

MIL-C-7078/31(AS)

8 July 1974

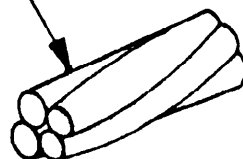
MILITARY SPECIFICATION SHEET

CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-22759/12 BASIC WIRES,
UNSHIELDED, UNJACKETED, 600-VOLT, 260°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-22759/12.

MIL-W-22759/12 Basic Wires
(Nickel-Coated Copper Conductor,
Extruded TFE Insulation)



TFE - Polytetrafluoroethylene

UNSHIELDED UNJACKETED CABLE

REQUIREMENTS:

CONSTRUCTION DETAILS: See above Figure and Table I

VOLTAGE RATING: 600 Volts (rms) at sea level

TEMPERATURE RATING: 260°C (500°F) max conductor temperature

COLD BEND: Not applicable

THERMAL SHOCK TEST: Not applicable

HEAT RESISTANCE: Not applicable

DIELECTRIC FLAWS (SPARK TEST): Not required

DRY DIELECTRIC: 2000 Volts (rms)

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

<u>M7078/31</u>	-	<u>22</u>	-	<u>2</u>
specification		size number		quantity of conductors
sheet number		of basic wires		(basic wires) in cable

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TABLE I

Cable part no.	Major diameter of finished cable (inch)		Weight of finished cable (lb/1000 ft)	
	(nom) <u>1</u> /	(max)	(nom) <u>1</u> /	(max)
M7078/31-28-2	.066	.070	2.6	2.8
M7078/31-28-3	.071	.075	3.8	4.1
M7078/31-28-4	.080	.084	5.1	5.5
M7078/31-28-5	.089	.095	6.4	6.9
M7078/31-28-6	.099	.105	7.7	8.3
M7078/31-28-7	.099	.105	8.9	9.7
M7078/31-26-2	.076	.080	3.7	3.9
M7078/31-26-3	.082	.086	5.5	5.9
M7078/31-26-4	.092	.096	7.3	7.8
M7078/31-26-5	.103	.108	9.2	9.8
M7078/31-26-6	.114	.120	11.0	11.7
M7078/31-26-7	.114	.120	12.8	13.7
M7078/31-24-2	.086	.090	5.1	5.3
M7078/31-24-3	.092	.097	7.6	8.0
M7078/31-24-4	.104	.109	10.1	10.6
M7078/31-24-5	.116	.122	12.6	13.3
M7078/31-24-6	.129	.135	15.1	15.9
M7078/31-24-7	.129	.135	17.7	18.6
M7078/31-22-2	.098	.102	7.4	7.7
M7078/31-22-3	.105	.110	11.0	11.5
M7078/31-22-4	.118	.123	14.7	15.3
M7078/31-22-5	.132	.138	18.4	19.2
M7078/31-22-6	.147	.153	22.1	23.0
M7078/31-22-7	.147	.153	25.7	26.8
M7078/31-20-2	.116	.120	10.8	11.2
M7078/31-20-3	.125	.129	16.2	16.8
M7078/31-20-4	.140	.145	21.6	22.4
M7078/31-20-5	.157	.162	27.0	28.0
M7078/31-20-6	.174	.180	32.5	33.6
M7078/31-20-7	.174	.180	37.9	39.2

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TABLE I (Continued)

Cable part no.	Major diameter of finished cable (inch)		Weight of finished cable (lb/1000 ft)	
	(nom) <u>1/</u>	(max)	(nom) <u>1/</u>	(max)
M7078/31-18-2	.136	.140	16.4	16.8
M7078/31-18-3	.146	.151	24.5	25.2
M7078/31-18-4	.164	.169	32.7	33.5
M7078/31-18-5	.184	.189	40.9	41.9
M7078/31-18-6	.204	.210	49.1	50.3
M7078/31-18-7	.204	.210	57.3	58.7
M7078/31-16-2	.150	.154	20.2	20.7
M7078/31-16-3	.161	.166	30.3	31.0
M7078/31-16-4	.181	.186	40.4	41.4
M7078/31-16-5	.203	.208	50.5	51.7
M7078/31-16-6	.225	.231	60.6	62.1
M7078/31-16-7	.225	.231	70.7	72.4

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

Preparing activity:

Navy - AS

(Project No. 6145-N246)

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No. 22-R255
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. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.		
SPECIFICATION <div style="text-align: center; margin: 10px 0;">MIL-C-7078/31(AS)</div> <div style="margin: 10px 0;">CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-22759/12 BASIC WIRES, UNSHIELDED, UNJACKETED, 600-VOLT, 260°C</div>		
ORGANIZATION		
CITY AND STATE	CONTRACT NUMBER	
MATERIAL PROCURED UNDER A <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> 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? <input type="checkbox"/> YES <input type="checkbox"/> 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 - Optional)		DATE

DD FORM 1426
1 JAN 64

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.