FLEXIBLE RF CABLE / **ULTRA-FLEXIBLE CABLE**

Cable Name: F60

Part No: VXF600



26.5 GHz
MAX FREQUENCY

1700 V.DC
WITHSTANDING VOLTS

Stranded Core
DYNAMIC FLEXIBILITY

Black PUR
HARSH ENV DEFENSE

General Description: The Vinstronics VXF600 is a heavy-duty, super-flexible RF cable delivering robust 26.5GHz transmission. Protected by a resilient 6.00mm black PUR jacket and rated for an impressive 1700 V.DC, it ensures maximum durability against harsh environmental conditions while maintaining excellent dynamic bending capabilities through its stranded core design.

Core Features

- **Super Flexible:** Stranded inner conductor for outstanding dynamic bending.
- **Extreme Voltage:** 1700 V.DC rating for ultimate power handling.
- **Harsh Environment Ready:** Black PUR jacket provides elite wear and weather resistance.
- **Ultra-Low Loss:** Optimized for precision signal transmission.
- **Reliable Shielding:** >90 dB shielding effectiveness for clear signals.

Target Applications

- **Tight Enclosures:** Perfect for narrow and complicated installation spaces.
- **RF Testing:** Highly durable for frequent-bending test cable assemblies.
- **Phased Array Radar:** Ideal for internal array interconnections.
- **Harsh Outdoors:** Dependable routing in extreme wild environments.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated stranded copper	**1.44** [0.057]
2. Dielectric	Low Density PTFE (LD PTFE)	**4.15** [0.163]
3. Inner Shield	Silver-plated copper strip	**4.35** [0.171]
4. Outer Shield	Silver-plated copper wire braiding	**4.80** [0.189]
5. Jacket	PUR / Black (Customizable)	**6.00** [0.236]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**26.5 GHz**
Cut-off Frequency	**29.5 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**1700 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**	**26500**
Attenuation (dB/100m)	**28.7**	**41.2**	**50.9**	**73.6**	**86.0**	**97.1**	**109.2**	**134.3**	**167.2**
Average Power (kW)	**0.175**	**0.122**	**0.099**	**0.068**	**0.059**	**0.052**	**0.046**	**0.037**	**0.030**

K1 = 0.880600 **K2 =** 0.000900 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**30 mm** [1.181 in]
Dynamic Bending Radius	**60 mm** [2.362 in]
Weight	**0.072 kg/m** [0.0484 lbs/ft]
Temperature Range	**-55 ~ +85 ℃** [-67 ~ +185 ℉]