

HUBER+SUHNER® DATA SHEET

Coaxial Cable: ENVIROFLEX_316_D

Rev.: T



Description

PE Foam cross-linked - 50 Ohm - double 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, 96 %	2.03 mm
Outer conductor	Copper, Silver plated	Braid, 90 %	2.5 mm
Jacket	RADOX	black/bl line	3.16 mm +/- 0.08
Print	HUBER+SUHNER ENVIROFLEX 316 D 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	$\geq 1 \times 10^7 M\Omega m$
Min. screening effectiveness	>70 dB (up to 5 GHz)
Max. operating voltage	1.5 kV _{rms} (at sea level)
Test voltage	3 kV _{rms} (50 Hz/1 min)
Voltage Rating UL	300 V

Mechanical Data

Weight	2.1 kg/100 m
Min. bending radius	static 5 mm
	repeated (for max. 50 bendings)
	dynamic
	30 mm
	30 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
Smoke density	EN 61034-2
Halogen free	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
Abraison test	MIL-T-81490 - §4.7.19 - prod. II - modified
Flex life test	MIL-T-81490 - §4.7.15 - prod. II - modified
Thermal stress test	IEC 61196-1 § 10.9
2002/95/EC (RoHS)	compliant

Ordering Information

Order as ENVIROFLEX_316_D

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 (U4)
	clamped (U4)
	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=	0.7182	b=	0.1682	f _{max} =	6	p _{at} 1GHz =	110
	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		0.44		0.134		201
	0.6		0.66		0.201		142
	0.9		0.83		0.253		116
	1.2		0.99		0.302		100
	1.5		1.13		0.344		90
	1.8		1.27		0.387		82
	2.1		1.39		0.424		76
	2.4		1.52		0.463		71
	2.7		1.63		0.497		67
	3.0		1.75		0.533		64
	3.3		1.86		0.567		61
	3.6		1.97		0.600		58
	3.9		2.07		0.631		56
	4.2		2.18		0.664		54
	4.5		2.28		0.695		52
	4.8		2.38		0.725		50
	5.1		2.48		0.756		49
	5.4		2.58		0.786		47
	5.7		2.67		0.814		46
	6.0		2.77		0.844		45

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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