

Flexible Coaxial Cables – Microwave

Flexible Coaxial Cabling for Microwave Links – 50 Ω coax cables

Rosenberger No.	Description	
RTK 400	50 Ω coax cable	

Mechanical Characteristics	
Inner conductor	Copper-Clad Alu Wire, 2.75 mm
Dielectric	Foamed PE, 7.2 mm
Diameter over outer conductor	Aluminate foil overlapped, applied longitudinally, 7.9 mm
Diameter over outer jacket	Jacket FRNC black, 10.2 ± 0.3 mm
Cable weight PE (FRNC)	105 kg/km
Min. bending radius, single	51 mm
Min. bending radius, repeated	87 mm
Recommended hanger spacing	0.6 m
Installation temperature	- 25 °C to + 60 °C
Operational temperature	- 40 °C to + 85 °C

Electrical Characteristics	
Impedance	50 ± 2 Ω
Relative velocity of propagation	85 %
Capacitance	77 pF/m
DC breakdown voltage	2000 V
Conductor DC-resistance	4.6 Ω/km
Insulation Resistance	≥ 10 GΩ x km
Screening efficiency 30 – 2000 MHz	≥ 100 dB
Return loss 800 – 1500 MHz	23 dB

Attenuation value and power rating

Frequency (MHz)	500	1000	1500	2000	2400	3000	5000
Attenuation (dB/100 m)	9.4	13.5	16.8	19.6	21.7	24.5	35.1
Average Power (kW)	0.80	0.60	0.45	0.40	0.35	0.30	0.25

- Attenuation, ambient temperature: 20 °C
- Average power, ambient temperature: 40 °C
- Average power, inner conductor temperature: 100 °C
- Maximum attenuation value shall be 105 % of the nominal attenuation value
- Other frequencies on request