ZCG7850
7/8" Flexible Foam Dielectric Coaxial Cable, 50 Ohm

ZCG SCALAR
INNOVATE MANUFACTURE SUPPORT

Compare the specifications and attenuation performance of our 7/8" flexible foam dielectric 50 ohm coaxial cable with any other brand on the market and your choice will become clear.

Available in cut lengths the Order Code is **ZCG7850**.
To reduce the price per metre purchase the full 500 metre roll; Order Code **ZCG7850-500**.

Electrical Specifications

Capacitance, pF/m(ft)	76(23.2)
Impedance, ohms	50±1
Velocity, Percent	88
Peak Power Rating, kW	90
RF Peak Voltage, KV	3.1
Insulation Resistance, MΩ • km	>5000
Cut-off Frequency, (GHz)	4.9
Insulation Voltage , KV	6
Inner Conductor DC Resistance, Ω/km	2.90
Outer Conductor DC Resistance, Ω/km	1.20
Jacket Spark, KV	8.0
Shielding Effectiveness, dB	>120
VSWR(Return Loss)	
0.005~3GHz	≤1.15(≥23dB)
0.8~1.0GHz	≤1.10(≥26dB)
1.7~2.0GHz	≤1.10(≥26dB)
2.0~2.4GHz	≤1.10(≥26dB)

Mechanical and Environmental Specifications

Minimum Bending Radius	
Single Bend, mm(in)	80(3.15)
Repeated Bends, mm(in)	125(5)
Number of Bends	15
Mobile Apply, mm(in)	400(16)
Bending Moment, N • m(lb-ft)	13(9.6)
Tensile Strength, kg(lb)	102(225)
Storage Temperature , ℃(℉)	-55to+85(-67to+185)
Installation Temperature , ℃(℉)	-40to+60(-40to+140)
Operating Temperature , ℃(℉)	-55to+85(-67to+185)
Cable Weight, kg/m (lb/ft)	0.46(0.31)

Construction Specifications

Inner Conductor	Helical Copper Tube
Dielectric	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube
Jacket	Black PE or
	Low Smoke Halogen-free Fire-retardant

Physical Dimensions

Inner Conductor Diameter, mm(in)	9.4(0.37)
Dielectric Diameter, mm(in)	23.0(0.91)
Outer Conductor Diameter, mm(in)	24.9(0.98)
Diameter Over Jacket , mm(in)	27.5(1.08)

Attenuation and Average Power

Frequency	Attenuation		Average
MHz	dB/100 m	dB/100 ft	Power(KW)
100	1.30	0.40	6.62
200	1.87	0.57	4.60
450	2.85	0.87	2.99
800	3.90	1.19	2.19
900	4.15	1.26	2.06
1000	4.42	1.35	1.93
1500	5.53	1.69	1.54
1800	6.12	1.87	1.39
2000	6.52	1.99	1.31
2200	6.90	2.10	1.24
2400	7.35	2.24	1.19
2500	7.65	2.33	1.16
3000	8.25	2.51	1.04

Standard Conditions:

For attenuation: VSWR 1.0, cable temperature 20℃(68℉)

For average power: VSWR 1.0, ambient temperature 40℃(104℉), inner conductor temperature 100℃(212℉). No solar loading.

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