

HDTV Cable



Construction data

Cable code		HD113	HD125	HD163
Inner conductor	material	BC	BC	BC
	dia. mm	1.13	1.25	1.63
Dielectric	material	FPE	FPE	FPE
	dia. mm	4.80	5.30	7.20
Screen:				
Film foil type	material	Al-PET-Al	Al-PET-Al	Al-PET-Al (Bonded)
Foil coverage	%	100	100	100
Braid	material	TC	TC	TC
Braid coverage	%	72	64	74
	dia. mm	5.30	5.90	8.00
Outer sheath	material	PVC	PE	PE
	dia. mm	6.60	7.30	10.10

Electrical data

Impedance	Ohm	75 ± 3	75 ± 3	75 ± 2	
Capacitance	pF/m	52 ± 2	52 ± 2	52 ± 2	
Velocity ratio	%	85	85	85	
Attenuation (at 20°C)					
at	5 MHz	dB/100m	1.6	1.4	1.1
at	10 MHz	dB/100m	2.3	2.0	1.5
at	30 MHz	dB/100m	3.2	2.9	2.2
at	50 MHz	dB/100m	4.1	3.7	2.8
at	200 MHz	dB/100m	8.0	7.3	5.6
at	300 MHz	dB/100m	9.8	9.0	6.9
at	470 MHz	dB/100m	12.5	11.5	8.8
at	862 MHz	dB/100m	17.2	15.9	12.3
at	1000 MHz	dB/100m	18.6	17.2	13.2
at	1750 MHz	dB/100m	25.2	23.4	17.9
at	2150 MHz	dB/100m	28.1	26.5	20.1
at	2400 MHz	dB/100m	29.7	27.9	21.0
at	3000 MHz	dB/100m	33.7	32.0	24.5
Structural return loss (SRL)					
at	5 - 470 MHz	dB	> 30	> 30	> 30
at	470 - 1000 MHz	dB	> 28	> 28	> 28
at	1000 - 2000 MHz	dB	> 26	> 26	> 23
at	2000 - 3000 MHz	dB	> 22	> 22	> 20
Screening attenuation (SA)					
	class		A +	A	A +
at	5 - 30 MHz	mOhm/m	0.3	0.5	0.25
at	30 - 1000 MHz	dB	> 95	> 90	> 95
at	1000 - 2000 MHz	dB	> 90	> 90	> 90
at	2000 - 3000 MHz	dB	> 80	> 90	> 80
DC resistance inner/outer cond.	Ohm/km	18.0 / 13.9	14.0 / 12.0	8.7 / 7.5	
Loop resistance	Ohm/km	31.9	26.0	16.0	
Max. current (I eff.)	A	8.0	10.0	16.0	
Sheath spark testing	kV	3.0	5.0	8.0	
Specification conformity	EN 50117	part 2-4	part 2-5	part 2-3	

HDTV Cable



Construction data

Cable code		MINI RG59	HD70	HD80	HD100
Inner conductor	material	CCS	BC	BC	BC
	dia. mm	0.41	0.70	0.80	1.00
Dielectric	material	FPE	FPE	FPE	FPE
	dia. mm	1.90	2.90	3.50	4.30
Screen:					
Film foil type	material	Al-PET-Al	Al-PET-Al	Al-PET-Al	Al-PET-Al
Foil coverage	%	100	100	100	100
Braid	material	TC	TC	TC	TC
	coverage	%	70	73	65
Braid coverage	dia. mm	2.50	3.40	4.00	4.80
Outer sheath	material	PVC	PVC	PVC	PVC
	dia. mm	3.60	4.30	5.00	6.00

Electrical data

Impedance	Ohm	75 ± 3	75 ± 3	75 ± 3	75 ± 3	
Capacitance	pF/m	55 ± 3	52 ± 2	52 ± 2	52 ± 2	
Velocity ratio	%	82	85	85	85	
Attenuation (at 20°C)						
at	5 MHz	dB/100m	3.8	2.5	2.1	1.8
at	10 MHz	dB/100m	5.4	3.5	3.0	2.5
at	30 MHz	dB/100m	8.2	5.2	4.4	3.6
at	50 MHz	dB/100m	10.6	6.7	5.7	4.6
at	200 MHz	dB/100m	20.9	13.0	11.0	9.0
at	300 MHz	dB/100m	25.6	15.9	13.5	10.7
at	470 MHz	dB/100m	32.5	20.2	17.2	14.0
at	862 MHz	dB/100m	44.3	27.8	23.6	19.2
at	1000 MHz	dB/100m	47.8	29.9	25.5	20.7
at	1750 MHz	dB/100m	64.2	40.3	34.3	27.9
at	2150 MHz	dB/100m	71.6	45.0	38.0	31.1
at	2400 MHz	dB/100m	74.3	47.9	40.2	32.9
at	3000 MHz	dB/100m	85.8	53.7	44.0	37.3
Structural return loss (SRL)						
at	5 - 470 MHz	dB	> 29	> 30	> 30	> 30
at	470 - 1000 MHz	dB	> 27	> 28	> 28	> 28
at	1000 - 2000 MHz	dB	> 22	> 26	> 26	> 26
at	2000 - 3000 MHz	dB	> 18	> 22	> 22	> 22
Screening attenuation (SA)						
	class		A	A	A	A +
at	5 - 30 MHz	mOhm/m	0.5	0.25	0.35	0.15
at	30 - 1000 MHz	dB	> 90	> 90	> 90	> 100
at	1000 - 2000 MHz	dB	> 90	> 85	> 80	> 90
at	2000 - 3000 MHz	dB	> 80	> 70	> 70	> 80
DC resistance inner/outer cond.	Ohm/km	310.0 / 30.0	45.5 / 19.6	35.0 / 18.6	22.5 / 13.7	
Loop resistance	Ohm/km	340.0	65.1	53.6	36.2	
Max. current (I eff.)	A	n.a.	3.0	4.0	6.0	
Sheath spark testing	kV	2.5	2.5	2.5	3.0	
Specification conformity	EN 50117	part 2-4	part 2-4	part 2-4	part 2-4	