PRECISION TEST CABLE / ARMORED

Cable Name: T18KA/KB

Part No: VXT180KA/KB



110 GHz	**≤ 1.50**
MAX FREQUENCY	VSWR (@ 110GHZ)
± 10°	**Armor**
MECHANICAL PHASE	CRUSH RESISTANCE

General Description: The Vinstronics VXT180KA/KB is an elite, armor-protected precision test cable designed for extreme 110GHz VNA and laboratory measurements. Protected by a ruggedized purple PTFE armor jacket, it delivers unparalleled mechanical phase stability (±10°) and amplitude stability (±0.1dB) during dynamic bending. It guarantees repeatable, flawless data for on-site testing and high-precision instrument interconnections.

Core Features

- **Mechanical Phase Stability:** Excellent ±10° stability ensures pristine test repeatability.
- **Amplitude Stability:** Rigid ±0.1dB range stability under dynamic flexing.
- **Armored Protection:** Withstands torsion, crushing, and severe laboratory handling.
- **Low VSWR:** ≤ 1.50 @ 110GHz for absolute signal purity.
- **Extreme Frequency:** Industry-leading transmission up to 110GHz.

Target Applications

- **Lab Testing:** The ultimate choice for VNA and high-frequency testing.
- **EMC Lab:** Highly dependable in rigorous electromagnetic environments.
- **System Testing:** Provides flawless interconnects for complex test benches.
- **On-Site Measurement:** Armored durability for field measurements.

CONSTRUCTION SPECIFICATION

Item	Material & Process	Diameter mm [in]
1~6 VXT180 Cable	FEP Jacket Core	**1.85** [0.073]
7~8 Armor	Silver-plated copper	**2.70** [0.106]
9~10 Jacket	PTFE (Purple)	**3.84** [0.151]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**110 GHz**
VSWR	**≤ 1.50 @ 110GHz**
Mechanical Phase	**± 10°**
Range Stability (Amplitude)	**± 0.1 dB**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**400 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**3000**	**8000**	**18000**	**26500**	**40000**	**67000**	**75000**	**110000**
Attenuation (dB/100m)	**113.7**	**198.5**	**328.0**	**499.3**	**611.5**	**760.4**	**1002.7**	**1065.9**	**1314.3**
Average Power (kW)	**0.039**	**0.022**	**0.014**	**0.009**	**0.007**	**0.006**	**0.004**	**0.004**	**0.003**

K1 = 3.557846 **K2 =** 0.001221 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**30 mm** [1.181 in]
Dynamic Bending Radius	**50 mm** [1.969 in]
Weight	**0.033 kg/m** [0.0222 lbs/ft]
Temperature Range	**-55 ~ +125 ℃** [-67 ~ +257 ℉]