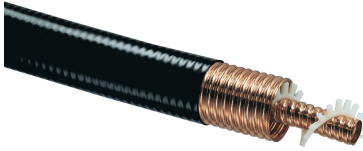


# HJ9-50



HJ9-50, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper, 5 in, black PE jacket

## Product Classification

<b>Brand</b>	HELIAX®
<b>Product Series</b>	HJ9-50
<b>Product Type</b>	Air coaxial cable

## Construction Materials

<b>Jacket Material</b>	PE
<b>Dielectric Material</b>	PE
<b>Flexibility</b>	Standard
<b>Inner Conductor Material</b>	Copper tube
<b>Jacket Color</b>	Black
<b>Outer Conductor Material</b>	Corrugated copper

## Dimensions

<b>Nominal Size</b>	5 in
<b>Cable Volume</b>	117.0 ft <sup>3</sup> /kft   10869.3 L/km
<b>Cable Weight</b>	4.91 kg/m   3.30 lb/ft
<b>Diameter Over Jacket</b>	132.080 mm   5.200 in
<b>Inner Conductor OD</b>	51.3080 mm   2.0200 in
<b>Outer Conductor OD</b>	127.000 mm   5.000 in

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm ±0.5 ohm
<b>Capacitance</b>	21.7 pF/ft   71.2 pF/m
<b>dc Resistance, Inner Conductor</b>	0.328 ohms/km   0.100 ohms/kft
<b>dc Resistance, Outer Conductor</b>	0.131 ohms/km   0.040 ohms/kft
<b>dc Test Voltage</b>	27500 V
<b>Inductance</b>	1.870 µH/m   0.570 µH/ft
<b>Insulation Resistance</b>	100000 Mohms•km
<b>Jacket Spark Test Voltage (rms)</b>	12000 V
<b>Operating Frequency Band</b>	1 – 960 MHz
<b>Peak Power</b>	1890.0 kW
<b>Power Attenuation</b>	6.661
<b>Velocity</b>	93%

## Environmental Specifications

<b>Installation Temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Storage Temperature</b>	-70 °C to +85 °C (-94 °F to +185 °F)

## Mechanical Specifications

<b>Bending Moment</b>	271.2 N-m   200.0 ft lb
<b>Flat Plate Crush Strength</b>	275.0 lb/in   4.9 kg/mm
<b>Minimum Bend Radius, Multiple Bends</b>	1270.00 mm   50.00 in
<b>Number of Bends, minimum</b>	15
<b>Number of Bends, typical</b>	30
<b>Pressurization, maximum</b>	0 N/mm <sup>2</sup>   30 psi
<b>Tensile Strength</b>	454 kg   1000 lb

## Note

<b>Performance Note</b>	Values typical, unless otherwise stated
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## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Average Power, Inner Conductor Temperature</b>	100 °C   212 °F

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.017	0.005	1273.93
1	0.024	0.007	898.92
1.5	0.03	0.009	732.79
2	0.034	0.011	633.76
10	0.078	0.024	279.93
20	0.111	0.034	196.13
30	0.137	0.042	159.03
50	0.179	0.055	121.84
85	0.237	0.072	92.09
88	0.242	0.074	90.41
100	0.259	0.079	84.46
108	0.27	0.082	81.05
150	0.322	0.098	67.93
174	0.349	0.106	62.68
200	0.376	0.115	58.10
204	0.38	0.116	57.48
300	0.47	0.143	46.47
400	0.552	0.168	39.57
450	0.59	0.18	37.02
500	0.627	0.191	34.87
512	0.635	0.194	34.40
600	0.696	0.212	31.42
700	0.76	0.232	28.74
800	0.822	0.25	26.59
824	0.836	0.255	26.14
894	0.877	0.267	24.91
960	0.915	0.279	23.89

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

