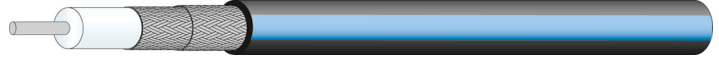


## Coaxial Cable ENVIROFLEX\_142

### 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)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.58 mm
Outer conductor	Copper, Silver plated	Braid, 95 %	4.16 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
Operating Frequency	6 GHz
Capacitance	94.5 pF/m
Velocity of signal propagation	70.9 %
Signal delay	4.7 ns/m
Insulation resistance	≥ 1 x 10 <sup>7</sup> MΩm
Min. screening effectiveness	≥ 75 dB (up to 5 GHz)
Max. operating voltage	≤ 2.5 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)
Voltage Rating UL	300 V
Phase vs Temperature	-40°C... + 100°C 9000 ppm

#### Mechanical Data

Weight		6 kg/100 m
Min. bending radius	static	30 mm
	repeated (for ≤ 50 bendings)	50 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 60332-2
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
Thermal stress test	IEC 61196-1 § 10.9
2011/95/EC (RoHS)	compliant

### Additional Information

DIN 5510-2 compliant

EN 45545 compliant hazard level for indoor cables: HL3

Railway certificates discontinued by end of 2017. Replacement type for railway: RADOX\_RF\_142.

#### Ordering Information

Order as ENVIROFLEX\_142

#### Remarks

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

#### Suitable Connectors

Cable group U9 3 mm / 50 Ohm

## Coaxial Cable ENVIROFLEX\_142

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

Coefficients:

a = 0.365

b = 0.142

f<sub>max</sub> = 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	0.24	0.074	411
0.6	0.37	0.112	290
0.9	0.47	0.144	237
1.2	0.57	0.174	205
1.5	0.66	0.201	184
1.8	0.75	0.227	168
2.1	0.83	0.252	155
2.4	0.91	0.276	145
2.7	0.98	0.300	137
3.0	1.06	0.323	130
3.3	1.13	0.345	124
3.6	1.2	0.367	119
3.9	1.27	0.388	114
4.2	1.34	0.410	110
4.5	1.41	0.431	106
4.8	1.48	0.451	103
5.1	1.55	0.472	100
5.4	1.61	0.492	97
5.7	1.68	0.512	94
6.0	1.75	0.532	92