Broadband Cable

Construction data

Cable code		BC703	BC11	BC22/99	BC27/115
Inner conductor	material	BC	BC	BC	BC
	dia. mm	1.13	1.63	2.20	2.70
Dielectric	material	FPE	FPE	FPE	FPE
	dia. mm	4.80	7.20	9.90	11.50
Screen:	material				
Film foil type		Al-PET-Al (bonded)	Al-PET-Al (bonded)	Al-PET-Al (bonded)	Al-PET-Al (bonded)
Foil coverage	%	100	100	100	100
Braid material		TC	TC	TC	TC
Braid coverage	%	45	64	64	64
	dia. mm	5.45	7.85	10.70	12.30
Shorting fold film foil laminate	material	Al-PET	Al-PET	Al-PET	Al-PET
Foil coverage	%	100	100	100	100
Outer sheath	material	PVC	PE	PE	PE
	dia. mm	6.90	10.30	13.10	15.30

Electrical data

Impedance			Ohm	75 ± 3	75 ± 2	75 ± 2	75 ± 2
Capacitance			pF/m	52 ± 2	52 ± 2	52 ± 2	52 ± 2
Velocity ratio			%	85	85	85	85
Attenuation (at 20°C)							
at	5	MHz	dB/100m	1.6	1.1	0.8	0.8
at	10	MHz	dB/100m	2.3	1.5	1.1	1.1
at	30	MHz	dB/100m	3.2	2.2	1.5	1.3
at	50	MHz	dB/100m	4.1	2.8	2.0	1.7
at	200	MHz	dB/100m	8.0	5.6	4.0	3.4
at	300	MHz	dB/100m	9.8	6.9	4.9	4.2
at	470	MHz	dB/100m	12.5	8.8	6.4	5.5
at	862	MHz	dB/100	17.2	12.3	9.1	7.7
at	1000	MHz	dB/100m	18.6	13.2	9.8	8.4
at	1750	MHz	dB/100m	25.2	17.9	13.3	11.4
at	2150	MHz	dB/100m	28.1	20.1	14.9	12.8
at	2400	MHz	dB/100m	29.7	21.0	15.7	13.6
at	3000	MHz	dB/100m	33.7	24.5	18.3	15.4
Structural return loss (SRL)							
at	5 - 470	MHz	dB	> 30	> 30	> 30	> 25
at	470 - 1000	MHz	dB	> 28	> 28	> 28	> 24
at	1000 - 2000	MHz	dB	> 26	> 23	> 23	> 23
at	2000 - 3000	MHz	dB	> 22	> 20	> 20	> 22
Screening attenuation (SA)			class	A ++	A ++	A ++	A ++
at	5 - 30	MHz	mOhm/m	0.1	0.1	0.02	0.01
at	30 - 1000	MHz	dB	> 105	> 105	>115	> 115
at	1000 - 2000	MHz	dB	> 90	> 90	> 100	> 110
at	2000 - 3000	MHz	dB	> 80	> 80	> 85	> 100
DC resistance inner/outer cond.			Ohm/km	18.0 / 14.0	8.5 / 7.5	5.0 / 4.5	3.4 / 3.5
Loop resistance			Ohm/km	32.0	16.0	9.5	6.9
Max. current (I eff.)			A	8.0	16.0	21.0	25.0
Sheath spark testing			kV	3.0	8.0	8.0	8.0
Specification conformity			EN 50117	part 2-4	part 2-3	part 2-3	part 2-3