Technical Data Sheet		Rosenberger
SLink Cable	1/2"R FRNC	**SL 012R FRNC**

This product used for mobile network and telecommunication equipment

Material and dimensions

Inner conductor	Copper Clad Aluminum wire	Ø 4.8 mm
Dielectric	Foam PE	Ø 12.2 mm
Outer conductor	Corrugated copper (annularly)	Ø 13.8 mm
Jacket	PE, Flame Retardant Non Corrosive Black, UV resistant, Halogen free	Ø 15.85 mm
Ink marking: metric length	RosenbergerSLink™_SL 012R_FRNC_B2ca_50Ω_ _ _ _ _(DD+MM+SS+YY+NNNNN)_ _ _ _ _XXXXm	
50Ohms structure must be ensured		

Documents

Fire resistance	IEC 60332-1-1:2004; IEC 60332-3-24:2000 IEC 60754-1/-2:1994; IEC 61034-2:2005; CPR-EN 50575 B2ca rated
UV resistance	GB/T2423.24-1995; EN 50289-4-17, Method A

Electrical Specification

Impedance	50 ± 1 Ω
Relative Velocity of Propagation	88%
Capacitance	76 pF/m
Inductance	0.190 µH/m
Maximum Operating Frequency	8.8 GHz
Cut-off Frequency	10.0 GHz
Peak Power Rating	40 kW
Insulation Resistance	≥ 10 GΩ x km
DC Breakdown Voltage	6000V
Jacket Spark Test Voltage	8000 Vrms
Inner Conductor DC-resistance	≤ 1.55 Ω/km
Outer Conductor DC-resistance	≤ 2.7 Ω/km

Environmental Specification

Installation Temperature	-25°C to +60°C
Operating Temperature	-40°C to +85°C
Storage Temperature	-70°C to +85°C
RoHS	compliant
CPR	B2ca – s1a,d0,a1

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Mechanical Specification

Cable weight	230 kg/km
Tensile strength	1150 N
Min. bending radius (single)	70 mm
Min. bending radius (repeated)	125 mm
Number of bends, minimum (typical)	15 (50)
Bending moment	5 Nm
Flat plate crush strength	20 N/mm
Recommended hanger spacing	0.8 m

Standard Conditions

Attenuation, Ambient Temperature	20°C
Average Power, Ambient Temperature	40°C
Average Power, Inner Conductor Temp.	100°C

Return Loss

Return Loss	Assembly up to 20m	Drum
	380 – 470 MHz ≥ 30dB	380 – 470 MHz ≥ 26dB
	600 – 960 MHz ≥ 30dB	600 – 960 MHz ≥ 26dB
	1.4 – 2.7 GHz ≥ 28dB	1.4 – 2.7 GHz ≥ 24dB
	3.4 – 4.2 GHz ≥ 26dB	3.4 – 4.2 GHz ≥ 22dB
	5.1 – 6.0 GHz ≥ 26dB	5.1 – 6.0 GHz ≥ 22dB
Intermodulation (3rd order, 2 x 20W)	≤ -117 dBm (static and dynamic)	

Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power (kW)
100	2.15	3.94
200	3.08	2.75
300	3.81	1.99
400	4.46	1.80
450	4.70	1.75
800	6.35	1.33
900	6.75	1.25
1000	7.20	1.18
1800	9.90	0.86
2000	10.50	0.81
2200	11.10	0.77
2500	11.95	0.73
2700	12.47	0.69
3000	13.20	0.65
3500	14.40	0.59
4000	15.50	0.55
5000	17.60	0.48
6000	19.60	0.43

Maximum attenuation value shall be 105% of the nominal attenuation value
Other frequencies on request

Draft	Date	Approved	Date
Christian Janßen	21.09.18	J. Gramsamer	12.06.24

Rev.	Engineering change number	Name	Date
k00	24-RL018	H. Schnitzer	12.06.24

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