RF cables

Edition 2008/2009

HUBER+SUHNER

Excellence in Connectivity Solutions

Standard RF coax cables

single screen

50 Ω

Impedance	50 Ω
Capacitance	101 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range G and RG cables	PVC, PVC (UL), PVC2 (LM): -25 °C to +85 °C
Temperature range G and RG cables	LSFH, PUR, RADOX: -40 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_01132-06	22511913	5 and 6	Wire	Cu	0.30	PE	1.00	CuAg	1.40	96	–	–	PVC	1.80	violet	0.60	1.0	3	U1	U1
RG_174_/U	22510040		Strand-7	StCu	0.48	PE	1.48	CuSn	2.00	87	–	–	PVC2(LM)	2.55	black	1.12	1.5	1	U2	U2
RG_174_A/U	22511579		Strand-7	StCu	0.48	PE	1.48	CuSn	2.00	87	–	–	PVC2(LM)	2.80	black	1.20	1.5	1	U2	U2
RG_174_A/U-60[b)]	22511810		Strand-7	StCu	0.48	PE	1.48	CuSn	2.00	87	–	–	PVC(UL)	2.80	black	1.30	1.5	1	U2	U2
G_02262	22510862		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	–	–	LSFH[1)]	2.80	black	1.33	1.5	1	U2	U2
G_02232	22510103		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	–	–	PVC2(LM)	2.80	black	1.40	1.5	1	U2	U2
G_02232-01	22510104		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	–	–	PVC	2.80	grey	1.40	1.5	1	U2	U2
G_02232-09	22510110		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	–	–	PVC	2.55	grey	1.30	1.5	1	U2	U2
G_03232-01	22510129		Wire	Cu	0.88	PE	2.95	Cu	3.60	95	–	–	PVC	5.00	black	3.90	2.5	1	U7	U7

b) UL recognised (see UL types page 117)

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_03212-01	22610095	5 and 6	Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	95	–	–	PUR[1)]	4.95	black	3.60	2.5	1	U7	U7
RG_58_C/U	22510015		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	PVC2(LM)	4.95	black	3.70	2.5	1	U7	U7
RG_58_C/U-01	22510350		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	PVC2(LM)	4.95	black	3.70	2.5	1	U7	U7
RG_58_C/U-05	22511239		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	PVC2(LM)	4.95	blue	3.70	2.5	1	U7	U7
RG_58_C/U-06	22510017		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	PVC	4.95	black	3.70	2.5	1	U7	U7
RG_58_C/U-07	22511244		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	PVC2(LM)	4.95	grey	3.70	2.5	1	U7	U7
RG_58_C/U-22	22511607		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	PVC2(LM)	4.95	red	3.70	2.5	1	U7	U7
RG_58_C/U-62[b)]	23024284		Strand-19	CuAg	0.90	PE	2.95	CuAg	3.60	96	–	–	PVC(UL)	4.95	black	3.70	2.5	1	U7	U7
G_03232	22510128		Strand-7	Cu	0.95	PE	2.95	Cu	3.60	95	–	–	PVC	5.00	black	3.70	2.5	1	U7	U7
G_03262-1	22512108		Strand-7	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	LSFH[1)]	4.95	black	3.90	2.5	1	U7	U7
G_03272	22511434		Strand-7	Cu	0.95	PE	2.95	Cu	3.60	95	–	–	PE[1)]	5.00	black	3.50	2.5	2	U7	U7
G_05232	22510176		Strand-7	Cu	1.50	PE	4.80	Cu	5.60	92	–	–	PVC2(LM)	7.40	black	7.70	3.5	1	–	U19
RG_213_U	22510052		Strand-7	Cu	2.25	PE	7.25	Cu	8.10	96	–	–	PVC2(LM)	10.30	black	15.30	5.0	1	U29	U28
RG_213_U-01[a)]	22510053		Strand-7	Cu	2.25	PE	7.24	Cu	8.10	96	–	–	PVC2(LM)	10.30	black	15.30	5.0	1	U29	U28
RG_213_U-04	22510055		Strand-7	Cu	2.25	PE	7.25	Cu	8.10	96	–	–	PVC	10.30	black	15.30	5.0	1	U29	U28
G_07262	22511836		Strand-7	Cu	2.25	PE	7.28	Cu	8.10	96	–	–	LSFH[1)]	10.30	black	15.30	5.0	1	U29	U28
RG_218_U	22510066		Wire	Cu	5.00	PE	17.30	Cu	18.40	96	–	–	PVC2(LM)	22.10	black	66.90	11.0	1	–	U44

* for suitable connectors

a) precision type: impedance 50 ▯1 Ω

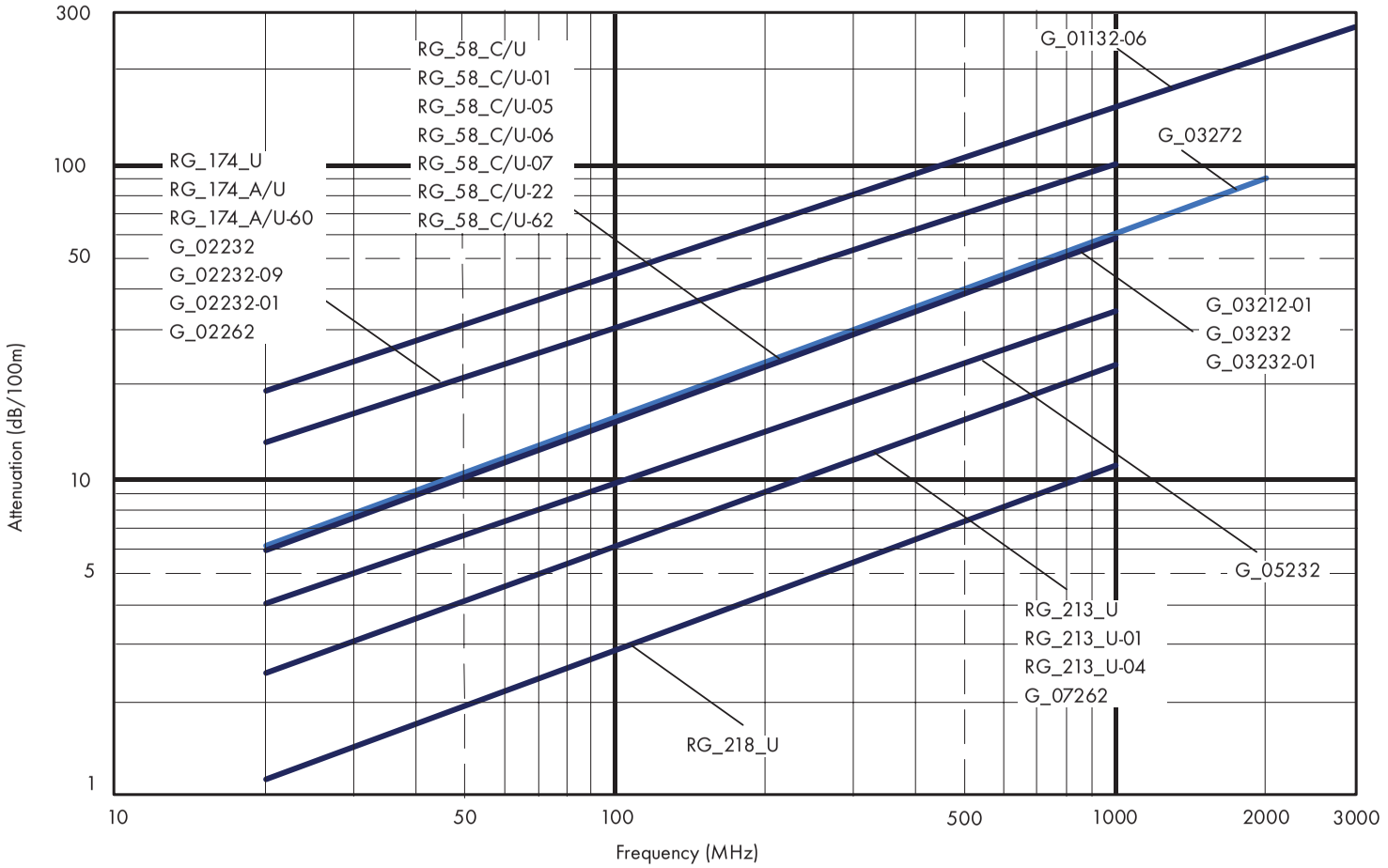
b) UL recognised (see UL types page 117)

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

Standard RF coax cables, single screen, 50 Ω

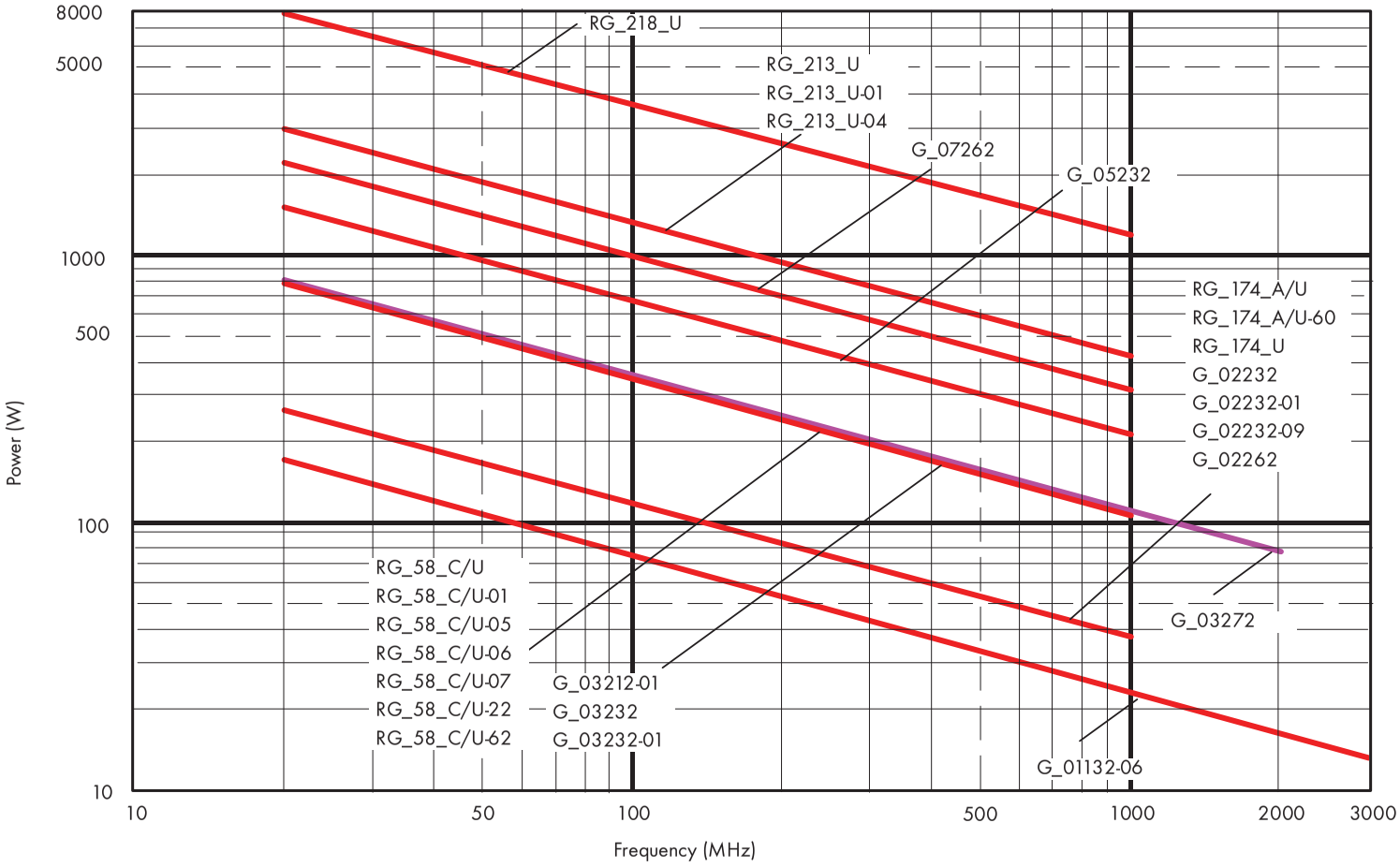
typical values at +20 °C ambient temperature



Power

Standard RF coax cables, single screen, 50 Ω

typical values at +40 °C ambient temperature



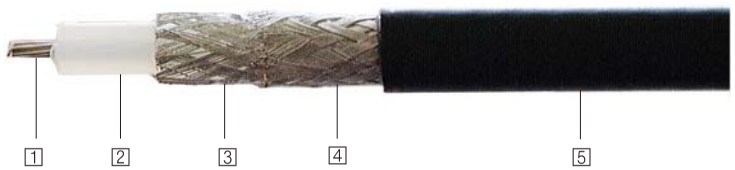
Standard RF coax cables

double screen

50 Ω

Impedance	50 Ω
Capacitance	101 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range G and RG cables	PVC, PVC (UL), PVC2 (LM): -25 °C to +85 °C
Temperature range G and RG cables	LSFH, PUR, RADOX: -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.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]		Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_02212_D-02	22511668	9 and 10	Strand-7	CuAg	0.48	PE	1.50	CuAg	2.00	95	2.50	93	PUR[1)]	3.10	orange	1.80	1.50	6	U4	U4
G_02232_D	22510112		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	2.50	93	PVC2(LM)	3.10	black	2.10	1.50	6	U4	U4
G_02232_D-60[a)]	22511746		Strand-7	Cu	0.49	PE	1.50	CuAg	1.95	97	2.05	100	PVC(UL)	3.10	grey	2.10	1.50	6	U4	U4
G_02262_BD[b)]	22512069		Strand-7	Cu	0.49	PE	1.50	CuAg	1.95	97	2.05	100	LSFH[1)]	3.10	black	2.10	0.45	6	U4	U4
G_03212_D-01	22512305		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	4.20	94	PUR[1)]	5.40	black	5.30	2.50	6	U9	U10
G_03262_D	22511812		Wire	CuAg	0.88	PE	2.95	CuAg	3.60	96	4.20	94	LSFH[1)]	5.40	black	5.50	2.50	6	U9	U10
G_03262_D-01	22511782		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	94	4.25	93	LSFH[1)]	5.40	black	5.50	2.50	6	U9	U10
RG_223_U	22510072		Wire	CuAg	0.88	PE	2.95	CuAg	3.60	96	4.20	94	PVC2(LM)	5.40	black	5.50	2.50	6	U9	U10

[a)] UL recognised (see UL types page 117), with 3rd additional µ-metal magnetic shield

[b)] with 3rd additional µ-metal magnetic shield

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
RG_223_U-04	22510174	9 and 10	Wire	CuAg	0.88	PE	2.95	CuAg	3.60	96	4.20	94	PVC2(LM)	5.40	grey	5.50	2.5	6	U9	U10
RG_223_U-60[b]	22511565		Wire	CuAg	0.88	PE	2.95	CuSn	3.60	96	4.20	94	PVC	5.40	grey	5.50	2.5	6	U9	U10
G_03232_D-01	22510134		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	95	4.25	93	PVC	5.35	black	5.70	2.5	6	U9	U10
RG_223_U-01	22510073		Wire	CuAg	0.88	PE	3.03	CuAg	3.60	96	4.20	94	PVC2(LM)	5.40	black	5.50	2.5	6	U9	U10
RG_223_U-02	22610106		Strand-19	CuAg	0.90	PE	2.93	CuAg	3.60	96	4.20	94	PVC2(LM)	5.30	black	5.30	2.5	6	U9	U10
RG_212_U	22510051		Wire	CuAg	1.40	PE	4.70	CuAg	5.45	94	6.20	94	PVC2(LM)	8.45	black	11.40	3.5	5	–	U20
G_05232_D	22512293		Strand-7	Cu	1.50	PE	4.80	Cu	5.60	93	6.20	93	PVC2(LM)	7.80	black	10.60	3.5	6	–	–
RG_214_U	22510057		Strand-7	CuAg	2.25	PE	7.28	CuAg	8.00	93	8.70	95	PVC2(LM)	10.80	black	18.50	5.0	6	U32	U33
RG_214_U-01	22510058		Strand-7	CuAg	2.25	PE	7.28	CuAg	8.00	96	8.70	93	PVC2(LM)	10.80	black	18.90	5.0	6	U32	U33
RG_214_U-04	22610050		Strand-7	CuAg	2.25	PE	7.28	CuAg	8.00	96	8.70	93	PVC2(LM)	10.80	grey	18.50	5.0	6	U32	U33
RG_214_U-60[b]	22511566		Strand-7	CuAg	2.25	PE	7.28	CuSn	8.00	93	8.70	95	PVC	10.80	black	18.90	5.0	6	U32	U33
RG_214_HiFlex	22512156		Strand-19	CuAg	2.25	PE	7.30	CuAg	8.00	93	8.70	95	PVC2(LM)	10.80	black	18.50	5.0	6	U32	U33
G_07232_D-08	22511272		Strand-7	CuAg	2.25	PE	7.28	CuAg	8.00	93	8.70	95	PVC2(LM)	10.80	black	18.50	5.0	6	U32	U33
G_07262_D	22512085		Strand-7	CuAg	2.25	PE	7.28	CuAg	8.00	93	8.70	95	LSFH[1]	10.80	black	19.70	5.0	6	U32	U33
RG_217_U	22510064		Wire	Cu	2.69	PE	9.33	Cu	10.30	96	11.20	94	PVC2(LM)	13.85	black	30.10	6.0	6	–	U38

* for suitable connectors

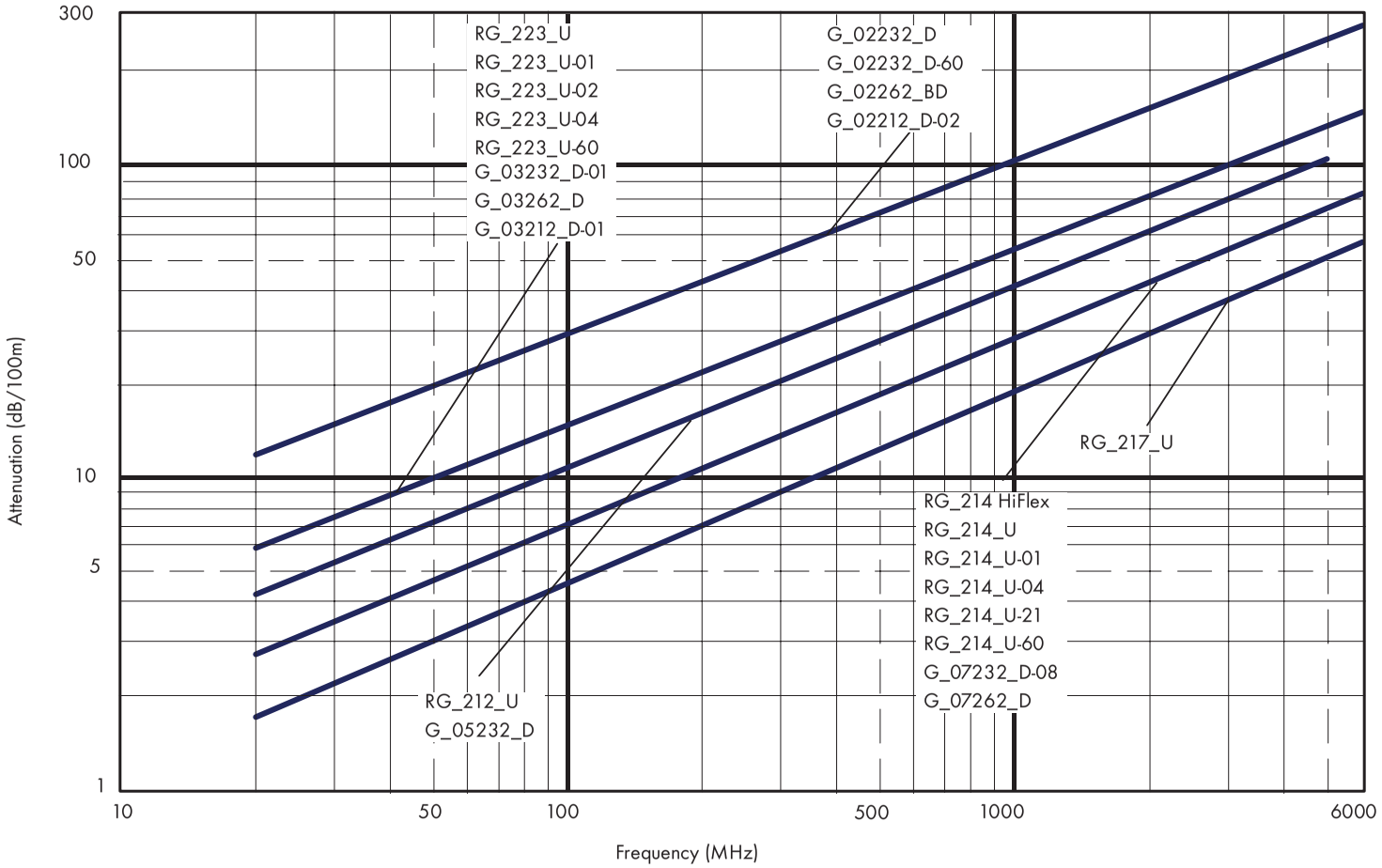
[b] UL recognised (see UL types page 117)

[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

Standard RF coax cables, double screen, 50 Ω

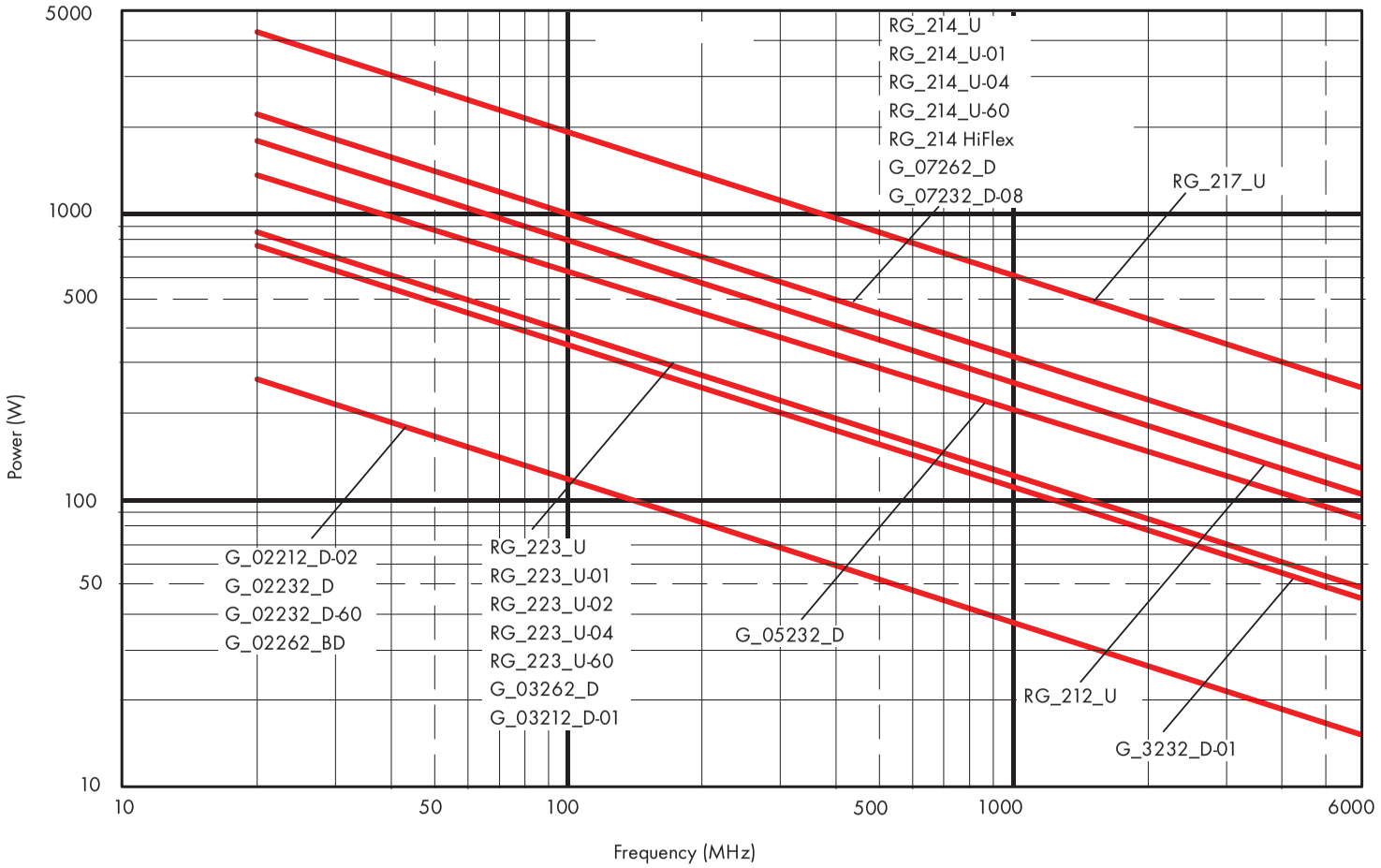
typical values at +20 °C ambient temperature



Power

Standard RF coax cables, double screen, 50 Ω

typical values at +40 °C ambient temperature



Standard RF coax cables

single screen

75 Ω

Impedance	75 Ω
Capacitance	67 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range G and RG cables	PVC, PVC (UL), PVC2(LM): -25 °C bis +85 °C
Temperature range G and RG cables	LSFH, PUR, RADOX: -40 °C bis +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]		Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_02223	22510102	13 and 14	Wire	StCu	0.24	PE	1.50	Cu	2.00	91	–	–	PA	2.30	black	0.90	1.0	1	–	–
G_02233-01	22510114		Wire	StCu	0.24	PE	1.50	Cu	2.00	96	–	–	PVC	2.80	black	1.30	1.0	1	–	U5
G_02233	22510113		Wire	StCu	0.24	PE	1.50	Cu	2.00	96	–	–	PVC	2.80	grey	1.30	1.0	1	–	U5
G_02133-03	22511422		Wire	Cu	0.40	PE	2.40	CuSn	3.10	94	–	–	PVC	4.00	grey	2.60	2.0	1	–	–
G_03233	22510135		Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	–	–	PVC	5.00	black	3.90	2.5	1	U12	U12
G_03233-60a)	22511927		Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	–	–	PVC(UL)	5.00	black	3.90	2.5	2.5	U12	U12
G_03263	22512297		Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	–	–	LSFH[1)]	5.00	black	3.90	2.5	1	U12	U12
RG_59_B/U	22510368		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	PVC2(LM)	6.10	black	5.00	3.0	1	U16	U15

a) UL recognised (see UL types page 117)

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
RG_59_B/U-02[b]	22510022	13 and 14	Wire	Cu	0.58	PE	3.64	Cu	4.35	93	–	–	PVC2(LM)	6.10	black	5.00	3	1	U16	U15
RG_59_B/U-20	22511030		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	PVC	6.10	grey	5.40	3	1	U16	U15
RG_59_B/U-34	22511097		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	PVC	6.10	green	5.40	3	1	U16	U15
RG_59_B/U-36	22511099		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	PVC	6.10	orange	5.40	3	3	U16	U15
RG_59_B/U-38	22511101		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	PVC	6.10	blue	5.40	3	1	U16	U15
RG_59_B/U-40	22511193		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	PVC	6.10	red	5.40	3	1	U16	U15
G_04263-01	22511501		Wire	StCu	0.58	PE	3.64	Cu	4.40	93	–	–	LSFH[1)]	6.10	green	5.20	3	1	U16	U15
G_04263-03	22511867		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	LSFH[1)]	6.10	black	5.20	3	1	U16	U15
G_04273	22511437		Wire	StCu	0.58	PE	3.64	Cu	4.50	92	–	–	PE[1)]	6.10	black	4.50	3	1	U16	U15
G_04233-02	22510165		Strand-7	Cu	0.64	PE	3.75	Cu	4.50	92	–	–	PVC	6.10	black	5.40	3	1	U16	U15
RG_11_A/U	22510004		Strand-7	CuSn	1.20	PE	7.25	Cu	8.10	96	–	–	PVC2(LM)	10.30	black	13.30	5	1	U34	U35
RG_11_A/U-08	22510373		Strand-7	CuSn	1.20	PE	7.25	Cu	8.10	96	–	–	PVC	10.30	black	13.90	5	1	U34	U35
RG_12_A/U[a)]	22510007		Strand-7	CuSn	1.20	PE	7.25	Cu	8.10	96	–	–	PVC2(LM)	10.30	black	23.10	5	1	–	U35

* for suitable connectors

a) equal to RG_11_A/U plus steel armour Ø 11.80 mm

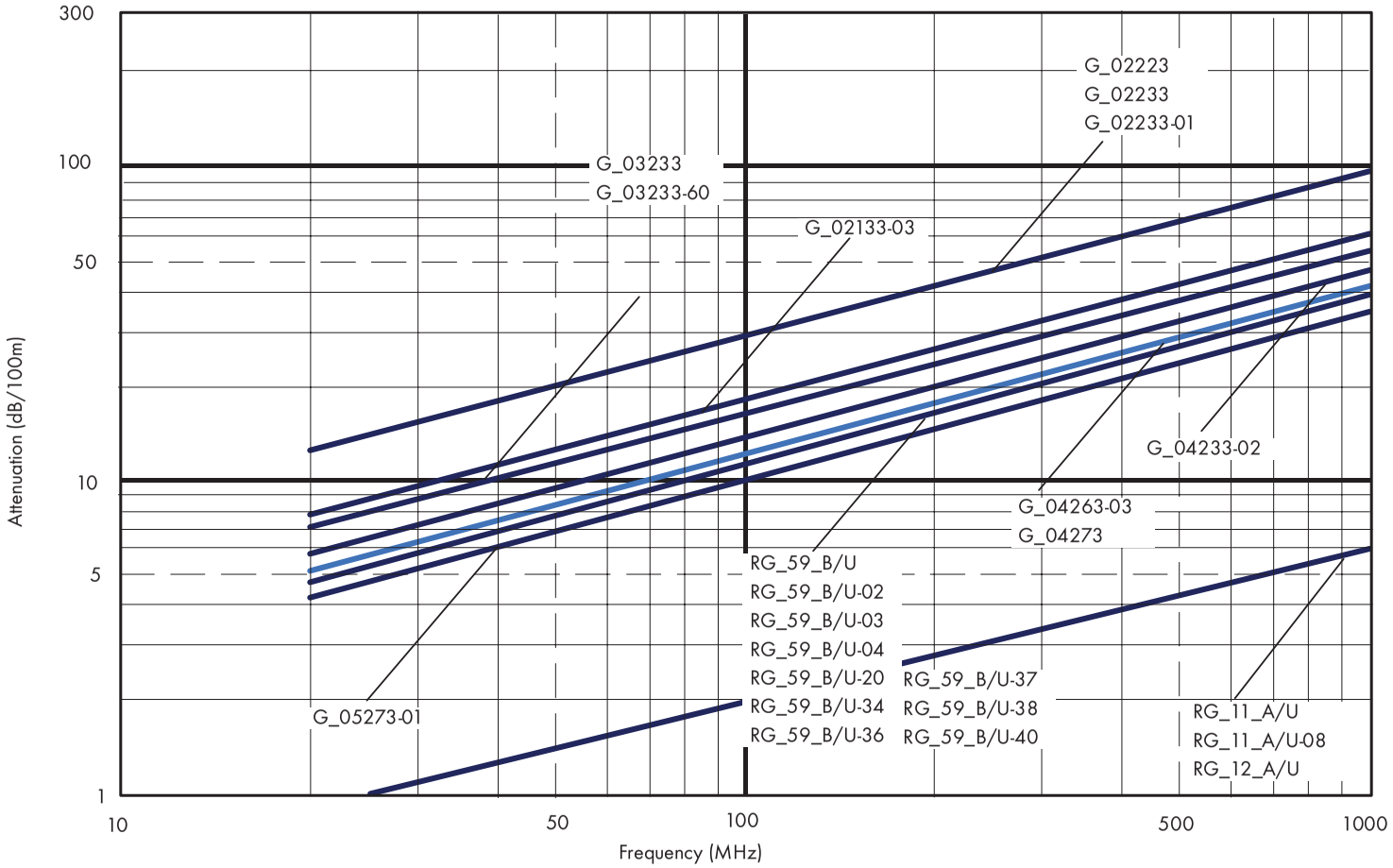
b) precision type: impedance 75 Ω ± 0.75

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

Standard RF coax cables, single screen, 75 Ω

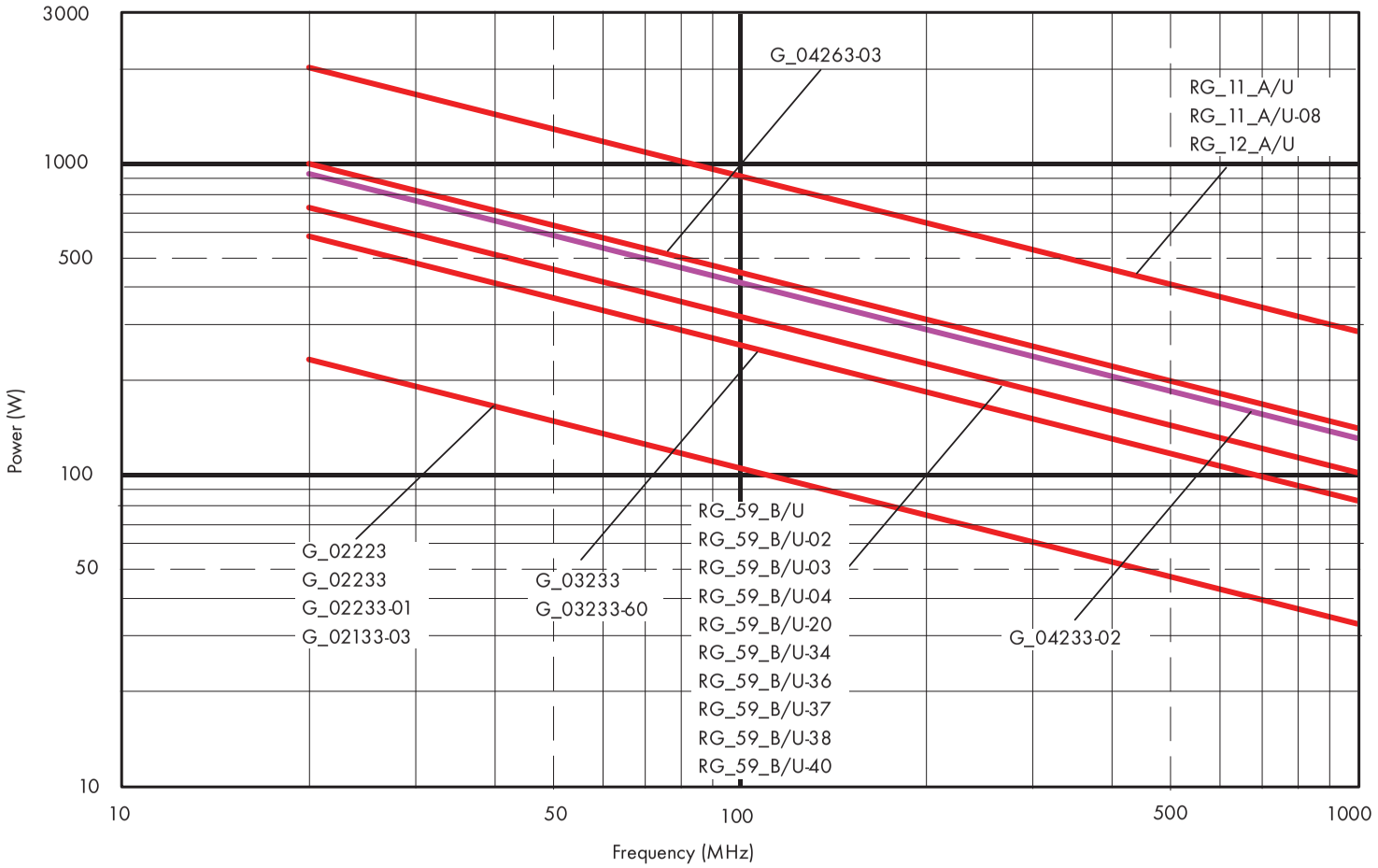
typical values at +20 °C ambient temperature



Power

Standard RF coax cables, single screen, 75 Ω

typical values at +40 °C ambient temperature



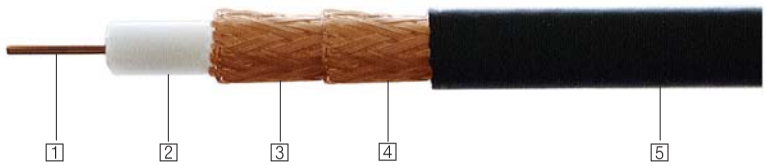
Standard RF coax cables

double screen

75 Ω

Impedance	75 Ω
Capacitance	67 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range G and RG cables	PVC, PVC (UL), PVC2(LM): -25 °C bis +85 °C
Temperature range G and RG cables	LSFH, PE, PUR, RADOX: -40 °C bis +85 °C
Screening effectiveness	≥ 80 dB up to 1 GHz

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



H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_02133_D-05[a]	22511921	17 and 18	Wire	Cu	0.32	PE	1.95	CuSn	2.40	91	2.85	89	PVC(UL)	3.60	white	2.40	1.75	1.75	-	-
G_03233_D[b]	22510140		Wire	CuAg	0.47	PE	2.95	CuAg	3.60	99	4.20	99	PVC	5.35	black	6.00	2.5	2	U14	U14
G_03213_D	22510954		Strand-7	Cu	0.49	PE	2.95	CuSn	3.60	94	4.20	93	PUR[1]	5.35	black	5.00	2.5	2	U14	U14
G_04133_D	22610079		Wire	Cu	0.58	PE	3.64	Cu	4.40	92	5.00	91	PVC	6.70	black	8.10	3	2	U18	U18
G_04133_D-02	22511285		Wire	Cu	0.58	PE	3.64	Cu	4.40	92	5.00	91	PVC	6.70	yellow	8.10	3	2	U18	U18
G_04133_D-04	22511336		Wire	Cu	0.58	PE	3.64	Cu	4.40	92	5.00	91	PVC	6.70	white	8.10	3	2	U18	U18
G_04233_D[c]	22510168		Wire	StCu	0.58	PE	3.64	CuAg	4.45	97	5.20	97	PVC	6.70	black	8.30	3	2	U18	U18

[a] construction according to BT 3002 specification
[b] construction according to 2 S PTT6012 specification
[c] construction according to 2 S PTT 6010 specification

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_04233_D-01	22510169	17 and 18	Strand-7	Cu	0.64	PE	3.75	CuSn	4.35	93	5.00	92	PVC	6.70	black	7.40	3	2	–	U18
G_04233_D-02	22510170		Strand-7	Cu	0.64	PE	3.75	Cu	4.35	93	5.00	92	PVC	6.70	black	7.40	3	2	–	U18
G_04233_D-10[a]	22510434		Wire	StCu	0.58	PE	3.64	CuSn	4.50	97	4.60	100	PVC2(LM)	6.50	black	8.00	3	2	U18	U18
G_04233_D-28	22510600		Wire	StCu	0.58	PE	3.64	CuSn	4.45	97	5.20	97	PVC	6.70	black	8.30	3	2	U18	U18
G_04233_D-58	22511875		Wire	StCu	0.58	PE	3.64	CuSn	4.50	97	5.30	97	PVC	6.70	grey	8.30	3	3	U18	U18
G_04233_D-95	22512296		Wire	StCu	0.58	PE	3.64	CuAg	4.45	97	5.20	97	PVC	6.70	green	8.30	3	3	U18	U18
G_04273_D-02	22513183		Strand-7	Cu	0.64	PE	3.75	CuSn	4.35	93	5.00	92	RADOX[1]	6.70	black	7.80	3	2	U18	U18
G_05133_D[b]	22610131		Wire	Cu	0.76	PE	4.76	Cu	5.50	91	6.30	92	PVC	8.00	black	10.20	3.5	2	–	U23
G_07273_D	22510365		Strand-7	CuSn	1.20	PE	7.25	Cu	8.00	93	8.70	94	PE[1]	8.70	black	15.70	5	5	U36	U37
RG_216_U	22510062		Strand-7	StSn	1.20	PE	7.25	Cu	8.00	95	8.70	93	PVC2(LM)	10.80	black	16.70	5	2	U36	U37
RG_216_U-01 Precision ±1.5Ω	22511281		Strand-7	StSn	1.20	PE	7.25	Cu	8.00	95	8.70	93	PVC2(LM)	10.80	black	16.70	5	2	U36	U37

* for suitable connectors

a) with 3rd additional μ-metal magnetic shield

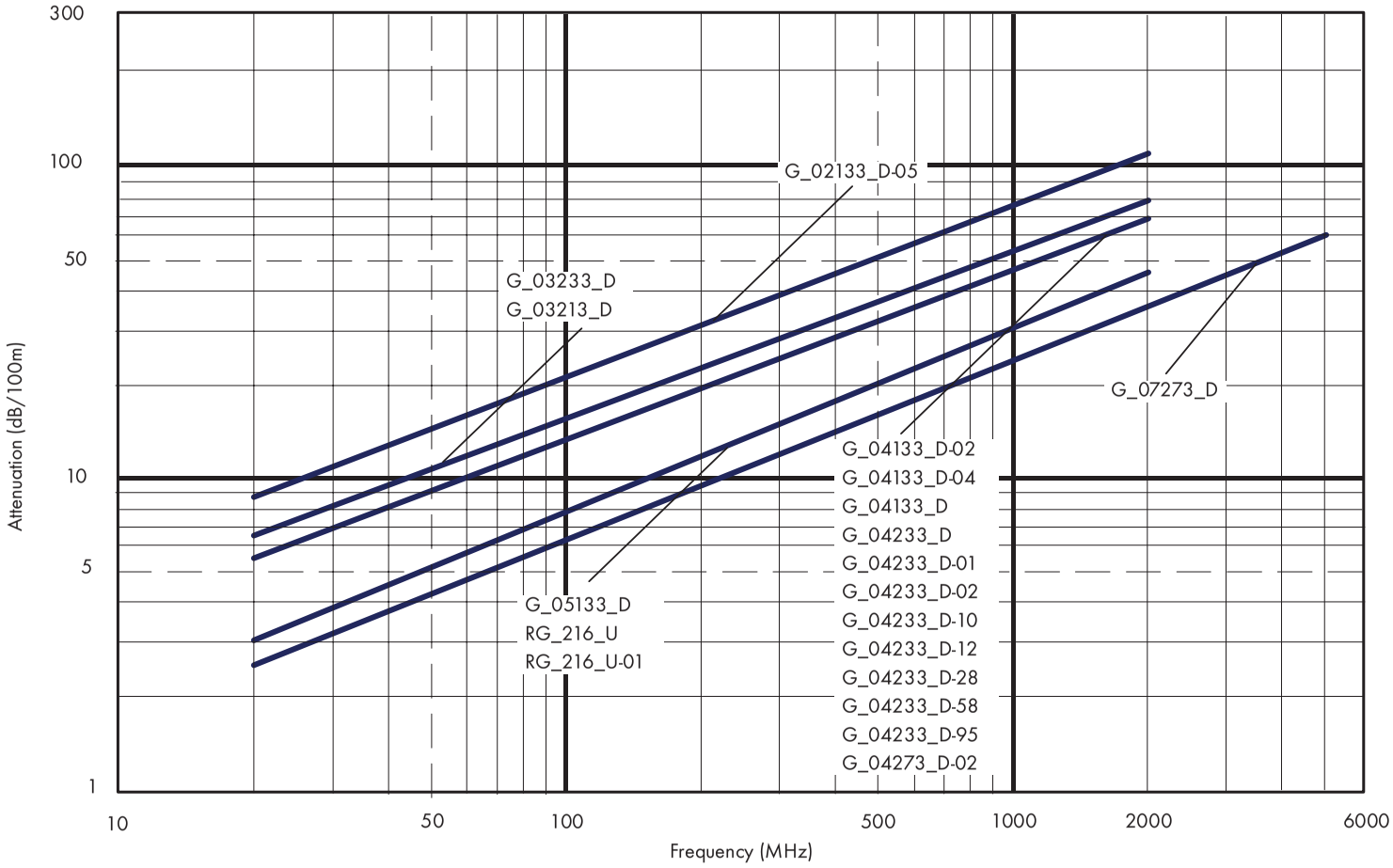
b) precision type: impedance 75 Ω ± 0.75

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

Standard RF coax cables, double screen, 75 Ω

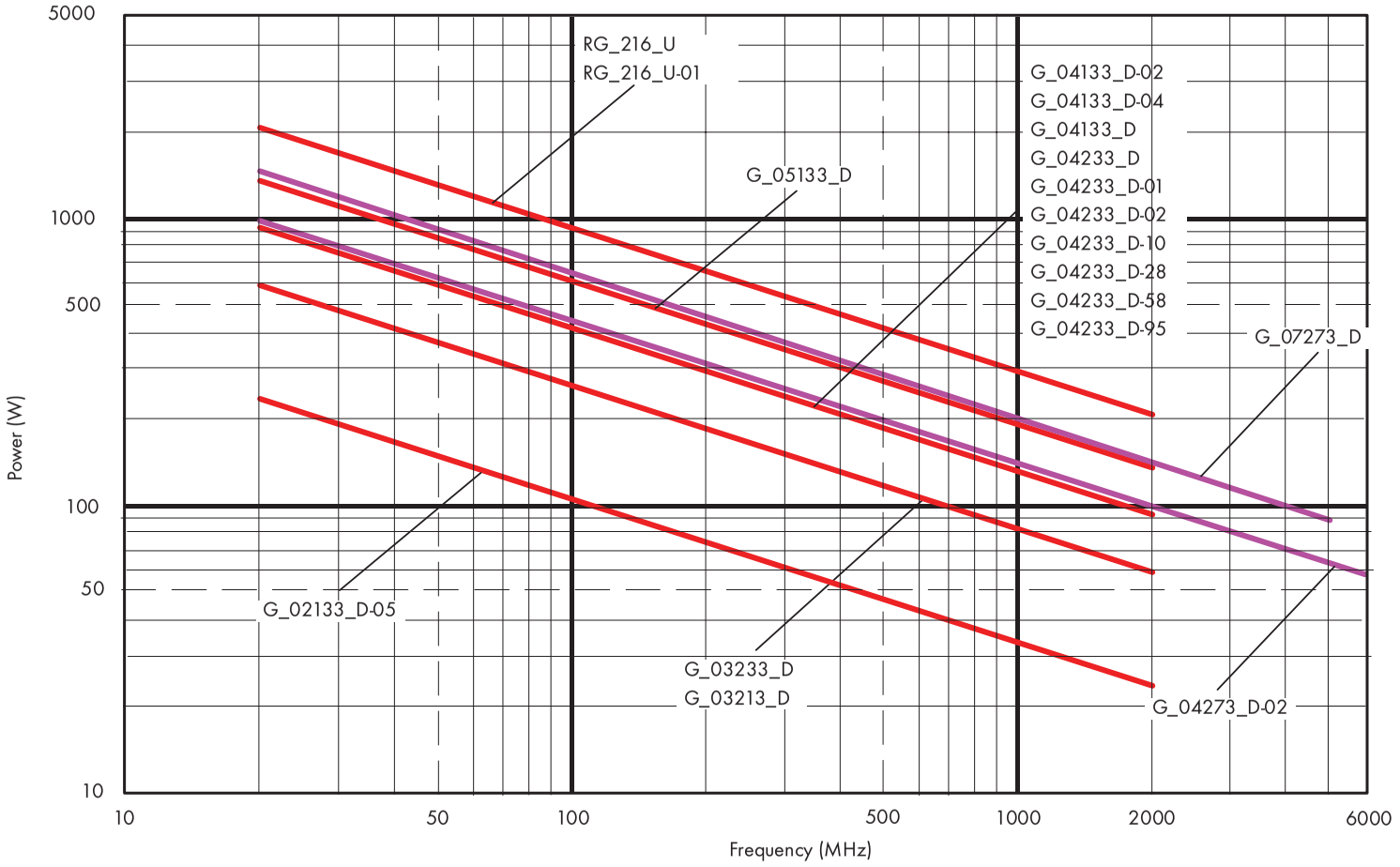
typical values at +20 °C ambient temperature



Power

Standard RF coax cables, double screen, 75 Ω

typical values at +40 °C ambient temperature



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HUBER+SUHNER

your partner - also for Test+Measurement components

Low loss RF coax cables

single screen

50 Ω

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	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range of S cables	PVC, PVC(UL), PVC2(LM): -25 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

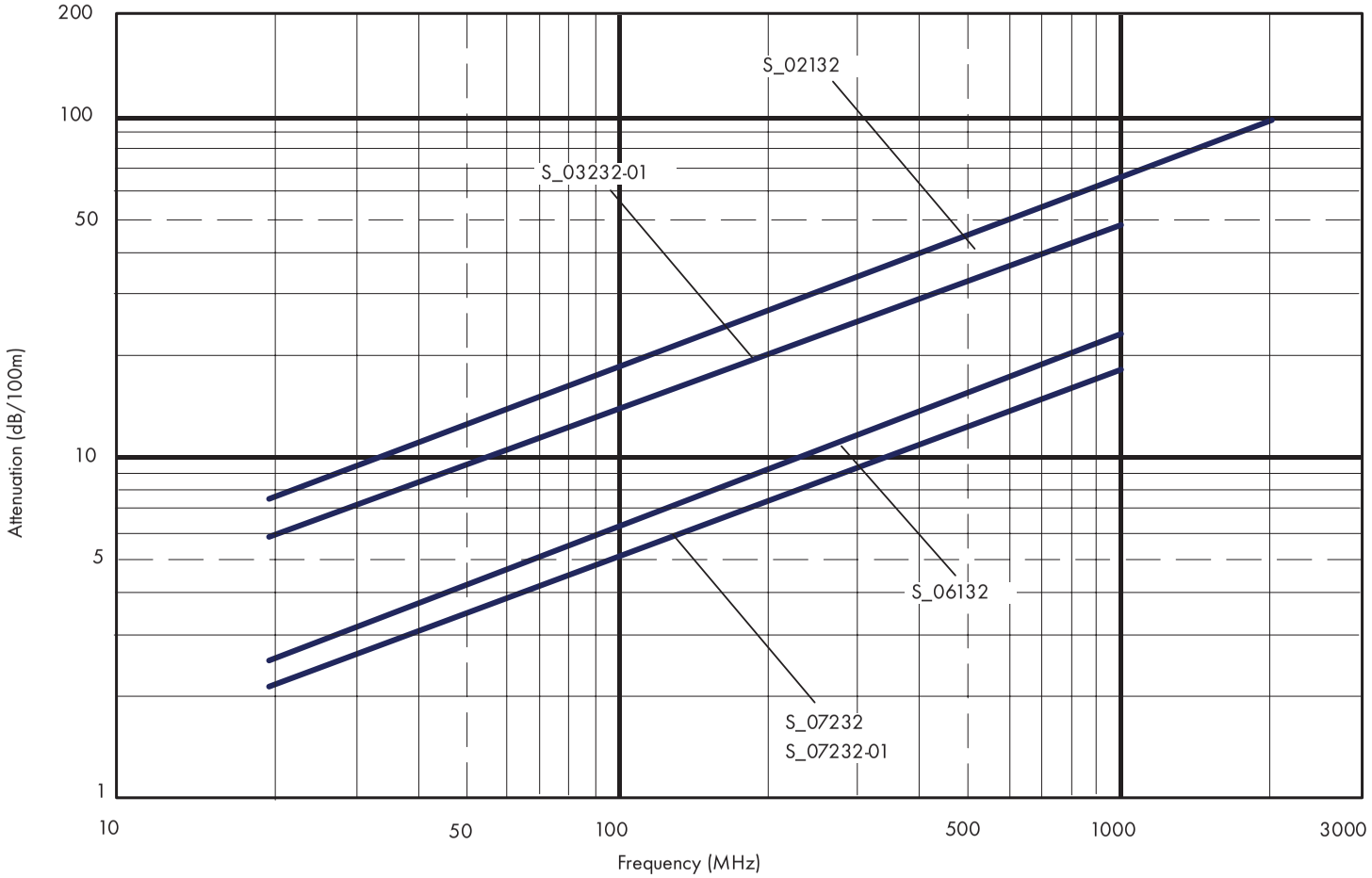
H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]		Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_02132	22511624	22 and 23	Strand-19	CuSn	0.90	SPE	2.30	CuSn	2.90	96	–	–	PVC2(LM)	4.50	black	2.80	0.35	2	S7	–
S_03232-01	22610021		Strand-7	Cu	1.20	SPE	2.95	Cu	3.60	95	–	–	PVC2(LM)	5.00	black	3.80	0.45	1	U8	–
S_06132	22511628		Strand-7	Cu	2.25	SPE	5.85	Cu	6.55	94	–	–	PVC2(LM)	8.15	black	9.20	0.75	1	–	–
S_07232	22510389		Wire	Cu	2.68	SPE	7.29	Cu	8.15	95	–	–	PVC2(LM)	10.30	black	15.30	1.05	1	U30	U31
S_07232-01	22510410		Strand-7	Cu	2.85	SPE	7.42	Cu	8.15	95	–	–	PVC2(LM)	10.30	black	14.90	1.05	1	–	U31

* for suitable connectors

Attenuation

Low loss RF coax cables, single screen, 50 Ω

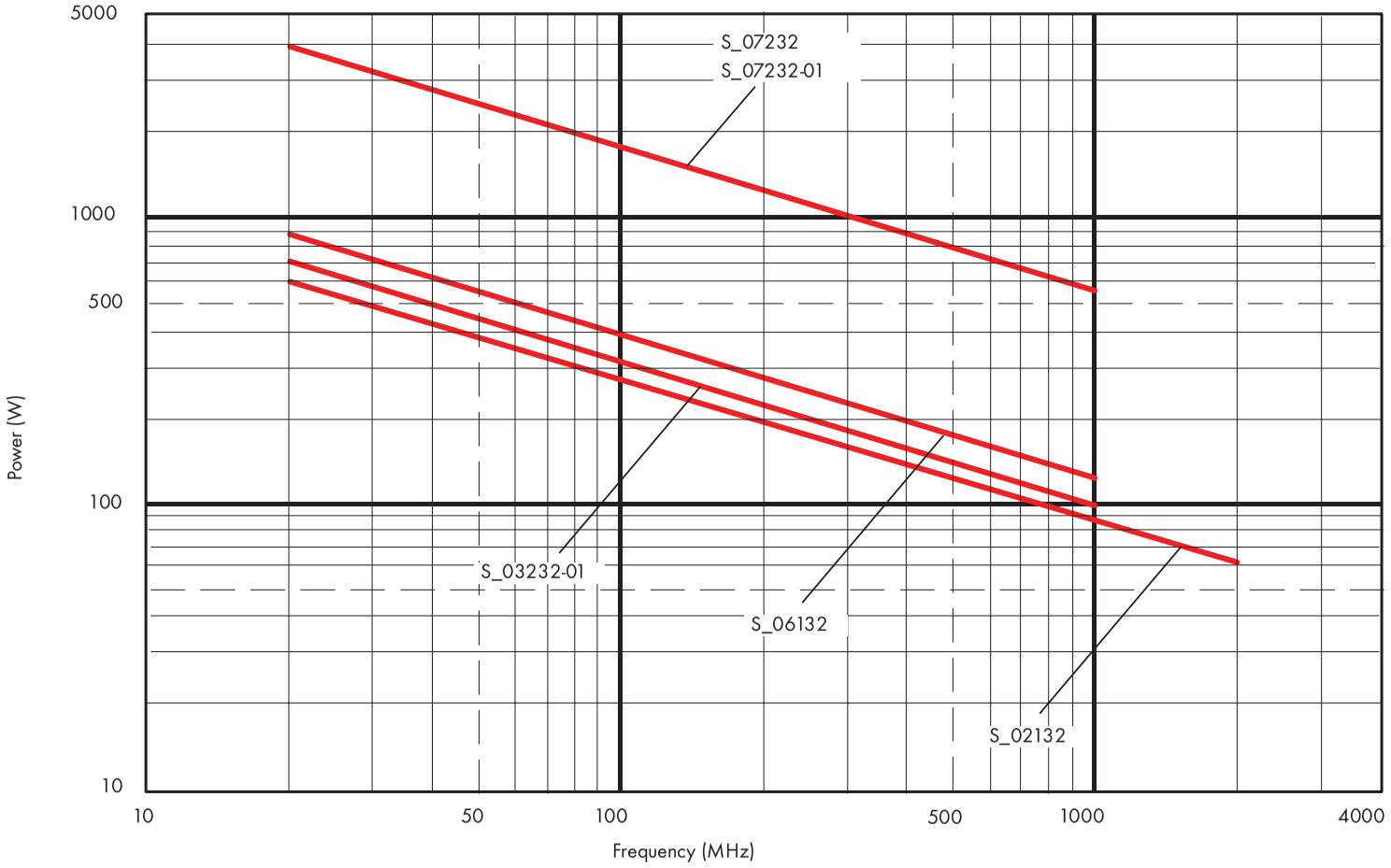
typical values at +20 °C ambient temperature



Power

Low loss RF coax cables, single screen, 50 Ω

typical values at +40 °C ambient temperature



Low loss RF coax cables

double screen

50 Ω

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	$>10^8$ MΩm
Min. bending radius static	5 x ∅/with foil 10 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅/with foil 20 x ∅ jacket [5]
Temperature range of S cables	PVC, PVC(UL), PVC2(LM): -25 °C to +85 °C LSFH, PE, PUR, HYTREL, RADOX: -40 °C to +85 °C
Screening effectiveness	≥ 80 dB up to 6 GHz ≥ 90 dB for all B types (foil)

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

H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]		Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_01112_D	22512129	26 and 27	Strand-7	Cu	0.54	SPE	1.37	CuSn	1.70	92	2.20	95	LSFH[1)]	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	2.70	75	LSFH[1)]	3.15	black	2.50	0.25	6	S9	–
S_02132_D	22511625		Wire	CuAg	0.88	SPE	2.39	CuAg	2.95	92	3.60	96	PVC2(LM)	4.80	black	4.50	0.35	6	S8	–
S_02132_D-60[a)]	84010316		Wire	CuAg	0.88	SPE	2.42	CuAg	2.95	92	3.60	96	PVC(UL)	4.80	black	4.50	0.35	6	S8	–
S_02112_D	22511910		Strand-19	CuSn	0.90	SPE	2.39	Cu	2.90	96	3.50	84	PUR[1)]	4.50	black	3.70	0.35	6	S8	–
S_03232_B-60[a)]	84018244		Wire	Cu	1.065	SPE	2.96	Al-PES	3.05	100	3.80	90	PVC(UL)	4.50	black	3.17	0.40	5	–	–
S_03212_D-02	23005520		Wire	CuAg	1.10	SPE	2.96	CuAg	3.60	95	4.20	93	HYTREL	5.40	black	5.43	0.45	6	–	–
S_03232_B-04[b)]	22512116		Wire	CuAg	1.10	SPE	2.96	Al-PES	3.20	100	3.80	90	PVC(UL)	5.00	black	3.90	0.40	5	–	–

a) UL recognised (see UL types page 117)

b) fulfills UL 1581 1080 VW-1 flame propagation test

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.

Low loss RF coax cables — double screen — 50 Ω

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Dim.	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_03262_B-60[a]	84010497	26 and 27	Wire	Cu	1.06	SPE	2.96	Al-PES	3.05	100	3.80	90	LSFH[1]	4.50	black	3.26	0.40	5	–	–
SX_03232_B-60[a]	84018307		Wire	Cu	1.065	SPEX	2.96	Al-PES	3.05	100	3.80	90	PVC(UL)	4.50	black	3.19	0.40	5	–	–
SX_03272_B-60[a]	84010513		Wire	Cu	1.065	SPEX	2.96	Al-PES	3.05	100	3.80	90	RADOX[1]	4.50	black	3.25	0.40	5	–	–
S_04172_D	22511598		Wire	CuAg	1.40	SPE	3.78	CuAg	4.20	96	4.70	94	PE[1]	5.70	blue	5.50	0.55	5	S16	–
S_04262_D	22511966		Wire	CuAg	1.40	SPE	3.78	CuAg	4.20	96	4.70	94	LSFH[1]	5.70	black	5.50	0.50	6	S16	–
SX_04172_B-60[a]	84026748		Wire	CuAg	1.40	SPEX	3.80	Al-PES	4.00		4.53	86	RADOX[1]	5.50	black	4.78	0.70	6	–	–
S_04162_B-60	84023780		Wire	Cu	1.40	SPE	3.80	Al-PES	4.00	100	4.53	86	LSFH[1]	5.50	black	4.78	1.00	6	–	–
S_04212_B	22511855		Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	4.48	87	PUR[1]	5.30	black	4.10	0.50	18	–	–
S_04262_B-01	84000918		Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	4.48	87	LSFH[1]	5.50	black	4.10	0.50	18	–	–
S_04272_B	22511622		Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	4.48	86	PE[1]	5.50	blue	4.40	0.50	18	–	–
S_04262_D-02	22512107		Strand-19	CuAg	1.43	SPE	3.77	CuAg	4.35	92	5.25	77	LSFH[1]	6.50	black	6.80	0.50	6	–	–
S_06162_D-02	22511923		Wire	CuAg	2.05	SPE	5.60	CuAg	6.10	93	6.75	85	LSFH[1]	7.90	black	11.00	0.75	6	S24	–
S_06132_D-10	22511629		Strand-7	CuAg	2.25	SPE	5.80	CuAg	6.55	94	7.25	96	PVC	8.95	black	14.00	0.75	4	S26	–
S_07272_B-05	23029079		Wire	Cu	2.68	SPE	7.29	Al-PES	7.45	100	8.10	88	PE[1]	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	8.10	100	PUR[1]	10.80	black	20.60	1.05	3	S32	–
S_07262_BD	22511767		Strand-7	CuAg	2.82	SPE	7.38	CuAg	8.00	96	8.10	100	LSFH[1]	10.80	black	20.60	1.05	3	S32	–
S_10162_B-11	23002145		Wire	AlCu	3.80	SPE	9.90	Cu	10.00	100	10.80	80	LSFH[1]	12.90	black	15.00	1.70	7.5	S39	–
S_10172_B-11	22512320		Wire	AlCu	3.80	SPE	9.90	Cu	10.00	100	10.80	80	PE[1]	12.90	black	15.00	1.50	7.5	S39	–
S_12272-04	22510390		Wire	AlCu	4.20	SPE	11.50	Cu	11.55	100	12.50	60	PE[1]	15.00	black	19.10	1.70	10	–	U40

* for suitable connectors

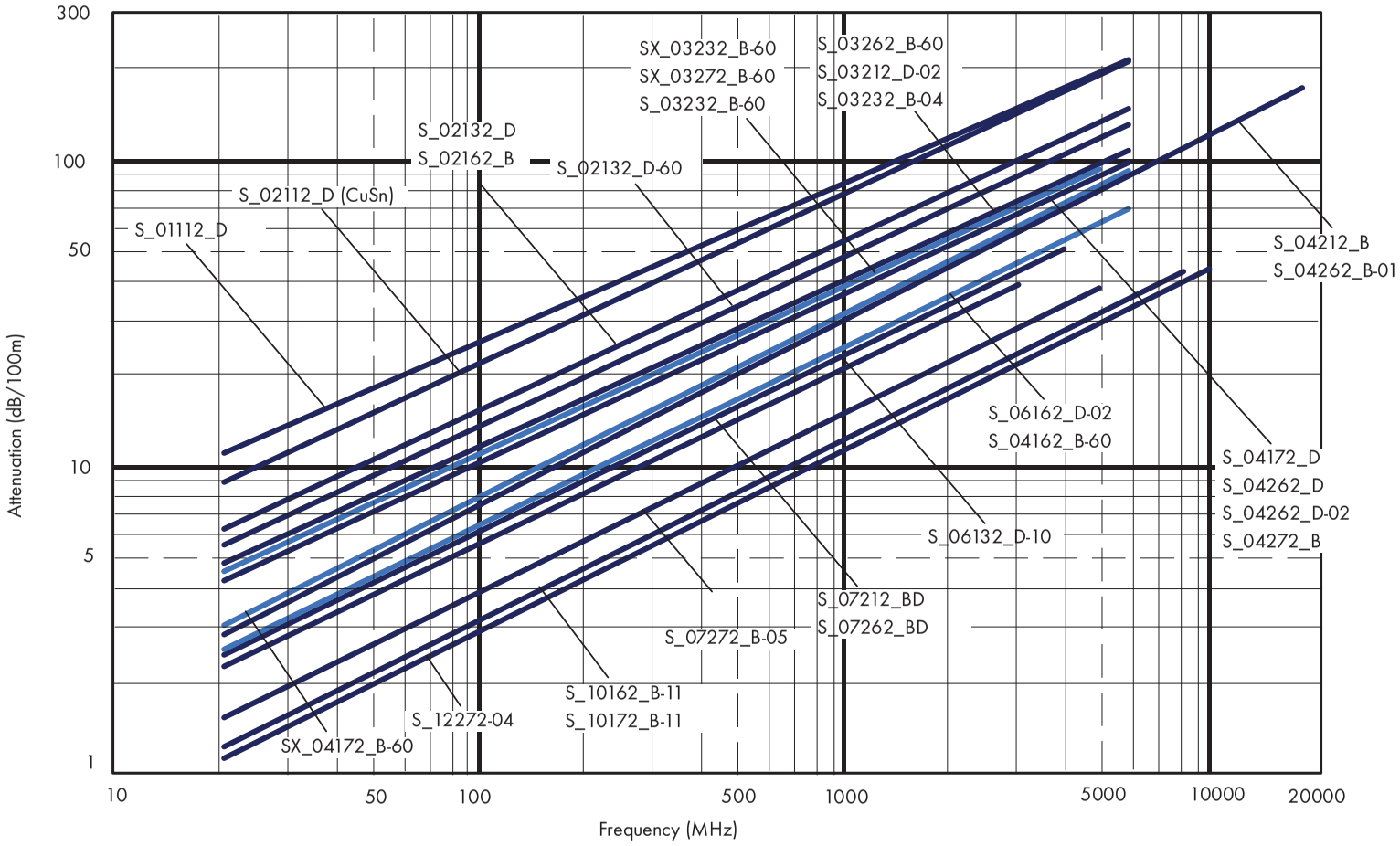
[a] UL recognised (see UL types page 117)

[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

Low loss RF coax cables, double screen, 50 Ω

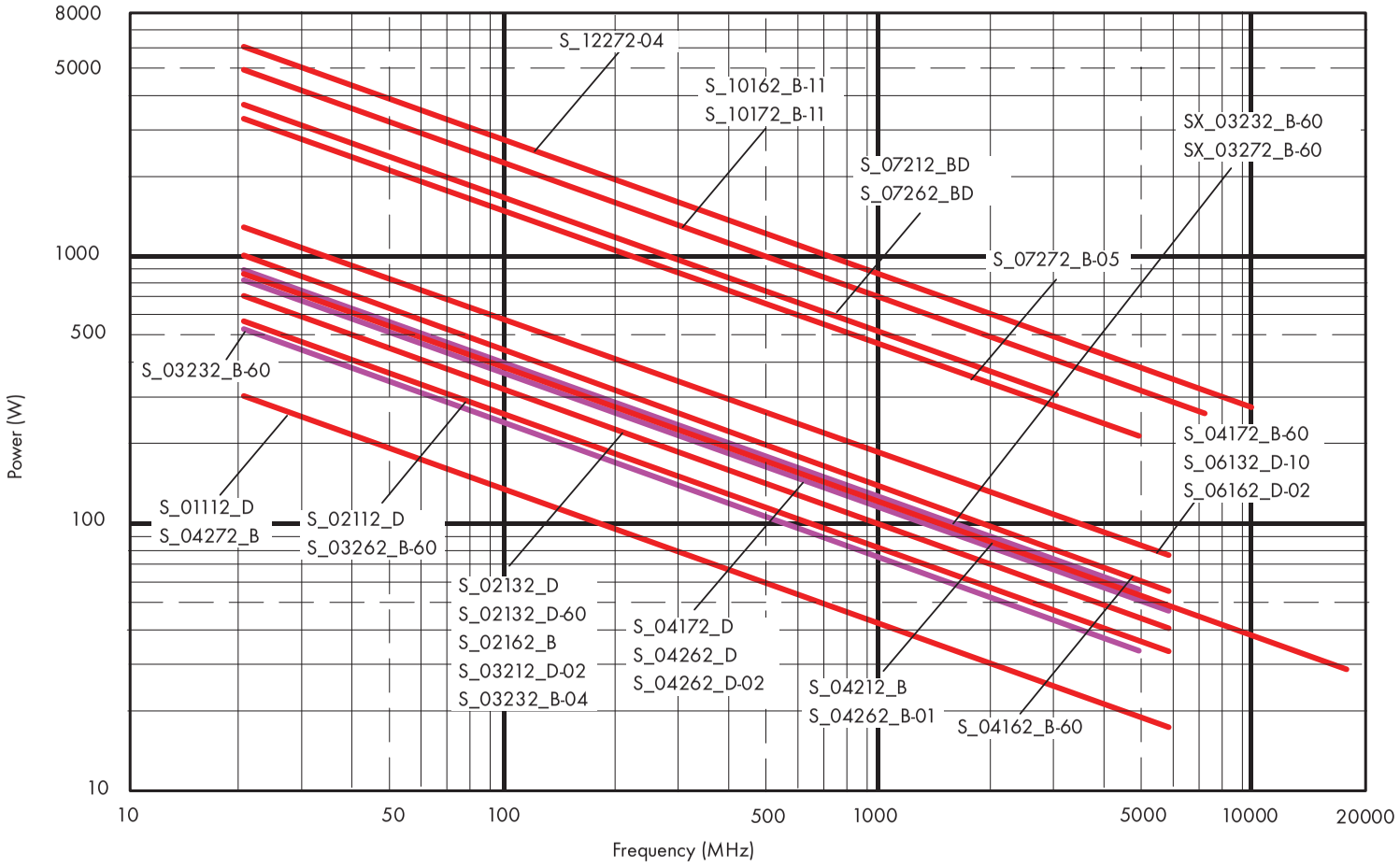
typical values at +20 °C ambient temperature



Power

Low loss RF coax cables, double screen, 50 Ω

typical values at +40 °C ambient temperature



Low loss RF coax cables

single screen

75 Ω

Impedance	75 Ω
Capacitance	54 pF/m
Velocity of signal propagation	82 % of the speed of light
Signal delay	4.1 ns/m
Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range of S cables	PVC, PVC(UL), PVC2(LM): -25 °C to +85 °C LSFH, PE: -40 °C to +85 °C
Screening effectiveness	≥40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_02223	22511273	29 and 30	Wire	Cu	0.35	SPE	1.55	Cu	2.00	94	–	–	–	PVC	2.55	blue	1.10	0.20	1	–	U5
S_02223-01	22511274		Wire	Cu	0.35	SPE	1.55	Cu	2.00	94	–	–	–	PVC	2.55	green	1.10	0.20	1	–	U5
S_02223-02	22511275		Wire	Cu	0.35	SPE	1.55	Cu	2.00	94	–	–	–	PVC	2.55	red	1.10	0.20	1	–	U5
S_02223-03	22511398		Wire	Cu	0.35	SPE	1.55	Cu	2.00	94	–	–	–	PVC	2.55	black	1.10	0.20	1	–	U5
S_02223-04	22511788		Wire	Cu	0.35	SPE	1.55	Cu	2.00	94	–	–	–	PVC	2.55	yellow	1.10	0.20	1	–	U5
S_03133-01	22511626		Wire	StCu	0.58	SPE	2.55	Cu	3.20	94	–	–	–	PVC2(LM)	4.50	black	2.70	0.35	1	–	–
S_04233	22610020		Wire	Cu	0.83	SPE	3.70	Cu	4.35	92	–	–	–	PVC2(LM)	6.10	black	4.30	0.50	1	U17	U15
S_04263	22511856		Wire	Cu	0.83	SPE	3.70	Cu	4.35	92	–	–	–	**LSFH**[1)]	6.10	black	4.70	0.50	1	U17	U15
SA_12273-10	22511823		Wire	Cu	2.76	SPE	11.50	Al-PES	12.28	100	–	–	–	**PE**[1)]	15.00	black	18.00	1.50	2	–	–

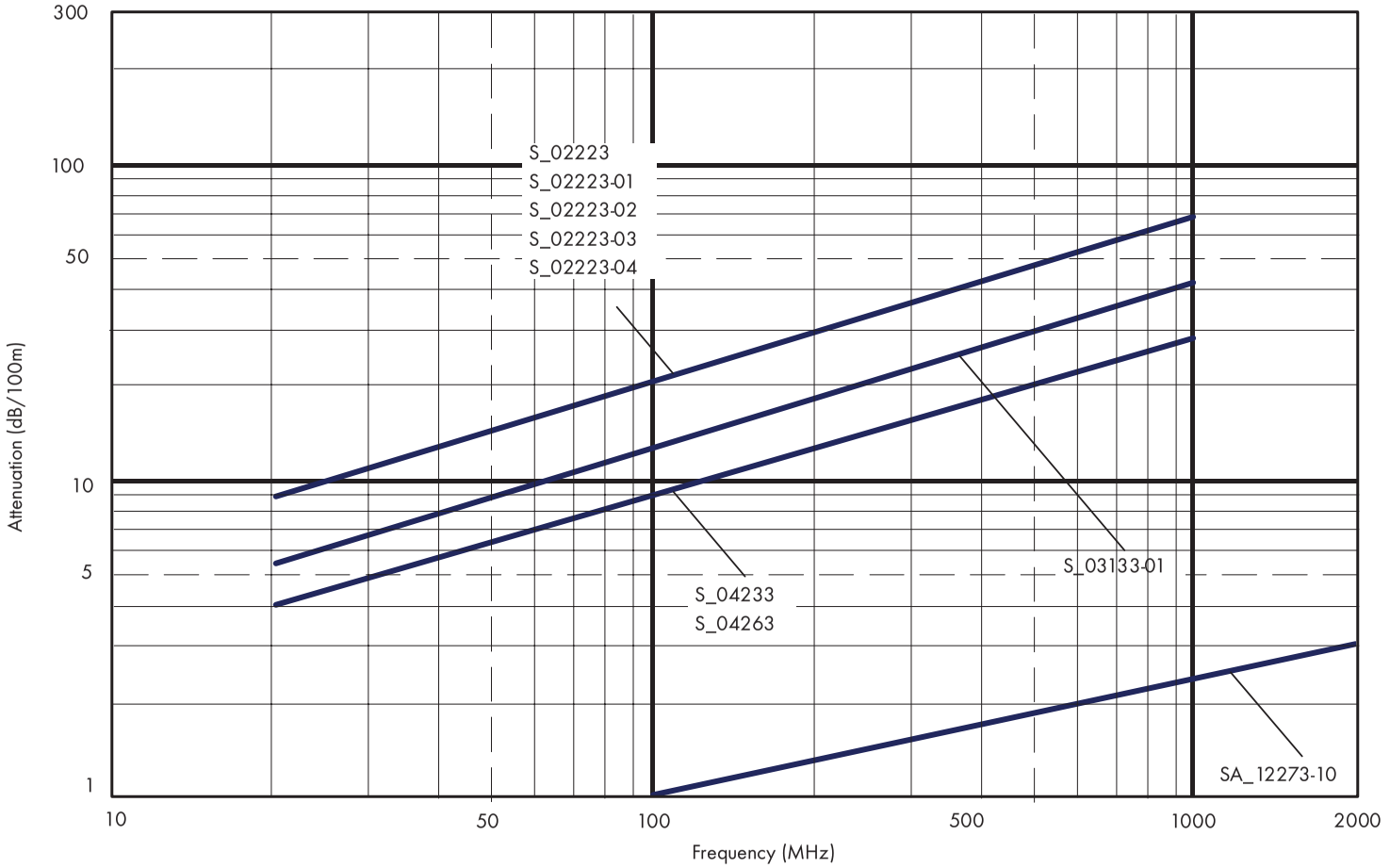
* for suitable connectors

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

Low loss RF coax cables, single screen, 75 Ω

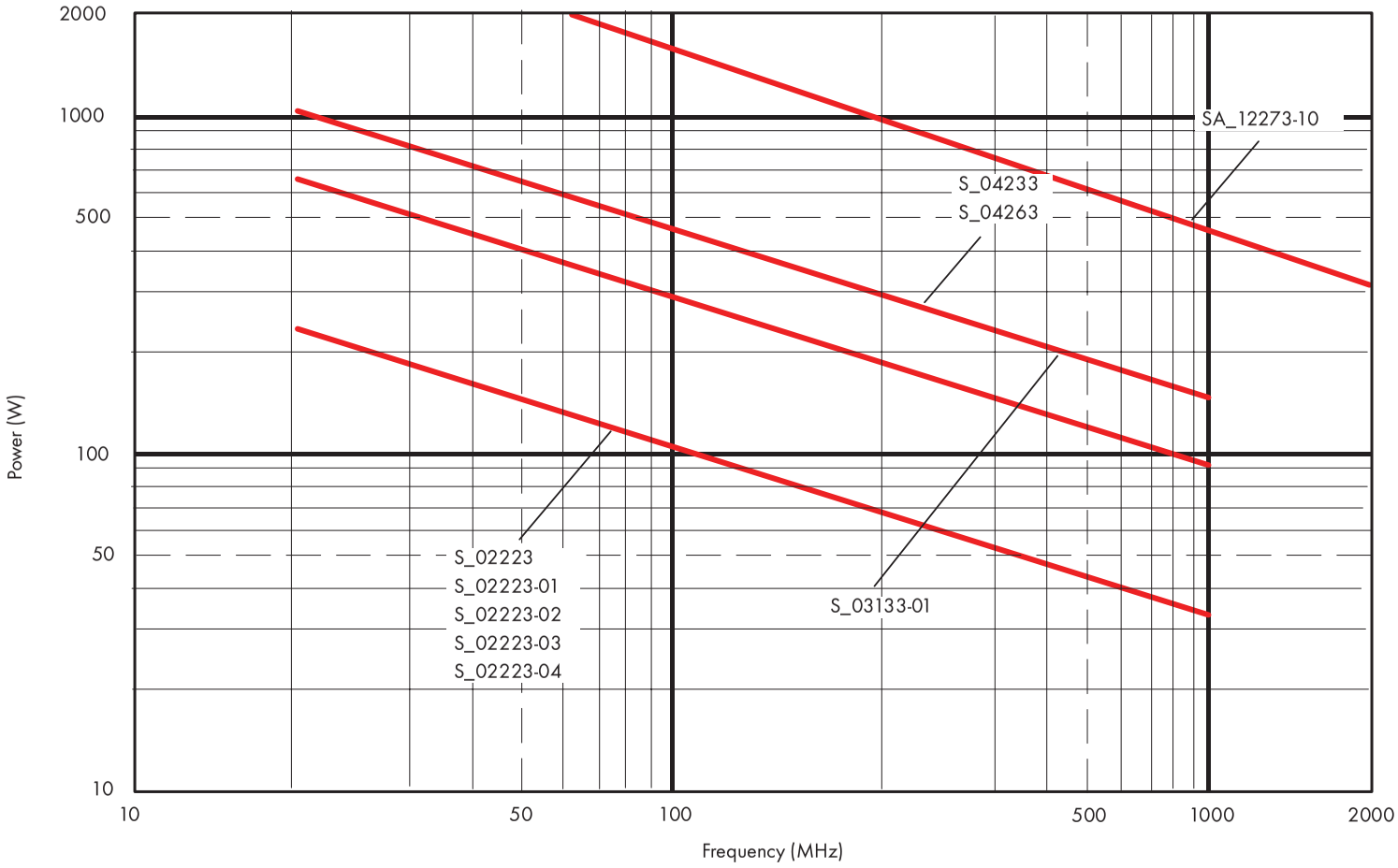
typical values at +20 °C ambient temperature



Power

Low loss RF coax cables, single screen, 75 Ω

typical values at +40 °C ambient temperature



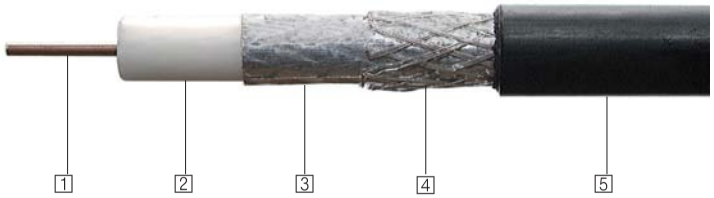
Low loss RF coax cables

double screen

75 Ω

Impedance	75 Ω
Capacitance	54 pF/m
Velocity of signal propagation	82 % of the speed of light
Signal delay	4.1 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅/with foil 10 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅/with foil 20 x ∅ jacket [5]
Temperature range of S cables	PVC, PVC(UL), PVC2(LM): -25 °C to +85 °C LSFH, PE: -40 °C to +85 °C
Screening effectiveness	≥ 80 dB up to 2 GHz

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



H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_02133_B-05	22511912	32 and 33	Wire	CuAg	0.45	SPE	1.95	Al-PES	2.05	100	CuSn	2.55	84	PVC	3.40	grey	1.70	0.40	2	–	–
S_03133_D-06	22511879		Wire	Cu	0.62	SPE	2.82	Al-PES	2.90	100	CuSn	3.55	82	PVC	5.30	grey	4.20	0.25	2	–	–
S_05163-02	23003405		Wire	Cu	1.00	SPE	4.57	Al-PES	4.65	100	CuSn	5.40	66	LSFH[1)]	6.90	black	5.30	0.50	2	–	–
S_07233_B-60[a)]	22511786		Wire	Cu	1.57	SPE	7.25	Al-PES	7.30	100	CuSn	8.10	89	PVC(UL)	10.30	black	12.40	1.00	2	–	–
S_07273-01	22510550		Wire	StCu	1.57	SPE	7.25	Al-PES	7.45	100	CuSn	8.10	44	PE[1)]	10.00	black	7.90	1.00	2	–	–

* for suitable connectors

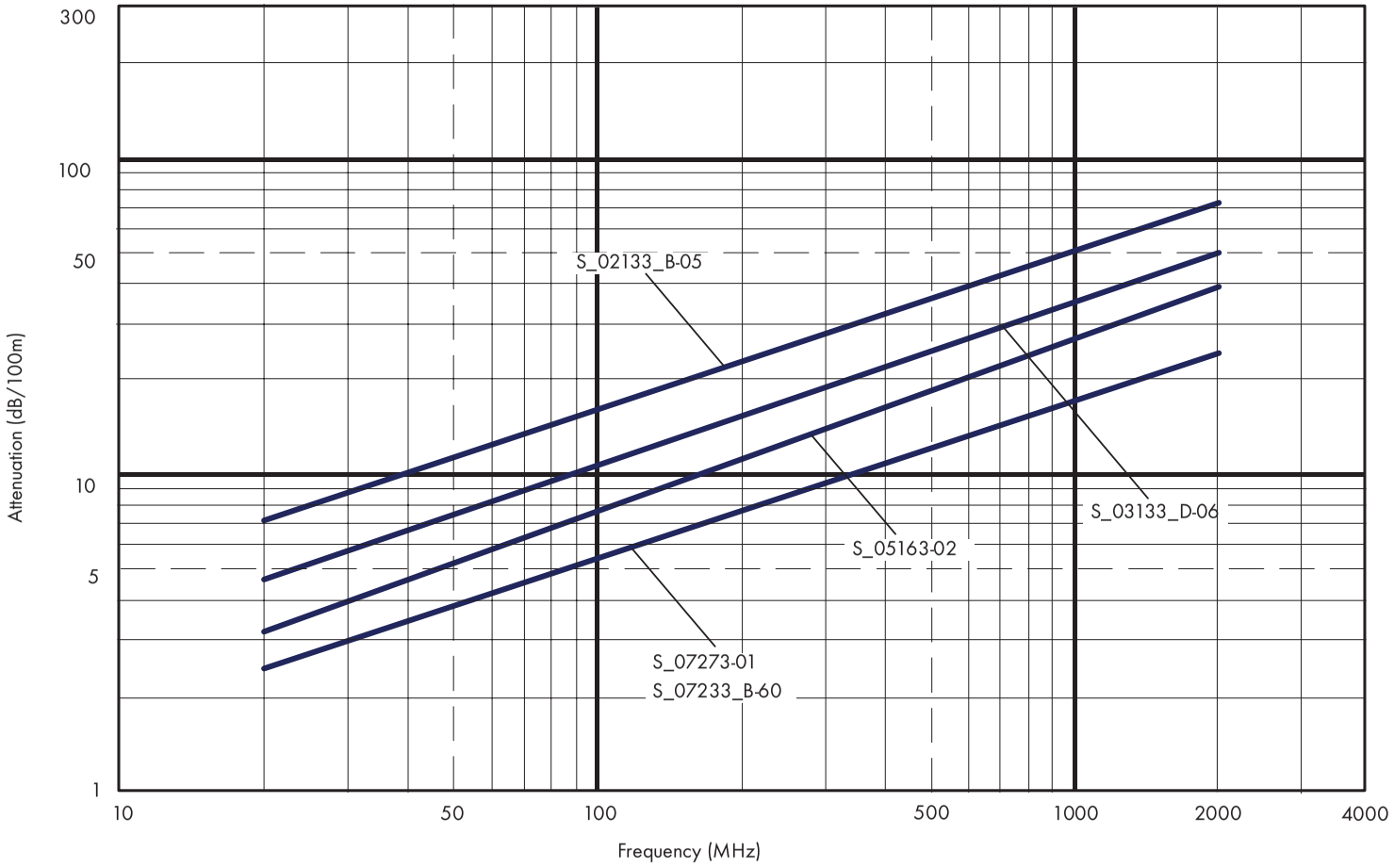
a) UL recognised (see UL types page 117)

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

Low loss RF coax cables, double screen, 75 Ω

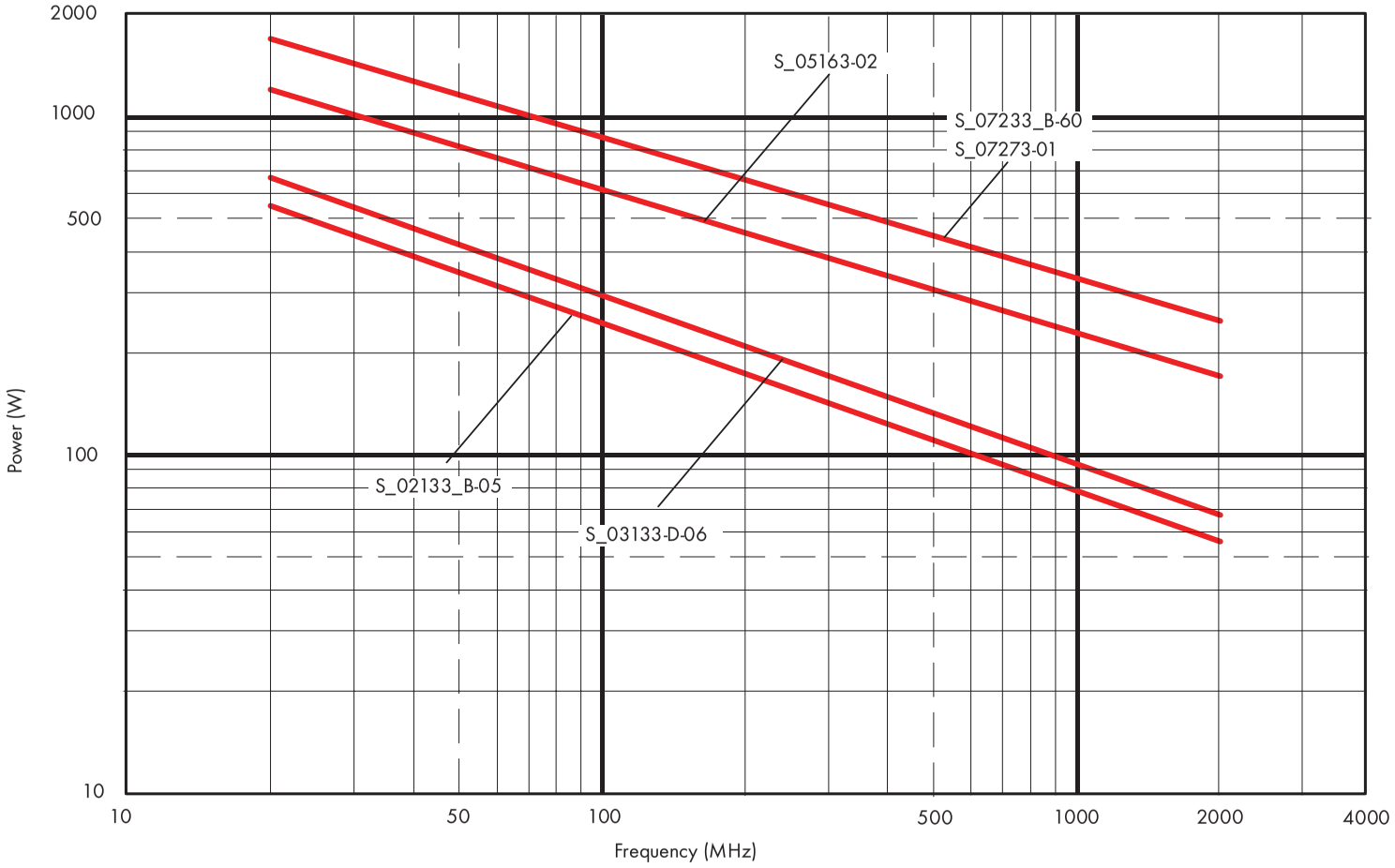
typical values at +20 °C ambient temperature



Power

Low loss RF coax cables, double screen, 75 Ω

typical values at +40 °C ambient temperature



Low loss RF coax cables (low phase vs temp) double screen 50 Ω

Impedance	50 Ω
Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ /with foil 10 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ /with foil 20 x ∅ jacket [5]
Temperature range S cables	PE, PUR, LSFH, RADOX: -40 °C to +85 °C
Temperature range EF cables	-40 °C to +105 °C

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

H+S type	Item no.	Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]			Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	Shield effect.	Max. phase vs temperat.	Cable group*	
		Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour						crimp	clamp
S_04272_B[a]	22511622	Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	CuSn	4.48	86	PE[1]	5.50	blue	4.40	0.50	18	90	981 ppm	–	–
S_04212_B[a]	22511855	Wire	CuAg	1.40	SPE	3.82	Al-PES	3.96	100	CuSn	4.48	87	PUR[1]	5.30	black	4.10	0.50	18	90	437 ppm	–	–
ENVIROFLEX_ 393 (see page 70)	22512282	Strand-7	CuAg	2.46	SPEX	7.33	CuAg	8.75	92	CuAg	8.75	94	RADOX[1]	10.10	black/ blue	18.00	5.00	6.0	71	3200 ppm	–	U33
S_07262_BD[b]	22511767	Strand-7	CuAg	2.82	SPE	7.35	CuAg	8.00	96	Cu	8.10	100	LSFH[1]	10.80	black	20.60	1.05	3	90	2500 ppm	S32	–
S_10162_B-11[b]	23002145	Wire	CuAl	3.80	SPE	9.90	Cu	10.00	100	Cu	10.80	80	LSFH[1]	12.90	black	15.00	1.70	7.5	90	4500 ppm	S39	
S_10172_B-11[b]	22512320	Wire	CuAl	3.80	SPE	9.90	Cu	10.00	100	Cu	10.80	80	PE[1]	12.90	black	15.00	1.50	7.5	90	4500 ppm	S39	

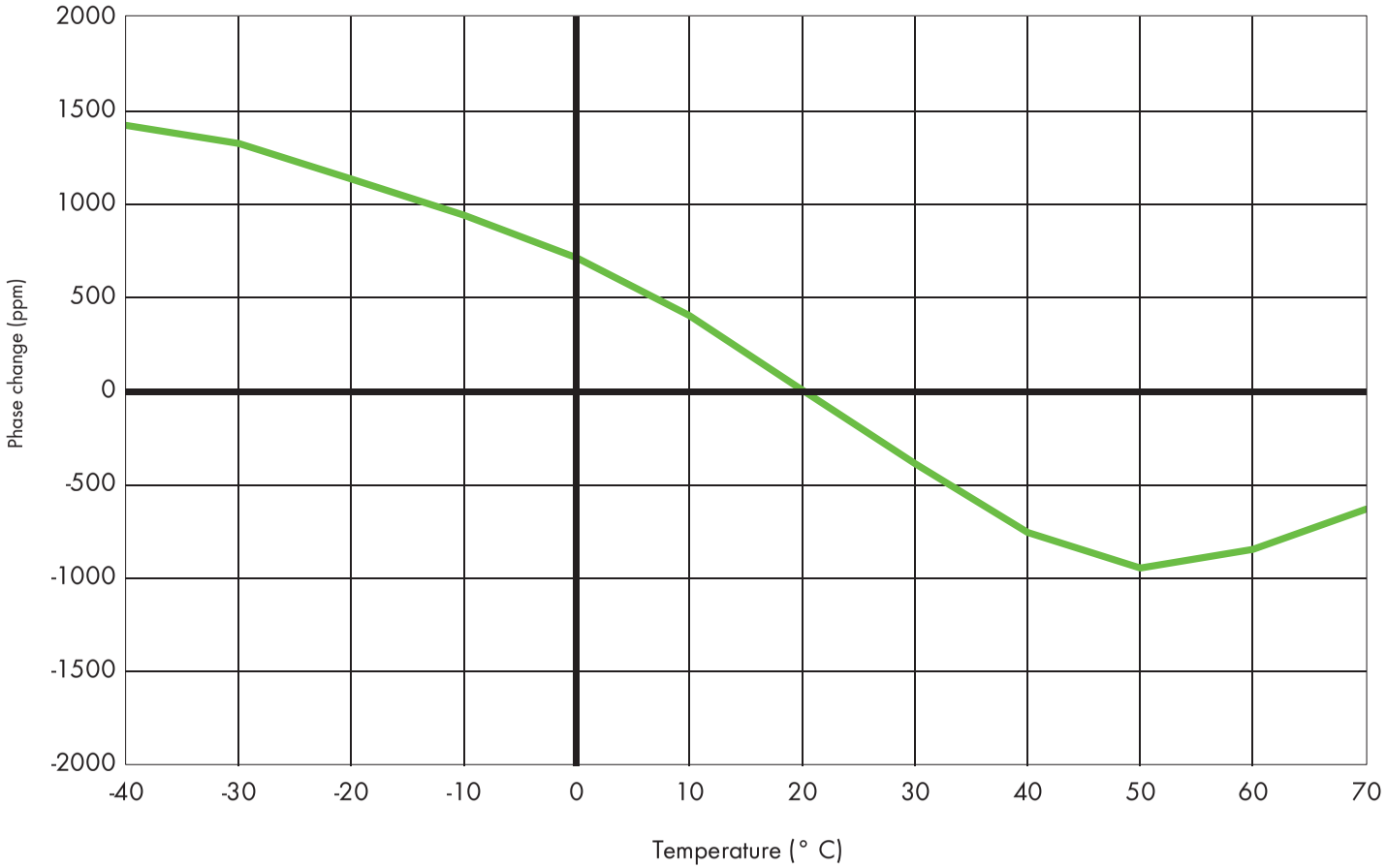
* for suitable connectors

a) for further technical data and suitable connectors see MICROWAVE CABLES AND ASSEMBLIES GENERAL CATALOGUE, item no. 23012500

b) see power and attenuation figures on pages 26 and 27

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.

Phase change vs temperature S_07262_BD



Overview of halogen free RF coax cables

standard +85 °C	50 Ω	single screen	page 38
standard +105 °C		single screen	page 39
standard +85 °C		double screen	page 42
standard +105 °C		double screen	page 43
standard +85 °C	75 Ω	single screen	page 46
standard +105 °C		single screen	page 47
standard +85 °C		double screen	page 50
standard +105 °C		double screen	page 51
low loss +85 °C	50 Ω	single screen	page 54
low loss +85 °C		double screen	page 57
low loss +105 °C		double screen	page 61
low loss +85 °C	75 Ω	single screen	page 64
low loss +85 °C		double screen	page 67
ENVIROFLEX™ - the halogen free alternative to conventional PTFE coax cables	50 and 75 Ω	single and double screen	page 70
Railway approved halogen free coax cables	50 and 75 Ω	single and double screen	page 74

Halogen free RF coax cables

single screen

50 Ω

Standard, +85 °C

Impedance	50 Ω
Capacitance	101 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range standard cables	-40 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_02262	22510862	40 and 41	Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	–	–	–	LSFH[1)]	2.80	black	1.33	1.50	1	U2	U2
G_03262-01	22512108		Strand-7	CuSn	0.90	PE	2.95	CuSn	3.60	96	–	–	–	LSFH[1)]	4.95	black	3.90	2.50	1	U7	U7
G_03212-01	22610095		Strand-19	CuSn	0.94	PE	2.95	CuSn	3.60	95	–	–	–	PUR[1)]	4.95	black	3.60	2.50	1	U7	U7
G_03272	22511434		Strand-7	Cu	0.95	PE	2.95	Cu	3.60	95	–	–	–	PE[1)]	5.00	black	3.50	2.50	2	U7	U7
G_07262	22511836		Strand-7	Cu	2.25	PE	7.28	Cu	8.10	96	–	–	–	LSFH[1)]	10.30	black	15.30	5.00	1	U29	U28

* for suitable connectors

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.

Halogen free RF coax cables

single screen

50 Ω

Standard, +105 °C

Impedance	50 Ω
Capacitance	101 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range	-40 °Cto +105 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
GX_02272	22510833	40 and 41	Strand-7	Cu	0.49	PEX	1.50	CuAg	2.00	96	–	–	–	RADOX[1]	2.80	black	1.45	1.5	2	U2	–
GX_03272	22510959		Strand-19	CuSn	0.94	PEX	2.95	CuAg	3.60	96	–	–	–	RADOX[1]	4.95	black	4.00	2.5	2	U7	U7
GX_07272	22510708		Strand-7	Cu	2.25	PEX	7.25	CuAg	8.15	95	–	–	–	RADOX[1]	10.30	black	16.10	5.0	2	U29	U28

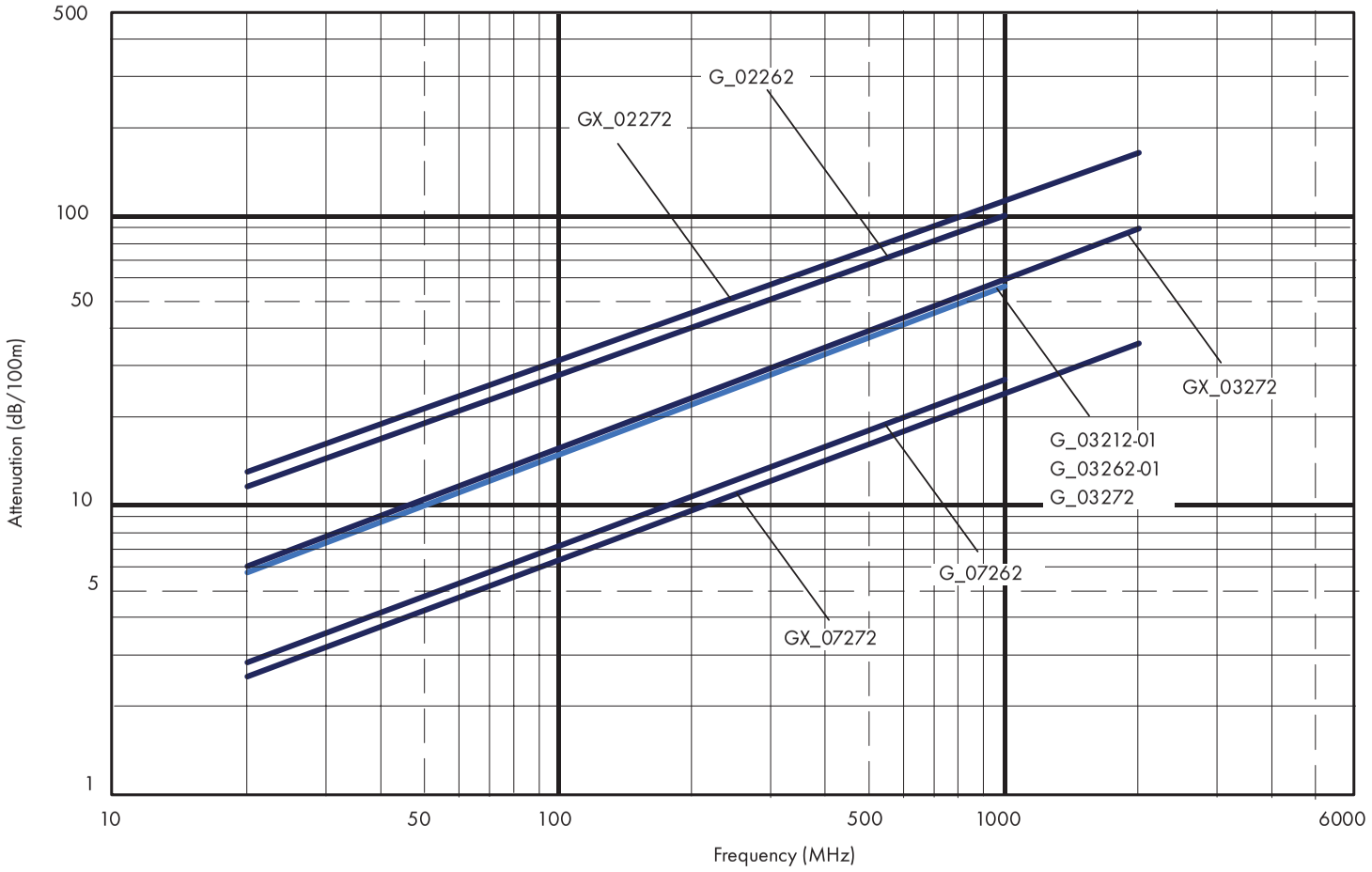
* for suitable connectors

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, standard types, single screen, 50 Ω

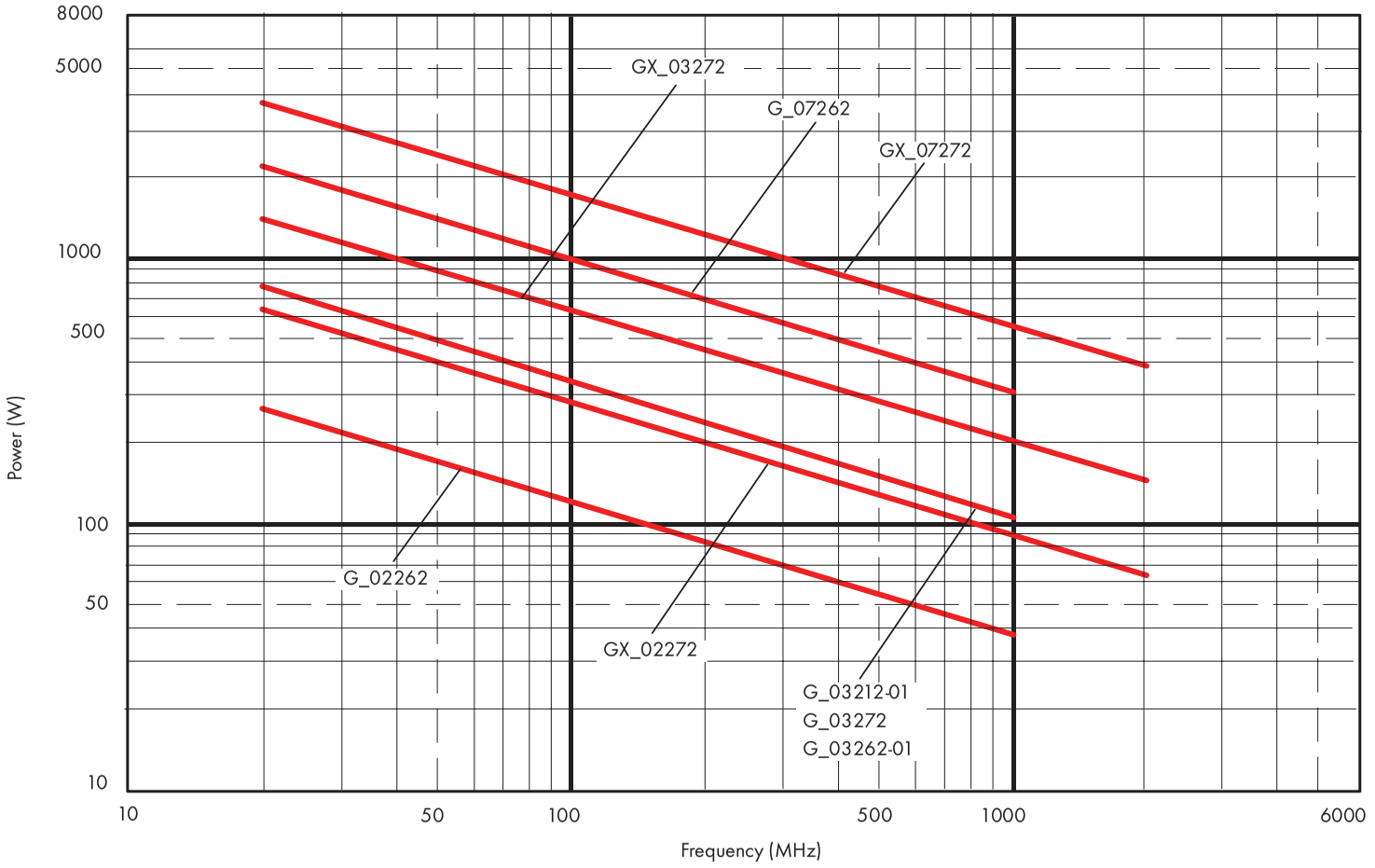
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, standard types, single screen, 50 Ω

typical values at +40 °C ambient temperature

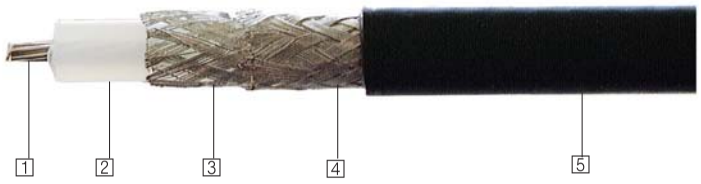


Halogen free RF coax cables — double screen — 50 Ω

Standard, +85 °C

Impedance	50 Ω
Capacitance	101 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅/ with foil 10 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅/ with foil 10 x ∅ 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.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_02212_D-02	22511668	44 and 45	Strand-7	CuAg	0.48	PE	1.50	CuAg	2.00	95	StCuAg	2.50	93	PUR[1]	3.10	orange	1.80	1.50	6	U4	U4
G_02262_BD	22512069		Strand-7	Cu	0.49	PE	1.50	CuAg	1.95	97	µ-metal	2.05	100	LSFH[1]	3.10	black	2.10	0.45	6	U4	U4
G_03262_D	22511812		Wire	CuAg	0.88	PE	2.95	CuAg	3.60	96	CuAg	4.20	94	LSFH[1]	5.40	black	5.50	2.50	6	U9	U10
G_03212_D-01	22512305		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	CuSn	4.20	94	PUR[1]	5.40	black	5.30	2.50	6	U9	U10
G_03262_D-01	22511782		Strand-19	CuSn	0.94	PE	2.95	CuSn	3.60	94	CuSn	4.25	93	LSFH[1]	5.40	black	5.50	2.50	6	U9	U10
G_07262_D	22512085		Strand-7	CuAg	2.25	PE	7.28	CuAg	8.00	93	CuAg	8.70	95	LSFH[1]	10.80	black	19.70	5.00	6	U32	U33

* for suitable connectors

[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.

Halogen free RF coax cables

double screen

50 Ω

Standard, +105 °C

Impedance	50 Ω
Capacitance	101 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range standard cables	-40 °C to +105 °C
Screening effectiveness	≥ 40 dB up to 1 GHz (single screen) ≥ 80 dB up to 6 GHz (double screen)

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

H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
GX_02272_D-02	22511671	44 and 45	Strand-7	CuAg	0.48	PEX	1.50	CuSn	2.00	96	CuSn	2.50	93	RADOX[1)]	3.20	black	2.10	1.00	6	U4	U4
GX_03272_D-06	22511592		Wire	CuAg	0.88	PEX	2.95	CuAg	3.60	96	CuAg	4.20	94	RADOX[1)]	5.40	black	5.50	2.50	6	U9	U10
GX_03262	22511645		Strand-19	CuSn	0.94	PEX	2.95	CuSn	3.60	96	Al-PES	3.80	100	LSFH[1)]	5.20	black	4.30	2.50	1	–	–
GX_07272_D	22511171		Strand-7	CuAg	2.25	PEX	7.28	CuAg	8.00	93	CuAg	8.70	95	RADOX[1)]	10.80	black	19.80	5.00	6	U32	U33

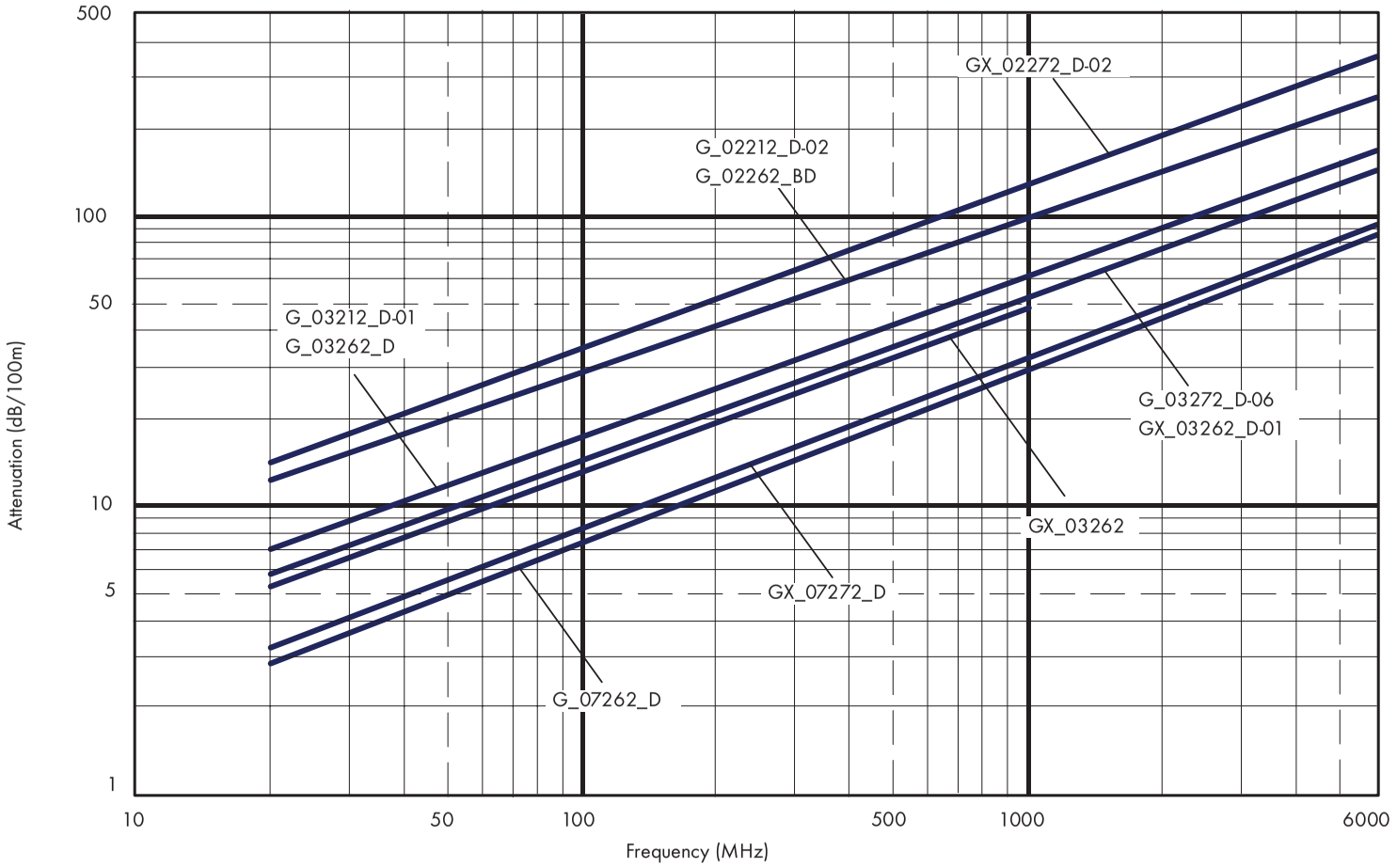
* for suitable connectors

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, standard types, double screen, 50 Ω

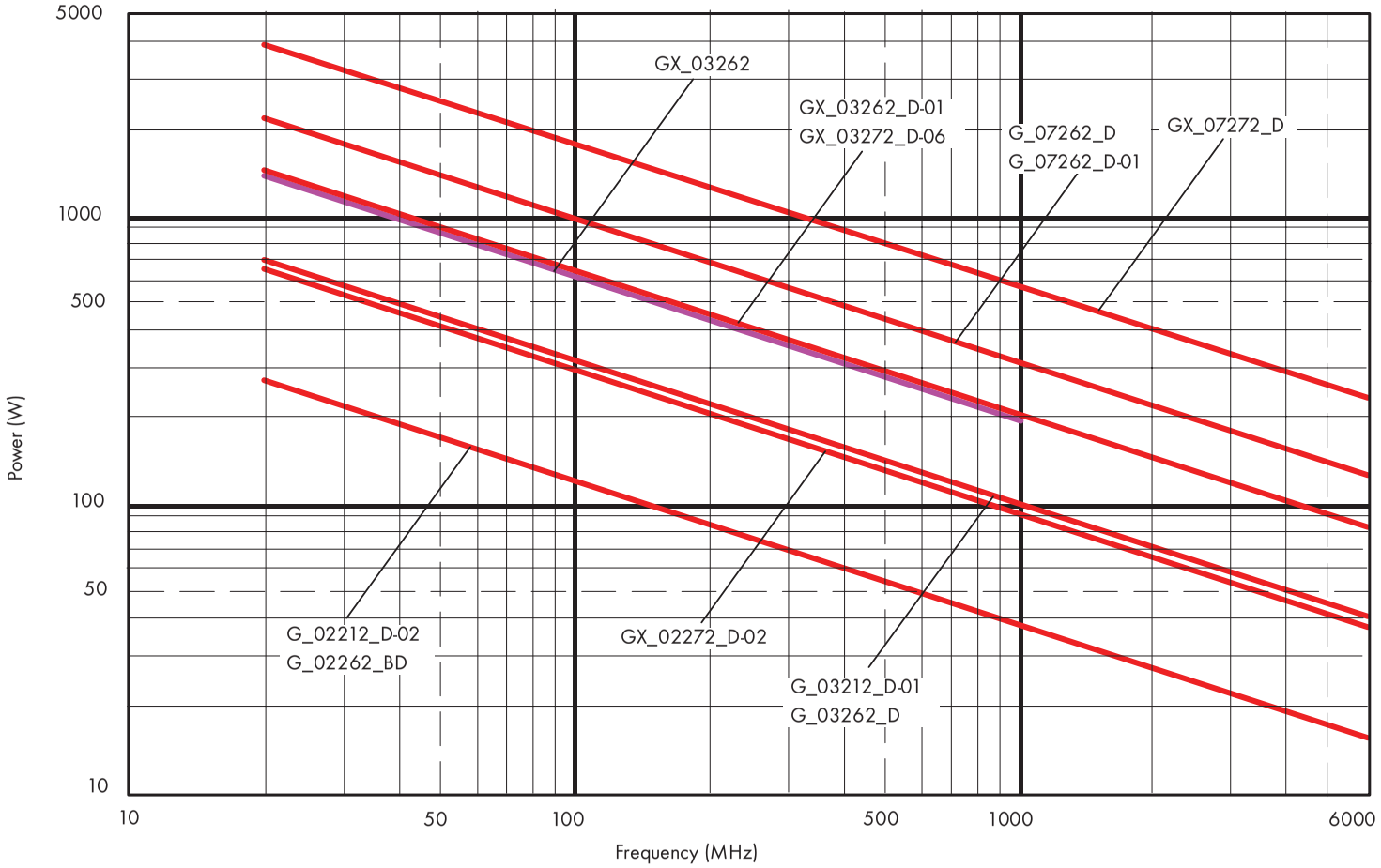
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, standard types, double screen, 50 Ω

typical values at +40 °C ambient temperature



Halogen free RF coax cables

single screen

75 Ω

Standard, +85 °C

Impedance	75 Ω
Capacitance	67 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range	-40 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_03263	22512297	48 and 49	Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	–	–	–	LSFH[1)]	5.00	black	3.90	2.50	1	U12	U12
G_03213_D	22510954		Strand-7	Cu	0.49	PE	2.95	CuSn	3.60	94	CuSn	4.20	93	PUR[1)]	5.35	black	5.00	2.00	2	U14	U14
G_04263-01	22511501		Wire	StCu	0.58	PE	3.64	Cu	4.40	93	–	–	–	LSFH[1)]	6.10	green	5.20	3.00	1	U16	U15
G_04263-03	22511867		Wire	StCu	0.58	PE	3.64	Cu	4.50	93	–	–	–	LSFH[1)]	6.10	black	5.20	3.00	1	U16	U15
G_04273	22511437		Wire	StCu	0.58	PE	3.64	Cu	4.50	92	–	–	–	PE[1)]	6.10	black	4.50	3.00	1	U16	U15

* for suitable connectors

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.

Halogen free RF coax cables

single screen

75 Ω

Standard, +105 °C

Impedance	75 Ω
Capacitance	67 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range	-40 °C to +105 °C
Screening effectiveness	≥ 40 dB at 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
GX_03173-01	22511581	48 and 49	Strand-7	StCu	0.42	PEX	2.45	CuSn	2.90	91	–	–	–	RADOX[1)]	3.70	grey	2.10	2.00	1	–	U6
GX_04273	22510458		Strand-7	Cu	0.64	PEX	3.75	CuAg	4.45	95	–	–	–	RADOX[1)]	6.10	black	5.70	3.00	1	U16	U15
GX_04273-13	23030797		Strand-7	Cu	0.64	PEX	3.75	CuAg	4.45	95	–	–	–	RADOX[1)]	6.10	red	5.70	3.00	1	U16	U15

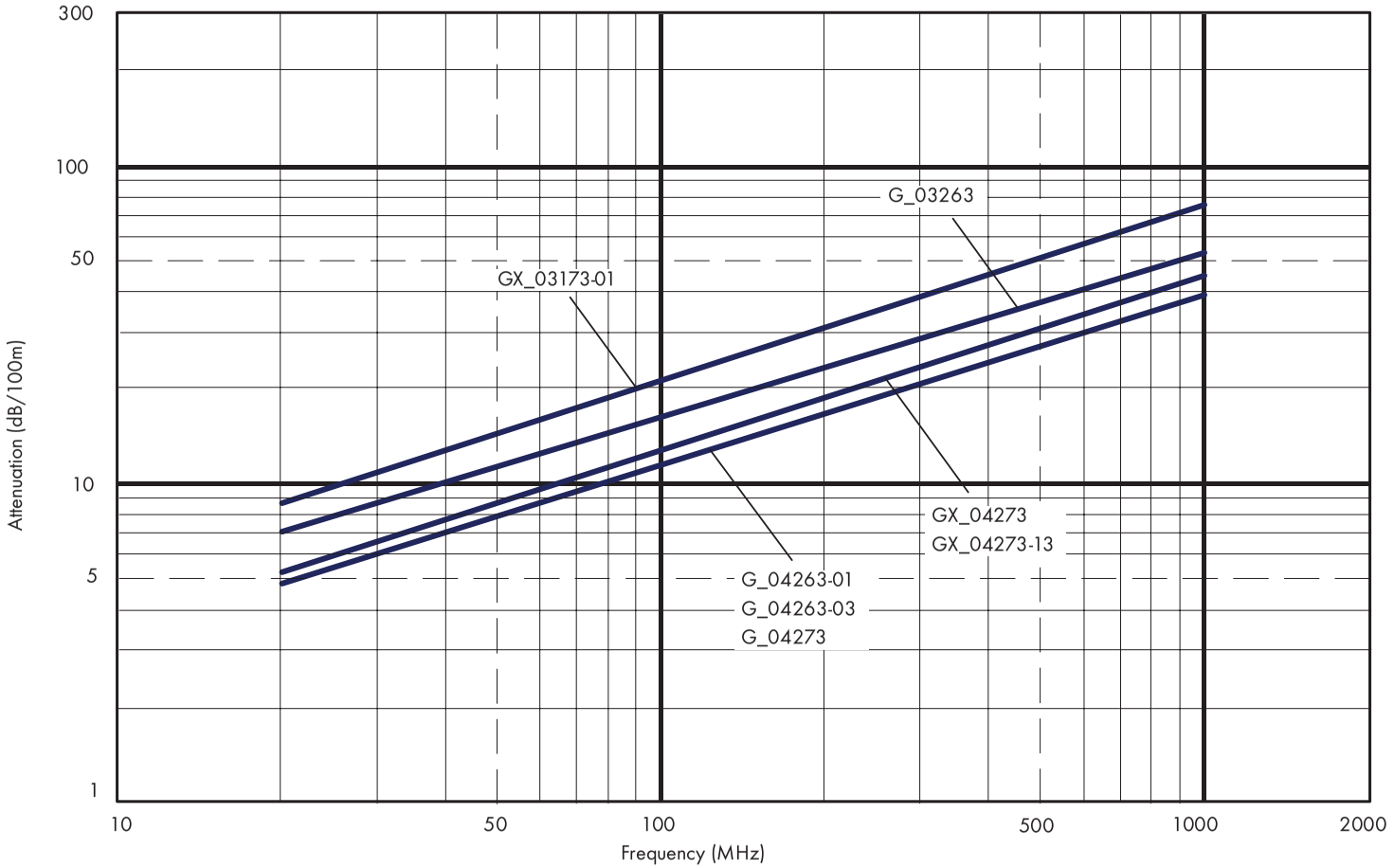
* for suitable connectors

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, standard types, single screen, 75 Ω

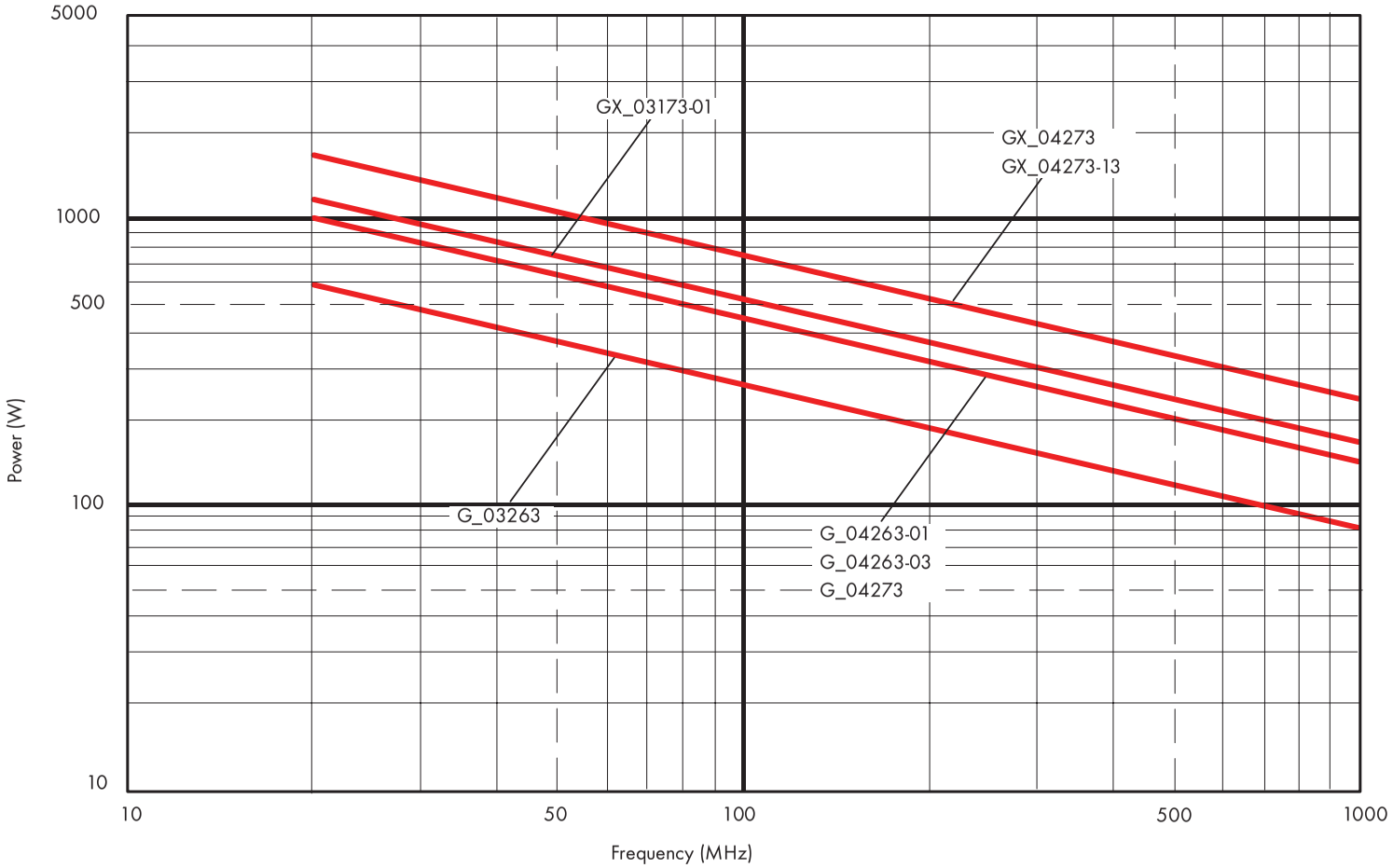
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, standard types, single screen, 75 Ω

typical values at +40 °C ambient temperature



Halogen free RF coax cables

double screen

75 Ω

Standard, +85 °C

Impedance	75 Ω
Capacitance	67 pF/m
Velocity of signal propagation	66 % of the speed of light
Signal delay	5.0 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range	-40 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_03213_D	22510954	52 and 53	Strand-7	Cu	0.49	PE	2.95	CuSn	3.60	94	CuSn	4.20	93	PUR[1)]	5.35	black	5.00	2.00	2	U14	U14

* for suitable connectors

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.

Halogen free RF coax cables

double screen

75 Ω

Standard, +105 °C

Impedance	75 Ω
Capacitance	54 pF/m
Velocity of signal propagation	82 % of the speed of light
Signal delay	4.1 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range	-40 °C to +105 °C
Screening effectiveness	≥ 40 dB at 2 GHz

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

H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
GX_02273_D	22511507	52 and 53	Wire	StCu	0.24	PEX	1.50	CuAg	2.00	96	CuAg	2.50	93	RADOX[1)]	3.30	black	2.10	1.00	2	–	–

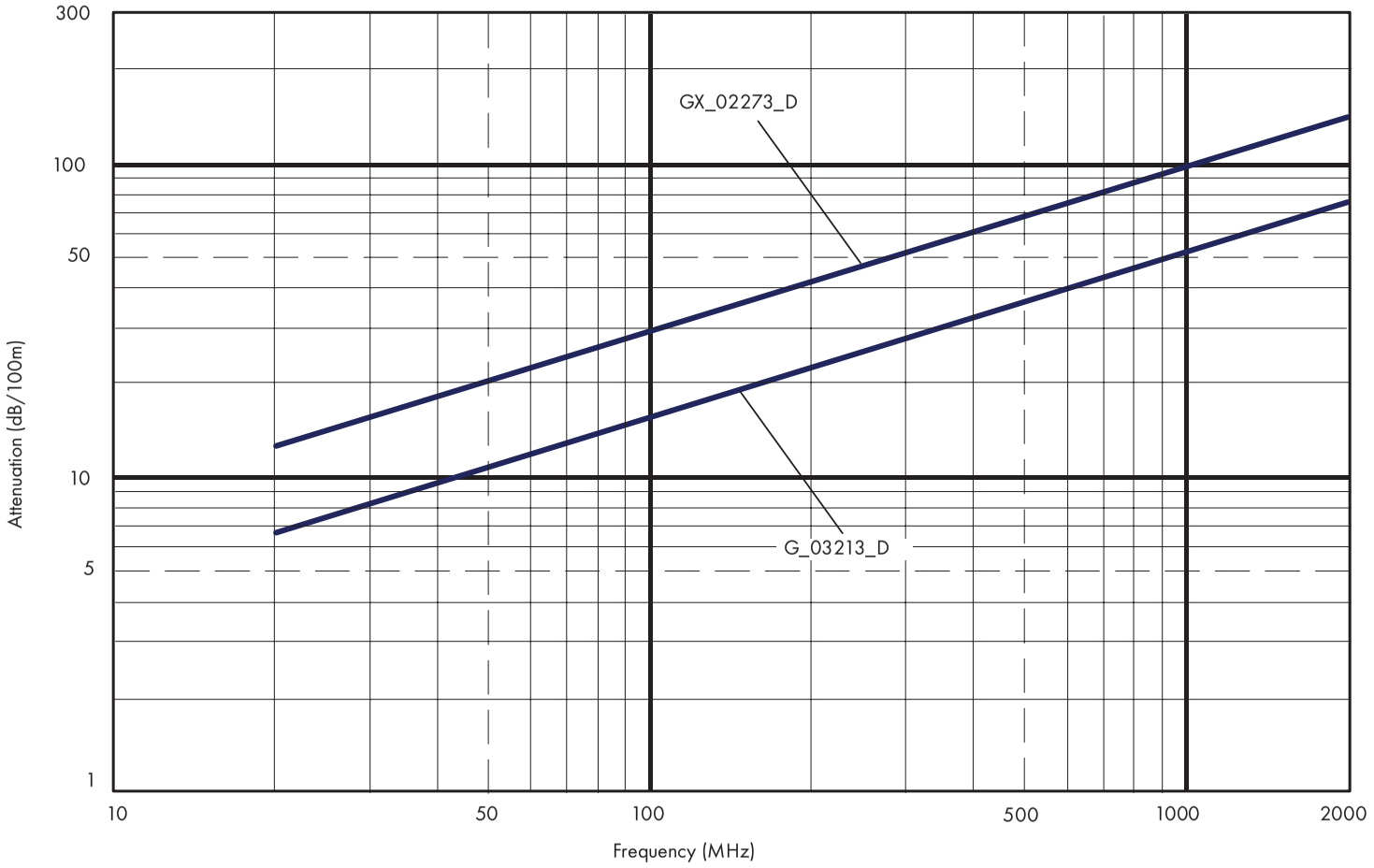
* for suitable connectors

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 coax cables, standard types, double screen, 75 Ω

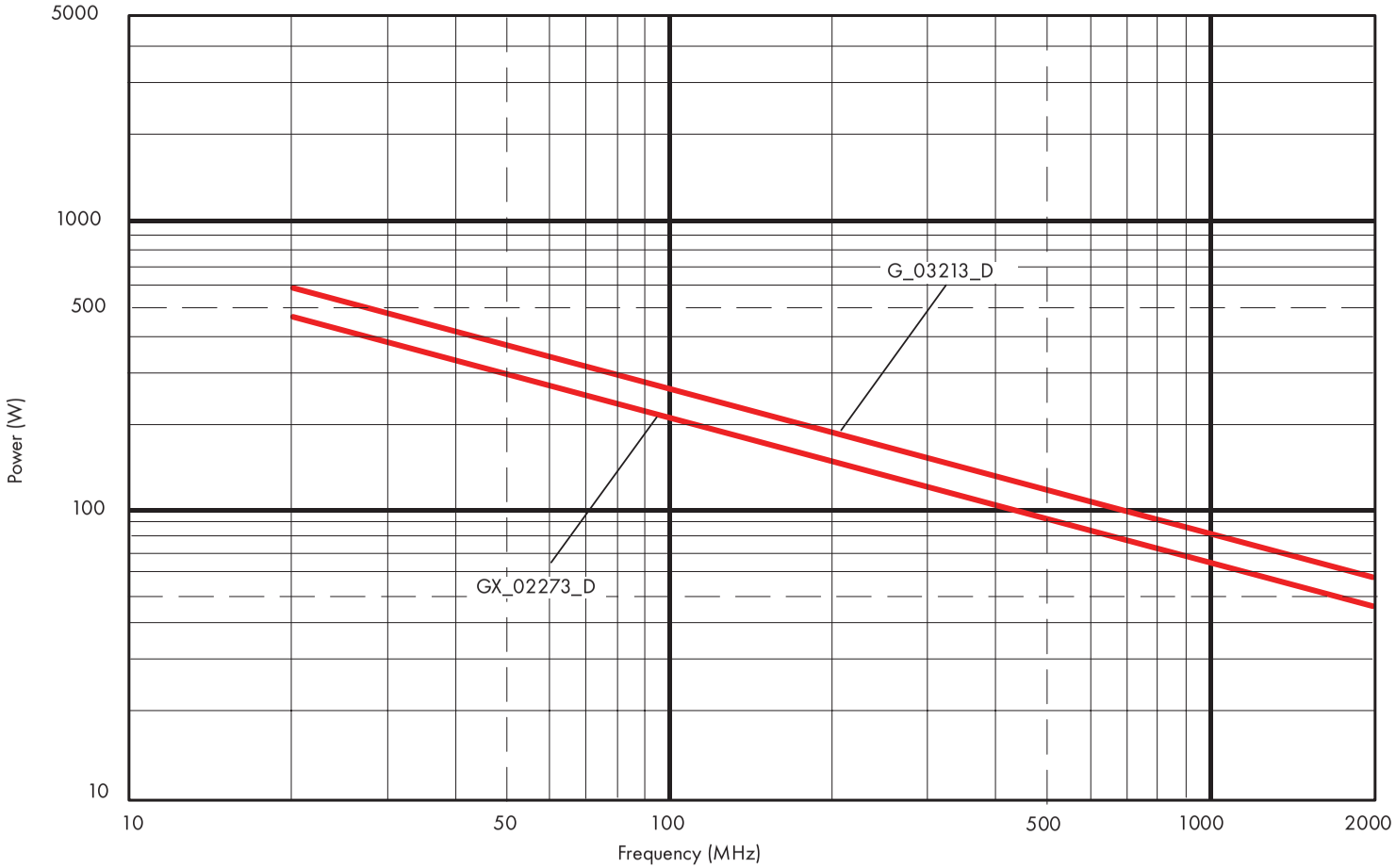
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, standard types, double screen, 75 Ω

typical values at +40 °C ambient temperature



Halogen free RF coax cables

single 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	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range standard cables	-40 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
S_02112-03	23008453	55 and 56	Strand-19	Cu	0.81	SPE	2.12	CuSn	2.65	92	–	–	–	HYTREL	3.15	black	2.00	0.25	2.5	–	–
SA_07272*	22520119		Wire	Cu	2.68	SPE	7.25	Al-PES	8.03	100	–	–	–	PE[1)]	10.00	black	11.20	1.05	2.5	T3	–
SA_12272*	22620002		Wire	AlCu	4.25	SPE	11.50	Al-PES	12.00	100	–	–	–	PE[1)]	15.00	black	17.60	1.70	2.5	T5	–

* for suitable connectors

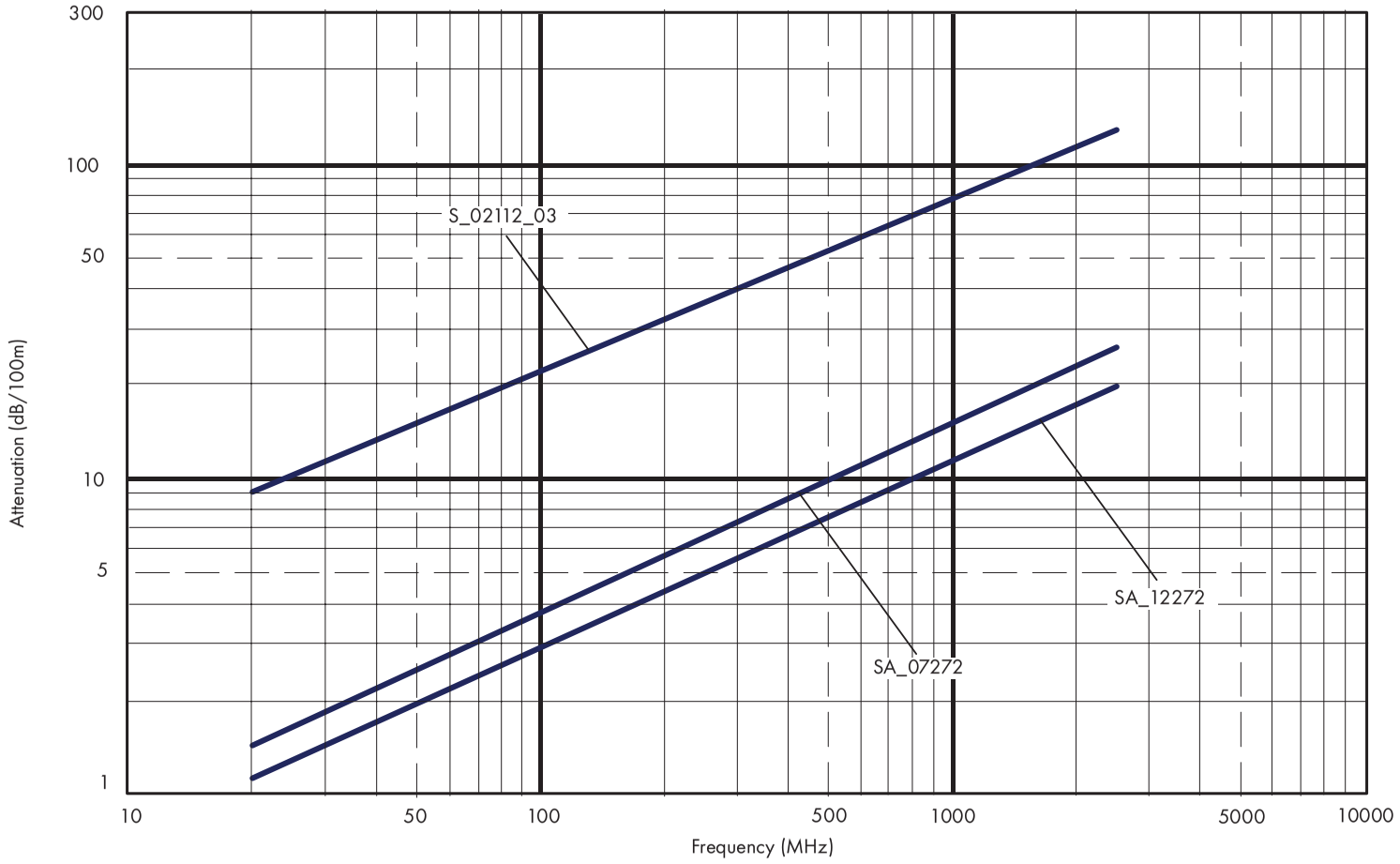
* longitudinal foil bound to the jacket

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, single screen, 50 Ω

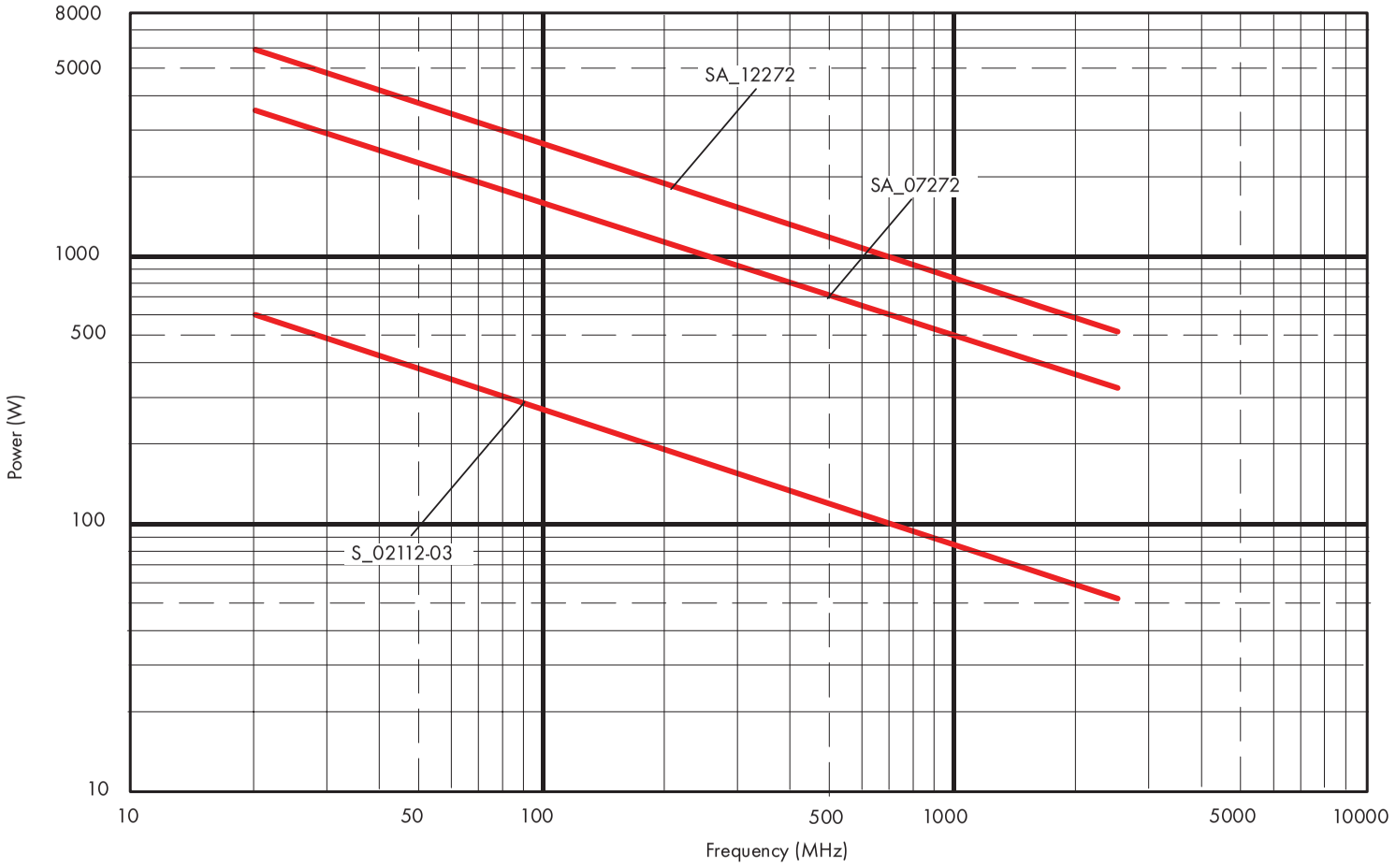
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, low loss types, single screen, 50 Ω

typical values at +40 °C ambient temperature



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	$>10^8$ MΩm
Min. bending radius static	5 x ∅/with foil 10 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅/with foil 20 x ∅ 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.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	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[1)]	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[1)]	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[1)]	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[1)]	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[1)]	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[1)]	6.50	black	6.80	0.50	6	–	–

Low loss, +85 °C (cont.)

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	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[1)]	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[1)]	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[1)]	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[1)]	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[1)]	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[1)]	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[1)]	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[1)]	10.80	black	20.60	1.05	3b[)]	S32	–
S_07262_BD[a)]	22511767		Strand-7	CuAg	2.82	SPE	7.38	CuAg	8.00	96	Cu	8.10	100	LSFH[1)]	10.80	black	20.60	1.05	3b[)]	S32	–
S_10162_B-11	23002145		Wire	CuAl	3.80	SPE	9.90	Cu	10.00	100	Cu	10.80	80	LSFH[1)]	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[1)]	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[1)]	15.00	black	19.10	1.70	10	–	U40

* for suitable connectors

a) screening effectiveness 105 dB at 2 GHz

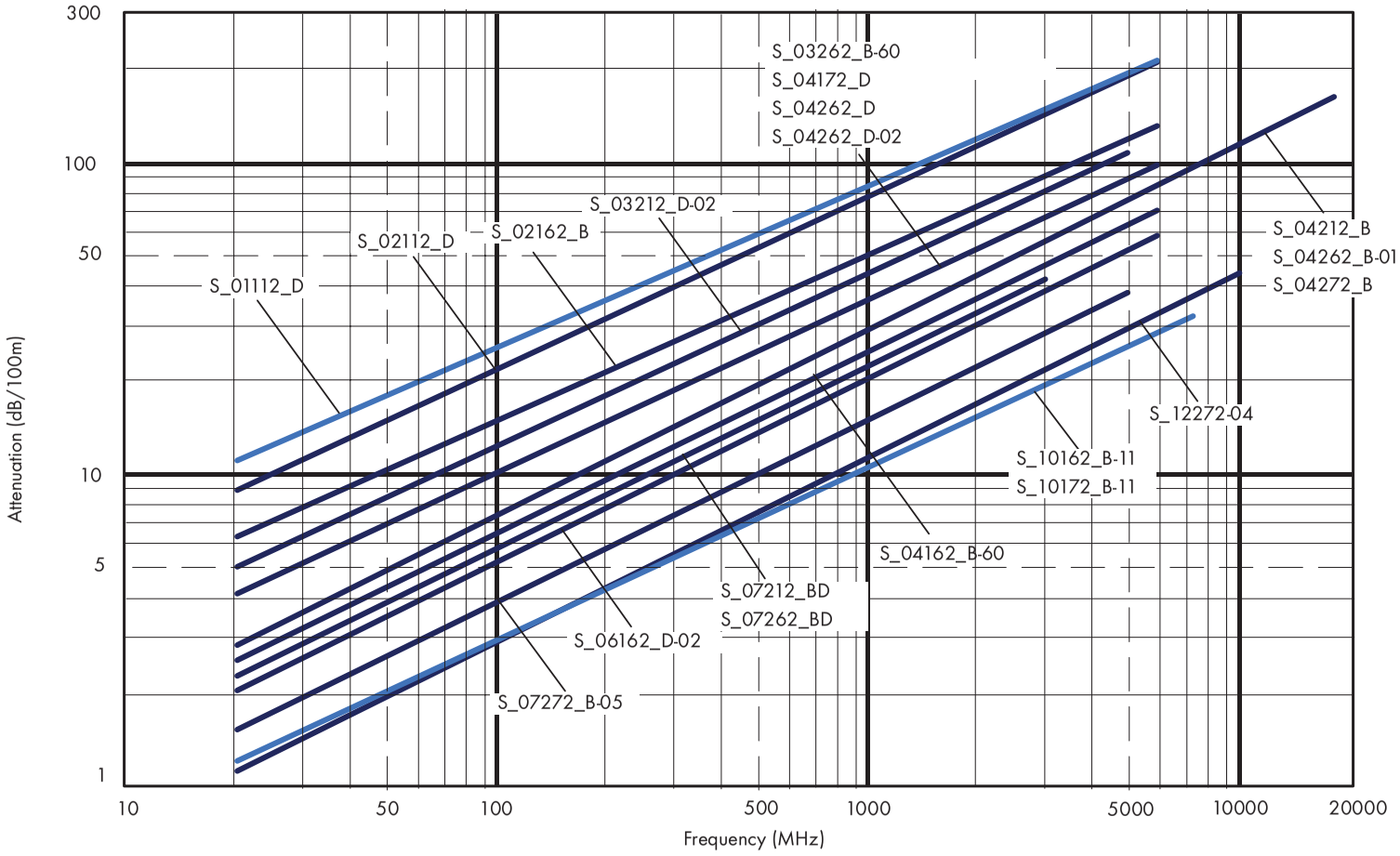
b) also applicable between 4 to 5.85 GHz

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 Ω

typical values at +20 °C ambient temperature

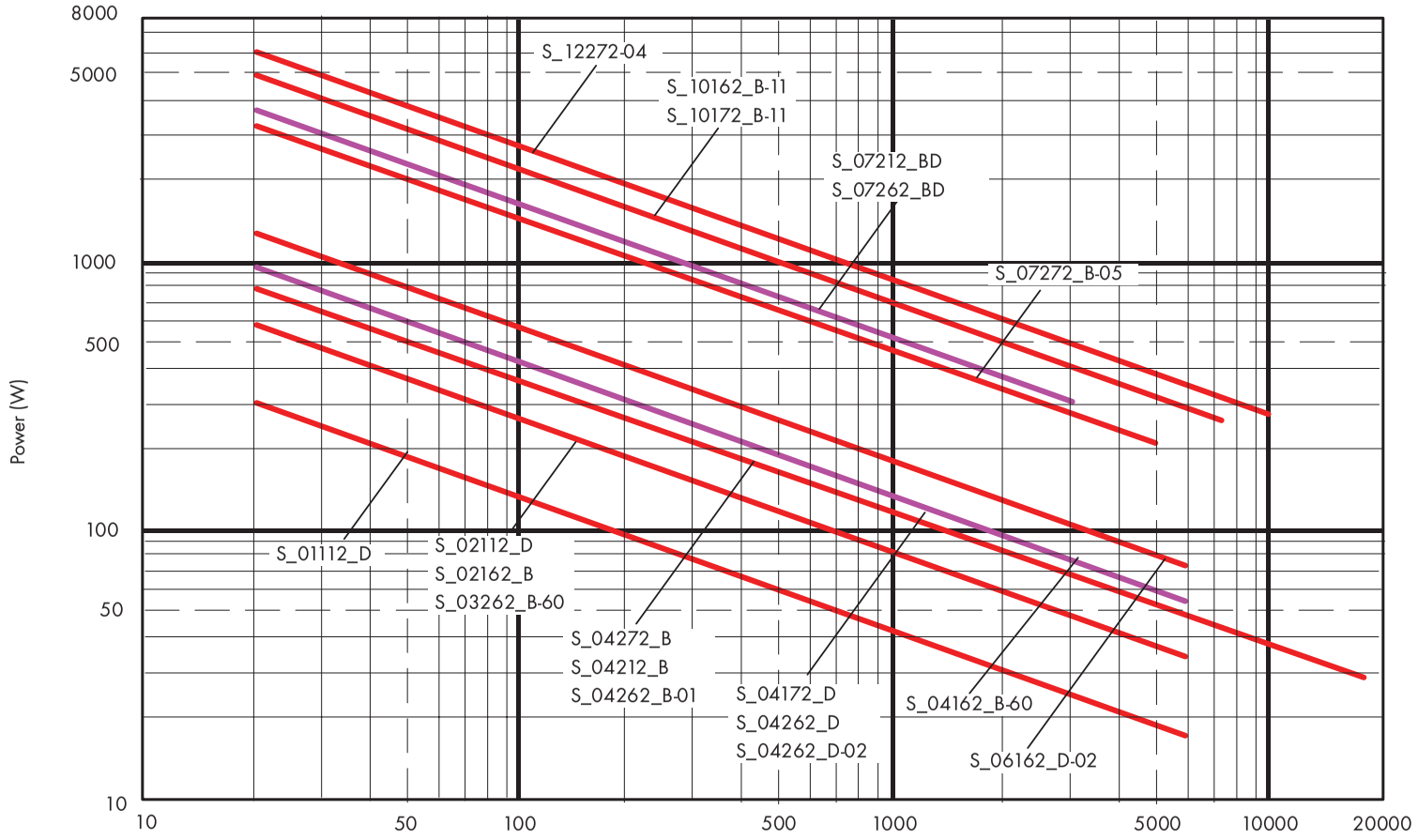


Halogen free, low loss 50Ω / 75Ω

Power

Halogen free RF coax cables, low loss types, double screen, 50 Ω

typical values at +40 °C ambient temperature

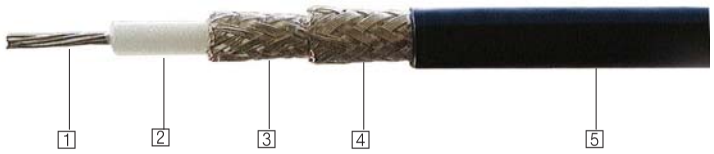


Halogen free RF coax cables — double screen — 50 Ω

Low loss, +105 °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	$>10^8$ MΩm
Min. bending radius static	5 x ∅/with foil 10 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅/with foil 20 x ∅ jacket [5]
Temperature range standard cables	-40 °C to +105 °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.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
SX_03232_B-60[b]	84018307	62 and 63	Wire	Cu	1.065	SPEX	2.96	Al-PES	3.05	100	CuSn	3.80	90	PVC(UL)	4.50	black	3.19	0.4	5	–	–
SX_03272_B-60[b]	84010513		Wire	Cu	1.065	SPEX	2.96	Al-PES	3.05	100	CuSn	3.80	90	RADOX[1]	4.50	black	3.25	0.4	5	–	–
SX_03272_D-01	22511948		Wire	CuAg	1.10	SPEX	2.96	CuAg	3.60	95	CuAg	4.20	93	RADOX[1]	5.40	black	6.10	0.45	6	–	U10
SX_04172_B-60[b]	84026748		Wire	CuAg	1.40	SPEX	3.80	Al-PES	4.00		CuSn	4.53	86	RADOX[1]	5.50	black	4.78	0.7	6	–	–
SX_04272_D-02	22511926		Wire	CuAg	1.40	SPEX	3.82	CuAg	4.20	97	CuAg	4.70	93	RADOX[1]	5.70	black	5.50	2.00	6	S16	–
SX_07262_BD	22511765		Strand-7	CuAg	2.82	SPEX	7.35	CuAg	8.00	96	Cu	8.10	100	RADOX[1]	10.80	black	20.60	1.05	3b[]	S32	–
SX_07272_BD	22512245		Strand-7	CuAg	2.85	SPEX	7.35	CuAg	8.10	96	Cu	8.20	30	RADOX[1]	10.80	black	19.80	1.10	3b[]	S32	–

* for suitable connectors

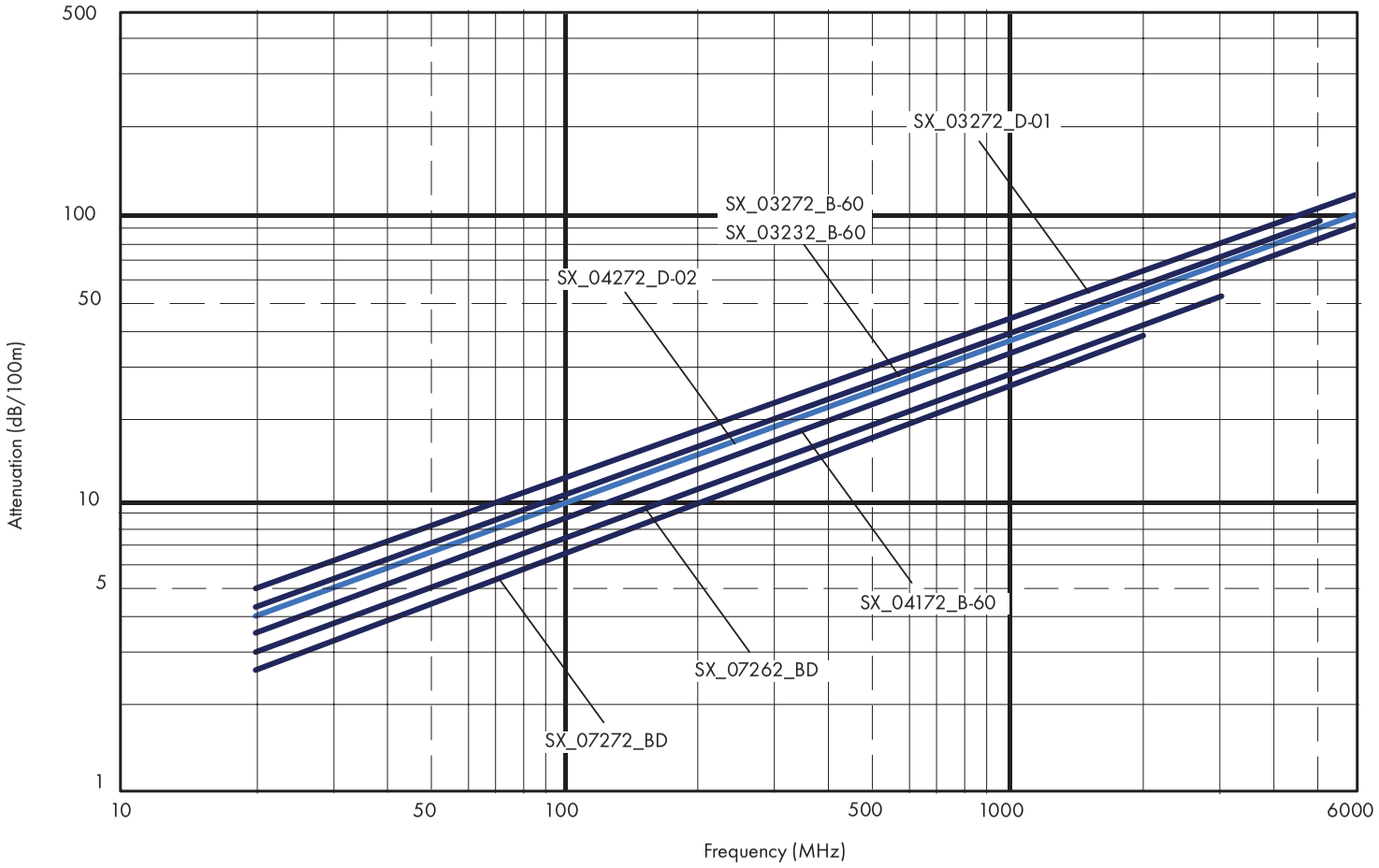
b) UL recognised (see UL types page 117)

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 Ω

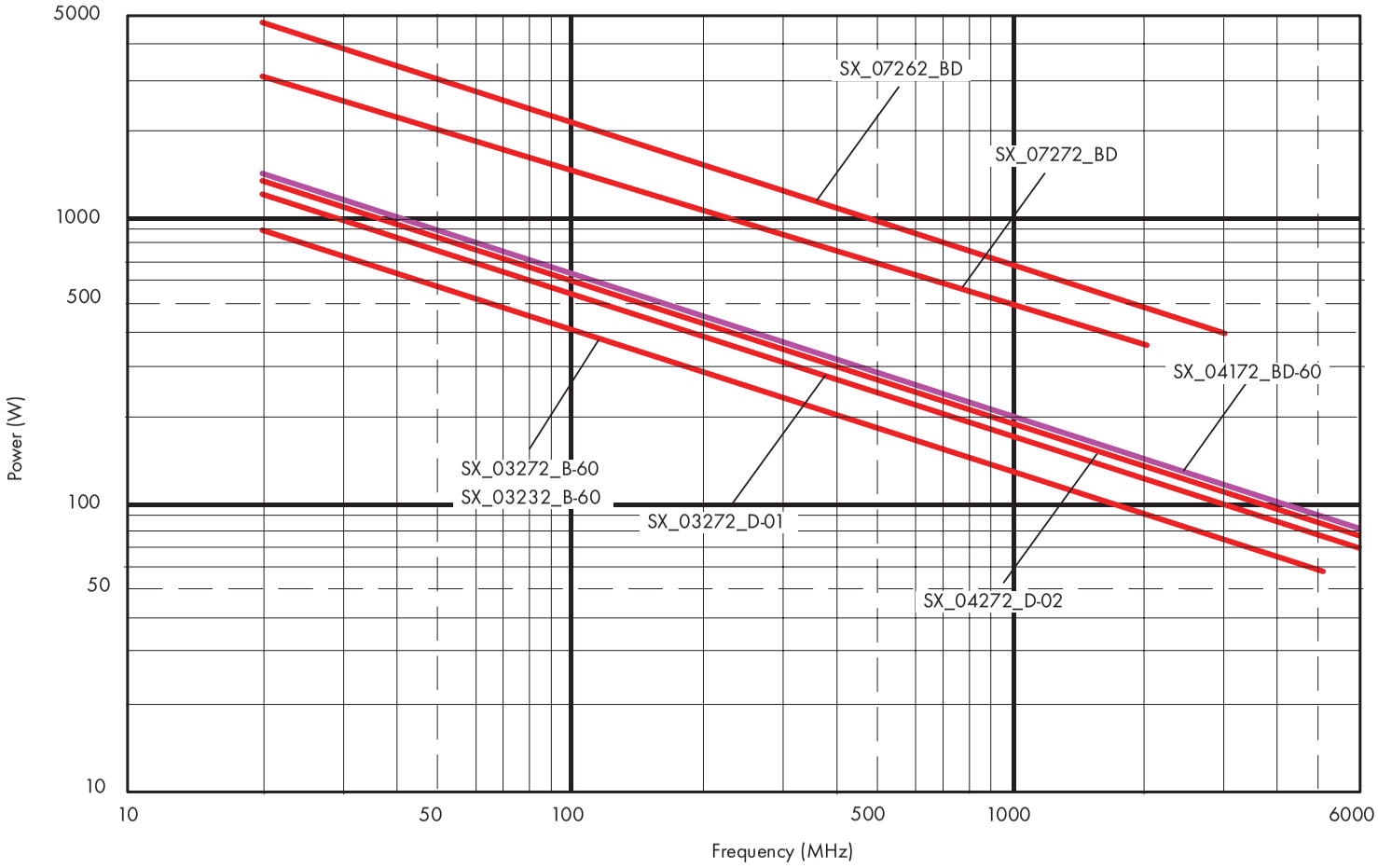
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, low loss types, double screen, 50 Ω

typical values at +40 °C ambient temperature



Halogen free, low loss 50Ω / 75Ω

Halogen free RF coax cables

single screen

75 Ω

Low loss, +85 °C

Impedance	75 Ω
Capacitance	54 pF/m
Velocity of signal propagation	82 % of the speed of light
Signal delay	4.1 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range standard cables	-40 °C to +85 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_04263	22511856	65 and 66	Wire	Cu	0.83	SPE	3.70	Cu	4.35	92	–	–	–	LSFH[1)]	6.10	black	4.70	0.50	1	U17	U15

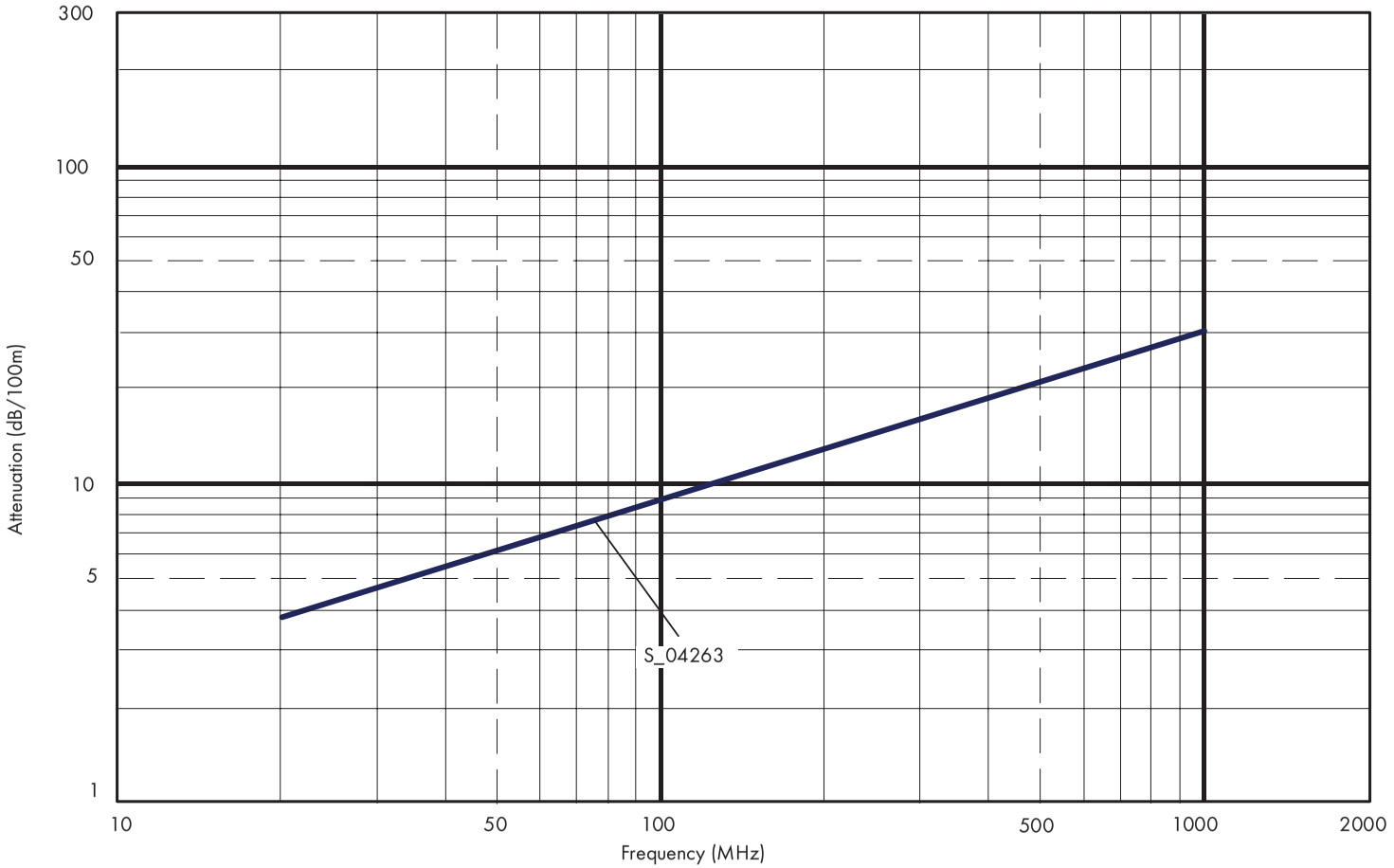
* for suitable connectors

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, single screen, 75 Ω

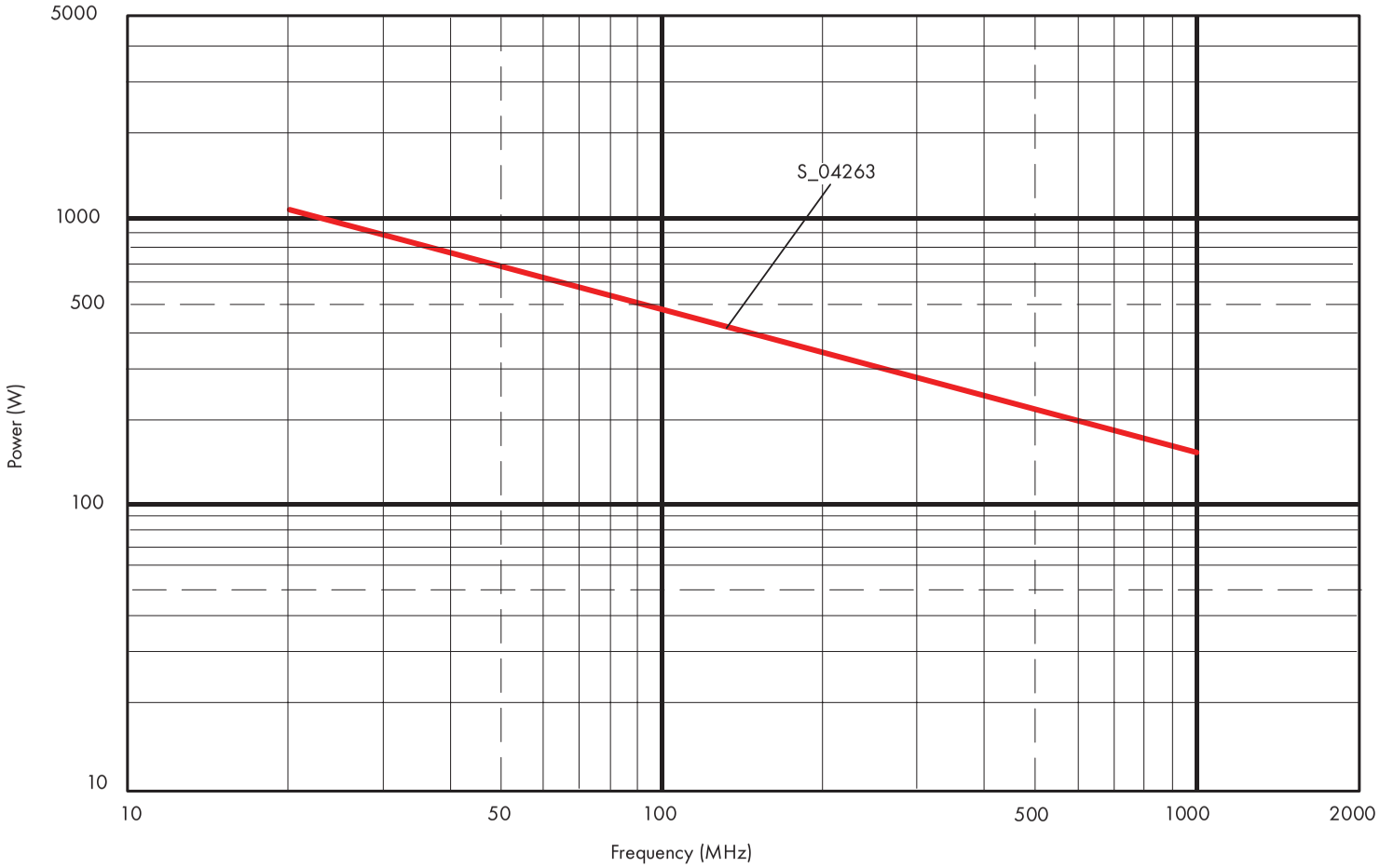
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, low loss types, single screen, 75 Ω

typical values at +40 °C ambient temperature



Halogen free RF coax cables

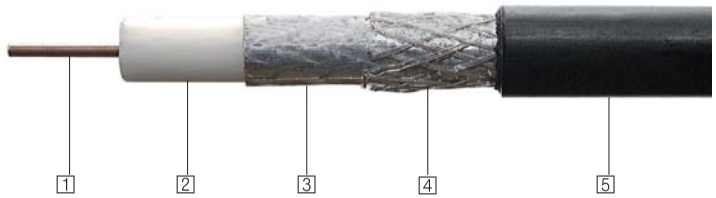
double screen

75 Ω

Low loss, +85 °C

Impedance	75 Ω
Capacitance	54 pF/m
Velocity of signal propagation	82 % of the speed of light
Signal delay	4.1 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅/with foil 10 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅/with foil 20 x ∅ jacket 5
Temperature range standard cables	-40 °C to +85 °C
Screening effectiveness	≥ 80 dB at 2 GHz

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



H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_05163-02	23003405	68 and 69	Wire	Cu	1.00	SPE	4.57	Al-PES	4.65	100	CuSn	5.40	66	LSFH[1)]	6.90	black	5.30	0.50	2	–	–
S_07273-01	22510550		Wire	StCu	1.57	SPE	7.25	Al-PES	7.45	100	CuSn	8.10	44	PE[1)]	10.00	black	7.90	1.00	2	–	–

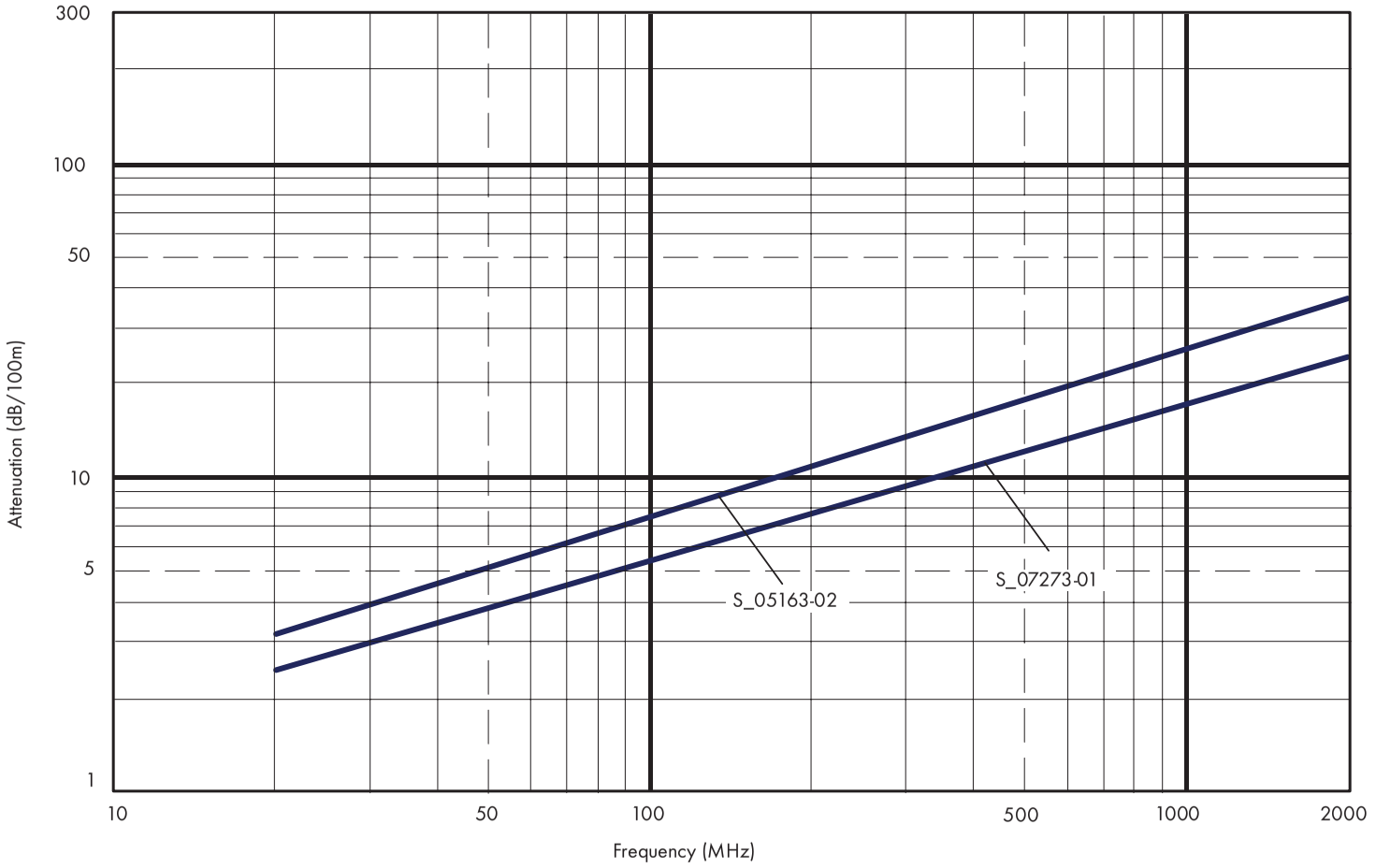
* for suitable connectors

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 coax cables, low loss types, double screen, 75 Ω

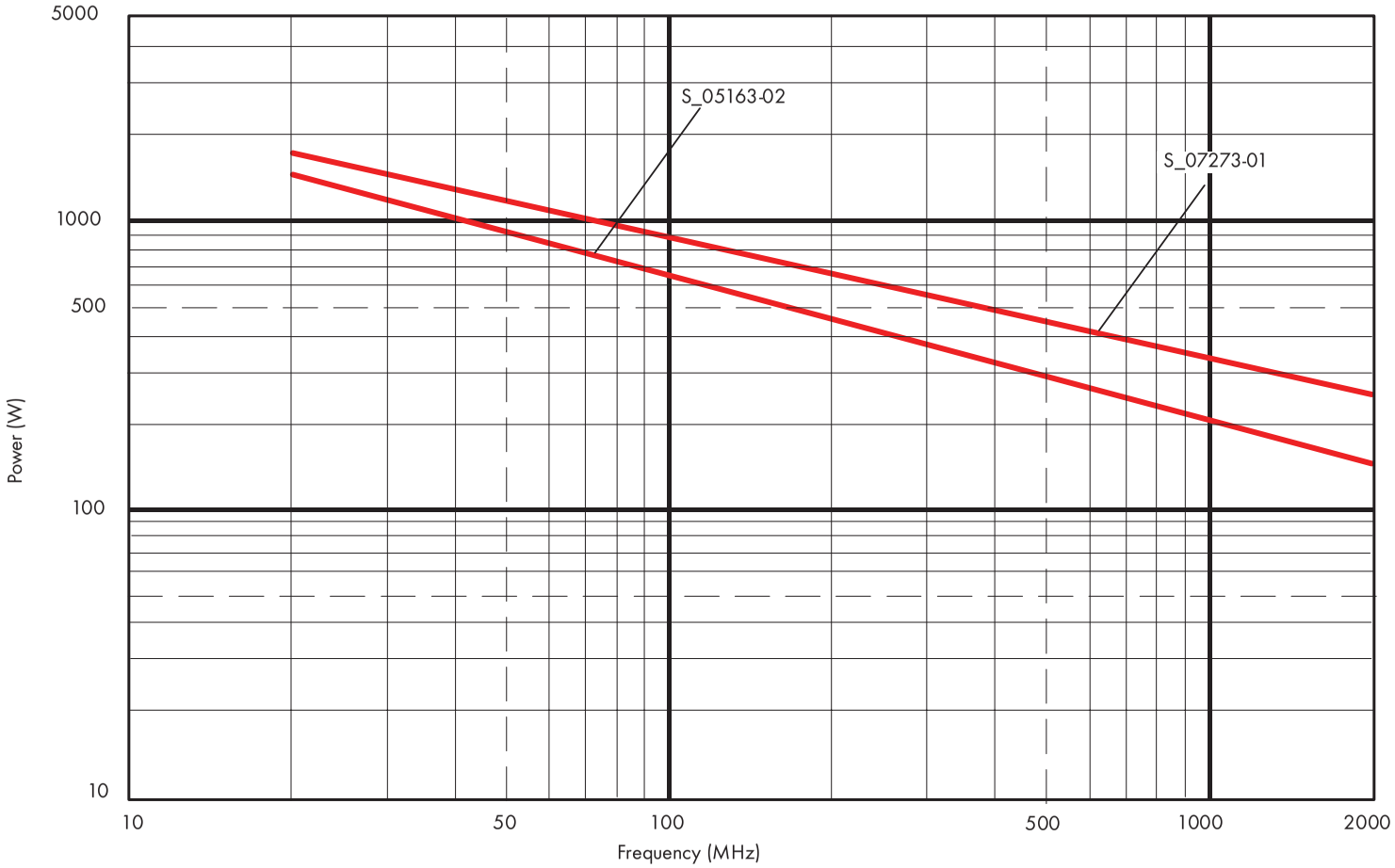
typical values at +20 °C ambient temperature



Power

Halogen free RF coax cables, low loss types, double screen, 75 Ω

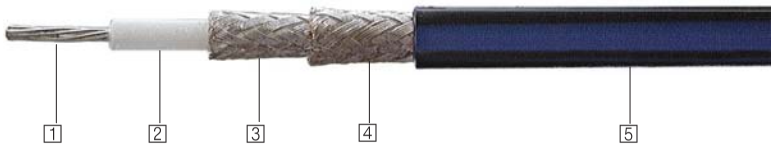
typical values at +40 °C ambient temperature



ENVIROFLEX, the halogen free alternative to conventional PTFE coax cables 50 Ω

Impedance	50 Ω
Capacitance	94 pF/m
Velocity of signal propagation	69 % of the speed of light
Signal delay	4.8 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range	-40 °C to +105 °C, acc. UL style 3651

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



All ENVIROFLEX types mentioned on this page are UL recognised.

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5							Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	Screen. effect.	crimp	clamp
EF_178	23010656	72 and 73	Strand-7	StCuAg	0.305	SPEX	0.82	CuAg	1.35	95	–	–	–	RADOX[1)]	1.84	blue	0.65	1.0	3	40	U1	U1
EF_178_D	23030426		Strand-7	StCuAg	0.305	SPEX	0.82	CuAg	1.35	96	CuAg	1.85	92	RADOX[1)]	2.45	blue	1.12	1.0	6	60	–	–
EF_178-01	84032838		Strand-7	StCuAg	0.305	SPEX	0.82	CuAg	1.35	95	–	–	–	RADOX[1)]	1.84	black	0.65	1.0	3	40	U1	U1
EF_316	23009565		Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.00	99	–	–	–	RADOX[1)]	2.54	blue	1.60	1.5	3	40	U2	U2
EF_316_D	22512281		Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.03	96	CuAg	2.50	90	RADOX[1)]	3.16	black/blue**	2.10	1.5	6	70	U4	U4
EF_316_D-01	84011098		Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.03	96	CuAg	2.50	90	RADOX[1)]	3.16	black	2.10	1.5	6	70	U4	U4
EF_316-03	84027942		Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.05	99	–	–	–	RADOX[1)]	2.52	black	1.60	1.5	3	40	U2	U2
EF_142	22512168		Wire	CuAg	0.95	SPEX	2.98	CuAg	3.58	97	CuAg	4.18	95	RADOX[1)]	5.00	black/blue**	6.00	2.5	6	75	U9	U10
EF_400	22512280		Strand-19	CuAg	1.00	SPEX	3.03	CuAg	3.72	96	CuAg	4.24	91	RADOX[1)]	5.00	black/blue**	6.00	2.5	6	70	U11	U10
EF_400-01	84008746		Strand-19	CuAg	1.00	SPEX	3.03	CuAg	3.72	96	CuAg	4.24	91	RADOX[1)]	5.00	black	6.00	2.5	6	70	U11	U10
EF_393	22512282		Strand-7	CuAg	2.46	SPEX	7.35	CuAg	8.00	92	CuAg	8.75	99	RADOX[1)]	10.10	black/blue**	18.00	5.0	6	78	U33	U33

* for suitable connectors

EF = ENVIROFLEX

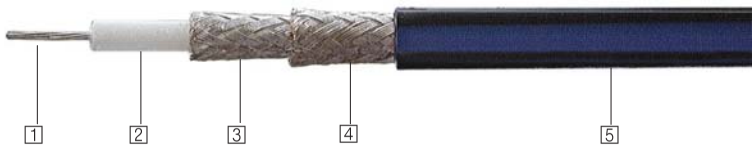
** black with blue line

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.

ENVIROFLEX, the halogen free alternative to conventional PTFE coax cables 75 Ω

Impedance	75 Ω
Capacitance	63 pF/m
Velocity of signal propagation	69 % of the speed of light
Signal delay	4.8 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Screening effectiveness	≥ 40 dB up to 1 GHz
Temperature range	-40 °C to +105 °C

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



All ENVIROFLEX types mentioned on this page are UL recognised.

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
ENVIROFLEX_179	23019104	72 and 73	Strand-7	StCuAg	0.305	SPEX	1.55	CuAg	2.13	94	-	-	-	RADOX[1)]	2.54	blue	1.11	1.50	1	U5	U5
ENVIROFLEX_179-01	84021688		Strand-7	StCuAg	0.305	SPEX	1.55	CuAg	2.13	94	-	-	-	RADOX[1)]	2.54	black	1.11		1	U5	U5

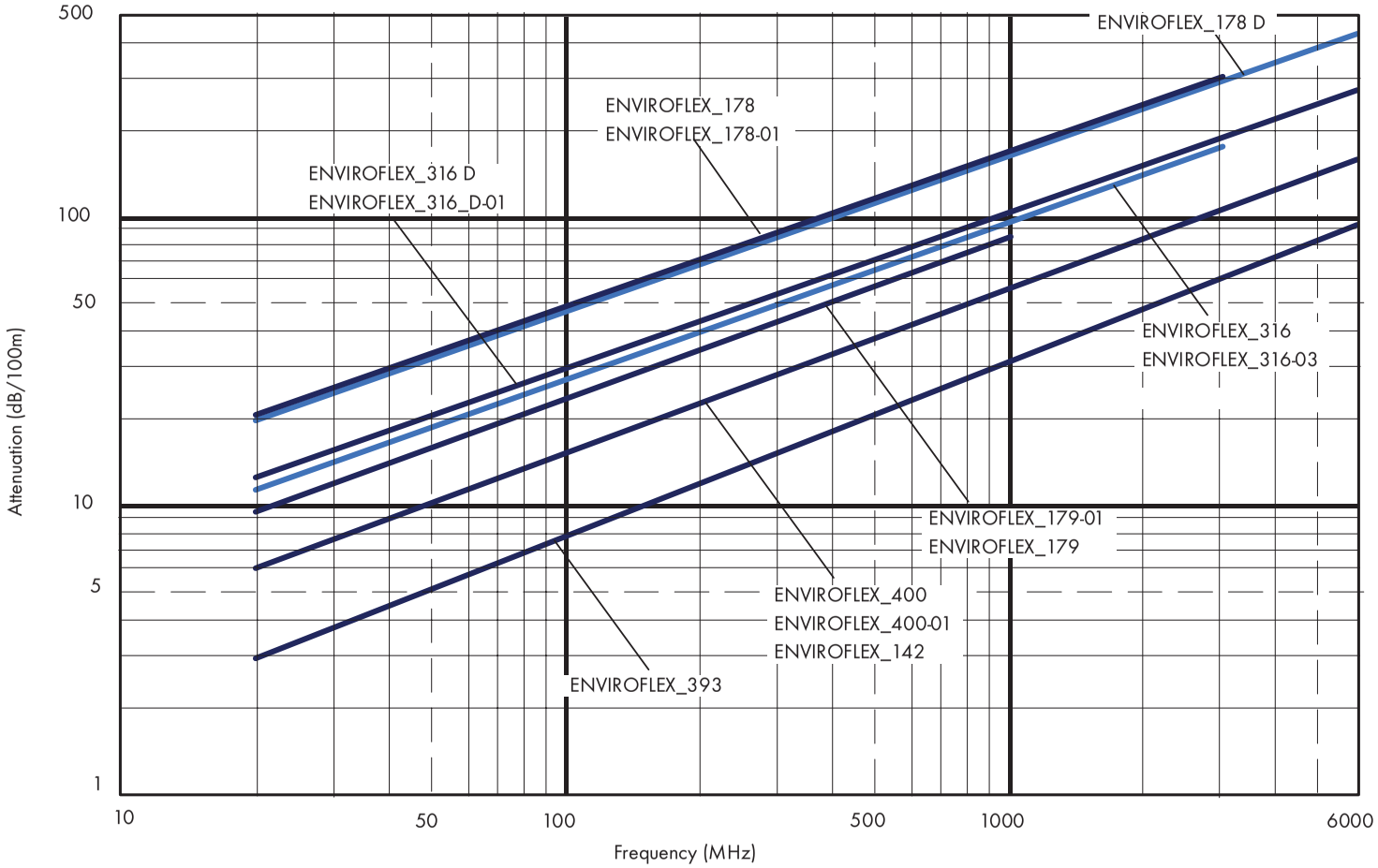
* for suitable connectors

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

ENVIROFLEX RF coax cables, 50 and 75 Ω

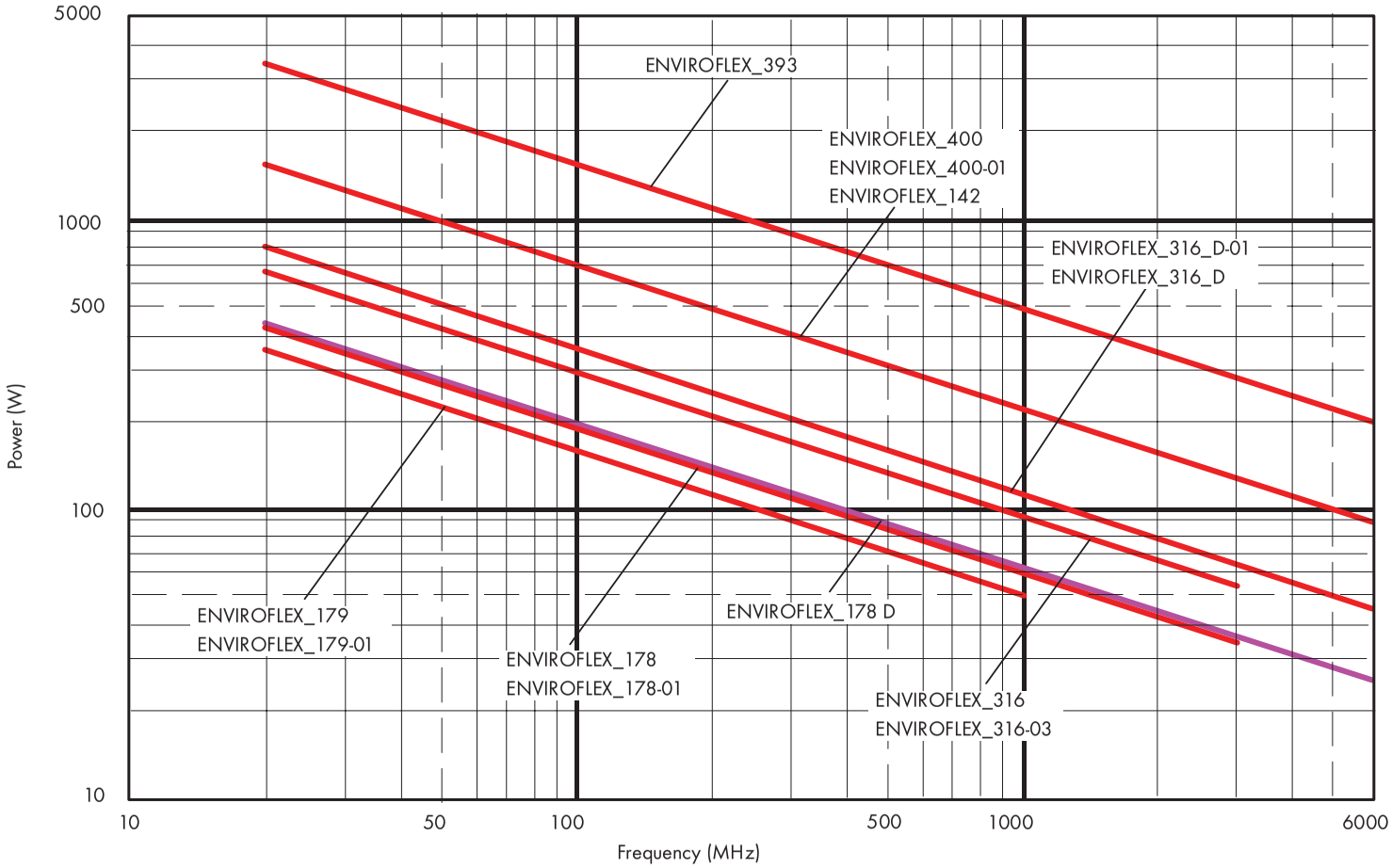
typical values at +20 °C ambient temperature



Power

ENVIROFLEX RF coax cables, 50 and 75 Ω

typical values at +40 °C ambient temperature



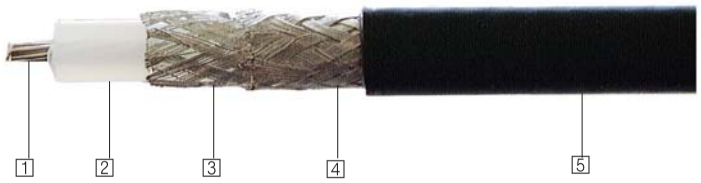
Halogen free
ENVIROFLEX
50Ω/75Ω

Railway approved RF coax cables

50 and 75 Ω

H+S type	GX_03272-04 GX_07272 GX_07272_D-04	GX_04273-12
Impedance	50 Ω	75 Ω
Capacitance	101 pF/m	67 pF/m
Velocity of signal propagation	66 % of the speed of light	66 % of the speed of light
Signal delay	5.0 ns/m	5.0 ns/m
Insulation resistance	>10^8 MΩm	>10^8 MΩm
Min. bending radius static	5 x ∅ jacket [5]	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]	15 x ∅ jacket [5]
Temperature range	-40 °C to +105 °C	-40 °C to +105 °C

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



H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
ENVIROFLEX_179[1]	23019104	76 and 77	Strand-7	StCuAg	0.31	SPEX	1.55	CuAg	2.13	94	–	–	–	RADOX[1]	2.54	blue	1.11	1.50	1	U5	U5
GX_03272-04*	22512309		Strand-19	CuSn	0.94	PEX	2.95	CuSn	3.60	96	–	–	–	RADOX GKW-S[1]	4.95	black	4.04	2.50	2	U7	U7
ENVIROFLEX_142[2]	22512168		Wire	CuAg	0.95	SPEX	2.98	CuAg	3.58	97	CuAg	4.16	95	RADOX[1]	5.00	black/blue**	6.00	2.50	6	U9	U10
ENVIROFLEX_400[2]	22512280		Strand-19	CuAg	1.00	SPEX	3.03	CuAg	3.72	96	CuAg	4.24	91	RADOX[1]	5.00	black/blue**	6.00	2.50	6	U11	U10

* for suitable connectors

[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.

* Specific cables for railway applications only (RADOX GKW-S). COC of DIN 5510-2 available

** black with blue line

[1] 75 Ohm, electrical data see page 71

[2] 50 Ohm, electrical data see page 70

Railway approved RF coax cables

50 and 75 Ω

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
ENVIROFLEX_316_D	22512281	76 and 77	Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.03	96	CuAg	2.5	90	LSFH[1]	3.16	black/blue**	2.10	1.50	6	U4	U4
GX_04273-12	23029791		Strand-7	CuSn	0.66	PEX	3.83	CuSn	4.45	95	–	–	–	RADOX GKW-S[1]	6.10	black	5.70	3.00	1	U16	U15
SX_04172_B-60[a]	84026748		Wire	CuAg	1.40	SPEX	3.80	Al/PES	4.0	100	CuSn	4.53	86	RADOX[1]	5.50	black	4.78	0.70	6	–	–
GX_07272	22510708		Strand-7	Cu	2.25	PEX	7.25	CuAg	8.15	95	–	–	–	RADOX[1]	10.30	black	16.10	5.00	2	U29	U28
GX_07272_D-04	22511988		Strand-7	CuAg	2.25	PEX	7.25	CuAg	8.00	93	CuAg	8.70	95	RADOX GKW-S[1]	10.80	black	20.20	5.00	6	U32	U33
ENVIROFLEX_393	22512282		Strand-7	CuAg	2.46	SPEX	7.35	CuAg	8.00	92	CuAg	8.75	99	LSFH[1]	10.10	black/blue**	18.00	5.00	6	U33	U33
S_10162_B-11	23002145		Wire	CuAl	3.80	SPE	9.90	Cu	10.00	100	Cu	10.80	80	LSFH[1]	12.90	black	15.00	1.70	7.5	S39	–
SUCOFEED_1/2_HF_FR	22512163		Wire	CuAl	3.60	SPE	8.80	Cu	12.20	100	–	–	–	LSFH[1]	13.40	grey/black	24.00	1.27	10	–	–

* for suitable connectors

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.

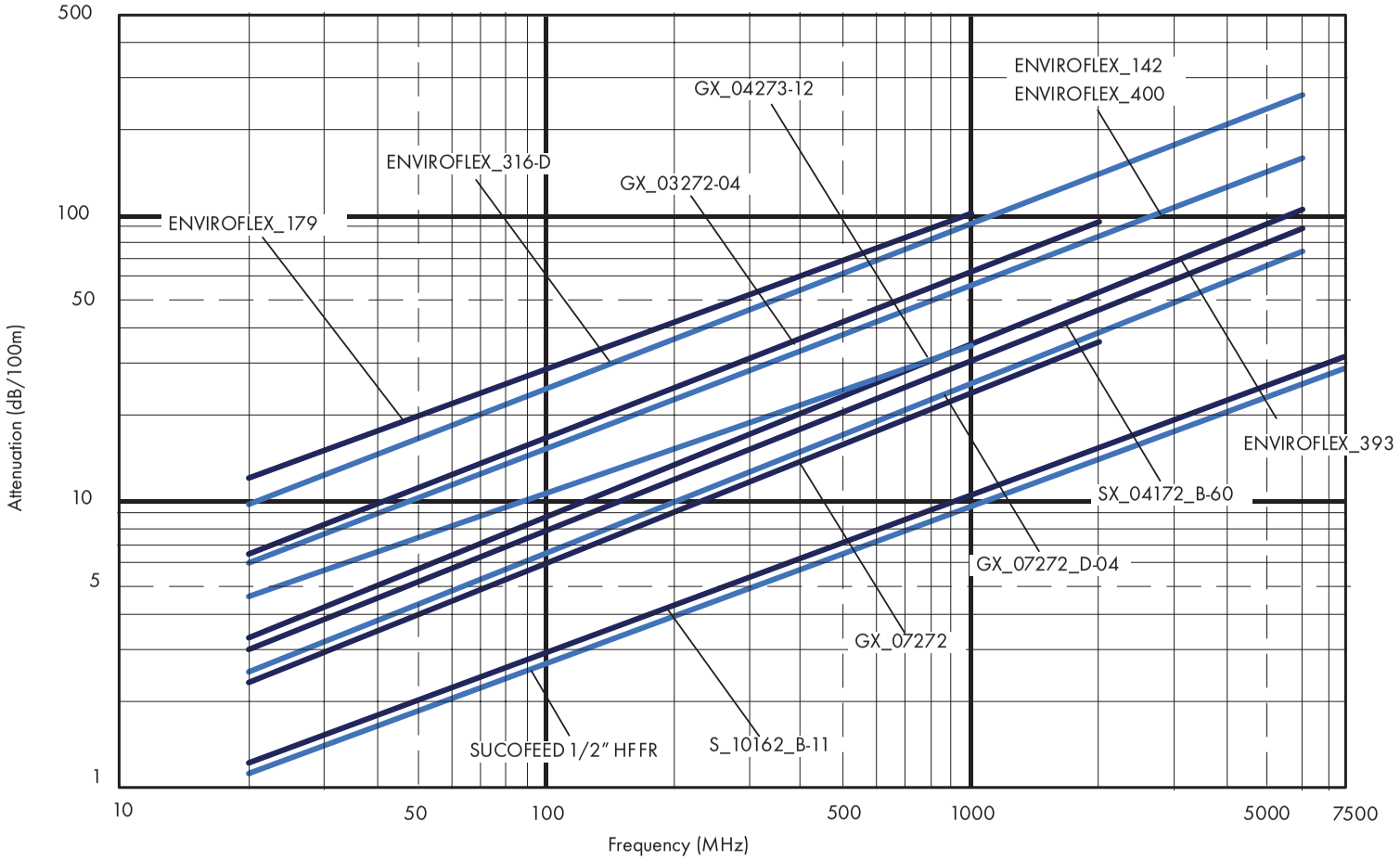
** black with blue line

b) UL recognised (see UL types page 117)

Attenuation

Railway approved RF coax cables, 50 and 75 Ω

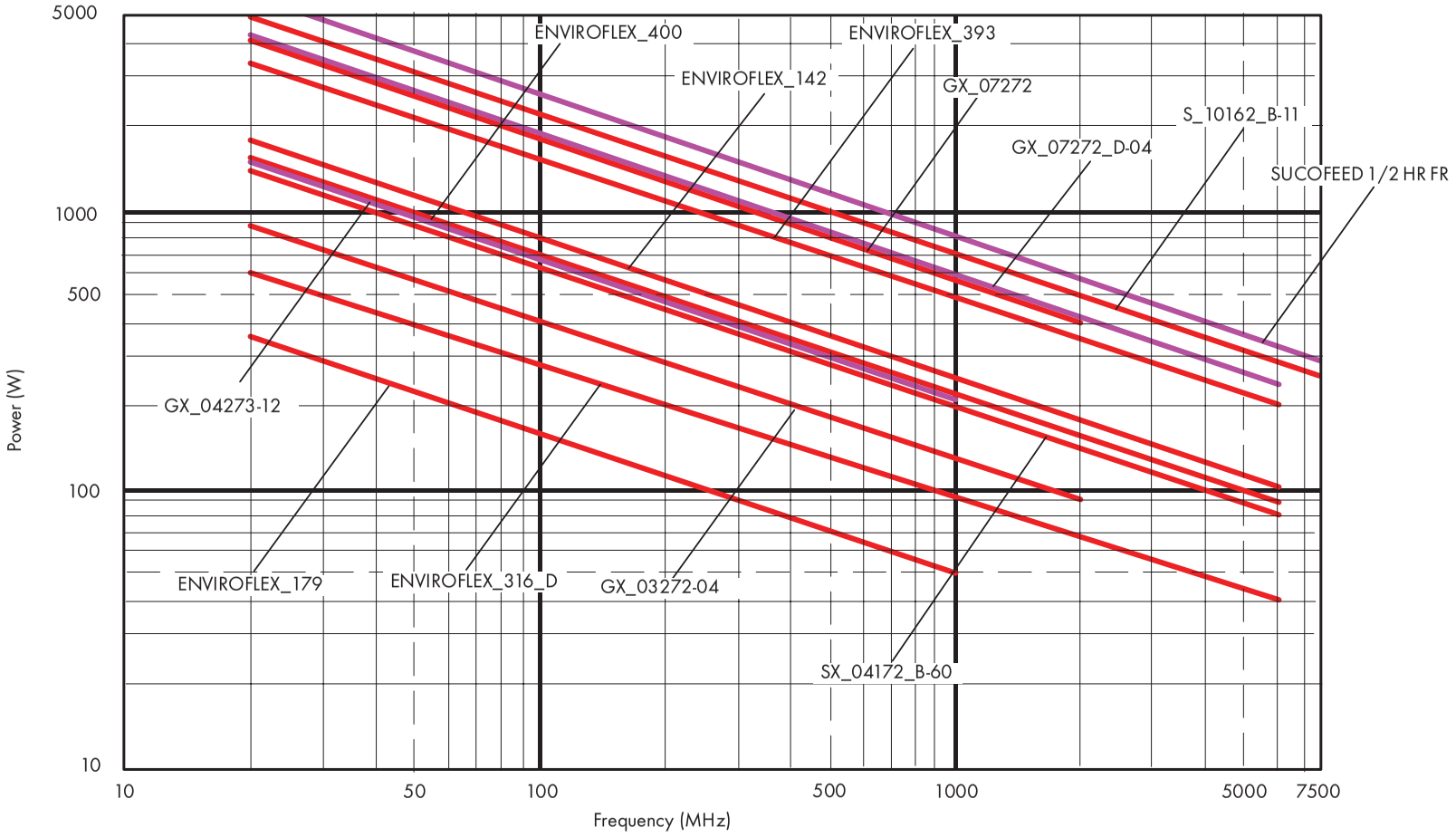
typical values at +20 °C ambient temperature



Power

Railway approved RF coax cables, 50 and 75 Ω

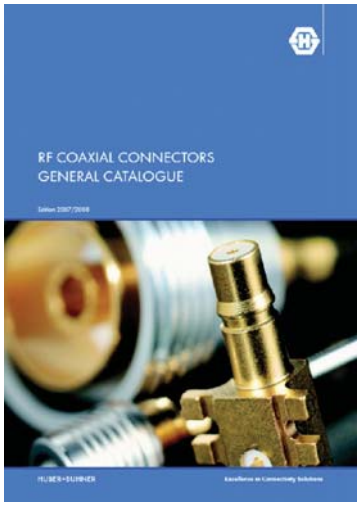
typical values at +40 °C ambient temperature



Halogen free
Railway cables
50Ω/75Ω

RF railway - cable selection list

Cable type	Item no.	Frequency (GHz)	Impedance (Ω)	Replacement for	DIN 5510-2 EN60332-1-2 EN61034-2
GX_03272-04	22512309	2	50	RG_58_C/U	passed
GX_04273-12	23029791	1	75	RG_59_C/U	passed
GX_07272	22510708	2	50	RG_213_/U	passed
GX_07272_D-04	22511988	6	50	RG_214_/U	passed
S_10162_B-11	23002145	7.5	50		passed
ENVIROFLEX_179	23019104	1	75	RG_179_B/U	passed
ENVIROFLEX_142	22512168	6	50	RG_142_B/U	passed
ENVIROFLEX_400	22512280	6	50	RG_400_B/U	passed
ENVIROFLEX_393	22512282	6	50	RG_393_/U	passed
ENVIROFLEX_316_D	22512281	6	50	RG_316_D	passed
SUCOFEED_1/2" HF FR	22512163	10	50		passed
SX_04172_B-60	84026748	6	50	LMR-240	passed



Order your copy of the detailed catalogue, item no. 644802

HUBER+SUHNER

your partner - also for coaxial connectors

Halogen free
Railway cables
50Ω/75Ω

High temperature RF coax cables — single screen — 50 Ω

High temperature, +165 °

Impedance	50 Ω
Capacitance	97 pF/m
Velocity of signal propagation	69 % of the speed of light
Signal delay	4.80 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range	-65 °C to +165 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
K_01152-07[a]	22511192	83 and 84	Strand-7	CuAg	0.19	PFA	0.52	CuAg	0.90	87	–	–	–	PFA	1.25	white	0.90	0.45	1	U0	–
K_02232-03[b]	22512207		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	94	–	–	–	PVC(UL)	2.50	black	1.60	0.85	1	U2	U2

* for suitable connectors

a) temperature range: -80 °C to +165 °C
b) temperature range: -25 °C to +105 °C

High temperature RF coax cables — single screen — 50 Ω

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
RG_178_B/U	22510043	83 and 84	Strand-7	StCuAg	0.31	PTFE	0.83	CuAg	1.33	95	–	–	–	FEP	1.80	brown	0.84	1.00	1	U1	U1
RG_196_A/U	22510049		Strand-7	StCuAg	0.31	PTFE	0.83	CuAg	1.33	96	–	–	–	PFA	1.83	white	0.92	1.00	1	U1	U1
RG_188_A/U	22510046		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	94	–	–	–	PFA	2.60	white	1.70	0.85	1	U2	U2
RG_188_A/U-01	22510047		Strand-7	StCuAg	0.54	FEP	1.55	CuAg	2.00	96	–	–	–	FEP	2.50	brown	1.70	1.45	1	U2	U2
RG_188_A/U-60[a)]	22511839		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	94	–	–	–	FEP	2.60	white	1.70	0.85	1	U2	U2
RG_316_/U	22510079		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	95	–	–	–	FEP	2.50	brown	1.60	0.85	3	U2	U2
RG_303_/U	22510078		Wire	StCuAg	0.95	PTFE	2.95	CuAg	3.60	97	–	–	–	FEP	4.30	brown	4.48	1.70	1	U7	U7
K_07252	22510234			CuAg	2.46	FEP	7.25	CuAg	8.15	97	–	–	–	FEP	9.10	black	19.50	6.70	1	–	–

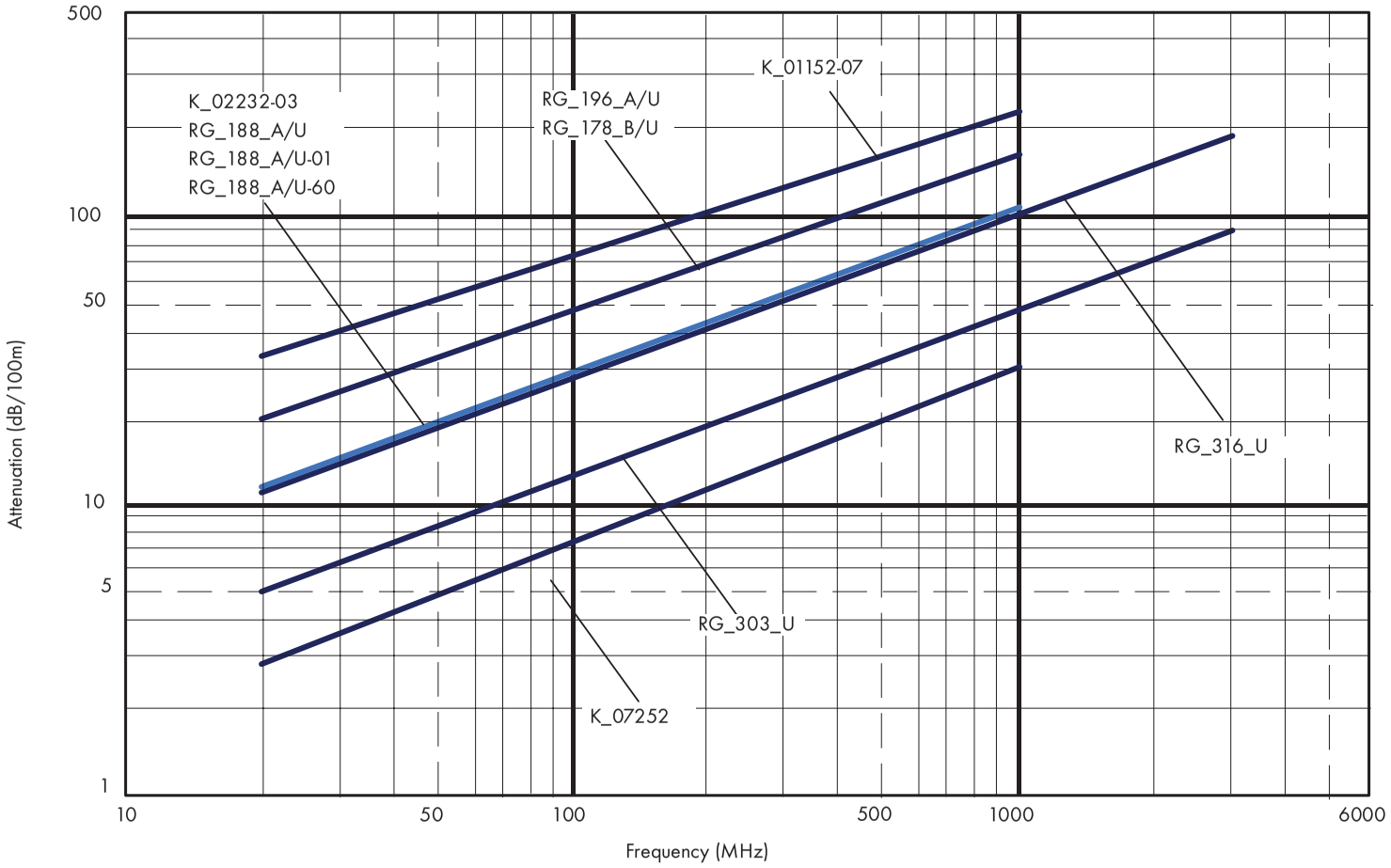
* for suitable connectors

a) UL recognised (see UL types page 117)

Attenuation

High temperature RF coax cables, single screen, 50 Ω

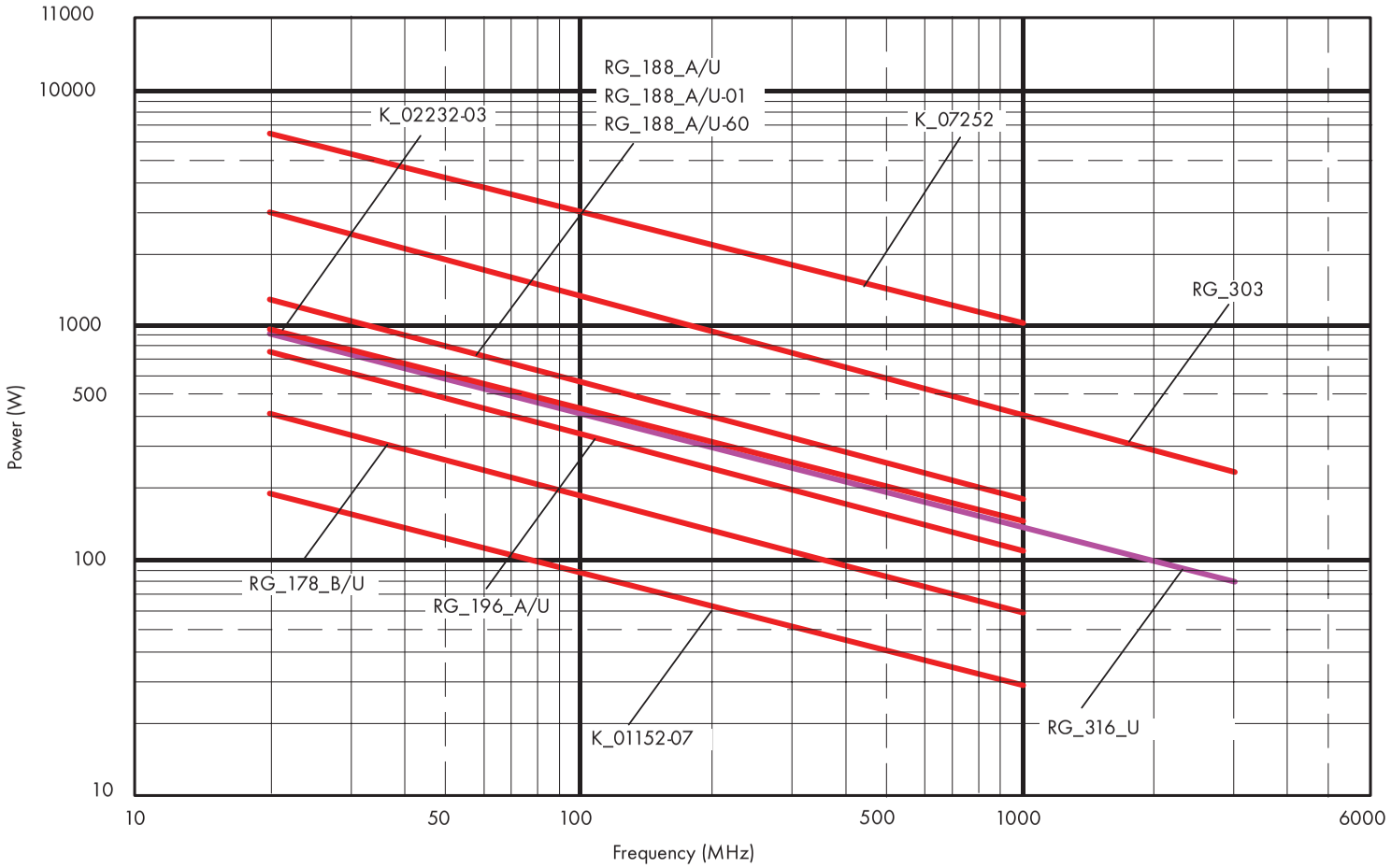
typical values at +20 °C ambient temperature



Power

High temperature RF coax cables, single screen, 50 Ω

typical values at +40 °C ambient temperature



High temperature, radiation resistant RF coax cables single screen 50 Ω

High temperature -180 °C up to +250 °C

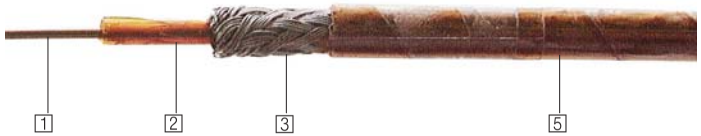
Radiation resistance:

PEEK	= 10^9 rad
PI (Kapton®)[a)]	= 10^9 rad
RADOX 125	= 10^8 rad

H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*		
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp	Screen. effect.
P_02182-01	22512101	86 and 87	Wire	Cu	0.40	PEEK	1.60	CuAg	2.10	96	-	-	-	PEEK	2.40	light brown	1.10	1.50	1	on request		40

* for suitable connectors

High temperature -269 °C up to +350 °C



H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*		
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp	Screen. effect.
U_02152	22511194	86 and 87	Wire	StCu	0.62	PI[a)]	2.00	St	2.70	93	-	-	-	PI[a)]	3.00	brown	1.80	1.50	1	on request		40

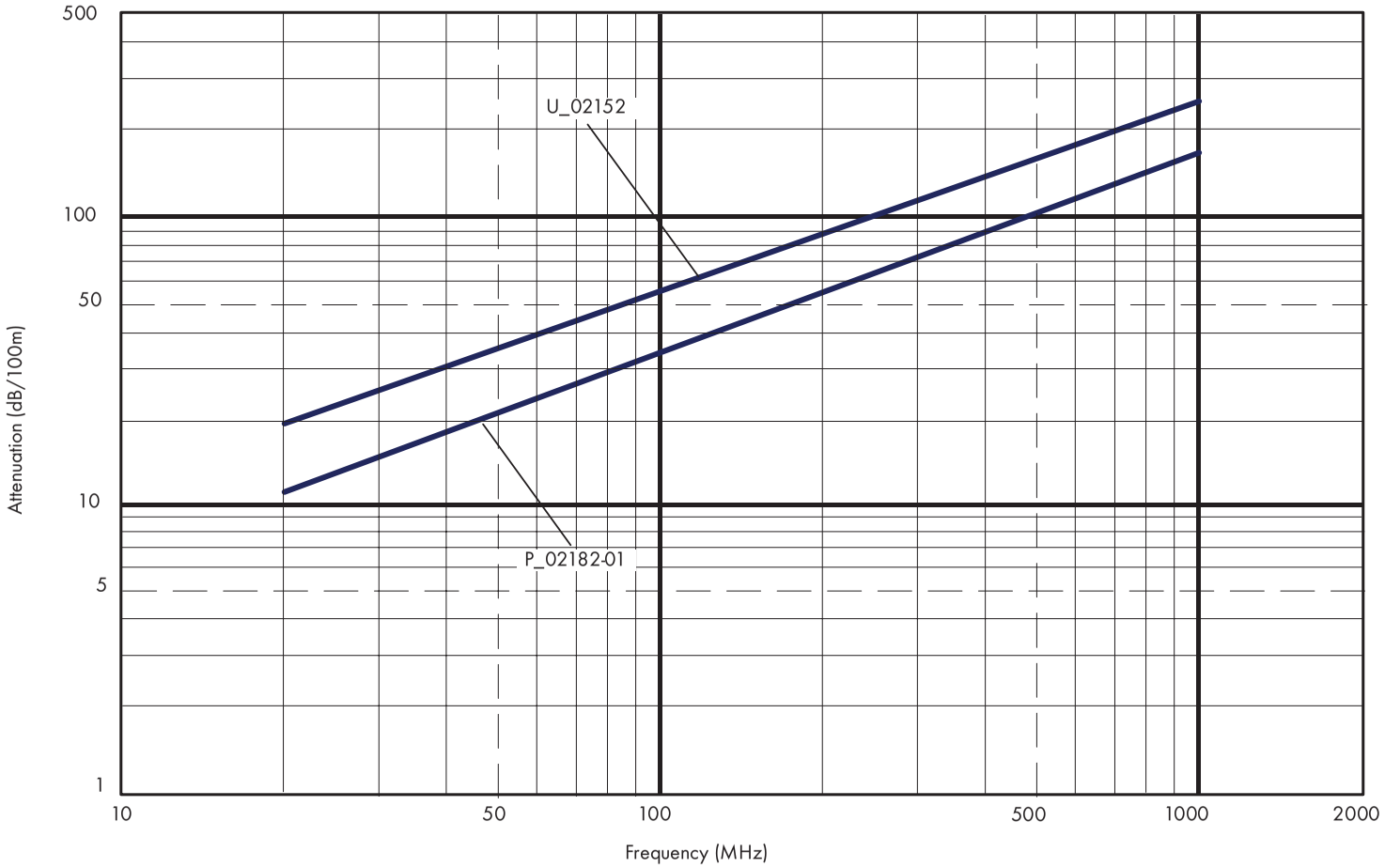
* for suitable connectors

[a)] PI = Kapton® - DuPont

Attenuation

High temperature, radiation resistant RF coax cables, single screen, 50 Ω

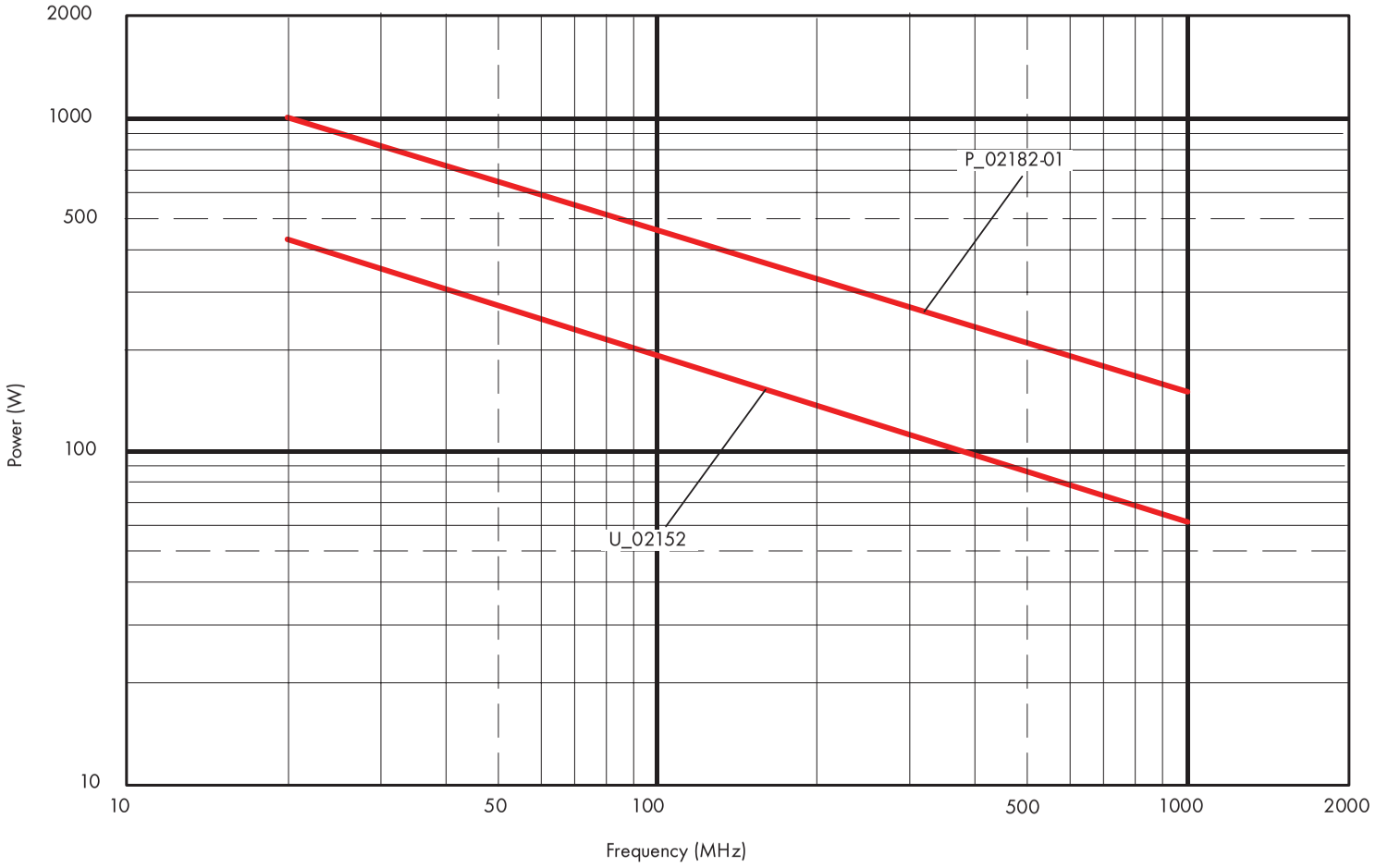
typical values at +20 °C ambient temperature



Power

High temperature, radiation resistant RF coax cables, single screen, 50 Ω

typical values at +40 °C ambient temperature

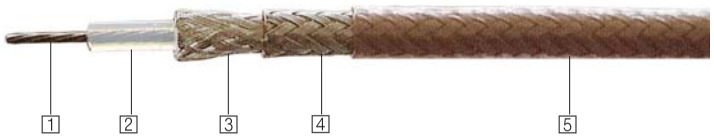


High temperature RF coax cables — double screen — 50 Ω

High temperature, +165 °

Impedance	50 Ω
Capacitance	96 pF/m
Velocity of signal propagation	69 % of the speed of light
Signal delay	4.8 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket [5]
Min. bending radius dynamic	15 x ∅ jacket [5]
Temperature range	-65 °C to +165 °C
Screening effectiveness	≥80 dB at 6 GHz

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



H+S type	Item no.		Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
K_01252_D	22610061	90 and 91	Strand-7	StCuAg	0.31	PTFE	0.83	CuAg	1.33	95	CuAg	1.83	92	FEP	2.40	brown	1.50	0.50	6	–	–
K_02232_D-01[a]	22511081		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	95	CuAg	2.50	93	PVC(UL)	3.20	black	2.30	0.85	5	U4	U4
K_02252_D	22510218		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	96	CuAg	2.50	91	FEP	3.00	brown	2.40	0.85	6	U4	U4
K_02252_D-08	22511127		Strand-7	CuAg	0.54	FEP	1.54	CuAg	2.00	96	CuAg	2.50	91	FEP	3.00	brown	2.40	1.45	6	U4	U4
K_02252_D-60[b]	22511904		Strand-7	CuAg	0.54	FEP	1.54	CuAg	2.00	96	CuAg	2.50	91	FEP	3.00	brown	2.40	1.45	6	U4	U4
K_02252_D-62[b]	22511857		Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	97	CuAg	2.55	97	FEP	2.95	grey	2.50	0.85	6	U4	U4
K_03252_D	22610032		Wire	CuAg	0.95	FEP	2.95	CuAg	3.60	95	CuAg	4.25	93	FEP	4.95	black	6.20	2.85	6	U9	U10
K_03252_D-03	22511236		Wire	CuAg	0.95	PFTE	2.95	CuAg	3.60	96	CuAg	4.20	94	FEP	4.95	grey	6.40	1.70	6	U9	U10

* for suitable connectors

[a] temperature range: -25 °C to + 105 °C

[b] UL recognised (see UL types page 117)

High temperature RF coax cables double screen 50 Ω

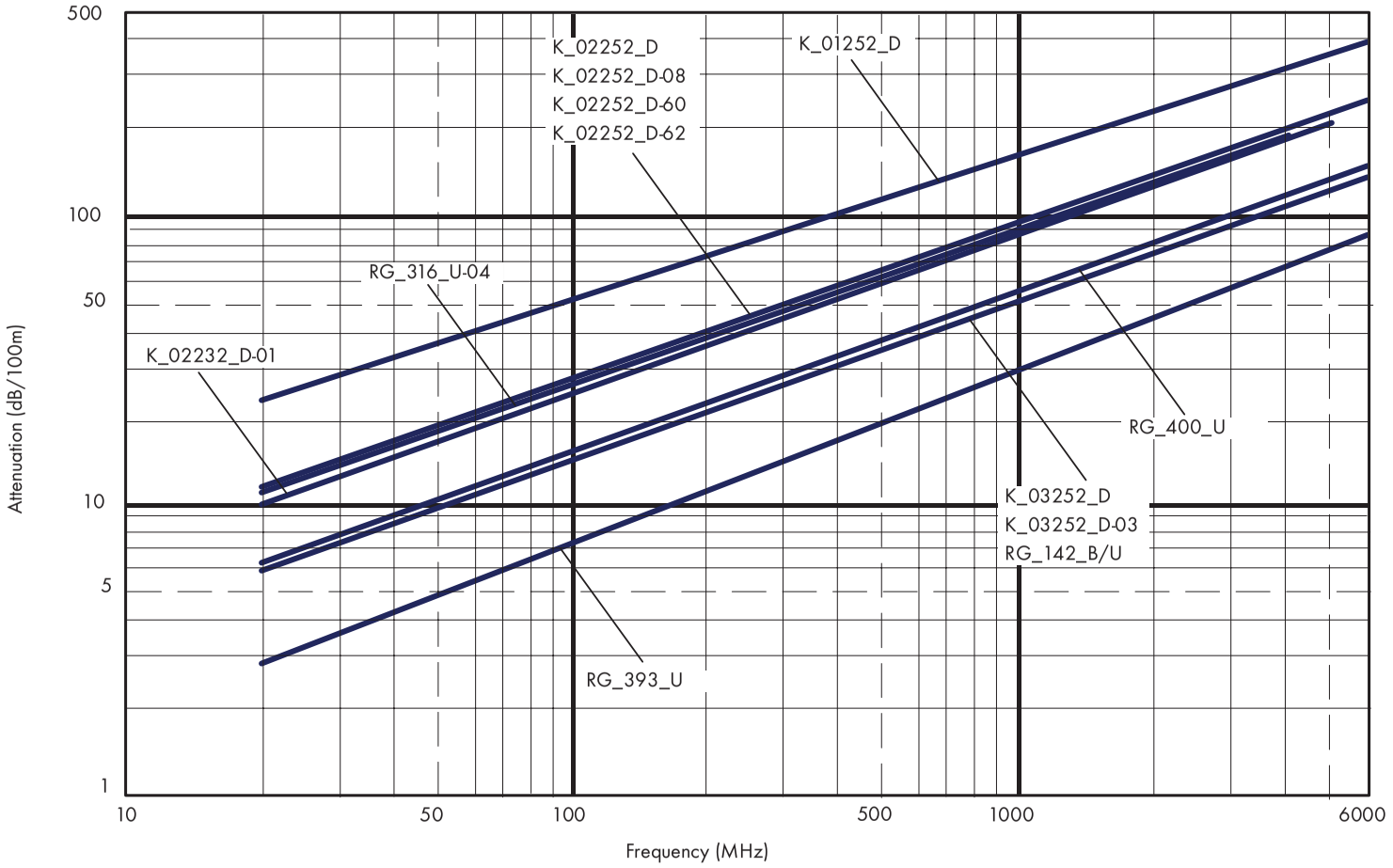
H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
RG_316_/U-04	22510610	90 and 91	Strand-7	StCuAg	0.54	PTFE	1.55	Al-PES	1.60	100	CuAg	2.10	94	FEP	2.60	green	1.80	1.00	4	U2	U2
RG_142_B/U	22510037		Wire	StCuAg	0.95	PTFE	2.95	CuAg	3.60	97	CuAg	4.25	94	FEP	4.95	brown	6.40	2.50	6	U9	U10
RG_400_/U	22510080		Strand-19	CuAg	1.00	PTFE	2.95	CuAg	3.60	97	CuAg	4.20	94	FEP	4.95	brown	6.40	1.70	6	U11	U10
RG_393_/U	22511430		Strand-7	CuAg	2.46	PFA	7.25	CuAg	8.00	92	CuAg	8.75	94	FEP	9.90	brown	22.90	4.10	6	U33	–

* for suitable connectors

Attenuation

High temperature RF coax cables, double screen, 50 Ω

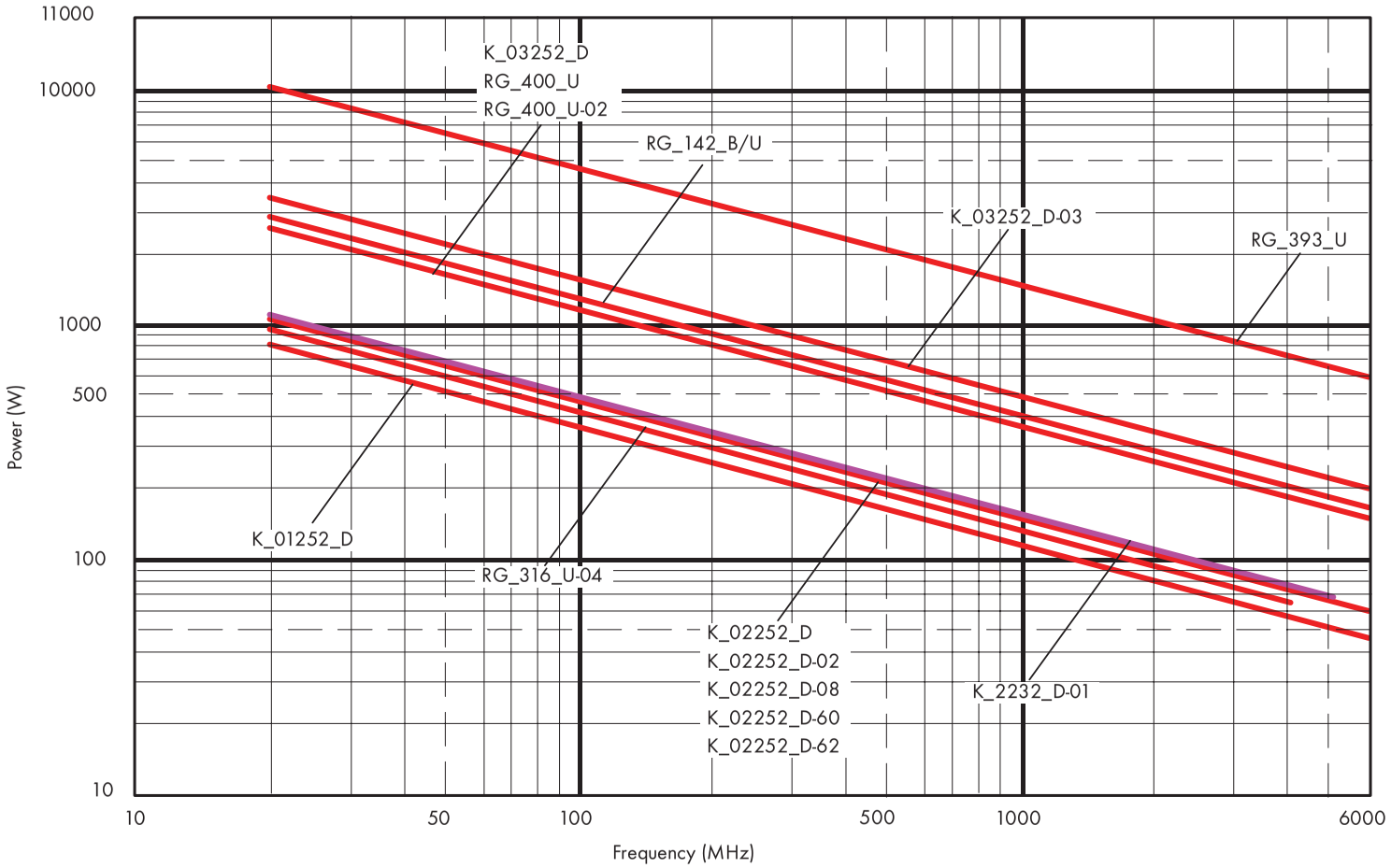
typical values at +20 °C ambient temperature



Power

High temperature RF coax cables, double screen, 50 Ω

typical values at +40 °C ambient temperature



High temperature RF coax cables

single screen

75 Ω

High temperature up to +165°

Impedance	75 Ω
Capacitance	63 pF/m
Velocity of signal propagation	69 % of the speed of light
Signal delay	4.8 ns/m
Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range standard cables	-65 °C to + 165 °C
Screening effectiveness	≥ 40 dB up to 1 GHz

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

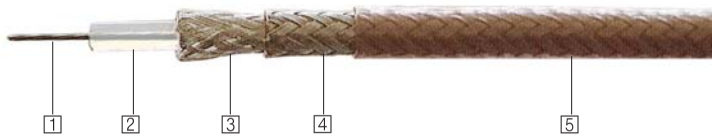
H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
RG_179_B/U	22510044	94 and 95	Strand-7	StCuAg	0.31	PTFE	1.55	CuAg	2.00	94	–	–	–	FEP	2.54	brown	1.48	1.00	1	U5	U5
RG_187_A/U	22510045		Strand-7	StCuAg	0.31	PTFE	1.55	CuAg	2.00	94	–	–	–	PFA	2.65	white	1.60	1.00	1	U5	U5
RG_302_/U	22510077		Wire	StCuAg	0.63	PTFE	3.70	CuAg	4.35	91	–	–	–	FEP	5.10	brown	1.60	0.85	1	U5	–

* for suitable connectors

High temperature RF coax cable — double screen — 75 Ω

High temperature up to +165 °

Impedance	75 Ω
Capacitance	63 pF/m
Velocity of signal propagation	69 % of the speed of light
Signal delay	4.8 ns/m
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ jacket 5
Min. bending radius dynamic	15 x ∅ jacket 5
Temperature range standard cables	-65 °C to + 165 °C
Screening effectiveness	≥ 80 dB up to 2 GHz



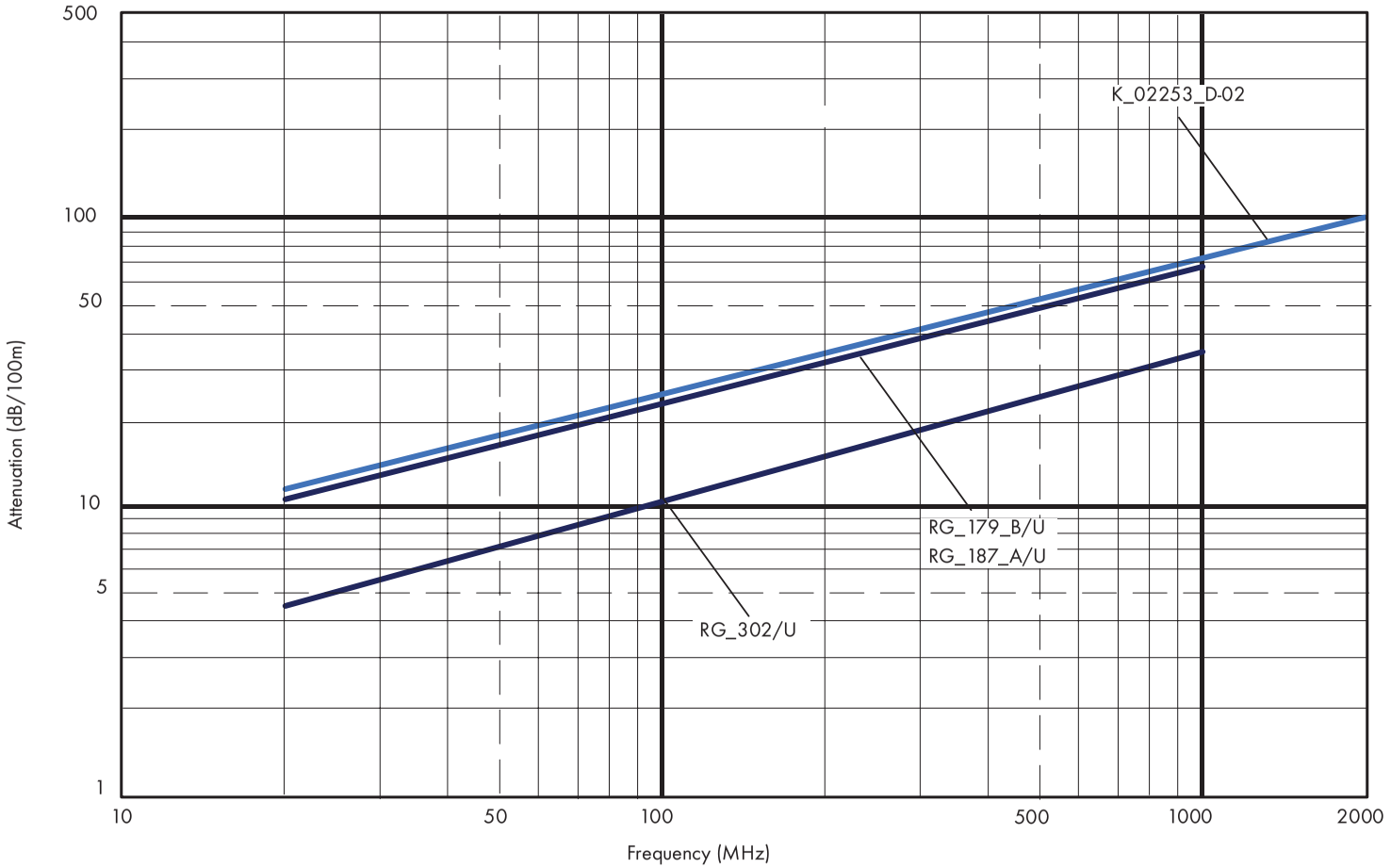
H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*		
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp	Screen. efffect.
K_02253_D-02	22511469	94 and 95	Strand-7	StCuAg	0.31	PTFE	1.55	CuAg	2.00	95	CuAg	2.50	93	FEP	3.00	brown	2.30	0.75	2	R8	–	81

* for suitable connectors

Attenuation

High temperature RF coax cables, single and double screen, 75 Ω

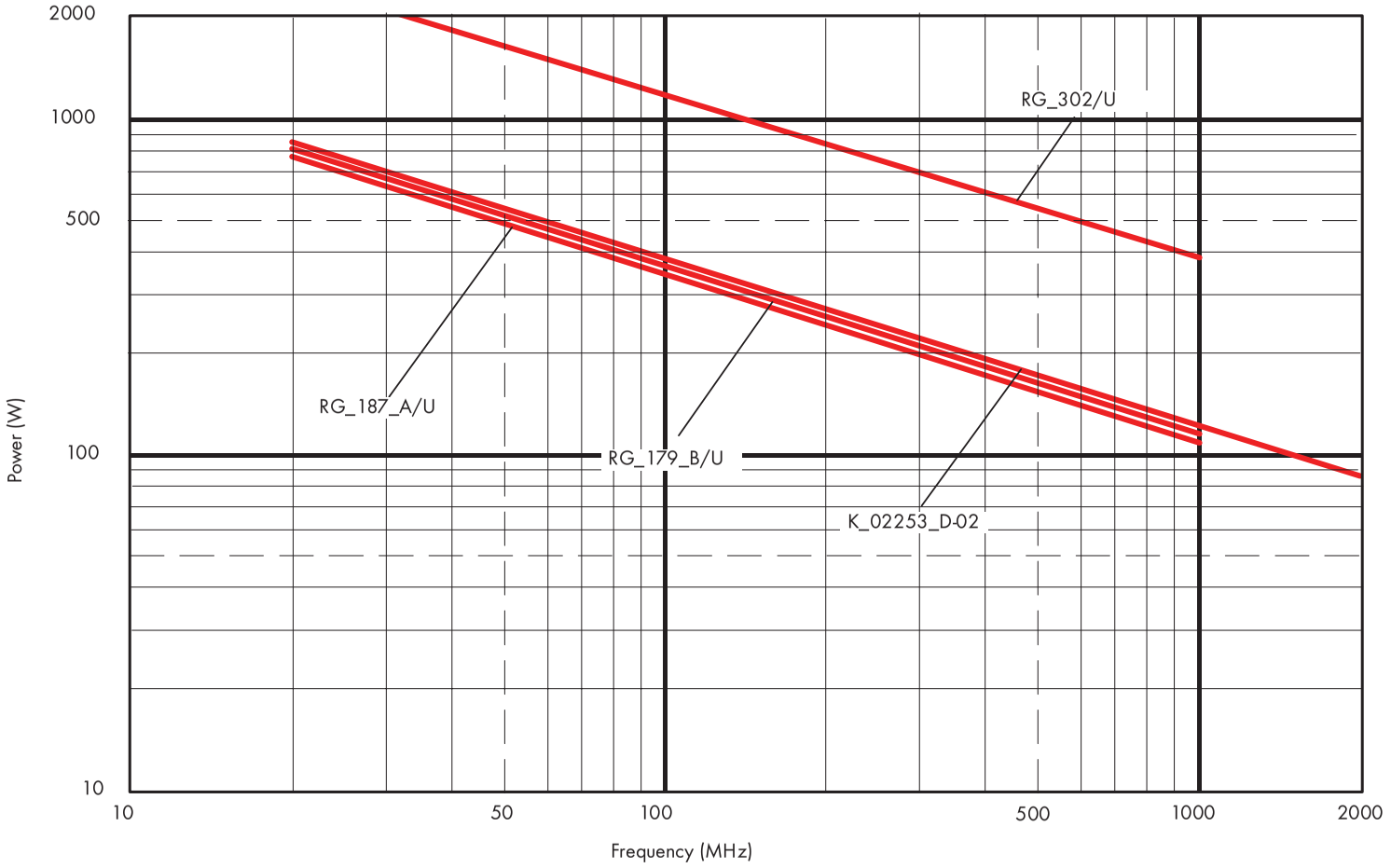
typical values at +20 °C ambient temperature



Power

High temperature RF coax cables, single and double screen, 75 Ω

typical values at +40 °C ambient temperature

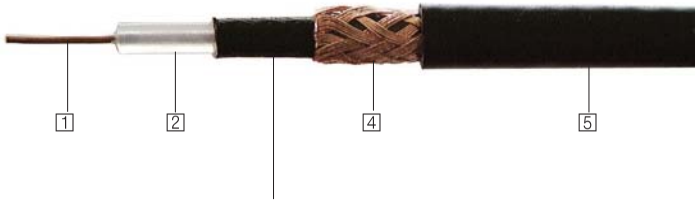


Low noise coax cables

50 Ω

Impedance	50 Ω
Capacity	101 pF/m
Max. operation frequency	1 GHz
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ [5]
Min. bending radius dynamic	15 x ∅ [5]
Temperature range G cables	-25 °C to +85 °C
Temperature range K + RG cables	-65 °C to +165 °C

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



"G" cables: semi-conductor PVC
"K+RG" cables: semi-conductor PTFE

H+S type	Item no.	Center conductor [1]			Dielectric [2]		Screen 1 [4]			Jacket [5]			Weight kg/ 100 m	Operating voltage kV	Low noise voltage mV	Cable group*	
		Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour				crimp	clamp
G_01232_HT-02	22512176	Wire	CuAg	0.28	PE	0.87	CuAg	1.70	94	PVC	2.10	grey	0.80	1.0	20	–	–
RG_404_/U	22510964	Strand-7	StCuAg	0.305	PTFE	0.83	CuAg	1.40	93	FEP	1.90	brown	0.91	0.75	25	U1	–
G_01130_HT	22510085	Wire	Cu	0.40	PE	1.40	Cu	2.40	91	PVC	3.15	black	1.60	1.5	10	U3	–
G_01130_HT-01	22510086	Wire	Cu	0.40	PE	1.40	Cu	2.40	91	PVC	3.15	grey	1.60	1.5	10	U3	–
G_01130_HT-03[a)]	22510088	Strand-7	Cu	0.45	PE	1.40	Cu	2.30	91	PVC	2.80	black	1.30	1.5	10	U3	–
G_01130_HT-12[a)]	22510732	Strand-7	Cu	0.45	PE	1.40	Cu	2.40	91	PVC	2.95	grey	1.30	1.5	10	U3	–
G_01130_HT-21	22511567	Strand-7	Cu	0.45	PE	1.40	Cu	2.30	91	PVC	2.80	grey	1.30	1.5	10	U3	–
G_01130_HT-24	22511866	Strand-7	Cu	0.45	PE	1.40	Cu	2.30	91	PVC	3.15	black	1.50	1.0	10	U3	–
K_02252_HK	22510536	Wire	CuAg	0.52	PTFE	1.53	CuAg	1.55	94	PFA	2.60	black	1.68	0.8	25	U2	–

* for suitable connectors

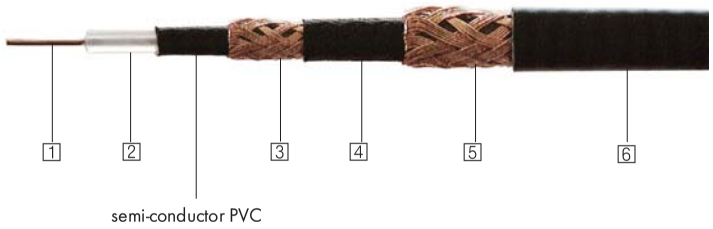
[a)] no print on jacket

Low noise triax cables

50 Ω

Impedance	50 Ω
Capacity	101 pF/m
Max. operation frequency	1 GHz
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ outer diameter [6]
Min. bending radius dynamic	15 x ∅ outer diameter [6]
Temperature range G cables	-25 °C to +85 °C

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



H+S type	Item no.	Center conductor [1]			Dielectric [2]		Screen 1 [3]			Jacket 1 [4]		Screen 2 [5]			Jacket 2 [6]						Cable group*	
		Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Low noise voltage mV	crimp	clamp
G_01330_HT-28	84012306	Wire	StCuAg	0.18	PE	0.68	Cu	1.45	89.5	PE	1.95	Cu	2.80	93	PVC	3.30	blue	1.86	1.0	10	–	–
G_02330_HT	22510116	Wire	CuSn	0.50	PE	1.50	Cu	2.40	92	PE	3.20	Cu	3.85	92	PVC	5.30	grey	4.50	1.0	10	–	–

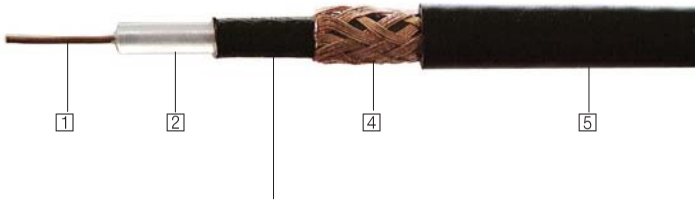
* for suitable connectors

Low noise coax cables

75 Ω

Impedance	75 Ω
Capacity	67 pF/m
Max. operation frequency	1 GHz
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅ [5]
Min. bending radius dynamic	15 x ∅ [5]
Temperature range G cables	-25 °C to +85 °C

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



H+S type	Item no.	Center conductor [1]			Dielectric [2]		Screen 1 [4]			Jacket [5]						Cable group*	
		Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Low noise voltage mV	crimp	clamp
G_03130_HT	22510119	Wire	Cu	0.50	PE	3.00	Cu	4.00	91	PVC	5.00	black	3.70	2.5	20	U13	–
G_03130_HT-01	22510120	Strand-7	Cu	0.489	PE	2.95	Cu	4.00	91	PVC	5.00	black	3.60	2.5	100	U13	–
G_03130_HT-03	22510122	Wire	Cu	0.50	PE	3.00	Cu	4.00	93	PVC	5.00	dark-grey	3.60	2.5	20	U13	–
G_03130_HT-07	22510125	Wire	Cu	0.50	PE	3.00	Cu	4.00	93	PVC	5.00	black	3.70	2.5	20	U13	–
G_03110_HT-08	23037874	Strand-7	Cu	0.49	PE	2.95	Cu	4.00	91	PUR[1)]	5.00	black	3.60	2.5	100	U13	–
G_04233_HT-01	22511337	Wire	StCu	0.58	PE	3.64	Cu	5.00	92	PVC	6.10	black	5.40	3.0	50	U18	–
K_03130_HT-02[a)]	22511739	Wire	CuAg	0.52	FEP	3.00	CuAg	4.00	91	PVC(UL)	5.00	black	4.60	2.3	100	U13	–

* for suitable connectors

a) temperature range: -25 °C to +105 °C

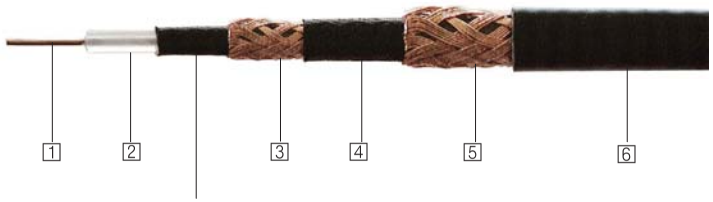
1) Low Smoke Free of Halogen (LSFH) acc. waste electrical and electronic equipment (WEEE) and restriction of the use of certain hazardous substances (RoHS) directive.

Low noise triax cables

75 Ω

Impedance	75 Ω
Capacity	67 pF/m
Max. operation frequency	1 GHz
Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ outer diameter [6]
Min. bending radius dynamic	15 x ∅ outer diameter [6]
Temperature range	-25 °C to +85 °C

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

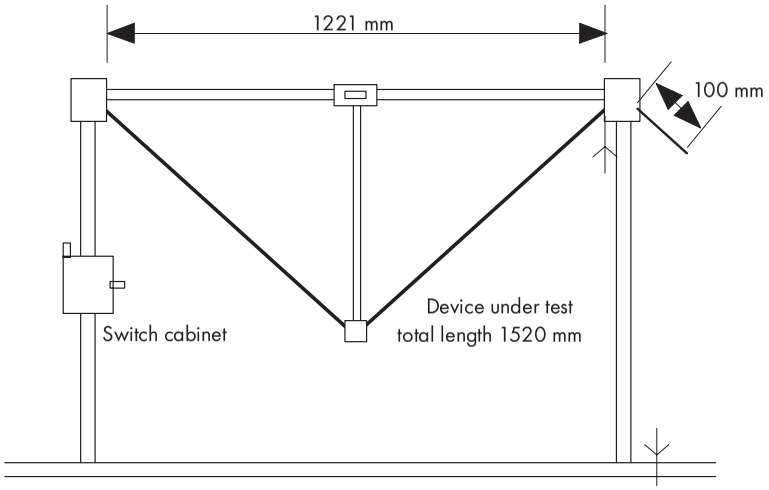


semi-conductor PVC

H+S type	Item no.	Center conductor [1]			Dielectric [2]		Screen 1 [3]			Jacket 1 [4]		Screen 2 [5]			Jacket 2 [6]							Cable group*	
		Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Cap. pF/m	Low noise voltage mV	crimp	clamp
G_03330_HT-07	22510358	Wire	Cu	0.50	PE	3.00	Cu	4.00	93	PVC	5.00	Cu	5.75	92	PVC	6.90	grey	8.10	1.30	71	20	–	–
G_03330_HT-11	22511103	Wire	Cu	0.50	PE	3.00	Cu	4.00	93	PVC	5.00	Cu	5.75	92	PVC	6.90	black	8.10	1.30	71	20	–	–

* for suitable connectors

Measurement procedure



Equipment to measure the noise voltage, acc. MIL-C-17G, § 4.8.14

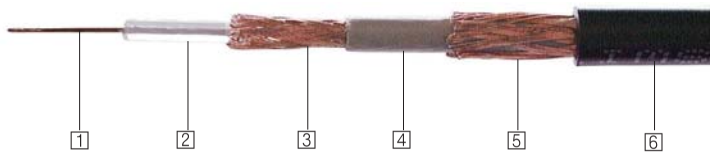
- When moving a standard coax cable a noise charge will be created. The coating of a low noise cable prevents any electrical voltage generation.
- The highest peak will be detected with the calibrated storage oscilloscope over 8 measurement cycles and should not exceed 5 mV.

Triax cables

50 Ω

Impedance	50 Ω
Capacitance	101 pF/m
Max. operation frequency	2 GHz (G_03232 and G_03332-08 up to 1 GHz only)
Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ outer diameter 6
Min. bending radius dynamic	15 x ∅ outer diameter 6
Temperature range G cables	-25 °C to +85 °C

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



H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Jacket 1 4		Screen 2 5			Jacket 2 6					Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	crimp	clamp
G_02332	22510117	104 and 105	Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	PVC	2.55	Cu	3.05	91	PVC	4.25	black	3.00	1.5	–	W1
G_02312-03	84016512		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	PVC	2.55	Cu	3.05	91	PUR[1)]	4.25	black	3.00	1.5	–	W1
G_02332-01	23023565		Strand-7	Cu	0.49	PE	1.50	Cu	2.00	96	PVC	2.55	Cu	3.05	91	PVC	4.25	grey	3.00	1.5	–	W1
G_03362-01[a)]	22511961		Strand-19	CuSn	0.90	PE	2.95	CuSn	3.60	96	LSFH[1)]	4.95	CuSn	5.60	96	LSFH[1)]	7.20	black	9.70	2.5	–	W2
G_03372[a)]	22511435		Strand-7	Cu	0.93	PE	2.95	Cu	3.60	95	PE[1)]	5.00	Cu	5.75	91	PE[1)]	7.35	black	7.90	2.5	–	–
G_03332	22510149		Strand-7	Cu	0.95	PE	2.95	Cu	3.60	95	PVC	5.00	Cu	5.70	91	PVC	7.30	black	9.00	2.5	–	W2
G_03332-08	22511387		Strand-7	Cu	0.95	PE	2.95	Cu	3.60	95	PVC	5.00	Cu	5.70	91	PVC	7.30	red	9.00	2.5	–	W2
G_03372-02[a)]	22511900		Strand-7	Cu	0.95	PE	2.95	Cu	3.60	95	PE[1)]	9.00	Cu	9.75	78	PE[1)]	12.00	black	14.00	2.5[b)]	–	–

* for suitable connectors

a) temperature range: -40 °C to +85 °C

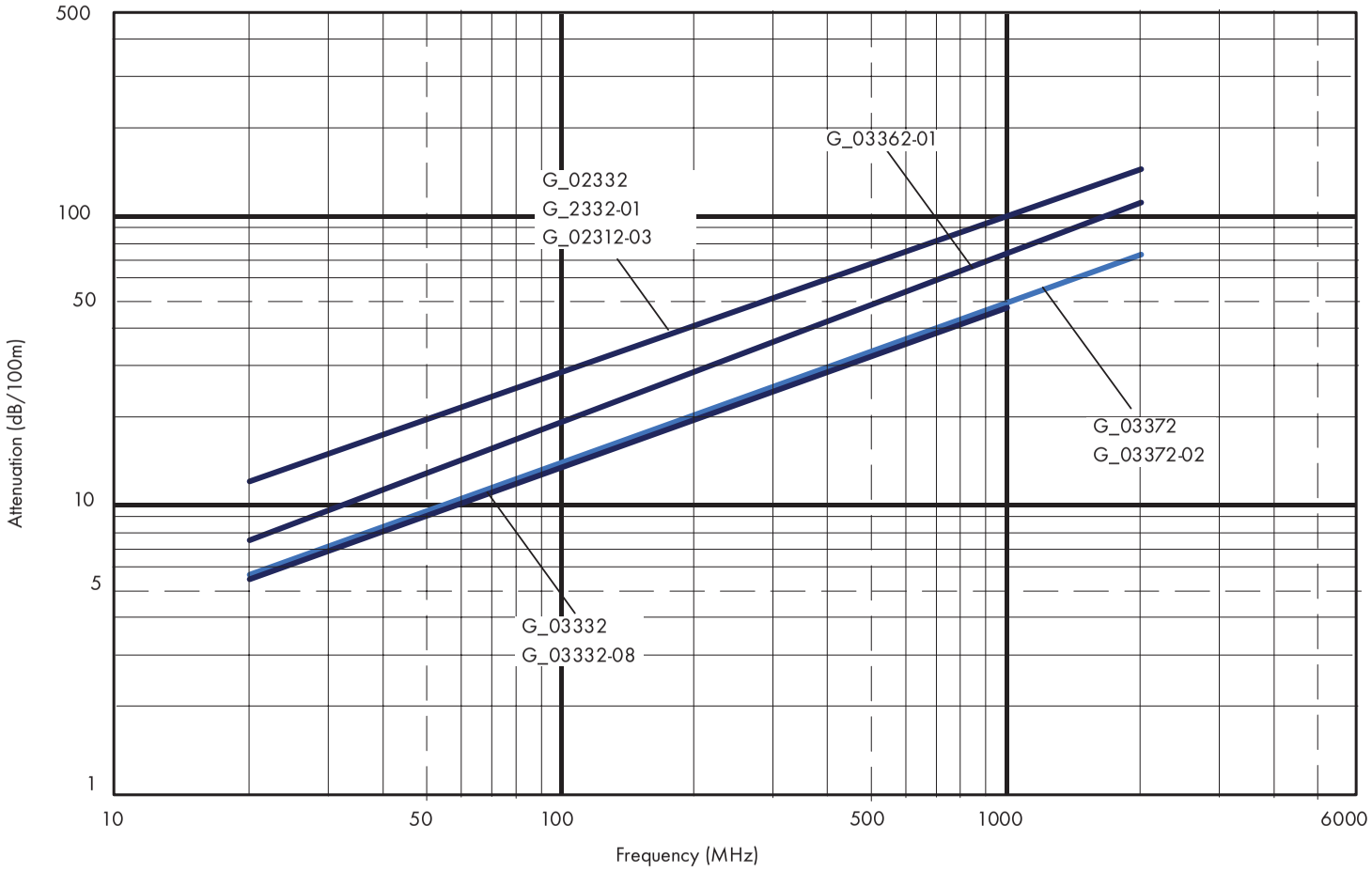
b) 60 kV max. working voltage between screen 1 and 2

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

Triax cables, 50 Ω

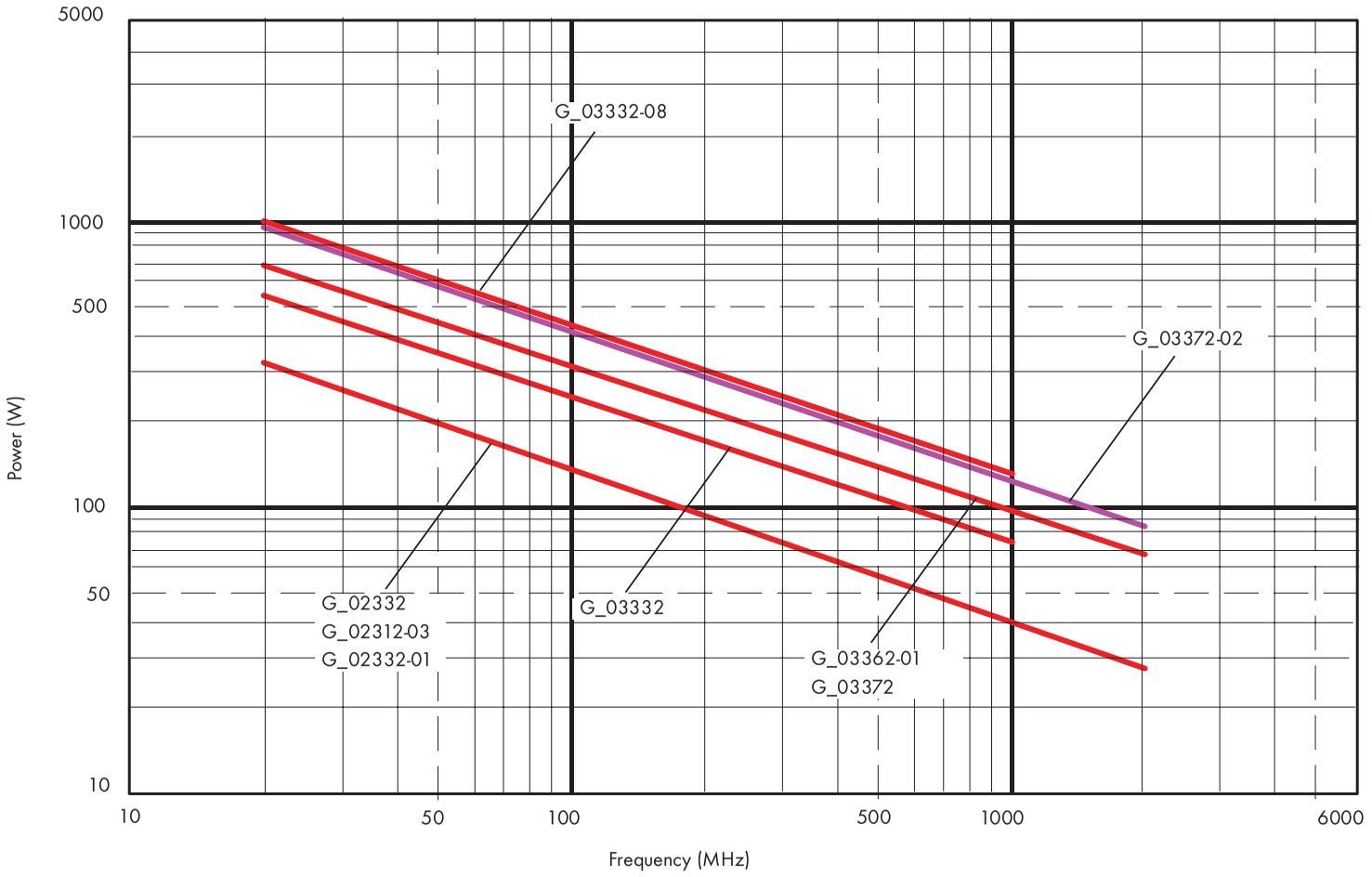
typical values at +20 °C ambient temperature



Power

Triax cables, 50 Ω

typical values at +40 °C ambient temperature

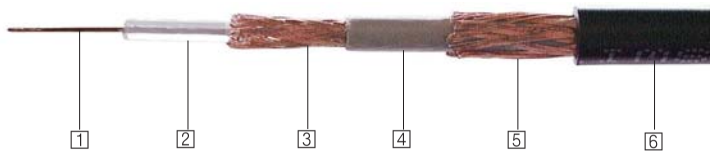


Triax cables

75 Ω

Impedance	75 Ω
Capacitance	67 pF/m
Max. operation frequency	1 GHz (G_04333-60 up to 2 GHz)
Insulation resistance	>10^8 MΩm
Max. frequency	-2 GHz
Min. bending radius static	5 x ∅ diameter 6
Min. bending radius dynamic	15 x ∅ diameter 6
Temperature range G cables	-25 °C to +85 °C

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



H+S type	Item no.		Center conductor 1			Dielectric 2		Screen 1 3			Jacket 1 4		Screen 2 5			Jacket 2 6					Cable group*	
		Curves see page	Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	crimp	clamp
G_02333	22510118	107 and 108	Wire	StCu	0.24	PE	1.50	Cu	2.00	96	PVC	2.80	Cu	3.30	93	PVC	4.30	black	3.10	1.0	–	–
G_02333-60[a]	22511842		Wire	StCu	0.24	PE	1.50	Cu	2.00	96	PVC(UL)	2.80	Cu	3.30	92	PVC(UL)	4.30	black	3.10	1.0	–	–
G_03313[b]	23041420		Wire	Cu	0.47	PE	2.95	Cu	3.60	95	PE	5.00	Cu	5.70	90	PUR[1]	7.35	orange	7.70	2.50	–	–
G_03333	22510379		Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	PVC	5.00	Cu	5.70	90	PVC	7.35	black	8.40	2.50	–	W3
G_03333-60[a]	22511911		Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	PVC(UL)	5.00	Cu	5.70	90	PVC(UL)	7.35	black	8.40	1.0	–	W3
G_04373-02[b]	22511438		Wire	StCu	0.58	PE	3.70	Cu	4.50	94	PE[1]	6.10	Cu	6.80	92	PE[1]	8.40	black	10.20	3.0	–	–
G_04333	22510381		Wire	StCu	0.58	PE	3.65	Cu	4.40	96	PVC2(LM)	6.10	Cu	7.60	93	PVC	9.40	black	15.20	3.0	–	–
G_04333-60[a]	22512162		Strand-7	Cu	0.64	PE	3.75	CuSn	4.45	94	PVC(UL)	5.30	CuSn	6.05	95	PVC(UL)	7.50	grey	9.60	3.0	–	–

* for suitable connectors

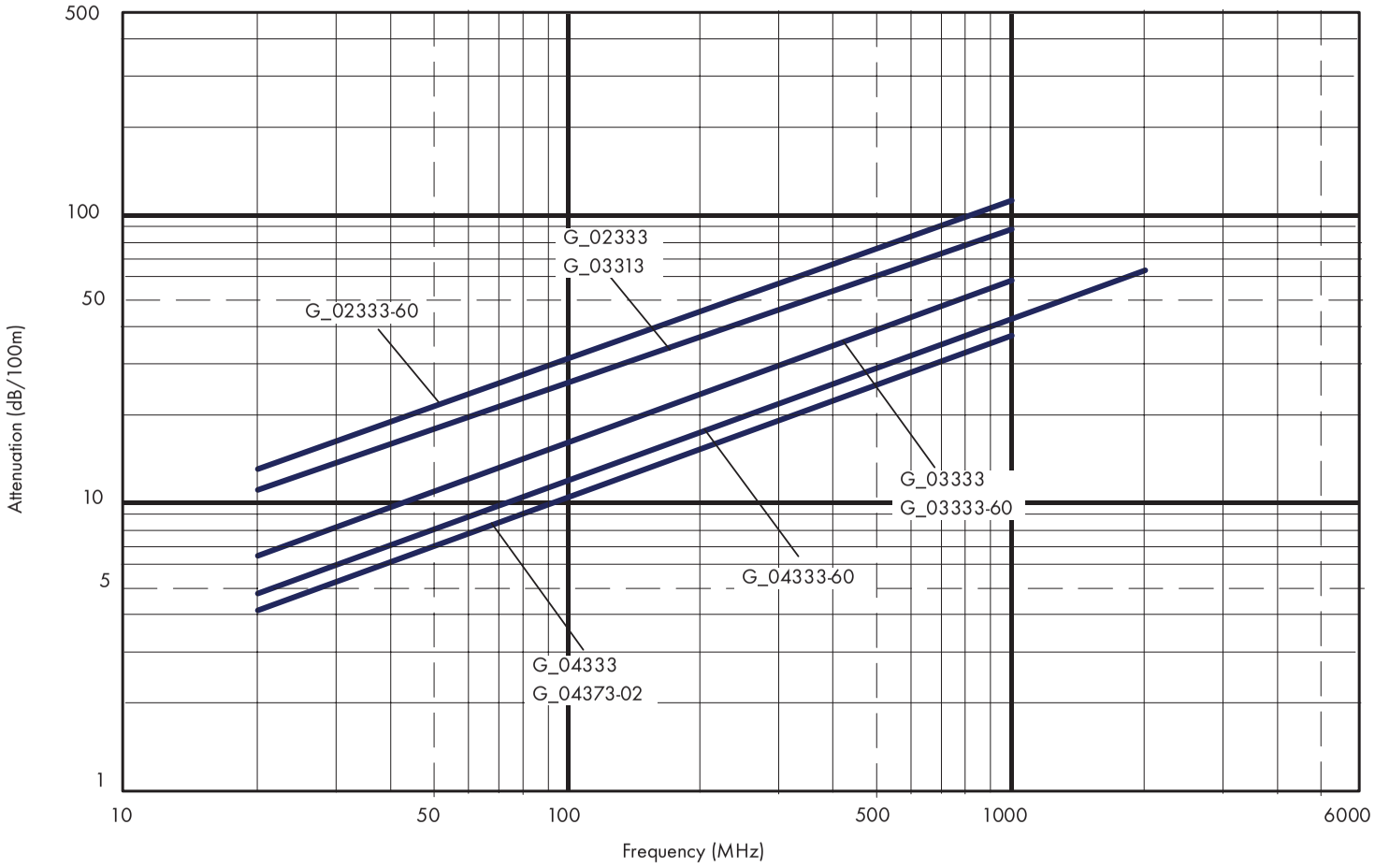
[a] UL recognised (see UL types page 117)

[b] temperature range: -40 °C to + 85 °C

Attenuation

Triax cables, 75 Ω

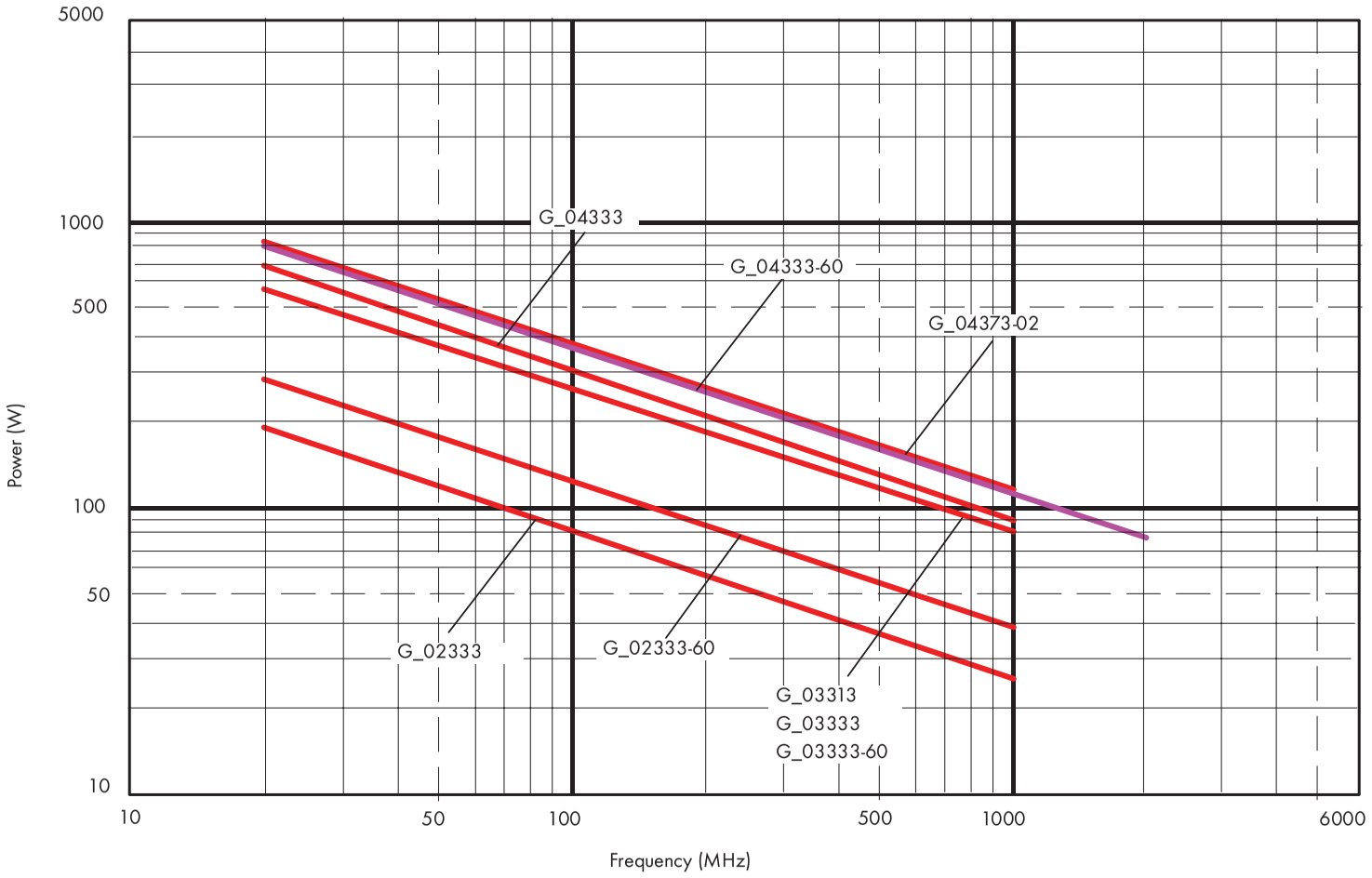
typical values at +20 °C ambient temperature

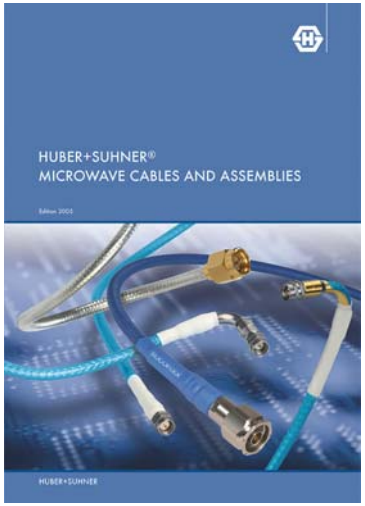


Power

Triax cables, 75 Ω

typical values at +40 °C ambient temperature





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HUBER+SUHNER

your partner - also for
microwave cables
and assemblies

Special Impedances

93 to 150 Ω

Max. operating frequency	1 GHz
Insulation resistance	$>10^8$ MΩm
Min. bending radius static	5 x ∅
Min. bending radius dynamic	15 x ∅
Screening effectiveness	≥ 40 dB at 1 GHz

H+S type	Item no.	Center conductor 1			Dielectric 2		Screen 1 3			Jacket 5							Cable group*	
		Design	Mat.	Dim. mm	Mat.	Dim. mm	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Temperature range	Max. operation frequency	Impedance Ω	crimp	clamp
S_03279_150	22511485	Wire	Cu	0.15	SPE	2.95	Cu	3.60	95	PE[1)]	5.00	black	3.20	-40 °C to +85 °C	1	150	–	–
RG_180_B/U	22510548	Strand-7	StCuAg	0.30	PTFE	2.60	CuAg	3.10	93	FEP	3.60	brown	2.70	-65 °C to +165 °C	1	95	–	–
RG_195_A/U	22510048	Strand-7	StCuAg	0.30	PTFE	2.52	CuAg	3.10	93	PFA	3.70	white	2.80	-65 °C to +165 °C	1	95	–	–
K_04259_100	22510494	Strand-7	StCuAg	0.39	PTFE	3.70	CuAg	4.40	97	FEP	4.90	black	5.40	-65 °C to +165 °C	1	100	–	–
RG_62_B/U	22510420	Wire	StCu	0.60	PE[1)]	3.70	Cu	4.45	93	PVC2(LM)	6.10	black	4.60	-25 °C to +85 °C	1	93	U16	U15
RG_62_A/U	22510028	Wire	StCu	0.62	PE[1)]	3.70	Cu	4.40	93	PVC2(LM)	6.10	black	4.60	-25 °C to +85 °C	1	93	U15	U16
RG_62_A/U-04	22510626	Wire	StCu	0.62	PE[1)]	3.70	Cu	4.40	93	PVC	6.10	black	5.08	-25 °C to +85 °C	1	93	U15	U16
RG_63_B/U	22510029	Wire	StCu	0.62	PE[1)]	7.25	Cu	8.10	96	PVC2(LM)	10.30	black	12.30	-25 °C to +85 °C	1	125	–	–
RG_63_B/U-01	22511882	Wire	StCu	0.62	PE[1)]	7.25	Cu	8.10	96	RADOX[1)]	10.30	black	13.13	-40 °C to +85 °C	1	125	–	–
RG_71_B/U[a)]	22510456	Wire	StCu	0.62	PE[1)]	3.70	Cu	4.40	93	PE[1)]	6.20	black	6.20	-40 °C to +85 °C	1	93	U18	–

* for suitable connectors

[a)] double screened

[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.

Twinax cables

78, 95, 105 Ω

Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ diameter [5]
Min. bending radius dynamic	15 x ∅ diameter [5]
Temperature range G cables	-25 °C to 85 °C

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

H+S type	Item no.	Center conductor [1]				Dielectric [2]		Cabling	Screen [3]			Jacket [5]							Cable group*	
		Lead	Mat.	Constr.	Dim. mm	Mat.	Dim. mm	Mat.	Mat.	Dim. mm	Cover %	Mat.	Dim. mm	Colour	Weight kg/ 100 m	Operating voltage kV	Imp. (Ω)	Cap. pF/m	crimp	clamp
S_03739_120-01	22511286	A	Cu		0.50	SPE	1.50	Lead A+B twisted	Cu	3.60	94	PVC2(LM)	5.00	black	3.30	0.40	120	36	–	–
		B	Cu		0.50	SPE	1.50													
G_05730	22510178	A	CuSn	7 x 0.28	0.84	PE	1.70	Lead A+B twisted, enclosed in PE tube ∅ 4.8 mm	Cu	5.60	92	PVC2(LM)	7.40	black	7.30	1.00	95	53	–	V2
		B	Cu CuSn	6 x 0.28 1 x 0.28	0.84	PE	1.70													
G_06739_105	22510493	A	Cu	7 x 0.31	0.93	PE	1.90	Lead A+B twisted, enclosed in PE tube ∅ 6.0 mm	CuSn	6.80	96	PVC	8.30	grey	9.60	0.75	105	50	–	–
		B	CuSn	7 x 0.31	0.93	PE	1.90													
RG_108_A/U	22510031	A	CuSn	7 x 0.31	0.93	PE	2.00	Lead A+B twisted	CuSn	4.60	87	PVC2(LM)	6.00	black	4.90	1.00	78	70	–	–
		B	Cu CuSn	1 x 0.31 6 x 0.31	0.93	PE	2.00													
RG_22_B/U	22510010	A	Cu	7 x 0.40	1.20	PE	2.25	Lead A+B twisted, enclosed in PE tube ∅ 7.25 mm	CuSn CuSn	8.00 8.70	94 95	PVC2(LM)	10.80	black	17.60	1.00	95	53	–	–
		B	Cu CuSn	6 x 0.40 1 x 0.40	1.20	PE	2.25													

* for suitable connectors

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.

Multi coax cables

50/75 Ω

Impedance	75 and 50 Ω
Insulation resistance	>10^8 MΩm
Min. bending radius static	5 x ∅ outer diameter [5]
Min. bending radius dynamic	15 x ∅ outer diameter [5]
Temperature range S cables	-25 °C to +85 °C
Temperature range K cables	-40 °C to +85 °C

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

H+S type	Item no.		Individual cable			Cabling			Overall screen			Overall jacket			
		Imp. Ω	Type Typ	Number Anzahl	mm	Construction Aufbau	Band	mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m
3 / S_02223_01	22511364	75	S_02223 S_02223-01 S_02223-02	1 1 1	2.55 2.55 2.55	3 cables twisted	PETP	5.40	–	–	–	PVC	6.80	grey	6.00
4 / S_02223	22511397	75	S_02223 S_02223-01 S_02223-02 S_02223-03	1 1 1 1	2.55 2.55 2.55 2.55	4 cables twisted	PETP	6.10	–	–	–	PVC	7.50	grey	7.20
5 / S_02223	22511789	75	S_02223 S_02223-01 S_02223-02 S_02223-03 S_02223-04	1 1 1 1 1	2.55 2.55 2.55 2.55 2.55	5 cables twisted	PETP	6.90	–	–	–	PVC	8.80	grey	9.50
6 / RG_174_A/U-60/2/3-60[a)]	22511808	50	RG_174_A/U-60	6	2.80	6 cables twisted	PTFE	8.65	–	–	–	PVC	10.80	black	13.10

[a)] UL recognised (see UL types page 117)

[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.

UL recognised RF coax cable types

Standard RG coax cables, 50 Ω

H+S type	Item no.	UL style	Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
			Design	Mat.	Ø mm	Mat.	Ømm	Mat.	Ø mm	Cover %	Ømm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
RG_214_U-60	22511566	1478	Strand-7	CuAg	2.25	PE	7.28	CuSn	8.00	93	8.70	95	PVC	10.80	black	18.90	5.0	6	U32	U33
RG_223_U-60	22511565	1354	Wire	CuSn	0.88	PE	2.95	CuSn	3.60	96	4.20	94	PVC	5.40	grey	5.50	2.5	6	U9	U10
RG_174_A/U-60	22511810	1354	Strand-7	StCu	0.48	PE	1.48	CuSn	2.00	87	–	–	PVC(UL)	2.80	black	1.30	1.5	1	U2	U2
RG_188_A/U-60	22511839	1354	Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	94	–	–	FEP	2.60	black	1.30	1.5	1	U2	U2
RG_58_C/U-62	23024284	1354	Strand-19	CuAg	0.90	PE	2.95	CuAg	3.60	96	–	–	PVC(UL)	4.95	black	3.70	2.5	1	U7	U7
G_02232_D-60	22511746	1354	Strand-7	Cu	0.49	PE	1.50	CuAg	1.95	97	2.05	100	PVC(UL)	3.10	grey	2.10	1.50	6	U4	U4

* for suitable connectors

Standard RG coax cables, 75 Ω

H+S type	Item no.	UL style	Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
			Design	Mat.	Ø mm	Mat.	Ø mm	Mat.	Ø mm	Cover %	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
G_03233-60	22511927	1354	Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	–	–	PVC(UL)	5.00	black	3.90	2.5	2.5	U12	U12

* for suitable connectors

NOTE: More technical information regarding these types is listed in the cable chapters. The corresponding number of the page ist to be found in the type index at the end of this catalogue.

Low Loss RF coax cables, 50 Ω

H+S type	Item no.	UL style	Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4		Jacket 5						Cable group*	
			Design	Mat.	Ø mm	Mat.	Ø mm	Mat.	Ø mm	Cover %	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. operation frequency	crimp	clamp
S_02132_D-60	84010316	1354	Wire	CuAg	0.88	SPE	2.42	CuAg	2.95	92	3.60	96	PVC(UL)	4.80	black	4.50	0.35	6	–	–
S_03262_B-60	84010497	1354	Wire	Cu	1.06	SPE	2.96	Al-PES	3.05	100	3.80	90	LSFH[1)]	4.50	black	3.26	0.40	5	–	–
S_04162_B-60	84023780	1354	Wire	Cu	1.40	SPE	3.80	Al-PES	4.00	100	4.53	86	LSFH[1)]	5.50	black	4.78	1.00	6	–	–
S_03262_B-60	84018244	1354	Wire	Cu	1.065	SPE	2.96	Al-PES	3.05	100	3.80	90	PVC(UL)	4.50	black	3.17	0.40	5	–	–

* for suitable connectors

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.

Low Loss RF coax cables, 75 Ω

H+S type	Item no.	UL style	Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5						Cable group*	
			Design	Mat.	Ø mm	Mat.	Ø mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
S_07233_B-60	22511786	1354	Wire	Cu	1.57	SPE	7.25	Al-PES	7.30	100	CuSn	8.10	89	PVC(UL)	10.30	black	12.40	1.00	2	–	–
SX_03272_B-60	84010513	1354	Wire	Cu	1.065	SPEX	2.96	Al-PES	3.05	100	CuSn	3.80	90	RADOX[1)]	4.50	black	3.25	0.4	5	–	–
SX_04172_B-60	84026748	1354	Wire	CuAg	1.40	SPEX	3.80	Al-PES	4.00		CuSn	4.53	86	RADOX[1)]	5.50	black	4.78	0.7	6	–	–
SX_03232_B-60	84018307	1354	Wire	Cu	1.065	SPEX	2.96	Al-PES	3.05	100	CuSn	3.80	90	PVC(UL)	4.50	black	3.19	0.4	5	–	–

* for suitable connectors

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.

NOTE: More technical information regarding these types is listed in the cable chapters. The corresponding number of the page ist to be found in the type index at the end of this catalogue.

ENVIROFLEX - halogen free coax cables, 50 Ω

H+S type	Item no.	UL style	Center conductor 1			Dielectric 2		Screen 1 3			Screen 2 4			Jacket 5							Cable group*	
			Design	Mat.	Ø mm	Mat.	Ø mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	Screen. effect.	crimp	clamp
EF_178	23010656	3651	Strand-7	StCuAg	0.305	SPEX	0.82	CuAg	1.35	95	–	–	–	RADOX[1)]	1.84	blue	0.65	1.0	3	40	U1	U1
EF_178_D	23030426	3651	Strand-7	StCuAg	0.305	SPEX	0.82	CuAg	1.35	96	CuAg	1.85	92	RADOX[1)]	2.45	blue	1.12	1.0	6	60	–	–
EF_316	23009565	3651	Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.00	99	–	–	–	RADOX[1)]	2.54	blue	1.60	1.5	3	40	U2	U2
EF_316_D	22512281	3651	Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.03	96	CuAg	2.50	90	RADOX[1)]	3.16	black/blue**	2.10	1.5	6	70	U4	U4
EF_142	22512168	3651	Wire	CuAg	0.95	SPEX	2.98	CuAg	3.58	97	CuAg	4.18	95	RADOX[1)]	5.00	black/blue**	6.00	2.5	6	75	U9	U10
EF_400	22512280	3651	Strand-19	CuAg	1.00	SPEX	3.03	CuAg	3.72	96	CuAg	4.24	91	RADOX[1)]	5.00	black/blue**	6.00	2.5	6	70	U11	U10
EF_400-01	84008746	3651	Strand-19	CuAg	1.00	SPEX	3.03	CuAg	3.72	96	CuAg	4.24	91	RADOX[1)]	5.00	black	6.00	2.5	6	70	U11	U10
EF_393	22512282	3651	Strand-7	CuAg	2.46	SPEX	7.35	CuAg	8.00	92	CuAg	8.75	99	RADOX[1)]	10.10	black/blue**	18.00	5.0	6	78	U33	U33
EF_316_D-01	84011098	3651	Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.03	96	CuAg	2.50	90	RADOX[1)]	3.16	black	2.10	1.5	6	70	U4	U4
EF_316_03	84027942	3651	Strand-7	StCuAg	0.54	SPEX	1.54	CuAg	2.05	99	–	–	–	RADOX[1)]	2.52	black	1.60	1.5	3	40	U2	U2
EF_178-01	84032838	3651	Strand-7	StCuAg	0.305	SPEX	0.82	CuAg	1.35	95	–	–	–	RADOX[1)]	1.84	black	0.65	1.0	3	40	U1	U1
EF_179	23019104	3651	Strand-7	StCuAg	0.305	SPEX	1.55	CuAg	2.13	94	–	–	–	RADOX[1)]	2.54	blue	1.11	1.50	1	40	U5	U5
EF_179-01	84021688	3651	Strand-7	StCuAg	0.305	SPEX	1.55	CuAg	2.13	94	–	–	–	RADOX[1)]	2.54	black	1.11		1	40	U5	U5

* for suitable connectors

EF = ENVIROFLEX

** black with blue line

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.

NOTE: More technical information regarding these types is listed in the cable chapters. The corresponding number of the page ist to be found in the type index at the end of this catalogue.

High temperature, flame retardant RF coax cables, 50 Ω

H+S type	Item no.	UL style	Center conductor [1]			Dielectric [2]		Screen 1 [3]			Screen 2 [4]			Jacket [5]						Cable group*	
			Design	Mat.		Mat.	Ø mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	Max. oper. freq.	crimp	clamp
K_02252_D-60	22511904	1354	Strand-7	CuAg	0.54	FEP	1.54	CuAg	2.00	96	CuAg	2.50	91	FEP	3.00	brown	2.40	1.45	6	U4	U4
K_02252_D-62[b]	22511857	1354	Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	97	CuAg	2.55	97	FEP	2.95	grey	2.50	0.85	6	U4	U4
RG_188_A/U	22511839	1354	Strand-7	StCuAg	0.54	PTFE	1.55	CuAg	2.00	97	–	–	–	FEP	2.60	black	1.30	1.5	1	U2	U2

* for suitable connectors

Triax cables, 78, 95, 105 Ω

H+S type	Item no.	UL style	Center conductor [1]			Dielectric [2]		Screen 1 [3]			Jacket 1 [4]		Screen 2 [5]			Jacket 2 [6]					Cable group*	
			Design	Mat.	Ø mm	Mat.	Ø mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m	Operating voltage kV	crimp	clamp
G_02333-60	22511842	1354	Wire	StCu	0.24	PE	1.50	Cu	2.00	96	PVC(UL)	2.80	Cu	3.30	92	PVC(UL)	4.30	black	3.10	1.0	–	–
G_03333-60	22511911	1354	Strand-7	Cu	0.49	PE	2.95	Cu	3.60	95	PVC(UL)	5.00	Cu	5.70	90	PVC(UL)	7.35	black	8.40	1.0	–	W3
G_04333-60	22512162	1354	Strand-7	Cu	0.64	PE	3.75	CuSn	4.45	94	PVC(UL)	5.30	CuSn	6.05	95	PVC(UL)	7.50	grey	9.60	3.0	–	–

* for suitable connectors

Multi coax cables, 50 Ω

H+S type	Item no.	UL style		Individual cable			Cabling			Overall screen			Overall jacket			
			Imp. Ω	Type	Number Anzahl	mm	Construction Aufbau	Band	mm	Mat.	Ø mm	Cover %	Mat.	Ø mm	Colour	Weight kg/ 100 m
6/RG_174_A/U-60-2-3-60	22511808	1354	50	RG_174_A/U-60	6	2.80	6 cables twisted	PTFE	8.65	–	–	–	PVC	10.80	black	43.70

* for suitable connectors

NOTE: More technical information regarding these types is listed in the cable chapters. The corresponding number of the page ist to be found in the type index at the end of this catalogue.

Quick selection

	your benefit
solid	attenuation
stranded	flexibility / flex life
PE	halogenfree
SPE	attenuation
PTFE	temperature up to +165 °C
single	up to 1 GHz
double	up to 6 GHz
tape	above 6 GHz
PVC	flexibility
PE	chemical and abrasion resistance
PUR	abrasion resistance, flexible
LSFH	halogenfree, flame retardant up to +85 °C
RADOX	halogenfree, flame retardant up to +105 °C
FEP/PFA	excellent chemical resistance and abrasion resistant operation up to +165 °C(200 °C resp. 260 °C)

Material selection guide

Requested properties	Possible materials			
	Center conductor	**Dielectric**	**Screen**	**Jacket**
Flexibility	Strand	SPE	large braid angle	PVC / PUR
Temperature resistance over 150 °C	*	PTFE / PFA / FEP	*	PFA / FEP / FEP
Temperature resistance below -150 °C	*	PTFE / PI	*	FEP / PTFE / PI
Water barrier across to the cable axis	*	*	Al-Foil or CuSn / CuAg with PETP-Foil	PE / FEP
Flame retardant, halogenated	*	PTFE / PFA / FEP	*	RADOX 155 / FEP / PFA / ETFE
Flame retardant, halogenfree	*	PE and SPE crosslinked	*	LSFH / RADOX 125
Halogenfree, (flamable)	*	PE / SPE	*	PE / PA / PUR
Radiation resistance	*	PE / ETFE / PI / PEEK	*	ETFE / RADOX / PI
Continuous weather resistance	*	*	*	PUR, FEP
Weather resistance	*	*	*	PE bk / RADOX bk / PVC bk
Abrasion resistance	*	*	*	PUR / FEP
Oil resistance	*	*	*	PVC spec. / FEP / Elastomer / PA / PUR
Acid resistance (non-oxidating)	*	*	*	FEP / PE / PP
Solvent resistance	*	*	*	FEP
Fuel resistance	*	*	*	FEP
Alkali resistance	*	*	*	FEP / PE / PP
Oxidant resistance	*	*	*	FEP, PFA
Rodent proof	*	*	*	Steel band, steel wire braid
Low attenuation	Wire (Cu-Ag)	SPE	CuAg double braid CuAg wrapped, Al-Foil length	*
Migration resistance according to MIL-C-17G	*	*	*	all, except PVC 1
Temperature range -40 °C bis 85 °C	*	PE / PTFE / ETFE / PEEK	*	PE / PA / PUR / ETFE / FEP / PFA
Low noise application	*	*	Semicond. and Cu / CuAg	

[a] PI (Kapton®, DuPont)

* does not influence that particular property

Comparison of insulation and jacket materials

Application for	PE Jacket or dielectric	SPE Dielectric	PVC Jacket	PUR Jacket	PA Jacket	RADOX Jacket	LSFH Jacket	PTFE Dielectric	PFA Jacket or dielectric	FEP Jacket or dielectric
Electrical properties										
Dielectric constant at 10^6 Hz	2.28	1.3...2.0	–	–	–	–	–	2.05	2.1	2.1
Dissipation factor at 10^6 Hz	1.5×10^{-4}	3×10^{-4}	–	–	–	–	–	10^{-4}	3×10^{-4}	3×10^{-4}
Volume resistivity MΩm	10^8	–	10^5	10^4	10^5	10^3 - 10^8 3)	10^6	10^{10}	10^{10}	10^{11}
Dielectric strength kV/mm	40	20	20 - 25	14 - 25	38	30	26	50	70	82
Physical properties										
Density kg/m^3	930	x ... x	1200-1500	1100-1600	1010	1200-1500	1500	2140-2180	2150	2140-2170
Nominal service temperature °C	85, cross-linked: 105	85, cross-linked:105	85 to 105	85	85	125 (GKW-S) 105	85	260	260	200
Low temperature limit °C	- 40	- 40	- 25 to - 40	- 40	- 40	- 40 to - 50	- 40	- 200	- 100	- 100
Solder resistance	medium; cross-linked: good	medium; crosslinked good	low	low	medium	high	low	high	high	high
Flammability	high flammable	high flammable	flammable (plasticizer)	flammable	flammable	flame retardant halogen free	flame retardant, halogen free	not flammable	not flammable	not flammable
Smoke generation	low	low	high, corrosive gases	high	high	low to medium	medium	low	low	low
Combustibility	keeps burning	keeps burning	extinguishes outside the flame	keeps burning, drops off	keeps burning	self-extinguishing	self-extinguishing	not flammable not recommended because of its halogen content	not flammable	not flammable

Application for	PE Jacket or dielectric	SPE Dielectric	PVC Jacket	PUR Jacket	PA Jacket	RADOX Jacket	LSFH Jacket	PTFE Dielectric	PFA Jacket or dielectric	FEP Jacket or dielectric
Environmental properties										
Weather resistance	black: high; coloured: medium	–	high	black: high; coloured: medium	high	black: high; coloured: medium	black: high; coloured: medium	excellent	excellent	excellent
Water resistance	high	high	sufficient	high	low	high	high	high	high	high
Radiation resistance Mrad	100	100	1	1	0.1	100	10	3	1	100
Chemical resistance at about 20 °C - non-oxidizing acids - Alkali - Oil - Solvents, e.g. Ethanol, Benzene, Trichloromethane, etc.	 high high high 1)	 low high low bad	 low-high 3) low-high 3) low-high 3) 2)	 medium medium medium medium	 low low low-high low with aromatic solvents; high with aliphatic solvents	 low low - medium3) low - medium3) low - medium3)	 low low low low	 excellent excellent excellent excellent	 excellent excellent excellent excellent	 medium medium high high
Mechanical properties										
Tensile strength N/mm^2	10 - 30	9.5	13 - 34	50	60	10 - 14	7	27.5	20.6	28
Elongation %	150 - 600	270	130 - 350	650	300	150 - 250	150	300	300	500
Abrasion resistance	high	low; cross-linked: high	medium	excellent	high	medium	medium	high	high	high

1) Depends on the applied solvents

2) The chemical resistance depends on the type of PVC and the plasticizer applied

3) Properties may differ with the compound applied

4) PETE = Polyethylene Terephthalate, Hytrel®, DUPONT

Suitable connector groups

Connector type		Cable entry
R6 (G 02133 D-05 (Cable Group R6)		
Straight cable plugs	11_BNC-75-2-21/133_NH	crimp
Right angle cable plugs	16_BNC-75-2-5/133_NE	crimp
Straight bulkhead cable jacks	24_BNC-75-2-15/133_NH	crimp
R8 (K 02253 D-02)		
Straight cable plugs	11_MCX-75-2-6/113_NE	crimp
S5 (S 02223-02)		
Straight cable plugs	11_BNC-75-2-18/133_NE	crimp
Straight cable jacks	21_BNC-75-2-7/133_NE	crimp
Straight bulkhead cable jacks	24_BNC-75-2-12/133_UE	crimp
S7, S8, S9 (on request)		
S16 (S 04262 D)		
Straight cable plugs	11_N-50-4-63/133_NE	crimp
Right angle cable plugs	16_N-50-4-14/133_NE 16_TNC-50-4-115/133_NE 16_QMA-50-4-1/133_NH 16_QN-50-4-1/133_NE	crimp crimp crimp crimp
Straight bulkhead cable jacks	24_N-50-4-17/133_UE	crimp
S24 (S 06162 D-02)		
Straight cable plugs	11_N-50-6-10/133_NH 11_716-50-6-3/003_-E	crimp crimp
Straight panel cable jacks	25_716-50-6-2/003_-V	crimp

Connector type		Cable entry
S26 (S 06132 D-10)		
Straight cable plugs	11_N-50-6-5/133_NE	crimp
Right angle cable plugs	16_N-50-6-8/133_NE	crimp
S32 (S 07262 BD, SX 07272 BD)		
Straight cable plugs	11_716-50-7-14/003_-E 11_N-50-7-49/133_NE	crimp crimp
Right angle cable plugs	16_716-50-7-11/003_-E 16_N-50-7-22/133_NE	crimp crimp
Straight cable jacks	21_716-50-7-11/003_-E 21_N-50-7-20/133_N	crimp crimp
S39 (S 10162 B-11, S 10172 B-11)		
Straight Cable Plugs	11_716-50-10-3/003_-Z 11_N-50-10-5/103_UV	crimp crimp
Right Angle Cable Plugs	16_N-50-10-1/103_UV	crimp
Straight cable jacks	21_716-50-10-1/003_-Z 21_N-50-10-1/133_UF	crimp crimp
U0 (K 01152-7)		
Straight cable plugs	11_MMCX-50-1-2/111_OE 16_MMCX-50-1-2/111_OH 21_MMCX-50-1-2/111_OE	crimp crimp crimp

Connector type		Cable entry
U1 (RG 178 B/U, RG 196 A/U, G 01132-06, K 01232-05)		
Straight cable plugs	11_BNC-50-1-1/133_NE 11_BNC-50-1-5/133_NE 11_MCX-50-1-13/111_NH 11_MCX-50-1-13/133_NH 11_MMBX-50-1-1/111_NE 11_MMCX-50-1-1/111_OH 11_QLA-01-1-8/122_NE 11_SMA-50-1-4/111_NE 11_SMB-50-1-40/111_NH 11_SMC-50-1-6/111_NE 11_SMC-50-1-10/111_NH 11_SMS-50-1-10/111_NE	clamp crimp crimp crimp crimp crimp crimp crimp crimp clamp crimp crimp
Right angle cable plugs	16_MCX-50-1-7/111_NH 16_MCX-50-1-7/133_NH 16_MMBX-50-1-1/111_NE 16_MMCX-50-1-1/111_OH 16_QLA-01-1-1/122_NE 16_SMA-50-1-1/111_NH 16_SMB-50-1-40/111_NE 16_SMB-50-1-50/111_NE 16_SMC-50-1-10/111_NH 16_SMC-50-1-20/111_NE 16_SMS-50-1-10/111_NH	crimp crimp crimp crimp crimp crimp crimp crimp crimp crimp crimp
Straight cable jacks	21_BNC-50-1-4/133_NE 21_MCX-50-1-11/111_NH 21_MMCX-50-1-1/111_OE 21_SMB-50-1-10/111_NE	crimp crimp crimp crimp

	Connector type	Cable entry
U1 (cont.)		
Straight bulkhead cable jacks	24_BNC-50-1-1/133_NE	clamp
	24_BNC-50-1-6/133_NE	crimp
	24_MCX-50-1-13/111_NH	crimp
	24_MCX-50-1-13/133_NH	crimp
	24_MMCX-50-1-1/111_OH	crimp
	24_QLA-01-1-11/112_NE	clamp
	24_QLA-01-1-12/112_NH	clamp
	24_SMB-50-1-10/111_NE	crimp
	24_SMC-50-1-10/111_NH	crimp
U2 (RG 174 /U, RG 188 A/U, RG 316 /U)		
Straight cable plugs	11_1023-C50-2-3/111_NH	crimp
	11_BNC-50-2-1/133_NE	clamp
	11_BNC-50-2-13/133_NH	crimp
	11_MCX-50-2-16/111_NH	crimp
	11_MCX-50-2-16/133_NH	crimp
	11_MMBX-50-2-1/111_NE	crimp
	11_MMCX-50-2-3/111_OH	crimp
	11_N-50-2-1/133_NE	clamp
	11_N-50-2-11/133_NH	crimp
	11_QLA-01-2-8/122_NH	crimp
	11_QLA-01-2-11/122_NE	clamp
	11_QMA-50-2-2/133_NH	crimp
	11_SMA-50-2-5/111_NH	crimp
	11_SMA-50-2-27/111_NH	crimp
	11_SMA-50-2-42/133_NH	crimp
	11_SMA-50-2-55/199_NE	crimp
	11_SMB-50-2-40/111_NH	crimp
	11_SMC-50-2-5/111_NE	clamp
	11_SMC-50-2-10/111_NH	crimp
	11_SMC-50-2-10/133_NE	crimp
	11_SMS-50-2-110/111_NH	crimp
	11_TNC-50-2-1/133_NE	clamp
	11_TNC-50-2-112/133_NE	crimp
Straight bulkhead cable plugs	14_BMA-50-2-3/199_NE	crimp

	Connector type	Cable entry
Right angle cable plugs	16_BNC-50-2-9/133_NE	clamp
	16_BNC-50-2-3/133_NE	crimp
	16_MCX-50-2-14/111_NH	crimp
	16_MCX-50-2-14/133_NH	crimp
	16_MCX-50-2-102/111_NH	soldered
	16_MMBX-50-2-1/111_NE	crimp
	16_MMCX-50-2-4/111_OH	crimp
	16_QLA-01-2-1/122_NE	crimp
	16_QMA-50-2-2/133_NH	crimp
	16_SMA-50-2-105/111_NH	crimp
	16_SMA-50-2-145/133_NH	crimp
	16_SMB-50-2-40/111_NH	crimp
	16_SMB-50-2-50/111_NH	crimp
	16_SMC-50-2-5/111_NE	clamp
	16_SMC-50-2-10/111_NH	crimp
	16_SMC-50-2-20/111_NE	crimp
	16_SMS-50-2-10/111_NE	crimp
	16_TNC-50-2-119/133_NE	crimp
U3 (G 01130 HT)		
Straight cable plugs	11_BNC-50-2-16/133_NH	crimp
	11_QLA-01-2-13/122_NH	crimp
Right angle cable plugs	16_QLA-01-2-13/122_NH	crimp
U4 (K 02252 D, G 02232 D, EF 316 D)		
Straight cable plugs	11_1023-C50-2-2/111_NH	crimp
	11_BNC-50-2-14/133_NH	crimp
	11_MCX-50-2-15/111_NH	crimp
	11_MCX-50-2-15/133_NH	crimp
	11_MMBX-50-2-2/111_NE	crimp
	11_MMCX-50-2-4/111_OE	crimp
	11_N-50-2-16/133_NE	crimp
	11_N-50-2-2/133_NE	clamp
	11_QLA-01-2-9/122_NH	crimp
	11_QMA-50-2-1/133_NH	crimp
	11_SMA-50-2-6/111_NH	crimp
	11_SMA-50-2-41/133_NH	crimp
	11_SMA-50-2-56/199_NH	crimp
	11_SMB-50-2-41/111_NH	crimp
	11_SMC-50-2-11/111_NE	crimp
	11_TNC-50-2-113/133_NE	crimp

	Connector type	Cable entry
Right angle cable plugs	16_BNC-50-2-5/133_NH	crimp
	16_MCX-50-2-11/111_NH	crimp
	16_MCX-50-2-11/133_NH	crimp
	16_MMBX-50-2-2/111_NE	crimp
	16 MMCX-50-2-2/111 _OH	crimp
	16_QLA-01-2-4/122 _NH	crimp
	16_QMA-50-2-1/133_NH	crimp
	16_SMA-50-2-106/111_NH	crimp
	16_SMA-50-2-141/133_NH	crimp
	16_SMB-50-2-41/111_NH	crimp
	16_SMB-50-2-51/111_NH	crimp
	16_SMC-50-2-11/111_NE	crimp
	16_TNC-50-2-7/133_NE	crimp
Straight cable jacks	21_ 1023-C50-2-2/111_NE	crimp
	21_BNC-50-2-10/133_NE	crimp
	21_MCX-50-2-12/111_NE	crimp
	21_MCX-50-2-12/133_NH	crimp
	21_SMA-50-2-6/111_NH	crimp
	21_SMB-50-2-11/111_NE	crimp
	21_SMC-50-2-11/111_NE	crimp
Straight bulkhead cable jacks	24_BNC-50-2-14/133_NH	crimp
	24_MCX-50-2-6/111_NH	crimp
	24_N-50-2-117/133_NE	crimp
	24_QMA-50-2-2/133_NH	crimp
	24_SMA-50-2-13/111_NH	crimp
	24_SMA-50-2-45/133_NH	crimp
	24_SMB-50-2-111/111_NH	crimp
	24_TNC-50-2-29/133_NH	crimp
Straight panel cable jacks	25_BNC-50-2-16/133_NE	crimp
	25_N-50-2-10/133_NE	crimp
	25_SMA-50-2-6/111_NE	crimp
	25_SMA-50-2-46/133_NE	crimp

Connector type		Cable entry
U5 (RG 179 B/U, RG 187 A/U)		
Straight cable plugs	11_BNC-75-2-1/133_NE 11_BNC-75-2-15/133_NH 11_MCX-75-2-1/113_NE	clamp crimp crimp
Right angle cable plugs	16_BNC-75-2-3/133_NE 16_MCX-75-2-5/133_NH	crimp crimp
Straight cable jacks	21_BNC-75-2-5/133_NE	crimp
Straight bulkhead cable jacks	24_BNC-75-2-6/133_NH 24_MCX-75-2-1/113_NE	crimp crimp
Straight panel cable jacks	25_BNC-75-2-7/133_NE 25_BNC-75-2-8/133_NE	crimp crimp
U6 (G 03133-06)		
Straight cable plugs	11_BNC-75-2-12/113_NE	clamp
U7 (RG 58 C/U, RG 303 /U, G 03232, GX 03272)		
Straight cable plugs	11_BNC-50-3-1/133_NE 11_BNC-50-3-4/133_NH 11_BNC-50-3-5/133_NE 11_H4-50-3-1/133_NE 11_H4-50-3-3/133_NE 11_N-50-3-5/133_NE 11_N-50-3-28/133_NE 11_QLA-01-3-1/122_NE 11_QMA-50-3-2/133_NH 11_QN-50-3-2/133_NE 11_SHV-50-3-1/133_NE 11_SHV-50-3-10/133_NE 11_SMA-50-3-7/111_NE 11_SMA-50-3-45/133_NH 11_SMA-50-3-55/199_NE 11_TNC-50-3-5/133_NE 11_TNC-50-3-6/133_NE 11_TNC-50-3-116/133_NE	clamp crimp clamp clamp crimp clamp crimp crimp crimp crimp crimp clamp clamp crimp crimp clamp clamp crimp

Connector type		Cable entry
Right angle cable plugs	16_BNC-50-3-5/133_NE 16_BNC-50-3-25/133_NE 16_BNC-50-3-13/133_NE 16_N-50-3-26/133_NE 16_N-50-3-103/133_NE 16_QMA-50-3-2/133_NH 16_QN-50-3-2/133_NE 16_SMA-50-3-105/111_NH 16_SMA-50-3-145/133_NE 16_TNC-50-3-28/133_NE 16_TNC-50-3-13/133_NE 16_TNC-50-3-112/133_NE	crimp clamp crimp crimp clamp crimp crimp crimp crimp clamp crimp crimp
Straight cable jacks	21_BNC-50-3-2/133_NE 21_BNC-50-3-12/133_NE 21_H4-50-3-1/133_NE 21_N-50-3-5/133_NE 21_N-50-3-7/133_NE 21_SHV-50-3-1/133_NE 21_SMA-50-3-5/111_NE 21_TNC-50-3-4/133_NE 21_TNC-50-3-31/133_NE	crimp clamp clamp clamp crimp crimp crimp clamp crimp
Straight bulkhead cable jacks	24_BNC-50-3-1/133_NE 24_BNC-50-3-5/133_NE 24 _H4-50-3-1/133_NE 24_N-50-3-10/133_NE 24_N-50-3-11/133_NE 24_QMA-50-3-2/133_NH 24_QN-50-3-2/133_NE 24_SHV-50-3-1/133_NE 24_TNC-50-3-23/133_NE	crimp clamp clamp clamp crimp crimp crimp crimp crimp
Straight panel cable jacks	25_BNC-50-3-13/133_NE 25_N-50-3-4/133_NE 25_N-50-3-6/133_NE 25_TNC-50-3-9/133_NE 25_TNC-50-3-19/133_NE	clamp clamp crimp clamp crimp

Connector type		Cable entry
U8 (S 03232)		
Straight cable plugs	11_BNC-50-3-58/133_NH	crimp
U9 (RG 142 B/U, RG 223 /U, EF 142)		
Straight cable plugs	11_BNC-50-3-16/133_NH 11_N-50-3-29/133_NE 11_QLA-01-3-2/122_NE 11_QMA-50-3-1/133_NH 11_QN-50-3-1/133_NE 11_SMA-50-3-6/111_NH 11_SMA-50-3-46/133_NH 11_SMA-50-3-56/199 NH 11_TNC-50-3-115/133_NE	crimp crimp crimp crimp crimp crimp crimp crimp crimp
Straight bulkhead cable plugs	14_BMA-50-3-3/199_NE	crimp
Right angle cable plugs	16_BNC-50-3-7/133_NE 16_N-50-3-27/133_NH 16_QMA-50-3-1/133_NH 16_SMA-50-3-106/111_NH 16_SMA-50-3-146/133_NH 16_TNC-50-3-18/133_NE 16_TNC-50-3-111/133_NE	crimp crimp crimp crimp crimp crimp crimp
Straight cable jacks	21_BNC-50-3-9/133_NE 21_N-50-3-8/133_NE 21_SMA-50-3-6/111_NE 21_TNC-50-3-32/133_NE	crimp crimp crimp crimp
Straight bulkhead cable jacks	24_BMA-50-3-5/119_ NE 24_BNC-50-3-8/133_NE 24_N-50-3-12/133_NE 24_QMA-50-3-1/133_NH 24_QN-50-3-1/133_NE 24_TNC-50-3-21/133_NE 24_SMA-50-3-42/133_NE	crimp crimp crimp crimp crimp crimp crimp
Straight panel cable jacks	25_BMA-50-3-3/119_NE 25_N-50-3-7/133_NE	crimp crimp

	Connector type	Cable entry
U10 (RG 142 B/U, RG 223 /U, RG 400 /U, EF 142, EF 400)		
Straight cable plugs	11_BNC-50-3-1/133_NE 11_BNC-50-3-5/133_NE 11_N-50-3-5/133_NE 11_SMA-50-3-8/111_NH 11_SMA-50-3-10/111_NE 11_TNC-50-3-5/133_NE 11_TNC-50-3-6/133_NE	clamp clamp clamp clamp clamp clamp clamp
Right angle cable plugs	16_BNC-50-3-25/133_NE 16_N-50-3-103/133_NE 16_TNC-50-3-28/133_NE	clamp clamp clamp
Straight cable jacks	21_BNC-50-3-12/133_NE 21_N-50-3-5/133_NE 21_TNC-50-3-4/133_NE	clamp clamp clamp
Straight bulkhead cable jacks	24_BNC-50-3-5/133_NE 24_N-50-3-10/133_NE	clamp clamp
Straight panel cable jacks	25_N-50-3-4/133_NE 25_TNC-50-3-9/133_NE	clamp clamp
U11 (RG 400 /U, EF 400)		
Straight cable plugs	11_BNC-50-3-52/133_NH 11_N-50-3-31/133_NH 11_QMA-50-3-1/133_NH 11_SMA-50-3-6/111_NH 11_SMA-50-3-46/133_NH 11_SMA-50-3-56/199_NH 11_TNC-50-3-117/133_NE	crimp crimp crimp crimp crimp crimp crimp
Straight bulkhead cable plugs	14_BMA-50-3-3/199_NE	crimp
Right angle cable plugs	16_QMA-50-3-1/133_NH 16_QN-50-3-1/133_NE 16_SMA-50-3-106/111_NH 16_SMA-50-3-146/133_NH	crimp crimp crimp crimp
Straight cable jacks	21_N-50-3-12/133_NE 21_SMA-50-3-6/111_NE	crimp crimp
Straight bulkhead cable jacks	24_BMA-50-3-5/119_NE 24_BNC-50-3-25/133_NH 24_QMA-50-3-1/133_NH	crimp crimp crimp

	Connector type	Cable entry
Straight panel cable jacks	25_BMA-50-3-3/119_NE 25_N-50-3-20/133_NE	crimp crimp
U12 (G 03233)		
Straight cable plugs	11_BNC-75-3-8/133_NE	crimp
Straight bulkhead cable jacks	24_BNC-75-3-4C/133_NE	crimp
U13 (G 03130 HT)		
Straight cable plugs	11_BNC-50-3-36/133_NE	crimp
U14 (G 03233 D)		
Straight cable plugs	11_BNC-75-3-9/133_NE 11_BNC-75-3-11/133_NE	crimp clamp
Right angle cable plugs	16_BNC-75-3-4/133_NE	crimp
Straight bulkhead cable jacks	24_BNC-75-3-5/133_NE	crimp
U15 (RG 59 B/U, RG 62 A/U, RG 302/U, GX 04273, S 04233)		
Straight cable plugs	11_BNC-75-4-3/133_NE 11_H4-50-4-1/133_NE 11_N-75-4-3/133_NE 11_SHV-50-4-10/133_NE 11_TNC-75-4-2/133_NE	clamp clamp clamp clamp clamp
Right angle cable plugs	16_TNC-75-4-2/133_NE	clamp
Straight bulkhead cable jacks	24_N-75-4-2/133_NE	clamp
U16 (RG 59 B/U , RG 62 A/U, RG 302 /U, GX 04273)		
Straight cable plugs	11_BNC-50-4-4/133_NE 11_BNC-50-4-23/133_NE 11_BNC-75-4-4/133_NH 11_H4-50-4-4/133_NE 11_N-75-4-8/133_NE 11_SHV-50-4-1/133_NE 11_TNC-75-4-4/133_NE	crimp crimp crimp crimp crimp crimp crimp
Right angle cable plugs	16_BNC-75-4-4/133_NE	crimp

	Connector type	Cable entry
Straight cable jacks	21_BNC-75-4-4/133_NE 21_N-75-4-8/133_NE 21_SHV-50-4-1/133_NE	crimp crimp crimp
Straight bulkhead cable jacks	24_BNC-75-4-3/133_NE 24_SHV-50-4-1/133_NE 24_TNC-75-4-8/133_NE	crimp crimp crimp
U17 (S 04233)		
Straight cable plugs	11_BNC-75-4-30/133_NE 11_TNC-75-4-30/133_NE	crimp crimp
Straight bulkhead cable jacks	24_BNC-75-4-15/133_NE	crimp
U18 (G 04233, G 04273 D)		
Straight cable plugs	11_BNC-75-4-6/133_NH 11_N-75-4-6/133_NE 11_N-75-4-9/133_NE 11_TNC-75-4-9/133_NE	crimp clamp crimp crimp
Right angle cable plugs	16_BNC-75-4-5/133_NE	crimp
Straight cable jacks	21_BNC-75-4-5/133_NE	crimp
Straight bulkhead cable jacks	24_BNC-75-4-4/133_NE	crimp
U23 (RG 6 A/U, G 05133 D)		
Straight cable plugs	11_N-75-5-2/133_NE	clamp
U24 (G 05133 D)		
Straight cable plugs	11_BNC-75-5-6/133_NE	crimp
U25 (S 06132 D)		
Straight cable plugs	11_N-50-6-1/133_NE	crimp

Connector type		Cable entry
U28 (RG 165 /U, RG 213 /U, GX 07272)		
Straight cable plugs	11_716-50-7-3/003_-E 11_BNC-50-7-1/133_NE 11_N-50-7-5/133_NE 11_N-50-7-6/133_NE 11_TNC-50-7-2/133_NE	clamp clamp clamp clamp clamp
Right angle cable plugs	16_N-50-7-26/133_NE 16_TNC-50-7-4/133_NE	clamp clamp
Straight cable jacks	21_N-50-7-8/133_NE	clamp
Straight bulkhead cable jacks	24_N-50-7-8/133_NE	clamp
Straight panel cable jacks	25_N-50-7-8/133_NE	clamp
U29 (RG 213 /U)		
Straight cable plugs	11_716-50-7-1/003_-E 11_BNC-50-7-7/133_NE 11_N-50-7-43/133_NE 11_QN-50-7-3/133_NE	crimp crimp crimp crimp
Right angle cable plugs	16_N-50-7-29/133_NE 16_N-50-7-30/133_NE 16_QN-50-7-2/133_NE	crimp crimp crimp
Straight cable jacks	21_716-50-7-1/003_-E 21_N-50-7-13/133_NE	crimp crimp
Straight bulkhead cable jacks	24_BNC-50-7-3/133_NE 24_N-50-7-14/133_NE 24_QN-50-7-3/133_NE	crimp crimp crimp
Straight panel cable jacks	25_N-50-7-13/133_NE	crimp
U30 (S 07232, SX 07272)		
Straight cable plugs	11_N-50-7-33/133_NE	crimp
U31 (S 07232)		
	on request	crimp

Connector type		Cable entry
U32 (RG 214 /U, RG 214 U/highflex)		
Straight cable plugs	11_716-50-7-2/003_-E 11_BNC-50-7-6/133_NE 11_N-50-7-44/133_NE 11_QN-50-7-1/133_NE	crimp crimp crimp crimp
Right angle cable plugs	16_716-50-7-10/003_NE 16_N-50-7-31/133_NE 16_N-50-7-36/133_NE 16_QN-50-7-1/133_NE	crimp crimp crimp crimp
Straight cable jacks	21_716-50-7-2/003_-E 21_N-50-7-14/133_NE	crimp crimp
Straight bulkhead cable jacks	24_N-50-7-15/133_NE 24_QN-50-7-2/133_NE	crimp crimp
Straight panel cable jacks	25_N-50-7-14/133_NE	crimp
U33 (RG 214 /U, RG 214 /U)		
Straight cable plugs	11_716-50-7-4/003_-E 11_BNC-50-7-2/133_NE 11_N-50-7-5/133_NE 11_N-50-7-6/133_NE 11_N-50-7-61/133_NE 11_QN-50-7-2/133_NE 11_TNC-50-7-2/133_NE	clamp clamp clamp clamp crimp crimp clamp
Right angle cable plugs	16_716-50-7-10/003_-E 16_BNC-50-7-6/133_NE 16_N-50-7-26/133_NE 16_N-50-7-28/133_NE 16_QN-50-7-1/133_NE 16_TNC-50-7-4/133_NE	crimp clamp clamp crimp crimp clamp
Straight cable jacks	21_N-50-7-8/133_NE	clamp
Straight bulkhead cable jacks	24_N-50-7-8/133_NE 24_N-50-7-24/133_NE 24_QN-50-7-1/133_NE	clamp crimp crimp
Straight panel cable jacks	25_N-50-7-8/133_NE	clamp

Connector type		Cable entry
U34 (RG 11 A/U)		
Straight cable plugs	11_BNC-75-7-5/133_NE 11_N-75-7-16/133_NE	crimp crimp
U35 (RG 11 A/U, RG 63 B/U)		
Straight cable plugs	11_N-75-7-4/133_NE	clamp
U36 (RG 216 /U)		
Straight cable plugs	11_N-75-7-18/133_NE	crimp
U37 (RG 216 /U)		
Straight cable plugs	11_N-75-7-4/133_NE	clamp
U40 (S 12272-4)		
	on request	
U44 (RG 218)		
	on request	
V1 (RG 108 A/U)		
Straight cable plugs	11_BNO-0-4-1/133_NH	crimp
Right angle cable plugs	16_BNO-0-4-1/133_NE	crimp
Straight cable jacks	21_BNO-0-4-1/133_NE	crimp
Straight bulkhead cable jacks	24_BNO-0-4-1/133_NE	crimp
V2 (G 5730)		
	on request	
W1 (G 02332)		
Straight cable plugs	11_BNT-50-2-1/103_NE	clamp
Straight bulkhead cable jacks	24_BNT-50-2-1/103_NE	clamp

For further connector information please see our Coaxial Connectors General Catalogue, item no. 644802.

RG (Radio grade)

Cable Replacement and Cross-Reference List

The following table summarises all RG type cables and their basic construction in numerical order. The designations RG... (e.g. RG_58_C/U) refers to ancient specifications and are not covered by valid specifications any more.

Cables according to valid MIL specifications have to be designated by M17/..-... (e.g. M17/155-00001). A part of the valid MIL specifications ask for identical cable characteristics as the ancient RG specifications (e.g. M17/155-00001).

Other valid MIL specifications, such as MIL/28-RG_58, specify the same cable construction as the ancient MIL specifications, but they additionally include higher requirements regarding the attenuation and the reflection characteristics of the cables.

All cables not listed in this inventory have been canceled without replacement.

HUBER+SUHNER will offer you low smoke free of halogen (LSFH) cables or recommended crosslinked PE alternatives on demand. Eg. for aerospace applications PVC is not allowed to be used.

RG-Type	Imped.	Center conductor		Dielectric		Screen / Armouring		Jacket		Designations according to MIL-C-17		HUBER+SUHNER alternative	
	Ω	Material	Ø mm	Material	Ø mm	Construction	Ø mm	Material	Ø mm	For new designs use specification	Former designation	Halogen-free	Flame retard./ halogenfree Operating temp. up to +100°C
RG_5_B/U	Canceled - Replacement: RG_212_U									M17/199-00001	M17/162-00001		
RG_6_A/U	75 ± 3	StCu	0.73	PE	4.80	CuAg / Cu	6.20	PVC 2	8.40	M17/180-00001	M17/2-RG6		
	old identification - for new designs use ⇒												
RG_8_A/U	Canceled - Replacement: RG_213_U												
RG_9_B/U	Canceled - Replacement: RG_214_U												
RG_10_A/U	Canceled - Replacement: RG_215_U												
RG_11_A/U	75 ± 3	CuSn	7 x 0.4	PE	7.25	Cu	8.10	PVC 2	10.30	M17/181-00001	M17/6-RG11		GX_07273
	old identification - for new designs use ⇒												
RG_12_A/U (Armoured RG_11_A/U)	75 ± 3	CuSn	7 x 0.4	PE	7.25	Cu Braid-armoured	8.10 11.80	PVC 2 ---	10.30 --	M17/181-00002 (armoured)	M17/6-RG12		
RG_13_A/U	Canceled - Replacement: RG_216_U												
RG_14_A/U	Canceled - Replacement: RG_217_U												
RG_17_A/U	Canceled - Replacement: RG_218_U												
RG_18_A/U	Canceled - Replacement: RG_219_U												
RG_19_A/U	Canceled - Replacement: RG_220_U												
RG_20_A/U	Canceled - Replacement: RG_221/U												

RG-Type	Imped.	Center conductor		Dielectric		Screen / Armouring		Jacket		Designations according to MIL-C-17		HUBER+SUHNER alternative	
	Ω	Material	Ø mm	Material	Ø mm	Construction	Ø mm	Material	Ø mm	For new designs use specification	Former designation	Halogen-free	Flame retard./ halogenfree Operating temp. up to +100°C
RG_21_A/U	Canceled - Replacement: RG_222/U												
RG_22_B/U	95 ± 5	Cu	7 x 0.4	PE-core	2.25					M17/182-00001 M17/182-00002 (armoured)	M17/15-RG22		
(Twinax)		PE-tube over 2 twisted leads ø 7.25mm				CuSn / CuSn	8.70	PVC 2	10.80				
						old identification - for new designs use ⇒							
RG_34_B/U	75 ± 3	Cu	7 x 0.62	PE	11.50	Cu	12.40	PVC 2	16.00		M17/24-RG_34, Cancelled without replacement		
RG_35_B/U	75 ± 3	Cu	2.65	PE	17.30	Cu	18.60	PVC 2	22.10	M17/209-00001... M17/209-00002 (armoured)	M17/64-RG35		
(Armoured RG_164_U)						Braid-armoured	23.50	---	--				
Not manufactured by HUBER+SUHNER													
RG_55_B/U	Canceled - Replacement: RG_223_U												
RG_57_A/U	Canceled - Replacement: RG_130_U												
RG_58_C/U	50 ± 2	CuSn	19 x 0.18	PE	2.95	CuSn	3.60	PVC 2	4.95	M17/197-00001 M17/183-00001	M17/155-00001 M17/28-RG58	G_03272	GX_03272
						old identification - for new designs use ⇒							
RG_59_B/U	75 ± 3	StCu	0.58	PE	3.70	Cu	4.40	PVC 2	6.10	M17/184-00001	M17/29-RG59	G_04263-03 G_04273	GX_04273
						old identification - for new designs use ⇒							
RG_62_A/U	93 ± 5	StCu	0.62	PE/air	3.70	Cu	4.40	PVC 2	6.10	M17/185-00001	M17/30-RG62	RADOX jacket on demand	
						old identification - for new designs use ⇒							
RG_62_B/U	93 ± 5	StCu	7 x 0.2	PE/air	3.70	Cu	4.40	PVC 2	6.10	(M17/185-00001)	M17/30-RG62		
						old identification - for new designs use ⇒							
RG_63_B/U	125 ± 6	StCu	0.62	PE/air	7.25	Cu	8.10	PVC 2	10.30	M17/218-00001... M17/218-00002	M17/31-RG63		
RG_71_B/U	93 ± 5	StCu	0.62	PE/air	3.70	Cu / CuSn	5.00	PE	6.20	M17/90-RG_71	---		
RG_74_A/U	Canceled - Replacement: RG_224/U												
RG_79_B/U	125 ± 6	StCu	0.60	PE/air	7.25	Cu	8.10	PVC 2	10.30	M17/31-RG_79	---		
(Armoured RG_63_B/U)						Braid-armoured	11.80	---	--				
RG_87_A/U	Canceled - Replacement: RG_225_U												
RG_94_U	Canceled - Replacement: RG_226_U												

RG-Type	Imped.	Center conductor		Dielectric		Screen / Armouring		Jacket		Designations according to MIL-C-17		HUBER+SUHNER alternative	
	Ω	Material	Ø mm	Material	Ø mm	Construction	Ø mm	Material	Ø mm	For new designs use specification	Former designation	Halogen-free	Flame retard./ halogenfree Operating temp. up to +100°C
RG_108_A/U	78 ± 7	CuSn	7 x 0.31	PE-Core	2.00								
(Twinax)		2 leads twisted ø 4.0 mm				CuSn	4.60	PVC 2	6.00	M17/186-00001	M17/45-RG108		
						old identification - for new designs use ⇒							
RG_111_A/U	95 ± 5	Cu	7 x 0.4	PE Core	2.25								
(Twinax)		PE-tube over 2 twisted leads ø 7.25 mm				CuSn / CuSn	8.70	PVC 2	10.80	M17/182-00002	M17/15-RG111		
(Armoured RG_22_B/U)						Braid-armoured	12.30	---	--				
						old identification - for new designs use ⇒							
RG_116_U	Canceled - Replacement: RG_227_U												
RG_117_A/U	Canceled - Replacement: RG_211_A/U												
RG_118_A/U	Canceled - Replacement: RG_228_A/U												
RG_119_U	50 ± 2	Cu	2.60	PTFE	8.45	Cu / Cu	10.10	GSi	11.80	M17/156-00001	M17/52-RG119 (unarmoured)		
Not manufactured by HUBER+SUHNER													
RG_120_U	50 ± 2	Cu	2.60	PTFE	8.45	Cu / Cu	10.10	GSi	11.80	M17/52-00001	M17/52-RG120 (armoured)		
(Armoured RG_119_U)						Braid-armoured	13.30	---	--				
RG_122_U	50 ± 2	CuSn	27 x 0.13	PE	2.50	CuSn	3.20	PVC 2	4.10	M17/198-00001	M17/157-00001		
Not manufactured by HUBER+SUHNER													
RG_140_U	Canceled - Replacement: RG_302_U												
RG_141_U	50 ± 2	StCuAg	0.95	PTFE	2.95	CuAg	3.60	GSi	4.40	M17/170-00001 see also RG_303	---		
RG_142_B/U	50 ± 2	StCuAg	0.95	PTFE	2.95	CuAg / CuAg	4.20	FEP	4.95	M17/158-00001	M17/60-RG142		GX_03272_D-06 /EF_142
RG_143_U	Canceled - Replacement: RG_304_U												
RG_144_U	75 ± 3	StCuAg	7 x 0.45	PTFE	7.25	CuAg	8.00	GSi	10.40	M17/62-RG_144	---		(GX_07273)
Not manufactured by HUBER+SUHNER													
RG_149_U	Canceled - Replacement: RG_391_U												
RG_150_U	Canceled - Replacement: RG_392_U												
RG_164_U	75 ± 3	Cu	2.65	PE	17.3	Cu	18.60	PVC 2	22.10	M17/209-00001... M17/209-00002 (armoured)	M17/64-RG164		
						old identification - for new designs use ⇒							
RG_165_U*	50 ± 2	CuAg	7 x 0.79	PTFE	7.25	CuAg	8.00	GSi	10.40	M17/159-00001	M17/65-RG165		GX_07272

RG-Type	Imped.	Center conductor		Dielectric		Screen / Armouring		Jacket		Designations according to MIL-C-17		HUBER+SUHNER alternative	
													Flame retard./ halogenfree
	Ω	Material	Ø mm	Material	Ø mm	Construction	Ø mm	Material	Ø mm	For new designs use specification	Former designation	Halogen-free	Operating temp. up to +100°C
RG_166_U*	50 ± 2	CuAg	7 x 0.79	PTFE	7.25	CuAg	8.00	GSi	10.40	---	M17/65-RG166		
(Armoured RG_165_U)						Braid-armoured Aluminium alloy	11.90	---	--				
RG_174_A/U	50 ± 2	StCu	7 x 0.16	PE	1.50	CuSn	2.00	PVC 2	2.80	M17/173-00001 M17/196-00001	M17/119-RG174	G_02262	GX_02272
RG_177_U	50 ± 2	Cu	5.00	PE	17.3	CuAg / CuAg	18.90	PVC 2	22.70	M17/160-00001 M17/212-00001 M17/210-00001	M17/67-RG177		EF_178 EF_179
									old identification - for new designs use ⇒				
RG_178_B/U	50 ± 2	StCuAg	7 x 0.1	PTFE	0.83	CuAg	1.30	FEP	1.80	M17/169-00001	M17/93-RG178		EF_178
RG_179_B/U	75 ± 3	StCuAg	7 x 0.1	PTFE	1.53	CuAg	2.00	FEP	2.54	M17/94-RG179	---		EF_179
RG_180_B/U	95 ± 5	StCuAg	7 x 0.1	PTFE	2.60	CuAg	3.10	FEP	3.60	M17/95-RG180	---		
RG_187_A/U	75 ± 3	StCuAg	7 x 0.1	PTFE	1.53	CuAg	2.65	PFA	2.00	---	---		
RG_188_A/U	50 ± 2	StCuAg	7 x 0.18	PTFE	1.54	CuAg	2.00	PFA	2.60	---	---		
RG_195_A/U	95 ± 5	StCuAg	7 x 0.1	PTFE	2.52	CuAg	3.10	PFA	3.70	---	---		
RG_196_A/U	50 ± 2	StCuAg	7 x 0.1	PTFE	0.83	CuAg	1.30	PFA	1.95	M17/169-00001	M17/71		
RG_210_U	93 ± 5	StCuAg	0.60	PTFE/air	3.70	CuAg	4.50	GSi	6.10	M17/97-RG_210	---		
Not manufactured by HUBER+SUHNER													
RG_212_U	50 ± 2	CuAg	1.40	PE	4.70	CuAg / CuAg	6.20	PVC 2	8.40	M17/162-00001	M17/73-RG212 M17/199-00001		
									old identification - for new designs use ⇒				
RG_213_U	50 ± 2	Cu	7 x 0.75	PE	7.25	Cu	8.10	PVC 2	10.30	M17/213-00001	M17/74-RG213 M17/163-00001	G_07262	GX_07272
RG_214_U	50 ± 2	CuAg	7 x 0.75	PE	7.25	CuAg / CuAg	8.70	PVC 2	10.80	M17/164-00001	M17/75-RG214	G_07262-D	GX_07272_D
RG_215_U	50 ± 2	Cu	7 x 0.75	PE	7.25	Cu	8.10	PVC 2	10.30	---	M17/74-RG215		
(Armoured RG_213_U)						Braid-armouring	11.80	---	--				
RG_216_U	75 ± 3	CuSn	7 x 0.4	PE	7.25	Cu / Cu	8.70	PVC 2	10.80	M17/191-00001	M17/77-RG216	G_07273_D	
									old identification - for new designs use ⇒				
RG_217_U	50 ± 2	Cu	2.68	PE	9.40	Cu / Cu	11.20	PVC 2	13.80	M17/215-00001	M17/165-00001		
									old identification - for new designs use ⇒				

RG-Type	Imped.	Center conductor		Dielectric		Screen / Armouring		Jacket		Designations according to MIL-C-17		HUBER+SUHNER alternative	
	Ω	Material	Ø mm	Material	Ø mm	Construction	Ø mm	Material	Ø mm	For new designs use specification	Former designation	Halogen-free	Flame retard./ halogenfree Operating temp. up to +100°C
RG_222_U	50 ± 2	CrNi	1.41	PE	4.70	CuAg / CuAg	6.20	PVC 2	8.50	M17/162-00001	M17/199-00001		
High attenuation cable													
RG_223_U	50 ± 2	CuAg	0.89	PE	2.95	CuAg CuAg	3.55 4.20	PVC 2	5.40	M17/167-00001	M17/84-RG223 M17/200-00001	G_03262_D	
RG_224_U	50 ± 2	Cu	2.68	PE	9.40	Cu / Cu	11.20	PVC 2	13.80	M17/215-00001	M17/165-00002		
(Armoured RG_217_U)						Braid-armoured	15.40	---	--				
RG_225_U*	50 ± 2	CuAg	7 x 0.79	PTFE	7.25	CuAg / CuAg	8.70	GSi	10.90	M17/86-00001	---		
RG_227_U*	50 ± 2	CuAg	7 x 0.79	PTFE	7.25	CuAg / CuAg	8.70	GSi	10.90	M17/86-00002 (armoured)	M17/86-00002		
(Armoured RG_225_U)						Braid-armoured	12.40	---	---				
RG_235_A/U	Canceled - Replacement: RG_179_U												
RG_302_U	75 ± 3	StCuAg	0.64	PTFE	3.70	CuAg	4.30	FEP	5.10	M17/110-RG302	---		
RG_303_U	50 ± 2	StCuAg	0.95	PTFE	2.95	CuAg	3.60	FEP	4.30	M17/170-00001	M17/111-RG_303 superseded RG_141_A/U		
RG_304_U	50 ± 2	StCuAg	1.50	PTFE	4.70	CuAg/CuAg	6.30	FEP	7.10	M17/171-00001	M17/112-RG304		
RG_307_A/U (Triaxial)	75 ± 4	CuAg	19x0.148	SPE	3.70	CuAg CuAg	4.50 7.50	PUR PE	5.20 6.70	M17/116-RG_307	---		
RG_316_U	50 ± 2	StCuAg	7 x 0.18	PTFE	1.54	CuAg	2.00	FEP	2.50	M17/172-00001	M17/113-RG316		EF_316
RG_393_U*	50 ± 2	CuAg	7 x 0.79	PTFE	7.25	CuAg CuAg	8.00 8.70	FEP	9.90	M17/174-00001	M17/127-RG393		GX_07272_D EF_393
RG_400_U	50 ± 2	CuAg	19 x 0.2	PTFE	2.95	CuAg CuAg	3.60 4.20	FEP	4.95	M17/175-00001	M17/128-RG400		EF_400
RG_401_U (Semi-Rigid)	50±0.5	CuAg	1.63	PTFE	5.31	Cu-tube	6.30	---	--	M17/129-00001	M17/129-RG401		
HUBER+SUHNER Alternative: **EZ_250/M17**													
RG_402_U (Semi-Rigid)	50 ± 1	StCuAg	0.92	PTFE	3.00	Cu-tube	3.60	---	--	M17/130-00001	M17/130-RG402		
HUBER+SUHNER Alternative: **EZ_141/M17**													

RG-Type	Imped.	Center conductor		Dielectric		Screen / Armouring		Jacket		Designations according to MIL-C-17		HUBER+SUHNER alternative	
	Ω	Material	Ø mm	Material	Ø mm	Construction	Ø mm	Material	Ø mm	For new designs use specification	Former designation	Halogen-free	Flame retard./ halogenfree Operating temp. up to +100°C
RG_403_U (Triaxial)	50 ± 2	CuAg	7 x 0.1	PTFE	0.83	CuAg CuAg	1.30 2.40	FEP FEP	1.90 3.10	---	M17/131-RG403		
RG_404_U (Low noise)	50 ± 2	StCuAg	7 x 0.1	PTFE *semicond.*	0.87 0.90	CuAg	1.40	FEP	1.90	M17/132-00001	M17/132-RG404		
RG_405_U (Semi-Rigid)	50±1.5	StCuAg	0.51	PTFE	1.68	Cu-tube	2.20	---	--	---	M17/133-RG405		
HUBER+SUHNER Alternative: **EZ_86/M17**													

* Dielectric material and diameter of H+S types deviate slightly in the ~1/100 mm range from the stated values to reach best impedance and return loss values.

For further current information please link to http://www.dsee.dla.mil/Programs/MilSpec/ (search for: MIL-C-17)

Glossary

Abrasion Resistance

The ability of a material to resist surface wear or damage by mechanical means.

Aging Stability Test

A test to determine the flexibility of a cable after temperature cycling.

American Wire Gauge (AWG)

A standard for describing the size of a wire. The gauge varies inversely with the actual wire diameter. The change of 3 AWG numbers doubles or halves the conductivity and halves the weight of a copper wire.

Aramidyarn

Trademark for carbon fibre yarn, which is formed into thin fibers and twisted and plied into yarns. It is used as protective braiding for cables. Normally saturated with silicone–base varnish to seal against moisture. Aramidyarn is very flame and abrasion resistant.

Armour

A protective covering normally applied over a jacket. Usually constructed with helically wrapped steel tapes or wires, or a steel wire braid.

Attenuation (α)

The decrease of a signal with the distance in the direction of propagation. Attenuation may be expressed as the scalar ratio of the input magnitude to the output magnitude,

$$\alpha\ [dB/m] = 10 \cdot \log \frac{P_{out}}{P_{in}} \quad ,$$

or as the ratio of the input signal voltage to the output signal voltage.

$$\alpha\ [dB/m] = 20 \cdot \log \frac{U_1}{U_2} \ .$$

U_1 = Input signal voltage at the cable entry
U_2 = Output signal voltage at the cable outlet

Attenuation Stability

The change in attenuation of a coaxial cable after being subjected to specified temperature cycles and mechanical deformations.

Bandwidth

The range of frequencies for which performance falls within specified limits.

Bending Radius:

Minimum static: The minimum permissible radius for fixed installation of the cable. This radius is used in climatic tests.
Minimum dynamic: The minimum permissible radius for flexible applications of the cable.

BIT

An abbreviation of binary digit; smallest unit of information and basic unit in digital data communications. A bit can have a zero or a one value (a mark or a space in data communications terminology).

BNC (Bayonet Navy Connector)
Coaxial connector with bayonet coupling mechanism. Available in 50 Ohm and 75 Ohm versions. Frequency range DC - 4 GHz (50 Ohm) and 1 GHz (75 Ohm), respectively.

BNO
Connector with bayonet coupling mechanism suitable for shielded balanced twin cables.

BNT
Connector with bayonet coupling mechanism suitable for triaxial cables.

Braid
Woven wire used as shielding for insulated wires and cables. Also, a woven fibrous protective outer covering over a conductor or cable.

Braid Angle
The angle between the axis of the cable and the axis of any one member or strand of the braid (also known as angle of advance).

Breakdown Voltage
The voltage at which a disruptive discharge takes place through or over the surface of the insulation.

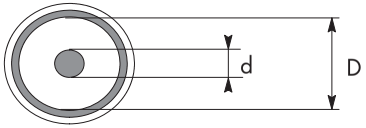
Bunch Stranded Conductor
All strands having a random position within the conductor. No distinct layers are formed.

Cable Assembly
A combination of cable and connectors with specified performance, used as a single unit.

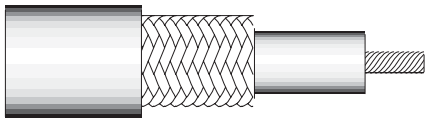
Capacitance (C)
The ability of a dielectric material between two conductors to store electric energy. For coaxial cables, the capacitance per meter is:

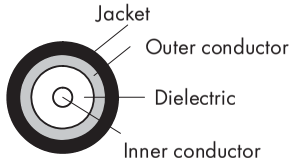
$$C = 3.336 \cdot 10^3 \frac{\sqrt{\varepsilon_r}}{Z_0} \text{ or } C = \frac{\varepsilon_r}{18 \cdot 10^{-3} \cdot \ln \frac{D}{d}} \quad [pF/m]$$

where e_r = *dielectric constant*
Z_0 = *Impedance [W]*



Cellular Polyethylene (SPE)
Polyethylene with homogeniously distributed individual gas cells included (foam). Used primarily as a dielectric material and has an extremely low dielectric constant and power factor. Limited to operation below + 70 °C.

Coaxial Cable




Cold Bend Test
A test of the cable to withstand flexing at low temperature.

Cold Flow
Relaxation of a built-in stress by slow deformation of the material at room temperature. Found in PTFE compounds in particular.

Concentric Stranding
A construction where the components are laid helically around a circular core to form layers. Consecutive layers have alternating direction of lay.

Conductivity
A measure of the ability of a material to conduct electric current under a given electric field. Resistivity is the reciprocal of conductivity.

Copolymer
A compound resulting from the chemical reaction of two or more chemically different monomers with each other.

Corona
A luminous discharge due to ionization of the air surrounding a conductor caused by a voltage gradient exceeding a certain critical value.

Coverage
A calculated percentage which defines the completeness with which a braid or shield covers the surface of the underlying component.

Crimp
Act of compressing (deforming) a connector barrel around a cable in order to make an electrical connection. For more detailed description refer to our connector general catalogue.

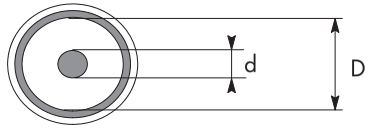
Crosslinking
The generation of chemical links between the molecular chains, usually achieved by chemical reactions or high energy irradiation of the material.

Cross talk
Signal interference between adjacent conductors caused by the pickup of stray energy.

Cutoff frequency (f_G)
The frequency, above which other than the TEM_{00} mode may occur alog the RF cable. The transmission characteristics of cables above their cutoff frequency may be unstable due to the different propagation velocity of the different streches of way of the signal.

$$f_G = \frac{2 \cdot c}{\pi \sqrt{\varepsilon_r}} \cdot \frac{1}{D + d} \text{ [Hz]}$$

where e_r = *dielectric constant*
c = *speed of light* 3×10^{11} *mm/s*
d/D = *diameters in mm*



d_{Bm}
Absolute measure of signal power where 0 dBm is equal to one milliwatt. See also decibel.

Decibel, dB
A relative, dimensionless unit calculated as ten times the logarithm to the base 10 of a power ratio.

Delay Line
A cable that delays electrical signals by a specified amount of time.

Dielectric
In a coaxial cable, the insulation between inner and outer conductor. It significantly influences the electrical characteristics such as impedance, capacitance, and velocity of propagation.

Dielectric constant (Permittivity)
Basic electrical property of a material that describes its behaviour in an electric field. The dielectric constant of the dielectric is the most important design parameter for coaxial cables and determines dimensions, losses and propagation characteristics.

Dielectric Loss
In a coaxial cable, the losses caused by the transformation of electromagnetic energy into heat within the dielectric material.

Dielectric Loss Factor (Dielectric Loss Index)
A measure of the loss characteristics of a dielectric material.

Dielectric Strength
The voltage which an insulating material can withstand before electrical breakdown occurs.

DIN 7/16
50 Ω coaxial connector with screw type coupling mechanism. Suitable for medium to high power applications. Frequency range DC - 7.5 GHz.

Dissipation Factor (loss tangent, tan δ)
See Dielectric Loss Factor.

Eccentricity
A measure of a conductor's location with respect to the circular cross section of the insulation. Expressed as a percentage of center displacement of one circle within the other.

Elastomer
A material which at room temperature stretches under stress to at least twice its length and snaps back to original length upon release of stress.

Electric Strength (Dielectric Strength)
See dielectric strength.

Electromagnetic Compatibility (EMC)
EMC describes the ability of an electrical system to avoid electromagnetic interference with the environment.

Elongation
The fractional increase in length of a material under tension.

ETFE (Ethylenetetrafluoroethylene)
ETFE polymers are tough, high temperature resistant thermoplastics with excellent characteristics: non-ageing properties, chemical inertness, very good dielectric properties, weather resistance and low moisture absorption.

Ethernet
A de facto standard in LAN technology. An Ethernet LAN uses coaxial cables in such a way, that members can share the same cable to communicate with each other.

Extrusion
Method of forcing thermoplastic, rubber or elastomer material under elevated temperature through a die to apply an insulation or a jacket to a cable.

Farad
Unit of capacitance. It indicates the charge per potential difference:

$$\textit{Capacitance in Farad} = \frac{\textit{Charge in Coulomb}}{\textit{Potential difference in Volt}}$$

FEP (Fluorinated Ethylene Propylene)
FEP is similar to PTFE but is easier to process. Heat resistance and chemical inertness are outstanding.

Fibre Optic Cable
Glass filament cable for the transmission of signals in the form of light. For more details refer to our fibre optic catalogue.

Filler
Material used as dummies to achieve circular cross section.

Flame Resistance
Property of a material to cease combustion once the heating flame is removed.

Flammability
Property of a material to support combustion.

Flex Life
Number of cycles a cable can withstand before failure when bent around a specific radius.

Heat shock
Test to determine the stability of a material when exposed to a sudden high temperature for a short period of time.

Heat Endurance
The time of thermal aging that a material can withstand before failing specified tests.

H+S
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IEC
Abbreviation for International Electrotechnical Commission.

IEC 60331
Horizontal flame test.

IEC 60332-1,-2,-3
Vertical flame tests (with high power and temperature than the horizontal).

IEEE
Abbreviation for Institute of Electrical and Electronics Engineers.

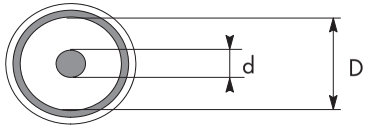
IEEE 60383
Vertical flame test similar to IEC 60332-3.

IM / PIM (Passive Intermodulation)
The generation of new (and in the case of cable assemblies undesirable) signals (intermodulation products) at the non-linear characteristics of transmission elements.

Impedance (characteristic, Z_0)
Characteristic property of a transmission line describing the ratio between electric and magnetic fields. For coaxial cables, the characteristic impedance is basically given by the permittivity of the dielectric and the dimensions of the conductors:

$$Z_0 = \frac{60}{\sqrt{\varepsilon_r}} \ln\left(\frac{D}{d}\right) [\Omega]$$

where ε_r = *dielectric constant*



Insulation Resistance
The resistance between the conductors of a cable for a given cable length.

Irradiation
Crosslinking of material with high energy radiation. In suitable materials, irradiation causes cross links between the molecules leading to improved mechanical stability with temperature.

ISO
Abbreviation for International Standards Organization.

LAN
Abbreviation for Local Area Network. A data communications network confined to a limited geographic area (up to 6 miles or about 10 kilometers).

LM (Low Migratory, see PVC 2 (LM)
See PVC 2 (LM).

Low Noise Cable
Cable specially constructed to avoid spurious electrical disturbances caused by mechanical movements.

LSFH
Abbreviation for Low Smoke free of Halogen.

MCX (MICROAX)
Micro-miniature coaxial connector with snap-on coupling mechanism. Available in 50 Ω and 75 Ω versions. Frequency range DC - 6 GHz.

MHV H4 (Miniature High Voltage)
Coaxial connector with bayonet coupling mechanism. Working voltage 2.2 kV DC.

Migration of Plasticizer
Loss of plasticizer from an elastomeric plastic compound with subsequent absorption to an adjacent medium of lower plasticizer concentration.

MIL
Abbreviation for military.

Mil
One-thousandth of an inch.

MMBX
50 Ω-Microminiatur-Board Connector for applications up to 6 GHz.

MMCX
50 Ω-Microminiatur Connector "Snap-Lock" for applications up to 6 GHz.

N (Navy Connector)
Coaxial connector with screw type coupling mechanism. Available in 50 Ohm and 75 Ohm versions. Frequency range DC - 18 GHz (50 Ohm) and 1 GHz (75 Ohm), respectively.

Neper
Natural logarithm of a voltage ratio.
Conversion: $\alpha\,[N/m] = 8.686 \cdot \alpha\,[dB/m]$

Noise
Random electrical signals, generated by circuit components or by natural disturbances.

Non-Contaminating Polyvinylchloride
A polyvinylchloride which has been compounded with an inorganic plasticizer to prevent contamination of a polyethylene dielectric.

PA (Polyamide)
A resin used primarily as a jacket material having superior abrasion resistance, resistance to aliphatic solvents, but relatively high moisture absorption. Temperature -40° to 80 °C. Is inflammable.

PE (Polyethylene)
A resin compounded with various additives for use as an insulation, dielectric or jacket material. This material is light, tough, permanently flexible, has good resistance to chemicals, non-oxidizing acids and aromatic solvents, a low moisture absorption, and good tensile and tear strength. Temperature range -40° to 85 °C. In addition, it has a low dielectric constant and dissipation factor.

PEX (Polyethylene crosslinked)
Temperature range -40 °C to +100 °C

PEEK (Polyetheretherketone)
The thermally most stable and chemically resistant carbonaceous compound. It is unaffected by sunlight, moisture and virtually all chemicals. Electrical performans nearly like PTFE. Temperature range -180 °C to +250 °C. Radiation resistant!

Permittivity Relative
Synonym term for relative dielectric constant ε_r.

PETE (Polyethylene Terephthalate, Hytrel®, DuPont)
Thermoplastic Polyether Ester Elastomer is the ideal material for RF cable jackets requiring excellent flex fatigue, resistance to tearing, creep and abrasion resistance at a range of temperatures and difficult chemical conditions.

PETP (Polyester Foil)

PFA (Perfluoroalkoxy)
Perfluoroalkoxy resins combine the processing ease of conventional thermoplastics with properties similar to PTFE.

Phase
A particular stage or point of advancement in an electrical cycle. The fractional part of the period through which the time has advanced, measured from some arbitrary point. Usually expressed in electrical degrees where 360 degrees represent one cycle.

Phase Shift
Change in phase of a voltage or current after passing through a circuit or cable.

Phase Stability
Variation of the electrical length of a cable as a function of - for example -the temperature or mechanical stressing such as bending or torsion. Formulation, refer also to Attenuation Stability.

PI (Polyimide, Kapton®, DuPont)
Properties of PI are its solvent resistance, barrier properties and performance at both high and low temperature extremes (-269 °C up to +350 °C). Extremely low flamability (UL 94 V-0). PI is very resistant to radiation.

Plasticizer
Chemical agent added to plastics to make them softer and more flexible.

Plenum Cable
A cable having adequate fire resistance and low smoke producing characteristics for installation without conduit in ducts, plenums, and other spaces used for environmental air, as permitted by NEC Articles 725-2(b) and 800-3(b).

Power Handling Capacity
Average power which a cable can handle without exceeding its maximum operating temperature.

PP (Polypropylene)
A polymer similar to PE, but stiffer and harder and not usable at temperatures $<\sim$-10 °C.

PTFE (Polytetrafluoroethylene)
The thermally most stable and chemically most resistant carbonaceous compound. It is unaffected by sunlight, moisture, and virtually all chemicals. Temperature range is -200°C to +260 °C. Electrical properties are very constant over temperature and a wide range of frequencies.

PUR (Polyurethane)
Thermoplastic polymer used for cables as an extruded jacket. Exhibits extreme toughness and abrasion resistance..

PVC (Polyvinylchloride)
Plasticized vinyl resin used as an insulation or jacket material which exhibits the property of high electrical resistivity, good dielectric strength, excellent mechanical toughness, superior resistance against oxygen, ozone, most common acids, alkalies and chemicals. Flame-resistance, oil-resistance and the temperature range (-25° to +85 °C) are depending on the compound. HUBER+SUHNER uses only leadfree PVC.

PVC 2 (LM)
Non migration PVC ($\Delta Q<3.3$) for excellent useful product lifetime (and MIL applications). HUBER+SUHNER uses only leadfree PVC.
Temperature range: -25 °C to +85 °C.

PVC (UL)
Flame retardant PVC, temperature range: -25 °C to +105 °C.

Q_{LA}
50 Ω subminiature connector with quick latch coupling mechanism for applications up to 1.4 GHz.

QMA
50 Ω subminiature connector with QUICK-LOCK coupling mechanism for applications up to 18 GHz.

QN
50 Ω subminiature connector with QUICK-LOCK coupling mechanism for applications up to 11 GHz.

Radox® 125
Trademark of HUBER+SUHNER for crosslinked, flame retardant, heat resistant and halogenfree insulation and jacket materials.

Reflection
See VSWR.

RG
Radio Grade. Terms that originate with the military. Very old and well known MIL-C-17 standard design.

RL
Return loss is a number that indicates the amount of signal that is reflected back into the input of a RF singnal path (p.e. possible little cable impedance discontinuities, connectors, terminating equipment). It is generally specified in dB and larger values are better as they indicate less reflection. Ideally, there would be no reflection and return loss would have a value of infinity. Generally, values of 25 dB to 34 dB to are considered well acceptable for a cable assembly to 6 GHz (34 dB indicates that only 2 % of the signal is reflected, VSWR 1.04).

RoHS
Restriction **o**f the use of certain **H**azardous **S**ubstances.

Screening Effectiveness
Ratio of the power fed into a coaxial cable to the power transmitted by the cable through the outer conductor (refer also to section “M”).

Self-Extinguishing
The ability of a material to extinguish its own flame after the heating flame is removed.

Shield
A conducting housing or screen that substantially reduces the effect of electric or magnetic fields on one side thereof, upon devices or circuits on the other side. Cable shields may be solid, braided, or taped (longitudinally or spirally).

SHV (Safe High Voltage)
Coaxial connector with bayonet coupling mechanism. Working voltage 5 kV DC.

Skin Effect
The phenomenon wherein the depth of penetration of electric currents into a conductor decreases as the frequency of the current increases e.g. only the wire surface of 1.5 µm thickness is useable at 1 GHz.

SMA (Subminiature A)
50 Ω - Subminiature coaxial connector with screw type coupling mechanism. Frequency range DC - 18 GHz.

SMB (Subminiature B)
Subminiature coaxial connector with snap-on coupling mechanism. Frequency range DC - 4 GHz.

SMC (Subminiature C)
Subminiature coaxial connector with screw type coupling mechanism. Frequency range DC - 10 GHz.

SMPX
Microminiature precision connector for applications up to 40 GHz.

SMS
Subminiature coaxial connector with slide-on coupling mechanism. Frequency range DC - 4 GHz.

SPE (Polyethylene)
Polyethylene with homogeniously distributed individual gas cells included (foam). Used primarily as a dielectric material and has an extremely low dielectric constant and power factor. Limited to operation below +85 °C.

SPEX (Polyethylene crosslinked)
Temperature range: -40 °C to +105 °C.

SSMA (Sub-Subminiature A)
Sub-Subminiature coaxial connector with screw type coupling mechanism. Frequency range DC - 40 GHz.

Stranded Conductor
A conductor composed of several wires or a group of wires. The members of a stranded conductor are usually twisted or bunched together.

Tensile Strength
Normally refers to the ultimate tensile strength, which is the breaking strength per square inch of cross-sectional area of the material tested.

Thermoplastic
A classification of resin that can be readily softened and resoftened by repeated heating.

TNC (Threaded Navy Connector)
Coaxial connector with screw type coupling mechanism. Available in 50 Ohm and 75 Ohm versions. Frequency range DC - 11 GHz (50 Ohm) and DC - 1 GHz (75 Ohm), respectively.

Transfer Impedance
Ratio of a longitudinal voltage on the disturbed side of a cable screen to the interference current on the disturbing side, relative to the length (refer also to section "M").

Triaxial Cable
A cable consisting of one centre conductor and two outer concentric conductors (with an insulating layer separating them). Notable for increased shielding efficiency.

Twinaxial Cable
Two conductors that are insulated from one another, twisted together and surrounded by a common shield.

U_{HF}
Coaxial connector with screw type coupling mechanism. Non-defined impedance. Frequency range DC - 200 MHz.

UL
Abbreviation for Underwriters Laboratories Inc.,an American Standards Institution.

Unidirectional Stranding
A term denoting that in a stranded conductor all layers have the same direction of lay.

Unilay
See Unidirectional Stranding.

Velocity of Signal Propagation (v_R)
Applied to coaxial cables, it indicates the propagation speed of an electrical signal within the cable.

$$v_R = \frac{c}{\sqrt{\varepsilon_r}} \quad [m/s] \qquad \text{also:}$$

$$\frac{v_R}{c} \cdot 100 = \frac{100}{\sqrt{\varepsilon_r}} \quad [\%\ \text{of c}]$$

where c = speed of light 3 V 10^8 m/s
e_r = dielectric constant

Voltage Rating
The voltage that may be continuously applied to the cable.

Voltage Withstand
See Breakdown Voltage.

VSWR
Abbreviation for Voltage Standing Wave Ratio. The ratio of the maximum to minimum voltage set up along a transmission by reflections.

WEEE
Waste **E**lectrical and **E**lectronic **E**quipment.

Type index

HUBER+SUHNER 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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