



DEFENSE LOGISTICS AGENCY
WEAPONS SUPPORT
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January 6, 2026

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Drafts of: MIL-DTL-17/90, /92-/95, and /97
Project Numbers: 6145-2026-002 through 6145-2026-007

These initial drafts for these subject documents, are now available for viewing and downloading from the DLA Land and Maritime-VA Web site:

<https://landandmaritimeapps.dla.mil/programs/milspec/default.aspx>

Major changes to these documents include 5 year review; adding qualification tables for clarification, removing inactive review activities, and updating document to be in accordance to MIL-DTL-961.

Concurrence or comments are required at this Center within 45 days from the date of this letter. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, as applicable, in sufficient time to allow for consolidating the department reply. Lack of response to this draft will be construed as concurrence

If these documents are of interest to you, please provide your comments or suggested changes. The point of contact for this document is Mr. Candelaria, phone number 614-693-3113, e-mail Eric.Candelaria@dlam.mil, or may be mailed via the US Postal Service to DLA LAND AND MARITIME, ATTN: VAI (Attention: Eric Candelaria), P.O. Box 3990, Columbus, OH 43218-3990.

Sincerely,

-/Signed/-
MUHAMMAD AKBAR
Chief,
Interconnection Branch

INCH-POUND

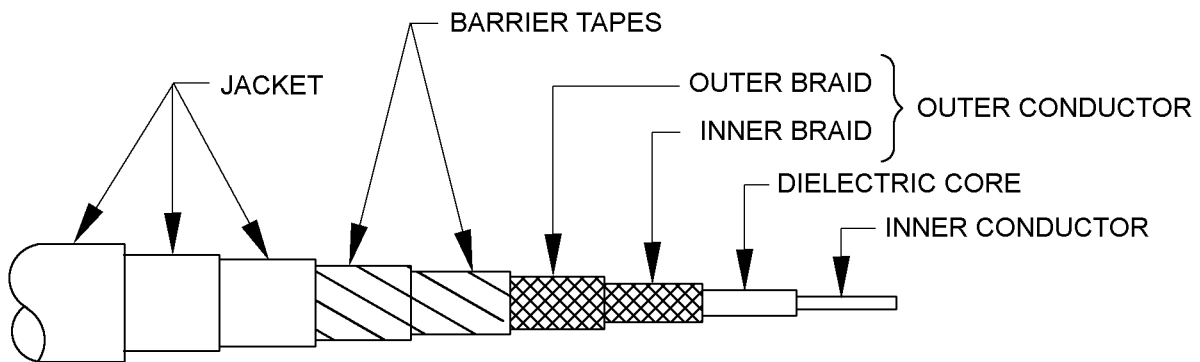
MIL-DTL-17/92E
w/AMENDMENT 1
DRAFT 2025
SUPERSEDING
MIL-DTL-17/92E
19 June 2015

MILITARY SPECIFICATION SHEET

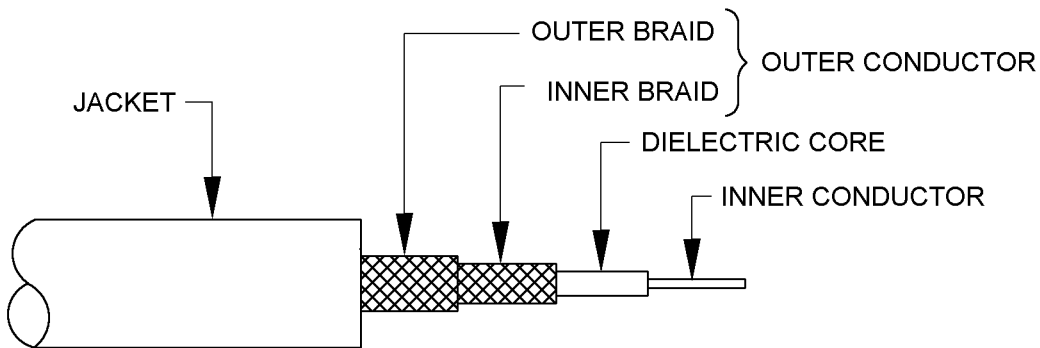
CABLE, RADIO FREQUENCY, FLEXIBLE COAXIAL, 50 OHMS, M17/92-RG115, M17/92-00001

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-17.



M17/92-RG115



M17/92-00001

FIGURE 1. Configurations.



MIL-DTL-17/92E
w/ AMENDMENT 1 DRAFT DATED 6 January 2026

TABLE I. Description.

Components	Construction details
Inner conductor	Seven strands of silver-coated, copper wire .028 inch each. Overall diameter: .084 inch $\pm$.001
Dielectric core	Type F-2: Diameter: .255 inch $\pm$.005.
Outer conductor	Double braid of AWG 34, silver-coated, copper wire. Diameter: .325 inch maximum
Inner braid	Coverage: 91.8% nominal Carriers: 24 Ends: 6 Picks/inch: 14.0% $\pm$ 10
Outer braid	Coverage: 91.9% nominal Carriers: 24 Ends: 6 Picks/inch: 15.5% $\pm$ 10
Barrier tapes	Type FF-2: Two wraps of PTFE tape, .005 inch thick each, by 1-inch wide. Each wrap of PTFE tape is to be applied with a 50% minimum overlap.
Jacket	M17/92-RG115 type V. Three braids. Diameter: .415 inch $\pm$.015. M17/92-00001 type FEP. Diameter: .344 $\pm$.010 applied directly over outer braid, barrier tapes not required.

ENGINEERING INFORMATION:

Continuous working voltage: 3,700 V rms, maximum.
Operating frequency: 12.4 GHz, maximum.
Velocity of propagation: 70 percent, nominal.
Operating temperature range: -55° to 200°C.
Inner conductor properties:
 DC resistance (maximum at 20°C): .199 ohm per 100 feet.
 Elongation: 25 percent, minimum.
 Tensile strength: Not applicable.
Engineering notes: This cable useful in high temperature applications.

REQUIREMENTS:

Dimensions, configuration, and descriptions: See figure 1 and table I.
Environmental and mechanical:
 Visual and mechanical examination: Applicable.
 Out-of-roundness: Not applicable.
 Eccentricity: 10 percent, maximum.
 Adhesion of conductors:
 Inner conductor to core: Not applicable.
 Aging stability:
 M17/92-RG115: +230°C $\pm$ 5°C.
 M17/92-00001: Not applicable:
 Stress crack resistance:
 M17/92-RG115: Not applicable.
 M17/92-00001: +230°C $\pm$ 5°C for 96 hours, mandrel size 7-1/2 times the jacket diameter.
 Outer conductor integrity: Not applicable.
 Cold bend: -35°C $\pm$ 2°C.

Dimensional stability: +200°C $\pm$ 5°C.

MIL-DTL-17/92E
w/ AMENDMENT 1 DRAFT DATED 6 January 2026

Inner conductor from core:
M17/92-RG115: Not applicable.
M17/92-00001: Not applicable.
Inner conductor from jacket:
M17/92-RG115: Not applicable.
M17/92-00001: 0.312 inch, maximum.
Contamination: Not applicable.
Bendability: Not applicable.
Flammability: Applicable.
Weight: 18.5 pounds per 100 feet, maximum.

Electrical:

Continuity: Applicable.
Spark test:
M17/92-RG115: Not applicable.
M17/92-00001: 2,000 V rms +25 percent, -0 percent.
Voltage withstanding: 10,000 V rms, minimum.
Insulation resistance: Not applicable.
Corona extinction voltage: 5,000 V rms, minimum.
Characteristic impedance: 50 ohms, ± 2 ohms.
Attenuation: See figure 2.
Structural return loss: See figure 3.
Capacitance: 32 pF per foot, maximum.
Capacitance stability: Not applicable.
Capacitance unbalance: Not applicable.
Transmission unbalance: Not applicable.
Phase stability: Not applicable.
Mechanically induced noise voltage: Not applicable.
Time delay: Not applicable.

Part or Identifying Number (PIN):

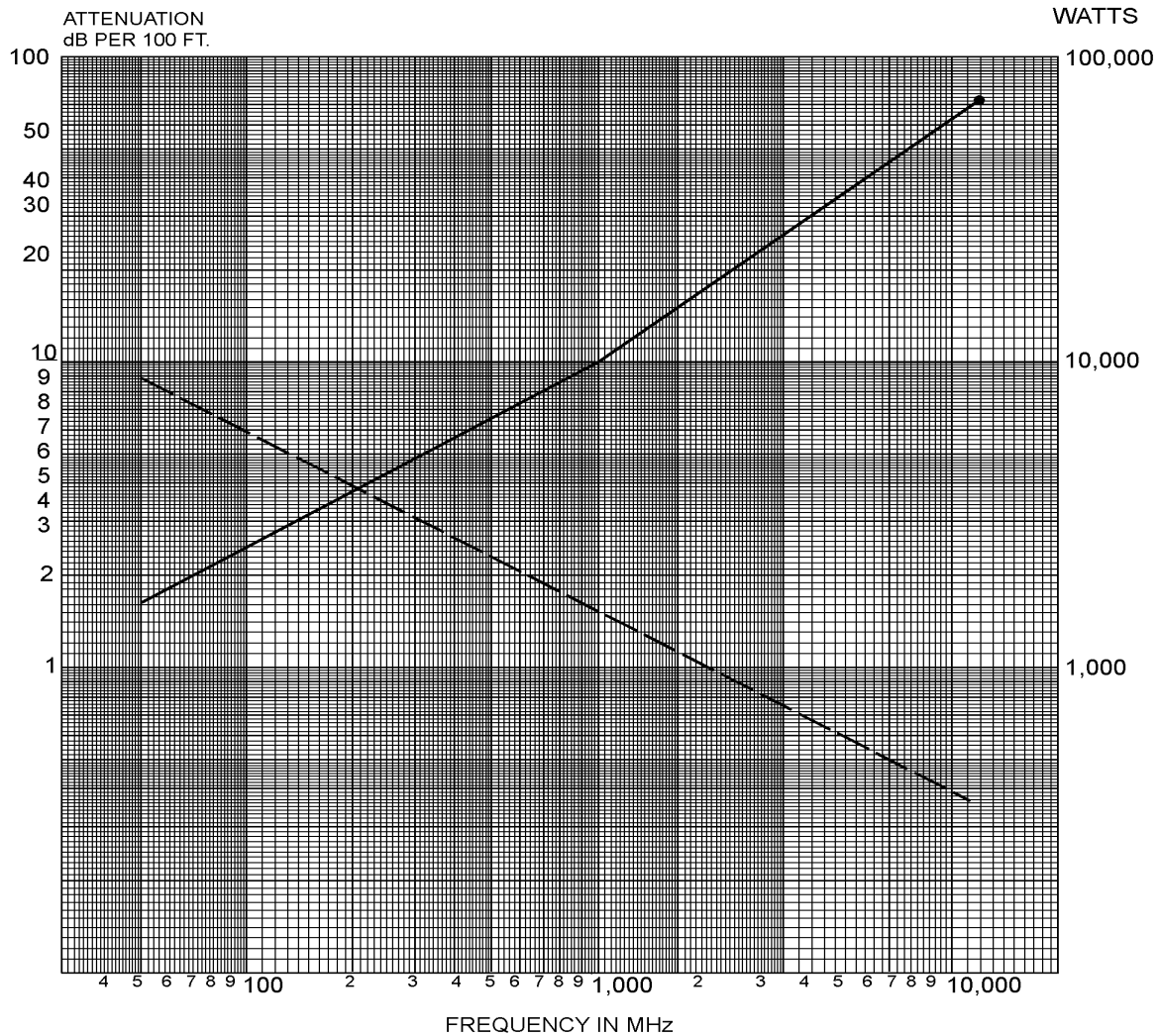
M17/92-RG115,
M17/92-00001.

Marking: Applicable

Marking Durability: 125 cycles (250 strokes), 1 pound

Workmanship: Applicable

Qualification: Shall consist of the inspections specified in table II.



MAXIMUM POWER _ _ _ AT 25°C SEA LEVEL

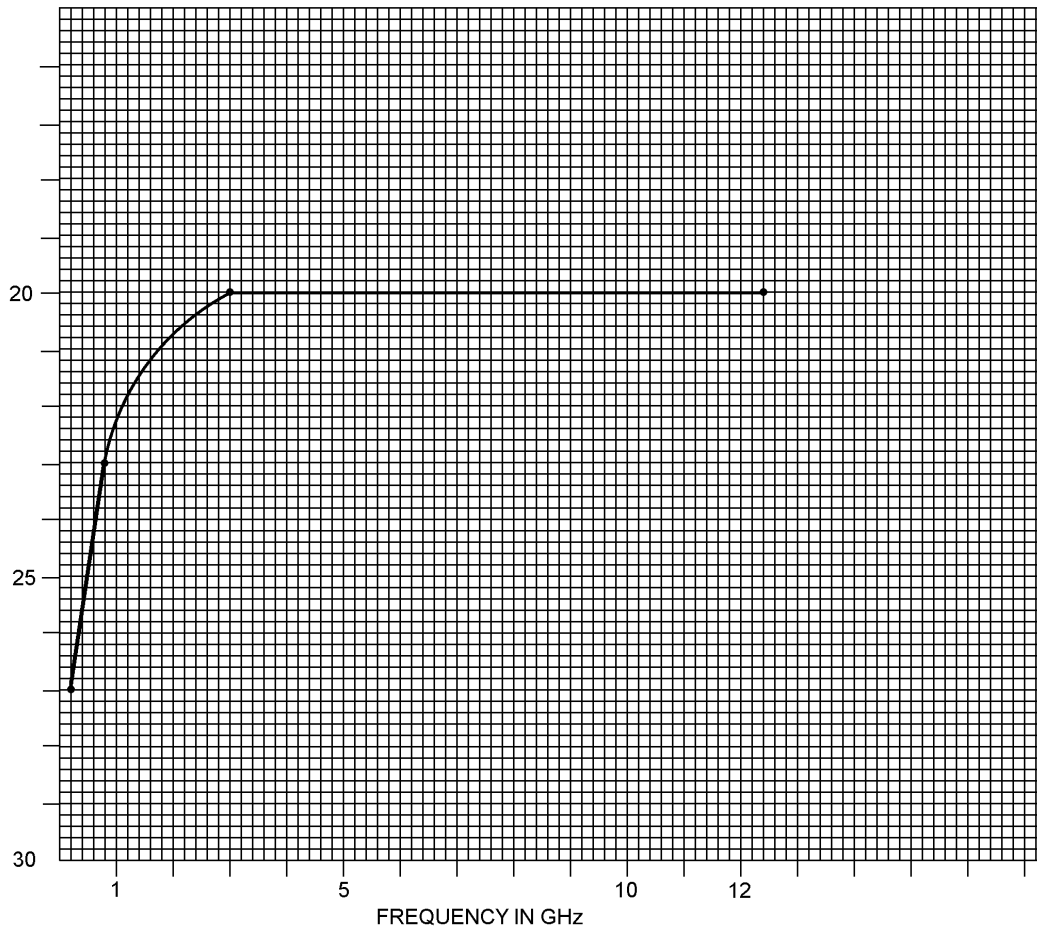
MAXIMUM ATTENUATION _____

Tabulated values are for reference only. The values on the graph represent the requirements for attenuation. The data regarding power rating are for information only.

FREQUENCY MHz	ATTENUATION dB	POWER WATTS
50	1.6	9000
100	2.5	6000
1000	9.8	1600
10000	58	450
12400	70	400

FIGURE 2. Power rating and attenuation.

RETURN LOSS dB



SWR	Reflection coefficient	Return loss dB	SWR	Reflection coefficient	Return loss dB
17.3910	.8913	1	1.3767	.1585	16
8.7242	.7943	2	1.3290	.1413	17
5.8480	.7079	3	1.2880	.1259	18
4.4194	.6310	4	1.2528	.1122	19
3.5698	.5623	5	1.2222	.1000	20
3.0095	.5012	6	1.1957	.0891	21
2.6146	.4467	7	1.1726	.0794	22
2.3229	.3981	8	1.1524	.0708	23
2.0999	.3548	9	1.1347	.0631	24
1.9250	.3162	10	1.1192	.0562	25
1.7849	.2818	11	1.1055	.0501	26
1.6709	.2512	12	1.0935	.0447	27
1.5769	.2239	13	1.0829	.0398	28
1.4985	.1995	14	1.0736	.0355	29
1.4326	.1778	15	1.0653	.0316	30

Frequency MHz	Min SRL dB
50	26.9
400	25.8
1000	23.0
3000	20
10000	20
12400	20

Tabulated values are for reference only. The values on the graph represent the requirements.

FIGURE 3. Structural return loss.

TABLE II. Qualification and Group A, B, and C Table.

Group	Qualification inspection	Requirement paragraph	Test paragraph	Qual- # of Specimens	Conf - # of Specimens	Conformance inspection
I	In-process inspection		4.5	Entire sample		
	Continuity	3.7.1	4.8.2	Entire sample		
	Spark test	3.7.2	4.8.3	Entire sample		
	Voltage withstanding	3.7.3	4.8.4	Entire sample		
	Insulation resistance	N/A				
	Visual and mechanical inspection	3.6	4.8.1	Entire sample	Per Table VIII	A
	Diameter measurements	3.6.1	4.8.1.1	Entire sample	Per Table VIII	A
	Out-of-roundness	N/A				
	Eccentricity of inner conductor	3.6.3	4.8.1.3	2	Per Table VIII	A
	Adhesion of conductors	3.6.4	4.8.1.4	4	Per Table VIII	A
	Marking	3.8	4.8.1	Entire sample	Per Table VIII	A
	Marking Durability	3.8.2	4.8.39	3	Per Table VIII	A
	Workmanship	3.10	4.8.1	Entire sample	Per Table VIII	A
II	Corona extinction voltage	3.7.5	4.8.6	1	Per Table VIII	B
	Characteristic impedance	3.7.6	4.8.7	1	Per Table VIII	A
	RF transmission loss (attenuation)	3.7.7	4.8.8	2	Per Table VIII	A
	Standing wave ratio (return loss)	3.7.8	4.8.9	2	Per Table VIII	A
	Capacitance	3.7.9	4.8.10	1	Per Table VIII	B
	Capacitance stability	N/A				
	Capacitance unbalance	N/A				
	Transmission unbalance	N/A				
	Inductance	N/A				
	Mechanically induced noise voltage	N/A				
	Time delay	N/A				
	Aging stability	3.7.15	4.8.16	4	Per Table VIII	C

TABLE II. Qualification and Group A, B, and C Table – Continued.

Group	Qualification inspection	Requirement paragraph	Test paragraph	Qual- # of Specimens	Conf - # of Specimens	Conformance inspection
II	Stress crack resistance	3.7.16	4.8.17	4	Per Table VIII	C
	Outer conductor integrity	N/A				
	Cold bend	3.7.18	4.8.19	3	Per Table VIII	B
	Dimensional stability	3.7.19	4.8.20	1	Per Table VIII	C
	Contamination	N/A				
	Bendability	N/A				
	Flammability	3.7.22	4.8.23	1	Per Table VIII	C
	Flame propagation	N/A				
	Acid gas generation	N/A				
	Halogen content	N/A				
	Immersion	N/A				
	Smoke index	N/A				
	Toxicity index	N/A				
	Durometer hardness	N/A				
	Weathering	N/A				
	Abrasion resistance	N/A				
	Tear strength	N/A				
	Heat distortion	N/A				
	Physicals (aged)	N/A				
	Tensile strength and elongation	N/A				
	Weight	3.9	4.8.24	1	Per Table VIII	B

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. This document references MIL-DTL-17.

CONCLUDING MATERIAL

Custodians:

Army – CR
Navy – EC
Air Force – 85
DLA - CC

Preparing activity:
DLA - CC

(Project 6145-2026-003)

Review activities:

Army – AT, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, ~~99~~

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.