

## BCLS-45RD-5

CAT 7 S/FTP 23AWG 750MHz Bulk Cable - Low Smoke & Halogen Free



Kramer's BCLS-45 is a high-performance CAT 7 S/FTP cable designed for IT, LAN and Ethernet installations. It is constructed with 23AWG solid bare copper conductors where each pair is individually shielded with metal foil screen and the entire cable is shielded with a tinned copper braid. It is enclosed in an LSZH jacket with sequential markings every meter and packed on a fumigated plywood reel. BCLS-45 cable exceeds CAT 7 specifications to provide additional performance and bandwidth beyond the basic standard

## **FEATURES**

High-Performance Transmission
High-Quality Safety Properties
Sweep Frequency up to 750MHz
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

Shield: Al Mylar tape, 100 % coverage and aluminum side facing out

Assembly: Left hand direction

Braid: Tinned copper, '30 % coverage

Jacket: Low smoke zero halogen (LSZH), red (Pantone 1797C)

DIAMETERS Jacket: Diameter: 7.7 ±0.2mm; thickness: 0.50 ±0.05mm

Insulation: Blue & white: 1.33 ± 0.02mm

Orange & white:  $1.30 \pm 0.02$ mm Green & white:  $1.33 \pm 0.02$ mm Brown & white:  $1.30 \pm 0.02$ mm

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: ≤160pF /100m pair-to-ground

Characteristic Impedance: 100±15Ω @1~100MHz

USAGE AND ENVIRONMENTAL

Cable Cold Bend: -20°C for 4hr

Insulation Tensile Strength: 2400 PSI min. (1.69kg/m,2)

**NVP 73%** 

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 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

REGULATORY SAFETY 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