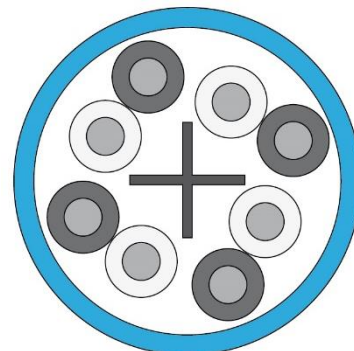


Twisted Pair Installation Cable - Category 6_A Class E_A - U/UTP



Abstract

CAT 6_A Class E_A, U/UTP, Twisted Pair Installation Cable, 500 MHz

Application areas

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

Standards

ANSI/TIA-568-C; ISO/IEC 11801 3rd Ed.; IEC 61156-5
EN 50173-1/4; EN 50288-11-1

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	None
Outer sheath	E _{CA} to B _{2CA} acc. to EN 50575; LSZH
Outer sheath diameter (nominal)	0.5 mm (E _{CA}); 0.60 mm (D _{CA}); 1.2 mm (C _{CA}); 1.4 mm (B _{2CA})
Outer sheath color	Light blue (RAL 5012)

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)	7.1 (E _{CA}); 6.3 mm (D _{CA}); 7.4 mm (C _{CA}); 7.6 mm (B _{2CA})
Weight (kg/km)	53 kg (E _{CA}); 54 kg (D _{CA}); 55 kg (C _{CA}); 56 kg (B _{2CA})



Electrical Properties

Impedance	100 ± 5 Ohm @ 1-600 MHz
Capacitance	40 pF/m nominal @ 1 KHz
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 2
Signal propagation delay	450 nS/100 m max.
Propagation delay	15 nS/100 m max.
Separating class	„c“ acc. to EN 50174-2
NVP	70%

Product Number Information

Item code	Length/Packaging	Reaction to fire acc. to EN 50575	DoP number
DK-1613-A-VH-1	100 m box, simplex	E _{CA}	DoP_1000_057
DK-1613-A-VH-305	305 m drum, simplex		
DK-1613-A-VH-5	500 m drum, simplex		
DK-1614-A-VH-1	100 m box, simplex	D _{CA}	DoP_1000_030
DK-1614-A-VH-305	305 m drum, simplex		
DK-1614-A-VH-5	500 m drum, simplex		
DK-1615-A-VH-1	100 m box, simplex	C _{CA}	DoP_1000_071
DK-1615-A-VH-305	305 m drum, simplex		
DK-1615-A-VH-5	500 m drum, simplex		
DK-1616-A-VH-1	100 m box, simplex	B2 _{CA}	DoP_1000_032
DK-1616-A-VH-305	305 m drum, simplex		
DK-1616-A-VH-5	500 m drum, simplex		

Transmission Properties

FREQ.	ATT	NEXT	PS-NEXT	ACR	PS-ACR	EL-FEXT	PS-ELFEXT	TCL	RL
MHz	dB	dB	dB	dB	Db	dB	dB	dB	dB
4	3,7	65,27	62,27	61,57	58,57	55,8	52,8	40	25
10	5,9	59,3	56,3	53,4	50,4	47,8	44,8	40	32,3
16	7,4	56,24	53,2	48,84	45,84	43,7	40,7	38	36,2
20	8,3	54,78	51,78	46,48	43,48	41,8	38,8	37	34,8
100	19	44,3	41,3	25,3	22,3	27,8	24,8	30	31,8
200	27,5	42,1	36,78	14,6	11,6	21,8	18,8	27	28,5
500	37,2	38,5	31,8	1,3	-2,3	13,8	10,8	23	22,2