

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: G\_03212\_D-01

Rev.: I



### Description

PE-50 Ohm - double screen

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96 %	3.6 mm
Outer conductor	Copper, Tin plated	Braid, 94 %	4.2 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	5.4 mm +/- 0.1
Print	HUBER+SUHNER G 03212 D-01 50 Ohm (PA no.)		

#### Electrical Data

Impedance	50	$\Omega$ +/- 2
Max. operating frequency	6	GHz
Capacitance	100.7	pF/m
Velocity of signal propagation	66	%
Signal delay	5.03	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M $\Omega$ m
Min. screening effectiveness	> 80	dB (up to 6 GHz)
Max. operating voltage	2.5	kV <sub>rms</sub> (at sea level)
Test voltage	5	kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	5.3	kg/100 m
Min. bending radius	static	30 mm
	repeated (for max. 50 bendings)	55 mm

#### Environmental Data

Temperature range	-40 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C
Halogen free	IEC 60754
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as G\_03212\_D-01

#### Additional Information

##### Remarks

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

**Cable group** U9 3 mm / 50 Ohm

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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=	0.3336	b=	0.2018	f <sub>max</sub> =	6	p <sub>at</sub> 1GHz =	110
	<b>Frequency (GHz)</b>		<b>Nom. attenuation (dB / m)</b> sea level 25° C ambient temperature		<b>Nom. attenuation (dB / ft)</b> sea level 25° C ambient temperature		<b>Max. CW power (watt)</b> sea level 40° C ambient temperature
	0.3		0.24		0.073		201
	0.6		0.38		0.116		142
	0.9		0.50		0.152		116
	1.2		0.61		0.186		100
	1.5		0.71		0.216		90
	1.8		0.81		0.247		82
	2.1		0.91		0.277		76
	2.4		1.00		0.305		71
	2.7		1.09		0.332		67
	3.0		1.18		0.360		64
	3.3		1.27		0.387		61
	3.6		1.36		0.415		58
	3.9		1.45		0.442		56
	4.2		1.53		0.466		54
	4.5		1.62		0.494		52
	4.8		1.70		0.518		50
	5.1		1.78		0.543		49
	5.4		1.86		0.567		47
	5.7		1.95		0.594		46
	6.0		2.03		0.619		45

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

**WAIVER!**

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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