



SUHRNER® COAXIAL CABLE DATA SHEET

TYPE RG 316 /U-01

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	1.65 mm
2. Outer conductor:	CuAg Braid	94% coverage	2.1 mm
3. Outer conductor:	n/a n/a		
Jacket:	FEP	RAL 5000 - bl	2.6 mm +/-0.1
Print:	SUHRNER SWITZERLAND RG 316 /U-01 50 Ohm		
Screen:	n/a n/a		
Armour E:	n/a		
Armour F:	n/a		
Armour G:	n/a		
Armour H:	n/a		
Jacket:	n/a		mm

Electrical Data

Impedance:	50 Ω +/-3
Max. operating frequency:	1 GHz
Capacitance :	97.2 pF / m
Velocity of signal propagation:	69 %
Signal delay:	4.86 ns / m
Min. screening effectiveness:	> 35 dB (up to 1 GHz)
Max. operating voltage:	0.85 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 "SUHRNER coaxial connector catalogue" or contact you nearest HUBER+SUHRNER partner)

Notes

Order as **RG 316 /U-01** under article number **22510590**

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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Page 1



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

Coefficients:

$a = 0.7632$

$b = 0.894$

$f_{\max} = 1$

$p_{\text{at } 1\text{GHz}} = 135$

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	603.7
0.10	0.331	0.1009	426.9
0.15	0.430	0.1311	348.6
0.20	0.520	0.1585	301.9
0.25	0.605	0.1844	270.0
0.30	0.686	0.2091	246.5
0.35	0.764	0.2329	228.2
0.40	0.840	0.2560	213.5
0.45	0.914	0.2786	201.2
0.50	0.987	0.3008	190.9
0.55	1.058	0.3225	182.0
0.60	1.128	0.3438	174.3
0.65	1.196	0.3645	167.4
0.70	1.264	0.3852	161.4
0.75	1.331	0.4057	155.9
0.80	1.398	0.4261	150.9
0.85	1.464	0.4462	146.4
0.90	1.529	0.4660	142.3
0.95	1.593	0.4855	138.5
1.00	1.657	0.5050	135.0

Test (following tests have been passed successfully)

Flame propagation: IEC 332-3

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Page 2



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