

HUBER+SUHNER® DATA SHEET

Coaxial Cable: S_10172_B-11



Description

PE Foam - 50 Ohm - high screened

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Aluminium / Copper	Wire	3.8 mm
Dielectric	SPE (Foamed Polyethylene)		9.9 mm
Outer conductor	Copper	longitudinal Foil, 100 %	10 mm
Outer conductor	Copper	Braid, 80 %	10.8 mm
Jacket	PE	RAL 9005 - bk	12.9 mm +/- 0.2
Print	HUBER+SUHNER S 10172 B-11 50 Ohm (PA no.)		

Electrical Data

Impedance	50 Ω +/- 2
Max. operating frequency	7.5 GHz
Capacitance	77 pF/m
Velocity of signal propagation	87 %
Signal delay	3.85 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω m
Min. screening effectiveness	>90 dB (up to 8.5 GHz)
Max. operating voltage	1.5 kV _{rms} (at sea level)
Test voltage	3 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	15 kg/100 m	
Min. bending radius	static	129 mm
	repeated (for max. 50 bendings)	258 mm

Environmental Data

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

Ordering Information

Order as S_10172_B-11

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 (S39)
	clamped (on request)
	soldered —

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

Coefficients:

a=	0.0826	b=	0.0129	f _{max} =	7.5	p _{at} 1GHz =	700
	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
	0.4		0.06		0.018		1107
	0.8		0.08		0.024		783
	1.1		0.10		0.030		667
	1.5		0.12		0.037		572
	1.9		0.14		0.043		508
	2.3		0.15		0.046		462
	2.6		0.17		0.052		434
	3.0		0.18		0.055		404
	3.4		0.20		0.061		380
	3.8		0.21		0.064		359
	4.1		0.22		0.067		346
	4.5		0.23		0.070		330
	4.9		0.25		0.076		316
	5.3		0.26		0.079		304
	5.6		0.27		0.082		296
	6.0		0.28		0.085		286
	6.4		0.29		0.088		277
	6.8		0.30		0.091		268
	7.1		0.31		0.094		263
	7.5		0.32		0.098		256

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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