



# kramer

## **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)



# kramer

## TECHNICAL SPECIFICATIONS

---

CONSTRUCTION	<p>Conductor: 4 pairs of 23AWG solid bare copper</p> <p>Insulation: Polyolefin (PO); blue &amp; white, orange &amp; white, green &amp; white, brown &amp; white</p> <p>Twist: Left-hand</p> <p>Shield: Al Mylar tape, 100 % coverage and aluminum side facing out</p> <p>Assembly: Left hand direction</p> <p>Braid: Tinned copper, &gt;30 % coverage</p> <p>Jacket: Low smoke zero halogen (LSZH), red (Pantone 1797C)</p>
DIAMETERS	<p>Jacket: Diameter: 7.7 ±0.2mm; thickness: 0.50 ±0.05mm</p> <p>Insulation: Blue &amp; white: 1.33 ± 0.02mm Orange &amp; white: 1.30 ± 0.02mm Green &amp; white: 1.33 ± 0.02mm Brown &amp; white: 1.30 ± 0.02mm</p>
ELECTRICAL	<p>Temperature &amp; Voltage Rating: 60°C @300V</p> <p>Spark Test: 2.5kV DC</p> <p>AC Leakage Current: ≤10mA (1.5kV AC) through overall jacket</p> <p>Conductor DC Resistance: ≤9.38Ω /100m</p> <p>Resistance Unbalance: ≤5%</p> <p>Dielectric Strength: 1.5kV AC for 2sec</p> <p>Insulation Resistance: ≥5000MΩ /m</p> <p>Mutual Capacitance: ≤5.6nF /100m</p> <p>Capacitance Unbalance: ≤160pF /100m pair-to-ground</p> <p>Characteristic Impedance: 100±15Ω @1~100MHz</p>
USAGE AND ENVIRONMENTAL	<p>Cable Cold Bend: -20°C for 4hr</p> <p>Insulation Tensile Strength: 2400 PSI min. (1.69kg/m,2)</p> <p>NVP 73%</p> <p>Temperature Range: Storage &amp; shipping: -20°C to 60°C; installation: -0°C to 60°C; operation: -20°C to 60°C</p> <p>Minimum Bending Radius: ≥4 times of overall diameter</p> <p>Maximum Pulling Tension: ≤110N</p>
REGULATORY PERFORMANCE	<p>ISO/IEC 11801 (Edition 2.2): Information technology – Generic cabling for customer premises</p> <p>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</p> <p>EN 50288-6-1:2013: Multi-element metallic cables used in analogue and digital communication and control – Part 6-1: Sectional specification for unshielded</p>

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