



STANDARD

5042

Cable type :

5042

Reference :

EC1-50-HF

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

FLAME RETARDANT

HLFR

Cable type :

5042-HLFR

Reference :

EC1-50-HF-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

CHARACTERISTICS

Construction

• Inner conductor		
Material	copper clad aluminium wire	
Diameter (mm)	1.9	
• Dielectric		
Material	gas-injected cellular polyethylene	
Diameter (mm)	4.6	
• Outer conductor		
Material	corrugated copper tube	
Diameter (mm)	6.4	
• Outer sheath		
Material	black polyethylene	
Thickness (mm)	0.55	
Diameter (mm)	7.5	

Mechanical

• Minimum bending radius		
a) single bending (cm)	3	
b) 15 repeated bends (cm)	3	
• Maximum pulling strength (daN)		
	30	
• Recommended temperature range		
- Storage	-70 to +85°C	
- Installation	-40 to +60°C	
- Operation	-55 to +85°C	
• Maximum length per hoisting grip (m)		
	70	
• Maximum hanger spacing		
	-	
• Flat plate crush resistance (kg/mm)		
	0.9	
• Bending moment (Nm)		
	1.1	
• Weight (kg/km)		
	80	

Electrical

• Characteristic impedance (Ω)	50 ±1.5
• Nominal capacity (pF/m)	80
• Relative propagation velocity (%)	83
• Inductance (μH/m)	0.200
• DC-resistance at 20°C	
- inner conductor (Ω/km)	9.2
- outer conductor (Ω/km)	4.4
• RF peak voltage (kV)	0.6
• RF peak power (kW)	3.6
• Cut-off-frequency (GHz)	22
• Insulation resistance (MΩ.km)	>>5000

Attenuation and power rating

Frequency (MHz)	Attenuation at 20°C ^(*) (dB/100m)	Mean power rating ^(**) (kW)
10	1.78	3.93
20	2.49	2.77
30	3.06	2.26
80	5.03	1.37
100	5.63	1.23
150	6.93	1.00
200	8.03	0.86
300	9.89	0.70
400	11.48	0.60
450	12.20	0.57
500	12.89	0.54
600	14.18	0.49
700	15.37	0.45
800	16.49	0.42
894	17.49	0.39
960	18.16	0.38
1000	18.56	0.37
1500	23.03	0.30
1700	24.63	0.28
1800	25.40	0.27
1880	26.00	0.27
2000	26.89	0.26
2170	28.10	0.25
2200	28.31	0.24
2300	29.00	0.24
2400	29.68	0.23
2500	30.35	0.23
3000	33.53	0.21
4000	39.31	0.18
6000	49.36	0.14

(*) Nominal values

(**) Ambient temperature = 40°C; Temperature of inner conductor = 100°C; VSWR = 1.0; no solar loading