FLEXIBLE RF CABLE / LOW LOSS CABLE/ ECONOMY

Cable Name: E36

Part No: VXE360



18 GHz
MAX FREQUENCY

Aluminum Foil
COST-EFFECTIVE SHIELD

3.60 mm
COMPACT ROUTING

Economy
INNER CONNECTIVITY

General Description: The Vinstronics VXE360 is a highly cost-effective, low-loss RF cable tailored for general 18GHz inner connectivity. Utilizing an aluminum foil inner shield to maximize cost efficiency and a compact 3.60mm FEP jacket, it provides reliable signal transmission for communication base stations where strict PIM performance is not required.

Core Features

- **Economy Build:** Aluminum foil shielding delivers maximum cost-effectiveness.
- **Low Loss:** LD PTFE dielectric ensures efficient signal transmission.
- **Compact Profile:** 3.60mm outer diameter is ideal for dense cabinet routing.
- **Reliable Shielding:** >70 dB shielding efficiency for internal environments.
- **High Voltage:** 1000 V.DC rating for reliable power handling.

Target Applications

- **Base Stations:** The optimal economical choice for communication base station connections.
- **Inner Connectivity:** Reliable routing inside general telecom cabinets.
- **Module Interconnection:** Cost-effective links between internal RF components.
- **General RF Routing:** Ideal for applications without strict PIM constraints.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**0.91** [0.036]
2. Dielectric	Low Density PTFE (LD PTFE)	**2.65** [0.104]
3. Inner Shield	Aluminum Foil	**2.78** [0.109]
4. Outer Shield	Silver-plated copper wire braiding	**3.15** [0.124]
5. Jacket	FEP / Blue (Customizable)	**3.60** [0.142]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**18 GHz**
Cut-off Frequency	**40 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>70 dB**
Dielectric Withstanding Voltage	**1000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**
Attenuation (dB/100m)	**38.7**	**55.0**	**67.7**	**96.9**	**112.5**	**126.4**	**141.5**	**172.3**
Average Power (kW)	**0.462**	**0.325**	**0.264**	**0.184**	**0.159**	**0.141**	**0.126**	**0.104**

K1 = 1.204032 **K2 =** 0.000600 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**18 mm** [0.709 in]
Dynamic Bending Radius	**36 mm** [1.417 in]
Weight	**0.029 kg/m** [0.0195 lbs/ft]
Temperature Range	**-55 ~ +125 ℃** [-67 ~ +257 ℉]