

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; 10GBase-T
 IEEE 802.5: 16 MB; ISDN; FDDI; ATM; CATV; Broadband video;
 PoE/PoE+

Normen

ISO/IEC 11801 2nd Ed.; IEC 61156-5
 EN 50173-1/4; EN 50288-9-1

Physical Properties

Conductor	Bare annealed copper, solid AWG 22/1; diameter 0.60 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	copper wire braid
Outer sheath	E _{CA} to B2 _{CA} acc. to EN 50575
Outer sheath diameter (nominal)	0.50 mm (E _{CA}); 0.52 mm (D _{CA}); 0.60 mm (C _{CA}); 0.60 mm (B2 _{CA})
Outer sheath color	Yellow (RAL 1028)

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 Simplex (nominal)	7.8 mm (E _{CA}); 7.8 mm (D _{CA}); 8.2 mm (C _{CA}); 8.2 mm (B2 _{CA})
Weight (kg/km)	51.5 kg (E _{CA}); 54.5 kg (D _{CA}); 57.5 kg (C _{CA}); 57.5 kg (B2 _{CA})

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	80 dB
Signal propagation delay	450 nS/100 m max.
Propagation delay	10 nS/100 m max.
Separating class	„d“ acc. to EN 50174-2
NVP	79%

Product Number Information

Item code	Length/Packaging	Reaction to fire acc. to EN 50575	DoP number
DK-1741-A-VH-5	500 m drum, Simplex	E _{CA}	
DK-1741-A-VH-10	1000 m drum, Simplex		
DK-1741-A-VH-D-5	500 m drum, Duplex		
DK-1743-A-VH-5	500 m drum, Simplex	D _{CA}	
DK-1743-A-VH-10	1000 m drum, Simplex		
DK-1743-A-VH-D-5	500 m drum, Duplex		
DK-1744-A-VH-5	500 m drum, Simplex	C _{CA}	
DK-1744-A-VH-10	1000 m drum, Simplex		
DK-1744-A-VH-D-5	500 m drum, Duplex		
DK-1745-A-VH-5	500 m drum, Simplex	B2 _{CA}	
DK-1745-A-VH-10	1000 m drum, Simplex		
DK-1745-A-VH-D-5	500 m drum, Duplex		

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