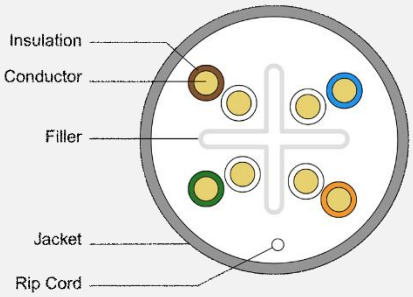
DATASHEET

SCHNELL CAT6 U/UTP 23 AWG 4 PAIR CABLE

Schnell Category 6 UTP cables are built to surpass Cat 6/Class E standards, tested up to 250 MHz, and support Gigabit 1000Base-T and 1000Base-TX applications up to 100 meters. They feature exceptional pair-balance for superior electromagnetic compatibility (EMC), minimizing signal radiation, enhancing noise immunity, and boosting alien crosstalk performance in UTP cabling systems.

DIAGRAM & CONSTRUCTION

Conductor Material	: Bare Copper
Conductor Size	: 23 AWG
Conductor Type	: Solid
Insulation Material	: High Density PE
Insulation Thickness	: 0.225 mm
Insulation Diameter	: 1.03 ± 0.05 mm
Inner Layer Pitch	: 30 mm
REF	
Color Code	: Per TIA/EIA 568-B



Total Number of Wires	: 8
Outside Layer cross	: Polyethylene
Outside Layer pitch	: 100 ± 20 mm
REF	
Rip Cord	: Yes, Nylon
Outer Jacket Material	: LSZH
Outer Jacket Thickness	: 0.60 ± 0.55 mm
Outer Jacket Diameter	: 6.3 mm ± 0.20 mm

ELECTRICAL CHARACTERISTICS

Insulation Resistance	: Min 5000 mega ohms-km at 20°C
Dielectric Test	: 1000V DC /1 min No Breakdown
Temperature Rating	: 60°C
Voltage Rating	: 30 V

PHYSICAL CHARACTERISTICS

Operating Temperature	: -20°C to +75°C
Min Bend Radius	: 53.6 mm
Tensile Strength	: 110 N

KEY FEATURES

- E Series, Cat 6/Class E compliant
- 23 AWG solid bare copper (U/UTP)
- Central spline for crosstalk control
- 250 MHz tested for Gigabit speeds
- 100% recyclable packaging

KEY APPLICATIONS

- Key applications include Gigabit Ethernet
- PoE for IP devices
- LAN cabling and Data center
- CCTV connectivity and Smart building systems
- VoIP, Wi-Fi uplinks
- Home/office networking

REACTION TO FIRE

Material Identifier	: HF1
Material Description	: Standard HFFR-LS
Flammability Rating	: IEC/EN 60332-1-2
Classification / Euro Class	: Eca

STANDARDS

- Supports IEEE 802.3af (PoE) and 802.3at (PoE+)
- Flame retardant and LSZH (IEC 60332-1, 60754, 61034)
- ANSI/TIA-568.2-D Category 6 compliant
- ISO/IEC 11801 Class E & IEC 61156-5 certified

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TRANSMISSION PERFORMANCE

Freq. MHz	Attenuation (20°C) ≤dB	NEXT ≥dB	PHASE DELAY ≤ns	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB	RL ≥dB
1	2.03	74.3	570	72.3	67.8	64.8	20
4	3.78	65.3	552	63.3	55.8	52.8	23
8	5.32	60.8	546.73	58.8	49.7	46.7	24.5
10	5.95	59.3	545.38	57.3	47.8	44.8	25
16	7.55	56.2	543	54.2	43.7	40.7	25
20	8.47	54.8	542.05	52.8	41.8	38.8	25
25	9.51	53.3	541.2	51.3	39.8	36.8	24.3
31.25	10.67	51.9	540.44	49.9	37.9	34.9	23.6
62.5	15.38	47.7	538.55	45.4	31.9	28.9	21.5
100	19.8	44.3	537.6	42.3	27.8	24.8	20.1
200	28.98	39.8	536.54	37.8	21.8	18.8	18
250	32.85	38.3	536.27	36.3	19.8	16.8	17.3

PACKING INFORMATION

Part Number	Packing Mode	Roll Length	N.W (kg)	G.W (kg)	Dimension (mm)
SCZ-5010C623GY	Pulley Box	305 Mtr	12.1	13.0	400 x 400 x 220
SCZ-5010C623LZGY	Pulley Box	305 Mtr	12.1	13.0	400 x 400 x 220

PART NUMBER

Part Number	Description
SCZ-5010C623GY	SCHNELL CAT6 U/UTP 23 AWG 4 PAIR CABLE PVC
SCZ-5010C623LZGY	SCHNELL CAT6 U/UTP 23 AWG 4 PAIR CABLE LSZH

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