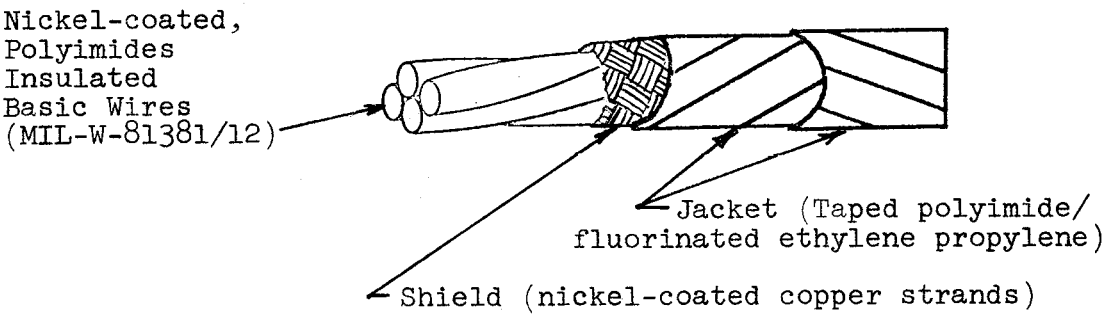
MILITARY SPECIFICATION SHEET

CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-81381/12 BASIC WIRES, COPPER SHIELD, POLYIMIDE TAPE JACKET, 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 Specification MIL-C-7078 and Specification Sheet MIL-W-81381/12.



SHIELDED JACKETED CABLE

REQUIREMENTS:
CONSTRUCTION DETAILS: See above Figure and Table 1
VOLTAGE RATING: 600 Volts (rms)
TEMPERATURE RATING: 200°C max. conductor temperature
WET DIELECTRIC TEST AFTER COLD BEND:
Required: Test voltage, 1000 volts (rms)
THERMAL SHOCK TEST: Required. Test temperature 230 ± 3°C
HEAT RESISTANCE: Required. Test temperature 230 ± 3°C
Supplementary wet dielectric test not required.
JACKET FLAWS (SPARK TEST): 1500 volts (rms)
DRY DIELECTRIC: 2500 volts (rms)
RESISTANCE: The increase in resistance of the cabled basic wires due to the 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:

M7078/12	-	24	-	1
specification sheet number		size number of basic wire		quantity of conductors (basic wires) in cable

TABLE 1

	Cable part no.	Gage of shield strands (AWG)	Thickness of taped jacket (in.)(min.)	diameter of shielded jacketed cable (in.)(max.)	Weight of shielded jacketed cable (lb./1000 ft.) (nom.) 1/	Weight of shielded jacketed cable (lb./1000 ft.) (max.)
	M7078/12 -24-1	38	.0035	.071	5.2	5.4
	M7078/12 -24-2	38	.0035	.118	8.8	9.3
	M7078/12 -24-3	38	.0035	.125	11.5	12.2
	M7078/12 -24-4	38	.0035	.135	15.0	15.9
	M7078/12 -24-5	38	.0035	.147	17.8	18.9
2/	M7078/12 -24-6	38	.0035	.159	20.6	21.9
	M7078/12 -24-7	38	.0035	.159	22.7	24.2
	M7078/12 -22-1	38	.0035	.078	6.5	6.8
	M7078/12 -22-2	38	.0035	.132	11.4	12.0
	M7078/12 -22-3	38	.0035	.140	15.1	16.0
	M7078/12 -22-4	38	.0035	.152	19.9	21.0
	M7078/12 -22-5	38	.0035	.166	23.7	25.1
2/	M7078/12 -22-6	38	.0035	.180	27.5	29.4
	M7078/12 -22-7	38	.0035	.180	30.6	32.7
	M7078/12 -20-1	38	.0035	.086	8.6	9.0
	M7078/12 -20-2	38	.0035	.148	15.4	16.2
	M7078/12 -20-3	38	.0035	.157	20.7	21.9
	M7078/12 -20-4	38	.0035	.172	27.3	28.9
	M7078/12 -20-5	38	.0035	.187	32.9	34.7
2/	M7078/12 -20-6	38	.0035	.204	38.6	40.8
	M7078/12 -20-7	38	.0035	.204	43.2	45.8
	M7078/12 -18-1	38	.0035	.096	11.4	11.9
	M7078/12 -18-2	38	.0035	.168	20.9	21.9
	M7078/12 -18-3	38	.0035	.179	28.8	30.1
	M7078/12 -18-4	38	.0035	.196	38.0	39.8
	M7078/12 -18-5	38	.0035	.214	46.0	48.2
2/	M7078/12 -18-6	38	.0035	.234	54.1	56.8
	M7078/12 -18-7	38	.0035	.234	61.1	64.2

TABLE 1 (CONTINUED)

	Cable part no.	Gage of shield strands (AWG)	Thickness of taped jacket (in.)(min.)	diameter of shielded jacketed cable (in.)(max.)	Weight of shielded jacketed cable (lb./1000 ft.) (nom.) 1/	Weight of shielded jacketed cable (lb./1000 ft.) (max.)
	M7078/12 -16-1	38	.0035	.102	13.5	14.1
	M7078/12 -16-2	38	.0035	.080	25.0	26.3
	M7078/12 -16-3	38	.0035	.192	34.7	36.4
	M7078/12 -16-4	38	.0035	.210	45.9	48.2
	M7078/12 -16-5	38	.0035	.230	55.7	58.6
2/	M7078/12 -16-6	38	.0035	.252	65.8	69.2
	M7078/12 -16-7	38	.0035	.252	74.5	78.4
	M7078/12 -14-1	36	.0035	.120	20.3	21.2
	M7078/12 -14-2	36	.0035	.212	37.7	39.4
	M7078/12 -14-3	36	.0035	.226	52.5	55.0
	M7078/12 -14-4	36	.0035	.248	69.4	72.7
	M7078/12 -14-5	36	.0035	.272	84.4	88.6
2/	M7078/12 -14-6	36	.0035	.302	101.0	106.0
	M7078/12 -14-7	36	.0035	.302	114.0	120.0
	M7078/12 -12-1	36	.0035	.140	28.8	29.8
	M7078/12 -12-2	36	.0035	.252	54.4	56.3
	M7078/12 -12-3	36	.0035	.273	76.8	79.4
	M7078/12 -12-4	36	.007	.305	103.0	106.0
	M7078/12 -12-5	36	.007	.334	126.0	130.0
2/	M7078/12 -12-6	36	.007	.366	149.0	154.0
	M7078/12 -12-7	36	.007	.366	169.0	175.0
	M7078/12 -10-1	36	.0035	.163	42.2	43.5
	M7078/12 -10-2	36	.0035	.298	80.6	83.6
	M7078/12 -10-3	36	.0035	.319	116.0	120.0
	M7078/12 -10-4	36	.007	.360	156.0	159.0
	M7078/12 -10-5	36	.007	.396	192.0	195.0
2/	M7078/12 -10-6	36	.007	.435	228.0	231.0
	M7078/12 -10-7	36	.007	.435	261.0	265.0

1/ Nominal values for weight of shielded jacketed 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-N157)

SPECIFICATION ANALYSIS SHEET

Form Approved
Budget Bureau No. 119-R004

INSTRUCTIONS

This sheet is to be filled out by personnel either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity *(as indicated on reverse hereof)*.

SPECIFICATION
MIL-C-7078/12(AS) CABLE, ELECTRIC , AEROSPACE VEHICLE, MIL-W-81381/12 BASIC WIRES ~~COPPER, SHIELD, POLYIMIDE TAPE JACKET, 600 VOLT 200°C~~

ORGANIZATION *(Of submitter)* | CITY AND STATE

CONTRACT NO. | QUANTITY OF ITEMS PROCURED | DOLLAR AMOUNT
$

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES.

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

☐ YES ☐ NO IF "YES", IN WHAT WAY?

4. REMARKS *(Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)*

SUBMITTED BY *(Printed or typed name and activity)* | DATE

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