

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_400_/U



Description

PTFE - 50 Ohm - double screen

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	1 mm
Dielectric	PTFE		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97 %	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.2 mm
Jacket	FEP	RAL 8015 - br	4.95 mm +/- 0.1
Print	HUBER+SUHNER RG 400 U 50 Ohm (PA no.)		

Electrical Data

Impedance	50	Ω +/- 2
Max. operating frequency	6	GHz
Capacitance	94	pF/m
Velocity of signal propagation	69	%
Signal delay	4.75	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M Ω m
Min. screening effectiveness	>81	dB (up to 6 GHz)
Max. operating voltage	1.7	kV _{rms} (at sea level)
Test voltage	3.4	kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	6.4	kg/100 m
Min. bending radius	static	30 mm
	repeated (for max. 50 bendings)	50 mm
	dynamic	75 mm

Environmental Data

Temperature range	-20 °C... + 60 °C	-65 °C... + 165 °C
Installation temperature	-20 °C... + 60 °C	
Flammability	IEC 60332-3	
2002/95/EC (RoHS)	compliant	

Ordering Information

Order as RG_400_/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	crimped (U11)
	clamped (U10)
	soldered —

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_400_/U



Rev.: I

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

Coefficients:

a=	0.3894	b=	0.0925	f _{max} =	6	p _{at} 1GHz =	365
	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
	0.3		0.24		0.073		666
	0.6		0.36		0.110		471
	0.9		0.45		0.137		385
	1.2		0.54		0.165		333
	1.5		0.62		0.189		298
	1.8		0.69		0.210		272
	2.1		0.76		0.232		252
	2.4		0.83		0.253		236
	2.7		0.89		0.271		222
	3.0		0.95		0.290		211
	3.3		1.01		0.308		201
	3.6		1.07		0.326		192
	3.9		1.13		0.344		185
	4.2		1.19		0.363		178
	4.5		1.24		0.378		172
	4.8		1.30		0.396		167
	5.1		1.35		0.411		162
	5.4		1.40		0.427		157
	5.7		1.46		0.445		153
	6.0		1.51		0.460		149

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