Data Sheet

Coaxial Cable Enviroflex_B142

HUBER+SUHNER
Excellence in Connectivity Solutions

Description

PE Foam - 50 Ohm - double screen

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.95 mm
Dielectric	SPE (Foamed Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 97%	3.5 mm
Outer conductor	Copper, Tin plated	Braid, 93 %	4.1 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	5 mm +/- 0.1

Print: HUBER+SUHNER ENVIROFLEX B142 50 OHM (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	94.5 pF/m
Velocity of signal propagation	71 %
Signal delay	4.7 ns/m
Insulation resistance	≥ 1 x 10^7 MΩm
Min. screening effectiveness	≥ 60 dB (up to 6 GHz)
Max. operating voltage	≤ 2.5 kV_{rms} (at sea level)
Test voltage	5 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		5.2 kg/100 m
Min. bending radius	static	30 mm
	repeated (for ≤ 50 bendings)	50 mm

Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-1,
Thermal stress test	IEC 61196-1 § 10.9
2011/65/EU (RoHS)	compliant

Additional Information

Ordering Information

Order as	Enviroflex_B142

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

Data Sheet

Coaxial Cable
Enviroflex_B142

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 = 145

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	265
0,6	0,37	0,112	187
0,9	0,47	0,144	153
1,2	0,57	0,174	132
1,5	0,66	0,201	118
1,8	0,75	0,227	108
2,1	0,83	0,252	100
2,4	0,91	0,276	94
2,7	0,98	0,300	88
3,0	1,06	0,323	84
3,3	1,13	0,345	80
3,6	1,2	0,367	76
3,9	1,27	0,388	73
4,2	1,34	0,410	71
4,5	1,41	0,431	68
4,8	1,48	0,451	66
5,1	1,55	0,472	64
5,4	1,61	0,492	62
5,7	1,68	0,512	61
6,0	1,75	0,532	59