

## Coaxial Cable SPUMA\_240-FR-AM

### Description

PE Foam - 50 Ohm - double screened



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper	Wire	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	LSFH (modified polyethylene)	RAL 9005 - bk	6.17 mm +/- 0.1

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

#### Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	78.9 pF/m
Velocity of signal propagation	82.6 %
Signal delay	4.05 ns/m
Insulation resistance	≥ 1 x 10 <sup>6</sup> MΩm
Min. screening effectiveness	≥ 90 dB (up to 6 GHz)
Max. operating voltage	≤ 0.9 kV <sub>rms</sub> (at sea level)
Test voltage	1.5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight		6.1 kg/100 m
Min. bending radius	static	14 mm
	repeated (for ≤ 50 bendings)	53 mm

#### Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen test	IEC 60754
2011/65/EU (RoHS)	compliant

### Additional Information

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant

#### Ordering Information

Order as SPUMA\_240-FR-AM

#### Remarks

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

#### Suitable Connectors

Cable group X28 4 mm / 50 Ohm

## Coaxial Cable SPUMA\_240-FR-AM

**Matrix** typical Attenuation [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] and maximum Power CW [ formula:  $(p/f^{0.5})$  ]

Coefficients:

a = 0.25984

b = 0.00926

f<sub>max</sub> = 6

P at 1GHz = 260

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	0,15	0,044	475
0,6	0,21	0,063	336
0,9	0,25	0,078	274
1,2	0,3	0,090	237
1,5	0,33	0,101	212
1,8	0,37	0,111	194
2,1	0,4	0,121	179
2,4	0,42	0,129	168
2,7	0,45	0,138	158
3,0	0,48	0,146	150
3,3	0,5	0,153	143
3,6	0,53	0,160	137
3,9	0,55	0,167	132
4,2	0,57	0,174	127
4,5	0,59	0,181	123
4,8	0,61	0,187	119
5,1	0,63	0,193	115
5,4	0,65	0,199	112
5,7	0,67	0,205	109
6,0	0,69	0,211	106