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
Operating Frequency	6 GHz
Capacitance	94.5 pF/m
Velocity of signal propagation	70.7 %
Signal delay	4.71 ns/m
Insulation resistance	≥ 1 x 10^7 MΩm
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 ≤ 30000 bendings)	40 mm
	dynamic	40 mm

Environmental Data

Temperature range	-40 °C... +105 °C
Temperature 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 test	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
Toxic fume	NF X 70-100
Abraison test	MIL-T-81490 - §4.7.19 - prod. II - modified
Thermal stress test	IEC 61196-1 § 10.9
2011/65/EU (RoHS)	compliant

Additional Information

DIN 5510-2 and NF F 16-101 compliant

Ordering Information

Order as	ENVIROFLEX_400

Remarks

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

Suitable Connectors

Cable group	U11 3 mm / 50 Ohm

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a =	0.5085	b =	0.0724	f_{max} =	6	P at 1GHz =	225

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
0.3	0.3	0.092	411
0.6	0.44	0.133	290
0.9	0.55	0.167	237
1.2	0.64	0.196	205
1.5	0.73	0.223	184
1.8	0.81	0.248	168
2.1	0.89	0.271	155
2.4	0.96	0.293	145
2.7	1.03	0.314	137
3.0	1.1	0.335	130
3.3	1.16	0.354	124
3.6	1.23	0.373	119
3.9	1.29	0.392	114
4.2	1.35	0.410	110
4.5	1.4	0.428	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	0.496	94
6.0	1.68	0.512	92