

## Highlights:

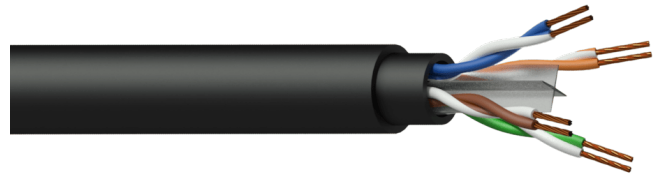
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- 24 AWG thin and dense stranded conductors
- Highflex™ solid & flexible jacket
- 8.2 mm (Ø) outer diameter

## Product information:

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The BCT60U is a CAT6 networking cable featuring a Highflex™ outer jacket which is specifically designed for professional use in highly demanding applications. The conductor section of the BCT60U consists of 4 twisted pairs with stranded copper 24 AWG conductors with a polyethylene '+' shaped separator in between. Thanks to this separator, better performance in terms of crosstalk and system noise can be achieved resulting in a higher bandwidth. The combination with hard and solid inner jacket materials and soft outer jacket materials provides great flexibility with a solid touch. Even after numerous times of winding and unwinding. Supports 10Base-T, 100Base-TX, 1000Base-T and 10GBase-T gigabit.



## Properties:

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## Inner Conductors:

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## Product Features:

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|             |                    |
|-------------|--------------------|
| Application | Rental & MI        |
| Series      | Bulk & Accessories |

## Physical Characteristics:

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|                 |                             |                         |   |
|-----------------|-----------------------------|-------------------------|---|
| Type of cable   | U/UTP CAT6 Networking cable |                         |   |
| Inner conductor | Material                    | BC 7 x 0.2 mm (Ø) (OFC) |   |
|                 | Section                     | 0.22 mm <sup>2</sup>    |   |
|                 | Number of conductors        | 8 (4 pairs)             |   |
|                 | Insulation                  | Material                | HDPE 1.02 mm (Ø)  |
|                 | Audio                       | Conductor twisting      | Lay length ≤ 30 mm  |
|                 | Insulation                  | Colours                 | Green / White & Green ; Blue / White & Blue ; Orange / White & Orange ; Brown / White & Brown |
| Separator       | Cross web Filling (PE)      |                         |   |
| Inner jacket    | Material                    | Durable PVC 6.6 mm (Ø)  |   |
| Outer jacket    | Material                    | Flexible PVC 8.2 mm (Ø) |   |
|                 | Colours                     | Black                   |   |
| Inner conductor | American Wire Gauge         | 24 AWG                  |   |

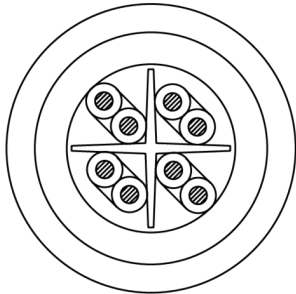
## Standards & regulations:

|                   |                                   |
|-------------------|-----------------------------------|
| RoHS2 compliant   | According EU Directive 2011/65/EU |
| Reach compliant   | According EC 1907/2006            |
| Flammability test | According IEC 60332-1             |
| Indoor / outdoor  | Indoor                            |
| Cabling standard  | ISO/IEC11801                      |
|                   | IEC61156                          |
|                   | UL444                             |
|                   | ANSI TIA-EIA 568C.2               |

## Mechanical Characteristics:

|                   |                     |                      |
|-------------------|---------------------|----------------------|
| Temperature range | Fixed installation  | - 20 °C till + 75 °C |
|                   | Mobile installation | - 15 °C till + 60 °C |
| Bending radius    | Fixed installation  | 10 x outer diameter  |
|                   | Mobile installation | 12 x outer diameter  |

## Cross sections:



## Electrical Characteristics:

|                                      |                          |                      |
|--------------------------------------|--------------------------|----------------------|
| Max. conductor                       | DC resistance            | 140 (Ω / Km)         |
|                                      | DC resistance unbalanced | 5 %                  |
| Dielectric strength                  |                          | 1.5 (KV / 1 min. DC) |
| Max. Delay / Skew                    |                          | 45 (ns / 100 m)      |
| Nom. Velocity of propagation         |                          | 65 %                 |
| Characteristic impedance             |                          | 100 Ω ± 15 Ω         |
| Nom. mutual capacitance              |                          | ≤ 5.6 (nF / 100 m)   |
| Pair to ground capacitance unbalance |                          | ≤ 330 (nF / 100 m)   |

## Variants:

- BCT60U/1 - 100 m wooden reel
- BCT60U/3 - 300 m wooden reel

Additional specifications:

| Frequency (MHz) | Characteristic Impedance Upper limit - Zu (Ω) | Characteristic Impedance Lower limit - Zl (Ω) | ATT (dB/100m) | RL (dB Min) | NEXT (dB Min) | PS NEXT (dB Min) | ELFNEXT (dB Min) | PS ELFNEXT (dB Min) | PD (ns/100m Max) |
|-----------------|---|---|---------------|-------------|---------------|------------------|------------------|---------------------|------------------|
| 1               | -   | -   | 2.4           | 20.0        | 74.3          | 72.3             | 67.8             | 64.8                | 570              |
| 4               | 115.2   | 86.8  | 4.5           | 23.0        | 65.3          | 63.3             | 55.8             | 52.8                | 552              |
| 8               | 112.6   | 88.8  | 6.4           | 24.5        | 60.8          | 58.8             | 49.7             | 46.7                | 547              |
| 10              | 111.9   | 89.4  | 7.1           | 25.0        | 59.3          | 57.3             | 47.8             | 44.8                | 545              |
| 16              | 111.9   | 89.4  | 9.1           | 25.0        | 56.2          | 54.2             | 43.7             | 40.7                | 543              |
| 20              | 111.9   | 89.4  | 10.2          | 25.0        | 54.8          | 52.8             | 41.8             | 38.8                | 542              |
| 25              | 112.9   | 88.5  | 11.4          | 24.2        | 53.3          | 51.3             | 39.8             | 36.8                | 541              |
| 31.25           | 114.1   | 87.7  | 12.8          | 23.3        | 51.9          | 49.9             | 37.9             | 34.9                | 540              |
| 62.5            | 118.3   | 84.5  | 18.5          | 20.7        | 47.4          | 45.4             | 31.9             | 28.9                | 539              |
| 100             | 121.9   | 82.0  | 23.8          | 19.0        | 44.3          | 42.3             | 27.8             | 24.8                | 538              |
| 200             | 128.8   | 77.6  | 34.8          | 16.4        | 39.8          | 37.8             | 21.8             | 18.8                | 537              |
| 250             | 131.5   | 76.0  | 39.4          | 15.6        | 38.3          | 36.3             | 19.8             | 16.8                | 536              |