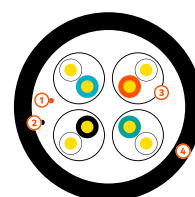
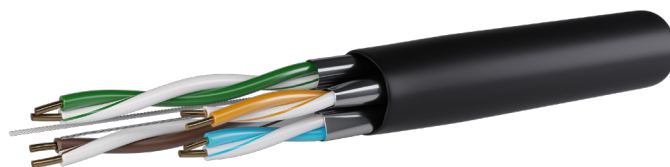




## ENTERPRISE/DATA CENTER COPPER CABLE CAT6 U/FTP - PE - 23 AWG - 0,56mm

### DESCRIPTION

Performance specified up to 250MHz and tested up to 550MHz.  
Decreasing length cable markings -  
Easy identification of remaining cable  
reduces installation time and cable  
scrap. Designed to Support all Class E  
protocols including 1GBASE-T. Support  
PoE, voice, video and Gigabit Ethernet.



- ① Drain Wire
- ② Rip-cord
- ③ Aluminum Foil
- ④ Outer Jacket

### APPLICABLE STANDARDS

#### Electrical Performance

- ISO/IEC 11801 • ISO/IEC 61156-5 • EN 50173 • EN 50288-5-1
- ANSI/ TIA-568-D

#### PoE

- IEEE 802.3bt PoE Type 1, 2, 3 and 4



### CONSTRUCTION

| Category   |               | CAT6 U/FTP            |        |                         |
|------------|---------------|-----------------------|--------|-------------------------|
| Conductor  | Material      | Copper                |        |                         |
|            | Nom O.D.      | 0,56 ± 0,005 mm       |        |                         |
|            |               | 0,022 in              |        |                         |
| Insulation | Material      | Skin-foam-skin PE     |        |                         |
|            | Diameter      | 1,330 ± 0,05 mm       |        |                         |
|            |               | 0,052 in              |        |                         |
|            | Thickness     | 0,55 ± 0,05 mm        |        |                         |
| Sheath     |               | 0,022 in              |        |                         |
|            | External O.D. | 7,3 ± 0,4 mm          |        |                         |
|            |               | 0,287 ± 0,015 in      |        |                         |
|            | Material      | PE (complies RoHS)    |        |                         |
| Rip-cord   | Color         | Black (RAL9005)       |        |                         |
|            |               | Yes                   |        |                         |
| Core Color | Pair 1        | White & Blue / Blue   | Pair 3 | White & Orange / Orange |
|            | Pair 2        | White & Green / Green | Pair 4 | White & Brown / Brown   |



## ENTERPRISE/DATA CENTER COPPER CABLE CAT6 U/FTP - PE - 23 AWG - 0,56mm

### SHEATH PHYSICAL PROPERTIES

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Before Aging Tensile Strength (Mpa) | ≥ 10,0                          |
| Before Aging Elongation (%)         | ≥ 350                           |
| Aging Period (°C x hrs)             | 100°C x24hx10d                  |
| After Aging Elongation (%)          | ≥ 300                           |
| Cold bend (-20±2°C x 4h)            | 8xCable O.D., No visible cracks |

### ELECTRICAL CHARACTERISTICS (20°C)

|                                              | Typical barpa values            | Standard values |
|----------------------------------------------|---------------------------------|-----------------|
| 1-250MHz - Impedance (Ω)                     | 100 ± 15                        | -               |
| 1-250MHz - Delay Skew (ns/100m)              | 12                              | ≤ 45            |
| DC Resistance (Ω/100m)                       | 7,2                             | ≤ 9,38          |
| DC Conductor Resistance Unbalance (%)        | 0,5% in pair; 1,2% between pair | ≤ 5,0           |
| Unbalanced to Ground Capacitance (pf/100m)   | 100                             | ≤ 330           |
| 1-250MHz - Velocity of Propagation (%) - NVP | 74                              | -               |

### TECHNICAL PERFORMANCE (100m II 328ft.)

| Frequency (MHz) | Attenuation ≤ dB |       | Return Loss ≥ dB |       | NEXT ≥ dB |       | PHASE DELAY ≤ ns |        | PSNEXT ≥ dB |       | ELFEXT ≥ dB |       | PSELFEXT ≥ dB |       |
|-----------------|------------------|-------|------------------|-------|-----------|-------|------------------|--------|-------------|-------|-------------|-------|---------------|-------|
|                 | GWC              | BT    | GWC              | BT    | GWC       | BT    | GWC              | BT     | GWC         | BT    | GWC         | BT    | GWC           | BT    |
| 1               | -                | 1,98  | 20,00            | 31,08 | 74,30     | 93,94 | 570,00           | 479,69 | 72,30       | 91,7  | 67,80       | 92,01 | 64,80         | 89,29 |
| 4               | 3,78             | 3,59  | 23,00            | 35,28 | 65,30     | 96,68 | 552,00           | 462,2  | 63,30       | 93,19 | 55,80       | 94,1  | 52,80         | 90,15 |
| 8               | 5,32             | 4,95  | 24,50            | 33,99 | 60,80     | 93,93 | 546,73           | 457,08 | 58,80       | 90,89 | 49,70       | 92,04 | 46,70         | 87,8  |
| 10              | 5,95             | 5,52  | 25,00            | 33,22 | 59,30     | 94,69 | 545,38           | 455,77 | 57,30       | 91,36 | 47,80       | 89,01 | 44,80         | 86,57 |
| 16              | 7,55             | 7,03  | 25,00            | 33,46 | 56,20     | 93,18 | 543,00           | 453,46 | 54,20       | 90,17 | 43,70       | 87,03 | 40,70         | 83,49 |
| 20              | 8,47             | 7,92  | 25,00            | 30,52 | 54,80     | 88,94 | 542,05           | 452,53 | 52,80       | 87,46 | 41,80       | 88,22 | 38,80         | 85,63 |
| 25              | 9,51             | 8,95  | 24,30            | 31,56 | 53,30     | 96,08 | 541,20           | 451,71 | 51,30       | 93,46 | 39,80       | 84,24 | 36,80         | 81,75 |
| 31,25           | 10,67            | 10,08 | 23,60            | 31,32 | 51,90     | 96,06 | 540,44           | 450,97 | 49,90       | 91,93 | 37,90       | 83,4  | 34,90         | 81,59 |
| 62,5            | 15,38            | 14,38 | 21,50            | 35,29 | 47,70     | 92,33 | 538,55           | 449,14 | 45,40       | 88,01 | 31,90       | 78,01 | 28,90         | 74,47 |
| 100             | 19,80            | 18,25 | 20,10            | 31,44 | 44,30     | 87,75 | 537,60           | 448,21 | 42,30       | 85,05 | 27,80       | 75,83 | 24,80         | 71,53 |
| 200             | 28,98            | 26,08 | 18,00            | 33,21 | 39,80     | 78,52 | 536,54           | 447,18 | 37,80       | 74,34 | 21,80       | 60,74 | 18,80         | 57,83 |
| 250             | 32,85            | 29,26 | 17,30            | 31,07 | 38,30     | 74,26 | 536,27           | 446,92 | 36,30       | 69,77 | 19,80       | 61,21 | 16,80         | 57,76 |
| 500*            | -                | 42,26 | -                | 23,32 | -         | 72,83 | -                | 446,27 | -           | 70,26 | -           | 42,92 | -             | 39,76 |
| 550*            | -                | 46,12 | -                | 22,15 | -         | 72,15 | -                | 446,21 | -           | 69,97 | -           | 41,21 | -             | 38,97 |

GWC = Guaranteed Worst Case // BT = barpa Typical



## ENTERPRISE/DATA CENTER COPPER CABLE CAT6 U/FTP - PE - 23 AWG - 0,56mm

### INSTALLATION

|                                 |                                |                                  |              |
|---------------------------------|--------------------------------|----------------------------------|--------------|
| Temperature Range (Operation)   | -40°C to +75°C                 | Temperature Range (Installation) | 0°C to +50°C |
| Min. Bending Radius (Operation) | 4D, D is the finished diameter | Max. Tensile Load (Installation) | 100N         |

### CABLE MARK

barpa (product code) category 6 U-FTP PE cable 4 pair 23 AWG Verified to ISO/IEC11801, EN 50173, EN 50174 NVP-74 \_\_m (produce date)

### ORDER INFORMATION

| Code        | Description          | Type of package | Size package (mm) | Gross Weight (kg/item) | Net Weight (kg/item) | Quantity (m) | EAN CODE      |
|-------------|----------------------|-----------------|-------------------|------------------------|----------------------|--------------|---------------|
| 82222234050 | Cable Cat.6 U/FTP PE | Drum            | 380x160x390       | 25,5                   | 23                   | 500          | 5608445000170 |

### PACKAGING

This images are merely illustratives. We want you to see the importance we attach to the packaging. We always work with products and materials that are easy to use. The drum material is Plywood, and the PE cable is black.



As part of our goal to achieve quality excellence, our barpa System Warranty can give you 25 years products and solution assurance of compliance with the industry performance standard comparing with the class installed. This warranty applies to network infrastructure installations that was made by an approved barpa Partner using an barpa solution (end-to-end).  
For more informations go to our website.

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The pictures/drawings are merely illustrative.

More information: [info@barpa.eu](mailto:info@barpa.eu) or in [www.barpa.eu](http://www.barpa.eu)

**datasheet n° b11\_5 | date: 04/25**

approved by: Ana Barbosa