

## Flexible RF cable

**G\_03232** Item: 22510128

### Description

G: RF cables with PE dielectrics

RG58 alternative, 50 Ohm, 1 GHz, 85°C, ø5 mm, PVC jacket



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper	Strand-07	0.95 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper	Braid, 95%	3.6 mm
Jacket	PVC (Polyvinyl chloride)	RAL 9005 - bk	5 mm +/- 0.15

Print: HUBER+SUHNER G 03232 50 Ohm (production order number)

#### 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	≥ 39 dB (up to 1 GHz)
Operating voltage	≤ 2.5 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight		3.7 kg/100 m
Min. bending radius	static	25 mm 50 mm

#### Environmental Data

Temperature range	-25 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

### Additional Information

#### 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 = 0.4027

b = 0.08

f<sub>max</sub> = 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	0,09	0,029	492
0,1	0,14	0,041	348
0,15	0,17	0,051	284
0,2	0,2	0,060	246
0,25	0,22	0,067	220
0,3	0,24	0,075	201
0,35	0,27	0,081	186
0,4	0,29	0,087	174
0,45	0,31	0,093	164
0,5	0,32	0,099	156
0,55	0,34	0,104	148
0,6	0,36	0,110	142
0,65	0,38	0,115	136
0,7	0,39	0,120	131
0,75	0,41	0,125	127
0,8	0,42	0,129	123
0,85	0,44	0,134	119
0,9	0,45	0,138	116
0,95	0,47	0,143	113
1,0	0,48	0,147	110