

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: ENVIROFLEX\_400-01



### Description

PE Foam cross-linked - 50 Ohm - double screen (UL AWM Style 3651)

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	1 mm
Dielectric	SPEX (Crosslink Foam PE)		3.03 mm
Outer conductor	Copper, Silver plated	Braid, 96 %	3.72 mm
Outer conductor	Copper, Silver plated	Braid, 91 %	4.24 mm
Jacket	RADOX	RAL 9005 - bk	4.97 mm +/- 0.1
Print	HUBER+SUHNER ENVIROFLEX 400-01 50 Ohm (UL logo) AWM Style 3651 (PA no.)		

#### Electrical Data

Impedance	50	$\Omega$ +/- 2
Max. operating frequency	6	GHz
Capacitance	94.5	pF/m
Velocity of signal propagation	70.7	%
Signal delay	4.71	ns/m
Insulation resistance	$\geq 1 \times 10^7$	M $\Omega$ m
Min. screening effectiveness	>70	dB (up to 5 GHz)
Max. operating voltage	2.5	kV <sub>rms</sub> (at sea level)
Test voltage	5	kV <sub>rms</sub> (50 Hz/1 min)
Voltage Rating UL	300	V

#### Mechanical Data

Weight	6	kg/100 m
Min. bending radius	static	10 mm
	repeated (for max. 50 bendings)	40 mm
	dynamic	40 mm

#### Environmental Data

Temperature range	-40 °C... + 105 °C
Temp. Rating UL	105 °C
Installation temperature	-20 °C... + 60 °C
Flammability	IEC 60332-1, UL 1581 § 1100, IEC 60332-2
Smoke density	DIN EN 50268-2
Halogen free	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
Abraison test	MIL-T-81490 - §4.7.19 - prod. II - modified
Thermal stress test	IEC 61196-1 § 10.9
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as ENVIROFLEX\_400-01

#### Additional Information

##### Remarks

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

**Cable group** U11 3 mm / 50 Ohm

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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=	0.5085	b=	0.0724	f <sub>max</sub> =	6	p <sub>at</sub> 1GHz =	220
	<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		0.30		0.091		402
	0.6		0.44		0.134		284
	0.9		0.55		0.168		232
	1.2		0.64		0.195		201
	1.5		0.73		0.222		180
	1.8		0.81		0.247		164
	2.1		0.89		0.271		152
	2.4		0.96		0.293		142
	2.7		1.03		0.314		134
	3.0		1.10		0.335		127
	3.3		1.16		0.354		121
	3.6		1.23		0.375		116
	3.9		1.29		0.393		111
	4.2		1.35		0.411		107
	4.5		1.40		0.427		104
	4.8		1.46		0.445		100
	5.1		1.52		0.463		97
	5.4		1.57		0.479		95
	5.7		1.63		0.497		92
	6.0		1.68		0.512		90

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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