



3/8"

STANDARD

Cable type : **5088**
Reference : **EC2-50**

Cable with standard UV resistant PE jacket,
halogen free according to IEC 60754

CHARACTERISTICS

Construction

• Inner conductor	
Material	copper clad aluminium wire
Diameter (mm)	3.25
• Dielectric	
Material	gas-injected cellular polyethylene
Diameter (mm)	8.4
• Outer conductor	
Material	corrugated copper tube
Diameter (mm)	9.6
• Outer sheath	
Material	black polyethylene
Thickness (mm)	1.1
Diameter (mm)	11.8

Mechanical characteristics

• Minimum bending radius	
a) single bending (cm)	4
b) 15 repeated bends (cm)	12
• Maximum pulling strength (daN)	55
• Recommended temperature range	
- Storage	-70 to +85 °C
- Installation	-40 to +60 °C
- Operation	-55 to +85 °C
• Max. length per hoisting grip (m)	70
• Maximum hanger spacing (m)	0.5
• Flat plate crush resistance (kg/mm)	1.2
• Bending moment (Nm)	2.8
• Weight (kg/km)	140

FLAME RETARDANT

Cable type : **5088-HLFR**
Reference : **EC2-50-FR**

Cable with UV resistant, halogen free, low smoke,
flame retardant jacket according to IEC 60754,
IEC 60332-1, IEC 60332-3 cat. C and IEC 61034

Electrical characteristics

• Characteristic impedance (Ω)	50 ± 1
• Nominal capacity (pF/m)	76
• Relative propagation velocity (%)	88
• Inductance ($\mu H/m$)	0.189
• DC-resistance at 20°C	
- inner conductor (Ω/km)	3.1
- outer conductor (Ω/km)	2.65
• RF peak voltage (kV)	1.1
• RF peak power (kW)	11
• Cut-off-frequency (GHz)	14.2
• Insulation resistance (M Ω .km)	>> 5000
• Attenuation ^[1] and power rating	

Frequency	Attenuation at 20°C ^[2]	Mean power rating ^[3]
(MHz)	(dB/100m)	(kW)
10	0.97	7.17
20	1.38	5.05
30	1.69	4.11
80	2.78	2.50
100	3.12	2.23
150	3.84	1.81
200	4.45	1.56
300	5.49	1.26
400	6.38	1.09
450	6.79	1.02
500	7.18	0.97
600	7.90	0.88
700	8.57	0.81
800	9.20	0.75
894	9.76	0.71
960	10.14	0.68
1000	10.37	0.67
1500	12.90	0.54
1700	13.81	0.50
1800	14.25	0.49
1880	14.59	0.48
2000	15.10	0.46
2170	15.79	0.44
2200	15.91	0.44
2300	16.31	0.43
2400	16.69	0.42
2500	17.08	0.41
3000	18.90	0.37
4000	22.23	0.31
6000	28.04	0.25

[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 = 0.30423
B = 0.000746

[2] Nominal values

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

