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

Cable Name: S73

Part No: VXS730



18 GHz
MAX FREQUENCY

1900 V.DC
EXTREME HIGH VOLTAGE

-155 dBc
LOW PIM PERFORMANCE

7.30 mm
HEAVY-DUTY FLEXIBILITY

General Description: The Vinstronics VXS730 is a heavy-duty, flexible low-loss RF cable engineered for demanding 18GHz microwave environments. Featuring a rugged 7.30mm blue FEP jacket and an impressive 1900 V.DC rating, it balances ultimate power handling with outstanding -155dBc PIM performance, providing reliable interconnects for critical base station infrastructure.

Core Features

- **Ultra-Low Loss:** Optimized for precision long-distance transmission.
- **Low PIM:** Outstanding -155dBc performance for clear signals.
- **Extreme Voltage:** 1900 V.DC rating for intensity requirements.
- **Robust Power:** Superior handling for high-intensity signals.
- **Heavy-Duty Build:** 7.30mm outer diameter for enhanced physical protection.

Target Applications

- **Base Stations:** Ideal for high-power communication routing.
- **RF Testing:** Reliable for microwave device testing environments.
- **Naval & Ground Systems:** Dependable in harsh outdoor settings.
- **High-Power Interconnects:** Ideal for extreme high-voltage applications.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**2.03** [0.080]
2. Dielectric	Low Density PTFE (LD PTFE)	**5.33** [0.210]
3. Inner Shield	Silver-plated copper strip	**5.53** [0.218]
4. Outer Shield	Silver-plated copper wire braiding	**6.10** [0.240]
5. Jacket	FEP / Blue (Customizable)	**7.30** [0.287]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**18 GHz**
Cut-off Frequency	**19 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**1900 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**4000**	**5000**	**6000**	**8000**	**10000**	**12400**	**18000**
Attenuation (dB/100m)	**15.9**	**22.8**	**28.3**	**33.0**	**37.1**	**41.0**	**47.9**	**54.1**	**60.8**	**74.5**
Average Power (kW)	**1.761**	**1.233**	**0.995**	**0.854**	**0.758**	**0.686**	**0.588**	**0.520**	**0.463**	**0.380**

K1 = 0.485121 **K2 =** 0.000523 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**29 mm** [1.142 in]
Dynamic Bending Radius	**57 mm** [2.244 in]
Weight	**0.118 kg/m** [0.0793 lbs/ft]
Temperature Range	**-55 ~ +165 ℃** [-67 ~ +329 ℉]