

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: S\_04272\_B



### Description

PE Foam - microwave cable - high screened

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.4 mm
Dielectric	SPE (Foamed Polyethylene)		3.82 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100 %	3.96 mm
Outer conductor	Copper, Tin plated	Braid, 86 %	4.48 mm
Jacket	PE (Polyethylene)	RAL 5014 - bl	5.5 mm +/- 0.1
Print	HUBER+SUHNER S 04272 B 50 Ohm (PA no.)		

#### Electrical Data

Impedance	50	$\Omega$ +/- 2
Max. operating frequency	18	GHz
Capacitance	82	pF/m
Velocity of signal propagation	82	%
Signal delay	4.1	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M $\Omega$ m
Min. screening effectiveness	> 90	dB (up to 18 GHz)
Max. operating voltage	0.5	kV <sub>rms</sub> (at sea level)
Test voltage	1	kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	4.4	kg/100 m
Min. bending radius	static	25 mm
	repeated (for max. 50 bendings)	90 mm

#### Environmental Data

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

#### Ordering Information

Order as S\_04272\_B

#### Additional Information

##### Remarks

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

**Cable group** X9 4 mm / 50 Ohm

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Rev.: O

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

Coefficients:

a=	0.197	b=	0.045	f <sub>max.</sub> =	18	p <sub>at</sub> 1GHz =	120
	<b>Frequency</b>		<b>Nom. attenuation</b>		<b>Nom. attenuation</b>		<b>Max. CW power</b>
	<b>(GHz)</b>		<b>(dB / m)</b>		<b>(dB / ft)</b>		<b>(watt)</b>
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.9		0.23		0.070		126
	1.8		0.35		0.107		89
	2.7		0.45		0.137		73
	3.6		0.54		0.165		63
	4.5		0.62		0.189		57
	5.4		0.70		0.213		52
	6.3		0.78		0.238		48
	7.2		0.85		0.259		45
	8.1		0.93		0.283		42
	9.0		1.00		0.305		40
	9.9		1.07		0.326		38
	10.8		1.13		0.344		37
	11.7		1.20		0.366		35
	12.6		1.27		0.387		34
	13.5		1.33		0.405		33
	14.4		1.40		0.427		32
	15.3		1.46		0.445		31
	16.2		1.52		0.463		30
	17.1		1.58		0.482		29
	18.0		1.65		0.503		28

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

**WAIVER!**

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