

HELIAX® Coaxial Cables



NEW!

EFX2-50

Cable Ordering Information

Description	Type No.
Extraflexible Cable 3/8" Extraflexible Cable, Standard Jacket	EFX2-50

Characteristics

Electrical	
Impedance, ohms	50 ± 1
Maximum Frequency, GHz	13.5
Velocity, percent	85
Peak Power Rating, kW	15.6
dc Resistance, ohms/1000 ft (1000 m)	
Inner	1.1 (3.6)
Outer	0.92 (3.0)
dc Breakdown, volts	2500
Jacket Spark, volts RMS	5000
Capacitance, pF/ft (m)	24.1 (79.0)
Inductance, µH/ft (m)	0.06 (0.20)
Mechanical	
Outer Conductor	Copper
Inner Conductor	Copper-Clad Aluminum
Diameter over Jacket, in (mm)	0.45 (11.3)
Diameter over Copper Outer Conductor, in (mm)	0.38 (9.7)
Minimum Bending Radius, in (mm)	1.75 (45)
Number of Bends, minimum (typical)	15
Bending Moment, lb-ft (N•m)	1.7 (2.3)
Cable Weight, lb/ft (kg/m)	0.09 (0.13)
Tensile Strength, lb (kg)	175 (79)
Flat Plate Crush Strength, lb/in (kg/mm)	120 (2.1)

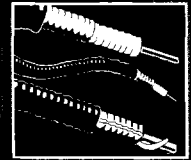
Attenuation and Average Power

Frequency MHz	Attenuation dB/100 ft	Attenuation dB/100m	Average Power kW
0.5	0.075	0.246	15.6
1	0.106	0.348	15.6
1.5	0.130	0.427	15.6
2	0.150	0.492	15.6
10	0.337	1.11	6.97
20	0.479	1.57	4.90
30	0.589	1.93	3.99
50	0.765	2.51	3.07
88	1.02	3.35	2.30
100	1.09	3.58	2.15
108	1.14	3.74	2.07
150	1.35	4.43	1.74
174	1.46	4.79	1.61
200	1.57	5.15	1.50
300	1.94	6.37	1.21
400	2.26	7.42	1.04
450	2.40	7.87	0.978
500	2.54	8.33	0.924
512	2.57	8.43	0.913
600	2.80	9.19	0.838
700	3.05	10.0	0.771
800	3.28	10.8	0.717
824	3.33	10.9	0.706
860	3.41	11.2	0.689
894	3.48	11.4	0.675
960	3.62	11.9	0.649
1000	3.70	12.1	0.635
1250	4.19	13.7	0.561
1500	4.63	15.2	0.507
1700	4.97	16.3	0.473
2000	5.45	17.9	0.431
2300	5.90	19.4	0.398
3000	3.88	12.7	0.342
4000	8.13	26.7	0.289
5000	9.29	30.5	0.253
6000	10.4	34.1	0.227
8000	12.4	40.7	0.190
10000	14.2	46.6	0.165
12000	15.9	52.2	0.147
13000	16.8	55.1	0.140
13500	17.2	56.4	0.137

Standard Conditions:

For Attenuation, VSWR 1.0, ambient temperature 24°C (75°F)

For average power, VSWR 1.0 ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), no solar loading.



E2PNM-H
N Male

Connectors

Interface	Description	Type Number	Previous Type Number	Inner Contact Attachment	Outer Contact Attachment	Plating Code	Max. Length in (mm)	Max. Dia. in (mm)
N Male	Hex Head	E2PNM-H		Solder	Self-Flare	SG	2.0 (52)	0.94 (23.9)
N Female		E2PNF		Solder	Self-Flare	SG	2.4 (61)	0.69 (17.6)
7-16 DIN Male		E2PDM-C		Captivated	Self-Flare	SS	2.1 (53)	1.41 (35.9)
7-16 DIN Female		E2PDF-C		Captivated	Self-Flare	SS	2.1 (53)	1.10 (27.9)
TNC Male		E2PTM		Solder	Self-Flare	SG	2.2 (56)	0.63 (16.1)
TNC Female		E2PTF		Solder	Self-Flare	NG	1.9 (49)	0.63 (16.1)
UHF Male		E2UM		Solder	Self-Flare	BB	2.2 (56)	0.77 (19.6)
UHF Female		E2UF		Solder	Self-Flare	BS	2.1 (53)	0.68 (17.3)
SMA Male		E2SM		Solder	Self-Flare	BG	2.2 (56)	0.68 (17.3)

Plating Codes: BG - Brass Body and Gold Plated Pin, BS - Brass Body and Silver Plated Pin, NG - Nickel Plated Body and Gold Plated Pin, SG - Silver Plated Body and Gold Plated Pin, SS - Silver Plated Body and Pin

Accessories –

Photos and descriptions on pages 544-572

Description	Type No.
Insulated Hangers and Adapters	
Insulated Hanger , single, for insulated towers. <i>Standard tower configuration spacing is 3-4 feet (1-1.2 m).</i> Recommended maximum spacing for outdoor installation is 2.5 ft (0.76 m) at 125 mph (200 km/h) wind, 1/2" (13 mm) radial ice. For different wind and ice loading spacing recommendations, refer to Cable Hanger Spacing, page 547.	11662-3
Angle Adapter , for insulated hanger	40430-1
Stainless Steel Wraplock , for round tower members	12395-1
Nylon Cable Tie Kit of 50. Recommended maximum spacing for outdoor installations is 3 ft (1 m)	40417
Nylon Cable Tie Kit in Plastic Box. 100 each, 4, 5.5, and 7.5 inch (101, 140, and 190 mm) ties. Recommended maximum spacing for outdoor installations is 3 ft (1 m)	CT-K350
Velcro Cable Ties . Black, 8 inch. For indoor use only Kit of 10 Kit of 50	VCT8-10 VCT8-50
Grounding and Surge Protection - for more information, see pages 559-564.	

Description	Type No.
Grounding Kit - factory attached, one-hole lug, 24 in (610 mm) lead	223158
Arrestor Plus® T-Series Lightning Surge Protector. Connectors on each end (universal version). Non-directional #, * <i>Interface and frequency band information.</i> <i>See page 563 for details.</i>	APT-#-*
Gas Tube Surge Arrestor. Connectors on each end (universal version). Directional, dc pass capability #, * <i>Interface and frequency band information.</i> <i>See page 564 for details.</i>	SA-#-*
Weatherproofing - for more information, see page 565.	
Cold Shrink Weatherproofing Kit 3/8" Coax-Type N to 3/8" Coax-Type N 3/8" Coax-Type N to Antenna Output	241474-3 241548-3
Connector/Splice Weatherproofing Kit	221213
Tools - for more tools see page 569.	
Installer Pax™. Bulk packs are available for some hangers, adapters, grounding kits and cold shrink weatherproofing kits. See page 570.	