

ZPP/ZO

VODOVI PROIZVEDENI PO ISE NORMI

Tipaska oznaka: ZPP/ZO

Norma: ISE ELKA

Nazivni napon: 200 V

Ispitni napon: 1000 V

OPIS KONSTRUKCIJE

Konstrukcija: $N+2 \times 0,5 \text{ mm}^2$
 $N+3 \times 0,5 \text{ mm}^2$
 Gdje je $N=10, 12, 16, 25, 35$ i 50 mm^2 ,
 a upravljački vodiči $0,5 \text{ mm}^2$

- 1. Središnja jezgra:** cijev od poliamida ili sličnog materijala
- 2. Vodič:** bakreno finožično uže $N \text{ mm}^2$
- 3. Upravljački vodič:** dva ili tri izolirana finožična vodiča $0,5 \text{ mm}^2$
- 4. Plašt:** PVC
Boja plašta: crna

CABLES ACC. TO ISE STANDARD

Type coded: ZPP/ZO

Standard: ISE ELKA

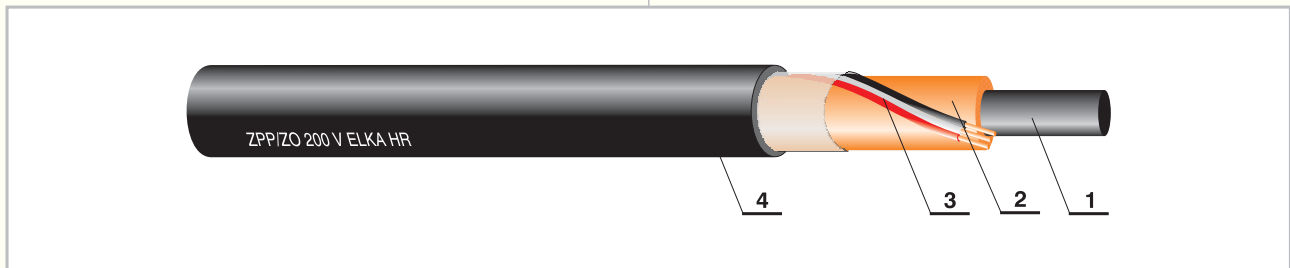
Nominal voltage: 200 V

Test voltage: 1000 V

DESCRIPTION OF CABLE CONSTRUCTION

Construction: $N+2 \times 0,5 \text{ mm}^2$
 $N+3 \times 0,5 \text{ mm}^2$
 with $N=10, 12, 16, 25, 35$ and 50 mm^2 ,
 and control conductors $0,5 \text{ mm}^2$

- 1. Central core:** polyamide or similar material tube
- 2. Conductor:** fine wired, copper rope $N \text{ mm}^2$
- 3. Control conductor:** two or three insulated, fine-wired conductors $0,5 \text{ mm}^2$
- 4. Sheath:** PVC
Sheath colour: black



NATPIS NA PLAŠTU

ZPP/ZO 200 V ELKA HR

MARKING ON THE SHEATH

ZPP/ZO 200 V ELKA HR

Tablica 3.5.1. Konstrukcijski podaci tip ZPP/ZO

Table 3.5.1. Construction data for type ZPP/ZO

| Nazivni presjek / Nominal cross section | Promjer cijevi / Tube diameter | Vodič / Conductor | | Debljina plašta / Sheath thickness | Vanjski promjer / External diameter | Masa / Cable weight | | El. otpor kod 20°C / El. resistance of conductor at 20°C | Pakiranje / Packing | |
|--|-----------------------------------|--------------------------------|-----------------------|---------------------------------------|--|------------------------|---------|---|---------------------|------------------|
| | | Konstrukcija / Construction | Promjer / Diameter | | | N+2x0,5 | N+3x0,5 | | Duljina / Length | Bubanj / Drum |
| mm ² | mm | n x m | mm | mm | mm | kg/km | | Ohm/km | m | |
| 10 | 6/8 | 5x(4x16x0,2) | 2,2 | 1,4 | 15,0 | 260 | 265 | 1,91 | 1000 | BD-10 |
| 12 | 6/8 | 4x(4x16x0,2) | 2,2 | 1,4 | 15,0 | 270 | 275 | 1,54 | 1000 | BD-10 |
| 16 | 6/8 | 6x(91x0,2) | 2,3 | 1,4 | 15,0 | 315 | 320 | 1,21 | 1000 | BD-10 |
| 25 | 6/8 | 9x(91x0,2) | 2,3 | 1,4 | 15,0 | 380 | 385 | 0,780 | 1000 | BD-10 |
| 35 | 6/8 | 13x(91x0,2) | 2,3 | 1,6 | 15,4 | 485 | 490 | 0,554 | 1000 | BD-12 |
| 50 | 6/8 | 18x(91x0,2) | 2,3 | 1,6 | 16,6 | 630 | 665 | 0,386 | 1000 | BD-12 |

*Broj uz BD označava vanjski promjer bubnja u dm

*The number along BD denotes external diameter of the drum in dm

STRUJNO OPTEREĆENJE

Strujno opterećenje ovisi o temperaturi okoline i uporabnom režimu voda.

Strujno opterećenje za:

HO1N2-D(E)
HOFR-N(HY)
HOFR-N(HY)-A
ZP/S

je optimalno kod temperature vodiča 85 °C i temperature okolice od 25 °C i dano je u **tablicama 4.1.1. i 4.1.2.**

CURRENT LOAD

Current load depends on ambient temperature and application mode of conductor.

Current load for:

HO1N2-D(E)
HOFR-N(HY)
HOFR-N (HY)-A
ZP/S

*is optimal at conductor temperature 85 °C and ambient temperature 25 °C, as stated in **Tables 4.1.1. and 4.1.2.***

4.1. INTERMITENCIJA RADA

Ovisno o trajanju ciklusa intermitencije mijenja se i strujno opterećenje.

Tablica 4.1.1. Strujno opterećenje za **HO1N2-D(E) HOFR-N(HY), ELNAC i ZP/S** u ovisnosti o intermitenciji

DUTY CYCLE

The current load varies in dependence with duration of the duty cycle.

Table 4.1.1. *Current load for **HO1N2-D(E) HOFR-N(HY), ELNAC and ZP/S** in dependence with the duty cycle*

| Nazivni presjek vodiča mm ² <i>Nominal conductor cross section mm²</i> | Dozvoljeno strujno opterećenje (A) / <i>Permitted current load (A)</i> | | | | |
|---|--|-----|-----|------|------|
| | 100% | 85% | 60% | 30% | 20% |
| 16 | 135 | 145 | 175 | 245 | 305 |
| 25 | 180 | 195 | 230 | 330 | 405 |
| 35 | 225 | 245 | 290 | 410 | 505 |
| 50 | 285 | 310 | 370 | 520 | 640 |
| 70 | 355 | 385 | 460 | 650 | 795 |
| 95 | 430 | 470 | 560 | 790 | 965 |
| 120 | 500 | 540 | 650 | 910 | 1120 |
| 150 | 580 | 626 | 750 | 1050 | 1262 |
| 185 | 660 | 715 | 850 | 1200 | 1475 |

Tablica 4.1.2. Strujno opterećenje za **HOFR-N(HY)** u ovisnosti o intermitenciji**Table 4.1.2.** Current load for **HOFR-N(HY)** in dependence with the duty cycle

| Nazivni presjek vodiča mm ² <i>Nominal conductor cross section mm²</i> | Dozvoljeno strujno opterećenje (A) / <i>Permitted current load (A)</i> | | | | |
|---|--|-----|-----|------|------|
| | 100% | 85% | 60% | 30% | 20% |
| 25 | 140 | 151 | 181 | 251 | 308 |
| 35 | 175 | 189 | 227 | 318 | 391 |
| 50 | 225 | 243 | 291 | 407 | 500 |
| 70 | 275 | 295 | 354 | 496 | 610 |
| 95 | 335 | 362 | 434 | 608 | 747 |
| 120 | 390 | 420 | 504 | 405 | 867 |
| 150 | 455 | 491 | 589 | 825 | 1014 |
| 185 | 510 | 551 | 663 | 928 | 1141 |
| 240 | 660 | 648 | 778 | 1089 | 1330 |

UTJECAJ TEMPERATURE OKOLINE

Promjenom temperature okoline reducira se strujno opterećenje kako slijedi:

INFLUENCE OF AMBIENT TEMPERATURE

With the change of the ambient temperature the current load reduces as follows:

| Temperatura okoline / <i>Ambient temperature</i> | 30 °C | 35 °C | 40 °C | 45 °C |
|--|-------|-------|-------|-------|
| Faktor redukcije / <i>Reduction factor</i> | 0,96 | 0,91 | 0,87 | 0,82 |

4.2.