

100 Low Loss Flexible Communication Coax - 50 Ohm

Cable Design

Inner Conductor	Solid plain copper wire	Ø 0,46 mm
Dielectric	Solid Polyethylene (PE)	Ø 1,52 mm
Shield	Aluminium tape	Ø 1,65 mm
Braid	Tinned copper wire braid	Ø 2,11 mm
Outer Jacket	Polyvinylchloride (PVC) or LSZH FireFighter®	Ø 2,79 mm



Mechanical and Thermal Characteristics

Bending radius	installed	6,4	mm
	repeated	25,4	mm
Bending moment		0,014	N/m
Weight		14	kg/km
Tensile strength		6,8	kg
Flat plate crush		0,18	kg/mm
Temperature Range	Installation	-40 to +85	°C
	Storage	-70 to +85	°C
	Operating	-40 to +85	°C

Electrical Data

Velocity of propagation		66	%
Dielectric constant		2,30	
Time delay		5,05	ns/m
Impedance		50	Ohm
Capacitance		101,1	pF/m
Inductance		0,25	µH/m
Shielding effectiveness	>	90	dB
DC Resistance	Inner Conductor	265	Ohm/km
	Outer Conductor	31,2	Ohm/km
Voltage withstand		500	V
Jacket spark		2000	V rms
Peak power		0,6	kW



Attenuation & Average Power

Frequency (MHz)	Attenuation (dB/100m)	Avg. Power (kW)
30	12.9	0.230
50	16.7	0.180
150	29.4	0.100
220	35.8	0.063
450	51.9	0.057
900	74.9	0.039
1500	98.7	0.029
1800	109.0	0.027
2000	115.5	0.025
2500	130.6	0.022
5800	210.3	0.013

Specification

Part Number	Type
100501	Polyvinylchloride (PVC)
100504	LSZH FireFighter® IEC 60332-1