

MIL-C-7078/27 (AS)
6 April 1972

MILITARY SPECIFICATION SHEET

CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-81381/8 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-81381/8.

Nickel-coated
Polyimide
Insulated
Basic Wires
(MIL-W-81381/8)



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 any 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:

<u>M7078/27</u>	-	<u>22</u>	-	<u>2</u>
specification sheet number		size number of basic wires		quantity of conductors (basic wires) in cable

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TABLE I

Cable part no.	Major diameter of cable (in.) (max.)	Weight of cable (lb/1000 ft)	
		(nom.) $\frac{1}{2}$	(Max.)
M7078/27-24-2	.074	3.7	4.1
M7078/27-24-3	.080	5.7	6.2
M7078/27-24-4	.089	7.5	8.3
M7078/27-24-5	.100	9.5	10.3
M7078/27-24-6	.111	11.3	12.4
M7078/27-24-7	.111	13.3	14.4
M7078/27-22-2	.088	6.0	6.4
M7078/27-22-3	.095	9.0	9.6
M7078/27-22-4	.106	12.0	12.8
M7078/27-22-5	.119	15.1	16.0
M7078/27-22-6	.132	18.1	19.2
M7078/27-22-7	.132	21.1	22.4
M7078/27-20-2	.104	9.0	9.5
M7078/27-20-3	.112	13.4	14.2
M7078/27-20-4	.126	17.9	19.0
M7078/27-20-5	.140	22.5	23.7
M7078/27-20-6	.156	27.0	28.5
M7078/27-20-7	.156	31.5	33.2
M7078/27-18-2	.124	13.6	14.2
M7078/27-18-3	.134	20.5	21.3
M7078/27-18-4	.150	27.3	28.4
M7078/27-18-5	.167	34.3	35.6
M7078/27-18-6	.186	41.2	42.7
M7078/27-18-7	.186	48.0	49.8
M7078/27-16-2	.136	17.0	17.9
M7078/27-16-3	.146	25.5	26.9
M7078/27-16-4	.164	34.0	35.8
M7078/27-16-5	.184	42.8	44.9
M7078/27-16-6	.204	51.3	53.8
M7078/27-16-7	.204	59.8	62.8

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TABLE I (Continued)

Cable part no.	Major diameter of cable (in.) (max.)	Weight of cable (lb/1000 ft)	
		(nom.) <u>1/</u>	(Max.)
M7078/27-14-2	.164	26.5	27.8
M7078/27-14-3	.177	39.7	41.7
M7078/27-14-4	.198	53.0	55.6
M7078/27-14-5	.221	66.6	69.6
M7078/27-14-6	.246	79.9	83.5
M7078/27-14-7	.246	92.8	97.4
M7078/27-12-2	.202	40.9	42.5
M7078/27-12-3	.218	61.3	63.7
M7078/27-12-4	.244	81.8	84.9
M7078/27-12-5	.273	102.7	106.1
M7078/27-12-6	.303	123.3	127.4
M7078/27-12-7	.303	143.8	148.6
M7078/27-10-2	.248	64.3	66.6
M7078/27-10-3	.267	96.5	99.8
M7078/27-10-4	.299	128.7	133.1
M7078/27-10-5	.335	161.6	166.4
M7078/27-10-6	.372	194.5	199.6
M7078/27-10-7	.372	226.3	232.9

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

Cable application: Application of this cable should be in accordance with the "Intended Use" note for the component wires in Specification Sheet MIL-W-81381/8.

Preparing activity:
Navy - AS
(Project No. 6145-N220)