

HUBER+SUHNER® DATA SHEET

Coaxial Cable: ENVIROFLEX_400



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	black/bl line	5 mm +/- 0.1
Print	HUBER+SUHNER ENVIROFLEX 400 50 Ohm (UL logo) AWM Style 3651 (PA no.)		

Electrical Data

Impedance	50	Ω +/- 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 Ω m
Min. screening effectiveness	> 70	dB (up to 6 GHz)
Max. operating voltage	2.5	kV _{rms} (at sea level)
Test voltage	5	kV _{rms} (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	EN 60332-1-2, UL 1581 § 1100, IEC 60332-1
Smoke density	EN 61034-2
Halogen free	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
Toxic fume	NF X 70-100
Abrasion 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

Additional Information

DIN 5510-2 and NF F 16-101 compliant

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

HUBER+SUHNER® DATA SHEET

Coaxial Cable: ENVIROFLEX_400



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 _{max} =	6	p _{at} 1GHz =	225
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.3		0.30		0.091		411
	0.6		0.44		0.134		290
	0.9		0.55		0.168		237
	1.2		0.64		0.195		205
	1.5		0.73		0.222		184
	1.8		0.81		0.247		168
	2.1		0.89		0.271		155
	2.4		0.96		0.293		145
	2.7		1.03		0.314		137
	3.0		1.10		0.335		130
	3.3		1.16		0.354		124
	3.6		1.23		0.375		119
	3.9		1.29		0.393		114
	4.2		1.35		0.411		110
	4.5		1.40		0.427		106
	4.8		1.46		0.445		103
	5.1		1.52		0.463		100
	5.4		1.57		0.479		97
	5.7		1.63		0.497		94
	6.0		1.68		0.512		92

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

HUBER+SUHNER – Excellence in Connectivity Solutions