

KL-500C — High-Precision Test Cable

High-Precision Test Cable — Flexible, Low-VSWR Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	1.44	Silver-Plated Copper
Dielectric	3.85	Low-Density PTFE
Inner Shield	4.05	Silver-Plated Copper Tape
Middle Layer	4.30	Low-Density PTFE (Reinforcement)
Outer Shield	4.65	Silver-Plated Copper Braid
Outer Jacket	5.10	Blue FEP (Custom Colors Available)

Electrical Properties

Parameter	Value
Operating Frequency	DC – 26.5 GHz
Cutoff Frequency	29 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	82%
Shielding Effectiveness	> 90 dB
Dielectric Withstanding Voltage	1500 V DC

Attenuation & Power Handling (Typical, 25°C / 40°C)

Frequency (MHz)	1000	2000	3000	6000	8000	10000	12400	18000	26500
Attenuation (dB/100m)	27.1	38.9	48.1	69.6	81.3	91.9	103.5	127.4	158.8
Avg. Power (kW)	0.821	0.573	0.463	0.320	0.274	0.242	0.215	0.175	0.140

Mechanical & Environmental

Static Bend Radius	Dynamic Bend Radius	Weight	Operating Temperature
25.5 mm	51 mm	0.055 kg/m	–55°C ~ +165°C

Features & Benefits

- Low insertion loss
- Low VSWR
- Flex and vibration resistant
- Rated for 600,000 flex cycles

Typical Applications

- Laboratory test
- Anechoic chamber test
- System test
- RF / microwave component & module test