

Coaxial Cable ENVIROFLEX_179

Description

PE Foam cross-linked - 75 Ohm - single screen (UL AWM Style 3651)



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.305 mm
Dielectric	SPEX (Crosslink Foam PE)		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 94%	2 mm
Jacket	RADOX	RAL 5015 - bl	2.54 mm +/- 0.07

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Electrical Data

Impedance		75 Ω +/- 3
Operating Frequency		3 GHz
Capacitance		63 pF/m
Velocity of signal propagation		70 %
Signal delay		4.78 ns/m
Insulation resistance		≥ 1 x 10 ⁷ MQm
Min. screening effectiveness		≥ 40 dB (up to 1 GHz)
Max. operating voltage		≤ 1 kV _{rms} (at sea level)
Test voltage		2 kV _{rms} (50 Hz/1 min)
Voltage Rating UL		300 V
Phase vs Temperature	-40°C... + 100°C	8400 ppm
Phase vs Bending		0.7 °/GHz

Mechanical Data

Weight		1.11 kg/100 m
Min. bending radius	static	5 mm
	repeated (for ≤ 50 bendings)	25 mm

Environmental Data

Temperature range	-40 °C... +105 °C
Temperature Rating UL	105 °C
Installation temperature	-20 °C... +60 °C
Flammability	UL 1581 § 1100, IEC 60332-2, EN 60332-1-2
Smoke density	EN 61034-2
Halogen test	IEC 60754
Uv resistance test	IEC 60068-2-5, proc. C
Solar radiation	IEC 60068-2-5, proc. C
2011/95/EC (RoHS)	compliant

Additional Information

DIN 5510-2 compliant

Railway certificates discontinued by end of 2017. Replacement type for railway: RADOX_RF_179.

Ordering Information

Order as ENVIROFLEX_179

Remarks

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

Suitable Connectors

Cable group U5 2 mm / 75 Ohm

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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.8288

b = 0.0725

$f_{max} = 3$

P at 1GHz = 45

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
0.15	0.33	0.101	116
0.3	0.48	0.145	82
0.45	0.59	0.179	67
0.6	0.69	0.209	58
0.75	0.77	0.235	52
0.9	0.85	0.260	47
1.05	0.93	0.282	44
1.2	0.99	0.303	41
1.35	1.06	0.323	39
1.5	1.12	0.343	37
1.65	1.18	0.361	35
1.8	1.24	0.379	34
1.95	1.3	0.396	32
2.1	1.35	0.412	31
2.25	1.41	0.429	30
2.4	1.46	0.444	29
2.55	1.51	0.460	28
2.7	1.56	0.475	27
2.85	1.61	0.489	27
3.0	1.65	0.504	26