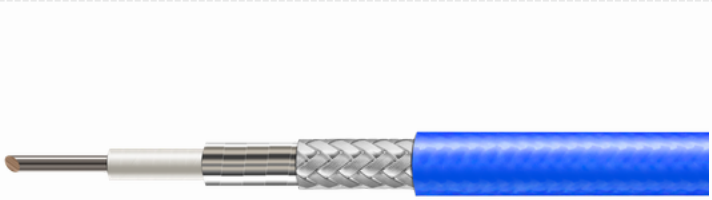
FLEXIBLE RF CABLE / GENERAL PURPOSE FLEXIBLE CABLE

Cable Name: I40

Part No: VXI400



26.5 GHz
MAX FREQUENCY

Low VSWR
SIGNAL INTEGRITY

1500 V.DC
WITHSTANDING VOLTS

Economy
SEMI-RIGID REPLACEMENT

General Description: The Vinstronics VXI400 is a robust, economy-type flexible RF cable for 26.5GHz transmissions. Built with a solid PTFE dielectric and a 4.00mm blue FEP jacket, it delivers an impressive 1500 V.DC power rating along with low VSWR. It completely eliminates the routing difficulties of traditional semi-rigid cables, providing a highly cost-effective interconnection solution.

Core Features

- **Economy Build:** High performance-to-price ratio for general-purpose use.
- **Semi-Rigid Replacement:** Highly flexible alternative to hand-formable cables.
- **High Voltage:** 1500 V.DC rating for increased power handling.
- **Low VSWR:** Ensures excellent signal integrity across the frequency band.
- **Durable Jacket:** Blue FEP jacket for environmental protection.

Target Applications

- **Chassis Interconnects:** Perfect for narrow and complicated cabinet routing.
- **Module Interconnection:** Reliable links between internal RF modules.
- **Phased Array Radar:** Ideal for internal array connection-free setups.
- **Semi-Rigid Replacement:** Cost-effective upgrades for legacy rigid routing.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**0.94** [0.037]
2. Dielectric	Solid PTFE	**3.00** [0.118]
3. Inner Shield	Silver-plated copper strip	**3.20** [0.126]
4. Outer Shield	Silver-plated copper wire braiding	**3.55** [0.140]
5. Jacket	FEP / Blue (Customizable)	**4.00** [0.157]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**26.5 GHz**
Cut-off Frequency	**34 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**70 %**
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)	**37.6**	**55.1**	**69.3**	**103.9**	**123.5**	**141.6**	**161.9**	**205.3**	**264.7**
Average Power (kW)	**0.290**	**0.198**	**0.157**	**0.105**	**0.088**	**0.077**	**0.067**	**0.053**	**0.041**

K1 = 1.082677 **K2** = 0.003337 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**20 mm** [0.787 in]
Dynamic Bending Radius	**40 mm** [1.575 in]
Weight	**0.041 kg/m** [0.0276 lbs/ft]
Temperature Range	**-55 ~ +125 ℃** [-67 ~ +257 ℉]