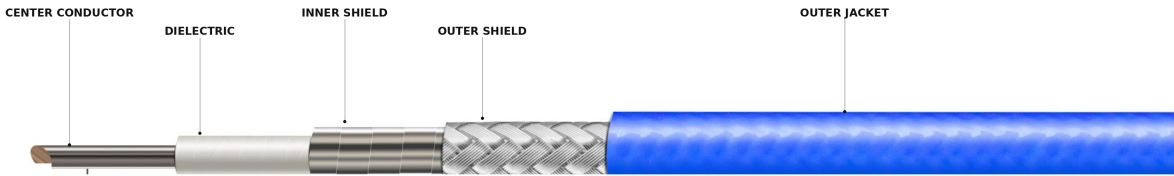


KL-1000A — Low-Loss Phase-Stable Coaxial Cable

Low-Loss, Phase-Stable Coaxial Cable — Flexible Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	3.00	Silver-Plated Copper
Dielectric	8.24	Low-Density PTFE
Inner Shield	8.48	Silver-Plated Copper Tape
Outer Shield	9.20	Silver-Plated Copper Braid
Outer Jacket	10.00	Blue FEP (Custom Colors Available)

Electrical Properties

Parameter	Value
Operating Frequency	DC – 10 GHz
Cutoff Frequency	13.5 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	83%
Shielding Effectiveness	> 90 dB
Dielectric Withstanding Voltage	3000 V DC

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

Frequency (MHz)	1000	2000	3000	6000	8000	10000	12400	16000	18000
Attenuation (dB/100m)	10.4	15.0	18.7	27.2	31.9	36.1	40.8	47.2	50.5
Avg. Power (kW)	3.512	2.440	1.996	1.350	1.151	1.016	0.900	0.778	0.727

Mechanical & Environmental

Static Bend Radius	Dynamic Bend Radius	Weight	Operating Temperature
50 mm	100 mm	0.206 kg/m	–55°C ~ +105°C

Features & Benefits

- Phase-stable across temperature (<750 ppm, –55°C to +85°C)
- Low insertion loss
- High power handling
- Low PIM (–155 dBc)
- Lightweight construction

Typical Applications

- Phased-array radar
- Airborne electronics
- Electronic warfare (EW)
- Any application demanding tight loss and phase tolerance