Data Sheet

Coaxial Cable
Enviroflex_B178

Description

PE Foam - 50 Ohm - single screen

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.305 mm
Dielectric	SPE (Foamed Polyethylene)		0.8 mm
Outer conductor	Copper, Tin plated	Braid, 95%	1.3 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	1.84 mm +/- 0.1

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Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	3 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	≥ 30 dB (up to 3 GHz)
Max. operating voltage	≤ 0.9 kV_{rms} (at sea level)
Test voltage	2 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		0.65 kg/100 m
Min. bending radius	static	5 mm
	repeated (for ≤ 50 bendings)	20 mm
	dynamic	30 mm

Environmental Data

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

Additional Information

Ordering Information

Order as	Enviroflex_B178

Remarks

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

Suitable Connectors

Cable group	U1 1 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 = 1.5474	b = 0.2452	f_{max} = 3	P at 1GHz = 40

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(watt)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
0,15	0,64	0,194	103
0,3	0,92	0,281	73
0,45	1,15	0,350	60
0,6	1,35	0,410	52
0,75	1,52	0,464	46
0,9	1,69	0,515	42
1,05	1,84	0,562	39
1,2	1,99	0,606	37
1,35	2,13	0,649	34
1,5	2,26	0,690	33
1,65	2,39	0,729	31
1,8	2,52	0,767	30
1,95	2,64	0,804	29
2,1	2,76	0,840	28
2,25	2,87	0,876	27
2,4	2,99	0,910	26
2,55	3,1	0,944	25
2,7	3,2	0,977	24
2,85	3,31	1,009	24
3,0	3,42	1,041	23