U/UTP CABLE - CATEGORY 6- 4 PAIR UNSHIELDED -PE SHEATH
D-INSTAKAB6F-305

Art.nr. 501-000

U/UTP 4 Pairs cable

Short Description

Durable Category 6 U/UTP cable with solid copper conductors and PE outer sheath, designed for high-speed data transmission in outdoor environments. The robust polyethylene jacket provides excellent protection against moisture and UV exposure, making it ideal for external installations and conduit applications.

Properties

- **Category:** CAT6 U/UTP
- **Construction:** 4 pairs, unshielded twisted pairs
- **Conductor:** Solid bare copper, AWG23
- **Insulation:** Polyethylene (PE)
- **Sheath Material:** UV-resistant Polyethylene (PE)
- **Color:** Black
- **Fire Class:** Not rated for indoor CPR use (intended for outdoor applications)
- **Length:** Available in 305 m reel or pull box
- **Standards Compliance:** ISO/IEC 11801, EN 50173, ANSI/TIA-568
- **Performance:** 250 MHz bandwidth, supports Gigabit Ethernet and higher-speed applications
- **Application:** Outdoor structured cabling, ducts, conduits, or building-to-building connections

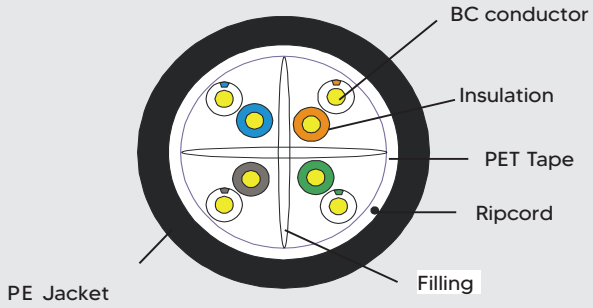
Mechanical specifications

- **Conductor Diameter:** 0.57 mm (AWG23)
- **Cable Diameter:** ±6.2 mm
- **Weight:** ±9.0 kg per 305 m
- **Sheath Type:** UV-resistant PE, waterproof
- **Operating Temperature:** -20°C to +60°C
- **Installation Temperature:** 0°C to +50°C
- **Minimum Bending Radius:** 8 × cable diameter
- **Pulling Tension:** ≤ 110 N
- **Installation Type:** Fixed, outdoor, in ducts or conduits
- **Moisture Resistance:** High
- **UV Resistance:** Yes

Connecting with quality!

Spécifications

Sheath Printing	TBD			
Customer No.		Customer Reference		
Category	U/UTP CAT6 -4P - PE			
Reference Standard	ISO/IEC11801 , TIA -568-C.2			
Conductor	Material	SOLID -Bare Copper		
	Nom. O.D. (mm)	0.550	Up	+0.005
			Down	-0.005
Insulation	Material	HDPE		
	Diameter	0.97± 0.08mm		
Color	A.Blue, White-Blue	B.Orange,White-Orange		
	C.Green,White-Green	D.Brown, White-Brown		
Shield	PET Tape			
Sheath	Thickness	0.55±0.05 mm		
	External O.D.	6.3±0.5 mm		
	Surface	Clean, Frap, Satiation		
	Material	LDPE (complies RoHS)		
	Color	Black		
Surface Printing	Letter height	3.0±0.3mm		
	Color	White		
	Print error & Space	≤±0.5%, 1m		
Packing	Wooden Tray & Carton			
Carton dimension	According to therequires			
Packing length	305± 1.5m			
Out Jacket Physical Properties	Before Aging Tensile Strength(Mpa) ≥ 10.0			
	Elongation (%) ≥ 350			
	Aging Period(°C× hrs) 100°C× 24h× 10d			
	After Aging Elongation (%) ≥ 300			
	Cold bend(-20± 2°C× 4h) No visible cracks			
Electrical Characteristics (20°C)	1.0-250.0MHz Impedance (Ω) 100±15			
	1.0-250.0MHz Delay Skew (ns/100m) ≤45			
	DC Resistance (Ω/100m) max 9.38			
	DC Conductor Resistance Unbalance (%) max 5.0			



Technical Performance (100m):

Frequency (MHz)	RL ≥dB	ATT(20°C) ≤dB	NEXT ≥dB	PHASE DELAY ≤ns
1	20.0	2.03	74.3	570.00
4.0	23.0	3.78	65.3	552.00
8.0	24.5	5.32	60.8	546.73
10.0	25.0	5.95	59.3	545.38
16.0	25.0	7.55	56.2	543.00
20.0	25.0	8.47	54.8	542.05
25.0	24.3	9.51	53.3	541.20
31.25	23.6	10.67	51.9	540.44
62.5	21.5	15.38	47.7	538.55
100	20.1	19.80	44.3	537.60
200	18.0	28.98	39.8	536.54
250	17.3	32.85	38.3	536.27

Frequency (MHz)	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB
1	72.3	67.8	64.8
4	63.3	55.8	52.8
8	58.8	49.7	46.7
10	57.3	47.8	44.8
16	54.2	43.7	40.7
20	52.8	41.8	38.8
25	51.3	39.8	36.8
31.25	49.9	37.9	34.9
62.5	45.4	31.9	28.9
100	42.3	27.8	24.8
200	37.8	21.8	18.8
250	36.3	19.8	16.8

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