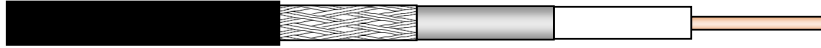




EC 200

Flexible 50 Ohms low loss coaxial cable.

This cable is compatible to the LMR-200 cable



CHARACTERISTICS

Construction

• Inner conductor	
Material	copper wire
Construction	-
Diameter (mm)	1.05
• Dielectric	
Material	gas-injected cellular polyethylene
Diameter (mm)	2.95
• Outer conductor	
Tape	aluminium tape, bonded to the dielectric
Diameter over tape (mm)	3.05
Braid	tinned copper braid
Diameter over braid (mm)	3.7
• Outer sheath	
Material	black polyethylene
Thickness (mm)	0.65
Diameter (mm)	5.0

Mechanical characteristics

• Minimum bending radius	
a) single bending (cm)	2.5
b) 15 repeated bends (cm)	5
• Maximum pulling strength (daN)	
	11
• Recommended temperature range	
- Storage	-70 to +85 °C
- Installation	-40 to +60 °C
- Operation	-55 to +85 °C
• Weight (kg/km)	
	32

Connectors

Type	PartNr.	Manufacturer
N(m)	350.055.112.T2	COMPEL
N(m) - 90°	350.055.192.T2	COMPEL
N(f) - bulkhead	350.055.726.T2	COMPEL



Electrical characteristics

• Characteristic impedance (Ω)	50 ± 2
• Nominal capacity (pF/m)	80.5
• Relative propagation velocity (%)	83
• Inductance (μH/m)	0.201
• DC-resistance at 20°C	
- inner conductor (Ω/km)	19.9
- outer conductor (Ω/km)	12.1
• RF peak voltage (kV)	0.4
• RF peak power (kW)	1.6
• Cut-off-frequency (GHz)	39
• Insulation resistance (MΩ.km)	>> 5000
• Screening attenuation (dB)	> 90
• Attenuation^[1] and power rating	

Frequency (MHz)	Attenuation at 20°C ^[2] (dB/100m)	Mean power rating ^[3] (kW)
10	3.31	1.62
20	4.69	1.14
30	5.75	0.93
80	9.44	0.57
100	10.58	0.51
150	13.00	0.41
200	15.05	0.36
300	18.52	0.29
400	21.47	0.25
450	22.81	0.23
500	24.09	0.22
600	26.47	0.20
700	28.67	0.19
800	30.73	0.17
894	32.57	0.16
960	33.80	0.16
1000	34.53	0.15
1500	42.73	0.13
1700	45.65	0.12
1800	47.05	0.11
1880	48.15	0.11
2000	49.76	0.11
2170	51.97	0.10
2200	52.35	0.10
2300	53.61	0.10
2400	54.84	0.10
2500	56.06	0.10
3000	61.82	0.09

[1] The attenuation can be approximated by the formula:

$$\alpha(f[\text{MHz}]) = A \cdot \sqrt{f[\text{MHz}]} + B \cdot f[\text{MHz}] \quad (\text{dB}/100\text{m})$$

$$A = 1.0416$$

$$B = 0.00159$$

[2] Nominal values

[3] Ambient temperature = 40°C; temperature of inner conductor = 100°C; VSWR = 1.0; no solar loading

