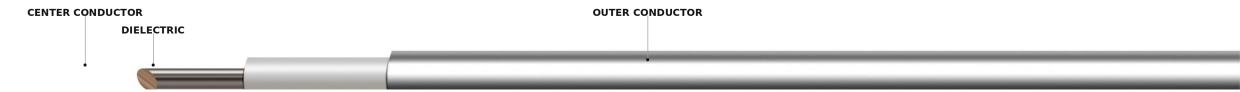


KL-034E-DW — Semi-Rigid Coaxial Cable

Cryogenic Semi-Rigid Coaxial Cable — CuNi Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	0.21 ± 0.015	Silver-Plated Copper-Nickel Alloy
Dielectric	0.61 ± 0.03	PTFE
Outer Conductor	0.86 ± 0.03	Copper-Nickel Alloy Tube

Electrical Properties

Parameter	Value
Operating Frequency	DC – 18 GHz
Cutoff Frequency	168 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	77%
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)	316.7	449.7	552.4	786.5	911.4	1022.2	1142.0	1303.3	1385.1
Avg. Power (kW)	0.102	0.072	0.058	0.041	0.035	0.032	0.028	0.025	0.023

Mechanical & Environmental

Static Bend Radius	Weight	Operating Temperature
4.30 mm	0.0034 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