

**LP-C6070BKC LanPro Reliable® CAT 6 U/UTP Outdoor Network Cable, solid AWG 23 100% Copper, Double Jacket (Black PE plus Gray CMX) Flexible-X™ separator for symmetry and ripcord in a 1000 ft (305 m) wood spool.**

LPC6070BKC\_SS\_ENB01W

**Características:**

- Exceeds all standards for CAT 6 communications cable.
- Outdoor installation.
- Direct burial.
- Extremely durable.
- Black PE Jacket.
- UV resistant.
- Unshielded U/UTP.
- Characterized up to 250 MHz.
- Operating voltaje ≤ 48 Volt RMS.
- Rattenweg™ option for rodent resistance.

**Applications:**

- Outdoor cable runs to wireless Access Points (AP), Bridges or CPE.
- Outdoor cable runs to IP Video Surveillance Cameras.
- Inter-building networks.
- Equipment not requiring shielding of the cable.
- Ethernet, Phone, Paging, Alarm, Video and Power-over-Ethernet (PoE) Networks.
- The perfect Cat 6 cable for outdoor residential and commercial installations.
- Situations where reliability is of paramount importance, as in military complexes, hospitals, extreme weather locations, airports.



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LanPro manufactures high performance CAT 6 cables for outdoor usage. The external jacket is made of Polyethylene (PE) with a high resistance to external agents like humidity, UV radiation and high temperatures resulting in a long lasting operation. The external jacket offers also positive protection to corrosion, erosion and friction.

This cable is constructed with a 4 UTP basis of AWG 23 100% Copper conductors, structurally uniformly arranged with our Flexible-X™ plastic separator for better performance yielding an U/UTP structure. All of these features make this cable highly recommended for outdoor connection equipment not requiring shielding.

Outdoor CAT 6 cables from LanPro are approved as per the ISO/IEC11801 standard and following the newest TIA/EIA 568-C.2 (newer than the 568B.2-1 E) specifications for Category 6 cables. Used for Traditional 100Base-Tx, 100Base TP PMD, and Gigabit Ethernet 1000BASE-Tx, token-ring, 155 Mbps ATM, 622MB ATM, and 1.2GB ATM. Also 100 Mbps TP-PMD, 100VG (Any Lan). ISDN, (broadband, analog baseband), digital video and voice over IP (VoIP), it can also be used for IP video surveillance cameras. Comply in excess European 50173-1 (See TIA/EIA 568-C.2), NEMA WC66, ANSI/ICEA S102-700 and UL on the internal jacket. Can be used in compliance with Mexican regulation NMXi 248 NYCE 2005.

**WARNING:** the use of traditional indoor grade Category 6 cable in outdoor applications subjects it to rapid deterioration. Installation of indoor CAT 6 cable inside a conduit does not make it outdoor suitable either. Conduits filled with water will deteriorate the cable rapidly.

Therefore, choosing a high quality outdoor (UV-rated) CAT 6 cable with PE jacket and HDPE conductor insulation is extremely important. LanPro outdoor cables will avoid costly network outages, keeping network reliability high and maintenance costs low.

If the cable is not well made or UV-rated, it may snag when coming out of the box, causing an installation breakdown or failure in sunlight over time. Wi-Fi towers and their installations MUST use this kind of product to avoid fast deterioration of the cabling set-up due to weather, dust, sun and rude environment.

LanPro has taken each aspect into consideration when designing this product, from its storage, installation, operation and its maintenance in order to deliver a cost effective solution to our customers. Now, with the optional PE Rattenweg™ jacket, you will avoid rodent damage.

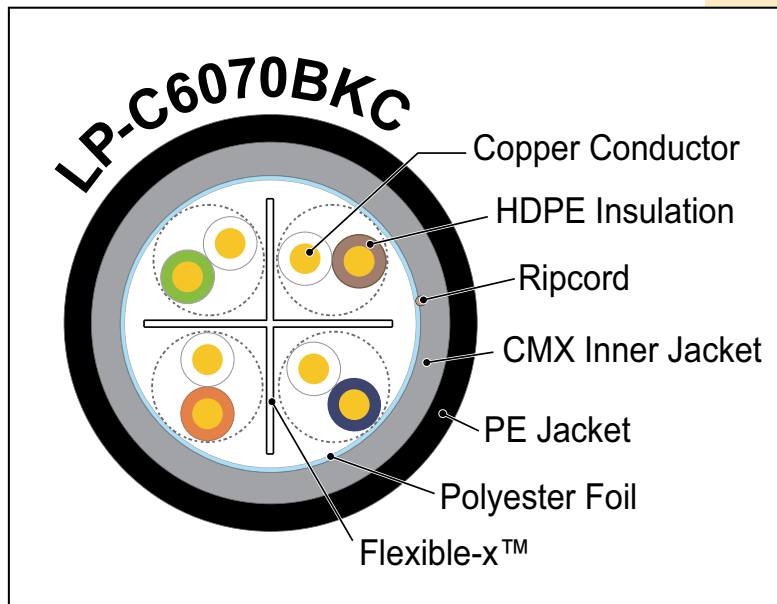
## A Technical Specifications

|                                   |  |   |                         |
|-----------------------------------|--|---|-------------------------|
| Standards                         | ISO/IEC11801, TIA/EIA 568.2                    |   |                         |
| 1.- Conductor                     | Material                                       | Copper 100%   |                         |
|                                   | AWG #  | 23  |                         |
|                                   | Nominal Diameter (mm)                          | 0.565   | Positive tolerance      |
| Negative tolerance                |  |   | -0.005                  |
| 2.- Isolation layer               | Material                                       | HDPE (High Density Polyethylene)                        |                         |
|                                   | Diameter (mm)                                  | 1.02 + 0.03   |                         |
|                                   | Elongation                                     | Min. 300%   |                         |
|                                   | Color  | A- Blue, White-Blue                                     | B- Orange, White-Orange |
| C- Green, White-Green             |  | D- Brown, White-Brown                                   |                         |
| 3.- Wrapping                      | Mylar  |   |                         |
| 4.- Rip Cord                      | Yes  |   |                         |
| 5.- Shielding                     | U/UTP  | Not shielded  |                         |
| 6.- Drain Wire                    | No   |   |                         |
| 7.- Jacket                        | Thickness                                      | 0.60 ± 0.05 mm  |                         |
|                                   | External Diameter, (O.D.)                      | 7.5 ± 0.5 mm  |                         |
|                                   | Surface finish                                 | Clean, Satinized  |                         |
|                                   | Material                                       | LDPE, RoHS, optional rodent <b>Rattenweg™</b> treatment |                         |
|                                   | Color  | Black   |                         |
| 8.- Jacket Physical Properties    | Tensile Strength Before aging                  | ≥10.0 Mpa   |                         |
|                                   | Elongation Before Aging                        | ≥350%   |                         |
|                                   | Aging Period(°CxHours)                         | 100°Cx24x10d  |                         |
|                                   | Elongation After aging                         | ≥300 %  |                         |
|                                   | Cold Bend(-20+2°Cx4h)                          | 8 x Cable O.D. No visible cracks                        |                         |
| 9.- Inner jacket                  | Material                                       | CMX   |                         |
|                                   | Thickness                                      | 0.55 mm   |                         |
|                                   | Color  | Gris  |                         |
|                                   | Diameter                                       | 7.4 mm  |                         |
| 10.- Markings                     | Type height                                    | 3.0 ± 0.3 mm  |                         |
|                                   | Color  | Blanco  |                         |
| 11.- Packaging                    | Wood Spool                                     |   |                         |
|                                   | Product length                                 | 305 ± 0.5 m   |                         |
| 12.- Mechanical properties        | Temperature Range                              | -20°C to 75°C   |                         |
|                                   | Minimum Mechanical Tension resistance          | 1.68 Kg/mm <sup>2</sup>                                 |                         |
| 13.- Electrical properties @ 20°C | Isolation resistance @500 V                    | Min 5000 MOhm/Km  |                         |
|                                   | Zo (1.0 – 100.0 MHz)                           | 100 ± 15 Ohm  |                         |
|                                   | Propagation Velocity (% C)                     | 68%   |                         |
|                                   | Delay Skew                                     | ≤45(ns/100m)  |                         |
|                                   | Maximum DC Resistance @ (20 °C)                | 9.38 Ohm/100 m  |                         |
|                                   | Delay [ns/100m] @100 MHz                       | 538 ns  |                         |
|                                   | % Resistance unbalance between conductors(Max) | 5 %   |                         |
|                                   | Maximum Operating RMS AC Voltage               | ≤48   |                         |
|                                   | Peak Operating Voltage (DC)                    | ≤68   |                         |
|                                   | (DC) Test Voltage (1 minute)                   | 1.0 KV/ 1 minute  |                         |

**B Electrical Characteristics**

| Frec. (MHz) | RL >dB | ATT <dB | NEXT >dB | DELAY <ns | PSNEXT >dB | ELFEXT >dB | PSELFEXT >dB |
|-------------|--------|---------|----------|-----------|------------|------------|--------------|
| 1           | 20.0   | 2.03    | 74.3     | 570.00    | 72.3       | 67.8       | 64.8         |
| 4           | 23.0   | 3.78    | 65.3     | 552.00    | 63.3       | 55.8       | 52.8         |
| 8           | 24.5   | 5.32    | 60.8     | 546.73    | 58.8       | 49.7       | 46.7         |
| 10          | 25.0   | 5.95    | 59.3     | 545.38    | 57.3       | 47.8       | 44.8         |
| 16          | 25.0   | 7.55    | 56.2     | 543.00    | 54.2       | 43.7       | 40.7         |
| 20          | 25.0   | 8.47    | 54.8     | 542.05    | 52.8       | 41.8       | 38.8         |
| 25          | 24.3   | 9.51    | 53.3     | 541.20    | 41.3       | 39.8       | 36.8         |
| 31.25       | 23.6   | 10.67   | 51.9     | 540.44    | 49.9       | 37.9       | 34.9         |
| 62.5        | 21.5   | 15.38   | 47.7     | 538.55    | 45.4       | 31.9       | 28.9         |
| 100         | 20.1   | 19.80   | 44.3     | 537.60    | 42.3       | 27.8       | 24.8         |
| 200         | 18.0   | 28.98   | 39.8     | 536.54    | 37.8       | 21.8       | 18.8         |
| 250         | 17.3   | 32.85   | 38.3     | 536.27    | 36.3       | 19.8       | 16.8         |

**C Cable Structure**



**D How to Order:**

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