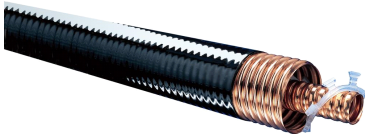


# HJ9HP-50



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

## Product Classification

<b>Brand</b>	HELIAX®
<b>Product Series</b>	HJ9HP-50
<b>Product Type</b>	Air coaxial cable

## Construction Materials

<b>Jacket Material</b>	PE
<b>Dielectric Material</b>	PTFE
<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>	5.06 kg/m   3.40 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>	20.8 pF/ft   68.2 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>	26000 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>	1690.0 kW
<b>Power Attenuation</b>	13.348
<b>Velocity</b>	96 %

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## Environmental Specifications

<b>Installation Temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °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>	240.0 lb/in   4.3 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>	150 °C   302 °F

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.015	0.004	1690.00
1	0.021	0.006	1690.00
1.5	0.026	0.008	1690.00
2	0.03	0.009	1464.04
10	0.069	0.021	634.44
20	0.1	0.03	438.43
30	0.124	0.038	351.85
50	0.165	0.05	265.33
85	0.223	0.068	196.50
88	0.227	0.069	192.62
100	0.245	0.075	178.93
108	0.256	0.078	171.11
150	0.31	0.095	141.08
174	0.339	0.103	129.13
200	0.369	0.112	118.74
204	0.373	0.114	117.33
300	0.473	0.144	92.58
400	0.567	0.173	77.25
450	0.611	0.186	71.64
460	0.62	0.189	70.64
460	0.62	0.189	70.64
500	0.654	0.199	66.93
512	0.664	0.203	65.91
600	0.737	0.225	59.42
700	0.816	0.249	53.66
800	0.893	0.272	49.07
824	0.91	0.278	48.10
894	0.962	0.293	45.52
960	1.01	0.308	43.36

\* Values typical, guaranteed within 5%

## Regulatory Compliance/Certifications

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

