Product Specifications

COMMSCOPE®

on the go

FXL-1480

FXL-1480, HELIAX® Flexible Coaxial Cable, smoothwall aluminum, 1-1/4 in, black PE jacket

Construction Materials

Jacket Material	PE
Outer Conductor Material	Smoothwall aluminum
Dielectric Material	Foam PE
Flexibility	Standard
Inner Conductor Material	Copper
Jacket Color	Black

Dimensions

Nominal Size	1-1/4 in
Cable Weight	0.45 lb/ft | 0.67 kg/m
Diameter Over Jacket	39.878 mm | 1.570 in
Inner Conductor OD	0.5500 in | 14.1000 mm
Outer Conductor OD	1.480 in | 37.600 mm

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	22.9 pF/ft | 75.1 pF/m
dc Resistance, Inner Conductor	0.450 ohms/kft | 1.480 ohms/km
dc Resistance, Outer Conductor	0.150 ohms/kft | 0.490 ohms/km
dc Test Voltage	9000 V
Inductance	0.058 µH/ft | 0.190 µH/m
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	100 – 3300 MHz
Peak Power	205.0 kW
Velocity	89%

Environmental Specifications

Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-50 °C to +70 °C (-58 °F to +158 °F)
Storage Temperature	-55 °C to +80 °C (-67 °F to +176 °F)

General Specifications

Brand	HELIAX®

Mechanical Specifications

Bending Moment	75.0 ft lb | 102.0 N-m
Flat Plate Crush Strength	200.0 lb/in | 3.6 kg/mm

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Minimum Bend Radius, Multiple Bends	279.40 mm | 11.00 in
Minimum Bend Radius, Single Bend	203.20 mm | 8.00 in
Number of Bends, minimum	15
Tensile Strength	1300 lb | 590 kg

Standard Conditions

Attenuation, Ambient Temperature	20 °C | 68 °F
Average Power, Ambient Temperature	40 °C | 104 °F
Average Power, Inner Conductor Temperature	100 °C | 212 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
800–960 MHz	1.10	26.40
1700–2000 MHz	1.10	26.40
2300–2500 MHz	1.10	26.40

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Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.054	0.017	146.77
1	0.077	0.023	103.66
1.5	0.094	0.029	84.57
2	0.109	0.033	73.18
10	0.244	0.074	32.51
20	0.347	0.106	22.87
30	0.427	0.13	18.61
50	0.555	0.169	14.33
88	0.742	0.226	10.70
100	0.793	0.242	10.02
108	0.825	0.252	9.63
150	0.98	0.299	8.11
174	1.059	0.323	7.51
200	1.139	0.347	6.98
300	1.411	0.43	5.63
400	1.645	0.501	4.83
450	1.753	0.534	4.53
500	1.855	0.565	4.28
512	1.879	0.573	4.23
600	2.048	0.624	3.88
700	2.227	0.679	3.57
800	2.396	0.73	3.32
824	2.435	0.742	3.26
894	2.547	0.776	3.12
960	2.649	0.808	3.00
1000	2.71	0.826	2.93
1250	3.069	0.935	2.59
1500	3.4	1.036	2.34
1700	3.65	1.113	2.18
1800	3.771	1.149	2.11
2000	4.006	1.221	1.98
2100	4.119	1.256	1.93
2200	4.231	1.29	1.88
2300	4.341	1.323	1.83
2500	4.556	1.389	1.74
2700	4.765	1.452	1.67
3000	5.068	1.545	1.57

** Values typical, guaranteed within 5%*

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant
China RoHS SJ/T 11364-2006	Below Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

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