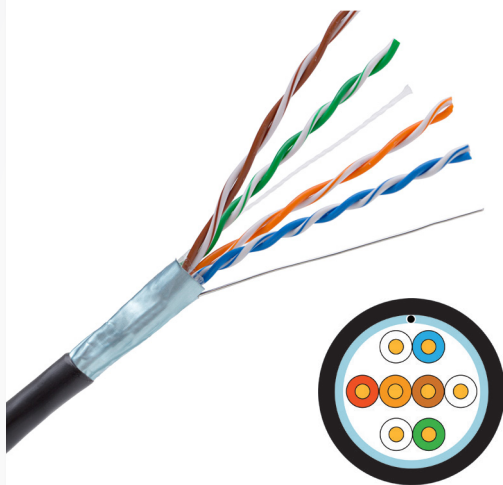


# Outdoor FTP (F/UTP) cable 4x2xAWG24, Category 5E, 300 MHz

P/N: KE300S24PE



## features

- PE sheath with thickness of 0,6 mm
- resistant to mechanical damage and environmental influences
- resistant to moisture, water and UV radiation
- cable core is identical with construction of KE300S24-Eca
- enables RJ45 connectors to be mounted directly to a cable
- enables transmission of all high-speed protocols including 1000BASE-T
- tested in bandwidth up to 300 MHz

## 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	solid bare copper wire AWG24
Insulation	polyethylene, Ø 1,0 mm
Twisting	2 cores to the pair
Pair screen	Al-foil
Cable lay up	4 pairs to the core
Sheath	PE, black RAL9005
Cable diameter	6,0 mm
PE sheath thickness	0,6 mm

## mechanical properties

Min. bending radius	installation	48 mm
	operation	24 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +75 °C
Max. tensile load	110 N (11 kg)	
Cable weight (netto)	31 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 11801-1:2017, EN 50173-1:2018, ANSI/TIA 568.2-D:2018 (Ed. 2.1), IEC 61156-5:2012, EN 50288-2-1:2013.

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