

Flexible RF cable G_03212-01

Description

G: RF cables with PE dielectrics

RG58 alternative, 50 Ohm, 1 GHz, 85°C, ø4.95 mm, PUR jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.902 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 95%	3.6 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	4.95 mm +/- 0.15

Print: No print on jacket

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 40 dB (up to 1 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		3.6 kg/100 m
Min. bending radius	static	25 mm 50 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen test	IEC 60754
Halogen free	Yes
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

Additional Information

Ordering Information

Order as G_03212-01

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group U7 3 mm / 50 Ohm

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

Coefficients:

a = 0.4629

b = 0.1012

$f_{\max} = 1$

P at 1GHz = 110

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (W) sea level 40° C ambient temperature
0,05	0,11	0,033	492
0,1	0,16	0,048	348
0,15	0,19	0,059	284
0,2	0,23	0,069	246
0,25	0,26	0,078	220
0,3	0,28	0,087	201
0,35	0,31	0,094	186
0,4	0,33	0,102	174
0,45	0,36	0,109	164
0,5	0,38	0,115	156
0,55	0,4	0,122	148
0,6	0,42	0,128	142
0,65	0,44	0,134	136
0,7	0,46	0,140	131
0,75	0,48	0,145	127
0,8	0,49	0,151	123
0,85	0,51	0,156	119
0,9	0,53	0,162	116
0,95	0,55	0,167	113
1,0	0,56	0,172	110