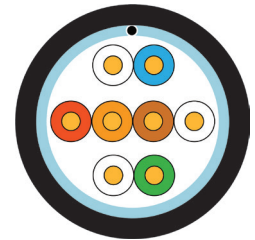
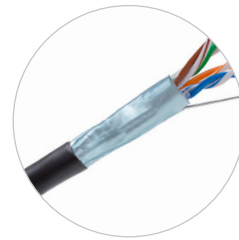
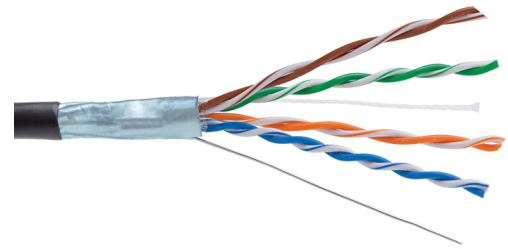
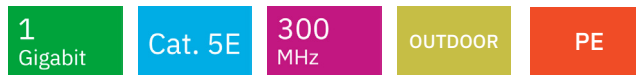


# Outdoor FTP (F/UTP) cable 4x2xAWG24, Category 5E, 300 MHz, PE

P/N: KE300S24PE-RLX



## 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-TX; 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          |
| Screen               | Al-foil                      |
| Cable lay up         | 4 pairs to the core          |
| Sheath               | PE, black RAL 9005           |
| Outer cable diameter | 6,2 mm                       |
| PE sheath thickness  | 0,6 mm                       |

### 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    |              | 110 N (11 kg)    |
| Cable weight (netto) |              | 35 kg/ km        |

### Electrical properties at 20°C

|                                       |                                       |                 |
|---------------------------------------|---------------------------------------|-----------------|
| Loop resistance                       | -                                     | ≤ 95,8 Ω/ km    |
| Resistance unbalance                  | -                                     | ≤ 5 %           |
| Insulation resistance                 | (500 V)                               | ≥ 5 000 MΩ x km |
| Capacity                              | at 800 Hz                             | nom. 56 nF/ km  |
| Capacity unbalance                    | (pair/ground)                         | ≤ 330 pF/ 100 m |
| 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)<br>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<br>(MHz) | Attenuation<br>(dB/100m) | NEXT<br>(dB min) | PS-NEXT<br>(dB min) | ACR<br>(dB/100m) | PS-ACR<br>(dB/100m) | ELFEXT<br>(dB/100m) | PS-ELFEXT<br>(dB/100m) | Return loss<br>(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                   | -                   |