

HUBER+SUHNER® DATA SHEET

Coaxial Cable: ENVIROFLEX_142



Description

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

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.95 mm
Dielectric	SPEX (Crosslink Foam PE)		2.98 mm
Outer conductor	Copper, Silver plated	Braid, 97 %	3.58 mm
Outer conductor	Copper, Silver plated	Braid, 95 %	4.18 mm
Jacket	RADOX	black/bl line	5 mm +/- 0.1
Print	HUBER+SUHNER ENVIROFLEX 142 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	>75	dB (up to 5 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	25 mm
	repeated (for max. 50 bendings)	50 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 60332-2
Smoke density	EN 61034-2
Halogen free	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
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_142

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 (U9)
	clamped (U10)
	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=	0.44	b=	0.103	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		0.27		0.082		411
	0.6		0.40		0.122		290
	0.9		0.51		0.155		237
	1.2		0.61		0.186		205
	1.5		0.69		0.210		184
	1.8		0.78		0.238		168
	2.1		0.85		0.259		155
	2.4		0.93		0.283		145
	2.7		1.00		0.305		137
	3.0		1.07		0.326		130
	3.3		1.14		0.347		124
	3.6		1.21		0.369		119
	3.9		1.27		0.387		114
	4.2		1.33		0.405		110
	4.5		1.40		0.427		106
	4.8		1.46		0.445		103
	5.1		1.52		0.463		100
	5.4		1.58		0.482		97
	5.7		1.64		0.500		94
	6.0		1.70		0.518		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.



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