

Low-loss, 50 Ohm, 6 GHz, 85°C, ø14.99 mm, PE jacket

SPUMA_600

Properties

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



Construction			
Component	Material	Detail	Diameter
Centre conductor	Aluminium / Copper	Wire	4.44 mm
Dielectric	SPE (Foamed Polyethylene)		11.56 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	11.71 mm
Outer conductor	Copper, Tin plated	Braid, 78%	12.55 mm
	PE (Polyethylene)	RAL 9005 - bk	14.99 mm +/- 0.25 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 6 GHz
Capacitance	78 pF/m
Inductance	0.2 μH/m
Velocity of signal propagation	85 %
Signal delay	3.9 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	1000000 MΩ*m
Inner conductor resistance	1.7 Ω/km
Operating Voltage (at sea level)	≤ 2 kVrms
Test voltage (50 Hz/1 min)	≤ 4 kVrms

Mechanical data	
Weight	approx. 200 g/m
Static bending radius	≥ 38 mm
Repeated bending radius	152 mm

Low-loss, 50 Ohm, 6 GHz, 85°C, ø14.99 mm, PE jacket
SPUMA_600

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	X29

Ordering information		
Item number	Item description	Available as assembly only
84151738	SPUMA_600	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 =	0.0786	b coefficient typical =	0.008
fmax =	6	P at 1 GHz =	930
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	0.026	0.008	2941
0.20	0.037	0.011	2080
0.40	0.053	0.016	1470
0.60	0.066	0.020	1201
1.00	0.087	0.026	930
1.50	0.108	0.033	759
2.00	0.127	0.039	658
6.00	0.241	0.073	380

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/ EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.
DOCUMENT PIM-P766 / Date of publication: 08.08.2024 / uncontrolled copy