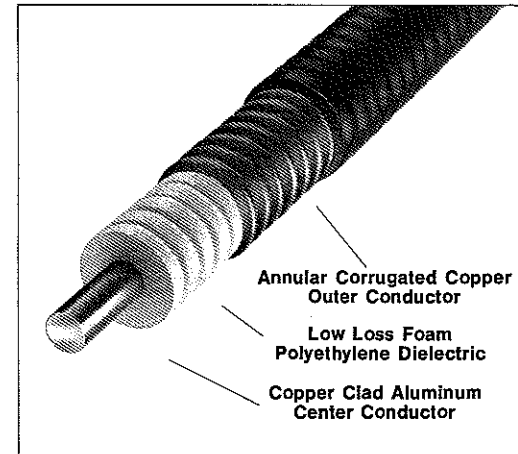


1/2" and 7/8" Cellflex Low Loss Foam FLC

Coaxial Cable

Cablewave Systems Low Loss Foam Cellflex coaxial cables are designed to exhibit lower attenuation than prior foam cables. The proprietary design features a closed cell foam dielectric with low density and high velocity specifications. These cables provide low loss performance characteristics that are almost as low as air dielectric cables but with none of the pressurization requirements associated with air cable. The outer conductor is annularly corrugated for flexibility, crush resistance, and prevention of moisture migration. The cable center conductor is copper clad aluminum. Cables are supplied with a black polyethylene jacket for improved handling and for use in direct burial applications.

Low Loss Foam Cellflex offers optimum performance for many applications throughout the Land Mobile, Microwave, Broadcast and Radar bands.



ELECTRICAL CHARACTERISTICS

Cable Type (part no.)	Cable Size	Impedance Ohms	Velocity of Propagation percent	Max. Freq. 90% fco GHz	Attenuation dB/100 ft. (dB/100m)			Average Power, kW @ 40° Ambient		
					30 MHz	400 MHz	1000 MHz	30 MHz	400 MHz	1000 MHz
FLC 12-50J (810918-001)	1/2"	50	88	8.0	0.37 (1.21)	1.40 (4.59)	2.30 (7.54)	5.0	1.3	.80
FLC 78-50J (810919-001)	7/8"	50	88	5.0	0.20 (0.65)	0.68 (2.23)	1.37 (4.49)	10.5	2.8	1.7

75 ohm versions of these cables available upon request.

MECHANICAL CHARACTERISTICS

Cable Type (part no.)	Center Conductor O.D., in. (mm)	Outer Conductor		Jacket O.D., in. (mm)	Minimum Bending Radius, in. (mm)	Cable Weight lbs./ft. (kg/m)
		I.D., in. (mm)	O.D., in. (mm)			
FLC 12-50J (810918-001)	.190 (4.83)	.450 (11.43)	.540 (13.72)	.640 (16.30)	5.0 (127.00)	.178 (.264)
FLC 78-50J (810919-001)	.357 (9.07)	.850 (21.59)	.990 (25.14)	1.124 (28.55)	10.0 (254.0)	.427 (.635)

New 810 921-001

SHIPPING INFORMATION

Cable Type and Length ft. (m)		Package	Shipping Size inches (mm)	Shipping Volume cu. ft. (cu. m)	Tare Weight lbs. (kg)
1/2"	7/8"				
0-100 (0-30)	—	Carton	28 x 28 x 4 (711 x 711 x 101)	1.8 (0.05)	4 (2)
100-350 (30-107)	0-300 (0-91)	Carton	60 x 60 x 12 (1524 x 1524 x 304)	25.0 (0.71)	40 (18)
0-350 (0-107)	—	Non-returnable reel	33 dia. x 20 wide (833 x 508)	12.6 (0.35)	106 (48.1)
350-1050 (107-320)	—	Non-returnable reel	43 dia. x 23 wide (1092 x 584)	24.6 (0.69)	211 (96)
1050-4450 (320-1356)	—	Non-returnable reel	51 dia. x 36 wide (1295 x 914)	54.2 (1.53)	342 (155)
—	300-1000 (91-305)	Non-returnable reel	75 dia. x 23 wide (1905 x 584)	74.8 (2.12)	402 (122)
—	1000-1400 (305-347)	Non-returnable reel	78 dia. x 25 wide (1981 x 635)	88.0 (2.49)	578 (176)
—	1400-2150 (347-655)	Non-returnable reel	63 dia. x 31 wide (1600 x 787)	71.2 (2.01)	484 (147)
—	2150-4350 (655-1326)	Non-returnable reel	75 dia. x 44 wide (1905 x 1117)	143.2 (4.05)	716 (218)

NOTE: Reel size, volume and weight includes lagging.

Standard factory bulk lengths are 2,500 ft. (762 m) ± 10% for 1/2" and 7/8" Low Loss Foam Cellflex. Maximum lengths of 7/8" cable with 7/8" EIA connectors attached are 25% less than listed cable lengths without connectors. The normal tolerance on specified lengths is -0 +2%. Special tolerances available upon request. Attenuation values are nominal.

Coaxial Cable

Connectors for 1/2" and 7/8" Low Loss Foam Cellflex

	N Male	Cable	Ohms	Part No.
		1/2"	50	738802
		7/8"	50	738828
	N Female	Cable	Ohms	Part No.
		1/2"	50	738801
		7/8"	50	738829
	UHF Male	Cable	Ohms	Part No.
		1/2"	50	738804
		7/8"	50	738833
	UHF Female	Cable	Ohms	Part No.
		1/2"	50	738803
		7/8"	50	738832
	7/8" EIA	Cable	Ohms	Part No.
		1/2"	50	738807
		7/8"	50	738831
	End Terminal	Cable	Ohms	Part No.
		1/2"	50	738805
		7/8"	50	738834
	Splice	Cable	Ohms	Part No.
		1/2"	50	738806
		7/8"	50	738830

7/8" EIA 90° Miter Elbow

920225

CONNECTOR DIMENSIONS AND WEIGHT

Type	1/2"			7/8"		
	O.D. in. (mm)	Length in. (mm)	Weight lbs. (kg)	O.D. in. (mm)	Length in. (mm)	Weight lbs. (kg)
N Male	1.0 (25)	3.3 (84)	0.4 (0.2)	1.4 (36)	3.6 (92)	0.8 (0.4)
N Female	1.0 (25)	3.1 (79)	0.4 (0.2)	1.4 (36)	3.7 (95)	0.8 (0.4)
UHF Male	1.0 (25)	3.0 (76)	0.4 (0.2)	1.4 (36)	4.5 (114)	0.80 (0.4)
UHF Female	1.0 (25)	3.0 (76)	0.4 (0.2)	1.4 (36)	3.6 (92)	0.80 (0.4)
7/8" EIA	1.0 (25)	3.4 (76)	0.8 (0.4)	1.4 (36)	3.9 (100)	1.41 (0.6)
End Terminal	1.0 (25)	3.8 (96)	0.5 (0.2)	1.4 (36)	4.4 (111)	1.1 (0.5)

ORDERING INFORMATION

Connectors may be ordered by the part number listed or by a cable designer followed by an interface abbreviation, i.e. "FLC 78-50NM" for N male connector for 7/8" cable. Panel and bulkhead mount versions of most connectors are available and may be ordered by adding the suffix "(P)" or "(B)", i.e. FLC 12-50NF(P) for N female panel mount connector for 1/2" cable and FLC 12-50NF(B) for N female bulkhead mount connector for 1/2" cable.

EIA flange connectors for Low Loss Foam Cellflex are not gas tight and use brass flanges. The EIA connectors include inner connector, O ring, and hardware.

FOR 2 GHz LOW VSWR CABLES SEE PAGE 158.

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called 7-99 *67.31*

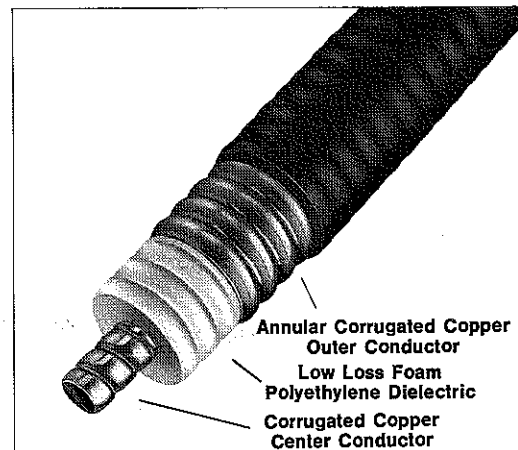
Coaxial Cable

1 1/2" Cellflex Low Loss Foam FLC

Coaxial Cable

Cablewave Systems Low Loss Foam Cellflex coaxial cables are designed to exhibit lower attenuation than prior foam cables. The proprietary design features a closed cell foam dielectric with low density and high velocity specifications. These cables provide low loss performance characteristics that are almost as low as air dielectric cables but with none of the pressurization requirements associated with air cable. The outer conductor is annularly corrugated for flexibility, crush resistance, and prevention of moisture migration. The center conductor is corrugated copper tube. Cables are supplied with a black polyethylene jacket for improved handling and for use in direct burial applications.

Low Loss Foam 1 1/2" Cellflex offers higher power for many applications throughout the Land Mobile, Microwave, Broadcast and Radar bands.



ELECTRICAL CHARACTERISTICS

Cable Type (part no.)	Cable Size	Impedance ohms	Velocity of Propagation percent	Max. Freq. 90% fco GHz	Attenuation dB/100 ft. (dB/100m)			Average Power kW @ 40° C Ambient		
					30 MHz	400 MHz	1000 MHz	30 MHz	400 MHz	1000 MHz
FLC 158-50J (810920-001)	1 1/2"	50	88	2.7	0.12 (0.39)	0.48 (1.57)	0.87 (2.85)	22	5.2	3.0

MECHANICAL CHARACTERISTICS

Cable Type (part no.)	Center Conductor O.D., inches (mm)	Outer Conductor		Jacket O.D., in. (mm)	Minimum Bending Radius, in. (mm)	Cable Weight lbs./ft. (kg/m)
		I.D., in. (mm)	O.D., in. (mm)			
FLC 158-50J (810920-001)	.680 (17.27)	1.590 (40.39)	1.830 (46.48)	2.015 (51.18)	20 (508)	.92 (1.369)

75 ohm version of this cable available upon request.

SHIPPING INFORMATION

Cable Type and Length ft. (m) 1 1/2"	Package	Shipping Size inches (mm)	Shipping Volume cu. ft. (cu. m)	Tare Weight lbs. (kg)
0-50 (0-15)	Carton	60 x 60 x 12 (1524 x 1524 x 304)	25.0 (0.71)	40 (18)
0-230 (0-70)	Non-returnable reel	75 dia. x 23 wide (1905 x 584)	74.8 (2.12)	402 (122)
230-270 (70-82)	Non-returnable reel	78 dia. x 25 wide (1981 x 635)	88.0 (2.5)	578 (262)
270-680 (82-207)	Returnable reel	83 dia. x 35 wide (2108 x 889)	139.5 (3.95)	754 (342)
680-800 (207-244)	Returnable reel	83 dia. x 41 wide (2108 x 1041)	163.4 (4.62)	848 (384)
800-1400 (244-427)	Returnable reel	91 dia. x 41 wide (2311 x 1041)	196.4 (5.56)	949 (430)
1400-2950 (427-899)	Returnable reel	101 dia. x 65 wide (2565 x 1651)	383.6 (10.86)	1566 (710)
2950-5000 (899-1524)	Returnable reel	111 dia. x 60 wide (2819 x 1524)	427.8 (11.70)	1906 (864)

NOTE: Reel size, volume and weight includes lagging.

Standard factory bulk lengths are 2,500 ft. (752 m) ± 10% for 1 1/2" Low Loss Foam Cellflex. Maximum lengths of 1 1/2" cable with 1 1/2" EIA connectors attached are 25% less than listed cable lengths without connectors. The normal tolerance on specified lengths is -0 +2%. Special tolerances available upon request. Attenuation values are nominal.

Coaxial Cable

Connectors for 1 1/2" Low Loss Foam Cellflex

	7/8" EIA Cable Ohms Part No. 1 1/2" 50 738854
	1" EIA Cable Ohms Part No. 1 1/2" 50 738853
	N Male Cable Ohms Part No. 1 1/2" 50 738850
	N Female Cable Ohms Part No. 1 1/2" 50 738851
	End Terminal Cable Ohms Part No. 1 1/2" 50 738856
	Splice Cable Ohms Part No. 1 1/2" 50 738855

1 1/2" EIA 90° Miter Elbow 920226
 1 1/2" EIA—7/8" EIA Plate Reducer 920247
 3 1/8" EIA—1 1/2" EIA Plate Reducer 920248
 For rigid line components, see pages 167 to 175.

CONNECTOR DIMENSIONS AND WEIGHT

Type	O.D. in. (mm)	1 1/2" Length in. (mm)	Weight in. (mm)
7/8" EIA	2.5 (63)	4.0 (101)	3.4 (1.5)
1 1/2" EIA	2.5 (63)	4.4 (113)	4.0 (1.8)
N Male	2.5 (63)	5.0 (127)	3.3 (1.5)
N Female	2.5 (63)	5.2 (130)	3.3 (1.5)
End Terminal	2.5 (63)	7.4 (187)	4.6 (2.1)
Splice	2.5 (63)	4.7 (119)	4.5 (2.0)

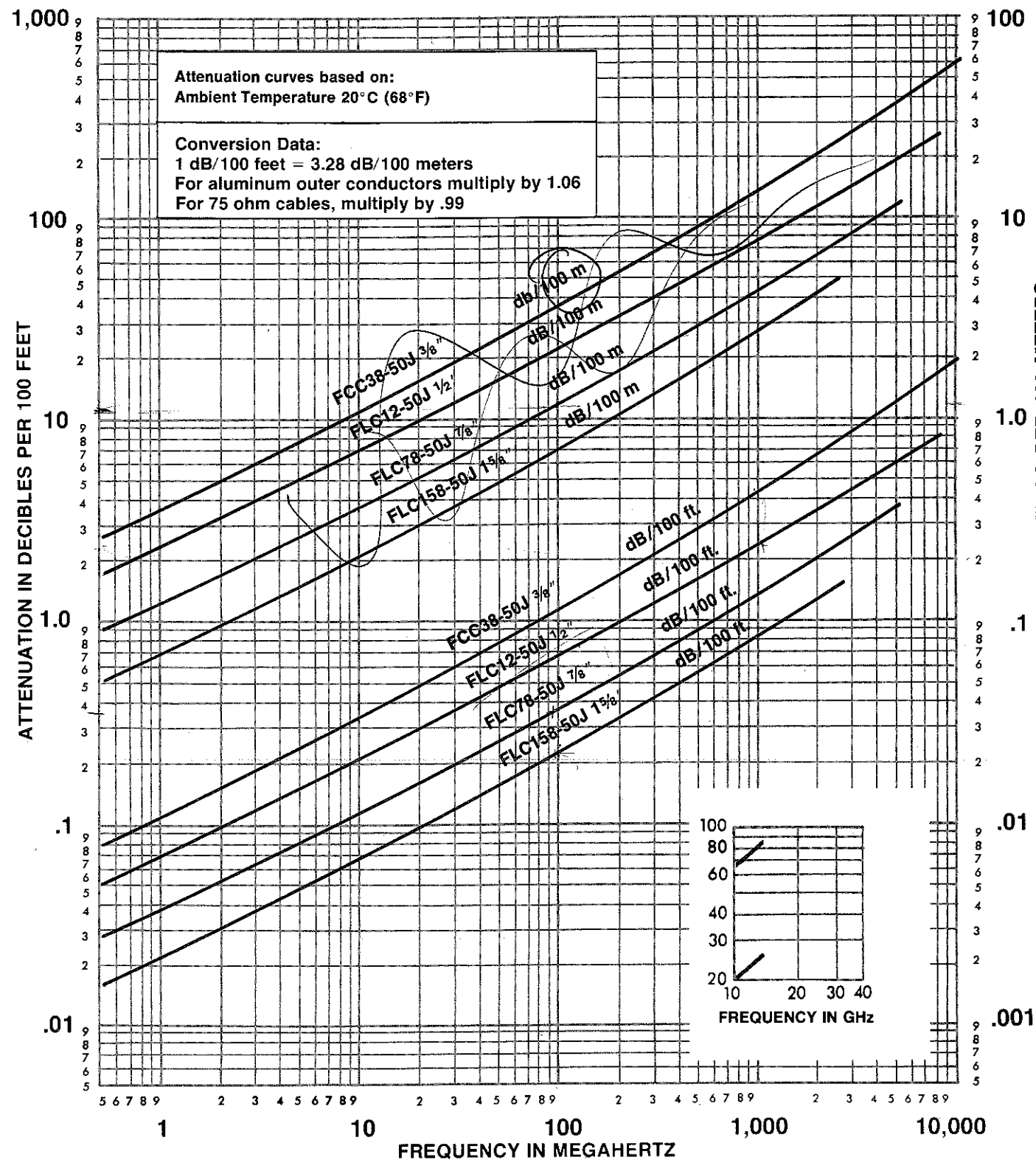
ORDERING INFORMATION

Connectors may be ordered by the part number listed or by a cable designator followed by an interface abbreviation, i.e. "FLC 158-50EIA" for 1 1/2" EIA connector for 1 1/2" Foam Cellflex cable. Panel and bulkhead mount versions of most connectors are available and may be ordered by adding the suffix "(P)" or "(B)", i.e. FLC 158-50NF(B) for N female bulkhead mount connector for 1 1/2" cable.

EIA connectors for Foam Cellflex are not gas tight and use brass flanges. All EIA connectors include inner connector, O ring, and hardware.

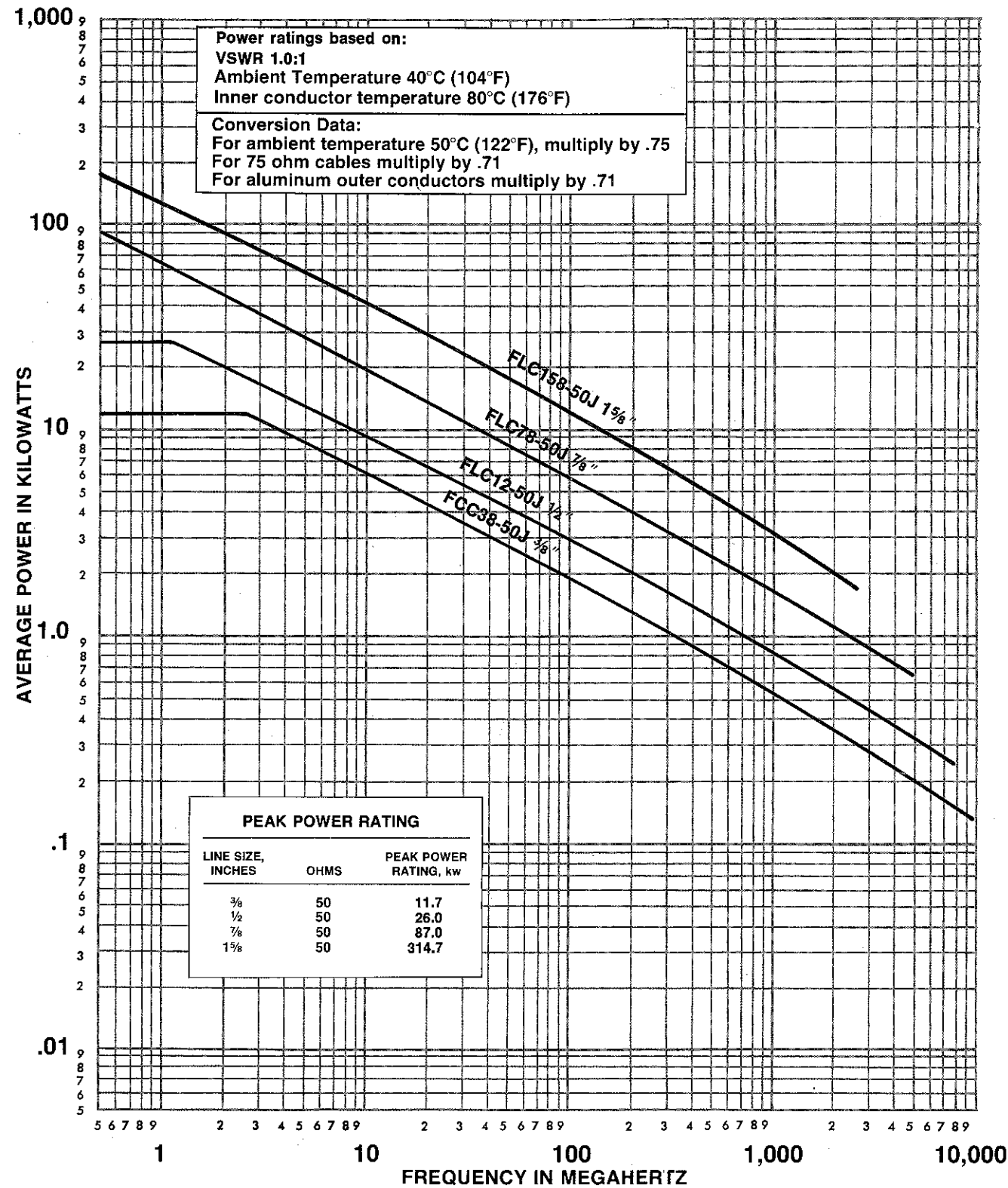
FOR 2 GHz VSWR CABLES SEE PAGE 158.

CORRUGATED COPPER/50 OHM/FOAM POLYETHYLENE DIELECTRIC



meters also

CORRUGATED COPPER/50 OHM/FOAM POLYETHYLENE DIELECTRIC



Coaxial Cable