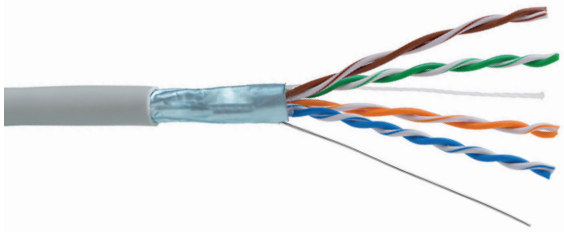
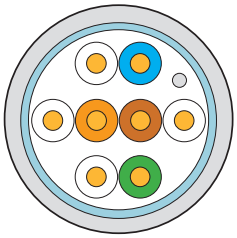
FTP (F/UTP) cable 4x2xAWG24, Category 5E, 300 MHz, LSOH, Euroclass D_{ca} - s2, d1, a1



P/N: KE300S24LSOH-Dca
500 m on a reel

P/N: KE300S24LSOH-Dca-RLX
305 m in a box



1 Gigabit | Cat. 5E | 300 MHz | LSOH | D_{ca}

Features

- cable shielded with AL/PET foil, halogen-free sheath
- enables transmission of all high-speed protocols up to 1000BASE-T
- tested in bandwidth up to 300 MHz
- enables RJ45 connectors to be mounted directly to a cable

Application

- primary (Campus), secondary (Riser), tertiary (Horizontal)
- IEEE 802.3: 10BASE-T; 100BASE-TX; 1000BASE-T
- IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Construction

Conductor	bare copper wire, AWG 24
Insulation	foamskin polyethylene, Ø 1,0 mm
Twisting	2 cores to the pair
Pair screen	Al-laminated PET foil
Cable lay up	4 pairs to the core
Sheath	LSOH, gray RAL 7035
Outer cable diameter	6,1 mm

KELINE

Reaction to fire and flame resistance

Reaction to fire	D_{ca} – s2, d1, a1	
Fire safety	flame retardancy	IEC 60332-1-2
	smoke performance	IEC 61034-1, IEC 61034-2
	halogen acidity	IEC 60754-2

Mechanical properties

Min. bending radius	installation	49 mm
	operation	25 mm
Temperature range	installation	0°C to +60°C
	operation	-20°C to +60°C
Max. tensile load		110 N (11 kg)
Weight (netto)		37 kg/km

Electrical properties at 20°C

Loop resistance	—	≤ 95,8 Ω/km
Resistance unbalance	—	≤ 5 %
Insulation resistance	(500 V)	≥ 5 000 MΩ x km
Capacity	at 800 Hz	nom. 56 nF/km
Capacity unbalance	(pair/ground)	≤ 330 pF/km
Characteristic impedance	at 100 MHz	(100 ± 15) Ω
Nominal velocity of propagation (NVP)	—	ca. 69 %
Propagation delay	Nominal	≤ 535 ns/100 m
Delay skew	Nominal	≤ 20 ns/100 m
Test voltage	(DC, 1 min) core/core; core/screen	1 000 V
Transfer impedance	at 1 MHz	≤ 50 mΩ/m
	at 10 MHz	≤ 100 mΩ/m
	at 30 MHz	≤ 200 mΩ/m
Coupling attenuation	—	≥ 55 dB

Transmission properties at 20°C

f (MHz)	Attenuation (dB/100 m)	NEXT (dB min)	PS-NEXT (dB min)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ELFEXT (dB/100 m)	PS-ELFEXT (dB/100 m)	Return loss (dB)
1,0	1,9	71	68	69,1	66,1	68	65,0	20,0
4,0	3,7	62	59	58,3	55,3	56	53,0	23,0
10,0	6,0	56	53	50	47	48	45,0	25,0
16,0	7,6	53	50	45,4	42,4	44	41,0	25,0
20,0	8,5	51	48	42,5	39,5	42	39,0	25,0
31,2	10,7	49	46	38,3	35,3	38	35	24,0
62,5	15,7	44	41	28,3	25,3	32	29	22,0
100,0	19,8	41	38	21,2	18,2	28	25	20,0
125,0	22,3	40	37	17,7	14,7	26	23	19,0
155,5	24,2	38	35	13,8	10,8	24	21	—
175,5	25,7	37	34	11,3	8,3	23	20	—
200,0	27,5	36	33	8,5	5,5	22	19	—
250,0	29,2	35	32	5,8	2,8	20	17	—
300,0	32	34	31	2	-1	16	13	—

The determination of Reaction to Fire Class Performance of this cable has been performed by Product Certification Body notified by European Commision, which also carries out the assessment and verification of constant performance (AVCP) in the System 3.