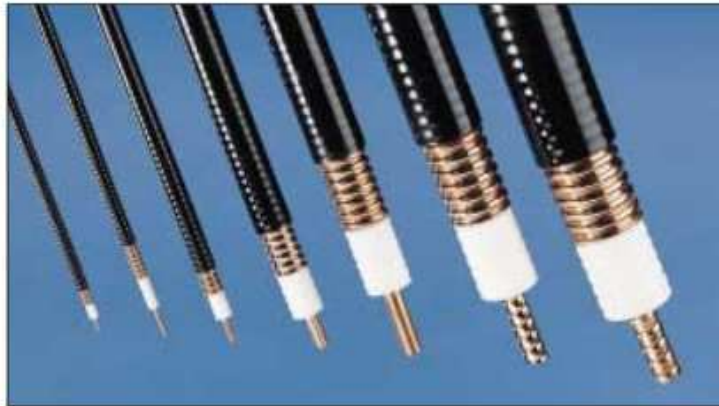




Jumper Specifications

Coaxial Cable Selection Guide



HELIAIX® Coaxial Cables

HELIAIX® Coaxial Cable Selection Guide - 50-ohm, Foam Dielectric

Foam Dielectric, LDF Series							
1/4"	3/8"	1/2"	5/8"	7/8"	1-1/4"	1-5/8"	2-1/4"
491	493	496	500	506	513	520	524
Standard Cables							
LDF1-50	LDF2-50	LDF4-50A	LDF4.5-50	LDF5-50A	LDF6-50	LDF7-50A	LDF12-50
Fire Retardant Cables							
LDF1RN-50	LDF2RN-50	LDF4RN-50A	LDF4.5RN-50	LDF5RN-50A	LDF6RN-50	LDF7RN-50A	LDF12RN-50
LDF1RN-50	LDF2RN-50	LDF4RN-50A	LDF4.5RN-50	LDF5RN-50A	LDF6RN-50	LDF7RN-50A	LDF12RN-50
LDF1RN-50	LDF2RN-50	LDF4RN-50A	LDF4.5RN-50	LDF5RN-50A	LDF6RN-50	LDF7RN-50A	LDF12RN-50
Low VSWR Cables, Specially Tested							
LDF1P-50-(**)	LDF2P-50-(**)	LDF4P-50A-(**)	LDF4.5P-50-(**)	LDF5P-50A-(**)	LDF6P-50-(**)	LDF7P-50A-(**)	LDF12P-50-(**)
Special Application Cables							
p. 590	p. 590	p. 590	--	p. 590	--	--	--
Characteristics							
15800	13500	8800	6100	5000	3300	2500	2200
12.1	15.6	40	62	91	205	315	425
86	88	88	89	89	89	88	88
3 (76)	3.75 (95)	5 (125)	8 (200)	10 (250)	15 (380)	20 (510)	24 (610)
Attenuation, dB/100 ft (dB/100 m) Standard conditions: VSWR 1.0; ambient temperature 20°C (68°F).							
0.667 (2.19)	0.563 (1.85)	0.357 (1.17)	0.254 (0.834)	0.195 (0.641)	0.135 (0.444)	0.109 (0.356)	0.091 (0.299)
1.23 (4.05)	1.04 (3.42)	0.661 (2.17)	0.473 (1.55)	0.364 (1.19)	0.254 (0.832)	0.205 (0.671)	0.173 (0.566)
2.71 (8.88)	2.29 (7.51)	1.45 (4.75)	1.05 (3.46)	0.808 (2.65)	0.571 (1.87)	0.467 (1.53)	0.400 (1.31)
4.16 (13.6)	3.52 (11.6)	2.22 (7.28)	1.64 (5.38)	1.25 (4.12)	0.897 (2.94)	0.742 (2.43)	0.644 (2.11)
6.10 (20)	5.17 (17)	3.25 (10.7)	2.44 (8.02)	1.86 (6.11)	1.35 (4.43)	1.13 (3.71)	0.994 (3.26)
11.5 (37.7)	9.79 (32.1)	6.11 (20.1)	4.76 (15.6)	--	--	--	--
15.7 (51.5)	13.4 (43.9)	--	--	--	--	--	--
Average Power Rating, kW Standard conditions: VSWR 1.0; ambient temperature 40°C (104°F); inner conductor temperature 100°C (212°F); no solar loading.							
3.32	4.14	6.46	9.57	14.1	22.0	30.9	39.8
1.79	2.24	3.49	5.14	7.56	11.7	16.4	21.0
0.818	1.02	1.59	2.31	3.41	5.22	7.18	9.06
0.533	0.663	1.04	1.48	2.19	3.32	4.52	5.64
0.363	0.451	0.710	0.996	1.48	2.21	2.96	3.65
0.193	0.239	0.378	0.511	--	--	--	--
0.141	0.175	--	--	--	--	--	--



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CELLFLEX® Foam and HELIFLEX® Air Cables

Introduction



TRANSMISSION
LINE PRODUCTS
1

Cable Type	Jacket Options	Nominal Size Inch	Diameter Over Jacket mm (In)	Cable Weight kg/m (lb/ft)	Minimum Bending Radius ¹ mm (In)	Attenuation at 1000MHz ² dB/100 m (dB/100ft)	Mean Power Rating at 1000 MHz ³ kW	
CELLFLEX								
Superflexible Cables	SCF14-50	J; JFN	1/4"	7.8(0.31)	0.07(0.05)	25(1.0)	19.5(5.94)	0.339
	SCF38-50	J; JFN; JGR	3/8"	10.2(0.4)	0.12(0.08)	25(1.0)	14.1(4.29)	0.560
	SCF12-50	J; JFN; JGR	1/2"	13.7(0.54)	0.21(0.14)	32(1.25)	11.2(3.41)	0.770
Ultraflexible Cables	UCF78-50A	J; JFN	7/8"	27.5(1.08)	0.43(0.29)	90(4)	4.44(1.35)	2.27
	UCF114-50A-P ⁴	J; JFN	1-1/4"	39.4(1.55)	0.86(0.58)	150(6)	3.14(0.957)	3.52
	UCF114-50A-A ⁵	J; JFN	1-1/4"	39.4(1.55)	0.86(0.58)	150(6)	3.02(0.921)	3.56
Low Loss Cables	LCF14-50	J; JFN	1/4"	10(0.39)	0.13(0.09)	40(2)	14.48(4.41)	0.55
	LCF38-50	J; JFN	3/8"	11.2(0.44)	0.12(0.08)	50(2)	11.33(3.45)	0.64
	LCF12-50	J; JFN; JGR	1/2"	16.2(0.64)	0.22(0.15)	70(3)	7.20(2.19)	1.18
	LCF58-50	J; JFN	5/8"	21.4(0.84)	0.37(0.25)	90(4)	5.59(1.70)	1.67
	LCF78-50A-P ⁶	J; JFN; JGR	7/8"	28.0(1.10)	0.51(0.34)	120(5)	3.93(1.20)	2.66
	LCF78-50A-A ⁷	J; JFN; JGR	7/8"	28.0(1.10)	0.51(0.34)	120(5)	3.78(1.15)	2.61
	LCFS114-50A-P ⁸	J; JFN; JGR	1-1/4"	39.0(1.54)	0.86(0.58)	200(8)	2.94(0.896)	3.60
	LCFS114-50A-A ⁹	J; JFN; JGR	1-1/4"	39.0(1.54)	0.86(0.58)	200(8)	2.85(0.870)	3.87
	LCF158-50A-P ¹⁰	J; JFN	1-5/8"	50.3(1.98)	1.19(0.80)	200(8)	2.39(0.729)	4.86
	LCF158-50A-A ¹¹	J; JFN	1-5/8"	50.3(1.98)	1.19(0.80)	200(8)	2.25(0.685)	4.99
	LCF214-50A	J; JFN	2-1/4"	59.9(2.36)	1.70(1.14)	280(11)	2.11(0.643)	6.61
	RGFLEX							
RF Type	RF174-50	JF	5/64"	2.7(0.11)	0.012(0.008)	14(0.55)	42(1.65)	-
RG Type	RG58-50	JF	9/64"	5.0(0.197)	0.037(0.024)	25.4(1)	100(3.94)	-
	RG223-50	JF	5/32"	5.4(0.213)	0.055(0.121)	30(1.18)	55(2.165)	-
	RG213-50	JF	5/16"	10.31(0.41)	0.155(0.103)	50.0(1.97)	205(8.0)	-
	RG214-50	JF	3/8"	10.8(0.425)	0.185(0.408)	55.0(2.165)	110(4.33)	-
RGC Type	RGC58-50	J	9/64"	5.0(0.197)	0.030(0.020)	25.4(1)	100(3.94)	-
	RGC213-50	J	5/16"	10.34(0.407)	0.120(0.080)	50.0(1.97)	205(8.07)	-
	RGC8-50	J	5/16"	10.24(0.403)	0.133(0.088)	25.4(1)	60(2.36)	-
HELIFLEX								
Standard Cables	HCA38-50	J; JB	3/8"	13.9(0.55)	0.31(0.21)	50(2)	9.10(2.77)	0.769
	HCA12-50	JPL	1/2"	15.7(0.62)	0.27(0.18)	120(5)	7.77(2.37)	2.09
	HCA58-50	J; JB	5/8"	21.4(0.84)	0.70(0.47)	80(3)	5.66(1.72)	1.46
	HCA78-50	J; JB; JPL	7/8"	28.3(1.11)	0.68(0.46)	100(4)	3.94(1.20)	2.58
	HCA118-50	J; JB	1-1/8"	36.4(1.43)	1.10(0.74)	130(5)	3.09(0.94)	3.72
	HCA158-50	J; JB; JPL	1-5/8"	50.4(1.984)	1.30(0.89)	180(7)	2.01(0.61)	6.11
	HCA214-50	J	2-1/4"	60.5(2.37)	1.7(1.15)	210(8)	1.93(0.588)	6.63
	HCA295-50	J; JB; JFN	3"	71.0(2.795)	2.6(1.75)	270(11)	1.47(0.448)	11.2
	HCA300-50	J; JFN	3"	76.7(3.02)	2.6(1.78)	270(11)	1.48(0.452)	11.4
	HCA318-50	J; JB	3-1/8"	90.5(3.56)	3.3(2.25)	380(15)	1.26(0.380)	17
	HCA418-50	J; JB; JFN	4-1/8"	115.1(4.53)	5.4(3.63)	500(20)	0.96(0.292) ¹²	25.1
	HCA500-50	J; JB; JFN	5"	147.2(5.79)	8.65(5.78)	800(31)	0.69(0.210) ¹³	42.0 ¹⁴
	HCA618-50	J; JFN	6-1/8"	169.0(6.65)	11.0(7.39)	1000(39)	0.61(0.186) ¹⁵	54.0 ¹⁶
	HCA800-50	J; JB	8"	223.0(8.78)	18.6(12.5)	1400(55)	0.42(0.128) ¹⁷	103 ¹⁸
	Increased Mean Power Cables	HCA38-50	JT	3/8"	13.9(0.55)	0.31(0.21)	50(2)	9.31(2.84)
HCA78-50		JT	7/8"	28.3(1.11)	0.68(0.46)	100(4)	3.94(1.20)	2.58
HCA118-50		JT	1-1/8"	36.4(1.43)	1.10(0.74)	130(5)	3.09(0.94)	3.72
HCA158-50		JT	1-5/8"	50.4(1.984)	1.30(0.89)	180(7)	2.23(0.680)	8.21
HCA500-50		JT	5"	147.2(5.79)	8.65(5.78)	800(31)	0.728(0.222) ¹⁹	63.6 ²⁰
HCA618-50		JT	6-1/8"	169.0(6.65)	11.0(7.39)	1000(39)	0.61(0.186) ²¹	54.0 ²²
HCA800-50	JT; JBT	8"	223.0(8.78)	18.5(12.4)	1400(55)	0.37(0.113) ²³	139 ²⁴	
HCA900-50	No Jacket	9"		9.6(6.48)	1700(67)	0.41(0.125) ²⁵	245 ²⁶	



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