DATA SHEET

RG58 LSFH, 50 Ohm, 3 GHz, 105°C, ø4.95 mm, RADOX® jacket

GX_03272-04

Properties

- Halogen free alternative to RG_58
- Low smoke
- - ozone, UV and weathering resistance



Construction			
Component	**Material**	**Detail**	**Diameter**
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm - 0.15 mm
Dielectric	PEX (Polyethylene cross-linked)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96%	3.6 mm
Jacket	RADOX	RAL 9005 - bk	4.95 mm +/- 0.15 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 3 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	40 dB at frequency 0.04 GHz ... 2GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 2.5 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 40.4 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	50 mm
Dynamic bending radius	< 100 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

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Environmental data	
Fire characteristics	free of halogenes, acc. standard IEC 60754
Smoke test	EN 61034-2

Additional Information
Railway certificates discontinued by end of 2017. Replacement type for railway: RADOX_RF_58.

Suitable connectors	
Cable group	U7

Ordering information		
Item number	Item description	Available as assembly only
22512309	GX_03272-04	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 =	**0.387**	b coefficient typical =	**0.201**
fmax =	**3.0**	P at 1 GHz =	**130.0**
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	0.142	0.043	411
0.20	0.213	0.065	291
0.30	0.272	0.083	237
0.40	0.325	0.099	206
0.60	0.420	0.128	168
0.80	0.507	0.155	145
1.00	0.588	0.179	130
1.20	0.665	0.203	119
1.40	0.739	0.225	110
1.60	0.811	0.247	103
1.80	0.881	0.269	97
2.00	0.949	0.289	92
2.50	1.114	0.340	82
3.00	1.273	0.388	75

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