

# Kábel do vonkajšieho prostredia UTP (U/UTP) 4x2x0,54, Category 6, 400 MHz, PE

P/N: KE400U23OUT

P/N: KE400U23OUT-RLX

500m na bubne

305 m v krabiciach

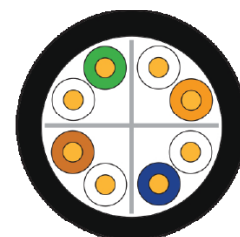
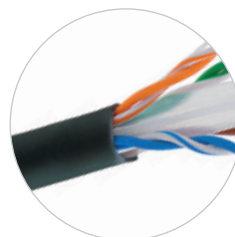
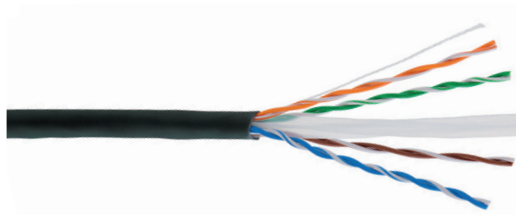
1  
Gigabit

Cat. 6

400  
MHz

OUTDOOR

PE



## Vlastnosti

- netienený kábel s párami oddelenými plastovým separátorom a PE plášťom
- odolný voči mechanickému poškodeniu a vplyvom prostredia
- stabilizovaný voči UV žiareniu, odolný voči prenikaniu vlhkosti a vody
- umožňuje prenos všetkých vysokorýchlostných protokolov vrátane 1000BASE-T
- šírka prenosového pásma testovaná do 400 MHz
- nie je chránený tienením voči elektromagnetickému rušeniu

## Použitie

- primár (kampus), sekundár (vertikálna kabeľáž), terciár (horizontálna kabeľáž)
- IEEE 802.3: 10BASE-T; 100BASE-TX; 1000BASE-T
- IEEE 802.5: 16 MB; ISDN; TPDDI; ATM

## Konštrukcia

|                        |                           |
|------------------------|---------------------------|
| Vodič                  | holý medený drôt, 0,54 mm |
| Izolácia               | polyetylén, Ø 0,93 mm     |
| Stočenie žíl           | 2 žily do páru            |
| Stočenie párov         | 4 páry do káblovej duše   |
| Plášť                  | PE, čierny RAL 9005       |
| Vonkajší priemer kábla | 6 mm                      |

## Mechanické vlastnosti

|                                 |                |                   |
|---------------------------------|----------------|-------------------|
| Min. polomer ohybu              | pri inštalácii | 48 mm             |
|                                 | pri prevádzke  | 24 mm             |
| Teplotný rozsah                 | pri inštalácii | 0 °C až +50 °C    |
|                                 | pri prevádzke  | -20 °C až +60 °C  |
| Max. ťahová sila pri inštalácii |                | 100 N (cca 10 kg) |

### Elektrické vlastnosti pri 20°C

|                                 |                                     |                 |
|---------------------------------|-------------------------------------|-----------------|
| Odpor slučky                    | —                                   | ≤ 176 Ω/ km     |
| Odporová nerovnováha            | —                                   | ≤ 2 %           |
| Izolačný odpor                  | (500 V)                             | ≥ 5 000 MΩ x km |
| Kapacita                        | pri 800 Hz                          | nom. 48 nF/ km  |
| Kapacitná nerovnováha           | (pár proti zemi)                    | ≤ 1500 pF/ km   |
| Charakteristická impedancia     | pri 100 MHz                         | (100 ± 5) Ω     |
| Menovitá rýchlosť šírenia (NVP) | —                                   | cca 69 %        |
| Oneskorenie šírenia signálu     | menovité                            | ≤ 535 ns/ 100 m |
| Skupinové oneskorenie           | menovité                            | ≤ 45 ns/ 100 m  |
| Skúšobné napätie                | (jednosmerné, 1 min)<br>jadro/jadro | 1 000 V         |

### Prenosové vlastnosti pri 20°C

| f<br>(MHz) | tlmenie<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) |      | tlmenie<br>odrazom (dB) |
|------------|----------------------|------|------------------|------|---------------------|------|------------------|------|---------------------|------|---------------------|------|------------------------|------|-------------------------|
|            | max.                 | nom. | min.             | nom. | min.                | nom. | min.             | nom. | min.                | nom. | min.                | nom. | min.                   | nom. |                         |
| 1,0        | 2,1                  | 1,9  | 74,0             | 78,0 | 72,0                | 75,0 | 72,0             | 76,1 | 70,0                | 73,1 | 68,0                | 82,0 | 65,0                   | 80,0 | 20,0                    |
| 4,0        | 3,8                  | 3,8  | 65,0             | 69,0 | 63,0                | 66,0 | 61,2             | 65,2 | 59,2                | 62,2 | 56,0                | 70,0 | 53,0                   | 68,0 | 23,0                    |
| 10,0       | 6,0                  | 6,0  | 59,0             | 63,0 | 57,0                | 60,0 | 53,0             | 57,0 | 51,0                | 54,0 | 48,0                | 62,0 | 45,0                   | 60,0 | 25,0                    |
| 16,0       | 7,6                  | 7,6  | 56,0             | 60,0 | 54,0                | 57,0 | 48,4             | 52,3 | 46,4                | 49,3 | 44,0                | 58,0 | 41,0                   | 56,0 | 25,0                    |
| 20,0       | 8,5                  | 8,5  | 55,0             | 59,0 | 53,0                | 56,0 | 46,5             | 50,0 | 44,5                | 47,0 | 42,0                | 56,0 | 39,0                   | 54,0 | 25,0                    |
| 31,2       | 10,7                 | 10,7 | 52,0             | 56,0 | 50,0                | 53,0 | 41,3             | 45,0 | 39,3                | 42,0 | 38,0                | 52,0 | 35,0                   | 50,0 | 23,6                    |
| 62,5       | 15,5                 | 15,1 | 47,0             | 51,0 | 45,0                | 48,0 | 31,5             | 36,0 | 29,5                | 33,0 | 32,0                | 46,0 | 29,0                   | 44,0 | 21,5                    |
| 100,0      | 19,9                 | 19,1 | 44,0             | 48,0 | 42,0                | 45,0 | 24,1             | 28,9 | 22,1                | 25,9 | 28,0                | 42,0 | 25,0                   | 40,0 | 20,1                    |
| 125,0      | 22,5                 | 21,3 | 43,0             | 47,0 | 41,0                | 44,0 | 20,5             | 25,2 | 18,5                | 22,2 | 26,0                | 40,0 | 23,0                   | 38,0 | 19,5                    |
| 155,5      | 25,4                 | 23,8 | 42,0             | 45,0 | 40,0                | 42,0 | 16,6             | 21,3 | 14,6                | 18,3 | 24,0                | 38,0 | 21,0                   | 36,0 | 18,8                    |
| 175,5      | 27,1                 | 25,3 | 41,0             | 44,0 | 39,0                | 41,0 | 13,9             | 19,1 | 11,9                | 16,1 | 23,0                | 37,0 | 20,0                   | 35,0 | 18,4                    |
| 200,0      | 29,2                 | 27,0 | 40,0             | 44,0 | 38,0                | 41,0 | 10,8             | 16,5 | 8,8                 | 13,5 | 22,0                | 36,0 | 19,0                   | 34,0 | 18,0                    |
| 250,0      | 33,0                 | 32,0 | 38,0             | 42,0 | 36,0                | 39,0 | 5,0              | 10,0 | 2,0                 | 7,0  | 20,0                | 34,0 | 17,0                   | 32,0 | 17,3                    |
| 300,0      |                      | 36,1 |                  | 41,0 |                     | 38,0 |                  | 4,8  |                     | 1,8  |                     | 32,0 |                        | 30,0 |                         |
| 400,0      |                      | 41,7 |                  | 39,0 |                     | 36,0 |                  | -2,7 |                     | -5,7 |                     | 30,0 |                        | 28,0 |                         |