

Flexible RF cable

RG_59_B/U-40 Item: 22511193

Description

RG: RG type RF cables

RG59 (red jacket), 75 Ohm, 1 GHz, 85°C, ø6.1 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper plated	Wire	0.58 mm
Dielectric	PE (Polyethylene)		3.64 mm
Outer conductor	Copper	Braid, 93%	4.5 mm
Jacket	PVC (Polyvinyl chloride)	RAL 3000 - rd	6.1 mm +/- 0.2

Print: HUBER+SUHNER RG 59 B/U-40 75 Ohm (production order number)

Electrical Data

Impedance	75 Ω +/- 1.5
Operating Frequency	1 GHz
Capacitance	67.6 pF/m
Velocity of signal propagation	65.8 %
Signal delay	5.07 ns/m
Screening effectiveness	≥ 40 dB (up to 1 GHz)
Operating voltage	≤ 3 kV _{rms} (at sea level)
Test voltage	6 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	5.4 kg/100 m
Min. bending radius	static
	32 mm
	65 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

MIL reference: M17/184-00001 (former reference: M17/29-RG59)

Remarks

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

Suitable Connectors

Cable group	U16 4 mm / 75 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 = 0.3173

b = 0.0499

 $f_{\max} = 1$

P at 1GHz = 140

Frequency	Nom. attenuation	Nom. attenuation	Max. 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
0,05	0,07	0,022	626
0,1	0,11	0,032	443
0,15	0,13	0,040	361
0,2	0,15	0,046	313
0,25	0,17	0,052	280
0,3	0,19	0,058	256
0,35	0,21	0,063	237
0,4	0,22	0,067	221
0,45	0,24	0,072	209
0,5	0,25	0,076	198
0,55	0,26	0,080	189
0,6	0,28	0,084	181
0,65	0,29	0,088	174
0,7	0,3	0,092	167
0,75	0,31	0,095	162
0,8	0,32	0,099	157
0,85	0,33	0,102	152
0,9	0,35	0,105	148
0,95	0,36	0,109	144
1,0	0,37	0,112	140