PRECISION TEST CABLE / STANDARD

Cable Name: T80

Part No: VXT800



18 GHz
MAX FREQUENCY

High Flex
EXTREME DURABILITY

7.80 mm
MEGA-SIZE OD

2000 V.DC
EXTREME VOLTAGE

General Description: The Vinstronics VXT800 is a mega-size precision test cable operating up to 18GHz. With a massive 7.80mm blue FEP jacket and an extreme 2000 V.DC rating, it is built to endure highly demanding, high-power test environments. It guarantees exceptional resistance to torsion and bending while maintaining pure signal integrity and low VSWR.

Core Features

- **Extreme Durability:** Specialized internal structure handles frequent high-stress flexing.
- **Extreme Voltage:** 2000 V.DC rating for superior power and safety.
- **Low VSWR:** Ensures pristine signal integrity for high-precision testing.
- **Mega-Size Build:** 7.80mm OD provides elite physical resilience.
- **Low Loss:** Minimized attenuation across the entire frequency band.

Target Applications

- **Lab Testing:** Perfect for high-power device testing environments.
- **EMC Lab:** Highly dependable in rigorous electromagnetic environments.
- **System Testing:** Provides flawless interconnects for large test benches.
- **Module Interconnection:** Reliable links between massive RF components.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**2.39** [0.094]
2. Dielectric	Low Density PTFE (LD PTFE)	**6.16** [0.243]
3. Inner Shield	Silver-plated copper strip	**6.40** [0.252]
4. Interlayer	Low Density PTFE (LD PTFE)	**6.70** [0.264]
5. Outer Shield	Silver-plated copper wire braiding	**7.25** [0.285]
6. Jacket	FEP / Blue (Customizable)	**7.80** [0.307]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**18 GHz**
Cut-off Frequency	**18 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**82 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**2000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**
Attenuation (dB/100m)	**16.7**	**23.8**	**29.3**	**42.1**	**48.9**	**55.0**	**61.7**	**75.3**
Average Power (kW)	**1.604**	**1.125**	**0.913**	**0.637**	**0.548**	**0.487**	**0.435**	**0.356**

K1 = 0.518300 **K2 =** 0.000320 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**40 mm** [1.575 in]
Dynamic Bending Radius	**80 mm** [3.150 in]
Weight	**0.123 kg/m** [0.0827 lbs/ft]
Temperature Range	**-55 ~ +165 ℃** [-67 ~ +329 ℉]