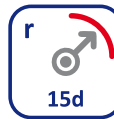
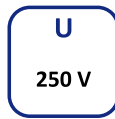
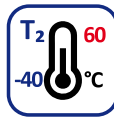
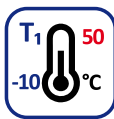




# TCEKFLES

## BASIC CHARACTERISTICS OF THE CABLE

### ELEKTRICKÉ / ELECTRIC

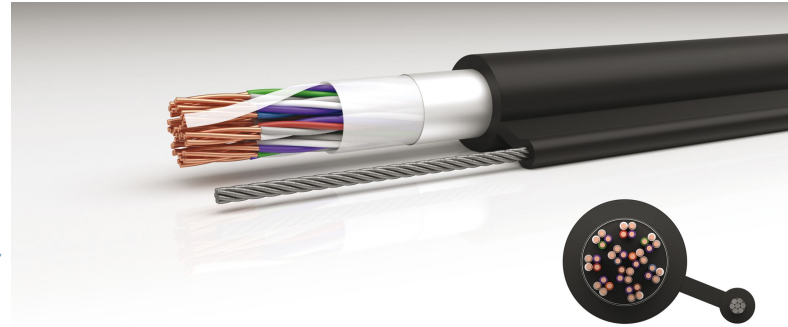


## CONSTRUCTION OF THE CABLE

- Copper conductor
- Insulation from solid polyethylene
- Circuit insulation from no hydroscopic foils
- Aluminum-polymer screening foil 150 µm
- Polyethylene sheath – black
- Steel bearing rope

## CABLE APPLICATION

Self-supporting screened cable with a steel bearing rope designed for the transmission of telecom and data signals in exteriors (UV resistant).



## STANDARDS

TPEFK 02-01-2004/103+A2  
STN EN 60708

Nominal thickness of the sheath, informative diameters and weight of cables, bearing rope.

| p    | Ø 0,4 mm  |           |              |            | Ø 0,6 mm  |           |              |            | Ø 0,8 mm  |           |              |            |
|------|-----------|-----------|--------------|------------|-----------|-----------|--------------|------------|-----------|-----------|--------------|------------|
|      | t<br>[mm] | d<br>[mm] | m<br>[kg/km] | nl<br>[mm] | t<br>[mm] | d<br>[mm] | m<br>[kg/km] | nl<br>[mm] | t<br>[mm] | d<br>[mm] | m<br>[kg/km] | nl<br>[mm] |
| 1x4  | 1,2       | 5,4       | 75           | 1,9        | 1,2       | 6,5       | 73           | 1,9        | 1,4       | 8,6       | 139          | 3,0        |
| 3x4  | 1,4       | 9,0       | 146          | 3,0        | 1,6       | 10,0      | 166          | 3,0        | 1,6       | 12,1      | 224          | 3,0        |
| 5x4  | 1,6       | 10,3      | 165          | 3,0        | 1,6       | 11,8      | 240          | 4,2        | 1,6       | 13,9      | 311          | 4,2        |
| 10x4 | 1,6       | 12,3      | 246          | 4,2        | 1,6       | 15,7      | 339          | 4,2        | 1,8       | 19,5      | 540          | 5,0        |
| 15x4 | 1,6       | 14,0      | 301          | 4,2        | 1,6       | 16,9      | 417          | 4,2        | -         | -         | -            | -          |
| 25x4 | 1,8       | 16,5      | 384          | 4,2        | 1,8       | 20,5      | 630          | 5,0        | -         | -         | -            | -          |
| 35x4 | 1,8       | 18,5      | 476          | 4,2        | -         | -         | -            | -          | -         | -         | -            | -          |
| 50x4 | 1,8       | 20,5      | 644          | 5,0        | -         | -         | -            | -          | -         | -         | -            | -          |

p – number of components

t – nominal thickness of the sheath

d – informative diameter of the cable over the sheath

m – informative weight of the cable

nl – bearing rope

## TRANSMISSION PARAMETERS

| Diameter of conductors                                 |  | 0,4 mm            | 0,6 mm            | 0,8 mm            |    |
|--|--|-------------------|-------------------|-------------------|----|
| Max. loop resistance, [ $\Omega$ /km]                  |  | 300               | 133,2             | 73,6              |    |
| Electrical resistance of the conductor [ $\Omega$ /km] | priemer - average                                  | 144               | 64                | 35                |    |
|  | jednot. - one                                      | 150               | 67                | 37                |    |
| Resistance unbalance of a pair [%]                     |  | $\leq 2$          | $\leq 2$          | $\leq 2$          |    |
| Mutual capacitance [nF/km]                             | max. stred <sup>1)</sup> – max. mid. <sup>1)</sup> | 42                | 42                | 42                |    |
|  | jednotlivo - one                                   | 42 $\pm$ 4        | 42 $\pm$ 4        | 42 $\pm$ 4        |    |
| Capacitance unbalance $k_1$<br>[pF/500m]               | 95% hodnôt – 95% value                             | < 150             | < 150             | < 100             |    |
|  | max. jedn. – max. one                              | 250               | 250               | 160               |    |
| Capacitance unbalance $k_{9-12}$ [pF/500m]             | 95% hodnôt – 95% value                             | < 500             | < 500             | < 300             |    |
|  | max. jedn. – max. one                              | 800               | 800               | 500               |    |
| Capacitance unbalance $e1 - e2$ [pF/500m]              | 95% hodnôt – 95% value                             | < 500             | < 500             | < 300             |    |
|  | max. jedn. – max. one                              | 800 <sup>2)</sup> | 800 <sup>2)</sup> | 500 <sup>2)</sup> |    |
| Attenuation, max. [dB/km]                              | 0,8 kHz  | 1,55              | 1                 | 0,75              |    |
|  | 16 kHz   | 6,7               | 3,8               | 3                 |    |
|  | 150 kHz  | 12                | 7                 | 4,6               |    |
|  | 1 MHz  | 23,5              | 17,5              | 12,4              |    |
|  | 2 MHz  | 35,7              | 22,5              | 16                |    |
| Crosstalk at near-end [dB/300m]                        | 80 kHz   | 100%              | 57                | 60                | 61 |
|  |  | 90%               | 62                | 64                | 66 |
|  | 150 kHz  | 100%              | 50                | 53                | 54 |
|  |  | 90%               | 55                | 57                | 59 |
|  | 1 MHz  | 100%              | 37                | 40                | 41 |
|  |  | 90%               | 42                | 44                | 46 |
|  | 2 MHz  | 100%              | 32                | 35                | 36 |
|  |  | 90%               | 37                | 39                | 41 |

NOTE 1: Valid only for 10 quads and more

NOTE 2: For the construction 1x4x is the maximum value 1700 pF/500m.