

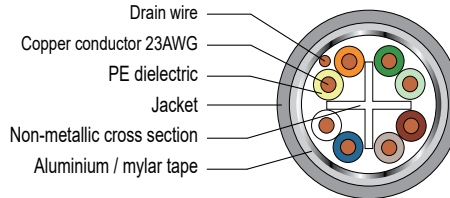
Connectivity.Assured

# ONE CAT 6A F/UTP 23AWG Network Data Cable

The Kordz ONE Series CAT 6A cable has been designed and engineered to provide a cable system infrastructure with assurance for advanced applications that demand more bandwidth and greater performance. This makes for a more robust and complex system at Gigabit speed and full duplex transmissions. This premium shielded twisted pair (F/UTP) cable with grounding, provides industry-leading protection inherent in complex systems from external cable noise sources, also known as alien crosstalk or EMI (electromagneticinterference).The new smaller and more compact Rapid-EZ-Reel packaging allows the easy flow of cable from the box, whilst keeping the cable from twisting and curling, greatly minimising snags during installation therefore saving precious time.



- Suitable for 10BASE-T, 100BASE-TX, 1000BASE-T/1000BASE-TX (Gigabit) & 10GBaseT, PoE & PoE+
- F/UTP Ethernet CAT 6A
- Four Twisted Pairs 23 AWG Solid Copper Conductors
- PVC Separator Reduces Crosstalk Between Pairs
- Mylar laminated aluminium tape shielding with a 26AWG drain wire
- Suitable for IDC Terminations
- Supplied in the durable Rapid-EZ-Reel packaging – 152.5m (500ft)
- Metre Marked
- 5 colours available: Blue, Green, White, Yellow & Purple
- Exceeds ANSI/TIA 568-C.2 and ISO/IEC 61156-5 standards
- Available in LSZH - IEC60332-3-25 and UL 444 CM fire rated versions
- CPR Declared Performance: ONE-CAT 6A: Dca-s1, d2, a1 (EN 50575:2014+A1:2016)



| Technical Specifications                     |  |                                   |
|--|--|-----------------------------------|
| <b>Construction</b>                          |  |                                   |
| Conductor                                    | Solid OFC annealed bare copper wire 0.561 +0/-0.015mm [23AWG]  |                                   |
| Insulation                                   | Orange & Brown pairs   | Polyethylene (PE), 1.12+/-0.05 mm |
|  | Blue & Green pairs   | Foam PE, 0.97 +/-0.05 mm          |
| Twisting                                     | 4 twisted pairs, 2 cores to each pair  |                                   |
| Twisted pair color code                      | 1: white-blue/blue 2: white-orange/orange<br>3: white-green/green 4: white-brown/brown   |                                   |
| Cable lay up                                 | 4 pairs with different pitches<br>Non-metallic cross separator (spine)   |                                   |
| Shielding                                    | Drain wire [26AWG]<br>Mylar tape laminated with aluminium foil as a shield   |                                   |
| Outer diameter                               | 7.4 +/-0.3 mm  |                                   |
| <b>Mechanical Properties</b>                 |  |                                   |
| Bend Radius                                  | without load ≥ 29.6mm /1.16"   |                                   |
|  | with load ≥ 59.2mm /2.33"  |                                   |
| Temperature range                            | During operation   | -20°C to 60°C                     |
|  | During installation  | 0°C to 50°C                       |
| <b>Electrical Properties - at 20°C ± 5°C</b> |  |                                   |
| DC resistance                                | ≤ 9.38Ω / 100m at 20°C   |                                   |
| Resistance unbalance                         | ≤ 2% at 20°C   |                                   |
| Insulation resistance (500V)                 | ≥ 5000MΩ / km at 20°C  |                                   |
| Mutual capacitance                           | ≤ 5.1 nf / 100m at 1khz  |                                   |
| Capacitance unbalance (pair to ground)       | ≤ 160 pf / 100m at 1khz  |                                   |
| Nominal velocity of propagation              | nom. 67% c   |                                   |
| Test voltage                                 | 1kV DC / 1 min   |                                   |
| <b>Material/Marking and Fire Rating</b>      |  |                                   |
| Material                                     | Marking  | Fire Rating                       |
| LSZH   | Kordz ONE Solid OFC UHD/4K Video Network Cable. ETL VERIFIED<br>TIA-568-C.2 (100372289CRT-001c) LSZH CAT6A F/UTP 23AWG . Kordz.com | IEC 60332-3-25                    |
| FRPVC  | Kordz ONE Solid OFC UHD/4K Video Network Cable. ETL VERIFIED<br>TIA-568-C.2 (100709714CRT-002c) CM CAT6A F/UTP 23AWG . Kordz.com   | UL 444 CM                         |



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Meets Transmission Performance acc. to ANSI/TIA-568-C.2 Cat.6a (20°C)

| Frequency (MHz) | Fitted Impedance (Ohms) | Attenuation (dB) Max. | NEXT (dB) Min. | PSNEXT (dB) Min. | ACRF (dB) Min. | PSACRF (dB) Min. | Return Loss (dB) Min. | Propagation Delay (ns) Max. | Delay Skew (ns) Max. | PSANEXT (dB) Min. | PSAACRF (dB) Min. |
|-----------------|-------------------------|-----------------------|----------------|------------------|----------------|------------------|-----------------------|-----------------------------|----------------------|-------------------|-------------------|
| 1               | 100 +/- 15              | 2.1                   | 74.3           | 72.3             | 67.8           | 64.8             | 20.0                  | 570                         | 45                   | 67.0              | 67.0              |
| 4               |                         | 3.8                   | 65.3           | 63.3             | 55.8           | 52.8             | 23.0                  | 552                         |                      | 67.0              | 66.2              |
| 8               |                         | 5.3                   | 60.8           | 58.8             | 49.7           | 46.7             | 24.5                  | 547                         |                      | 67.0              | 60.1              |
| 10              |                         | 5.9                   | 59.3           | 57.3             | 47.8           | 44.8             | 25.0                  | 545                         |                      | 67.0              | 58.2              |
| 16              |                         | 7.5                   | 56.2           | 54.2             | 43.7           | 40.7             | 25.0                  | 543                         |                      | 67.0              | 54.1              |
| 20              |                         | 8.4                   | 54.8           | 52.8             | 41.8           | 38.8             | 25.0                  | 542                         |                      | 67.0              | 52.2              |
| 25              |                         | 9.4                   | 53.3           | 51.3             | 39.8           | 36.8             | 24.3                  | 541                         |                      | 67.0              | 50.2              |
| 31.25           |                         | 10.5                  | 51.9           | 49.9             | 37.9           | 34.9             | 23.6                  | 540                         |                      | 67.0              | 48.3              |
| 62.5            |                         | 15.0                  | 47.4           | 45.4             | 31.9           | 28.9             | 21.5                  | 539                         |                      | 65.6              | 42.3              |
| 100             |                         | 19.1                  | 44.3           | 42.3             | 27.8           | 24.8             | 20.1                  | 538                         |                      | 62.5              | 38.2              |
| 200             |                         | 27.6                  | 39.8           | 37.8             | 21.8           | 18.8             | 18.0                  | 537                         |                      | 58.0              | 32.2              |
| 250             |                         | 31.1                  | 38.3           | 36.3             | 19.8           | 16.8             | 17.3                  | 536                         |                      | 56.5              | 30.2              |
| 300             |                         | 34.3                  | 37.1           | 35.1             | 18.3           | 15.3             | 16.8                  | 536                         |                      | 55.3              | 28.7              |
| 400             |                         | 40.1                  | 35.3           | 33.3             | 15.8           | 12.8             | 15.9                  | 536                         |                      | 53.5              | 26.2              |
| 500             |                         | 45.3                  | 33.8           | 31.8             | 13.8           | 10.8             | 15.2                  | 536                         |                      | 52.0              | 24.2              |

## Packaging Details

|                   |  |
|-------------------|--|
| Roll Size         | 152.5m / 500ft - metre marked  |
| Carton dimensions | 330mm (W) x 265mm (D) x 340mm (H) / 13.0in (W) x 10.4in (D) x 13.4in (H) |
| Volume            | 0.03m <sup>3</sup> / 1.05 cu. ft.  |
| Gross weight      | 9.8kg / 21.6lbs  |

| Part No:       | Color  | RAL Color Reference | Cable Type | Fire Rating | Gauge | Spool Length |
|----------------|--------|---------------------|------------|-------------|-------|--------------|
| K13602-152M-BL | Blue   | RAL 5015            | F/UTP      | LSZH        | 23AWG | 152.5m       |
| K13602-152M-GN | Green  | RAL 6018            |            |             |       |              |
| K13602-152M-PP | Purple | RAL4005             |            |             |       |              |
| K13602-152M-WH | White  | RAL9003             |            |             |       |              |
| K13602-152M-YL | Yellow | RAL1018             |            |             |       |              |
| K13605-152M-BL | Blue   | RAL 5015            |            | UL CM       |       |              |
| K13605-152M-GN | Green  | RAL 6018            |            |             |       |              |
| K13605-152M-PP | Purple | RAL4005             |            |             |       |              |
| K13605-152M-WH | White  | RAL9003             |            |             |       |              |
| K13605-152M-YL | Yellow | RAL1018             |            |             |       |              |

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