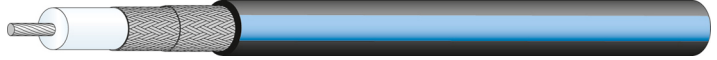


Coaxial Cable ENVIROFLEX_316_D

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)		1.53 mm
Outer conductor	Copper, Silver plated	Braid, 96%	1.99 mm
Outer conductor	Copper, Silver plated	Braid, 90 %	2.44 mm
Jacket	RADOX	black/bl line	3.16 mm +/- 0.08

Print: HUBER+SUHNER ENVIROFLEX 316 D 50 Ohm (UL logo) AWM Style 3651 Dca-s1b,d1,a1 (PA no.)

Electrical Data

Impedance		50 Ω +/- 2
Operating Frequency		6 GHz
Capacitance		94.5 pF/m
Velocity of signal propagation		70.1 %
Signal delay		4.72 ns/m
Insulation resistance		≥ 1 x 10 ⁷ MΩm
Min. screening effectiveness		≥ 70 dB (up to 6 GHz)
Max. operating voltage		≤ 1.3 kV _{rms} (at sea level)
Test voltage		3 kV _{rms} (50 Hz/1 min)
Voltage Rating UL		300 V
Phase vs Temperature	-40°C... + 100°C	10000 ppm
Phase vs Bending		0.7 °/GHz

Mechanical Data

Weight		2.1 kg/100 m
Min. bending radius	static	5 mm
	repeated (for ≤ 50 bendings)	30 mm
	dynamic	30 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, EN 50305, 9.1.2, FAR 25.869
Smoke density	EN 61034-2
Halogen test	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
2011/65/EU (RoHS)	compliant
2011/305/EU (CPR)	compliant, Dca-s1b,d1,a1

Additional Information

Railway certificates discontinued by end of 2017. Replacement type for railway: RADOX_RF_316_D.

Ordering Information

Order as ENVIROFLEX_316_D

Remarks

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

Suitable Connectors

Cable group U4 2 mm / 50 Ohm

Coaxial Cable ENVIROFLEX_316_D

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

Coefficients:

a = 0.7648

b = 0.1301

f_{max} = 6

P at 1GHz = 110

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	0,46	0,140	201
0,6	0,67	0,204	142
0,9	0,84	0,257	116
1,2	0,99	0,303	100
1,5	1,13	0,345	90
1,8	1,26	0,384	82
2,1	1,38	0,421	76
2,4	1,5	0,456	71
2,7	1,61	0,490	67
3,0	1,71	0,523	64
3,3	1,82	0,554	61
3,6	1,92	0,585	58
3,9	2,02	0,615	56
4,2	2,11	0,644	54
4,5	2,21	0,673	52
4,8	2,3	0,701	50
5,1	2,39	0,729	49
5,4	2,48	0,756	47
5,7	2,57	0,783	46
6,0	2,65	0,809	45