

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: RG\_316\_U

### Description

Single screened coaxial cable



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.54 mm
Dielectric	PTFE		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 95 %	2 mm
Jacket	FEP	RAL 8015 - br	2.5 mm +/- 0.1
Print	HUBER+SUHNER RG 316 U 50 Ohm (PA no.)		

#### Electrical Data

Impedance	50 $\Omega$ +/- 2
Max. operating frequency	1 GHz
Capacitance	97 pF/m
Velocity of signal propagation	69 %
Signal delay	4.86 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M $\Omega$ m
Min. screening effectiveness	>38 dB (up to 1 GHz)
Max. operating voltage	0.85 kV <sub>rms</sub> (at sea level)
Test voltage	1.7 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	1.6 kg/100 m
Min. bending radius	static 15 mm
	dynamic 37 mm

#### Environmental Data

Temperature range	-55 °C... + 165 °C
Installation temperature	-20 °C... + 60 °C
Flammability	IEC 60332-3

#### Ordering Information

Order as RG\_316\_U

#### Additional Information

##### Remarks

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

#### Suitable Connectors

Cable group U2 / U2

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Rev.: D

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

Coefficients:

a=	0.7727	b=	0.0972	f <sub>max</sub> =	1	p <sub>at</sub> 1GHz =	135
	<b>Frequency</b>		<b>Nom. attenuation</b>		<b>Nom. attenuation</b>		<b>Max. CW power</b>
	<b>(GHz)</b>		<b>(dB / m)</b>		<b>(dB / ft)</b>		<b>(watt)</b>
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.05		0.18		0.055		604
	0.10		0.25		0.076		427
	0.15		0.31		0.094		349
	0.20		0.37		0.113		302
	0.25		0.41		0.125		270
	0.30		0.45		0.137		246
	0.35		0.49		0.149		228
	0.40		0.53		0.162		213
	0.45		0.56		0.171		201
	0.50		0.59		0.180		191
	0.55		0.63		0.192		182
	0.60		0.66		0.201		174
	0.65		0.69		0.210		167
	0.70		0.71		0.216		161
	0.75		0.74		0.226		156
	0.80		0.77		0.235		151
	0.85		0.80		0.244		146
	0.90		0.82		0.250		142
	0.95		0.85		0.259		139
	1.00		0.87		0.265		135

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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