



**KAYBE®**  
Right transmission for the future

CONNECTING  
PERFORMANCE

# CAT6 LAN CABLES



Reliable. High Performance. Future Ready.



HIGH SPEED  
DATA TRANSFER



PREMIUM  
QUALITY



WIDE RANGE OF  
APPLICATIONS



100% TESTED  
FOR RELIABILITY



## PRODUCT CATALOG

COMPLETE CABLING SOLUTIONS



COMMERCIAL  
BUILDINGS



DATA CENTERS



SECURITY  
SYSTEMS



SMART HOMES



INDUSTRIAL  
APPLICATIONS

<https://kaybenetworking.com/lan-cables/>





## **CAT6 LAN CABLES**

1. CAT6 UTP - CCAU CABLE
2. CAT6 FTP - CCAU CABLE
3. CAT6 OUTDOOR - CCAU CABLE
4. CAT6 U/UTP - BOLT SERIES
5. CAT6 F/UTP - BOLT SERIES
6. CAT6 U/UTP - BLAZE SERIES
7. CAT6 UTP DUAL JACKET OUTDOOR (Copper)
8. CAT6 S/FTP - BLAZE SERIES
9. CAT6 SFTP OUTDOOR (Copper)

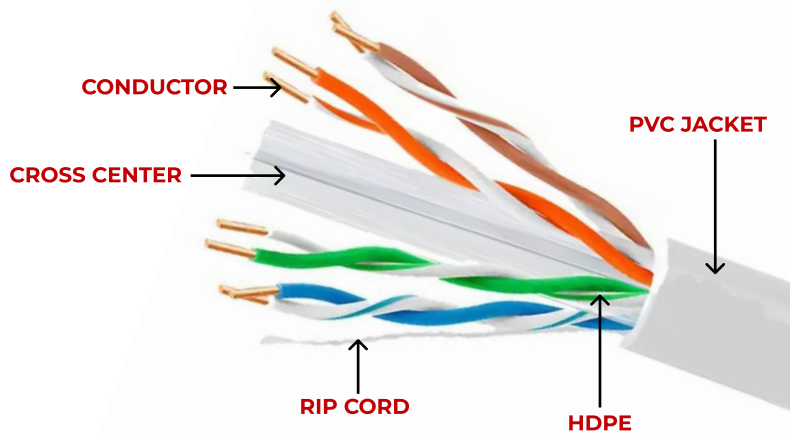


### CAT6 UTP - CCAU CABLE

**PART NO.:** CAT6501

**DESCRIPTION:** 23AWG X 4 PAIRS CAT6 UTP

KAYBE CAT6 23AWG CCAU – UTP Cable is a reliable choice for robust networking. Built with a 23AWG gauge and High Content Copper-Claded Aluminum (CCAU), it ensures efficient, high-speed data transfers, perfect for gaming, streaming, and large file handling. A cost-effective and dependable solution for various networking needs and CCTV connectivity.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

CONSTRUCTION DATA SHEET

|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Operating Temperature | —15°C TO 75°C                                                   |
| CONDUCTOR             |                                                                 |
| Conductor Material    | CCAU Conductor                                                  |
| No. Of Strands        | 1 Nos                                                           |
| Conductor (mm)        | 0.58 ± 0.005 mm                                                 |
| INSULATION            |                                                                 |
| Insulation Material   | HDPE (High Density Polyethylene)                                |
| Insulation Thickness  | 0.25MM                                                          |
| Insulation Diameter   | 1.10 ± 0.10 mm                                                  |
| PAIR TWISTING         |                                                                 |
| Pair - 1              | Blue + White-Blue                                               |
| Pair - 2              | Orange + White-Orange                                           |
| Pair - 3              | Green + White-Green                                             |
| Pair - 4              | Brown + White-Brown                                             |
| LAYING TYPE           |                                                                 |
| 4 Pair Laid Up        | All of the 4pair twisted together With Separator i.e. Cross Web |
| RIP Cord              | Yes (Available)                                                 |
| OUTER JACKET          |                                                                 |
| Material              | PVC (Polyvinyl Chloride)                                        |
| Thickness (mm)        | 0.55 mm (Nominal)                                               |
| Diameter (mm)         | 6.20 ± 0.30 mm                                                  |
| Colour                | White                                                           |

ELECTRICAL PARAMETERS

|                               |                                        |
|-------------------------------|----------------------------------------|
| Conductor Resistance At 20 CO | 93.80 Ω/Km (Maximum)                   |
| Resistance DC Unbalance       | 5% (Maximum)                           |
| Insulation Resistance         | >367.0 MΩ/KM AT 500 VDC                |
| Dielectric Strength           | 0.700 KV AC for 1 Minute (Withstood)   |
| Spark Test                    | 1.0 KV AC for 0.15 Seconds (Withstood) |
| Capacitance To 1KHz (Approx)  | 5.6nF/100m                             |

COMPATIBLE KAYBE PRODUCTS

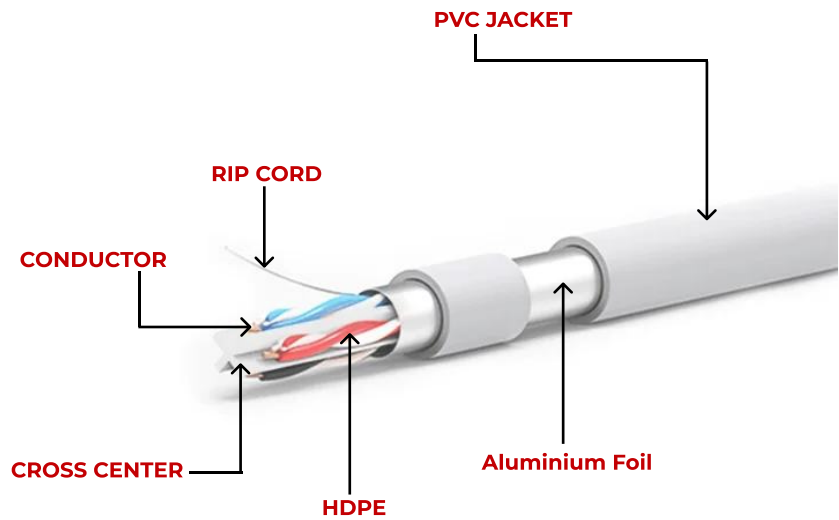
|                                |                             |                                           |                                        |
|--------------------------------|-----------------------------|-------------------------------------------|----------------------------------------|
| CAT 6 UTP Keystone & Faceplate | CAT 6 UTP 24Awg Patch Cords | CAT 6 UTP - 24 port & 48 port Patch Panel | CAT 6 UTP - 50u Gold - Rj45 Connectors |
|--------------------------------|-----------------------------|-------------------------------------------|----------------------------------------|

### CAT6 FTP - CCAU CABLE

**PART NO.:** CAT6FTP502

**DESCRIPTION:** 23AWG X 4 PAIRS CAT6 SHIELDED

KAYBE CAT6 CCAU - FTP Cable offers secure and reliable networking with Foil Twisted Pair (FTP) shielding and Copper-Clad Aluminum (CCA) construction. Designed to enhance data transmission and protect against electromagnetic interference, it's perfect for applications requiring stable, high-performance connections. A cost-effective solution that combines quality and security, ideal for professional and demanding home setups.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

CONSTRUCTION DATA SHEET

|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Operating Temperature | —20°C TO 70°C                                                   |
| CONDUCTOR             |                                                                 |
| Conductor Material    | CCAU Conductor                                                  |
| No. Of Strands        | 1 Nos                                                           |
| Conductor (mm)        | 23 AWG                                                          |
| INSULATION            |                                                                 |
| Insulation Material   | HDPE (High Density Polyethylene)                                |
| Insulation Thickness  | 0.23MM                                                          |
| Insulation Diameter   | 1.10 ± 0.10 mm                                                  |
| PAIR TWISTING         |                                                                 |
| Pair - 1              | Blue + White-Blue                                               |
| Pair - 2              | Orange + White-Orange                                           |
| Pair - 3              | Green + White-Green                                             |
| Pair - 4              | Brown + White-Brown                                             |
| LAYING TYPE           |                                                                 |
| 4 Pair Laid Up        | All of the 4pair twisted together With Separator i.e. Cross Web |
| Drain Wire            | Yes (Available)                                                 |
| Shielding             | 100% Foil Coverage                                              |
| RIP Cord              | Yes (Available)                                                 |
| OUTER JACKET          |                                                                 |
| Material              | PVC (Polyvinyl Chloride)                                        |
| Thickness (mm)        | 0.56 mm (Nominal)                                               |
| Diameter (mm)         | 6.40 ± 0.30 mm                                                  |
| Colour                | White                                                           |

ELECTRICAL PARAMETERS

|                               |                                      |
|-------------------------------|--------------------------------------|
| Conductor Resistance At 20 CO | 93.80 Ω/Km (Maximum)                 |
| Resistance DC Unbalance       | 5% (Maximum)                         |
| Insulation Resistance         | >367.0 MΩ/KM AT 500 VDC              |
| Dielectric Strength           | 0.700 KV AC for 1 Minute (Withstood) |
| Capacitance To 1KHz (Approx)  | 5.6nF/100m                           |

COMPATIBLE KAYBE PRODUCTS

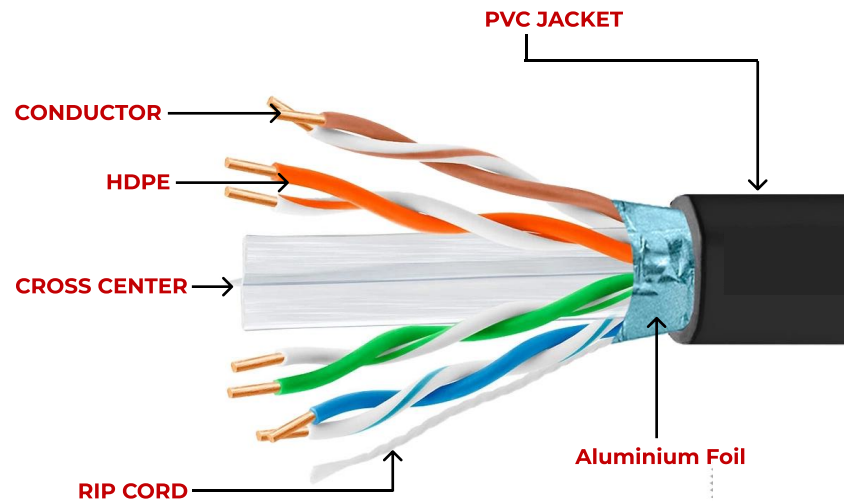
|                                |                             |                                           |                                        |
|--------------------------------|-----------------------------|-------------------------------------------|----------------------------------------|
| CAT 6 UTP Keystone & Faceplate | CAT 6 UTP 24Awg Patch Cords | CAT 6 UTP - 24 port & 48 port Patch Panel | CAT 6 UTP - 50u Gold - Rj45 Connectors |
|--------------------------------|-----------------------------|-------------------------------------------|----------------------------------------|

### CAT6 OUTDOOR - CCAU CABLE

**PART NO.:** CAT6FTP600PE

**DESCRIPTION:** 23AWG OUTDOOR SHIELDED CAT6

KAYBE CAT6 CCAU – FTP Outdoor Cable is designed for high-performance networking in outdoor environments. With Copper-Clad Aluminum (CCA) construction and FTP shielding, it ensures reliable data transmission and protection against the elements. Ideal for outdoor surveillance, remote access points, and more, this durable, weather-resistant cable provides a stable, secure connection with high performance.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

## CONSTRUCTION DATA SHEET

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Operating Temperature | —20°C TO 75°C                                                      |
| <b>CONDUCTOR</b>      |                                                                    |
| Description           | 23 AWG CAT6 FTP Outdoor                                            |
| Conductor Material    | CCAU                                                               |
| No. Of Strands        | 1 Nos                                                              |
| Conductor (mm)        | 0.575 mm (CCAU)                                                    |
| <b>INSULATION</b>     |                                                                    |
| Insulation Material   | HDPE (High Density Polyethylene)                                   |
| Insulation Thickness  | 0.20MM (Nominal)                                                   |
| Insulation Diameter   | 1.08 ± 0.10 mm                                                     |
| <b>PAIR TWISTING</b>  |                                                                    |
| Pair - 1              | Blue + White-Blue                                                  |
| Pair - 2              | Orange + White-Orange                                              |
| Pair - 3              | Green + White-Green                                                |
| Pair - 4              | Brown + White-Brown                                                |
| <b>INNER SHIELD</b>   |                                                                    |
| 4 Pair Laid Up        | All of the 4pair twisted together With Separator i.e. Cross Filler |
| Foil                  | AL Foil + Drain Wire                                               |
| <b>OUTER SHEATH</b>   |                                                                    |
| Material              | UV PE Grade jacket                                                 |
| Thickness (mm)        | 1.0 mm                                                             |
| Diameter (mm)         | 6.70 ± 0.10 mm                                                     |
| Colour                | Black                                                              |

## ELECTRICAL PARAMETERS

|                                 |            |
|---------------------------------|------------|
| Conductor ResistanceΩ/100m.20°C | ≤20Ω       |
| Conductor allow load current(A) | 0.5A'      |
| Voltage Rating                  | ≤30V       |
| Operating Temperature(°C)       | —20°C~75°C |

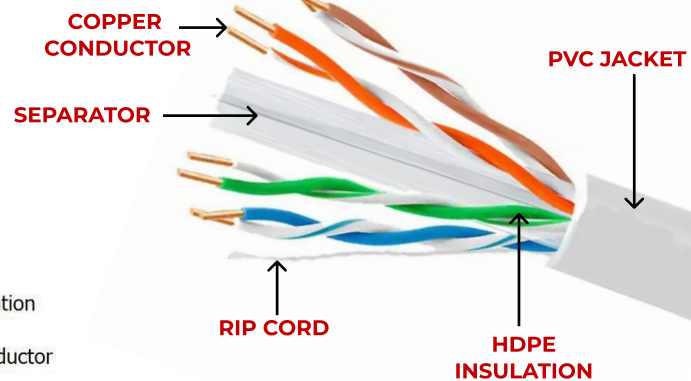
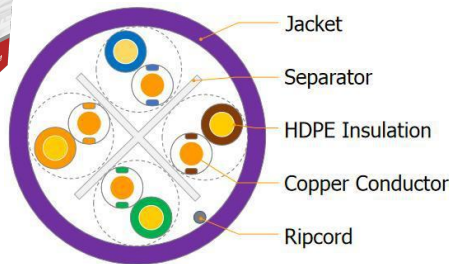


### CAT6 U/UTP - BOLT SERIES

**PART NO.:** C650024

**DESCRIPTION:** CAT6 X 4 PAIR UTP 100% COPPER

KAYBE CAT6 U/UTP - BOLT SERIES 100% copper cable is designed for high-speed data transmission, supporting up to 250 MHz bandwidth. Its unshielded twisted pairs minimize crosstalk and interference for reliable performance in Gigabit Ethernet and PoE applications. Durable and versatile, it's ideal for residential and commercial networking needs.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

CONSTRUCTION DATA SHEET

| CONDUCTOR               |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| Conductor Material      | Solid Bare Copper                                               |
| No. Of Strands          | 1 Nos                                                           |
| Conductor Diameter (mm) | 24AWG/0.505                                                     |
| INSULATION              |                                                                 |
| Insulation Material     | HDPE (High Density Polyethylene)                                |
| Insulation Thickness    | 0.20MM                                                          |
| Insulation Diameter     | 0.94 ± 0.1 mm                                                   |
| PAIR TWISTING           |                                                                 |
| Pair - 1                | Blue + White-Blue                                               |
| Pair - 2                | Orange + White-Orange                                           |
| Pair - 3                | Green + White-Green                                             |
| Pair - 4                | Brown + White-Brown                                             |
| LAYING TYPE             |                                                                 |
| 4 Pair Laid Up          | All of the 4pair twisted together With Separator i.e. Cross Web |
| RIP Cord                | Yes (Available)                                                 |
| OUTER JACKET            |                                                                 |
| Material                | PVC (Polyvinyl Chloride)                                        |
| Thickness (mm)          | 0.6 ± 0.1 mm                                                    |
| Diameter (mm)           | 5.8 ± 0.5 mm                                                    |
| Colour                  | White / Orange                                                  |

ELECTRICAL PARAMETERS

|                                                        |              |
|--------------------------------------------------------|--------------|
| Conductor Resistance (20°C)                            | ≤9.5Ω/100m   |
| Electrical Resistance Unbalance (20°C)                 | ≤2.0%        |
| Insulation Resistance                                  | >5000 MΩ.km  |
| Pair to Ground Capacitance Unbalance (0.8 kHz or 1kHz) | ≤160 pF/100m |
| Nominal Velocity of Propagation (NVP)                  | 69 %         |
| Skew                                                   | 45 ns/100m   |
| Operating Frequency, maximum                           | 250 MHz      |

ENVIRONMENTAL CHARACTERISTICS

|                                                 |                |
|-------------------------------------------------|----------------|
| Operating Temperature Range                     | -20°C to +60°C |
| Flame Retardant                                 | IEC 60332-1    |
| All Materials Comply with 2011/65/EU (ROHS 2.0) |                |

ORDERING INFORMATION AS PER FOLLOWS

| PART NO  | DESCRIPTION              | COLOR  | PACKAGING     |
|----------|--------------------------|--------|---------------|
| C650024W | CAT6 U/UTP - BOLT SERIES | White  | 2pcs / Carton |
| C650024O | CAT6 U/UTP - BOLT SERIES | Orange | 2pcs / Carton |

COMPATIBLE KAYBE PRODUCTS

|                                |                             |                                           |                                        |
|--------------------------------|-----------------------------|-------------------------------------------|----------------------------------------|
| CAT 6 UTP Keystone & Faceplate | CAT 6 UTP 24Awg Patch Cords | CAT 6 UTP - 24 port & 48 port Patch Panel | CAT 6 UTP - 50u Gold - RJ45 Connectors |
|--------------------------------|-----------------------------|-------------------------------------------|----------------------------------------|

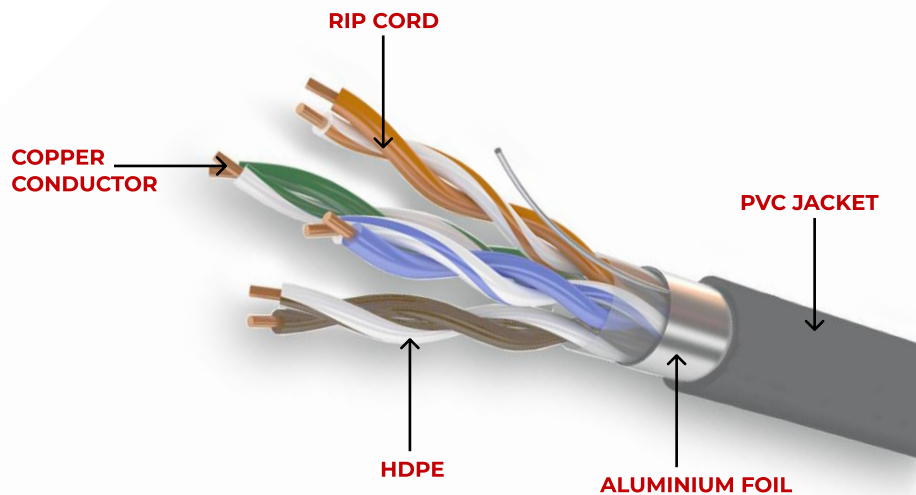


### CAT6 F/UTP - BOLT SERIES

**PART NO.:** CAT650224

**DESCRIPTION:** CAT6 X 4 PAIR SHIELDED 100% COPPER

KAYBE CAT6 F/UTP - BOLT SERIES 100% copper cable offers superior performance with foil shielding to minimize interference and ensure stable data transmission. Supporting up to 250 MHz bandwidth, it's perfect for high-speed networks, including Gigabit Ethernet and PoE. Designed for durability, it's an excellent choice for demanding residential and commercial installations.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | Att. Solid | Pr-Pr NEXT | PS NEXT | Prop. Delay ns | Delay Skew ns | Return Loss | Pr-Pr ELFEXT | Ps ELFEXT |
|------------|------------|------------|---------|----------------|---------------|-------------|--------------|-----------|
| 1          | 2.8        | 74.3       | 72.3    | 570            | 45            | 20.0        | 67.8         | 64.8      |
| 10         | 6.5        | 59.3       | 57.3    | 545            | 45            | 25.0        | 47.8         | 44.8      |
| 20         | 8.5        | 54.8       | 52.8    | 542            | 45            | 25.0        | 41.8         | 38.8      |
| 31.25      | 10.7       | 51.9       | 49.9    | 540.4          | 45            | 23.6        | 37.9         | 34.9      |
| 62.50      | 15.4       | 47.4       | 45.4    | 538.6          | 45            | 21.5        | 31.9         | 28.9      |
| 100        | 19.8       | 44.3       | 42.3    | 537.6          | 45            | 20.1        | 27.8         | 24.8      |
| 200        | 29.0       | 39.8       | 37.8    | 536.5          | 45            | 18.0        | 21.8         | 18.8      |
| 250        | 32.8       | 38.3       | 36.3    | 536.3          | 45            | 17.3        | 19.8         | 16.8      |

## CONSTRUCTION DATA SHEET

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| Operating Temperature | —15°C TO 70°C                                                |
| <b>CONDUCTOR</b>      |                                                              |
| Conductor Material    | Solid Bare Copper                                            |
| <b>INSULATION</b>     |                                                              |
| Insulation Material   | HDPE (High Density Polyethylene)                             |
| Min. Avg. Thickness   | 0.25 mm                                                      |
| Min. Thickness        | 0.20 mm                                                      |
| <b>PAIR TWISTING</b>  |                                                              |
| Pair - 1              | Blue + White-Blue                                            |
| Pair - 2              | Orange + White-Orange                                        |
| Pair - 3              | Green + White-Green                                          |
| Pair - 4              | Brown + White-Brown                                          |
| <b>SHIELD</b>         |                                                              |
| Drain Wire            | Drain wire (tinned copper conductor) and aluminum-mylar tape |
| <b>OUTER JACKET</b>   |                                                              |
| Material              | FR-PVC (Polyvinyl Chloride)                                  |
| Min. Avg. Thickness   | 0.585 mm                                                     |
| Min. Thickness        | 0.458 mm                                                     |
| Approximate O.D.      | 6.6 mm +/- 0.3mm                                             |
| Temperature           | (+80°C — -40°C)                                              |

## ELECTRICAL PARAMETERS

|                                       |                               |
|---------------------------------------|-------------------------------|
| Characteristic Impedance( $Z_0$ )     | 85~115 $\Omega$ (1~250 MHz)   |
| DC. Resistance Capacitance Unbalance  | 5%                            |
| Pair-to-Ground Capacitance Unbalance  | 330 pF/100M Max               |
| Conductor Resistance                  | 9.38 $\Omega$ / 100M 20°C Max |
| Mutual Capacitance                    | 5600 pF/100m Max              |
| Spark Test                            | 2.5KV                         |
| Nominal Velocity of Propagation (NVP) | 70%                           |

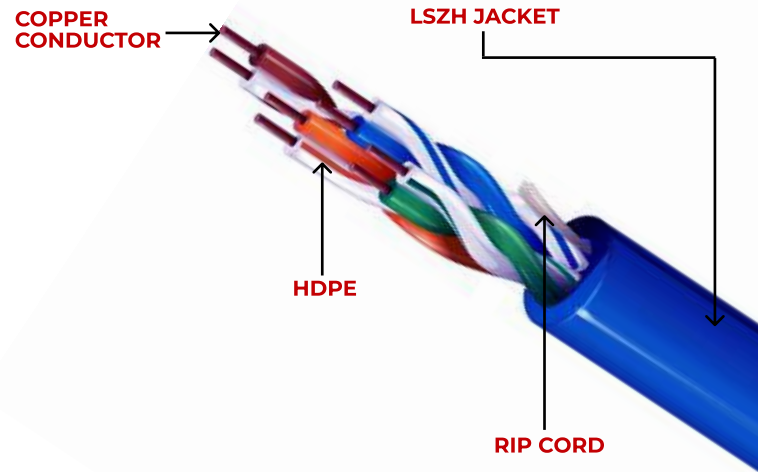


### CAT6 U/UTP - BLAZE SERIES

**PART NO.:** C650024

**DESCRIPTION:** CAT6 U/UTP 23AWG ENHANCED CABLE

KAYBE CAT6 U/UTP - BLAZE SERIES 100% copper Etisalat Approved cable combines superior performance with reliability, supporting up to 250 MHz bandwidth. Its unshielded twisted pair construction ensures minimal crosstalk for smooth Gigabit Ethernet and PoE operations. Durable and efficient, it's the perfect solution for modern networking needs.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

CONSTRUCTION DATA SHEET

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Operating Temperature | —15°C TO 70°C                                                      |
| CONDUCTOR             |                                                                    |
| Conductor Material    | Annealed Bare Copper                                               |
| No. Of Strands        | 1 Nos                                                              |
| Conductor (mm)        | 0.55 ± 0.015 mm                                                    |
| INSULATION            |                                                                    |
| Insulation Material   | HDPE (High Density Polyethylene)                                   |
| Insulation Thickness  | 0.20 mm (Nominal)                                                  |
| Insulation Diameter   | 1.00 ± 0.10 mm                                                     |
| PAIR TWISTING         |                                                                    |
| Pair - 1              | Blue + White-Blue                                                  |
| Pair - 2              | Orange + White-Orange                                              |
| Pair - 3              | Green + White-Green                                                |
| Pair - 4              | Brown + White-Brown                                                |
| LAYING TYPE           |                                                                    |
| 4 Pair Laid Up        | All of the 4pair twisted together With Separator i.e. Cross Filler |
| RIP Cord              | Yes (Available)                                                    |
| OUTER JACKET          |                                                                    |
| Material              | FR-PVC / LSZH                                                      |
| Thickness (mm)        | 0.50 mm (Nominal)                                                  |
| Diameter (mm)         | 6.20 ± 0.30 mm                                                     |
| Colour                | Blue & Orange                                                      |

ELECTRICAL PARAMETERS

|                               |                                        |
|-------------------------------|----------------------------------------|
| Conductor Resistance At 20 CO | 93.80 Ω/Km (Maximum)                   |
| Resistance DC Unbalance       | 5% (Maximum)                           |
| Insulation Resistance         | >367.0 MΩ/KM AT 500 VDC                |
| Dielectric Strength           | 0.700 KV AC for 1 Minute (Withstood)   |
| Spark Test                    | 1.0 KV AC for 0.15 Seconds (Withstood) |
| Capacitance To 1KHz (Approx)  | 5.6nF/100m                             |

Standard References - UL Verified , ETL

ORDERING INFORMATION AS PER FOLLOWS

| PART NO  | DESCRIPTION                     | COLOR | PACKAGING     |
|----------|---------------------------------|-------|---------------|
| C650024B | Cat6 U/UTP 23AWG Enhanced Cable | Blue  | 2 rolls / box |

NOTE: OLD PART NUMBER WAS CAT650023, NOW UPDATED TO C650024

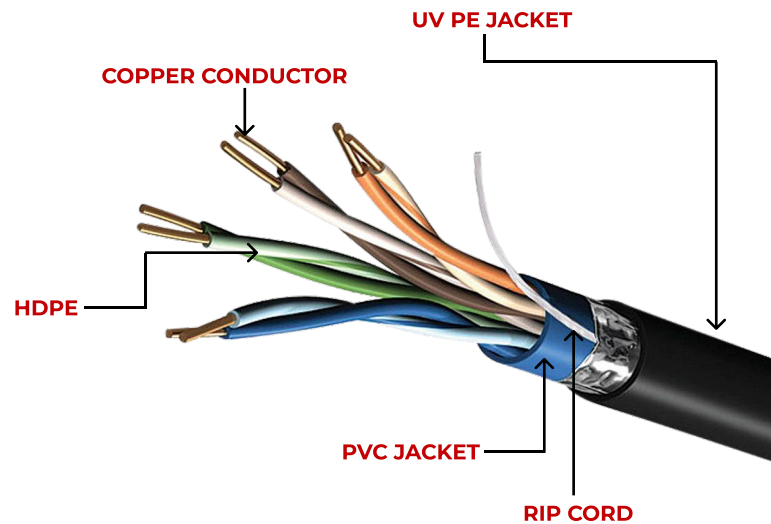


### CAT6 UTP DUAL JACKET OUTDOOR (COPPER)

**PART NO.:** CAT6UPE60024

**DESCRIPTION:** BLAZE CAT6, OUTDOOR U/UTP CABLE

KAYBE CAT6 UTP Dual Jacket Outdoor (Copper) 100% copper cable is built for high-speed data transmission in outdoor environments. Its dual-layer jacket provides superior durability, protecting against harsh weather and UV exposure. Made with pure copper conductors, it ensures reliable performance. Ideal for long-distance and outdoor installations, this cable offers robust connectivity without compromising speed or stability.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

## CONSTRUCTION DATA SHEET

|                       |                                  |
|-----------------------|----------------------------------|
| Operating Temperature | —10°C TO 70°C                    |
| <b>CONDUCTOR</b>      |                                  |
| Conductor Material    | Annealed Bare Copper             |
| Conductor (mm)        | 4x2x0.535 mm                     |
| <b>INSULATION</b>     |                                  |
| Insulation Material   | HDPE (High Density Polyethylene) |
| Insulation Thickness  | 0.21 mm                          |
| Insulation Diameter   | 1.05 ± 0.05 mm                   |
| <b>HDPE COLOR</b>     |                                  |
| Pair - 1              | White (Blue)/Blue                |
| Pair - 2              | White(Orange)/Orange             |
| Pair - 3              | White(Green)/Green               |
| Pair - 4              | White(Brown)/Brown               |
| <b>SHIELDING</b>      |                                  |
| 100% Coverage         | Polyster Tape                    |
| 100% Coverage         | Al Myar Tape                     |
| Drain Wire            | Tinned Copper                    |
| Braiding              | 60% Alloy coverage               |
| <b>OUTER JACKET</b>   |                                  |
| Material              | LDPE                             |
| Thickness (mm)        | 0.54 mm, with rip cord           |
| Diameter (mm)         | 6.70 ± 0.30 mm                   |

## ELECTRICAL PARAMETERS

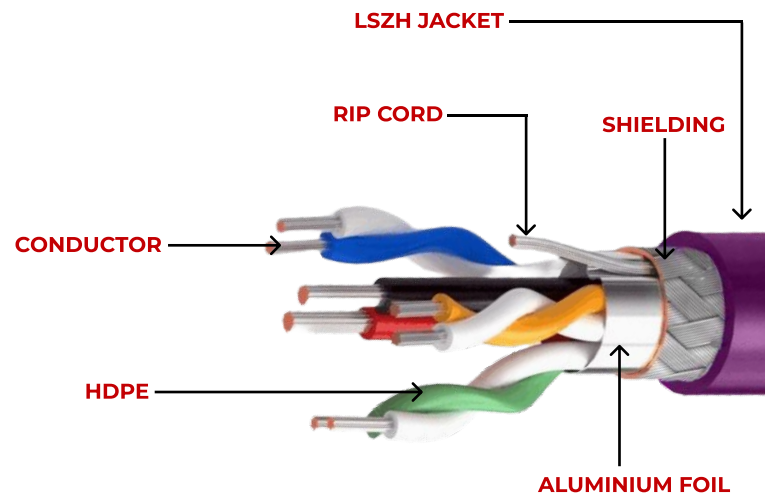
|                              |                       |
|------------------------------|-----------------------|
| Conductor Resistance At 20°C | 9.38 Ω/100m (Maximum) |
| Capacitance Unbalance Pair   | 330 PF/100m           |
| Impedance                    | 100 ohms/100m         |
| Dielectric Strength          | 0.9KV - 1KV/min       |
| Jacket Elongation            | 300% (Minimum)        |
| Bending Radius Test          | 10 times              |
| Working distance fluke pass  | 90m fluke pass ETL    |

### CAT6 S/FTP - BLAZE SERIES

**PART NO.:** CAT6SFTP675LZ

**DESCRIPTION:** BLAZE CAT6, SFTP DUAL SHIELDED CABLE

KAYBE CAT6 S/FTP BLAZE SERIES 100% copper cable delivers exceptional performance with individually shielded pairs and an overall foil shield to eliminate interference. Supporting up to 250 MHz bandwidth, it ensures stable and high-speed connections for Gigabit Ethernet and PoE applications. Durable and efficient, it's perfect for demanding network environments.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

## CONSTRUCTION DATA SHEET

|                       |                                  |
|-----------------------|----------------------------------|
| Operating Temperature | —10°C TO 70°C                    |
| <b>CONDUCTOR</b>      |                                  |
| Conductor Material    | Annealed Bare Copper             |
| <b>INSULATION</b>     |                                  |
| Insulation Material   | HDPE (High Density Polyethylene) |
| Insulation Thickness  | 0.23 mm                          |
| Insulation Diameter   | 1.05 ± 0.05 mm                   |
| <b>HDPE COLOR</b>     |                                  |
| Pair - 1              | White (Blue)/Blue                |
| Pair - 2              | White(Orange)/Orange             |
| Pair - 3              | White(Green)/Green               |
| Pair - 4              | White(Brown)/Brown               |
| <b>SHIELDING</b>      |                                  |
| 100% Coverage         | Polyster Tape                    |
| 100% Coverage         | Al Myar Tape                     |
| Drain Wire            | Tinned Copper                    |
| Braiding              | 60% Alloy coverage               |
| <b>OUTER JACKET</b>   |                                  |
| Material              | LSZH / FR-PVC                    |
| Thickness (mm)        | 0.56 mm, with rip cord           |
| Diameter (mm)         | 7.00 ± 0.30 mm                   |

## ELECTRICAL PARAMETERS

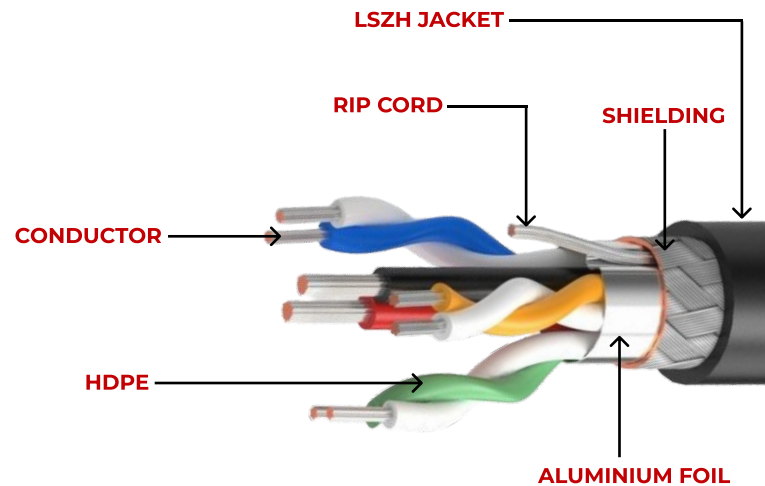
|                              |                       |
|------------------------------|-----------------------|
| Conductor Resistance At 20°C | 9.38 Ω/100m (Maximum) |
| Capacitance Unbalance Pair   | 330 PF/100m           |
| Impedance                    | 100 ohms/100m         |
| Dielectric Strength          | 0.9KV - 1KV/min       |
| Jacket Elongation            | 300% (Minimum)        |
| Bending Radius Test          | 10 times              |
| Working distance fluke pass  | 100m fluke pass ETL   |

### CAT6 SFTP OUTDOOR (COPPER)

**PART NO.:** CAT6SFTP677PE

**DESCRIPTION:** BLAZE CAT6, OUTDOOR SFTP CABLE

KAYBE CAT6 SFTP UV RATED Outdoor (Copper) cable offers robust performance with dual shielding to minimize interference, ensuring reliable high-speed data transmission. Designed for outdoor use, its weather-resistant jacket and pure copper conductors provide durability and superior connectivity. Ideal for Gigabit Ethernet and PoE, it's perfect for long-distance, demanding installations.



### HIGH FREQUENCY ELECTRICAL PARAMETERS

| FREQ (MHz) | INS LOSS (dB/100m) Max. | NEXT Pair to Pair (dB/100m) Min. | NEXT Power Sum (dB/100m) Min. | ELFEXT Pair to Pair (dB/100m) Min. | ELFEXT Power Sum (dB/100m) Min. | Return Loss (dB/100m) |
|------------|-------------------------|----------------------------------|-------------------------------|------------------------------------|---------------------------------|-----------------------|
| 1          | 1.8                     | 71.0                             | 67.4                          | 70.1                               | 67.3                            | 25.2                  |
| 4          | 3.6                     | 62.5                             | 64.1                          | 58.8                               | 55.9                            | 28.1                  |
| 8          | 5.0                     | 60.0                             | 63.2                          | 51.2                               | 50.0                            | 26.3                  |
| 10         | 5.8                     | 58.1                             | 61.5                          | 50.1                               | 46.7                            | 30.1                  |
| 16         | 7.7                     | 55.0                             | 60.0                          | 46.9                               | 43.9                            | 31.0                  |
| 20         | 7.9                     | 54.3                             | 55.6                          | 45.3                               | 41.5                            | 30.8                  |
| 25         | 8.4                     | 53.7                             | 54.9                          | 42.5                               | 40.7                            | 29.6                  |
| 31.25      | 10.0                    | 52.3                             | 55.9                          | 41.8                               | 36.8                            | 29.0                  |
| 62.5       | 14.5                    | 46.7                             | 49.8                          | 35.0                               | 30.3                            | 26.7                  |
| 100        | 18.1                    | 44.0                             | 46.3                          | 32.1                               | 28.1                            | 25.0                  |
| 250        | 33.0                    | 38.0                             | 36.0                          | 20.0                               | 18.0                            | 18.0                  |

## CONSTRUCTION DATA SHEET

|                       |                                  |
|-----------------------|----------------------------------|
| Operating Temperature | —10°C TO 70°C                    |
| <b>CONDUCTOR</b>      |                                  |
| Conductor Material    | Annealed Bare Copper             |
| <b>INSULATION</b>     |                                  |
| Insulation Material   | HDPE (High Density Polyethylene) |
| Insulation Thickness  | 0.23 mm                          |
| Insulation Diameter   | 1.05 ± 0.05 mm                   |
| <b>HDPE COLOR</b>     |                                  |
| Pair - 1              | White (Blue)/Blue                |
| Pair - 2              | White(Orange)/Orange             |
| Pair - 3              | White(Green)/Green               |
| Pair - 4              | White(Brown)/Brown               |
| <b>SHIELDING</b>      |                                  |
| 100% Coverage         | Polyster Tape                    |
| 100% Coverage         | Al Myar Tape                     |
| Drain Wire            | Tinned Copper                    |
| Braiding              | 60% Alloy coverage               |
| <b>OUTER JACKET</b>   |                                  |
| Material              | LDPE UV RATED + Flame retardant  |
| Thickness (mm)        | 0.56 mm, with rip cord           |
| Diameter (mm)         | 7.00 ± 0.30 mm                   |

## ELECTRICAL PARAMETERS

|                              |                       |
|------------------------------|-----------------------|
| Conductor Resistance At 20°C | 9.38 Ω/100m (Maximum) |
| Capacitance Unbalance Pair   | 330 PF/100m           |
| Impedance                    | 100 ohms/100m         |
| Dielectric Strength          | 0.9KV - 1KV/min       |
| Jacket Elongation            | 300% (Minimum)        |
| Bending Radius Test          | 10 times              |
| Working distance fluke pass  | 100m fluke pass ETL   |



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