

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

GX_04273-12

Properties

- Halogen free alternative to RG_59
- Highly flexible
- Low smoke
- Ozone, UV and weathering resistance
- 75 Ohm characteristic Impedance



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-07, 95 %, RAL 9005 - bk	0.66 mm - 0.2 mm
Dielectric	PEX (Polyethylene cross-linked)		3.83 mm
Outer conductor	Copper, Tin plated	Braid, 95%	4.45 mm
Jacket	RADOX	RAL 9005 - bk	6.1 mm +/- 0.2 mm

Electrical data	
Impedance	75 Ω +/- 3Ω
Operating frequency	≤ 1 GHz
Capacitance	67 pF/m
Velocity of signal propagation	66 %
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. 57 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	IEC 60332-1 EN 60332-1-2
Fire characteristics	free of halogenes, acc. standard IEC 60754

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Environmental data	
Smoke test	BS 6853 Annex D
Toxicity test	BS 6853 Annex B

Additional Information

Railway certificates discontinued by end of 2017. Replacement type for railway: RADOX_RF_59.

Suitable connectors

Cable group	U16
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Ordering information

Item number	Item description	Available as assembly only
23029791	GX_04273-12	No

Power Matrix

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

a coefficient typical =	0.325	b coefficient typical =	0.163
fmax =	1.0	P at 1 GHz =	93.0
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (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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