FLEXIBLE RF CABLE / **FLEXIBLE LOW LOSS CABLE**

Cable Name: S100

Part No: VXS1000



10 GHz
MAX FREQUENCY

2500 V.DC
EXTREME HIGH VOLTAGE

-155 dBc
LOW PIM PERFORMANCE

10.00 mm
MEGA-SIZE PROFILE

General Description: The Vinstronics VXS1000 is a mega-size, flexible low-loss RF cable designed for the most demanding 10GHz transmissions. Boasting an unprecedented 10.00mm blue FEP jacket and a 2500 V.DC rating, it provides maximum power transfer, excellent -155dBc PIM performance, and ultimate armor for critical wireless and electronic countermeasure systems.

Core Features

- **Ultra-Low Loss:** Optimized for precision long-distance transmission.
- **Low PIM:** Outstanding -155dBc performance for clear signals.
- **Extreme Voltage:** 2500 V.DC rating for ultimate power handling.
- **Robust Power:** Superior handling for high-intensity signals.
- **Mega-Size Profile:** 10.00mm outer diameter for elite durability and armor.

Target Applications

- **Base Stations:** Ideal for extreme high-power communication routing.
- **Naval & Ground Systems:** Dependable in harsh outdoor settings.
- **RF Testing:** Reliable for heavy-duty microwave device testing.
- **Extreme Power Routing:** Ideal for high-voltage and high-current applications.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**3.00** [0.118]
2. Dielectric	Low Density PTFE (LD PTFE)	**8.00** [0.315]
3. Inner Shield	Silver-plated copper strip	**8.25** [0.325]
4. Outer Shield	Silver-plated copper wire braiding	**8.80** [0.346]
5. Jacket	FEP / Blue (Customizable)	**10.00** [0.394]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**10 GHz**
Cut-off Frequency	**14 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**2500 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**4000**	**5000**	**6000**	**8000**	**10000**
Attenuation (dB/100m)	**10.6**	**15.3**	**19.0**	**22.2**	**25.1**	**27.8**	**32.5**	**37.1**
Average Power (kW)	**2.146**	**1.488**	**1.200**	**1.026**	**0.908**	**0.820**	**0.700**	**0.612**

K1 = 0.320490 **K2 =** 0.000512 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**50 mm** [1.969 in]
Dynamic Bending Radius	**100 mm** [3.937 in]
Weight	**0.222 kg/m** [0.1492 lbs/ft]
Temperature Range	**-55 ~ +165 ℃** [-67 ~ +329 ℉]