

Section 10

COAXIAL CABLE and FITTINGS

Updated 23 February 2011

ZCG1250 ½" Flexible Foam Dielectric Coaxial Cable, 50 Ohm



Our ½" flexible foam dielectric 50 ohm coaxial cable has specifications and attenuation performance to match or surpass all other brands. This is a high quality cable. Look no further.

Available in cut lengths the Order Code is **ZCG1250**.

To reduce the price per metre purchase the full 500 metre roll; Order Code **ZCG1250-500**.



Electrical Specifications

Capacitance, pF/m(ft)	76(23 2)
Impedance, ohms	50 ± 1
Velocity, Percent	88
Peak Power Rating, kW	40
RF Peak Voltage, KV	1.6
Insulation Resistance, M Ω · km	> 5000
Cut-off Frequency, (GHz)	8.8
Insulation Voltage, KV	6
Inner Conductor DC Resistance, Ω /km	1.48
Outer Conductor DC Resistance, Ω /km	1.90
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)	50(2)
Repeated Bends, mm(in)	125(5)
Number of Bends	15
Mobile Apply, mm(in)	350(14)
Bending Moment, N · m(lb-ft)	5.0(3 7)
Tensile Strength, kg(lb)	110(247)
Storage Temperature, °C(°F)	-55to+85(-67to+185)
Installation Temperature, °C(°F)	-40to+60(-40to+140)
Operating Temperature, °C(°F)	-55to+85(-67to+185)
Cable Weight, kg/m (lb/ft)	0.24(0.16)

Construction Specifications

Inner Conductor	Copper-Clad Aluminum Wire or Copper
Dielectric	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube
Jacket	Black PE or Low Smoke Halooen-free Fire-retardant

Physical Dimensions

Inner Conductor Diameter, mm(in)	4 8(0 190)
Dielectric Diameter, mm(in)	12.3(0.484)
Outer Conductor Diameter, mm(in)	13.8(0.543)
Diameter Over Jacket Diameter, mm(in)	15.7(0.618)

Attenuation and Average Power

Frequency MHz	Attenuation		Average Power(KW)
	dB/100 m	dB/100 ft	
100	2.15	0.655	3.94
200	3.08	0.939	2.75
450	4.70	1.43	1.80
800	6.35	1.94	1.33
900	6.75	2.06	1.25
1000	7.20	2.19	1.18
1500	9.05	2.76	0.95
1800	9.90	3.02	0.86
2000	10.50	3.20	0.81
2200	11.10	3.38	0.77
2400	11.60	3.54	0.75
2500	11.95	3.64	0.73
3000	13.20	4.02	0.65

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