

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SUCOFLEX_102



Description

SUCOFLEX 100, the flexible, high performance microwave cable

Technical Data

Construction

	Material	Detail	Diameter	
Centre conductor	Copper, Silver plated	Wire		
Dielectric	PTFE			
Outer conductor	Copper, Silver plated	wrapped Foil, 100 %		
Outer conductor	Copper, Silver plated	Braid		
Jacket	FEP	RAL 5000 - bl	4	mm

Electrical Data

Impedance	50	Ω
Max. operating frequency	46	GHz
Capacitance	87	pF/m
Velocity of signal propagation	77	%
Signal delay	4.3	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M Ω m
Min. screening effectiveness	>90	dB (up to 18 GHz)
Max. operating voltage	1.4	kV _{rms} (at sea level)

Mechanical Data

Weight	4	kg/100 m
Min. bending radius	12	mm
	20	mm

Environmental Data

Temperature range	-55 °C... + 165 °C
Flammability	MIL-T-87104 § 4.6.4.8
2002/95/EC (RoHS)	compliant

Ordering Information

Order as	SUCOFLEX_102 (available only as assembly)
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Additional Information

Remarks

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

Suitable Connectors

Cable group	crimped (n/a)
	clamped —
	soldered —

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

Coefficients:

a=	0.37	b=	0.0071	f _{max} =	46	p _{at} 1GHz =	394
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	2.3		0.58		0.177		260
	4.6		0.83		0.253		184
	6.9		1.02		0.311		150
	9.2		1.19		0.363		130
	11.5		1.34		0.408		116
	13.8		1.47		0.448		106
	16.1		1.60		0.488		98
	18.4		1.72		0.524		92
	20.7		1.83		0.558		87
	23.0		1.94		0.591		82
	25.3		2.04		0.622		78
	27.6		2.14		0.652		75
	29.9		2.24		0.683		72
	32.2		2.33		0.710		69
	34.5		2.42		0.738		67
	36.8		2.51		0.765		65
	39.1		2.59		0.789		63
	41.4		2.67		0.814		61
	43.7		2.76		0.841		60
	46.0		2.84		0.866		58

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

WAIVER!

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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