

# Telecom Cables

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**Caleb Cable is one of the world's leading suppliers for telecom cables. Some of our end users include global telecommunication service providers, such as British Telecom and Telefonica.**

**We have a wide range of copper telecom cables, including the following ranges: CW 1308, CW 1128, CW 1600, ADSL and XDSL big pair telephone cables; CC 7000, CC 8000, BT 2003 and BT 3002 multi core coax cables; semi flexible radio frequency coaxial cables for high frequency application.**

# Telecom Cables

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## CW1128



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
10 x cable diameter
- **Maximum conductor resistance at 20 °C**  
96 Ohm/km
- **Nominal diameter of conductors**  
0.5 mm
- **Average mutual capacitance**  
56 pF/km

### Cable structure

- **Conductor:** solid bare copper
- **Insulation:** foam PE
- **Filler:** petroleum jelly
- **Separator:** tape
- **Sheath:** PE
- **Sheath color:** black

### Pair identification

- Quad: Orange/Green/White/Black
- Pair 1: White/Blue
  - Pair 2: White/Orange
  - Pair 3: White/Green
  - Pair 4: White/Brown
  - Pair 5: White/Grey
  - Pair 6: Red/Blue
  - Pair 7: Red/Orange
  - Pair 8: Red/Green
  - Pair 9: Red/Brown
  - Pair 10: Red/Grey

### Tape lapping identification

- Unit 1: Blue
- Unit 2: Orange
- Unit 3: Green
- Unit 4: Brown
- Unit 5: Grey
- Unit 6: White
- Unit 7: Red
- Unit 8: Black
- Unit 9: Yellow
- Unit 10: Violet

### Application

The cable is mainly designed to connect telephone equipments and can be used in low level signaling applications.

#### Cw1128 1/0.5 PJ Filled Unarmored

No. of Pairs x Nominal Diameter of Conductors # x mm	Configuration	Outer Diameter mm	Cable Weight kg/km
2 x 0.5	1 Quad	6.8	48
5 x 0.5	1 x 5 Pairs	8.3	79
10 x 0.5	1 x 10 Pairs	11.0	141
20 x 0.5	4 x 5 Pairs	12.5	198
50 x 0.5	5 x 10 Pairs	15.5	310
100 x 0.5	10 x 10 Pairs	20.3	578

## CW1128/1198



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
10 x cable diameter
- **Maximum conductor resistance at 20 °C**  
96 Ohm/km
- **Nominal diameter of conductors**  
0.5 mm
- **Average mutual capacitance**  
56 pF/km

### Cable structure

- Conductor: solid bare copper
- Insulation: foam PE
- Filler: petroleum jelly
- Separator: tape
- Inner sheath: PE
- Armoring: GSWA (Galvanized Steel Wire Armor)
- Sheath: PE
- Sheath color: black

### Pair identification

- Quad: Orange/Green/White/Black
- Pair 1: White/Blue
- Pair 2: White/Orange
- Pair 3: White/Green
- Pair 4: White/Brown
- Pair 5: White/Grey
- Pair 6: Red/Blue
- Pair 7: Red/Orange
- Pair 8: Red/Green
- Pair 9: Red/Brown
- Pair 10: Red/Grey

### Tape lapping identification

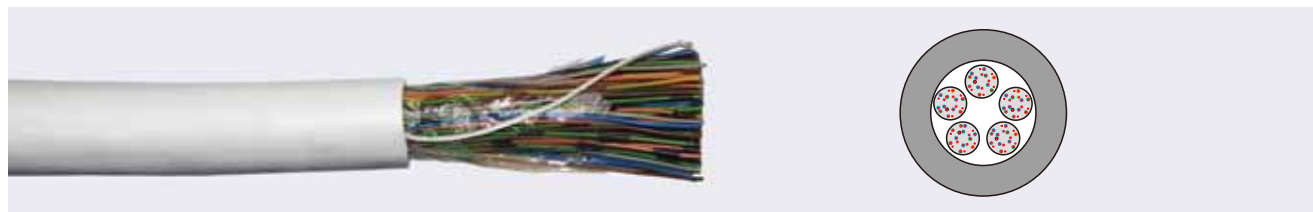
- Unit 1: Blue
- Unit 2: Orange
- Unit 3: Green
- Unit 4: Brown
- Unit 5: Grey
- Unit 6: White
- Unit 7: Red
- Unit 8: Black
- Unit 9: Yellow
- Unit 10: Violet

### Application

The cable is mainly designed to connect telephone equipments and can be used in low level signaling applications. It is suitable for outdoor usage and direct burial, being UV and moisture resistant.

No. of Pairs x Nominal Diameter of Conductors # x mm	Pair Configuration	Outer Diameter mm	No. of Pairs x Nominal Diameter of Conductors # x mm	Pair Configuration	Outer Diameter mm
2 x 0.5	1 Quad	—	20 x 0.9	4 x 5 Pairs	26.6
2 x 0.9	1 Quad	—	30 x 0.5	3 x 10 Pairs	18.4
5 x 0.5	1 x 5 Pairs	14.7	30 x 0.9	3 x 10 Pairs	27.8
5 x 0.9	1 x 5 Pairs	19.0	50 x 0.5	5 x 10 Pairs	24.8
10 x 0.5	1 x 10 Pairs	16.2	50 x 0.9	5 x 10 Pairs	36.0
10 x 0.9	1 x 10 Pairs	22.3	100 x 0.5	10 x 10 Pairs	30.5
20 x 0.5	4 x 5 Pairs	17.2	100 x 0.9	10 x 10 Pairs	46.0

## CW1308



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
10 x cable diameter
- **Maximum conductor resistance at 20 °C**  
96 Ohm/km
- **Nominal diameter of conductors**  
0.5 mm
- **Maximum capacitance unbalance**  
500 pF/500m

### Cable structure

- **Conductor:** solid plain copper
- **Insulation:** SR-PVC
- **Separator:** tape
- **Sheath:** PVC/LSF
- **Sheath color:** white/black

### Application

The cable is mainly designed to connect telephone equipments and can be used in low level signaling applications. It is suitable for indoor installation.

No. of Pairs x Nominal Diameter of Conductors # x mm	Construction	Outer Diameter mm	Cable Weight kg/km
2 x 0.5	1 x 2PR	4.0	22
3 x 0.5	1 x 3PR	4.5	28
4 x 0.5	1 x 4PR	5.3	36
6 x 0.5	1 x 6PR	5.7	45
8 x 0.5	1 x 8PR	6.3	57
10 x 0.5 + E	1 x 10PR + E	7.3	90
12 x 0.5	1 x 12PR	7.0	79
15 x 0.5	1 x 15PR	7.7	95
16 x 0.5	1 x 16PR	7.9	101
20 x 0.5 + E	1 x 20PR + E	9.9	153
25 x 0.5 + E	1 x 25PR + E	10.8	180
30 x 0.5 + E	3 x 10PR + E	11.5	205
32 x 0.5	4 x 8PR	10.7	189
40 x 0.5 + E	4 x 10PR + E	12.7	258
50 x 0.5 + E	5 x 10PR + E	14.0	313
64 x 0.5 + E	1 x 16PR + 6 x 8PR + E	14.8	386
80 x 0.5 + E	1 x 20PR + 6 x 10PR + E	16.4	472
100 x 0.5 + E	1 x 20PR + 8 x 10PR + E	18.6	596
160 x 0.5 + E	4 x 10PR + 6 x 20PR + E	23.0	912
320 x 0.5 + E	1 x 20PR + 5 x 20PR + 10 x 20PR + E	32.0	1756

E - Includes additional 1.38 mm diameter insulated earth wire colored white  
PR=Pairs

## CW1308



### Pair identification

Cabling Element	Color of Insulation	
	A - Wire	B - Wire
1	WHITE - Blue	BLUE - White
2	WHITE - Orange	ORANGE - White
3	WHITE - Green	GREEN - White
4	WHITE - Brown	BROWN - White
5	WHITE - Grey	GREY - White
6	RED - Blue	BLUE - Red
7	RED - Orange	ORANGE - Red
8	RED - Green	GREEN - Red
9	RED - Brown	BROWN - Red
10	RED - Grey	GREY - Red
11	BLACK - Blue	BLUE - Black
12	BLACK - Orange	ORANGE - Black
13	BLACK - Green	GREEN - Black
14	BLACK - Brown	BROWN - Black
15	BLACK - Grey	GREY - Black

Cabling Element	Color of Insulation	
	A - Wire	B - Wire
16	YELLOW - Blue	BLUE - Yellow
17	YELLOW - Orange	ORANGE - Yellow
18	YELLOW - Green	GREEN - Yellow
19	YELLOW - Brown	BROWN - Yellow
20	YELLOW - Grey	GREY - Yellow
21	VIOLET - Blue	BLUE - Violet
22	VIOLET - Orange	ORANGE - Violet
23	VIOLET - Green	GREEN - Violet
24	VIOLET - Brown	BROWN - Violet
25	VIOLET - Grey	GREY - Violet
26	PINK - Blue	BLUE - Pink
27	PINK - Orange	ORANGE - Pink
28	PINK - Green	GREEN - Pink
29	PINK - Brown	BROWN - Pink
30	PINK - Grey	GREY - Pink

## CW1308B



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
15 x cable diameter
- **Maximum conductor resistance at 20 °C**  
96 Ohm/km
- **Maximum Earth Resistance at 20 °C**  
12.40 Ohm/km
- **Maximum capacitance unbalance**  
500 pF/500m

### Cable structure

- Conductor: solid plain copper
- Insulation: SR-PVC
- Separator: tape
- Screen: Al-PET and tinned copper drain wire
- Nylon rip cord
- Sheath: LSZH
- Sheath color: black

### Application

The cable is mainly designed to connect telephone equipments and can be used in low level signaling applications. It is suitable for both indoor and outdoor environment.

No. of Pairs x Nominal Diameter of Conductors # x mm	Outer Diameter mm	Cable Weight kg/km
10PR + E x 0.5	7.0	98
20PR + E x 0.5	9.0	155
50PR + E x 0.5	13.5	325
75PR + E x 0.5	16.0	470
80PR + E x 0.5	16.5	495
100PR + E x 0.5	19.0	610
200PR + E x 0.5	25.6	1155

E - Includes additional 1.38 mm diameter insulated earth wire colored white

### Pair identification

Cabling Element	Color of Insulation		Cabling Element	Color of Insulation	
	A - Wire	B - Wire		A - Wire	B - Wire
1	WHITE - Blue	BLUE - White	16	YELLOW - Blue	BLUE - Yellow
2	WHITE - Orange	ORANGE - White	17	YELLOW - Orange	ORANGE - Yellow
3	WHITE - Green	GREEN - White	18	YELLOW - Green	GREEN - Yellow
4	WHITE - Brown	BROWN - White	19	YELLOW - Brown	BROWN - Yellow
5	WHITE - Grey	GREY - White	20	YELLOW - Grey	GREY - Yellow
6	RED - Blue	BLUE - Red	21	VIOLET - Blue	BLUE - Violet
7	RED - Orange	ORANGE - Red	22	VIOLET - Orange	ORANGE - Violet
8	RED - Green	GREEN - Red	23	VIOLET - Green	GREEN - Violet
9	RED - Brown	BROWN - Red	24	VIOLET - Brown	BROWN - Violet
10	RED - Grey	GREY - Red	25	VIOLET - Grey	GREY - Violet
11	BLACK - Blue	BLUE - Black	26	PINK - Blue	BLUE - Pink
12	BLACK - Orange	ORANGE - Black	27	PINK - Orange	ORANGE - Pink
13	BLACK - Green	GREEN - Black	28	PINK - Green	GREEN - Pink
14	BLACK - Brown	BROWN - Black	29	PINK - Brown	BROWN - Pink
15	BLACK - Grey	GREY - Black	30	PINK - Grey	GREY - Pink

## J-Y(St)Y Cable



### Technical data

- **Temperature rating:** 70 °C
- **Nominal voltage:** 300 V
- **Test voltage:** 800 V
- **Flame retardant:**  
VDE 0482-332-1-2/IEC 60332-1
- **Minimum bending radius**  
7.5 x cable diameter

### Cable structure

- **Conductor:** bare copper
- **Insulation:** PVC
- **Stranding unit:** pair
- **Screen:** Al-PET and drain wire
- **Sheathing material:** PVC
- **Sheath color:** grey

### Application

The cable is designed to connect different telecommunication units in both dry and wet inside rooms. The cable can also be used outdoor if it is not exposure directly to the sun. It cannot be used in power circuits.

No. of Pairs x Nominal Diameter of Conductors # x mm	Outer Diameter mm	Cable Weight kg/km
01 x 2 x 0.6	5.0	30
02 x 2 x 0.6	5.5	35
03 x 2 x 0.6	6.3	50
04 x 2 x 0.6	6.8	55
05 x 2 x 0.6	7.2	65
06 x 2 x 0.6	7.5	75
08 x 2 x 0.6	8.0	90

No. of Pairs x Nominal Diameter of Conductors # x mm	Outer Diameter mm	Cable Weight kg/km
10 x 2 x 0.6	9.0	110
12 x 2 x 0.6	9.5	130
14 x 2 x 0.6	10.0	150
16 x 2 x 0.6	10.5	155
20 x 2 x 0.6	11.0	200
24 x 2 x 0.6	11.5	235
30 x 2 x 0.6	13.0	275

No. of Pairs x Nominal Diameter of Conductors # x mm	Outer Diameter mm	Cable Weight kg/km
40 x 2 x 0.6	15.0	350
50 x 2 x 0.6	17.0	445
60 x 2 x 0.6	18.0	520
80 x 2 x 0.6	20.5	675
100 x 2 x 0.6	23.0	870
01 x 2 x 0.8	6.0	40
02 x 2 x 0.8	7.0	55
03 x 2 x 0.8	8.5	80
04 x 2 x 0.8	9.0	95
05 x 2 x 0.8	9.5	115
06 x 2 x 0.8	10.5	130
08 x 2 x 0.8	11.5	160

No. of Pairs x Nominal Diameter of Conductors # x mm	Outer Diameter mm	Cable Weight kg/km
10 x 2 x 0.8	13.0	205
12 x 2 x 0.8	14.0	240
14 x 2 x 0.8	14.5	280
16 x 2 x 0.8	15.5	300
20 x 2 x 0.8	16.5	380
24 x 2 x 0.8	19.0	445
30 x 2 x 0.8	20.0	540
40 x 2 x 0.8	22.5	710
50 x 2 x 0.8	25.5	875
60 x 2 x 0.8	28.0	1085
80 x 2 x 0.8	31.0	1440
100 x 2 x 0.8	32.0	1790



## CW1600



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
7.5 x cable diameter
- **Maximum conductor resistance at 20 °C**  
96 Ohm/km
- **Nominal diameter of conductors**  
0.5 mm
- **Maximum average mutual capacitance at 0.8 kHz-3.0 kHz:** 80 nF/km
- **Maximum Capacitance Unbalance at 0.8 kHz-3.0 kHz pair-to-pair:**  
500 pF/500m

### Cable structure

- Conductor: solid annealed bare or tinned copper
- Insulation: PE
- Screen: Al-PET and drain wire
- Fire Barrier Tape: Mica glass tape is included in cable with more than 10 pairs for achieving the required fire properties
- Nylon ripcord
- Sheath: LSZH

### Application

The cable is similar to CW 1308 in design and application, but with low smoke halogen free insulation and sheath. CW 1600 has the additional screening advantage due to an Al-PET foil screen and drain wire.

#### 0.5 mm Conductor, 0.95 mm Insulated Wire-Layer

No. of Pairs	Pair Elements or Unit Size	Outer Diameter mm	Cable Weight kg/km
2	Prs1-2	4.5	23
3	Prs1-3	5.0	35
4	Prs1-4	5.8	40
6	Prs1-6	6.8	51
12	Prs1-12	9.1	92
25	Prs1-25	11.4	167

## CW1600



### 0.5 mm Conductor, 0.95 mm Insulated Wire-Unit

No. of Pairs	Pair Elements or Unit Size	Outer Diameter mm	Cable Weight kg/km
10 + E	1/2x20	8.6	102
20 + E	20	12.0	157
40 + E	20	15.0	271
50 + E	20	18.0	241
80 + E	20	22.5	496
100 + E	20	27.0	633
160 + E	20	30.3	960
320 + E	20	39.5	1840

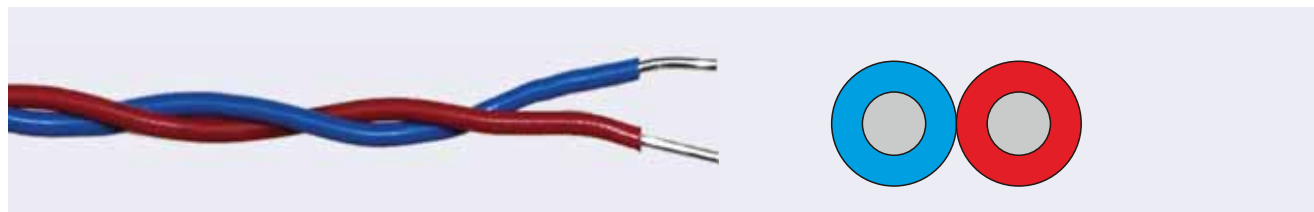
E - Includes additional 1.38 mm diameter insulated earth wire colored white

### Pair identification

Cabling Element	color of Insulation	
	A - Wire	B - Wire
1	WHITE - Blue	BLUE - White
2	WHITE - Orange	ORANGE - White
3	WHITE - Green	GREEN - White
4	WHITE - Brown	BROWN - White
5	WHITE - Grey	GREY - White
6	RED - Blue	BLUE - Red
7	RED - Orange	ORANGE - Red
8	RED - Green	GREEN - Red
9	RED - Brown	BROWN - Red
10	RED - Grey	GREY - Red
11	BLACK - Blue	BLUE - Black
12	BLACK - Orange	ORANGE - Black
13	BLACK - Green	GREEN - Black
14	BLACK - Brown	BROWN - Black
15	BLACK - Grey	GREY - Black

Cabling Element	color of Insulation	
	A - Wire	B - Wire
16	YELLOW - Blue	BLUE - Yellow
17	YELLOW - Orange	ORANGE - Yellow
18	YELLOW - Green	GREEN - Yellow
19	YELLOW - Brown	BROWN - Yellow
20	YELLOW - Grey	GREY - Yellow
21	VIOLET - Blue	BLUE - Violet
22	VIOLET - Orange	ORANGE - Violet
23	VIOLET - Green	GREEN - Violet
24	VIOLET - Brown	BROWN - Violet
25	VIOLET - Grey	GREY - Violet

## Jumper Wires



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
7.5 x cable diameter
- **Abrasion Resistant**

### Cable structure

- **Conductor:** solid bare copper or tinned copper
- **Insulation:** SR-PVC to BS 6746 (CW 1109); cross-linked PVC (CW 1257) & PVC (CW 1423)

## Application

The jumper wires are suitable to be used for the general wiring between terminal blocks at main distribution frames (MDF), cross connection cabinets (CCP) and distribution frames or boxes.

	CW 1109	CW 1257	CW 1423
Maximum conductor resistance at 20°C(Ohm/km)	234	153	98
Minimum insulation resistance at 500 V DC(MOhm x km)	50	50	50

## CW 1109

### 0.32 mm Conductor, 0.7 mm Insulated Wire

No. of Wires	Conductor Diameter mm	Conductor Size mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
1	0.32	0.08	0.7	1.5
2	0.32	0.08	1.3	3.0

### 0.4 mm Conductor, 0.85 mm Insulated Wire

1	0.4	0.126	0.85	1.8
2	0.4	0.126	1.45	3.6

### 0.5 mm Conductor, 0.95 mm Insulated Wire

1	0.5	0.196	0.95	2.2
2	0.5	0.196	1.65	4.8
3	0.5	0.196	2.35	6.6

### 0.6 mm Conductor, 1.05 mm Insulated Wire

1	0.6	0.283	1.05	2.8
2	0.6	0.283	1.75	5.6

### 0.8 mm Conductor, 1.5 mm Insulated Wire

1	0.8	0.5	1.50	5.5
2	0.8	0.5	2.50	11.0

### 1.0 mm Conductor, 1.7 mm Insulated Wire

1	1.0	0.785	1.70	6.5
2	1.0	0.785	2.60	13.0

### 7/0.2 mm Conductor, 1.05 mm Insulated Wire

1	7/0.2	0.22	1.05	2.5
2	7/0.2	0.22	2.35	5.0

## Jumper wire



### CW 1257

#### 0.4 mm Conductor, 1.0 mm Insulated Wire

No. of Wires	Conductor Diameter mm	Conductor Size mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
1	0.4	0.126	1.0	2.0
2	0.4	0.126	1.8	4.0

#### 0.4 mm Conductor, 0.85 mm Insulated Wire

1	0.5	0.19	1.1	2.5
2	0.5	0.19	2.0	5.0

#### 0.6 mm Conductor, 1.2 mm Insulated Wire

1	0.6	0.283	1.2	2.9
2	0.6	0.283	2.2	5.8

### CW 1423

#### 0.5 mm Conductor, 1.1 mm Insulated Wire

1	0.5	0.196	1.98	2.5
2	0.5	0.196	2.50	5.0
3	0.5	0.196	3.00	7.5
4	0.5	0.196	3.80	10.0
5	0.5	0.196	4.60	12.5



Abrasion Tester

## ADSL Connecting Cables



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
10 x cable diameter
- **Maximum conductor resistance at 20 °C**  
143 Ohm/km
- **Impedance(Ohm):** 120
- **Maximum Average Attenuation at 1 MHz (dB/km):** 32
- **Maximum Average Attenuation at 10 MHz (dB/km):** 110
- **Minimum NEXT pair-to-pair at 1 MHz (dB):** 55
- **Minimum NEXT pair-to-pair at 10 MHz (dB):** 40

### Cable structure

- **Conductors:** Solid annealed bare copper sized 0.4 mm
- **Insulation:** PE
- **Screen:** Al-PET and tinned copper braiding
- **Ripcord**
- **Sheath:** PVC/LSZH compound

### Application

The cable is designed for ADSL transmission systems. It ensures data bandwidth up to 10 MHz.

No. of Pairs	Sheath Thickness mm	Outer Diameter mm	Cable Weight kg/km
24	0.9	11.0	139
32	0.9	12.0	180
64	1.0	15.0	300
72	1.0	16.0	330
96	1.1	19.5	450
128	1.2	20.0	528

## XDSL Connecting Cables



### Technical data

- **Temperature rating:** 70 °C
- **Minimum bending radius**  
10 x cable diameter
- **Maximum conductor resistance at 20 °C**  
96 Ohm/km
- **Impedance at 0.3 – 1 MHz (Ohm):** 100±20
- **Impedance at 1 – 40 MHz (Ohm):** 100±15
- **Maximum Resistance Unbalance(%):** 2
- **Average mutual capacitance (nF/km):** 52
- **Maximum Capacitance Unbalance at 1kHz pair-to-pair (pF/500m):** 45
- **Maximum Capacitance Unbalance at 1kHz pair-to-ground (pF/500m):** 400

### Cable structure

- **Conductors:** Solid annealed bare copper sized 0.5 mm
- **Insulation:** PE
- **Screen:** Al-PET and tinned copper drain wire
- **Nylon ripcord**
- **Sheath:** PE

### Application

The cables are designed for XDSL transmission system. It ensures data speeds up to 40 MHz.

No. of Pairs/Quads	Conductor Diameter mm	Sheath Thickness mm	Outer Diameter mm	Cable Weight kg/km
26	0.5	0.9	18.5	265
51	0.5	1.0	24.2	460
101	0.5	1.1	31.5	790
202	0.5	1.2	41.5	1415

Maximum Average Attenuation		
at 0.1 MHz	dB/km	0.81
at 0.3 MHz	dB/km	1.15
at 0.6 MHz	dB/km	1.65
at 1.0 MHz	dB/km	2.10
at 4.0 MHz	dB/km	4.3
at 10 MHz	dB/km	6.6
at 16 MHz	dB/km	8.2
at 20 MHz	dB/km	9.2
at 31.25 MHz	dB/km	11.8
at 40 MHz	dB/km	13.9

Minimum ELFEXT pair-to-pair		
at 0.16 MHz	dB	69
at 1 MHz	dB	55
at 20 MHz	dB	29
at 40 MHz	dB	23

Minimum NEXT pair-to-pair		
at 0.16 MHz	dB	68
at 1 MHz	dB	59
at 20 MHz	dB	39
at 40 MHz	dB	35

Minimum Return Loss		
at 1-20 MHz	dB/100m	23

## BT 2001



### Technical data

- Maximum conductor resistance at 20°C (Ohm/km): 84.6
- Minimum insulation DC resistance at 20°C (MΩ x km): 100
- Temperature rating (°C): 80
- Nominal voltage (V): 30
- Velocity ratio (%): 82
- Impedance (Ω): 75±3
- Capacitance (pF/m): <65

### Cable structure

- Conductors: bare copper, diameter 0.20 x 7 mm
- Insulation: foam PE, diameter 2.4 mm
- Braiding: bare copper; coverage: 94%
- Sheath: PVC, diameter 4.4 mm
- Sheath color: white
- Multi-core coax cables are available; typically 4, 8, 16 and 32 cores

### Application

The BT 2001 coax cables are suitable for communication and signal control systems.

## BT 2002



### Technical data

- Maximum conductor resistance at 20°C (Ohm/km): 84.6
- Minimum insulation DC resistance at 20°C (MΩ x km): 100
- Temperature rating (°C): 70
- Nominal voltage (V): 30
- Velocity ratio (%): 83
- Impedance (Ω): 75±3
- Capacitance(pF/m): <65

### Cable structure

- Conductors: bare copper, diameter 0.20 x 7 mm
- Insulation: foam PE, diameter 2.4 mm
- Braiding 1: bare copper; coverage: 94%
- Braiding 2: bare copper; coverage: 98%
- Sheath: LSZH, diameter 5.1 mm
- Sheath color: white
- Multi-core coax cables are available; typically 4, 8, 16 and 32 cores

### Application

The BT 2002 coax cables are suitable for communication and signal control systems.

## BT 2003



### Technical data

- Maximum conductor resistance at 20°C (Ohm/km): 63.7
- Minimum insulation DC resistance at 20°C (MΩ x km): 20000
- Temperature rating (°C): -20 ~ 70
- Nominal voltage (V): 30
- Velocity ratio (%): 67.7
- Impedance (Ω): 75±3
- Capacitance (pF/m): <70

### Cable structure

- Conductors: bare copper, diameter 0.61 mm
- Insulation: solid PE, diameter 3.7 mm
- Braiding 1: bare copper; coverage: 93%
- Braiding 2: bare copper; coverage: 92%
- Sheath: PVC, diameter 6.7 mm
- Sheath color: white
- Multi-core coax cables are available; typically 4, 8, 16 and 32 cores

### Application

The BT 2003 coax cables are suitable for communication and signal control systems.

## BT 3002



### Technical data

- Maximum conductor resistance at 20°C (Ohm/km): 246.5
- Minimum Insulation DC Resistance at 20°C (MΩ x km): 20000
- Temperature rating (°C): 80
- Nominal voltage (V): 30
- Velocity ratio (%): 66.6
- Impedance (Ω): 75±3

### Cable structure

- Conductors: bare copper, diameter 0.31 mm
- Insulation: solid PE, diameter 1.95 mm
- Braiding 1: tinned copper; coverage: 94%
- Braiding 2: tinned copper; coverage: 95%
- Sheath: PVC, diameter 3.55 mm
- Sheath color: white
- Multi-core coax cables are available; typically 4, 8, 16 and 32 cores

### Application

The BT 3002 coax cables are suitable for communication and signal control systems.

#### BT3002 cable diameter for different cores

	Single Core	4 Core	8 Core	12 Core	16 Core	32 Core
BT3002	3.55mm	10.20mm	16.05mm	17.50mm	19.60mm	26.90mm



## CC 7000



### Technical data

- **Maximum conductor resistance at 20°C (Ohm/km):** 7.32
- **Minimum insulation DC resistance at 20°C (MΩ x km):** 200
- **Temperature rating (°C):** 60
- **Nominal voltage (V):** 30
- **Capacitance (pF/m):** 56
- **Velocity ratio (%):** 82.5
- **Impedance (Ohm):** 75±3
- **Capacitance (pF/m):** <70

### Cable structure

- **Conductors:** solid bare copper, diameter 0.60 mm.
- **Insulation:** foam PE, diameter 2.80 mm
- **Shield:** Al-PET and tinned copper braiding
- **Sheath:** LSZH, diameter 4.5 mm
- **Multi-core coax cables** are available; typically 4, 8, 16 and 32 cores

### Application

CC 7000 is a flexible cable which runs up to 250 m at 34 Mbit/s. It is also capable to run over 100 m at 155 Mbit/s. It is ideal for use on HDC systems and VoIP application;

#### Summary of transmission distance:

Transmission Rate (Mbit/s)	2	8	34	140	155
CC 8000	280 m	160 m	140 m	80 m	60 m
CC 7000	N/A	250 m	250 m	125 m	115 m

#### CC7000 cable diameter for different cores

	Single Core	4 Core	8 Core	12 Core	16 Core	32 Core
CC7000	4.50 mm	12.75 mm	17.20 mm	21.40 mm	24.25 mm	33.45 mm

#### Attenuation at 20°C (dB/100m)

at 1MHz	2.406
at 5MHz	3.938
at 10MHz	4.966
at 30MHz	7.384
at 100MHz	12.156
at 135MHz	13.796
at 180MHz	15.502
at 270MHz	16.172
at 360MHz	17.370

## CC 8000



### Technical data

- **Maximum conductor resistance at 20°C(Ohm/km):** 23.6
- **Minimum insulation DC resistance at 20°C (MΩm x km):** 200
- **Temperature rating (°C):** 60
- **Nominal voltage (V):** 30
- **Capacitance (pF/m):** 56
- **Velocity ratio (%):** 82
- **Impedance (Ωm):** 75±3
- **Capacitance (pF/m):** 56

### Cable structure

- **Conductors:** solid bare copper, diameter 0.31 mm.
- **Insulation:** foam PE, diameter 1.45 mm
- **Shield:** Al-PET and tinned copper braiding
- **Sheath:** LSZH, diameter 2.75 mm
- **Multi-core coax cables** are available; typically 4, 8, 16 and 32 cores

### Application

CC 8000 is a high performance alternative to BT 3002 with a much smaller overall diameter, and suitable for 2 Mbit/s application.

#### Summary of transmission distance:

Transmission Rate(Mbit/s)	2	8	34	140	155
CC 8000	280 m	160 m	140 m	80 m	60 m
CC 7000	N/A	250 m	250 m	125 m	115 m

#### CC8000 cable diameter for different cores

	Single Core	4 Core	8 Core	12 Core	16 Core	32 Core
CC8000	2.75 mm	8.25 mm	10.00 mm	13.30 mm	14.85 mm	20.55 mm

#### Attenuation at 20°C (dB/100m)

at 1MHz	2.00
at 4MHz	4.15
at 17MHz	8.42
at 69MHz	15.02
at 78MHz	15.70

## TZC 750 24



### Technical data

- **Maximum conductor resistance at 20°C (Ohm/km):** 17.5
- **Minimum insulation DC resistance at 20°C (MOhm x km):** 228
- **Temperature rating (°C):** 75
- **Nominal voltage:** 0.75 kV AC (max peak value)
- **Velocity ratio (%):** 66
- **Impedance (Ohm):** 75±3
- **Capacitance (pF/m):** 66

### Cable structure

- **Conductors:** solid plain copper wire; 0.31 mm
- **Insulation:** PE; 1.95 mm
- **Outer conductor:** double tinned copper braiding
- **Sheath:** PVC, diameter 3.55 mm

### Application

The cable is suitable for indoor use in the telecom transmission systems. It's robust and with good transmission properties.

#### TZC75024 cable diameter for different cores

	Single Core	4 Core	8 Core	12 Core	16 Core	32 Core
TZC75024	3.55 mm	10.20 mm	14.50 mm	17.50 mm	19.50 mm	26.90 mm

## Semi-Flexible cable



### Application

The low attenuation and high-frequency signal transmission property makes the cable suitable to be used in the wireless and micro wave measuring equipments.

Construction		CC670-047 SXE	CC670-086/75 SXE	CC670-141/25 SXE	CC670-141/100 SXE
	Material	Diameter(mm)	Diameter(mm)	Diameter(mm)	Diameter(mm)
Inner conductor	Silver Plated Copper Clad Steel	0.29	0.29	1.64	0.28
Dielectric	PTFE	0.94	1.68	3.00	2.98
Outer conductor	Tin Soaked Copper Braid	1.19	2.10	3.52	3.52
Sheath	FEP	1.60	2.50	4.10	4.10

### Electrical Characteristics

Capacitance(pF/m)	95	63.5	190.4	47.6
Impedance(Ohm)	50	75	25	100
Velocity(%)	69.5	69.5	69.5	69.5
Operating frequency(GHz)	109	61	29	36
Time delay(ns/m)	4.7	4.7	4.7	4.7
Max. operating voltage(KV rms)	1.5	1.5	1.9	1.9
Min. screening effectiveness up 18 GHz (dB)	100	100	100	100

### Mechanical Characteristics

Min. bending radius static(mm)	4	4	10	8
Min. bending radius repeated(mm)	20	20	40	40
Operating temp(°C)	-55 ~ 125	-55 ~ 125	-55 ~ 125	-55 ~ 125

### Attenuation at 20°C

0.5 GHz	dB/100m	79.0	48.0	35.0	35.0
1.0 GHz	dB/100m	112.0	68.0	49.0	50.0
5.0 GHz	dB/100m	258.0	160.0	115.0	116.0
10.0 GHz	dB/100m	373.0	234.0	170.0	169.0
20.0 GHz	dB/100m	544.0	347.0	258.0	249.0