FLEXIBLE RF CABLE / HIGH POWER CABLE

Cable Name: B93

Part No: VXB930



10 GHz
MAX FREQUENCY

Aluminum Foil
HIGH TENSILE STRENGTH

2500 V.DC
EXTREME VOLTAGE

9.30 mm
MAXIMUM ARMOR

General Description: The Vinstronics VXB930 is a heavy-duty, high-power RF cable designed for massive 10GHz energy transmission. Protected by a massive 9.30mm blue FEP jacket and featuring a high-temperature aluminum foil interlayer, it delivers an extreme 2500 V.DC rating with elite tensile strength. It provides impenetrable defense for the most demanding ground-based and naval systems.

Core Features

- **Extreme Voltage:** 2500 V.DC rating for unprecedented power handling.
- **Aluminum Foil Layer:** Unique interlayer ensures superior tensile properties.
- **Low PIM:** Outstanding -155dBc performance for pure signal clarity.
- **Ultra-Low Loss:** Optimized for high-efficiency, long-distance transmission.
- **Maximum Armor:** 9.30mm outer diameter for ultimate physical protection.

Target Applications

- **High Power Launch:** Dependable for extreme-intensity broadcasting.
- **Naval & Ground Systems:** Reliable in harsh, heavy-duty outdoor settings.
- **Base Stations:** Ideal for high-power communication routing.
- **ECM Systems:** Ultimate protection in electronic countermeasure setups.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**2.44** [0.096]
2. Dielectric	Low Density PTFE (LD PTFE)	**7.24** [0.285]
3. Inner Shield	Silver-plated copper strip	**7.48** [0.294]
4. Interlayer	High temperature aluminum foil	**7.61** [0.300]
5. Outer Shield	Silver-plated copper wire braiding	**8.19** [0.322]
6. Jacket	FEP / Blue (Customizable)	**9.30 [0.366]**

ELECTRICAL CHARACTERISTICS

Operating Frequency	**10 GHz**
Cut-off Frequency	**15 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**	**6000**	**7000**	**8000**	**9000**	**10000**
Attenuation (dB/100m)	**14.7**	**21.1**	**26.2**	**30.6**	**38.2**	**41.5**	**44.7**	**47.7**	**50.6**
Average Power (kW)	**1.839**	**1.279**	**1.031**	**0.883**	**0.709**	**0.651**	**0.605**	**0.567**	**0.534**

K1 = 0.446080 **K2 =** 0.000600 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**51 mm** [2.008 in]
Dynamic Bending Radius	**100 mm** [3.937 in]
Weight	**0.193 kg/m** [0.1297 lbs/ft]
Temperature Range	**-55 ~ +200 ℃** [-67 ~ +392 ℉]