



Air dielectric coaxial cable, corrugated copper tube for outer conductor and helical copper tube for inner conductor, air dielectric with PE support, 3-1/8 in, black PE jacket

## General Specifications

Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation guaranteed within the tolerance $\pm 10\%$
Structure Note	Dimension guaranteed within the tolerance $\pm 5\%$
Nominal Size	3-1/8 in

## Material Specifications

Inner Conductor	Helical Copper Tube
Dielectric	Air Dielectric with PE Support
Outer Conductor	Corrugated Copper Tube
Jacket	Black PE
Diameter of Inner Conductor	34.70 mm
Diameter of Dielectric	75.20 mm
Diameter of Outer Conductor	85.40 mm
Diameter of Jacket	91.00 mm

## Electrical Specifications

Impedance	50 ohms $\pm 1$ ohm
Maximum Available Frequency	1.55 GHz
Cut-off Frequency	1.66 GHz
Velocity Ratio	96%
Peak Power	940 kW
Insulation Resistance	3000 M $\Omega$ -km
DC Breakdown Voltage	9700 V
Nominal Capacitance	70 pF/m
Nominal Inductance	0.19 $\mu$ H/m

## Attenuations

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.03	0.01	790.0
1	0.04	0.01	560.0
1.6	0.05	0.02	440.0
3	0.06	0.02	320.0
6	0.09	0.03	227.0
10	0.11	0.03	176.0
20	0.16	0.05	124.0
30	0.20	0.06	80.0
100	0.37	0.11	43.0
200	0.52	0.16	30.0
500	0.85	0.26	18.5
800	1.01	0.31	14.4
1000	1.26	0.38	12.7

## Return Loss / VSWR

Frequency Band	VSWR	Return Loss (dB)	Tolerance
550-1600 KHz	1.10	26.4	5%
87-108 MHz	1.10	26.4	5%
1CH-12CH Specified Channel	1.15	23.1	5%
13CH-24CH Specified Channel	1.15	23.1	5%
25CH-68CH Specified Channel	1.15	23.1	5%

## Mechanical Specifications

Bending Radius (Single)	≥380 mm
Bending Radius (Repeated)	≥1100 mm
Number of Bending (Typical)	≤15
Tensile Strength	4200N

## Environmental Specifications

Installation Temperature	-20 °C to +55 °C
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +85 °C

## Regulatory Compliances

ISO 9001:2015	Compliant
ROHS	Compliant
China RoHS	Compliant
UK RoHS	Compliant
REACH	Compliant
EU/CE	Compliant

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