

## Low-loss, 50 Ohm, 6 GHz, 85°C, ø6.15 mm, PE jacket

SPUMA\_240

### Properties

- Halogen free cable with standard dimensions
- Ozone, UV and weathering resistance
- CPR qualified



### Construction

Component	Material	Detail	Diameter
Centre conductor	Copper	Wire	1.42 mm
Dielectric	SPE (Foamed Polyethylene)		3.81 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	3.96 mm
Outer conductor	Copper, Tin plated	Braid, 90%	4.52 mm
	PE (Polyethylene)	RAL 9005 - bk	6.15 mm +/- 0.13 mm

### Electrical data

Impedance	50 Ω +/-2Ω
Operating frequency	≤ 6 GHz
Capacitance	79 pF/m
Inductance	0.2 μH/m
Velocity of signal propagation	84 %
Signal delay	3.97 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	12.63 Ω/km
Operating Voltage (at sea level)	≤ 1.2 kVrms
Test voltage (50 Hz/1 min)	≤ 2 kVrms

### Mechanical data

Weight	approx. 50 g/m
Static bending radius	≥ 19 mm
Repeated bending radius	60 mm

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Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
CPR class	Fca
Fire characteristics	free of halogenes, acc. standard IEC 60754

Suitable connectors	
Cable group	X28

Ordering information		
Item number	Item description	Available as assembly only
84151737	SPUMA_240	No

Power Matrix			
Calculation: typical Attenuation [ formula: (a*f^0.5 + b*f) ] and maximum Power CW [ formula: (p/f^0.5) ]			
a coefficient typical =	<b>0.2507</b>	b coefficient typical =	<b>0.009</b>
fmax =	<b>6</b>	P at 1 GHz =	<b>260</b>
Frequency	Nom. attenuation	Nom. attenuation	CW power
GHz	(dB/m)	(dB/ft)	(W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.10	0.080	0.024	822
0.20	0.114	0.035	581
0.40	0.162	0.049	411
0.60	0.200	0.061	336
1.00	0.260	0.079	260
1.50	0.321	0.098	212
2.00	0.373	0.114	184
6.00	0.668	0.204	106

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