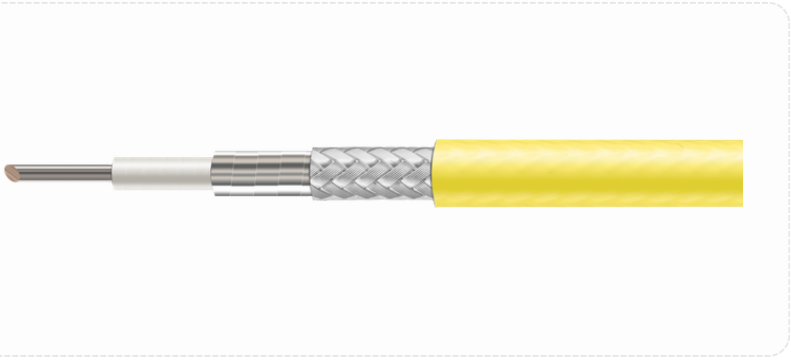
FLEXIBLE RF CABLE / PHASE STABLE CABLE

Cable Name: W48B

Part No: VXW480B



26.5 GHz	1500 V.DC
MAX FREQUENCY	POWER HANDLING
Ruggedized	**< 750 PPM**
ENVIRONMENTAL PROTECTION	PHASE STABILITY

General Description: The Vinstronics VXW480B is a premium, ultra-low loss, phase-stable RF coaxial cable engineered for demanding microwave environments. Featuring a distinctive yellow FEP jacket and LD PTFE dielectric, it delivers exceptional signal integrity up to 26.5GHz. With strict phase stability (<750PPM) and a remarkable 1500 V.DC voltage rating, it is the ideal interconnect solution for advanced aerospace and communication systems.

Core Features

- **Phase Stability:** <750PPM @ -55℃ ~ +85℃ for high signal fidelity.
- **Ultra-Low Loss:** Optimized for precision, long-distance signal transmission.
- **Low PIM:** Outstanding -155dBc performance for minimal interference.
- **High Voltage Rating:** 1500 V.DC architecture for high-intensity requirements.
- **Specialized Jacket:** Yellow FEP material for excellent resistance and easy routing.

Target Applications

- **Avionics:** Meets stringent weight and environmental stability standards.
- **Phased Array Radar:** Ensures the precise phase consistency crucial for tracking.
- **ECM Systems:** Reliable performance in harsh electromagnetic environments.
- **High-Frequency Interconnects:** Ideal for any strict loss and phase applications.

CONSTRUCTION SPECIFICATION

Item	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**1.30** [0.051]
2. Dielectric	Low Density PTFE (LD PTFE)	**3.58** [0.141]
3. Inner Shield	Silver-plated copper strip	**3.73** [0.147]
4. Outer Shield	Silver-plated copper wire braiding	**4.27** [0.168]
5. Jacket	FEP / Yellow (Customizable)	**4.83** [0.190]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**26.5 GHz**
Cut-off Frequency	**33 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**83 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**1500 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**	**26500**
Attenuation (dB/100m)	**25.2**	**36.0**	**44.4**	**63.8**	**74.3**	**83.7**	**94.0**	**115.1**	**142.4**
Average Power (kW)	**0.749**	**0.525**	**0.425**	**0.296**	**0.254**	**0.225**	**0.201**	**0.164**	**0.133**

K1 = 0.778394 **K2 =** 0.000591 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**24 mm** [0.945 in]
Dynamic Bending Radius	**48 mm** [1.890 in]
Weight	**0.050 kg/m** [0.0336 lbs/ft]
Temperature Range	**-55 ~ +165 ℃** [-67 ~ +329 ℉]