

FTP (F/UTP) cable 4x2xAWG24, Category 5E, 300 MHz Euroclass E_{ca}

P/N: KE300S24-Eca

500 m on reels

P/N: KE300S24-Eca-RLX

305 m in a box



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

application

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

construction

Conductor	bare copper wire AWG24
Insulation	foamskin polyethylene, Ø 1.1 mm
Twisting	2 cores to the pair
Screen	Al-laminated plastic foil
Cable lay up	4 pairs to the core
Sheath	gray RAL 7035
Outer cable diameter	5,9 mm

reaction to fire and fire safety

Reaction to fire	E _{ca}	
Fire safety	flame retardancy	IEC 60332-1-2
	smoke performance	-
	halogen acidity	-

mechanical properties

Min. bending radius	installation	50 mm
	operation	25 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +60 °C
Max. tensile load	80 N (8 kg)	
Cable weight (netto)	36 kg / km	

electrical properties at 20°C

Loop resistance	-	≤ 190 Ω/ km
Resistance unbalance	-	≤ 2%
Insulation resistance	(500V)	≥ 2000 MΩ x km
Capacity	at 800 Hz	nom. 48 nF/ km
Capacity unbalance	(pair/ground)	≤ 1500 pF/ km
Characteristic impedance	at 100 MHz	(100 ± 15) 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
Transfer impedance	at 1 MHz	≤ 50mΩ/ 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/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1	1,9	71	68	69,1	66,1	68	65	20
4	3,7	62	59	58,3	55,3	56	53	23
10	6	56	53	50	47	48	45	25
16	7,6	53	50	45,4	42,4	44	41	25
20	8,5	51	48	42,5	39,5	42	39	25
31,2	10,7	49	46	38,3	35,3	38	35	24
62,5	15,7	44	41	28,3	25,3	32	29	22
100	19,8	41	38	21,2	18,2	28	25	20
125	22,3	40	37	17,7	14,7	26	23	19
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	27,5	36	33	8,5	5,5	22	19	-
250	29,2	35	32	5,8	2,8	20	17	-
300	32	34	31	2	-1	16	13	-



This product is certified by 3P international independent laboratories according to ISO/IEC 11801 (Ed. 2.2), EN 50173-1:2011, ANSI/TIA 568-C.2, IEC 61156-5 (Ed. 2), EN 50288-2-1:2013 incl. Amd.1, IEC 60332-1-2.

Mass production of this product is under permanent supervision of third party international laboratories performing 3P SURVEILLANCE maintenance testing and quality assurance sites



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