



Air dielectric coaxial cable, corrugated copper tube for outer conductor and helical copper tube for inner conductor, air dielectric with PE support, 1-5/8 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	1-5/8 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	18.50 mm
Diameter of Dielectric	39.70 mm
Diameter of Outer Conductor	46.50 mm
Diameter of Jacket	51.00 mm

## Electrical Specifications

Impedance	75 ohms $\pm 1$ ohm
Maximum Available Frequency	2.7 GHz
Cut-off Frequency	3.1 GHz
Velocity Ratio	93%
Peak Power	270 kW
Insulation Resistance	3000 M $\Omega$ -km
DC Breakdown Voltage	5200 V
Nominal Capacitance	71 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	0.05	0.02	270.0
1	0.06	0.02	198.0
1.6	0.08	0.02	156.0
3	0.11	0.03	114.0
6	0.15	0.05	81.0
10	0.20	0.06	62.0
20	0.28	0.09	44.0
30	0.35	0.11	27.9
100	0.65	0.2	15.2
200	0.90	0.27	10.7
500	1.46	0.45	6.7
800	1.87	0.57	5.2
1000	2.10	0.64	4.6
2000	3.10	0.94	3.2

## 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)	≥180 mm
Bending Radius (Repeated)	≥550 mm
Number of Bending (Typical)	≤15
Tensile Strength	3200N

## 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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