

# Halogen free RF coax cables

## double screen

50 Ω

Low loss, +85 °C

Impedance	50 Ω
Capacitance	82 pF/m
Velocity of signal propagation	82 % of the speed of light
Signal delay	4.1 ns/m
Insulation resistance	>10 <sup>8</sup> MΩm
Min. bending radius static	5 x Ø/with foil 10 x Ø jacket [5]
Min. bending radius dynamic	15 x Ø/with foil 20 x Ø jacket [5]
Temperature range standard cables	-40 °C to +85 °C
Screening effectiveness	≥ 80 dB up to 6 GHz



HUBER+SUHNER delivers all PVC jacketed coaxial cables leadfree acc. to WEEE directive.

H+S type	Item no.	Curves see page	Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]			Weight kg/100 m	Operating voltage kV	Max. operation frequency	Cable group*	
			Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour				crimp	clamp
S_01112_D	22512129	59 and 60	Strand-7	Cu	0.54	SPE	1.32	CuSn	1.70	92	CuSn	2.20	95	LSFH <sup>1)</sup>	2.65	black	1.30	0.20	6	-	-
S_02162_B	22512310		Strand-7	Cu	0.80	SPE	2.10	Al-PES	2.15	100	CuSn	2.70	75	LSFH <sup>1)</sup>	3.15	black	2.50	0.25	6	S9	-
S_02112_D	22511910		Strand-19	CuSn	0.90	SPE	2.39	Cu	2.90	96	Cu	3.50	84	PUR <sup>1)</sup>	4.50	black	3.70	0.35	6	S8	-
S_03212_D-02	23005520		Wire	CuAg	1.10	SPE	2.96	CuAg	3.60	95	CuAg	4.20	93	HYTREL	5.40	black	5.43	0.45	6	-	-
S_04172_D	22511598		Wire	CuAg	1.40	SPE	3.78	CuAg	4.20	94	CuAg	4.70	94	PE <sup>1)</sup>	5.70	black	5.50	0.55	5	S16	-
S_04262_D	22511966		Wire	CuAg	1.40	SPE	3.78	CuAg	4.20	96	CuAg	4.70	94	LSFH <sup>1)</sup>	5.70	black	5.50	0.50	6	S16	-
S_04262_D-02	22512107		Strand-19	CuAg	1.43	SPE	3.77	CuAg	4.35	92	CuAg	5.25	77	LSFH <sup>1)</sup>	6.50	black	6.80	0.50	6	-	-

## Low loss, +85 °C (cont.)

H+S type	Item no.	Curves see page	Center conductor ①			Dielectric ②		Screen 1 ③			Screen 2 ④			Jacket ⑤			Weight kg/100 m	Operating voltage kV	Max. operation frequency	Cable group*	
			Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour				crimp	clamp
S_03262_B-60	84010497	59 and 60	Wire	Cu	1.06	SPE	2.96	Al-PES	3.05	100	CuSn	3.80	90	LSFH <sup>1)</sup>	4.50	black	3.26	0.40	5	-	-
S_04162_B-60	84023780		Wire	Cu	1.40	SPE	3.80	Al-PES	4.00	100	CuSn	4.53	86	LSFH <sup>1)</sup>	5.50	black	4.78	1.00	6	-	-
S_04212_B	22511855		Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	CuSn	4.48	87	PUR <sup>1)</sup>	5.30	black	4.10	0.50	18	-	-
S_04262_B-01	84000918		Wire	CuAg	1.40	SPE	3.82	Al	3.96	100	CuSn	4.48	87	LSFH <sup>1)</sup>	5.50	black	4.10	0.50	18	-	-
S_04272_B	22511622		Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	CuSn	4.48	87	PE <sup>1)</sup>	5.50	blue	4.40	0.50	18	-	-
S_06162_D-02	22511923		Wire	CuAg	2.05	SPE	5.60	CuAg	6.10	93	CuAg	6.75	85	LSFH <sup>1)</sup>	7.90	black	11.00	0.75	6	S24	-
S_07272_B-05	23029079		Wire	Cu	2.68	SPE	7.29	Al-PES	7.45	100	CuSn	8.10	88	PE <sup>1)</sup>	10.20	black	13.25	1.05	5	U30	U31
S_07212_BD	22511864		Strand-7	CuAg	2.82	SPE	7.38	CuAg	8.00	96	Cu	8.10	100	PUR <sup>1)</sup>	10.80	black	20.60	1.05	3 <sup>b)</sup>	S32	-
S_07262_BD <sup>a)</sup>	22511767		Strand-7	CuAg	2.82	SPE	7.38	CuAg	8.00	96	Cu	8.10	100	LSFH <sup>1)</sup>	10.80	black	20.60	1.05	3 <sup>b)</sup>	S32	-
S_10162_B-11	23002145		Wire	CuAl	3.80	SPE	9.90	Cu	10.00	100	Cu	10.80	80	LSFH <sup>1)</sup>	12.90	black	15.00	1.70	7.5	S39	-
S_10172_B-11	22512320		Wire	CuAl	3.80	SPE	9.75	Cu	10.00	100	Cu	10.80	80	PE <sup>1)</sup>	12.90	black	15.00	1.50	7.5	S39	-
S_12272-04	22510390		Wire	CuAl	4.20	SPE	11.50	Cu	11.55	100	Cu	12.50	60	PE <sup>1)</sup>	15.00	black	19.10	1.70	10	-	U40

\* for suitable connectors

a) screening effectiveness 105 dB at 2 GHz

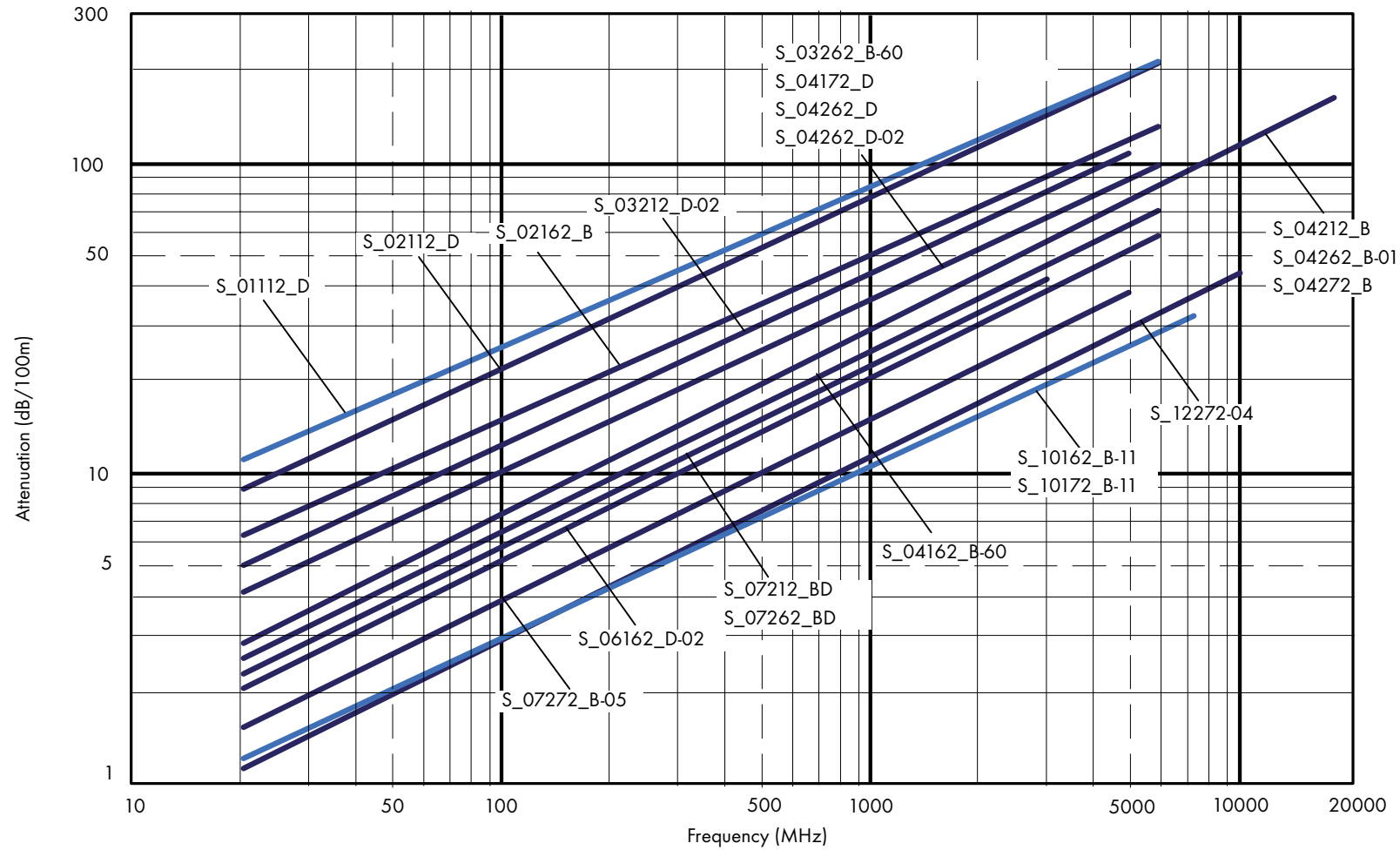
b) also applicable between 4 to 5.85 GHz

1) Low Smoke Free of Halogen (LSFH) acc. waste electrical and electronic equipment (WEEE) and restriction of the use of certain hazardous substances (RoHS) directive.

# Attenuation

Halogen free RF coax cables, low loss types, double screen, 50  $\Omega$

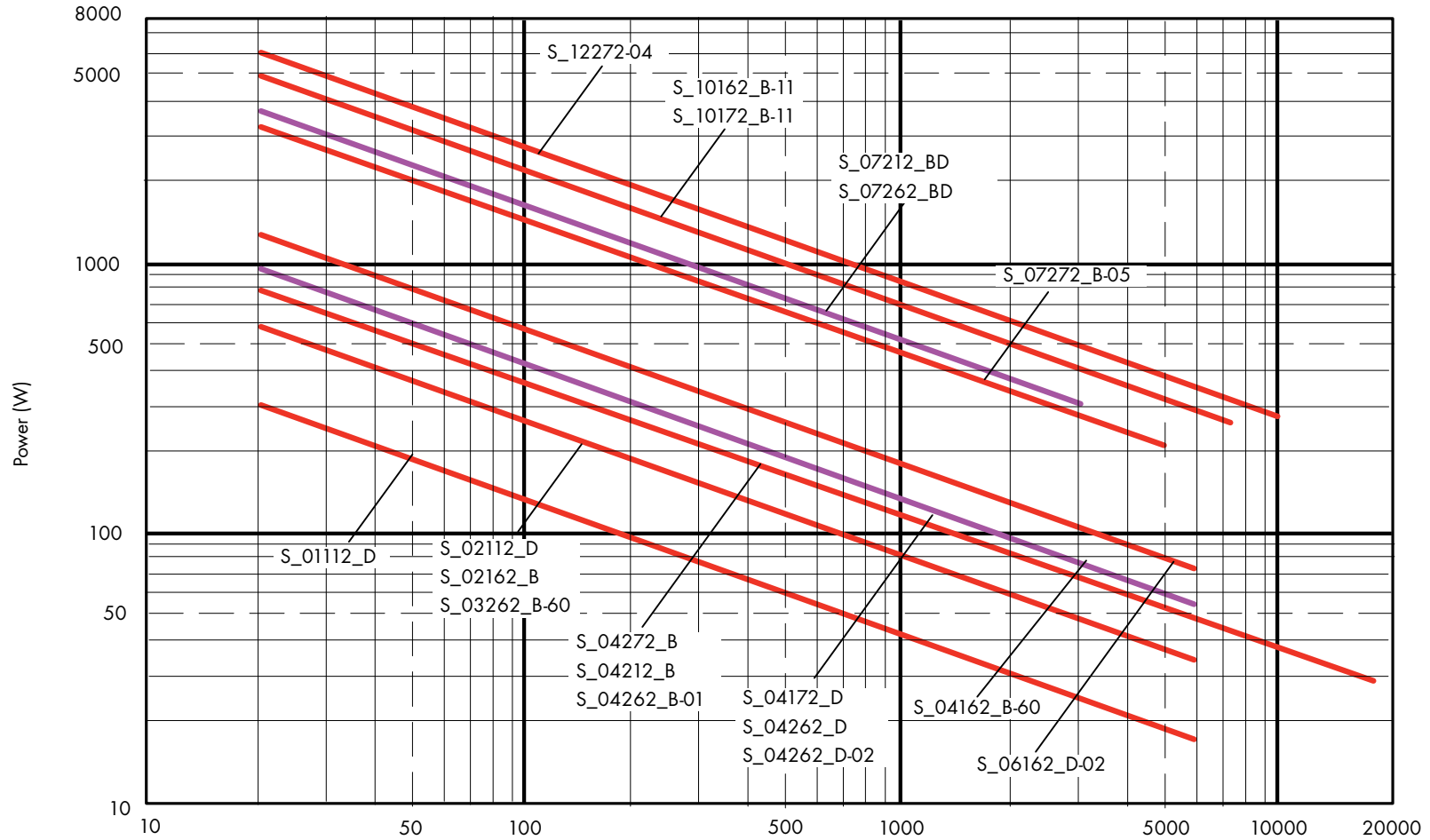
typical values at +20 °C ambient temperature



# Power

## Halogen free RF coax cables, low loss types, double screen, 50 $\Omega$

typical values at +40 °C ambient temperature



# HUBER+SUHNER® DATA SHEET

## Coaxial Cable Connector: 11\_N-50-4-55/133\_N



### Description

Straight cable plug

Interface Standards

IEC 61169-16\_MIL-STD-348A/304\_CECC 22210



### Technical Data

#### Electrical Data

Impedance	50 Ω		
Interface frequency max.	18 GHz		
Frequency range	DC to 8 GHz	8 to 12 GHz	12 to 18 GHz
Return loss	≥ 28 dB	≥ 25 dB	≥ 18 dB

#### Mechanical Data

Centre contact	plugged
Outer contact	crimped
Weight	0.0352 kg

#### Environmental Data

Operating Temperature	-65 °C to 125 °C
2002/95/EC (RoHS)	compliant

#### Material Data

##### Piece Parts

	Material	Surface Plating
Centre contact	Copper Beryllium Alloy	Gold Plating (Nickel underplated)
Outer contact	Brass	SUCOPLATE (R) Plating
Body	Brass	SUCOPLATE (R) Plating
Insulator	PFA / PTFE	
Coupling nut	Brass	SUCOPLATE (R) Plating
Gasket	MVQ (Silicone Rubber)	
Crimp ferrule	Copper	SUCOPLATE (R) Plating

#### Related Documents

Outline drawing	DOU-00006574
Assembly instruction	DOC-0000179057

#### Ordering Information

Single package	11_N-50-4-55/133_NE
----------------	---------------------

#### Additional Information

Suitable cables	S_04272_B, S_04212_B
-----------------	----------------------

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 contained specifications and/or the fitness for any particular purpose. The facts and figures herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



**HUBER+SUHNER AG**  
RF Technology  
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**