

Coaxial Cable SUCOFLEX_103

Description

SUCOFLEX 100, the flexible, high performance microwave cable



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	
Dielectric	PTFE (Polytetrafluoroethylene)		
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	
Outer conductor	Copper, Silver plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5000 - bl	4.6 mm

Electrical Data

Impedance	50 Ω
Operating Frequency	33 GHz
Capacitance	87 pF/m
Velocity of signal propagation	77 %
Signal delay	4.3 ns/m
Insulation resistance	≥ 1 x 10 ⁸ MΩm
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 2 kV _{rms} (at sea level)

Mechanical Data

Weight		5.3 kg/100 m
Min. bending radius	static	13 mm
	dynamic	22 mm

Environmental Data

Temperature range	-55 °C... +165 °C
Flammability	MIL-T-87104 § 4.6.4.8, ,
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as SUCOFLEX_103 (available only as assembly)

Remarks

(For details refer to the HUBER+SUHNER MICROWAVE CABLES AND ASSEMBLIES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.2836

b = 0.0071

f_{max} = 33

P at 1GHz = 615

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
1.65	0.38	0.115	479
3.3	0.54	0.164	339
4.95	0.67	0.203	276
6.6	0.78	0.236	239
8.25	0.87	0.266	214
9.9	0.96	0.293	195
11.55	1.05	0.319	181
13.2	1.12	0.343	169
14.85	1.2	0.365	160
16.5	1.27	0.387	151
18.15	1.34	0.408	144
19.8	1.4	0.427	138
21.45	1.47	0.447	133
23.1	1.53	0.465	128
24.75	1.59	0.484	124
26.4	1.64	0.501	120
28.05	1.7	0.518	116
29.7	1.76	0.535	113
31.35	1.81	0.552	110
33.0	1.86	0.568	107