

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 (Polytetrafluorethyl.)		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 95 %	2 mm
Jacket	FEP (Fluorethylene Prop.)	RAL 8015 - br	2.5 mm +/- 0.1
Print	HUBER+SUHNER RG 316 U 50 Ohm (PA no.)		

Electrical Data

Impedance	50 Ω +/- 2
Max. operating frequency	1 GHz
Capacitance	97.2 pF/m
Velocity of signal propagation	69 %
Signal delay	4.86 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω m
Min. screening effectiveness	>38 dB (up to 1 GHz)
Max. operating voltage	0.85 kV _{rms} (at sea level)
Test voltage	1.7 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	1.6 kg/100 m
Min. bending radius	static 15 mm
	repeated (for max. 50 bendings) 25 mm

Environmental Data

Temperature range	-65 °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

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_316_U



Rev.: C

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

Coefficients:

a=	0.767	b=	0.0892	f _{max.} =	1	p _{at} 1GHz =	135
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			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		0.36		0.110		302
	0.25		0.41		0.125		270
	0.30		0.45		0.137		246
	0.35		0.48		0.146		228
	0.40		0.52		0.158		213
	0.45		0.55		0.168		201
	0.50		0.59		0.180		191
	0.55		0.62		0.189		182
	0.60		0.65		0.198		174
	0.65		0.68		0.207		167
	0.70		0.70		0.213		161
	0.75		0.73		0.222		156
	0.80		0.76		0.232		151
	0.85		0.78		0.238		146
	0.90		0.81		0.247		142
	0.95		0.83		0.253		139
	1.00		0.86		0.262		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.



HUBER+SUHNER AG
RF Industrial
9100 Herisau, Switzerland
 Phone +41 (0)71 353 41 11
 Fax +41 (0)71 353 45 90
 www.hubersuhner.com

HUBER+SUHNER – Excellence in Connectivity Solutions