FLEXIBLE RF CABLE / PHASE STABLE CABLE

Cable Name: W120

Part No: VXW1200



8 GHz	3000 V.DC
MAX FREQUENCY	WITHSTANDING VOLTS
12.00 mm	**< 750 PPM**
ULTIMATE ARMOR	PHASE STABILITY

General Description: The Vinstronics VXW1200 is the ultimate high-power, low-loss RF cable, designed for 8GHz transmission. With an unprecedented 12.00mm diameter and a 3000 V.DC rating, it provides maximum power transfer, strict phase stability (<750PPM), and impenetrable environmental protection for the most demanding electronic countermeasure systems.

Core Features

- **Phase Stability:** <750PPM @ -55℃ to +85℃.
- **Extreme Voltage:** 3000 V.DC rating for ultimate power handling.
- **Ultra-Low Loss:** Optimized for precision transmission.
- **Low PIM:** Outstanding -155dBc performance.
- **Ultimate Armor:** 12.00mm outer diameter for impenetrable defense.

Target Applications

- **Avionics:** Meets stringent stability standards.
- **Phased Array Radar:** Ensures precise phase consistency.
- **Naval & Ground Systems:** Reliable in harsh environments.
- **Extreme Power Routing:** Ideal for high-voltage applications.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**3.80** [0.150]
2. Dielectric	Low Density PTFE (LD PTFE)	**10.30** [0.406]
3. Inner Shield	Silver-plated copper strip	-
4. Outer Shield	Silver-plated copper wire braiding	**11.35** [0.447]
5. Jacket	FEP / Gray (Customizable)	**12.00** [0.472]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**8 GHz**
Cut-off Frequency	**11 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**83 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**3000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**4000**	**5000**	**6000**	**7000**	**8000**
Attenuation (dB/100m)	**10.0**	**14.4**	**18.0**	**21.0**	**23.8**	**26.3**	**28.7**	**31.0**
Average Power (kW)	**2.320**	**1.605**	**1.289**	**1.101**	**0.973**	**0.879**	**0.806**	**0.747**

K1 = 0.298565 **K2 =** 0.000535 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**60 mm** [2.362 in]
Dynamic Bending Radius	**120 mm** [4.724 in]
Weight	**0.282 kg/m** [0.1895 lbs/ft]
Temperature Range	**-55 ~ +105 ℃** [-67 ~ +221 ℉]