Kramer’s BCLS−31 is a high−performance CAT6A U/UTP cable designed for IT, LAN and Ethernet installations. It is constructed with four pairs of 23AWG solid bare copper conductors with a cross filler in an LSZH jacket with internal rip cord and sequential markings every meter and packed on a fumigated plywood reel. The unique zigzag jacket design provides excellent performance of "six around one" bundle transmission. BCLS−31 cable exceeds CAT 6A specifications to provide additional performance and bandwidth beyond the basic standard.

FEATURES

High-Performance Single Cable Transmission
Zigzag Jacket Design - Provides excellent performance of six around one bundle transmission
Round & Smooth Jacket without Twisted Stripe
High-Quality Safety Properties
Sweep Frequency up to 650MHz
Length - Available in wooden drums of 500m (1640ft)
# TECHNICAL SPECIFICATIONS

## CONSTRUCTION
- **Conductor**: 4 pairs of 23AWG solid bare copper
- **Insulation**: Polyolefin (PO); blue & white, orange & white, green & white, brown & white
- **Twist**: Left-hand
- **Assembly**: Left hand direction
- **Rip Cord**: Polyester multi-yarn
- **Jacket**: Low smoke zero halogen (LSZH), yellow (Pantone 116C)
- **Filler**: Polyolefin (PO)

## DIAMETERS
- **Jacket**: Diameter: 8.3 ±0.2mm; thickness: 1.10 ±0.01mm
- **Insulation**: Blue & white: 1.17 ± 0.02mm
  - Orange & white: 1.12 ± 0.02mm
  - Green & white: 1.15 ± 0.02mm
  - Brown & white: 1.10 ± 0.02mm

## ELECTRICAL
- **Temperature & Voltage Rating**: 60°C @300V
- **Spark Test**: 2.5kV DC
- **AC Leakage Current**: ≤10mA (1.5kV AC) through overall jacket
- **Conductor DC Resistance**: ≤9.38Ω /100m
- **Resistance Unbalance**: ≤5%
- **Dielectric Strength**: 1.5kV AC for 2sec
- **Insulation Resistance**: ≥5000MΩ /m
- **Mutual Capacitance**: ≤5.6nF /100m
- **Capacitance Unbalance**: ≤330pF /100m pair-to-ground
- **Characteristic Impedance**: 100±15Ω @1~100MHz
- **Coupling Attenuation**: ≤55dB @30MHz, ≤41dB @500MHz

## USAGE AND ENVIRONMENTAL
- **Cable Cold Bend**: -20°C for 4hr
- **Insulation Tensile Strength**: 2400 PSI min. (1.69kg/m,2)
- **NVP**: 67%
- **Temperature Range**: Storage & shipping: -20°C to 60°C; installation: 0°C to 60°C; operation: -20°C to 60°C
- **Minimum Bending Radius**: ≥4 times of overall diameter
- **Maximum Pulling Tension**: ≤110N

## REGULATORY PERFORMANCE
- **ANSI/TIA-568-C.2 (2009)**: Balanced Twisted-Pair Telecommunications Cabling and Components Standards
- **ISO/IEC 11801 (Edition 2.2)**: Information technology – Generic cabling for customer premises
- **IEC 61156-5 (Edition 2.0)**: Multicore and symmetrical pair/quad cables for digital communications – Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1000 MHz – Horizontal floor wiring – Sectional specification
EN 50288-6-1:2013: Multi-element metallic cables used in analogue and digital communication and control – Part 6-1: Sectional specification for unscreened cables characterized up to 250MHz – Horizontal and building backbone cables

EN 50173-1:2011: Information technology – Generic cabling systems – Part 1: General requirements

IEC 60332-1-2: Tests on electric and optical fiber cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1kW pre-mixed flame

IEC 61034-1 / 61034-2: Measurement of smoke density of cables burning under defined conditions

IEC 60754-2 Test on gases evolved during combustion of materials from cables

EU Directive 2011/65/EC (RoHS 2)

EU Directive 2006/95/EC (LVD)

CE compliance date: 2010.01.01
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