



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE S 05163-02

*High screened coaxial cable*

### Cable Design



	Material	Detail	Diameter
Centre conductor:	Cu	Wire ( 1 mm)	1 mm
Dielectric:	SPE		4.57 mm
1. Outer conductor:	Al-PES longitudinal Foil	100% coverage	4.65 mm
2. Outer conductor:	CuSn Braid	66% coverage	5.4 mm
Jacket:	LSFH	RAL 9005 - bk	6.9 mm +/-0.15
Print:	SUHNER SWITZERLAND S 05163-02 75 Ohm		

### Electrical Data

Impedance:	75 $\Omega$ +/-3
Max. operating frequency:	2 GHz
Capacitance :	54.4 pF / m
Velocity of signal propagation:	82 %
Signal delay:	4.08 ns / m
Min. screening effectiveness:	> 40 dB (up to 2 GHz)
Max. operating voltage:	0.5 kV <sub>rms</sub> (at sea level)
Test voltage:	1 kV <sub>rms</sub> (50 Hz/ 1min)
Insulation resistance:	> 10 M $\Omega$ m

### General Data

Temperature range:	-40 °C...+ 85 °C
Weight:	5.3 kg / 100 m
Min. bending radius :	static 35 mm
	repeated (for max. 50 bendings) 70 mm

### Suitable Connectors

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

### Notes

Order as **S 05163-02** under article number **23003405**

#### WAIVER!

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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:

$a = 0.2164$

$b = 0.0413$

$f_{\max} = 2$

$p_{\text{at } 1\text{GHz}} = 202$

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
0.10	0.073	0.0222	638.8
0.20	0.105	0.0320	451.7
0.30	0.131	0.0399	368.8
0.40	0.153	0.0466	319.4
0.50	0.174	0.0530	285.7
0.60	0.192	0.0585	260.8
0.70	0.210	0.0640	241.4
0.80	0.227	0.0692	225.8
0.90	0.242	0.0738	212.9
1.00	0.258	0.0786	202.0
1.10	0.272	0.0829	192.6
1.20	0.287	0.0875	184.4
1.30	0.300	0.0914	177.2
1.40	0.314	0.0957	170.7
1.50	0.327	0.0997	164.9
1.60	0.340	0.1036	159.7
1.70	0.352	0.1073	154.9
1.80	0.365	0.1112	150.6
1.90	0.377	0.1149	146.5
2.00	0.389	0.1186	142.8

Halogen content      IEC 754

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