

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_214_U-01

Description

Double screened coaxial cable - precision type



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.25 mm
Dielectric	PE (Polyethylene)		7.28 mm
Outer conductor	Copper, Silver plated	Braid, 96 %	8 mm
Outer conductor	Copper, Silver plated	Braid, 93 %	8.7 mm
Jacket	PVC II (non migration)	RAL 9005 - bk	10.8 mm +/- 0.15
Print	HUBER+SUHNER RG 214 U-01 50 Ohm (PA no.)		

Electrical Data

Impedance	50 Ω +/- 1
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 Ω m
Min. screening effectiveness	>71 dB (up to 6 GHz)
Max. operating voltage	5 kV _{rms} (at sea level)
Test voltage	10 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	18.5 kg/100 m
Min. bending radius	static 55 mm
	repeated (for max. 50 bendings) 110 mm
	dynamic 220 mm

Environmental Data

Temperature range	-40 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C

Ordering Information

Order as RG_214_U-01

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 U32 / U33

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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=	0.1884	b=	0.066	f _{max} =	6	p _{at} 1GHz =	325
	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		0.12		0.037		593
	0.6		0.19		0.058		420
	0.9		0.24		0.073		343
	1.2		0.29		0.088		297
	1.5		0.33		0.101		265
	1.8		0.37		0.113		242
	2.1		0.41		0.125		224
	2.4		0.45		0.137		210
	2.7		0.49		0.149		198
	3.0		0.52		0.158		188
	3.3		0.56		0.171		179
	3.6		0.60		0.183		171
	3.9		0.63		0.192		165
	4.2		0.66		0.201		159
	4.5		0.70		0.213		153
	4.8		0.73		0.222		148
	5.1		0.76		0.232		144
	5.4		0.79		0.241		140
	5.7		0.83		0.253		136
	6.0		0.86		0.262		133

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

WAIVER!

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