

RG59 LSFH, 75 Ohm, 1 GHz, 105°C, ø6.24 mm, RADOX® jacket

RADOX_RF_59

Properties

- Halogen free alternative to RG_59
- Low smoke
- Ozone, UV and weathering resistance
- Railway qualified
- HUBER+SUHNER RADOX® jacket material



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-07	0.66 mm
Dielectric	PEX (Polyethylene cross-linked)		3.83 mm
Outer conductor	Copper, Tin plated	Braid, 94%	4.42 mm
Jacket	RADOX EMI04	RAL 9005 - bk	6.24 mm +/- 0.06 mm

Electrical data	
Impedance	75 Ω +/-3Ω
Operating frequency	≤ 1 GHz
Capacitance	68 pF/m
Velocity of signal propagation	66.1 %
Signal delay	5.05 ns/m
Screening effectiveness	40 dB at frequency 0.05 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 3 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 55 g/m
Static bending radius	≥ 35 mm
Dynamic bending radius	< 60 mm

Environmental data	
Operation temperature	-40 °C ... 105 °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

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Environmental data	
Smoke test	EN 61034-2
UV resistance	ISO 4892-2A

Additional Information
EN 45545 compliant Hazard level for indoor cables: HL3 An operating temperature of -55°C is feasible for static applications.

Suitable connectors	
Cable group	U16

Ordering information		
Item number	Item description	Available as assembly only
85023729	RADOX_RF_59	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 =	0.325	b coefficient typical =	0.163
fmax =	1	P at 1 GHz =	93
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	0.119	0.036	294
0.20	0.178	0.054	208
0.30	0.227	0.069	170
0.40	0.271	0.083	147
0.60	0.350	0.107	120
0.80	0.421	0.128	104
1.00	0.488	0.149	93

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