



SUHNER® COAXIAL CABLE DATA SHEET

TYPE ENVIROFLEX_142

Double screened coaxial cable - flame retardant - free of halogen

Cable Design



	Material	Detail	Diameter
Centre conductor:	Copper, Silver plated	Wire	0.95 mm
Dielectric:	SPEX (Crosslink Foam PE)		2.98 mm
1. Outer conductor:	Copper, Silver plated Braid	97%	3.64 mm
2. Outer conductor:	Copper, Silver plated Braid	95%	4.3 mm
Jacket:	RADOX (LSFH)	RAL 5012 - bl	5 mm +/- 0.1
Print:	HUBER+SUHNER ENVIROFLEX 142 50 Ohm E111025 UR AWM (PA no.)		

Electrical Data

Impedance:	50	Ω +/-2
Max. operating frequency:	6	GHz
Capacitance :	95	pF / m
Velocity of signal propagation:	70.9	%
Signal delay:	4.7	ns / m
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/ 1min)
Insulation resistance:	> 100	$\times 10^6$ M Ω /m

General Data

Temperature range:	-40 °C... +105 °C
Weight:	6 kg / 100 m
Min. bending radius :	static 30 mm
	repeated (for max. 50 bendings) 50 mm

Suitable Connectors

Cable group *U9 / U10*
(for details refer to the "SUHNER coaxial connector catalogue" or contact your nearest HUBER+SUHNER partner)

Notes

WAIVER!

While the information contained in this folder has been carefully compiled to the best of our present knowledge, it is not intended as representation or warranty of any kind on our part regarding the fitness of the products concerned for any particular use or purpose and neither shall any statement contained herein be construed as a recommendation to infringe any industrial property rights or as a license to use any such rights. The fitness of each product for any particular purpose must be checked beforehand with our specialists.



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Matrix Attenuation [formula : (a*f^0.5 +b*f)] and Power CW [formula : (p*/ f^0.5)]

Coefficients:

a= 0.44

b= 0.103

f_{max}= 6

p_{at 1GHz} = 250

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
0.30	0.272	0.0829	456.4
0.60	0.403	0.1228	322.7
0.90	0.510	0.1554	263.5
1.20	0.606	0.1847	228.2
1.50	0.693	0.2112	204.1
1.80	0.776	0.2365	186.3
2.10	0.854	0.2603	172.5
2.40	0.929	0.2831	161.4
2.70	1.001	0.3051	152.1
3.00	1.071	0.3264	144.3
3.30	1.139	0.3472	137.6
3.60	1.206	0.3676	131.8
3.90	1.271	0.3874	126.6
4.20	1.334	0.4066	122.0
4.50	1.397	0.4258	117.9
4.80	1.458	0.4444	114.1
5.10	1.519	0.4630	110.7
5.40	1.579	0.4813	107.6
5.70	1.638	0.4992	104.7
6.00	1.696	0.5169	102.1

Test (following tests have been passed successfully)

Flame propagation: IEC 60332-1 UL 1581 - §1100 IEC 60332-2

Halogen content: IEC 60754

Smoke: DIN EN 50268-2

Aging: MIL-C-17 - §4.8.16

Abrasion: MIL-T-81490 - §4.7.19 - prod. II - modified

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