



SUHNER® COAXIAL CABLE DATA SHEET

TYPE RG 316 /U-04

Double screened coaxial cable

Cable Design



	Material	Detail	Diameter
Centre conductor:	StCuAg	Strand-07 (0.18 mm)	0.54 mm
Dielectric:	PTFE		1.55 mm
1. Outer conductor:	Al-PES wrapped Foil	100% coverage	1.6 mm
2. Outer conductor:	CuAg Braid	94% coverage	2.1 mm
Jacket:	FEP	RAL 6017 - gn	2.6 mm +/-0.1
Print:	SUHNER SWITZERLAND RG 316 /U-04 50 Ohm		

Electrical Data

Impedance:	50 Ω +/-2
Max. operating frequency:	1 GHz
Capacitance :	96.6 pF / m
Velocity of signal propagation:	69 %
Signal delay:	4.83 ns / m
Min. screening effectiveness:	> 41 dB (up to 1 GHz)
Max. operating voltage:	1 kV _{rms} (at sea level)
Test voltage:	2 kV _{rms} (50 Hz/ 1min)
Insulation resistance:	> 10 M Ω m

General Data

Temperature range:	-65 °C...+ 165 °C
Weight:	1.8 kg / 100 m
Min. bending radius :	static 20 mm
	repeated (for max. 50 bendings) 30 mm
	dynamic 70 mm

Suitable Connectors

Cable group *U2 / U2*
(for details refer to the "SUHNER coaxial connector catalogue" or contact you nearest HUBER+SUHNER partner)

Notes

Order as **RG 316 /U-04** under article number **22510610**

WAIVER!

While the information contained in this folder has been carefully compiled to the best of our present knowledge, it is not intended as representation or warranty of any kind on our part regarding the fitness of the products concerned for any particular use or purpose and neither shall any statement contained herein be constructed as a recommendation to infringe any industrial property rights or as a license to use any such rights. The fitness of each product for any particular purpose must be checked beforehand with our specialists.



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

Coefficients:

$a = 0.7632$

$b = 0.894$

$f_{\max} = 1$

$p_{\text{at } 1\text{GHz}} = 134$

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
0.05	0.215	0.0655	599.3
0.10	0.331	0.1009	423.7
0.15	0.430	0.1311	346.0
0.20	0.520	0.1585	299.6
0.25	0.605	0.1844	268.0
0.30	0.686	0.2091	244.6
0.35	0.764	0.2329	226.5
0.40	0.840	0.2560	211.9
0.45	0.914	0.2786	199.8
0.50	0.987	0.3008	189.5
0.55	1.058	0.3225	180.7
0.60	1.128	0.3438	173.0
0.65	1.196	0.3645	166.2
0.70	1.264	0.3852	160.2
0.75	1.331	0.4057	154.7
0.80	1.398	0.4261	149.8
0.85	1.464	0.4462	145.3
0.90	1.529	0.4660	141.2
0.95	1.593	0.4855	137.5
1.00	1.657	0.5050	134.0

Test (following tests have been passed successfully)

Flame propagation: IEC 332-3

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