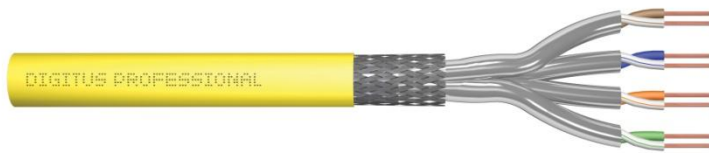


## Twisted Pair Installation Cable - Category 7<sub>A</sub> Class F<sub>A</sub> - S/FTP



### Abstract

CAT 7<sub>A</sub> Class F<sub>A</sub>, S/FTP, Twisted Pair Installation Cable, D<sub>CA</sub> acc. to EN 50575, 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 2<sup>nd</sup> Ed.; IEC 61156-5  
 EN 50173-1/4; EN 50288-9-1

### FRNC (Flammwidrigkeit)

IEC 60754-2; IEC 61034

### 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	20% wire braid
Outer sheath	D <sub>CA</sub> - s2, d1, a1 acc. to EN 50575
Outer sheath diameter	0.8 mm nominal
Outer sheath color	Yellow (RAL 1028)
DoP number	1000_013

### 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	7.3 mm nominal Simplex; 2x 7.3 mm nominal Duplex
Halogen free & smoke-proof	IEC 60754-2 & IEC 61034
Fire load	740 Mj/km Simplex; 1480 Mj/km Duplex
Weight	70 kg/km

### 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%

### 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	64	31	40	37	20.2
1500	62	73	70	11	8	25	22	12.3

### Product Number Information

Item code	Length	Packaging	Version
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