

INCH-POUND

MIL-PRF-39012/58F  
AMENDMENT 3  
11 January 2000  
SUPERSEDING  
AMENDMENT 2  
26 March 1999

PERFORMANCE SPECIFICATION

CONNECTORS, RECEPTACLE, ELECTRICAL, COAXIAL, RADIO FREQUENCY  
(SERIES SMA (CABLED) – SOCKET CONTACT, FLANGE MOUNTED, CLASS 2)

This amendment forms a part of MIL-PRF-39012/58F, dated 27 January 1992, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGES 3 and 4

Delete and substitute the new table I as shown below:

"TABLE I. Dash numbers, cross reference, and dimensions.

Dash number <u>1/</u>	# Applicable cable group from MIL-PRF-39012, appendix B	Dimensions	Inches (millimeters) Maximum <u>2/</u>
Category A – Field serviceable (no special tools required) <u>3/</u>			
3006 4006	CABLE GROUP I M17/93-RG178 <u>7/ 14/</u>	A	.960 (24.38)
3007 4007	CABLE GROUP II M17/113-RG316 <u>7/ 14/</u>		
3008 4008	CABLE GROUP IV M17/54-RG122 <u>7/ 14/</u>		
3009 4009	CABLE GROUP VI M17/60-RG142 <u>8/</u> M17/128-RG400 <u>14/</u> M17/84-RG223 <u>7/</u>		
3010 <u>9/</u> 4010 <u>9/</u>	CABLE GROUP VI M17/111-RG303 <u>7/ 14/</u>		
3030 4030	CABLE GROUP III M17/152-00001 <u>7/ 14/</u>		

"TABLE I. Dash numbers, cross reference, and dimensions - Continued.

Dash number <u>1/</u>	# Applicable cable group from MIL-PRF-39012, appendix B	Dimensions	Inches (millimeters) Maximum <u>2/</u>
Category C – Field serviceable (MIL-C-22520-01 crimp tool) <u>4/</u>			
3025 4025	CABLE GROUP I  M17/93-RG178 <u>7/ 10/ 14/</u>	A	1.125 (28.58)
3026 4026	CABLE GROUP IIa  M17/113-RG316 <u>7/ 11/ 14/</u>		
3027 4027	CABLE GROUP IV  M17/54-RG122 <u>7/ 12/ 14/</u>		
3028 4028	CABLE GROUP VIb  M17/60-RG142 <u>8/</u> M17/128-RG400 <u>13/ 14/</u> M17/84-RG223 <u>7/</u>		
3029 4029	CABLE GROUP VIa  M17/111-RG303 <u>13/ 14/</u> M17/28-RG058 <u>7/</u>		
Category D-Field replaceable-Defined piece parts <u>4/ 5/ 6/</u>			
3502 4502	CABLE GROUP VIb  M17/60-RG142 <u>7/ 8/</u> M17/128-RG400 <u>14/</u>	A	1.125 (28.58)

1/ These connectors have captivated center contacts.

2/ Millimeters are in parentheses.

3/ All corrosion resistant steel bodied connectors which are designed to be assembled to the cable outer conductor using solder shall be gold plated in accordance with MIL-G-45204, type II, class I.

4/ These connectors are assembled, using the applicable crimp tool, to the specified cables stripped as shown on figure 4.

5/ Complete connector assembly shall consist of a body, center contact, ferrule and assembly instructions.

6/ Not for use in Army equipment.

7/ Cable to be used when performing tests except as in note 8/.

8/ Cable to be used for the +200°C temperature cycling test. Connectors mate with connectors of the same material; i.e., "3XXX" series dash numbers mate only with other "3XXX" series connectors and "4XXX" series connectors with other "4XXX" series connectors.

9/ These parts are inactive for new design, new designs should procure to dash numbers-\*009 and \*109. These dash numbers use the same cable group (VI).

10/ Preferred die M22520/5-33 closure B, alternate die M22520/5-03 closure B.

11/ Preferred die M22520/5-35 closure B, alternate die M22520/5-03 closure A.

12/ Preferred die M22520/5-41 closure B, alternate die M22520/5-05 closure B or -09 closure A.

13/ Preferred die M22520/5-19 closure B, alternate die M22520/5-05 closure A or -11, 57, closure A.

14/ Preferred cable.

# The latest version of each cable shall be applicable."

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Delete and substitute the new table II as follows:

"TABLE II. Voltage rating.

Cables	Voltage max. (sea level)	Voltage max. (70,000 ft.)
Cable group 1	$\frac{V_{rms}}{170}$	$\frac{V_{rms}}{45}$
Cable group II, IIa, III, IV	250	65
Cable group VI, VIa, VIb	335	85

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FIGURE 5, Test pin data: Delete "90° ±1°" and substitute "69° ±1°".

Requirements, Voltage standing wave ratio, delete and substitute the following:

<u>Cable group</u>	<u>VSWR</u>
I	1.20 + 0.025 (F) GHz
II, IIa, III, IV	1.15 + 0.02 (F) GHz
VI, VIa, VIb	1.15 + 0.01 (F) GHz

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Dielectric withstanding voltage, delete and substitute the following:

<u>Cable group</u>	<u>V rms</u>
I	500
II, IIa, III, IV	750
VI, VIa, VIb	1,000

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Corona level, delete and substitute the following:

<u>Cable group</u>	<u>Volts min.</u>
I	125
II, IIa, III, IV	190
VI, VIa, VIb	250

RF high potential withstanding voltage, delete and substitute the following:

<u>Cable group</u>	<u>Volts min.</u>
I	335
II, IIa, III, IV	500
VI, VIa, VIb	670

\*TABLE IV, group I, column 3, add the following part number "M39012/58-X030".

NOTE: The margin of this amendment are marked with asterisks to indicate where changes from the previous amendment were made. 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 and relationship to the last.

### CONCLUDING MATERIAL

Custodians:

Army – CR  
Navy – EC  
Air Force – 11  
NASA - NA  
DLA – CC

Preparing activity:

DLA – CC

(Project 5935-4232-01)

Review activities:

Army – AR, AT, EA, MI  
Navy – AS, MC, OS, SH  
Air Force – 99