

50 Ohm, 3 GHz, 105°C, Ø4.95 mm, RADOX® jacket

GX_03272

Properties

- Halogen free alternative to standard RG cable
- Low smoke
- - ozone, UV and weathering resistance



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.902 mm - 0.15 mm
Dielectric	PEX (Polyethylene cross-linked)		2.95 mm
Outer conductor	Copper, Silver 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	41 dB at frequency 0.001 GHz ... 2GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	28 Ω/km
Operating Voltage (at sea level)	≤ 2.5 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 40 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	50 mm (bendings, up to 50)

Environmental data	
Operation temperature	-40 °C ... 105 °C
Installation temperature	-20 °C ... 60°C
Flame propagation standard	IEC 60332-1

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Environmental data	
Fire characteristics	free of halogenes, acc. standard IEC 60754

Additional Information
Elimination candidate Alternative type: RADOX_RF_58

Suitable connectors
Cable group U7

Ordering information		
Item number	Item description	Available as assembly only
22510959	GX_03272	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 =	0.4003	b coefficient typical =	0.1637
fmax =	3.0	P at 1 GHz =	205.0
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	0.143	0.044	648
0.20	0.212	0.065	458
0.30	0.268	0.082	374
0.40	0.319	0.097	324
0.60	0.408	0.124	265
0.80	0.489	0.149	229
1.00	0.564	0.172	205
1.20	0.635	0.194	187
1.40	0.703	0.214	173
1.60	0.768	0.234	162
1.80	0.832	0.254	153
2.00	0.894	0.272	145
2.50	1.042	0.318	130
3.00	1.184	0.361	118

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