

Coaxial Cable Spuma_240-RS-FR

Description

PE Foam - 50 Ohm - double screened



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Strand, Low-loss	1.42 mm
Dielectric	SPE (Foamed Polyethylene)		3.82 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	3.94 mm
Outer conductor	Copper, Tin plated	Braid, 94 %	4.52 mm
Jacket	TPU (Urethane TPE)	RAL 9005 - bk	6.17 mm +/- 0.1

Print: HUBER+SUHNER SPUMA 240-RS-FR 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	81 pF/m
Velocity of signal propagation	85 %
Signal delay	4.05 ns/m
Insulation resistance	$\geq 1 \times 10^6$ M Ω m
Min. screening effectiveness	≥ 90 dB (up to 6 GHz)
Max. operating voltage	≤ 0.9 kV _{rms} (at sea level)
Test voltage	1.5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	5.4 kg/100 m
Min. bending radius	static repeated (for ≤ 50 bendings)
	14 mm 53 mm

Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
Flammability	EN 60332-1-2,
2011/65/EU (RoHS)	compliant

Additional Information

Ordering Information

Order as	Spuma_240-RS-FR
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Remarks

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

Suitable Connectors

Cable group	X34 4 mm / 50 Ohm
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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.276

b = 0.0165

f_{max} = 6

P at 1GHz = 230

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	0,16	0,048	420
0,6	0,22	0,068	297
0,9	0,28	0,084	242
1,2	0,32	0,098	210
1,5	0,36	0,111	188
1,8	0,4	0,122	171
2,1	0,43	0,132	159
2,4	0,47	0,142	148
2,7	0,5	0,152	140
3,0	0,53	0,161	133
3,3	0,56	0,169	127
3,6	0,58	0,178	121
3,9	0,61	0,186	116
4,2	0,63	0,194	112
4,5	0,66	0,201	108
4,8	0,68	0,208	105
5,1	0,71	0,216	102
5,4	0,73	0,223	99
5,7	0,75	0,230	96
6,0	0,78	0,236	94