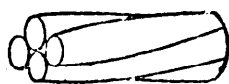
MILITARY SPECIFICATION SHEET

CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-81381/12 BASIC WIRES,  
UNSHIELDED, UNJACKETED 600-Volt, 200° C

This specification has been approved by the Naval Air Systems  
Command, Department of the Navy.

The complete requirements for procuring the cable described herein  
shall consist of this document and the issues in effect of Specifi-  
cation MIL-C-7078 and Specification Sheet MIL-W-81381/12.

Nickel-coated  
Polyimide  
Insulated  
Basic Wires  
(MIL-W-81381/12)

UNSHIELDED UNJACKETED CABLE

## REQUIREMENTS:

CONSTRUCTION DETAILS: See above Figure and Table 1

VOLTAGE RATING: 600 Volts (rms)

TEMPERATURE RATING: 200° C max. conductor temperature

COLD BEND: Not applicable

THERMAL SHOCK TEST: Not Applicable

HEAT RESISTANCE: Not applicable

JACKET FLAWS (SPARK TEST): Not applicable

DRY DIELECTRIC: 2500 Volts (rms)

RESISTANCE: The increase in resistance of the cabled basic  
wires due to lay of the cable shall not be greater than  
3% of the maximum value specified for that wire by the  
basic wire specification.

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

M7078/16

-

22

-

1

specification  
sheet number

size number  
of basic wires

quantity of conductors  
(basic wires) in cable

FSC 6145

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TABLE 1

Cable part no.	diameter of cable (in.)(max.)	Weight of cable (lb./1000 ft.)	
		(nom.) $\frac{1}{1}$	(Max.)
M7078/16 -24-2	.092	4.2	4.6
M7078/16 -24-3	.099	6.3	6.9
M7078/16 -24-4	.109	8.4	9.2
M7078/16 -24-5	.121	10.5	11.5
$\frac{2}{1}$ M7078/16 -24-6	.133	12.6	13.8
M7078/16 -24-7	.133	14.7	16.1
M7078/16 -22-2	.106	6.2	6.7
M7078/16 -22-3	.114	9.3	10.0
M7078/16 -22-4	.126	12.4	13.4
M7078/16 -22-5	.140	15.5	16.7
$\frac{2}{1}$ M7078/16 -22-6	.154	18.6	20.1
M7078/16 -22-7	.154	21.7	23.4
M7078/16 -20-2	.122	9.4	10.0
M7078/16 -20-3	.131	14.0	15.0
M7078/16 -20-4	.146	18.7	20.0
M7078/16 -20-5	.161	23.4	25.0
$\frac{2}{1}$ M7078/16 -20-6	.178	28.2	30.0
M7078/16 -20-7	.178	32.8	35.0
M7078/16 -18-2	.142	14.0	14.8
M7078/16 -18-3	.153	21.0	22.2
M7078/16 -18-4	.170	28.0	29.5
M7078/16 -18-5	.188	35.0	37.0
M7078/16 -18-6	.208	42.0	44.4
M7078/16 -18-7	.208	49.0	51.8
M7078/16 -16-2	.154	17.5	18.5
M7078/16 -16-3	.166	26.2	27.7
M7078/16 -16-4	.184	35.0	37.0
M7078/16 -16-5	.204	43.7	46.3
M7078/16 -16-6	.226	52.5	55.5
M7078/16 -16-7	.226	61.2	64.7

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TABLE 1 (Continued)

Cable part no.	diameter of cable (in.)(max.)	Weight of cable (lb./1000 ft.)	
		(nom.) <u>1/</u>	(Max.)
M7078/16 -14-2	.182	26.9	28.3
M7078/16 -14-3	.196	40.3	42.5
M7078/16 -14-4	.218	53.7	56.7
M7078/16 -14-5	.242	67.2	70.8
<u>2/</u> M7078/16 -14-6	.268	80.6	84.9
M7078/16 -14-7	.268	94.3	99.1
M7078/16 -12-2	.222	41.4	42.8
M7078/16 -12-3	.239	62.1	64.2
M7078/16 -12-4	.267	82.8	85.7
M7078/16 -12-5	.296	104.0	107.0
<u>2/</u> M7078/16 -12-6	.328	124.0	129.0
M7078/16 -12-7	.328	145.0	150.0
M7078/16 -10-2	.268	64.6	66.9
M7078/16 -10-3	.289	97.0	100.0
M7078/16 -10-4	.322	129.0	134.0
M7078/16 -10-5	.358	162.0	167.0
<u>2/</u> M7078/16 -10-6	.397	194.0	200.0
M7078/16 -10-7	.397	226.0	234.0

1/ Nominal values for weight of cable are given for information only. Nominal values are not requirements.

2/ Six-conductor cables to this specification sheet will not be procured or stocked by the Department of Defense. Seven-conductor cables will be used in lieu of six-conductor constructions.

Preparing activity:  
Navy - AS

(Project 6145-N161)