MILITARY STANDARD

ELECTRONIC EQUIPMENT PARTS
SELECTED STANDARDS
WIRE AND CABLE

TO ALL HOLDERS OF MIL-STD-242J(NAVY), PART 10:

1. THE FOLLOWING PAGES OF MIL-STD-242J(NAVY), PART 10 HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
iii/iv	30 APRIL 1987	iii/vi	30 APRIL 1987
1	30 APRIL 1987	1	23 JUNE 1986
2	30 APRIL 1987	2	23 JUNE 1986
110.1	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986
110.2	30 APRIL 1987	110.2	23 JUNE 1986
110.7	30 APRIL 1987	110.7	23 JUNE 1986
110.8	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986
110.9	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986
110.10	30 APRIL 1987	110.10	23 JUNE 1986
110.11	(REPRINTED WITHOUT CHANGE)		3 MAR 1987
110.12	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986
110.13	30 APRIL 1987	110.13	23 JUNE 1986
110.14	(REPRINTED WITHOUT CHANGE)		3 MAR 1987
110.21	30 APRIL 1987	110.21	23 JUNE 1986
110.22	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986
210.1	30 APRIL 1987	210.1	23 JUNE 1986
210.2	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986
310.1	30 APRIL 1987	310.1	23 JUNE 1986
310.2	(REPRINTED WITHOUT CHANGE)		23 JUNE 1986

2. THE FOLLOWING PAGES OF MIL-STD-242J(NAVY), PART 10 HAS BEEN DELETED WITH NO SUPERSEDING PAGES, DUE TO THE CANCELLATION OF CERTAIN MIL-C-915 SLASH SHEETS:

PAGE NUMBER	DATE	SPECIFICATION NUMBER
210.5	30 JUNE 1986	MIL-C-915/11
210.6	30 JUNE 1986	MIL-C-915/14
210.7	30 JUNE 1986	MIL-C-915/15
210.8	30 JUNE 1986	MIL-C-915/17
210.10	30 JUNE 1986	MIL-C-915/24
210.11	30 JUNE 1986	MIL-C-915/25
210.12	30 JUNE 1986	MIL-C-915/28
210.13	30 JUNE 1986	MIL-C-915/29
210.14	30 JUNE 1986	MIL-C-915/30
210.15	30 JUNE 1986	MIL-C-915/31
210.16	30 JUNE 1986	MIL-C-915/32
210.17	30 JUNE 1986	MIL-C-915/34
210.18	30 JUNE 1986	MIL-C-915/35

AMSC N/A FSC 59GP

MILITARY STANDARD

ELECTRONIC EQUIPMENT PARTS
SELECTED STANDARDS
WIRE AND CABLE

2. THE FOLLOWING PAGES OF MIL-STD-242J(NAVY), PART 10 HAS BEEN DELETED WITH NO SUPERSEDING PAGES, DUE TO THE CANCELLATION OF CERTAIN MIL-C-915 SLASH SHEETS (CONT):

PAGE NUMBER	DATE	SPECIFICATION NUMBER
210.19	23 JUNE 1986	MIL-C-915/37
210.20	23 JUNE 1986	MIL-C-915/38
210.21	23 JUNE 1986	MIL-C-915/39
210.22	23 JUNE 1986	MIL-C-915/40
210.23	23 JUNE 1986	MIL-C-915/41
210.24	23 JUNE 1986	MIL-C-915/42
210.25	23 JUNE 1986	MIL-C-915/43
210.26	23 JUNE 1986	MIL-C-915/44
210.27	23 JUNE 1986	MIL-C-915/45
210.28	23 JUNE 1986	MIL-C-915/46
210.31	23 JUNE 1986	MIL-C-915/49
210.32	23 JUNE 1986	MIL-C-915/50
210.33	23 JUNE 1986	MIL-C-915/51
210.34	23 JUNE 1986	MIL-C-915/52
210.35	23 JUNE 1986	MIL-C-915/53
210.36	23 JUNE 1986	MIL-C-915/54
210.37	23 JUNE 1986	MIL-C-915/55
210.38	23 JUNE 1986	MIL-C-915/56
210.39	23 JUNE 1986	MIL-C-915/57
210.41	23 JUNE 1986	MIL-C-915/59
210.42	23 JUNE 1986	MIL-C-915/60
210.43	23 JUNE 1986	MIL-C-915/63
210.44	23 JUNE 1986	MIL-C-915/64
210.45	23 JUNE 1986	MIL-C-915/65
210.48	23 JUNE 1986	MIL-C-915/68
210.49	23 JUNE 1986	MIL-C-915/69
210.50	23 JUNE 1986	MIL-C-915/70
210.51	23 JUNE 1986	MIL-C-915/71
210.52	23 JUNE 1986	MIL-C-915/72
210.53	23 JUNE 1986	MIL-C-915/75
210.54	23 JUNE 1986	MIL-C-915/76
210.55	23 JUNE 1986	MIL-C-915/77
210.56	23 JUNE 1986	MIL-C-915/78

3. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

MILITARY STANDARD

ELECTRONIC EQUIPMENT PARTS
SELECTED STANDARDS
WIRE AND CABLE

4. HOLDERS OF MIL-STD-242J(NAVY), PART 10, WILL VERIFY THAT PAGE CHANGES AND ADDITIONS INDICATED ABOVE HAVE BEEN ENTERED. THIS NOTICE PAGE WILL BE RETAINED AS A CHECK SHEET. THIS ISSUANCE, TOGETHER WITH APPENDED PAGES, IS A SEPERATE PUBLICATION. EACH NOTICE IS TO BE RETAINED BY STOCKING POINTS UNTIL THE MILITARY STANDARD IS COMPLETELY REVISED OR CANCELLED.

Review activities:
NAVY-AS, OS, SH
DESC-EP

User activity:
NAVY-MC

Preparing activity:
NAVY-EC

(Project Number 59GP-N066)

NOTICE 1

FOREWARD

This Military Standard Part provides equipment designers and manufacturers with a list of wire and cable having quality levels most acceptable in the design and construction for military systems and equipments. It also will aid to control and minimize logistic support. The criteria used in selecting parts are used as follows:

1. Application Need. Parts must satisfy the widest range of design requiring reliable parts.

2. Technological Maturity. The design of the part must be final and must use proven materials and technologies. It must have been in production for a period sufficient to ensure that the design and process parameters have been identified and adequate quality controls have been developed.

3. Availability. The part must be in production by at least one manufacturer whose previous performance indicates ability to qualify to specifications of this standard. There must also be a reasonable expectation that the part will not become obsolete for at least seven years. Microcircuits are excluded from this requirement because of rapid technological changes.

4. Test or usage history. Sufficient test or usage data to predict part reliability must be available.

In the event of conflict between the technical description of standard parts in this standard and the applicable specification, the specification shall govern

Technical information included in this standard was obtained from military specifications and standards; no warranty is made of data accuracy, or that inclusion of these parts will assure equipment/systems will meet performance requirements of any contracts. The contractor is responsible for conducting necessary tests and inspections of selected parts to ensure that contract requirements are met.

Review activities:
Navy-AS, SH
DESC-EP

User activity:
Navy-MC

Preparing activities:
Navy-EC

(Project Number 59GP-N066)

SUPERSEDES PAGE iii/iv OF 23 JUNE 1986

1. SCOPE.

1.1 Purpose. The purpose of this standard is to control and minimize the variety of Wire And Cable in Navy equipment in order to facilitate effective logistic support, improve quality and reduce cost.

1.2 Scope. This standard establishes the requirements for the selection of Wire and Cable used in the design and manufacture of Navy equipment.

2. REFERENCED DOCUMENTS.

2.1 Government documents. The issues of the following documents in effect on the date of invitation for bid form a part of this standard to the extent specified herein.

SPECIFICATIONS

MILITARY

MIL-C-17	Cables, Radio Frequency General Specifications For
MIL-C-915	Cables, Electric, For Shipboard Use General Specification For
MIL-C-3432	Cables, (Power And Special Purpose) And Wire, Electrical (300 And 600 Volts) General Specification For
MIL-W-16878	Wire, Electrical, Insulated, General Specification For
MIL-W-22759	Wire Electric Fluoropolymer-Insulated Copper Or Copper Alloy, General Specification For
MIL-C-24643	Cable And Cord, Low Smoke, For Shipboard Use, General Specification For
MIL-C-28830	Cables, Radio Frequency, Coaxial, Semirigid, Corrugated Outer Conductor, General Specification For
MIL-C-28777	Cable Assembly, Electronic Test Equipment, (3 Wire, 125 And 250 Volts AC And 250 Volts AC And 28 Volts DC) Grounding Plug Connector, General Specification For
MIL-W-81822	Wire, Electrical, Solderless Wrap, Insulated And Uninsulated, General Specification For

FEDERAL

QQ-W-343	Wire, Electrical, Copper (Uninsulated)

Wire And Cable

3. Definitions.

3.1 The terms used in this standard are defined in referenced documents.

4. General Requirements.

4.1 Selection Of Devices. Wire And Cable shall be selected from types listed in this standard. The variety of types used in any Navy equipment shall be the minimum necessary to provide satisfactory performance and the contractor (hardware designer/builder) shall exercise all reasonable design choices to achieve this objective.

4.2 Criteria For Inclusion In This Standard.

(a). The device must satisfy a wide range of design requirements.

(b). At least one manufacturer is qualified to the applicable detail specification.

(c). There is reasonable assurance that the device will be available for at least seven years.

4.3 Wire And Cable Characteristics. The characteristics listed herein are for reference only and are intended as an aid in selecting devices. The applicable detail specification shall be used for all final design criteria.

4.4 Conflict Of Data. In the event of conflict between the technical description of devices in this standard and the applicable detail specification, the detail specification shall govern.

5. Wire And Cable Identification.

5.1 Wire And Cable identification is the part number or type designator as listed in this standard.

6. Notes

6.1 Subject term (key word) listing.

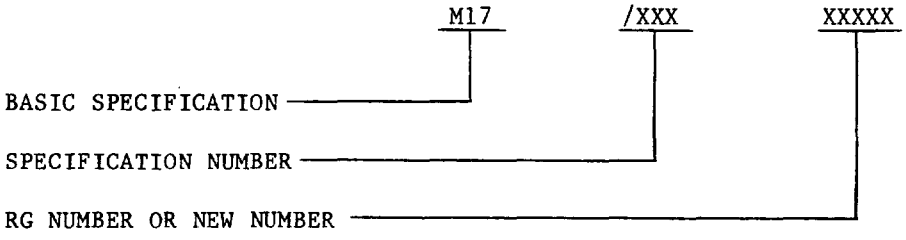
Electrical
Radio Frequency
Cables
Wire
Insulated
Uninsulated
Copper
Coaxial

CABLES, RADIO FREQUENCY, COAXIAL

MIL-C-17

SCOPE: THIS SECTION COVERS FLEXIBLE AND SEMIRIGID CABLES WITH SOLID AND SEMISOLID DIELECTRIC CORES, WITH SINGLE, DUAL AND TWIN INNER CONDUCTORS. THESE CABLES ARE PRIMARILY INTENDED FOR USE AS TRANSMISSION LINES TO CONDUCT ENERGY IN A SINGLE POWER TRANSFER CONTINUOUSLY OR INTERMITTENTLY. THESE ARE FOR LOW LOSS, STABLE OPERATION FROM RELATIVELY LOW FREQUENCIES THROUGH HIGHER FREQUENCIES ENCOUNTERED IN THE MICROWAVE AND RADAR REGIONS OF THE FREQUENCY SPECTRUM. IN TABLE I. M39012/CVRSN REPRESENTS CONVERSION TO MIL-C-39012/SLASH NUMBER - DASH NUMBER.

PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE FOLLOWING:



RADIO FREQUENCY SELECTION GUIDE

50 OHM, FLEXIBLE, COAXIAL

CABLE CODE	NATO DESIGNATOR	OUTSIDE DIMENSIONS	TEMPERATURE °C	JACKET	FREQUENCY GHz	CONDUCTORS
RG058	NWR-2	.195	-40 TO +85	PVC	1	STRANDED INNER
RG122	NWR-47	.160	-40 TO +85	PVC	1	STRANDED INNER
RG142	NWR-25	.195	-55 TO +200	FEP	12.4	SOLID INNER
RG165	NWR-10	.410	-55 TO +250	FIBERGLASS	3	SOLID INNER
RG174	NWR-45	.110	-40 TO +85	PVC	1	STRANDED INNER
RG178	NWR-34	.071	-55 TO +200	FEP	3	STRANDED INNER
RG211	NWR-13	.730	-55 TO +250	FIBERGLASS	1	SOLID INNER
RG212	NWR-50	.332	-40 TO +85	PVC	11	SOLID INNER
RG213	NWR-1	.405	-40 TO +85	PVC	1	STRANDED INNER
RG214	NWR-35	.425	-40 TO +85	PVC	11	STRANDED INNER
RG223	NWR-48	.212	-40 TO +85	PVC	12.4	SOLID INNER
M17/86-00001	NWR-36	.390	-55 TO +200	FIBERGLASS	10	STRANDED INNER
M17/87-00001		.500	-55 TO +200	FEP	10	STRANDED INNER
RG303	NWR-30	.170	-55 TO +200	FEP	3	SOLID INNER
RG316	NWR-32	.098	-55 TO +200	FEP	3	STRANDED INNER
RG393		.390	-55 TO +200	FEP	11	STRANDED INNER
RG400		.195	-55 TO +200	FEP	12.4	STRANDED INNER
M17/134-0001		.245	-40 TO +70	POLYETHYLENE	3	STRANDED INNER
M17/134-0002		.245	-40 TO +70	POLYETHYLENE	3	STRANDED INNER

CABLES, RADIO FREQUENCY, COAXIAL

MIL-C-17

50 OHM, SEMI-RIGID, COAXIAL

CABLE CODE	NATO DESIGNATOR	OUTSIDE DIMENSIONS	TEMPERATURE °C	JACKET	FREQUENCY GHz	CONDUCTORS
RG402	NWR-49	.141	-40 TO +100	COPPER	20	SOLID INNER
RG401	NWR-51	.250	-40 TO +90	COPPER	18	SOLID INNER

VARIOUS IMPEDANCES, FEXIBLE, COAXIAL

CABLE CODE	NATO DESIGNATOR	OHMS	OUTSIDE DIMENSIONS	TEMPERATURE °C	JACKET	CONDUCTOR
RG6		75	.332	-40 TO +85	PVC	DOUBLE SHIELD, COPPERWELD
RG11	NWR-18	75	.405	-40 TO +85	PVC	STRANDED CENTER
RG59	NWR-11	75	.242	-40 TO +85	PVC	COPPERWELD
RG062	NWR-12	93	.242	-40 TO +80	PVC	COPPERWELD
RG179	NWR-33	75	.100	-55 TO +200	FEP	STRANDED CENTER, COPPERWELD
RG180		95	.141	-55 TO +200	FEP	STRANDED CENTER, COPPERWELD
RG216	NWR-53	75	.425	-40 TO +85	PVC	STRANDED CENTER
RG302	NWR-31	75	.202	-55 TO +200	FEP	COPPERWELD
RG71		93	.245	-55 TO +85	POLYTHN	SOLID INNER

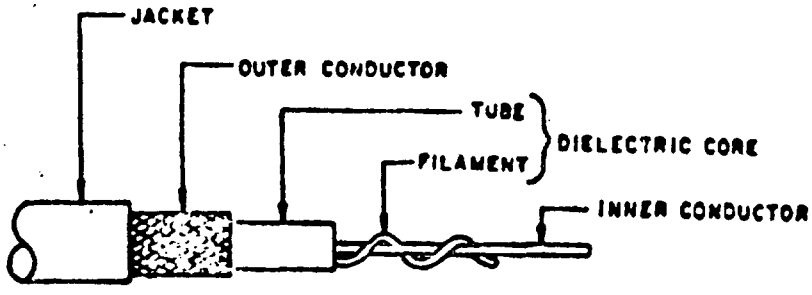
THE FOLLOWING CABLES USE PVC MATERIAL AND ARE NOT TO BE USED IN AEROSPACE APPLICATIONS

M17/2-RG6	M17/73-RG212
M17/6-RG11	M17/74-RG213
M17/28-RG058	M17/75-RG214
M17/29-RG59	M17/77-RG216
M17/30-RG062	M17/84-RG223
M17/54-RG122	M17/119-RG174

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 93 OHMS, M17/030-RG062

MIL-C-17/30

NOT FOR NAVAIR USE



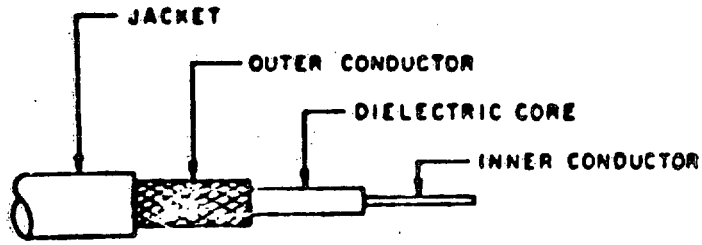
PART NUMBER: M17/030-RG062

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
030-RG062	INR CNDCT	.0253 IN	SOL COP-COV STL W	26-0012
	DIEL CORE	.146 IN	TYPE A-3: AIR-SPACED POLTHN.	28-0012 29-0012
	OUTER CNDCT	.191 IN MAX	SGL BRD OF AWG #34, BARE COP W	30-0012
	JKT	.242 IN	TYPE IIa: PVC	

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 50 OHMS, M17/054-RG122

MIL-C-17/54



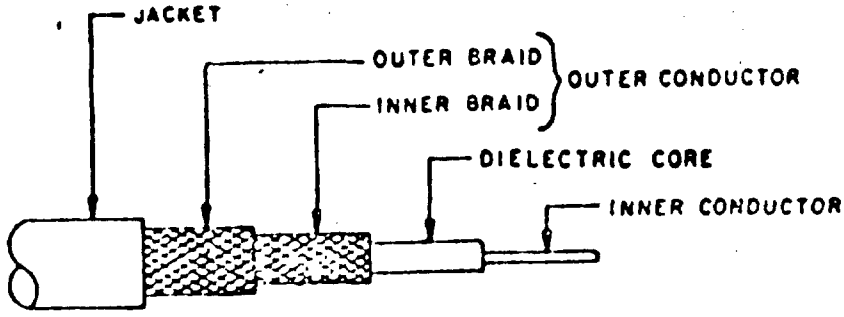
PART NUMBER: M17/54-RG122

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
54-RG122	INR CNDCT	.0308 IN	27-STRANDS OF TND COP W	55-3027
	DIEL CORE	.096 IN	TYPE A-1: SOL POLTHN	57-3027 58-3027
	OUTER CNDCT	.126 IN MAX	SGL BRD OF AWG #36, TND COP W	59-3027
	JKT	.160 IN	TYPE IIa: PVC	

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 50 OHMS, M17/060-RG142

MIL-C-17/60



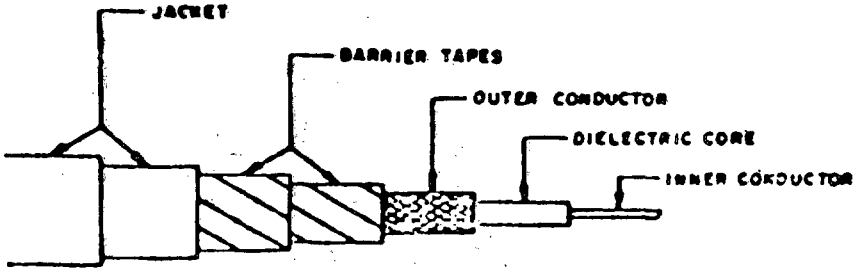
PART NUMBER: M17/060-RG142

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
060-RG142	INR CNDCT	.037 IN	SOL SIL-CTD, COP-COV, STL W	01-0503 02-0513
	DIEL CORE	.116 IN	TYPE F-1: SOL EXTD PTFE	03-0503
	OUTER CNDCT	.171 IN MAX	DBL BRD OF AWG #36, SIL-CTD COP W	05-0503 38-0503
	JKT	.195 IN	TYPE IX: FEP	55-4502 56-3028 57-4502 58-4502 59-4502

CABLES, RADIO FREQUENCY, FLEXIBLE COAXIAL, 50 OHMS, UNARMORED, M17/065-RG165

MIL-C-17/65



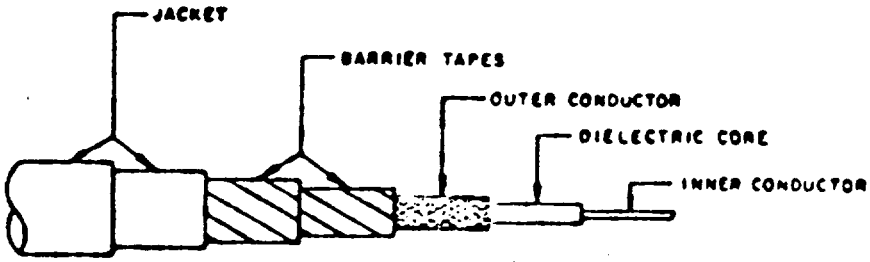
PART NUMBER: M17/065-RG165

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
065-RG165	INR CNDCT	.094 IN	7-STRANDS OF SIL-CTD COP W	01-0021 02-0041
	DIEL CORE	.285 IN	TYPE F-1: SOL EXTD PTFE	03-0018
	OUTER CNDCT	.340 IN MAX	SINGLE BRD OF AWG #34, SIL-CTD COP W	06-0002 07-0001
	BARR TAPES		TYPE FF-2: TWO WRAPS OF PTFE TAPE	08-0001 10-0001
	JKT	.410 IN	TYPE V. DBL BRD OF FIBERGLASS	11-0002

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 50 OHMS, M17/72-RG211

MIL-C-17/72



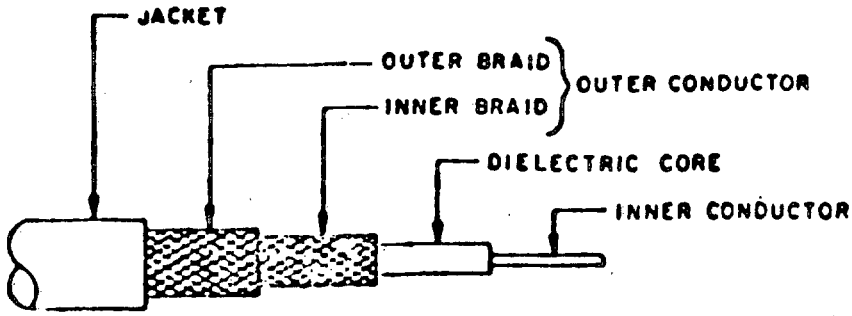
PART NUMBER: M17/72-RG211

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET
072-RG211	INR CNDCT	.192 IN	SOL BARE COP W
	DIEL CORE	.620 IN	TYPE F-1: SOL EXT PTFE
	OUTER CNDCT	.670 IN MAX	SGL BRD OF AWG #32, BARE COP W
	JKT	.730 IN	TYPE V: DBL BRD OF FIBERGLASS

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 50 OHMS, M17/73-RG212

MIL-C-17/73



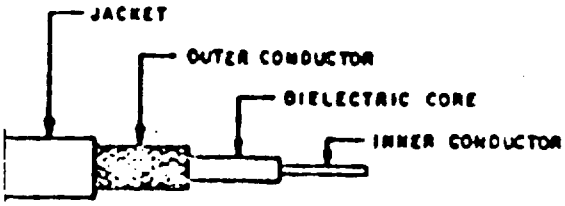
PART NUMBER: M17/73-RG212

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
073-RG212	INR CNDCT DIEL CORE OUTER CNDCT JKT	.0556 IN .185 IN .265 IN MAX .332 IN	SOL SIL-CTD COP W TYPE A-1: SOL POLTHN DBL BRD OF AWG #34, SIL-CTD COP W TYPE IIa: PVC	01-0016 02-0027 03-0013 06-0001 07-0002 08-0002 11-0001

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 50 OHMS, UNARMORED, M17/074-RG213

MIL-C-17/74



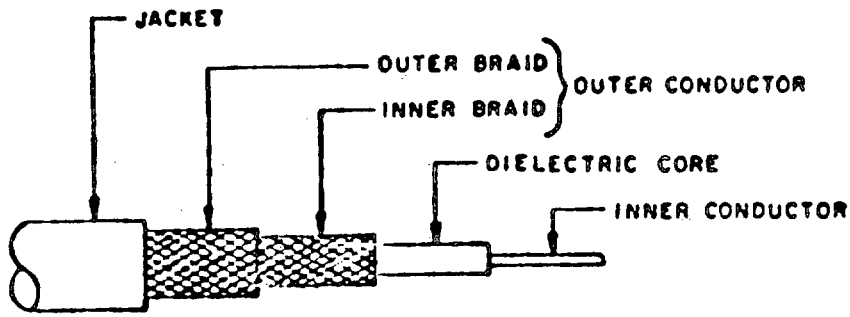
PART NUMBER: M17/74-RG213

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
074-RG213	INR CNDCT	.0888 IN	7-STRANDS OF BARE COP W	05-0004
	DIEL CORE	.285 IN	TYPE A-1: SOL POLTHN	05-0502
	OUTER CNDCT	.340 IN MAX	SGL BRD OF AWG #33 BARE COP W	06-0002 07-0001
	JKT	.405 IN	TYPE IIa: PVC	08-0001 10-0001 11-0002

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 50 OHMS, M17/75-RG214

MIL-C-17/75



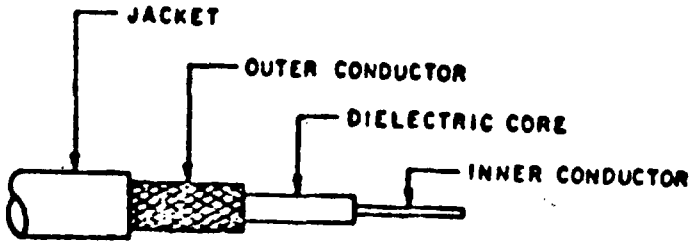
PART NUMBER: M17/75-RG214

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
075-RG214	INR CNDCT	.0888 IN	7-STRANDS OF SIL-CTD COP W	05-0005 05-0501
	DIEL CORE	.285 IN	TYPE A-1: SOL POLTHN	06-0002
	OUTER CNDCT	.360 IN MAX	DBL BRD OF AWG #34, SIL-CTD COP W	07-0001 08-0001
	JKT	.425 IN	TYPE IIa: PVC	10-0001 11-0002 36-0501

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 75 OHMS, M17/094-RG179

MIL-C-17/94



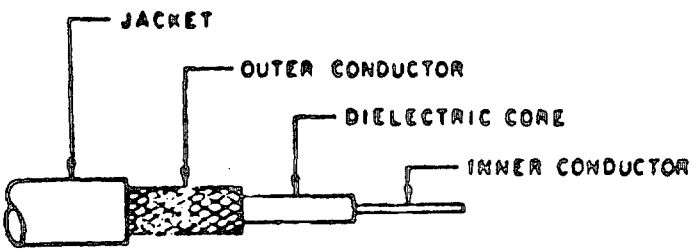
PART NUMBER: M17/94-RG179

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/CNVRS
094-RG179	INR CNDT	.012 IN	7-STRD OF SIL-CTD, ANL-	73-0002
	DIEL CORE	.063 IN	COP-COV, TYPE F-1: SOL	73-0004
	OUTER CNDCT	.084 IN MAX	EXTRUDED SGL BRD OF	74-0002
			AWG #38 SIL-CTD COP WIRE	74-0004
	JKT	.100 IN	TYPE IX: FEP	75-0002
				75-0004
				76-0002
				76-0004

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 95 OHMS, M17/095-RG180

MIL-C-17/95



PART NUMBER: M17/095-RG180

TABLE I. CABLE DESCRIPTION

M17/	CMPNT	DIA	CONSTR DET	M39012/ CVRSN
095-RG180	INR CNDCT	.012 IN	7-STRANDS OF SIL-CTD, ANL-COP-COV,STL W	26-0502 27-0502
	DIEL CORE	.102 IN	TYPE F-1: SOL EXTD PTFE	28-0502
	OUTER CNDCT	.124 IN MAX	SGL BRD OF AWG #38, SIL-CTD COP W	29-0502 30-0502
	JKT	.141 IN	TYPE IX: FEP	

CABLE, ELECTRICAL

MIL-C-915

SCOPE: THIS SECTION COVERS ELECTRICAL CABLE, AND CORD FOR SHIPBOARD APPLICATIONS. THE CLASSIFICATIONS ARE WATERTIGHT AND NON-WATERTIGHT CONSTRUCTION, FLEXING AND NON-FLEXING SERVICE FOR POWER, LIGHTING, CONTROL, COMMUNICATIONS, INSTRUMENTATION, AND ELECTRONIC APPLICATIONS.

THE FOLLOWING CABLES USE PVC MATERIAL AND ARE NOT TO BE USED IN AEROSPACE APPLICATIONS.

SPECIFICATION	CABLE TYPE
MIL-C-915/22	TSP
MIL-C-915/66	MSPW
MIL-C-915/67	MSP

CABLE, ELECTRICAL, 600 VOLTS, TYPES SHOF, DHOF, THOF, AND FHOF

MIL-C-915/6

CONSTRUCTION

FIRST - COPPER CONDUCTOR, UNCOATED, SEE TABLE 1.
SECOND - SEPARATOR.
THIRD - SYNTHETIC RUBBER INSULATION, SEE TABLE 1. NOTE: A COLORED RUBBER FILLED COTTON TAPE MAY BE USED ON SIZE 23 AND LARGER.
FOURTH - REINFORCEMENT ON TYPE SHOF, SIZES 23 AND LARGER.
FIFTH - THE REQUIRED NUMBER OF CONDUCTORS CABLED TOGETHER. SEE TABLE 1.
SIXTH - BINDER TAPE APPLIED HELICALLY WITH OVERLAP ON MULTI-CONDUCTOR CABLES.
SEVENTH - JACKET OF POLYCHLOROPRENE OR STANDARD THERMOPLASTIC ON SIZES 42 AND SMALLER OF ALL TYPES, EXCEPT THOF-14. JACKET OF POLYCHLOROPRENE ON THOF-14 AND ON SIZES 60 AND LARGER OF ALL TYPES.

TABLE 1. CABLE DETAILS AND CHARACTERISTICS

TYPE AND SIZE	CONDUCTORS NO.	CONDUCTORS SIZE NAVY STANDARD	INSULATION THICKNESS NOMINAL	OVERALL DIAMETER MIN	OVERALL DIAMETER MAX	VOLTAGE WITHSTAND MINIMUM RMS (VOLTS)	RESISTANCE PER 1,000 FT. INSULATION (MEGOHM)	RESISTANCE PER 1,000 FT. CONDUCTOR (OHMS)
SHOF-3	---	2-1/2 (65)	.031	.195	.210	2000*	300	4.18
SHOF-23	---	23 (228)	.040	.440	.460	2500**		.499
SHOF-60	---	60 (304)	.050	.570	.600		250	.187
SHOF-150	---	150 (760)	.070	.830	.870		200	.0747
SHOF-200	---	200 (988)		.940	.980			.0575
SHOF-250	---	250(1254)		1.035	1.085		150	.0453
SHOF-500	---	500 (259)	.090	1.380	1.450		100	.0225
SHOF-650	---	650 (427)	.100	1.540	1.610			.0174
SHOF-800	---	800(4033)		1.600	1.670			.0141
DHOF-3	---	2-1/2 (26)	.031	.405	.425	2000*	300	4.18
DHOF-4	---	4 (41)		.440	.460		250	2.62
DHOF-6	---	6 (65)		.490	.510		200	1.65
DHOF-9	---	9 (90)		.540	.570			1.24
DHOF-14	---	14 (140)	.040	.675	.705	2500**		.802

WIRE, ELECTRICAL, POLYTETRAFLUOROETHYLENE(PTFE) INSULATED, 200°C, 600 VOLTS, EXTRUDED INSULATION

MIL-W-16878

SCOPE: THIS SECTION COVERS UNSHIELDED WIRE FOR HOOK UP AND LEAD WIRING OF ELECTRICAL AND ELECTRONIC COMPONENTS AND EQUIPMENT, TO HAVE MINIMUM WIRE AND WEIGHT CONSISTENT WITH SERVICE REQUIREMENTS. THE TEMPERATURE RATING OF WIRE INCLUDED RANGES TO A MAXIMUM OF 260°C, WITH POTENTIAL RATING FROM 250 TO 3,000 VOLTS(RMS). THIS SINGLE CONDUCTOR WIRE IS INTENDED TO BE USED IN INTERNAL WIRING OF ELECTRICAL AND ELECTRONIC EQUIPMENT AND SWITCHBOARDS.

PART NUMBER - M16787/14BCB902

M16878	/14	B	C	B	902

MILITARY SPECIFICATION NUMBER

SPECIFICATION SHEET NUMBER

CONDUCTOR MATERIAL
- A - BARE COPPER
- B - COATED COPPER
- D - COATED HIGH STRENGTH COPPER ALLOY

CONDUCTOR SIZE

A	32	L	12
B	30	M	10
C	28	N	8
D	26	P	6
E	24	R	4
F	22	S	2
G	20	T	1
H	18	U	0
J	16	W	00
K	14	Y	000
		Z	0000

STRANDS

A	1	K	105
B	7	L	133
C	10	M	259
D	16	N	427
E	19	P	665
F	26	R	817
G	37	S	1045
H	41	T	1330
J	65	V	1672
		W	2109

INSULATION COLOR CODE
- 0 - BLACK
- 2 - RED
- 9 - WHITE

SUPERSEDES PAGE 310.1 OF 23 JUNE 1986

WIRE, ELECTRICAL, POLYTETRAFLUOROETHYLENE(PTFE) INSULATED, 200°C, 600 VOLTS, EXTRUDED INSULATION

MIL-W-16878/4

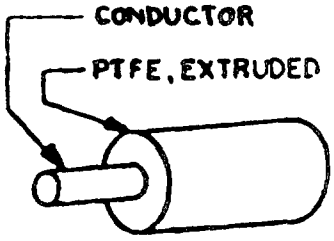


TABLE I. CONSTRUCTION DETAILS

WIRE SIZE	STRANDING	CONDUCTOR		CONDUCTOR DIAMETER (NOMINAL)	FINISHED WIRE DIAMETER(INCH)	
		MATERIAL	COATING		MIN	MAX
32	1 X 32	COPPER	SILVER	0.0089	0.025	0.033
32	1 X 32	H.S.C.A.	SILVER	0.0089	0.025	0.033
32	1 X 32	C.C. STEEL	SILVER	0.0089	0.025	0.033
32	7 X 40	COPPER	SILVER	0.010	0.026	0.034
32	7 X 40	H.S.C.A.	SILVER	0.010	0.026	0.034
30	1 X 30	COPPER	SILVER	0.0100	0.026	0.034
30	1 X 30	H.S.C.A.	SILVER	0.0100	0.026	0.034
30	1 X 30	C.C. STEEL	SILVER	0.0100	0.026	0.034
30	7 X 38	COPPER	SILVER	0.012	0.028	0.036
30	7 X 38	H.S.C.A.	SILVER	0.012	0.028	0.036
28	1 X 28	COPPER	SILVER	0.0126	0.029	0.037
28	1 X 28	H.S.C.A.	SILVER	0.0126	0.029	0.037
28	1 X 28	C.C. STEEL	SILVER	0.0126	0.029	0.037
28	7 X 36	COPPER	SILVER	0.015	0.031	0.039
28	7 X 36	H.S.C.A.	SILVER	0.015	0.031	0.039
26	1 X 26	COPPER	SILVER	0.0159	0.032	0.040
26	1 X 26	H.S.C.A.	SILVER	0.0159	0.032	0.040
26	1 X 26	C.C. STEEL	SILVER	0.0159	0.032	0.040
26	7 X 34	COPPER	SILVER	0.019	0.035	0.043
26	7 X 34	H.S.C.A.	SILVER	0.019	0.035	0.043
26	19 X 38	COPPER	SILVER	0.020	0.035	0.043
26	19 X 38	H.S.C.A.	SILVER	0.020	0.035	0.043
24	1 X 24	COPPER	SILVER	0.0201	0.036	0.044
24	1 X 24	H.S.C.A.	SILVER	0.0201	0.036	0.044
24	7 X 32	COPPER	SILVER	0.024	0.040	0.048
24	7 X 32	H.S.C.A.	SILVER	0.024	0.040	0.048
24	19 X 36	COPPER	SILVER	0.025	0.040	0.048
24	19 X 36	H.S.C.A.	SILVER	0.025	0.040	0.048
22	1 X 22	COPPER	SILVER	0.0254	0.041	0.049
22	1 X 22	H.S.C.A.	SILVER	0.0254	0.041	0.049
22	7 X 30	COPPER	SILVER	0.030	0.046	0.054
22	7 X 30	H.S.C.A.	SILVER	0.030	0.046	0.054
22	19 X 34	COPPER	SILVER	0.032	0.046	0.054
22	19 X 34	H.S.C.A.	SILVER	0.032	0.046	0.054

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions – Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE
MIL-STD-242J/Part 10	ELECTRONIC EQUIPMENT PARTS SELECTED STANDARDS WIRE AND CABLE

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR ☐ USER ☐ MANUFACTURER ☐ OTHER *(Specify)*: _____
b. ADDRESS *(Street, City, State, ZIP Code)*	

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI)* – Optional	b. WORK TELEPHONE NUMBER *(Include Area Code)* – Optional
c. MAILING ADDRESS *(Street, City, State, ZIP Code)* – Optional	8. DATE OF SUBMISSION *(YYMMDD)*

DD FORM 82 MAR 1426 PREVIOUS EDITION IS OBSOLETE.

(TO DETACH THIS FORM, CUT ALONG THIS LINE.)