

Coaxial Cable RG_400_/U

Description

PTFE - 50 Ohm - double screen



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	1 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.2 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	4.95 mm +/- 0.1

Print: HUBER+SUHNER RG 400 U 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	94 pF/m
Velocity of signal propagation	69 %
Signal delay	4.75 ns/m
Insulation resistance	≥ 1 x 10 ⁸ MQm
Min. screening effectiveness	≥ 81 dB (up to 6 GHz)
Max. operating voltage	≤ 1.7 kV _{rms} (at sea level)
Test voltage	3.4 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	6.4 kg/100 m	
Min. bending radius	static	30 mm
	repeated (for ≤ 50 bendings)	50 mm
	dynamic	75 mm

Environmental Data

Temperature range	-65 °C... +165 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-3, ,
2011/65/EU (RoHS)	compliant

Additional Information

Ordering Information

Order as RG_400_/U

Remarks

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

Suitable Connectors

Cable group U11 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 = 0.3894

b = 0.0925

f_{max} = 6

P at 1GHz = 365

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 (watt) sea level 40° C ambient temperature
0.6	0.36	0.109	471
0.9	0.45	0.138	385
1.2	0.54	0.164	333
1.5	0.62	0.188	298
1.8	0.69	0.210	272
2.1	0.76	0.231	252
2.4	0.83	0.252	236
2.7	0.89	0.271	222
3.0	0.95	0.290	211
3.3	1.01	0.309	201
3.6	1.07	0.327	192
3.9	1.13	0.344	185
4.2	1.19	0.362	178
4.5	1.24	0.379	172
4.8	1.3	0.395	167
5.1	1.35	0.412	162
5.4	1.4	0.428	157
5.7	1.46	0.444	153
6.0	1.51	0.460	149