

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

P/N: KE300S24OUT

500 m on a reel

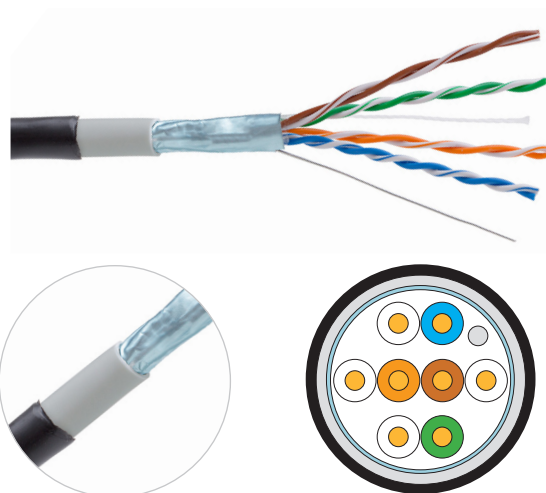
 1
Gigabit

Cat. 5E

 300
MHz

OUTDOOR

PE



Properties

- 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-TX; 1000BASE-T
- IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Construction

Conductor		bare copper wire, AWG 24
Insulation		polyethylene, Ø 1,1 mm
Twisting		2 cores to the pair
Pair screen		Al-laminated PET foil
Cable lay up		4 pairs to the core
Sheath	outer	PE, black RAL 9005
	inner	PVC, gray RAL 7035
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
Teplotný rozsah	installation	0°C to +50°C
	operation	-20°C to +75°C
Max. tensile load		82 N (8,2 kg)
Weight (netto)		46 kg/km

Electrical properties at 20°C

Loop resistance	—	≤ 190 Ω/km
Resistance unbalance	—	≤ 2 %
Insulation resistance	(500 V)	≥ 2 000 MΩ x km
Capacity	at 800 Hz	nom. 48 nF/km
Capacity unbalance	(pair/ground)	≤ 1 500 pF/km
Characteristic impedance	at 100 MHz	(100 ± 15) Ω
Nominal velocity of propagation (NVP)	—	ca. 69 %
Propagation delay	Nominal	≤ 535 ns/100 m
Delay skew	Nominal	≤ 20 ns/100 m
Test voltage	(DC, 1 min) core/core; core/screen	1 000 V
Transfer impedance	at 1 MHz	≤ 50 mΩ/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/100 m)	NEXT (dB min)	PS-NEXT (dB min)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ELFEXT (dB/100 m)	PS-ELFEXT (dB/100 m)	Return loss (dB)
1,0	1,9	71,0	68,0	69,1	66,1	68,0	65,0	20,0
4,0	3,7	62,0	59,0	58,3	55,3	56,0	53,0	23,0
10,0	6,0	56,0	53,0	50,0	47,0	48,0	45,0	25,0
16,0	7,6	53,0	50,0	45,4	42,4	44,0	41,0	25,0
20,0	8,5	51,0	48,0	42,5	39,5	42,0	39,0	25,0
31,2	10,7	49,0	46,0	38,3	35,3	38,0	35,0	24,0
62,5	15,7	44,0	41,0	28,3	25,3	32,0	29,0	22,0
100,0	19,8	41,0	38,0	21,2	18,2	28,0	25,0	20,0
125,0	22,3	40,0	37,0	17,7	14,7	26,0	23,0	19,0
155,5	24,2	38,0	35,0	13,8	10,8	24,0	21,0	—
175,5	25,7	37,0	34,0	11,3	8,3	23,0	20,0	—
200,0	27,5	36,0	33,0	8,5	5,5	22,0	19,0	—
250,0	29,2	35,0	32,0	5,8	2,8	20,0	17,0	—
300,0	32,0	34,0	31,0	2,0	-1,0	16,0	13,0	—