



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



Abstract

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

Application areas

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

Certification

ETL Type Approval (101622550CRT-001)

Standards

ANSI/TIA-568-C; ISO/IEC 11801 3rd Ed.; EN 50173-1; EN 50288-10-1
IEC 61156-5

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	Aluminum foil, providing 100% coverage
Overall shielding	None, with drain wire
Outer sheath	E _{CA} to B2 _{CA} acc. to EN 50575; LSZH
Outer sheath diameter (nominal)	0.5 mm (E _{CA}); 0.6 mm (D _{CA}); 0.8 mm (C _{CA}); 0.8 mm (B2 _{CA})
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
Outer diameter (nominal)	7.0 mm (E _{CA}); 7.2 mm (D _{CA}); 7.6 mm (C _{CA}); 7.6 mm (B2 _{CA})
Weight (kg/km)	56 kg (E _{CA}); 57 kg (D _{CA}); 58 kg (C _{CA}); 58 kg (B2 _{CA})



Electrical Properties

Impedance	100 ± 15 Ohm @ 4-100 MHz; 100 ± 25 Ohm @ 100-600 MHz
Capacitance	45 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	95 Ohm/km max. (2% max. resistance unbalance)
DC loop resistance	190 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	25 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-1623-A-VH-1	100 m box, simplex	E _{CA}	DoP_1000_052
DK-1623-A-VH-305	305 m drum, simplex		
DK-1623-A-VH-5	500 m drum, simplex		
DK-1624-A-VH-1	100 m box, simplex	D _{CA}	DoP_1000_036
DK-1624-A-VH-305	305 m drum, simplex		
DK-1624-A-VH-5	500 m drum, simplex		
DK-1625-A-VH-1	100 m box, simplex	C _{CA}	DoP_1000_070
DK-1625-A-VH-305	305 m drum, simplex		
DK-1625-A-VH-5	500 m drum, simplex		
DK-1626-A-VH-1	100 m box, simplex	B2 _{CA}	DoP_1000_037
DK-1626-A-VH-305	305 m drum, simplex		
DK-1626-A-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	95	92	92,9	89,9	68	65	25
10	5,9	90	87	84,1	81,1	48	45	25
100	19,1	75	72	55,9	52,9	28	25	20,1
250	31,1	66	63	34,9	31,9	20	17	17,3
500	45,3	57	54	11,7	8,7	14	11	15,2