

Flexible RF cable

GX_03173-01 Item: 22511581

Description

GX: RF cables with cross-linked PE dielectrics

75 Ohm, 1 GHz, 105°C, ø3.7 mm, RADOX® jacket, Flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper plated	Strand-07	0.42 mm
Dielectric	PEX (Polyethylene cross-linked)		2.45 mm
Outer conductor	Copper, Tin plated	Braid, 91%	2.9 mm
Jacket	RADOX	RAL 7000 - gr	3.7 mm +/- 0.1

Print: HUBER+SUHNER GX 03173-01 75 Ohm (production order number)

Electrical Data

Impedance	75 Ω +/- 3
Operating Frequency	1 GHz
Capacitance	69 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 40 dB (up to 1 GHz)
Operating voltage	≤ 2 kV _{rms} (at sea level)
Test voltage	4 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	2.1 kg/100 m
Min. bending radius	static
	18 mm
	37 mm

Environmental Data

Temperature range	-40 °C ... +105 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	IEC 60332-1,
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

Remarks

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

Suitable Connectors

Cable group	U6 3 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 = 0.6003

b = 0.0549

 $f_{\max} = 1$

P at 1GHz = 170

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	0,14	0,042	760
0,1	0,2	0,060	538
0,15	0,24	0,073	439
0,2	0,28	0,085	380
0,25	0,31	0,096	340
0,3	0,35	0,105	310
0,35	0,37	0,114	287
0,4	0,4	0,122	269
0,45	0,43	0,130	253
0,5	0,45	0,138	240
0,55	0,48	0,145	229
0,6	0,5	0,152	219
0,65	0,52	0,158	211
0,7	0,54	0,165	203
0,75	0,56	0,171	196
0,8	0,58	0,177	190
0,85	0,6	0,183	184
0,9	0,62	0,189	179
0,95	0,64	0,194	174
1,0	0,66	0,200	170