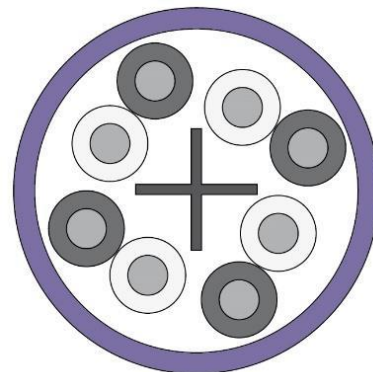




## Twisted Pair Installation Cable - Category 6 Class E - U/UTP



### Abstract

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

### Application areas

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

### Certification

GHMT 2 Connector Channel Link Class E<sub>A</sub> (z5547a-19)

### Standards

ANSI/TIA 568-C.2; ISO/IEC 11801 3<sup>rd</sup> Ed.; IEC 61156-5  
EN 50173-1/4; EN 50288-6-1

### Physical Properties

Conductor	Bare annealed copper, 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	None
Outer sheath	E <sub>CA</sub> to B2 <sub>CA</sub> acc. to EN 50575; LSZH
Outer sheath diameter (nominal)	0.5 mm (E <sub>CA</sub> ); 0.6 mm (D <sub>CA</sub> ); 1.0 mm (C <sub>CA</sub> ); 1.0 mm (B2 <sub>CA</sub> )
Outer sheath color	Purple (RAL 4005)

### 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 (nominal)	6.1 mm (E <sub>CA</sub> ); 6.3 mm (D <sub>CA</sub> ); 6.8 mm (C <sub>CA</sub> ); 6.8 mm (B2 <sub>CA</sub> )
Weight (kg/km)	41 kg (E <sub>CA</sub> ); 42 kg (D <sub>CA</sub> ); 44 kg (C <sub>CA</sub> ); 44 kg (B2 <sub>CA</sub> )



### Electrical Properties

Impedance	100 ± 5 Ohm @ 1-250 MHz
Capacitance	40 pF/m nominal @ 800 Hz
Capacitance unbalance (pair-ground)	1.6 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	"b" acc. to EN 50174-2
NVP	69%

### Product Number Information

Item code	Length/Packaging	Reaction to fire acc. to EN 50575	DoP number
DK-1613-VH-1	100 m box, Simplex	E <sub>CA</sub>	DOP_1000_076
DK-1613-VH-305	305 m box, Simplex		
DK-1613-VH-5	500 m drum, Simplex		
DK-1614-VH-1	100 m box, Simplex	D <sub>CA</sub>	DOP_1000_079
DK-1614-VH-305	305 m box, Simplex		
DK-1614-VH-5	500 m drum, Simplex		
DK-1615-VH-1	100 m box, Simplex	C <sub>CA</sub>	DOP_1000_068
DK-1615-VH-305	305 m box, Simplex		
DK-1615-VH-5	500 m drum, Simplex		
DK-1616-VH-1	100 m box, Simplex	B2 <sub>CA</sub>	DOP_1000_021
DK-1616-VH-305	305 m box, Simplex		
DK-1616-VH-5	500 m drum, Simplex		

### Transmission Properties

FREQ.	ATT	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS ELFEXT	RL
MHz	dB	dB	dB	dB	dB	dB	dB	dB
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
200	27.6	39.3	36.3	11.7	8.7	22	19	18
250	32.85	38.3	35.3	5.45	2.45	20	17	17.3