

HUBER+SUHNER® DATA SHEET

Coaxial Cable: S_05163-01



Description

High screened coaxial cable

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Wire	1 mm
Dielectric	SPE (Foamed Polyethylene)		4.57 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100 %	4.65 mm
Outer conductor	Copper, Tin plated	Braid, 66 %	5.4 mm
Jacket	PE (LSFH)	RAL 9005 - bk	6.9 mm +/- 0.15
Print	Kilchenmann AG Telematik / halogenfrei		

Electrical Data

Impedance	75 Ω +/- 3
Max. operating frequency	2 GHz
Capacitance	54 pF/m
Velocity of signal propagation	82 %
Signal delay	4.08 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω m
Min. screening effectiveness	>80 dB (up to 2 GHz)
Max. operating voltage	0.5 kV _{rms} (at sea level)
Test voltage	1 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	5.3 kg/100 m
Min. bending radius	static 35 mm
	dynamic 105 mm

Environmental Data

Temperature range	-40 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C
Halogen free 2002/95/EC (RoHS)	IEC 60754 compliant

Ordering Information

Order as	S_05163-01
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Additional Information

Remarks

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

Suitable Connectors

Cable group	crimped (on request) clamped (on request) soldered —
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Rev.: E

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

Coefficients:

a=	0.2164	b=	0.0413	f _{max.} =	2	p _{at} 1GHz =	202
	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
	0.1		0.07		0.021		639
	0.2		0.11		0.034		452
	0.3		0.13		0.040		369
	0.4		0.15		0.046		319
	0.5		0.17		0.052		286
	0.6		0.19		0.058		261
	0.7		0.21		0.064		241
	0.8		0.23		0.070		226
	0.9		0.24		0.073		213
	1.0		0.26		0.079		202
	1.1		0.27		0.082		193
	1.2		0.29		0.088		184
	1.3		0.30		0.091		177
	1.4		0.31		0.094		171
	1.5		0.33		0.101		165
	1.6		0.34		0.104		160
	1.7		0.35		0.107		155
	1.8		0.36		0.110		151
	1.9		0.38		0.116		147
	2.0		0.39		0.119		143

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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