

Twisted Pair Installation Cable - Category 7_A Class F_A - S/FTP



Abstract

CAT 7_A Class F_A, S/FTP, Twisted Pair Installation Cable, 1500 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; CATV; PoE/PoE+/4PPoE

Certification

GHMT 2 Connector Permanent Link Class E_A (z5548a-19)

Standards

Flame spread
Halogen-free, corrosiveness
Smoke density

ISO/IEC 11801 3rd Ed.; IEC 61156-5
EN 50173-1/4; EN 50288-9-1
EN 60332-1-2 (LSOH-PVC)
EN 60754-1/2 (LSOH)
EN 61034-2

Physical Properties

Conductor
Insulation
Total number of insulated conductors
Color code
Individual pair shielding
Overall shielding
Outer sheath
Outer sheath diameter (nominal)
Outer sheath color

Bare annealed copper, solid AWG 22/1
SFS-PE (Foam-Skin Polyethylene)
8, twisted in 4 pairs
Blue-white, orange-white, green-white, brown-white
Aluminum foil, providing 100% coverage
copper tinned braid
D_{CA} to C_{CA} acc. to EN 50575; LSZH
0.60 mm (D_{CA}); 0.60 mm (C_{CA})
Yellow (RAL 1028)

Mechanical Properties

Tensile loading
Dynamic bending radius
Static bending radius
Shipping- and storage temperature range
Operating temperature range
Installations temperature range

150 N max.
8x AD mm min.
4x AD mm min.
-20 °C up to +60 °C
-20 °C up to +60 °C
0 °C up to +50 °C



Overall diameter Simplex (nominal)
Weight (kg/km)

7.8 mm (D_{CA}); 7.8 mm (C_{CA})
65 kg (D_{CA}); 65 kg (C_{CA})

Electrical Properties

Impedance	100 ± 5 Ohm @ 1-1000 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 1b
Signal propagation delay	450 nS/100 m max.
Propagation delay	10 nS/100 m max.
Separating class	„d“ acc. to EN 50174-2
NVP	75%

Product Number Information

Item code	Length/Packaging	Reaction to fire acc. to EN 50575	DoP number
DK-1743-A-VH-1	100 m ring, Simplex	D _{CA}	DoP_1000_087
DK-1743-A-VH-5	500 m drum, Simplex		
DK-1743-A-VH-10	1000 m drum, Simplex		
DK-1743-A-VH-D-5	500 m drum, Duplex		
DK-1743-A-VH-D-1	100 m ring, Simplex		
DK-1744-A-VH-5	500 m drum, Simplex	C _{CA}	DoP_1000_092
DK-1744-A-VH-D-5	500 m drum, Duplex		
DK-1745-A-VH-5	500 m drum, Simplex	B2 _{CA}	DoP_1000_044

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	1.6	110	107	108	105	109	106	26.1
10	4.2	110	107	106	103	109	106	32.3
100	14.4	110	107	96	93	93	90	36.2
250	24.5	105	102	81	78	83	80	34.8
500	34	105	102	71	68	70	67	31.8
600	37.7	100	97	62	59	64	61	28.5
1000	49	92	89	43	40	49	46	22.2
1200	54.9	88	85	33	31	40	37	20.2
1500	62	73	70	11	8	25	22	12.3