

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: ENVIROFLEX\_316



### Description

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

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.54 mm
Dielectric	SPEX (Crosslink Foam PE)		1.54 mm
Outer conductor	Copper, Silver plated	Braid, 99 %	2.05 mm
Jacket	RADOX	RAL 5017 - bl	2.54 mm +/- 0.07
Print	HUBER+SUHNER ENVIROFLEX 316 50 Ohm (UL logo)		AWM Style 3651 (PA no.)

#### Electrical Data

Impedance	50	$\Omega$ +/- 2
Max. operating frequency	3	GHz
Capacitance	94.5	pF/m
Velocity of signal propagation	70.7	%
Signal delay	4.72	ns/m
Insulation resistance	$\geq 1 \times 10^7$	M $\Omega$ m
Max. operating voltage	1.5	kV <sub>rms</sub> (at sea level)
Test voltage	3	kV <sub>rms</sub> (50 Hz/1 min)
Voltage Rating UL	300	V

#### Mechanical Data

Weight	1.6	kg/100 m
Min. bending radius	5	mm
	30	mm

#### Environmental Data

Temperature range	-40 °C... + 105 °C
Temp. Rating UL	105 °C
Installation temperature	-20 °C... + 60 °C
Flammability	UL 1581 § 1100
Halogen free	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as ENVIROFLEX\_316

#### Additional Information

##### Remarks

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

**Cable group** U2 2 mm / 50 Ohm

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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=	0.812	b=	0.1504	f <sub>max.</sub> =	3	p <sub>at</sub> 1GHz =	90
	<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
	0.2		0.39		0.119		201
	0.3		0.49		0.149		164
	0.5		0.65		0.198		127
	0.6		0.72		0.219		116
	0.8		0.85		0.259		101
	0.9		0.91		0.277		95
	1.1		1.02		0.311		86
	1.2		1.07		0.326		82
	1.4		1.17		0.357		76
	1.5		1.22		0.372		73
	1.7		1.31		0.399		69
	1.8		1.36		0.415		67
	2.0		1.45		0.442		64
	2.1		1.49		0.454		62
	2.3		1.58		0.482		59
	2.4		1.62		0.494		58
	2.6		1.70		0.518		56
	2.7		1.74		0.530		55
	2.9		1.82		0.555		53
	3.0		1.86		0.567		52

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

**WAIVER!**

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