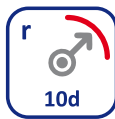
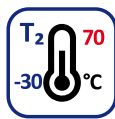
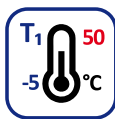




# TCEKFLEY

## ZÁKLADNÉ VLASTNOSTI KÁBLA BASIC CHARACTERISTICS OF THE CABLE

### ELEKTRICKÉ / ELECTRIC



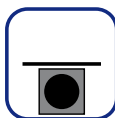
## NORMY STANDARDS

TPEFK 18-02-2008/107

## KONŠTRUKCIA KÁBLA CONSTRUCTION OF THE CABLE

- Medený vodič  
*Copper conductor*
- Izolácia z plného polyetylénu  
*Solid polyethylene insulation*
- Obvodová izolácia z nehydrokopických fólií  
*Circuit insulation from no hydroscopic foils*
- Tieniaca Al-polymérová folia 100 µm  
*Aluminum-polymer screening foil 100 µm*
- Plášť PE – čierny  
*PE sheath – black*
- PVC plášť – čierny  
*PVC sheath – black*

## POUŽITIE KÁBLA CABLE APPLICATION



Označenie káblov – str. 126 – 127 / Cable labeling – page 126 – 127

Farebné kódy – str. 128 – 133 / Color codes – page 128 – 133

Minimálne hrúbky plášťa, informatívne priemery a hmotnosti káblov, výrobné dĺžky, transportné bubny.  
Minimal thickness of the sheath, diameters and weight of cables, production lengths, transport drums.

| p  | Ø 0,4 mm                 |           |              |          |           | Ø 0,6 mm                 |           |              |          |           | Ø 0,8 mm                 |           |              |          |           |
|----|--------------------------|-----------|--------------|----------|-----------|--------------------------|-----------|--------------|----------|-----------|--------------------------|-----------|--------------|----------|-----------|
|    | t <sub>min</sub><br>[mm] | d<br>[mm] | m<br>[kg/km] | l<br>[m] | b<br>[cm] | t <sub>min</sub><br>[mm] | d<br>[mm] | m<br>[kg/km] | l<br>[m] | b<br>[cm] | t <sub>min</sub><br>[mm] | d<br>[mm] | m<br>[kg/km] | l<br>[m] | b<br>[cm] |
| 3  | 1,6                      | 14,0      | 190          | 1000     | 100       | 1,6                      | 15,0      | 228          | 1000     | 100       | 1,6                      | 17,5      | 278          | 1000     | 125       |
| 5  | 1,6                      | 15,0      | 224          | 1000     | 100       | 1,6                      | 17,0      | 290          | 1000     | 125       | 1,6                      | 19,0      | 365          | 1000     | 125       |
| 10 | 1,6                      | 17,0      | 291          | 1000     | 125       | 1,6                      | 20,5      | 421          | 1000     | 125       | 1,6                      | 23,5      | 572          | 1000     | 140       |
| 15 | 1,6                      | 18,5      | 346          | 1000     | 125       | 1,6                      | 23,0      | 534          | 1000     | 140       | 1,6                      | 27,5      | 791          | 1000     | 150       |
| 20 | 1,6                      | 20,0      | 402          | 1000     | 125       | 1,6                      | 24,5      | 634          | 1000     | 140       | 1,6                      | 30,0      | 950          | 1000     | 160       |
| 25 | 1,6                      | 21,5      | 464          | 1000     | 125       | 1,6                      | 25,5      | 725          | 1000     | 140       | 1,6                      | 32,0      | 1123         | 1000     | 160       |
| 35 | 1,6                      | 24,0      | 574          | 1000     | 140       | 1,6                      | 28,5      | 917          | 1000     | 160       | 1,6                      | 36,0      | 1340         | 1000     | 180       |
| 50 | 1,6                      | 26,0      | 708          | 1000     | 150       | 1,6                      | 32,5      | 1197         | 1000     | 160       | -                        | -         | -            | -        | -         |

p – počet prvkov (number of components)

t<sub>min</sub> – minimálna hrúbka plášťa (minimal thickness of the sheath)

d – informatívny priemer kábla nad plášťom (informative diameter of the cable over the sheath)

m – informatívna hmotnosť kábla (informative weight of the cable)

l – výrobná dĺžka (production length)

b – transportný bubon (transport drum)

## PRENOSOVÉ PARAMETRE / TRANSMISSION PARAMETERS

| Priemer vodičov - Diameter of conductors   |                         | Ø      | Ø      | Ø      |    |
|--|-------------------------|--------|--------|--------|----|
|  |                         | 0,4 mm | 0,6 mm | 0,8 mm |    |
| <b>Max.odpor elektrickej slučky [Ω/km]</b> - Max. loop resistance, [Ω/km]                                    |                         | 300    | 133,2  | 73,6   |    |
| <b>Elektrický odpor vodiča [Ω/km]</b><br>Electrical resistance of the conductor [Ω/km]                       | priemer - average       | 144    | 64     | 35     |    |
|  | jednot. - one           | 150    | 67     | 37     |    |
| <b>Odporová nerovnováha páru [%]</b> - Resistance unbalance of a pair [%]                                    |                         | ≤ 2    | ≤ 2    | ≤ 2    |    |
| <b>Prevádzková kapacita páru [nF/km]</b><br>Mutual capacitance [nF/km]                                       | max.stred - max. middle | 42     | 42     | 42     |    |
|  | max.jedn. - max. one    | 42±4   | 42±4   | 42±4   |    |
| <b>Kapacitná nerovnováha k<sub>1</sub> [pF/500m]</b><br>Capacitance unbalance k <sub>1</sub> [pF/500m]       | 95% hodnôt - value      | < 150  | < 150  | < 100  |    |
|  | max.jedn. - max. one    | 250    | 250    | 160    |    |
| <b>Kapacitná nerovnováha k<sub>9-12</sub> [pF/500m]</b><br>Capacitance unbalance k <sub>9-12</sub> [pF/500m] | 95% hodnôt - value      | < 500  | < 500  | < 300  |    |
|  | max.jedn. - max. one    | 800    | 800    | 500    |    |
| <b>Maximálne merné tlenie [dB/km]</b><br>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     |    |
| <b>Presluchové tlenie na blízkom konci [dB/300m]</b><br>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 |