

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: RG\_59\_B/U



### Description

PE-75 Ohm - single screen

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper plated	Wire	0.58 mm
Dielectric	PE		3.64 mm
Outer conductor	Copper	Braid, 93 %	4.5 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	6.1 mm +/- 0.15
Print	HUBER+SUHNER RG 59 B/U 75 Ohm (PA no.)		

#### Electrical Data

Impedance	75	$\Omega$ +/- 1.5
Max. operating frequency	1	GHz
Capacitance	67	pF/m
Velocity of signal propagation	66	%
Signal delay	5.07	ns/m
Insulation resistance	$\geq 1 \times$	$10^8 \text{ M}\Omega\text{m}$
Min. screening effectiveness	>40	dB (up to 1 GHz)
Max. operating voltage	3	kV <sub>rms</sub> (at sea level)
Test voltage	6	kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight		5	kg/100 m
Min. bending radius	static	35	mm
	repeated (for max. 50 bendings)	65	mm

#### Environmental Data

Temperature range		-25 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C	
2002/95/EC (RoHS)	compliant	

#### Ordering Information

Order as RG\_59\_B/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 (U16)
	clamped (U15)
	soldered —

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: RG\_59\_B/U



Rev.: H

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

Coefficients:

a=	0.3173	b=	0.0499	f <sub>max</sub> =	1	p <sub>at</sub> 1GHz =	101
	<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		0.07		0.021		452
	0.10		0.11		0.034		319
	0.15		0.13		0.040		261
	0.20		0.15		0.046		226
	0.25		0.17		0.052		202
	0.30		0.19		0.058		184
	0.35		0.21		0.064		171
	0.40		0.22		0.067		160
	0.45		0.24		0.073		151
	0.50		0.25		0.076		143
	0.55		0.26		0.079		136
	0.60		0.28		0.085		130
	0.65		0.29		0.088		125
	0.70		0.30		0.091		121
	0.75		0.31		0.094		117
	0.80		0.32		0.098		113
	0.85		0.33		0.101		110
	0.90		0.35		0.107		106
	0.95		0.36		0.110		104
	1.00		0.37		0.113		101

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**