

Twisted Pair Installation Cable - Category 5e Class D - F/UTP



Abstract

CAT 5 Class D, F/UTP, Twisted Pair Installation Cable, E_{CA} acc. to EN 50575, 100 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

Norms

ANSI/TIA 568-C; ISO/IEC 11801 2nd Ed.; EN 50173; EN 50288-2-1

Physical Properties

Conductor	Bare annealed copper, solid AWG 24/1; diameter 0.50 mm nominal
Insulation	PE (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	Foil shielded, with drain wire
Outer sheath	E_{CA} acc. to EN 50575 (PVC)
Outer sheath diameter	0.55 mm nominal
Outer sheath color	Grey (RAL 7035)
DoP number	1000_002

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 +75 °C
Operating temperature range	-20 °C up to +60 °C
Installations temperature range	0 °C up to +50 °C
Overall diameter	6.1 mm nominal
Weight (kg/km)	38 kg

Electrical Properties

Impedance	100 ± 5 Ohm @ 1-600 MHz
Capacitance	40 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	40 dB
Signal propagation delay	535 nS/100 m max.
Propagation delay	20 nS/100 m max.
NVP	69%

Transmission Properties

FREQ.	ATT	NEXT	PS NEXT	RL	ACR	PS ACR	ELFEXT	PS ELFEXT
MHz	dB	dB	dB	dB	dB	dB	dB	dB
1	2,03	62,3	59,3	17	60,3	57,3	60,75	60,75
10	6,46	47,3	44,3	20	40,8	37,8	40,75	40,75
100	21,97	32,29	29,29	15,1	10,3	7,3	20,75	20,75

Product Number Information

Item code	Length	Packaging	Version
DK-1521-V-1	100 m	Carton	Simplex
DK-1521-V-305	305 m	Carton	Simplex