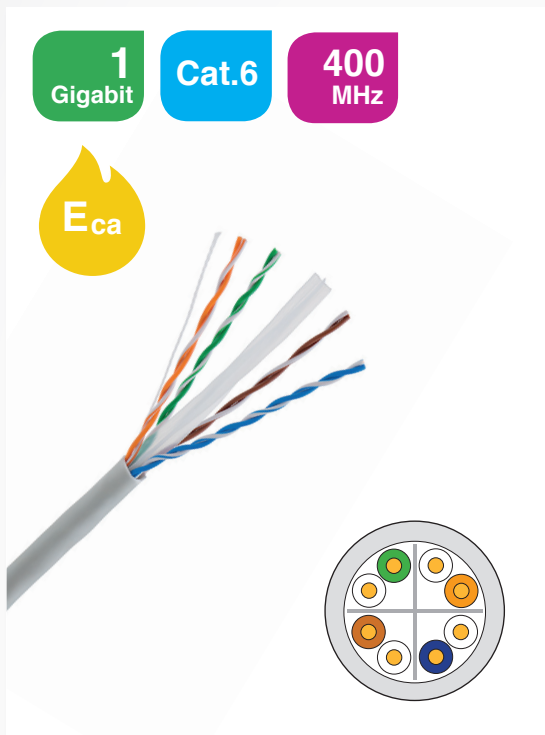


# UTP (U/UTP) cable 4x2x0,54, Category 6, 400 MHz

## Euroclass E<sub>ca</sub>

P/N: KE400U23-Eca



### features

- complies with the Construction Products Regulation (CPR) EU No. 305/2011 and reaction to fire requirements according to the harmonized standards EN 50575: 2014+A1: 2016
- unshielded cable with pairs separated by a cross filler, PVC 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: BASE-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	PVC, gray RAL7035
Outer cable diameter	6 mm

### reaction to fire and fire safety

Reaction to fire	E <sub>ca</sub>	
Fire safety	flame retardancy	IEC 60332-1-2
	smoke performance	-
	halogen acidity	-

### 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)	
Weight (netto)	36 kg / km	

**electrical properties at 20°C**

Conductor resistance	-	≤ 176 Ω/ km
Resistance unbalance	-	≤ 2%
Insulation resistance	(500V)	≥ 5000 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; core/screen	1000 V

**transmission properties at 20°C**

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

