Data Sheet

Coaxial Cable
RADOX_RF_142

Description

PE Foam cross-linked - 50 Ohm - double screen

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.95 mm
Dielectric	SPEX (Crosslink Foam PE)		2.98 mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.58 mm
Outer conductor	Copper, Silver plated	Braid, 95 %	4.18 mm
Jacket	RADOX EM104	RAL 9005 - bk	5.34 mm +/- 0.06

Print: HUBER+SUHNER RADOX RF 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 10^7 MΩm
Min. screening effectiveness	≥ 75 dB (up to 5 GHz)
Max. operating voltage	≤ 2.5 kV_{rms} (at sea level)
Test voltage	5 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		5.7 kg/100 m
Min. bending radius	static	30 mm
	repeated (for ≤ 50 bendings)	50 mm

Environmental Data

Temperature range	-40 °C... +105 °C
Installation temperature	-20 °C... +60 °C
Flammability	EN 60332-1-2, EN 50305, 9.1.2,
Smoke density	EN 61034-2
Halogen test	IEC 60754
2011/95/EC (RoHS)	compliant

Additional Information

EN 45545 compliant
Hazard level for indoor cables: HL3

Ordering Information

Order as	RADOX_RF_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

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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 =	0.365	b =	0.142	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	0.24	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

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