

Low-loss, 75 Ohm, 3 GHz, 85°C, ø10.25 mm, LSFH jacket

SPUMA_400-FR-75

Properties

- Halogen free cable with standard dimensions
- Low smoke
- - ozone, UV and weathering resistance
- Railway qualified
- 75 Ohm characteristic Impedance



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper	Wire	1.65 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
	LSFH (modified polyethylene)	RAL 9005 - bk	10.25 mm +/- 0.1 mm

Electrical data	
Impedance	75 Ω +/- 3 Ω
Operating frequency	$\leq$ 3 GHz
Capacitance	53 pF/m
Inductance	0.2 μ H/m
Velocity of signal propagation	84 %
Signal delay	3.9 ns/m
Screening effectiveness	90 dB at frequency 3GHz
Insulation resistance	1000000 M Ω *m
Operating Voltage (at sea level)	$\leq$ 1.6 kVrms
Test voltage (50 Hz/1 min)	$\leq$ 3 kVrms

Mechanical data	
Weight	approx. 120 g/m
Static bending radius	$\geq$ 25 mm
Repeated bending radius	100 mm

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Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60°C
Flame propagation standard	EN 60332-1-2 IEC 60332-3-25
Fire characteristics	free of halogenes, acc. standard IEC 60754
Smoke test	EN 61034-2
UV resistance	ISO 4892-2A

Additional Information
EN 45545-2 compliant

Suitable connectors
Cable groupX33

Ordering information		
Item number	Item description	Available as assembly only
85022187	SPUMA_400-FR-75	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 =	0.119	b coefficient typical =	0.015
fmax =	3.0	P at 1 GHz =	400.0
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	0.039	0.012	1265
0.20	0.056	0.017	894
0.40	0.081	0.025	632
0.60	0.101	0.031	516
1.00	0.134	0.041	400
1.50	0.168	0.051	327
2.00	0.198	0.060	283
3.00	0.251	0.077	231

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