



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
DIAMETERS	Jacket: Low smoke zero halogen (LSZH), red (Pantone 1797C)
	Jacket: Diameter: $7.7 \pm 0.2\text{mm}$; thickness: $0.50 \pm 0.05\text{mm}$
	Insulation: Blue & white: $1.33 \pm 0.02\text{mm}$
	Orange & white: $1.30 \pm 0.02\text{mm}$
	Green & white: $1.33 \pm 0.02\text{mm}$
ELECTRICAL	Brown & white: $1.30 \pm 0.02\text{mm}$
	Temperature & Voltage Rating: 60°C @300V
	Spark Test: 2.5kV DC
	AC Leakage Current: $\leq 10\text{mA}$ (1.5kV AC) through overall jacket
	Conductor DC Resistance: $\leq 9.38\Omega$ /100m
	Resistance Unbalance: $\leq 5\%$
	Dielectric Strength: 1.5kV AC for 2sec
	Insulation Resistance: $\geq 5000\text{M}\Omega$ /m
	Mutual Capacitance: $\leq 5.6\text{nF}$ /100m
	Capacitance Unbalance: $\leq 160\text{pF}$ /100m pair-to-ground
	Characteristic Impedance: $100 \pm 15\Omega$ @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: $\leq 110\text{N}$
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