

SUPER FLEXIBLE RF CABLE

HRCAY-50-9



CONSTRUCTION MATERIALS

Inner Conductor	Copper-Clad Aluminum Wire
Dielectric	Physical Foam Polyethylene
Outer Conductor	Helical Copper Tube
Jacket	Black PE

PHYSICAL DIMENSIONS

Inner Conductor Diameter	3.60 mm
Dielectric Diameter	9.10 mm
Outer Conductor Diameter	12.00 mm
Diameter Over Jacket	13.30 mm

MECHANICAL SPECIFICATIONS

Minimum Bending Radius	
Single Bending	20 mm
Repeated Bending	60 mm
Minimum Number of Bends	15
Tensile Strength	500 N

ENVIRONMENTAL SPECIFICATION

Storage Temperature	-55 °C ~ +85 °C
Installation Temperature	-40 °C ~ +60 °C
Operating Temperature	-55 °C ~ +85 °C

ELECTRICAL SPECIFICATION

Capacitance	80.0 pF/m
Impedance	50±2 Ω
Velocity	82%
RF Peak Voltage	1.13 kV
Peak Power Rating	19 kW
Cut-off Frequency	12.5 GHz
Shielding Effectiveness >10MHz	>120 dB
Insulation Resistance	5000 MΩ·km
VSWR	
0.8~1.0 GHz	≤1.20
1.7~2.2 GHz	≤1.20
2.2~2.7 GHz	≤1.20

PERFORMANCE

Frequency MHz	Attenuation		Average Power Rating (kW)
	dB/100 m	dB/100 ft	
100	3.22	0.98	3.03
150	4.05	1.23	2.39
200	4.65	1.42	2.11
280	5.65	1.72	1.69
450	7.20	2.19	1.37
800	9.86	3.01	1.00
900	10.56	3.22	0.94
1000	11.15	3.40	0.88
1500	13.80	4.21	0.70
1800	15.55	4.74	0.63
2000	16.40	5.00	0.59
2200	17.35	5.29	0.56
2400	18.10	5.52	0.53
2500	18.50	5.64	0.52
3000	20.90	6.37	0.48

Standard Conditions :

For attenuation : VSWR 1.0 , cable temperature 20 °C (68 °F)

For average power : VSWR 1.0 , ambient temperature 40 °C (104 °F) ,

Inner conductor temperature 100 °C (212 °F) . No solar loading .

Maximum attenuation value shall be 105% off the nominal attenuation value.