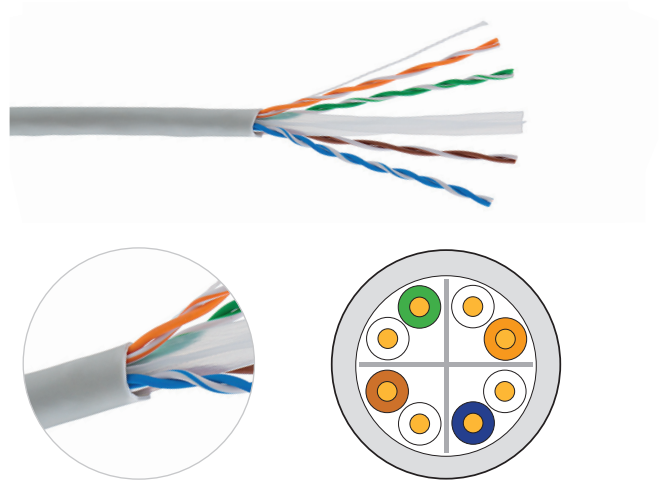


# UTP (U/UTP) cable 4x2x0,54, Category 6, 400 MHz, LSOH, Euroclass D<sub>ca</sub> - s2, d2, a1

P/N: KE400U23LSOH-Dca 500 m on reels	P/N: KE400U23LSOH-Dca-RLX 305 m in a box
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1 Gigabit	Cat. 6	400 MHz	LSOH	D <sub>ca</sub>
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## Features

- unshielded cable with pairs separated by a cross filler, halogen-free sheath
- enables transmission of all high-speed protocols including 1000BASE-T
- tested in bandwidth up to 400 MHz
- not shielded against electromagnetic interference

## 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, 0,54 mm
Insulation	polyethylene, Ø 0,95 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath	LSOH, gray RAL 7035
Outer cable diameter	6 mm

### Reaction to fire and flame resistance

Reaction to fire	D <sub>ca</sub> - s2, d2, 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	48 mm
	operation	24 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +60 °C
Max. tensile load	100 N (10 kg)	

### Electrical properties at 20°C

Loop resistance	—	≤ 176 Ω/ km
Resistance unbalance	—	≤ 2 %
Insulation resistance	(500 V)	≥ 5 000 MΩ x km
Capacity	at 800 Hz	nom. 48 nF/ km
Capacity unbalance	(pair/ground)	≤ 1500 pF/ km
Characteristic impedance	at 100 MHz	(100 ± 5) Ω
Nominal velocity of propagation (NVP)	—	cca 69 %
Propagation delay	Nominal	≤ 535 ns/ 100 m
Delay skew	Nominal	≤ 20 ns/ 100 m
Test voltage	(DC, 1 min) core/core	1 000 V

**Transmission properties at 20°C**

f (MHz)	Attenuation (dB/100m)		NEXT (dB min)		PS-NEXT (dB min)		ACR (dB/100m)		PS-ACR (dB/100m)		ELFEXT (dB/100m)		PS-ELFEXT (dB/100m)		Return loss (dB)
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.
1,0	2,1	1,9	74,0	78,0	72,0	75,0	72,0	76,1	70,0	73,1	68,0	82,0	65,0	80,0	20,0
4,0	3,8	3,8	65,0	69,0	63,0	66,0	61,2	65,2	59,2	62,2	56,0	70,0	53,0	68,0	23,0
10,0	6,0	6,0	59,0	63,0	57,0	60,0	53,0	57,0	51,0	54,0	48,0	62,0	45,0	60,0	25,0
16,0	7,6	7,6	56,0	60,0	54,0	57,0	48,4	52,3	46,4	49,3	44,0	58,0	41,0	56,0	25,0
20,0	8,5	8,5	55,0	59,0	53,0	56,0	46,5	50,0	44,5	47,0	42,0	56,0	39,0	54,0	25,0
31,2	10,7	10,7	52,0	56,0	50,0	53,0	41,3	45,0	39,3	42,0	38,0	52,0	35,0	50,0	23,6
62,5	15,5	15,1	47,0	51,0	45,0	48,0	31,5	36,0	29,5	33,0	32,0	46,0	29,0	44,0	21,5
100,0	19,9	19,1	44,0	48,0	42,0	45,0	24,1	28,9	22,1	25,9	28,0	42,0	25,0	40,0	20,1
125,0	22,5	21,3	43,0	47,0	41,0	44,0	20,5	25,2	18,5	22,2	26,0	40,0	23,0	38,0	19,5
155,5	25,4	23,8	42,0	45,0	40,0	42,0	16,6	21,3	14,6	18,3	24,0	38,0	21,0	36,0	18,8
175,5	27,1	25,3	41,0	44,0	39,0	41,0	13,9	19,1	11,9	16,1	23,0	37,0	20,0	35,0	18,4
200,0	29,2	27,0	40,0	44,0	38,0	41,0	10,8	16,5	8,8	13,5	22,0	36,0	19,0	34,0	18,0
250,0	33,0	32,0	38,0	42,0	36,0	39,0	5,0	10,0	2,0	7,0	20,0	34,0	17,0	32,0	17,3
300,0		36,1		41,0		38,0		4,8		1,8		32,0		30,0	
400,0		41,7		39,0		36,0		-2,7		-5,7		30,0		28,0	



The determination of Reaction to Fire Class Performance of this cable has been performed by Product Certification Body notified by European Commission.