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)		1.53 mm
Outer conductor	Copper, Silver plated	Braid, 99%	1.99 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 Ω +/- 2
Operating Frequency	3 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
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		1.6 kg/100 m
Min. bending radius	static	5 mm
	dynamic	30 mm

Environmental Data

Temperature range	-40 °C... +105 °C
Temperature Rating UL	105 °C
Installation temperature	-20 °C... +60 °C
Flammability	UL 1581 § 1100, ,
Halogen test	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as	ENVIROFLEX_316

Remarks

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

Suitable Connectors

Cable group	U2 2 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 =	0.812	b =	0.1504	f_{max} =	3	P at 1GHz =	90

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
0.15	0.34	0.103	232
0.3	0.49	0.149	164
0.45	0.61	0.187	134
0.6	0.72	0.219	116
0.75	0.82	0.249	104
0.9	0.91	0.276	95
1.05	0.99	0.302	88
1.2	1.07	0.326	82
1.35	1.15	0.349	77
1.5	1.22	0.372	73
1.65	1.29	0.394	70
1.8	1.36	0.415	67
1.95	1.43	0.435	64
2.1	1.49	0.455	62
2.25	1.56	0.474	60
2.4	1.62	0.493	58
2.55	1.68	0.512	56
2.7	1.74	0.530	55
2.85	1.8	0.548	53
3.0	1.86	0.566	52