

Belden Coaxial Cables for Broadband

Coaxial 50 Ohm Cables

			50 OHM					
Product description			RG213 PVC	H1000 B PE	H1000 PVC	H1000 PE	H1001 PE	H500 PE
Electrical performance								
Impedance	Ohm		50 ± 2	50 ± 2	50 ± 2	50 ± 2	50 ± 2	50 ± 2
Capacitance	pF / m		100 ± 2	80 ± 2	80 ± 2	80 ± 2	80 ± 2	82 ± 2
Velocity ratio	%		66.0	83.0	83.0	83.0	83.0	81.0
DC resistance	Loop	Ohm / km	11.5	8.0	12.3	12.3	16.5	14.2
	Inner conductor	Ohm / km	6.0	3.5	3.5	3.5	4.5	3.5
Attenuation at	5 MHz	dB / 100 m	1.6	0.8	0.8	0.8	1.0	0.9
	10 MHz	dB / 100 m	2.0	1.2	1.2	1.2	1.5	1.3
	50 MHz	dB / 100 m	4.6	2.8	2.8	2.8	3.3	2.9
	100 MHz	dB / 100 m	6.6	4.0	4.0	4.0	4.7	4.1
	200 MHz	dB / 100 m	9.5	5.7	5.7	5.7	6.7	6.0
	230 MHz	dB / 100 m	10.1	6.1	6.1	6.1	7.2	6.5
	300 MHz	dB / 100 m	11.6	7.0	7.0	7.0	9.8	7.5
	400 MHz	dB / 100 m	13.8	8.4	8.4	8.4	10.6	8.7
	600 MHz	dB / 100 m	17.0	10.4	10.4	10.4	12.2	10.9
	800 MHz	dB / 100 m	20.0	12.3	12.3	12.3	14.4	12.9
	860 MHz	dB / 100 m	20.7	13.8	13.8	13.8	14.9	13.4
	1000 MHz	dB / 100 m	22.6	14.0	14.0	14.0	16.2	14.6
	1350 MHz	dB / 100 m	26.8	16.7	16.7	16.7	19.3	17.4
	1600 MHz	dB / 100 m	29.7	18.7	18.7	18.7	21.4	19.4
	1750 MHz	dB / 100 m	31.1	19.5	19.5	19.5	22.4	20.3
2150 MHz	dB / 100 m	35.1	22.5	22.5	22.5	25.3	23.0	
2400 MHz	dB / 100 m	37.1	23.6	23.6	23.6	27.1	24.6	
Power rating at 40 C	7 MHz	Watt	3700	4500	3200	3200	2600	3000
	14 MHz	Watt	2600	3200	2200	2200	1850	2100
	21 MHz	Watt	2100	2600	1840	1840	1500	1720
	28 MHz	Watt	1800	2200	1590	1590	1300	1490
	50 MHz	Watt	1350	1700	1180	1180	970	1100
	100 MHz	Watt	950	1200	820	820	680	770
	144 MHz	Watt	780	1000	680	680	560	640
	432 MHz	Watt	440	600	370	370	310	350
	800 MHz	Watt	320	400	265	265	230	250
	900 MHz	Watt	290	400	250	250	210	240
	1296 MHz	Watt	240	300	200	200	170	190
	2320 MHz	Watt	170	200	145	145	125	140
5000 MHz	Watt	110	200	90	90	80	90	
10000 MHz	Watt	70	100	55	55	50	55	
Return loss at	5 – 470 MHz	dB	> 20.0	> 23.0	> 23.0	> 23.0	> 23.0	> 23.0
	470 – 862 MHz	dB	> 18.0	> 20.0	> 20.0	> 20.0	> 20.0	> 20.0
	862 – 2150 MHz	dB	> 16.0	> 18.0	> 18.0	> 18.0	> 18.0	> 18.0
Screening efficiency	30 – 1000 MHz	dB	> 65.0	> 100.0	> 100.0	> 100.0	> 100.0	> 95.0



Construction and dimensions								
Material conductor			Stranded soft annealed copper	Bare copper	Bare copper	Bare copper	Stranded soft annealed copper	Bare copper
Diameter conductor	mm		2.25	2.62	2.62	2.62	2.70	2.50
Construction	n x mm		7.0 x 0.75				19.0 x 0.54	
Material dielectric			Solid PE	Gas injected PE	Gas injected PE	Gas injected PE	Gas injected PE	Gas injected PE
Diameter dielectric	mm		7.25 ± 0.2	7.15 ± 0.2	7.15 ± 0.2	7.15 ± 0.2	7.15 ± 0.2	7.0 ± 0.2
Type of foil				CuPET	Cu	Cu	CuPET	Cu
Overlap foil	mm			2	2	2	2	2
Braiding material			Bare copper	Bare copper	Bare copper	Bare copper	Bare copper	Bare copper
Braid coverage	%		92	85	49	49	49	50
Diameter outer conductor	mm		7.8 ± 0.25	8.0 ± 0.25	7.9 ± 0.25	7.9 ± 0.25	7.9 ± 0.25	7.45 ± 0.2
Sheath material			PVC	PE	PVC	PE	PE	PE
Diameter sheath	mm		10.3 ± 0.3	10.3 ± 0.3	10.3 ± 0.3	10.3 ± 0.3	10.3 ± 0.3	9.8 ± 0.2
Min. setting radius	mm		50	50	100	100	50	75

Belden part number	43673	49056	46531	49025	49205	49305
Colour	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
Put-up code	151 / 153 240 / 242 / 245	242	151 / 245 240 / 242	242	242	042 151 / 153 240 / 242
Length / reel	meter	500	100 / 1000 250 / 500	500	500	2000 100 / 200 250 / 500
Total weight	kg / km	136	155	141	120	109