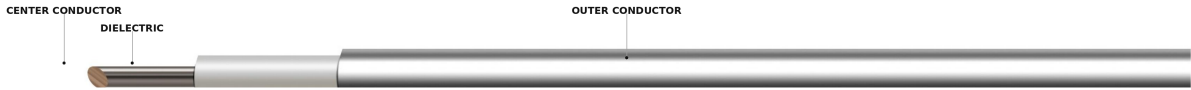


KL-020E-DW — Semi-Rigid Coaxial Cable

Cryogenic Semi-Rigid Coaxial Cable — CuNi Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	0.127 ± 0.003	Silver-Plated Copper-Nickel Alloy
Dielectric	0.432 ± 0.03	PTFE
Outer Conductor	0.580 ± 0.03	Copper-Nickel Alloy Tube

Electrical Properties

Parameter	Value
Operating Frequency	DC – 18 GHz
Cutoff Frequency	240 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	70%
Shielding Effectiveness	> 165 dB
Dielectric Withstanding Voltage	100 V DC

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

Frequency (MHz)	1000	2000	3000	6000	8000	10000	12400	16000	18000
Attenuation (dB/100m)	563.4	796.7	975.8	1380.0	1593.5	1781.5	1983.8	2253.5	2390.2
Avg. Power (kW)	0.064	0.045	0.037	0.026	0.023	0.020	0.018	0.016	0.015

Mechanical & Environmental

Static Bend Radius	Weight	Operating Temperature
2.90 mm	0.002 kg/m	–268°C ~ +150°C

Features & Benefits

- Ultra-low temperature rated
- Ultra-low loss
- Ultra-wide bandwidth

Typical Applications

- Quantum computing
- Quantum communication
- Deep-space communication