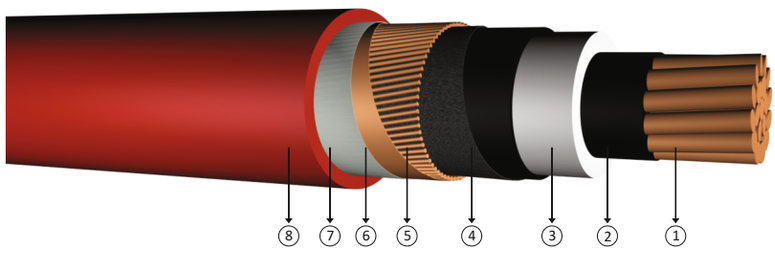
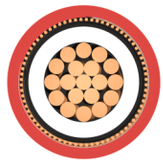
# 20.3/35 kV or 20.8/36 kV XLPE insulated, single core, cables with copper conductor



**Code:** YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor Rigid

**Standards:** TS HD 620 S2, TSEK

**Technical Data**

| | |
|---|---|
| Max. operating temperature | : 90 °C |
| Max. short circuit temperature | : 250 °C (max. 5 sec.) |
| Rated voltage | : 20.3/35 kV<br>20.8/36 kV |
| Min. bending radius | : 15 x D |
| D | : Cable outer diameter |

**Application**

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

**Construction**

1. Stranded copper conductors
2. Inner semi conductive layer
3. XLPE insulation
4. Outer semi conductive layer
5. Semi conductive tape
6. Copper screen
7. Polyester tape
8. PVC outer jacket

| DIMENSION AND WEIGHTS | | | ELECTRICAL PROPERTIES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal Cross Section | Overall Diameter (approx) | Net Weight (approx) | Delivery Length | DC Conductor Resistance at 20 °C Max | DC Conductor Resistance at 90 °C Max | Operation Inductance | | Operational Capacitance | Current Carrying Capacity (A) | | | |
| | | | | | | | | | In ground at 20 °C | | In air at 30 °C | |
| mm² | mm | kg/km | m | ohm/km | ohm/km | *** mH/km | ** mH/km | µF/km | *** | ** | *** | ** |
| 1x35/16 | 34,5 | 1300 | 1000 | 0,524 | 0,6707 | 0,685 | 0.464 | 0,115 | 214 | 192 | 233 | 202 |
| 1x50/16 | 36,0 | 1550 | 1000 | 0,387 | 0,4954 | 0,659 | 0.444 | 0,125 | 251 | 226 | 279 | 241 |
| 1x70/16 | 37,5 | 1800 | 1000 | 0,268 | 0,3430 | 0,628 | 0.420 | 0,140 | 306 | 276 | 348 | 299 |
| 1x95/16 | 39,5 | 2100 | 1000 | 0,193 | 0,2470 | 0,604 | 0.402 | 0,153 | 363 | 329 | 421 | 362 |
| 1x120/16 | 41,5 | 2400 | 1000 | 0,153 | 0,1958 | 0,585 | 0.388 | 0,165 | 410 | 373 | 483 | 416 |
| 1x150/25 | 43,0 | 2850 | 1000 | 0,124 | 0,1587 | 0,567 | 0.376 | 0,178 | 449 | 415 | 540 | 469 |
| 1x185/25 | 44,5 | 3200 | 1000 | 0,0991 | 0,1268 | 0,551 | 0.365 | 0,191 | 503 | 468 | 615 | 536 |
| 1x240/25 | 47,5 | 3800 | 1000 | 0,0754 | 0,0965 | 0,531 | 0.351 | 0,209 | 576 | 541 | 718 | 630 |
| 1x300/25 | 49,5 | 4500 | 1000 | 0,0601 | 0,0769 | 0,514 | 0.341 | 0,226 | 641 | 608 | 812 | 717 |
| 1x400/35 | 53,0 | 5650 | 500 | 0,0470 | 0,0602 | 0,493 | 0.328 | 0,252 | 697 | 684 | 904 | 823 |
| 1x500/35 | 56,0 | 6700 | 500 | 0,0366 | 0,0468 | 0,477 | 0.318 | 0,274 | 768 | 762 | 1011 | 929 |
| 1x630/35 | 60,0 | 8000 | 500 | 0,0283 | 0,0362 | 0,460 | 0.308 | 0,300 | 858 | 847 | 1128 | 1043 |

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 °C, load factor 1.0
*** : Flat formation, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
** : Trefoil formation
Number of system : 1