

LDF5-75

LDF5-75, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 7/8 in, black PE jacket



OBSOLETE

This product was discontinued on: December 31, 2010

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®
Product Series	LDF5-75

General Specifications

Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	23.622 mm 0.93 in
Diameter Over Jacket	27.432 mm 1.08 in
Inner Conductor OD	5.588 mm 0.22 in
Outer Conductor OD	24.892 mm 0.98 in
Nominal Size	7/8 in

Electrical Specifications

Cable Impedance	75 ohm \pm 3 ohm
Capacitance	49.5 pF/m 15.088 pF/ft
dc Resistance, Inner Conductor	1.116 ohms/km 0.34 ohms/kft
dc Resistance, Outer Conductor	1.181 ohms/km 0.36 ohms/kft

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dc Test Voltage	6500 V
Inductance	0.285 μ H/m 0.087 μ H/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	1 – 1000 MHz
Peak Power	70 kW
Velocity	89 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.113	0.034	32.2
1.5	0.139	0.042	26.25
2.0	0.16	0.049	22.7
10.0	0.363	0.111	10.03
20.0	0.518	0.158	7.03
30.0	0.639	0.195	5.7
50.0	0.834	0.254	4.37
85.0	1.102	0.336	3.3
88.0	1.123	0.342	3.24
100.0	1.202	0.366	3.03
108.0	1.252	0.382	2.91
150.0	1.494	0.455	2.44
174.0	1.619	0.493	2.25
200.0	1.746	0.532	2.09
204.0	1.765	0.538	2.06
300.0	2.182	0.665	1.67
400.0	2.561	0.781	1.42
450.0	2.737	0.834	1.33
460.0	2.771	0.845	1.31
500.0	2.905	0.885	1.25
512.0	2.944	0.897	1.24
600.0	3.224	0.982	1.13
700.0	3.523	1.074	1.03
800.0	3.807	1.16	0.96
824.0	3.873	1.18	0.94

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894.0	4.062	1.238	0.9
960.0	4.236	1.291	0.86
1000.0	4.339	1.322	0.84

Material Specifications

Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends	254 mm 10 in
Number of Bends, minimum	15
Number of Bends, typical	40
Tensile Strength	147 kg 324.079 lb
Bending Moment	16.3 N-m 144.267 in lb
Flat Plate Crush Strength	1.4 kg/mm 78.396 lb/in

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C

Packaging and Weights

Cable weight	0.45 kg/m 0.302 lb/ft
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