

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: SPUMA\_400-FR



### Description

PE Foam - 50 Ohm - double screened (UL AWM Style 1354)

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Aluminium / Copper	Wire	2.74 mm
Dielectric	SPE (Foamed Polyethylene)		7.24 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100 %	7.4 mm
Outer conductor	Copper, Tin plated	Braid, 78 %	8.15 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	10.25 mm +/- 0.1
Print	HUBER+SUHNER SPUMA 400-FR 50 Ohm (UL logo) AWM Style 1354 (PA no.)		

#### Electrical Data

Impedance	50	$\Omega$ +/- 2
Max. operating frequency	6	GHz
Capacitance	78	pF/m
Velocity of signal propagation	85	%
Signal delay	3.9	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M $\Omega$ m
Min. screening effectiveness	>90	dB (up to 6 GHz)
Max. operating voltage	1.6	kV <sub>rms</sub> (at sea level)
Test voltage	2.1	kV <sub>rms</sub> (50 Hz/1 min)
Voltage Rating UL	3 V	

#### Mechanical Data

Weight	11.5	kg/100 m
Min. bending radius	static	25 mm
	repeated (for max. 50 bendings)	100 mm

#### Environmental Data

Temperature range	-40 °C... + 85 °C
Temp. Rating UL	60 °C
Installation temperature	-20 °C... + 60 °C
Flammability	UL 1581 § 1100, UL 1581 § 1080 (VW-1), IEC 60332-3-24, EN 60332-1-2
Smoke density	EN 61034-2
Halogen free	IEC 60754
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as SPUMA\_400-FR

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

Coefficients:

a=	0.1241	b=	0.008	f <sub>max.</sub> =	6	p <sub>at</sub> 1GHz =	410
	<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
	0.3		0.07		0.021		749
	0.6		0.10		0.030		529
	0.9		0.12		0.037		432
	1.2		0.15		0.046		374
	1.5		0.16		0.049		335
	1.8		0.18		0.055		306
	2.1		0.20		0.061		283
	2.4		0.21		0.064		265
	2.7		0.23		0.070		250
	3.0		0.24		0.073		237
	3.3		0.25		0.076		226
	3.6		0.26		0.079		216
	3.9		0.28		0.085		208
	4.2		0.29		0.088		200
	4.5		0.30		0.091		193
	4.8		0.31		0.094		187
	5.1		0.32		0.098		182
	5.4		0.33		0.101		176
	5.7		0.34		0.104		172
	6.0		0.35		0.107		167

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

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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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