

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: S\_04272\_B



### Description

S-SERIES, the economical low loss microwave cable

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.4 mm
Dielectric	SPE (Foamed Polyethylene)		3.82 mm
Outer conductor	Aluminium	longitudinal Foil, 100 %	3.96 mm
Outer conductor	Copper, Tin plated	Braid, 86 %	4.48 mm
Jacket	PE	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 30 mm
	dynamic 110 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)

#### Suitable Connectors

Cable group	crimped (on request)
	clamped (on request)
	soldered —

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Rev.: I

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

Coefficients:

a=	0.2247	b=	0.0368	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		0.25		0.076		126
	1.8		0.37		0.113		89
	2.7		0.47		0.143		73
	3.6		0.56		0.171		63
	4.5		0.64		0.195		57
	5.4		0.72		0.219		52
	6.3		0.80		0.244		48
	7.2		0.87		0.265		45
	8.1		0.94		0.286		42
	9.0		1.01		0.308		40
	9.9		1.07		0.326		38
	10.8		1.14		0.347		37
	11.7		1.20		0.366		35
	12.6		1.26		0.384		34
	13.5		1.32		0.402		33
	14.4		1.38		0.421		32
	15.3		1.44		0.439		31
	16.2		1.50		0.457		30
	17.1		1.56		0.475		29
	18.0		1.62		0.494		28

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.



**HUBER+SUHNER AG**  
**RF Industrial**  
**9100 Herisau, Switzerland**  
 Phone +41 (0)71 353 41 11  
 Fax +41 (0)71 353 45 90  
 www.hubersuhner.com

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