

Outdoor / direct burial FTP (F/UTP) cable 4x2xAWG24 Category 5E, 300 MHz, with double-sheath

P/N: KE300S24OUT



features

- double sheath with total thickness of 1.65 mm
- extremely 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	bare copper wire AWG24	
Insulation	foamskin polyethylene, Ø 1.1 mm	
Twisting	2 cores to the pair	
Pair screen	Al-laminated plastic foil	
Cable lay up	4 pairs to the core	
Sheath	outer	PE, black RAL9005
	inner	PVC, gray RAL7035
Outer cable diameter	8,0 mm	
Outer PE sheath thickness	1,25 mm	
Inner sheath thickness	0,4 mm	

mechanical properties

Min. bending radius	installation	64 mm
	operation	32 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +75 °C
Max. tensile load	82 N (8,2 kg)	
Cable weight (netto)	46 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