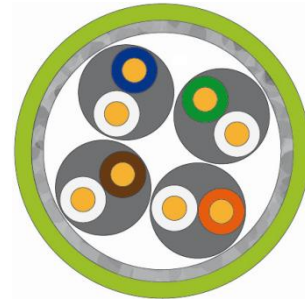


Twisted Pair Installation Cable - Category 7 Class F - S/FTP



Abstract

CAT 7 Class F, S/FTP, Twisted Pair Installation Cable, E_{CA} acc. to EN 50575, 1200 MHz

Application areas

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

Norms

ISO/IEC 11801 2nd Ed.; IEC 61156-5
EN 50173-1; EN 50288-4-1

FRNC (flame retardancy)

IEC 60332-1; IEC 60754-2; IEC 61034

Physical Properties

Conductor	Bare annealed copper, solid AWG 23/1; diameter 0.56 mm nominal
Insulation	SFS-PE (Foam-Skin 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	20% wire braid
Outer sheath	E _{CA} acc. to EN 50575
Outer sheath diameter	0.50 mm nominal
Outer sheath color	Orange (RAL 2000)
DoP number	1000_007

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 +50 °C
Installations temperature range	0 °C up to +50 °C
Overall diameter	7.2 mm nominal
Flame retardancy	IEC 60332-1 (LSZH-1/FRNC-B)
Halogen free & smoke-proof	IEC 60754-2 & IEC 61034
Fire load	650 Mj/km Simplex; 1300 Mj/km Duplex
Weight	50 kg/km

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	80 dB
Signal propagation delay	450 nS/100 m max.
Propagation delay	25 nS/100 m max.
Separating class	„d“ acc. to EN 50174-2
NVP	79%

Transmission Properties

FREQ.	ATT	NEXT	PS NEXT	RL	ACR	PS ACR	ELFEXT	PS ELFEXT	EL TCL
MHz	dB	dB	dB	dB	dB	dB	dB	dB	dB
1	2.0	78.0	75.0	20.0	76.0	73.0	78.0	75.0	35.0
10	5.9	78.0	75.0	25.0	72.1	69.1	74.0	71.0	15.0
100	19.1	72.4	69.4	20.1	53.3	50.3	54.0	51.0	NS
250	31.0	66.5	63.5	17.3	35.5	32.5	46.0	43.0	NS
500	45.3	61.9	58.9	17.3	16.6	13.6	40.0	37.0	NS
600	50.1	60.8	57.8	17.3	10.7	7.7	38.4	35.4	NS
1000	66.9	57.4	54.4	13.1	NS	NS	35.3	32.3	NS
1200	74.4	56.2	53.2	12.6	NS	NS	33.8	30.8	NS

Product Number Information

Item code	Length	Packaging	Version
DK-1741-VH-1	100 m	Ring	Simplex
DK-1741-VH-5	500 m	Drum	Simplex
DK-1741-VH-10	1000 m	Drum	Simplex
DK-1741-VH-D-1	100 m	Ring	Duplex
DK-1741-VH-D-5	500 m	Drum	Duplex