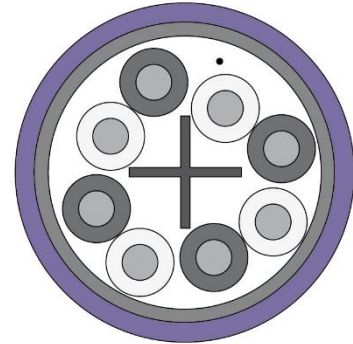




## Twisted Pair Installation Cable - Category 6 Class E - F/UTP



### Abstract

CAT 6 Class E, F/UTP, Twisted Pair Installation Cable, 250 MHz

### Application areas

Primary (Campus), Secondary (Riser), Tertiary (Horizontally)  
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 2.5GBase-T;  
5GBase-T  
IEEE 802.5: 16 MB; ISDN; FDDI; ATM; PoE/PoE+

### Certification

ETL Type Approval (101152681CRT-001c)

### Standards

ISO/IEC 11801 3<sup>rd</sup> Ed.; IEC 61156-5  
EN 50173-1/4; EN 50288-5-1

### Physical Properties

Conductor	Bare annealed copper, solid AWG 23/1
Insulation	HD-PE (High Density Polyethylene)
Total number of insulated conductors	8, twisted in 4 pairs
Color code	Blue-white, orange-white, green-white, brown-white
Individual pair shielding	None
Overall shielding	Aluminum foil, providing 100% coverage, with drain wire
Outer sheath	E <sub>CA</sub> to B <sub>2CA</sub> acc. to EN 50575; LSZH
Outer sheath diameter (nominal)	0.5 mm (E <sub>CA</sub> ); 0.6 mm (D <sub>CA</sub> ); 0.8 mm (C <sub>CA</sub> ); 0.8 mm (B <sub>2CA</sub> )
Outer sheath color	Purple

### Mechanical Properties

Tensile loading	150 N max.
Dynamic bending radius	8x AD mm min.
Static bending radius	4x AD mm min.
Shipping- and storage temperature range	-20 °C up to +60 °C
Operating temperature range	-20 °C up to +75 °C
Installations temperature range	0 °C up to +50 °C
Overall diameter Simplex (nominal)	7.0 (E <sub>CA</sub> ); 7.2 mm (D <sub>CA</sub> ); 7.6 mm (C <sub>CA</sub> ); 7.6 mm (B <sub>2CA</sub> )
Weight (kg/km)	46 kg (E <sub>CA</sub> ); 47 kg (D <sub>CA</sub> ); 48.5 kg (C <sub>CA</sub> ); 48.5 kg (B <sub>2CA</sub> )



### Electrical Properties

Impedance	100 ± 5 Ohm @ 1-250 MHz
Capacitance	45 pF/m nominal @ 800 Hz
Capacitance unbalance (pair-ground)	1.5 pF/m max. @ 1 KHz
Insulation resistance	5 GOhm x km min.
DC resistance	72 Ohm/km max. (2% max. resistance unbalance)
DC loop resistance	147 Ohm/km max. (2% max. resistance unbalance)
Voltage resistance	72 Vdc max.
Coupling attenuation	CA-Type 3
Signal propagation delay	535 nS/100 m max.
Propagation delay	20 nS/100 m max.
Separating class	„c“ acc. to EN-50174-2
NVP	69%

### Product Number Information

Item code	Length/Packaging	Reaction to fire acc. to EN 50575	DoP number
DK-1623-VH-1	100 m box, simplex	E <sub>CA</sub>	DoP_1000_051
DK-1623-VH-305	305 m drum, simplex		
DK-1623-VH-5	500 m drum, simplex		
DK-1624-VH-1	100 m box, simplex	D <sub>CA</sub>	DoP_1000_054
DK-1624-VH-305	305 m drum, simplex		
DK-1624-VH-5	500 m drum, simplex		
DK-1625-VH-1	100 m box, simplex	C <sub>CA</sub>	DoP_1000_072
DK-1625-VH-305	305 m drum, simplex		
DK-1625-VH-5	500 m drum, simplex		
DK-1626-VH-1	100 m box, simplex	B2 <sub>CA</sub>	DoP_1000_035
DK-1626-VH-305	305 m drum, simplex		
DK-1626-VH-5	500 m drum, simplex		

### Transmission Properties

FREQ.	ATT	NEXT	PS-NEXT	ACR	PS-ACR	EL-FEXT	PS-ELFEXT	RL
MHz	dB	dB	dB	dB	Db	dB	dB	dB
1	2,1	74.3	71.3	72.2	69.2	68	65	26
10	5,9	59.3	56.3	53.4	50.4	48	45	25
100	19,1	44.3	41.3	25.2	22.2	28	25	20.1
250	31.1	38.3	35.3	7.2	4.2	20	17	17.3