

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: RG\_59\_B/U-40



### Description

PE-75 Ohm - single screen - precision type

### 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	RAL 3000 - rd	6.1 mm +/- 0.2
Print	HUBER+SUHNER RG 59 B/U-40 75 Ohm (PA no.)		

#### Electrical Data

Impedance	75	$\Omega$ +/- 1.5
Max. operating frequency	1	GHz
Capacitance	67.6	pF/m
Velocity of signal propagation	65.8	%
Signal delay	5.07	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M $\Omega$ 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		5.4	kg/100 m
Min. bending radius	static	32	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-40

#### Additional Information

##### Remarks

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

**Cable group** U16 4 mm / 75 Ohm

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**Matrix**                      **Attenuation** [ formula: (a\*f<sup>0.5</sup> + b\*f) ] **and Power CW** [ formula: (p\* / f<sup>0.5</sup>) ]

Coefficients:

a=	0.3173	b=	0.0499	f <sub>max.</sub> =	1	P <sub>at</sub> 1GHz =	140
	<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		626
	0.10		0.11		0.034		443
	0.15		0.13		0.040		361
	0.20		0.15		0.046		313
	0.25		0.17		0.052		280
	0.30		0.19		0.058		256
	0.35		0.21		0.064		237
	0.40		0.22		0.067		221
	0.45		0.24		0.073		209
	0.50		0.25		0.076		198
	0.55		0.26		0.079		189
	0.60		0.28		0.085		181
	0.65		0.29		0.088		174
	0.70		0.30		0.091		167
	0.75		0.31		0.094		162
	0.80		0.32		0.098		157
	0.85		0.33		0.101		152
	0.90		0.35		0.107		148
	0.95		0.36		0.110		144
	1.00		0.37		0.113		140

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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