HJ7RPV-50

HJ7-50A, HELIAX® Plenum Rated Air Dielectric Coaxial Cable, corrugated copper, 1-5/8 in, off-white PVC jacket

Product Classification

Product Type
Air coaxial cable

Product Brand
HELIAX®

Product Series
HJ7-50A

General Specifications

Flexibility
Standard

Jacket Color
Off-white

Dimensions

Diameter Over Jacket
48.514 mm | 1.91 in

Inner Conductor OD
18.034 mm | 0.71 in

Outer Conductor OD
46.482 mm | 1.83 in

Nominal Size
1-5/8 in

Cable Volume
1,300.642 L/km | 14 ft³/kft

Electrical Specifications

Cable Impedance
50 ohm ±0.5 ohm

Capacitance
72.507 pF/m | 22.1 pF/ft

dc Resistance, Inner Conductor
0.722 ohms/km | 0.22 ohms/kft

dc Resistance, Outer Conductor
0.328 ohms/km | 0.1 ohms/kft

dc Test Voltage
11000 V

Inductance
1.87 µH/m | 0.57 µH/ft

Insulation Resistance
100000 Mohms-km

Jacket Spark Test Voltage (rms)
10000 V

Operating Frequency Band
1 – 2700 MHz
HJ7RPV-50

Peak Power 305 kW
Power Attenuation 3.356
Velocity 92%

### Attenuation

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<th>Frequency (MHz)</th>
<th>Attenuation (dB/100 m)</th>
<th>Attenuation (dB/100 ft)</th>
<th>Average Power (kW)</th>
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Material Specifications

Dielectric Material
PE

Jacket Material
PVC

Inner Conductor Material
Copper tube

Outer Conductor Material
Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends
508 mm | 20 in

Number of Bends, minimum
15

Number of Bends, typical
30

Tensile Strength
340 kg | 749.571 lb

Bending Moment
30 ft lb | 40.675 N-m

Flat Plate Crush Strength
3.125 kg/mm | 175 lb/in

Pressurization, maximum
0.207 N/mm² | 30 psi

Environmental Specifications

Installation temperature
-5 °C to +60 °C (+23 °F to +140 °F)

Operating Temperature
-20 °C to +85 °C (-4 °F to +185 °F)

Storage Temperature
-20 °C to +85 °C (-4 °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
Fire Retardancy Test Method

NFPA 262/CATVP/CMP

Packaging and Weights

Cable weight

1.548 kg/m  |  1.04 lb/ft

Regulatory Compliance/Certifications

Agency          Classification
ISO 9001:2015    Designed, manufactured and/or distributed under this quality management system
UL/ETL Certification  CATVP/CMP