

SLink  
Cable

1/2" S FRNC

**SL 012S FRNC**



This product used for mobile network and telecommunication equipment

**Material and dimensions**

Inner conductor	Copper Clad Aluminum wire	Ø 3.6 mm
Dielectric	Foam PE	Ø 9.0 mm
Outer conductor	Corrugated copper(Helically)	Ø 12.2 mm
Jacket	PE, Flame Retardant Non Corrosive(FRNC)	Ø 13.4 mm
	Black, UV resistant, Halogen free	
Ink marking: metric length	RosenbergerSLink™_SL 012S_FRNC_50Ω_ _ _ _ _ (DD+MM +SS+YY+NNNNN)_ _ _ _ _ XXXXm	

**Documents**

Fire resistance	IEC 60332-1-2:2004; IEC 60332-3-24:2000
	IEC 60754-1/-2:1994; IEC 61034-2:2005
UV resistance	GB 14049-093; EN 50289-4-17, Method A

**Electrical Specification**

Impedance	50 ± 1 Ω
Relative Velocity of Propagation	83%
Capacitance	80 pF/m
Inductance	0.195 µH/m
Maximum Operating Frequency	10.2 GHz
Cut-off Frequency	13.0 GHz
Peak Power Rating	16 kW
Insulation Resistance	≥ 10 GΩ x km
DC Breakdown Voltage	2500V
Jacket Spark Test Voltage	5000 Vrms
Inner Conductor DC-resistance	≤ 2.73 Ω/km
Outer Conductor DC-resistance	≤ 3.68 Ω/km

**Environmental Specification**

Installation Temperature	-20°C to +60°C
Operating Temperature	-40°C to +85°C
Storage Temperature	-70°C to +85°C
2011/65EU (RoHS)	compliant

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RF\_35/05.10/6.0

# Technical Data Sheet

# Rosenberger

SLink  
Cable

1/2" S FRNC

SL 012S FRNC

## Mechanical Specification

Cable weight	≈ 184 kg/km
Tensile strength	750 N
Min. bending radius (single)	25 mm
Min. bending radius (repeated)	35 mm
Number of bends, minimum (typical)	20 (50)
Bending moment	3 Nm
Flat plate crush strength	15 N/mm
Recommended hanger spacing	0.8 m
Retention force radial	40 Ncm min. (between inner conductor and jacket)
Retention force axial	200 N min. (between inner conductor and dielectric) test method: refer to RN 085-01

## Standard Conditions

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

## Return Loss

Return loss(Band A)	≤ -26dB 800 to 1000MHz
Return loss(Band B)	≤ -24dB 1700 to 1900MHz
Return loss(Band C)	≤ -24dB 1900 to 2200MHz
Return loss(Band D)	≤ -24dB 2200 to 2500MHz
Return loss(Band E)	≤ -24dB 2500 to 3000MHz
Cable assemblies with a length up to 20m should meet the following requirement:	
Return Loss	≤ -30dB @ DC-1000MHz
	≤ -28dB @ 1000 -2500MHz
	≤ -26dB @ 2500-3000MHz
Intermodulation (3rd order, 2 x 20W)	≤ -117dBm @ 910MHz or 1800MHz (static and dynamic)

## Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power (KW)
100	3.31	3.16
200	4.84	2.17
300	6.07	1.71
400	7.11	1.47
450	7.59	1.38
800	10.4	1.01
900	11.2	0.95
1000	11.8	0.89
1800	16.0	0.63
2000	17.2	0.60
2200	18.2	0.56
2500	19.5	0.52
2700	20.5	0.50
3000	21.9	0.48

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

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Check	Approved	Date	Rev.	Engineering change number	Name	Date
Feifei	13/12/11	Feifei	Luding	30/01/13	g	12-0003	Zhukun	04/12/12
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本产品用于无线网络及通讯设备

### 材料及尺寸

中心导体	铜包铝线	Ø 3.6 mm
绝缘体	发泡 PE	Ø 9.0 mm
外导体	皱纹铜管(螺旋状)	Ø 12.2 mm
护套	黑色, PE, 无烟防腐蚀(FRNC) 防紫外线	Ø 13.4 mm
喷码: 米标	RosenbergerSLink™_SL 012S_FRNC_50Ω_ _ _ _ _ (DD+MM +SS+YY+NNNNN)_ _ _ _ _ XXXXm	

### 文档材料

防火标准	IEC 60332-1-2:2004; IEC 60332-3-24:2000
	IEC 60754-1/-2:1994; IEC 61034-2:2005
防紫外线标准	GB 14049-093; EN 50289-4-17, Method A

### 电气参数

阻抗	50 ± 1 Ω
相对传输速度	83%
电容	80 pF/m
电感	0.195 µH/m
截止频率	13.0 GHz
峰值功率	16 kW
绝缘电阻	≥ 10 GΩ x km
直流击穿电压	2500V
护套电火花试验电压	5000 Vrms
中心导体接触电阻	≤ 2.73 Ω/km
外导体接触电阻	≤ 3.68 Ω/km

### 环境参数

安装温度	-20°C to +60°C
工作温度	-40°C to +85°C
储存温度	-70°C to +85°C
2011/65/EU (RoHS)	符合

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**机械参数**

重量	≈ 184 kg/km
抗拉强度	750 N
最小折弯半径(单次)	25 mm
最小折弯半径(多次)	35 mm
折弯次数, 最小(典型值)	20 (50)
折弯力矩	3 Nm
平面耐压强度	15 N/mm
参考悬挂间距	0.8 m
径向保持力	40 Ncm min (内导体与外护套之间)
轴向保持力	200N min (内导体与绝缘体之间)

检测方法: 依据 RN 085-01

**标准参数**

衰减, 外部环境温度	20°C
平均功率, 外部环境温度	40°C
平均功率, 中心导体温度	100°C

**回波损耗**

频段 A	≤ -26dB 800 to 1000MHz
频段 B	≤ -24dB 1700 to 1900MHz
频段 C	≤ -24dB 1900 to 2200MHz
频段 D	≤ -24dB 2200 to 2500MHz
频段 E	≤ -24dB 2500 to 3000MHz

20 米以下线缆需满足如下要求:

回波损耗	≤ -30dB @ DC-1000MHz
	≤ -28dB @ 1000 -2500MHz
	≤ -26dB @ 2500-3000MHz
三阶交调 (2 x 20W)	≤ -117dBm @ 910MHz 或 1800MHz (静态和动态)

**衰减**

功率 (MHz)	衰减(dB/100m)	平均功率 (KW)
100	3.31	3.16
200	4.84	2.17
300	6.07	1.71
400	7.11	1.47
450	7.59	1.38
800	10.4	1.01
900	11.2	0.95
1000	11.8	0.89
1800	16.0	0.63
2000	17.2	0.60
2200	18.2	0.56
2500	19.5	0.52
2700	20.5	0.50
3000	21.9	0.48

最大衰减不得超过标准值的 105%；其余频段可根据要求提供。

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