

Coaxial Cable SPUMA_400-FR-01

Description

PE Foam - 50 Ohm - double screened



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Aluminium / Copper	Wire	2.74 mm
Dielectric	SPE (Foamed Polyethylene)		7.24 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	7.4 mm
Outer conductor	Copper, Tin plated	Braid, 78 %	8.15 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	10.25 mm +/- 0.1

Print: HUBER+SUHNER SPUMA 400-FR-01 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	78 pF/m
Velocity of signal propagation	85 %
Signal delay	3.9 ns/m
Insulation resistance	≥ 1 x 10 ⁶ MΩm
Min. screening effectiveness	≥ 90 dB (up to 6 GHz)
Max. operating voltage	≤ 1.6 kV _{rms} (at sea level)
Test voltage	3 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	11.5 kg/100 m
Min. bending radius	static repeated (for ≤ 50 bendings)
	25 mm 100 mm

Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
Flammability	UL 1581 § 1100, UL 1581 § 1080 (VW-1), EN 60332-1-2
Smoke density	EN 61034-2
Halogen test	IEC 60754
Uv resistance test	ISO 4892-2A
2011/95/EC (RoHS)	compliant

Additional Information

EN 45545 compliant hazard level for indoor cables: HL3

DIN 5510-2, NF F 16-101 and NFPA-130 compliant

Ordering Information

Order as SPUMA_400-FR-01

Remarks

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

Suitable Connectors

Cable group U30 7 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 = 0.1241

b = 0.008

f_{max} = 6

P at 1GHz = 600

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	0,07	0,021	1095
0,6	0,1	0,031	775
0,9	0,12	0,038	632
1,2	0,15	0,044	548
1,5	0,16	0,050	490
1,8	0,18	0,055	447
2,1	0,2	0,060	414
2,4	0,21	0,064	387
2,7	0,23	0,069	365
3,0	0,24	0,073	346
3,3	0,25	0,077	330
3,6	0,26	0,081	316
3,9	0,28	0,084	304
4,2	0,29	0,088	293
4,5	0,3	0,091	283
4,8	0,31	0,095	274
5,1	0,32	0,098	266
5,4	0,33	0,101	258
5,7	0,34	0,104	251
6,0	0,35	0,107	245