

Signum® 100

Low Loss Flexible Communication Coax 50 Ohm

Signum®
Low Loss Coaxial Cable



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

Specification

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

Mechanical and Thermal Characteristics

Bending radius	10	x Ø
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



Signum[®] 100

Low Loss Flexible Communication Coax 50 Ohm

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

Belcom Cables Ltd. ("Belcom") reserves the right to make changes to the product described in this specification without prior notice. Belcom does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.