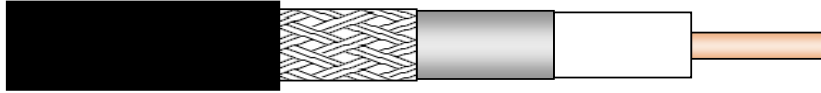




# EC 600

**Flexible 50 Ohms low loss coaxial cable.**

This cable is compatible to the LMR-600 cable



## CHARACTERISTICS

### Construction

<b>• Inner conductor</b>	
Material	<b>copper clad aluminium wire</b>
Construction	-
Diameter (mm)	<b>4.47</b>
<b>• Dielectric</b>	
Material	<b>gas-injected cellular polyethylene</b>
Diameter (mm)	<b>11.56</b>
<b>• Outer conductor</b>	
Tape	<b>aluminium tape</b>
Diameter over tape (mm)	<b>11.7</b>
Braid	<b>tinned copper braid</b>
Diameter over braid (mm)	<b>12.3</b>
<b>• Outer sheath</b>	
Material	<b>black polyethylene</b>
Thickness (mm)	<b>1.35</b>
Diameter (mm)	<b>15.0</b>

### Mechanical characteristics

<b>• Minimum bending radius</b>	
a) single bending (cm)	<b>8</b>
b) 15 repeated bends (cm)	<b>15</b>
<b>• Maximum pulling strength (daN)</b>	
	<b>50</b>
<b>• Recommended temperature range</b>	
- Storage	<b>-70 to +85 °C</b>
- Installation	<b>-40 to +60 °C</b>
- Operation	<b>-55 to +85 °C</b>
<b>• Weight (kg/km)</b>	
	<b>175</b>

### Connectors

Type	PartNr.	Manufacturer
N(m)	350.055.106	COMPEL
N(m)	J01020B0029	Telegärtner



### Electrical characteristics

• Characteristic impedance (Ω)	<b>50 ± 2</b>
• Nominal capacity (pF/m)	<b>76.7</b>
• Relative propagation velocity (%)	<b>87</b>
• Inductance (μH/m)	<b>0.191</b>
<b>• DC-resistance at 20°C</b>	
- inner conductor (Ω/km)	<b>1.65</b>
- outer conductor (Ω/km)	<b>4.4</b>
• RF peak voltage (kV)	<b>1.6</b>
• RF peak power (kW)	<b>25.6</b>
• Cut-off-frequency (GHz)	<b>10</b>
• Insulation resistance (MΩ.km)	<b>&gt;&gt; 5000</b>
• Screening attenuation (dB)	<b>&gt; 90</b>
<b>• Attenuation<sup>[1]</sup> and power rating</b>	

Frequency (MHz)	Attenuation at 20°C <sup>[2]</sup>		Mean power rating <sup>[3]</sup> (kW)
	(dB/100m)	(dB/100m)	
10	0.78	9.74	
20	1.11	6.87	
30	1.37	5.59	
80	2.25	3.39	
100	2.53	3.03	
150	3.11	2.46	
200	3.61	2.12	
300	4.46	1.72	
400	5.18	1.48	
450	5.51	1.39	
500	5.83	1.31	
600	6.42	1.19	
700	6.96	1.10	
800	7.48	1.02	
894	7.94	0.96	
960	8.25	0.93	
1000	8.43	0.91	
1500	10.50	0.73	
1700	11.25	0.68	
1800	11.61	0.66	
1880	11.89	0.64	
2000	12.30	0.62	
2170	12.87	0.59	
2200	12.97	0.59	
2300	13.29	0.57	
2400	13.61	0.56	
2500	13.93	0.55	
3000	15.42	0.50	

[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 = 0.246  
B = 0.00065

[2] Nominal values

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

