# N2XSY

Medium Voltage Cables


## DESCRIPTION

The N2XSY cable is a high-performance medium-voltage cable with a copper conductor, XLPE insulation, and a PVC sheath. It offers excellent electrical characteristics and can be installed safely and efficiently, even in complex routing situations.

## TECHNICAL DATA

**Al Foil**
No

**CE-Conformity**
yes

**Colour of insulation**
uncoloured

**Colour of sheath**
red or black

**Conductive tape below screen**
Yes

**Conductor**
Copper

**Copper wire screen and tape**
Yes

**CPR class**
Eca

**Insulation**
XLPE

**Maximal operating conductor temperature (°C)**
+90

**Maximal short-circuit temperature (°C)**
+250

**Minimal storage temperature (°C)**
-25

**Minimal temperature for laying (°C)**
-5

**Non conducting tape above screen**
Yes

**Operating temperature range (°C)**
-35-+90

**Packaging**
wooden or metal drums

**Sheath**
PVC

# N2XSY

## CROSS-SECTION DATA — 6/10 kV

| Voltage | Test voltage | Operating temperature range |
|---|---|---|
| 6/10 kV | 21 kV | -35-+90 °C |
| **Conductor temperature (max.)** | **Short-circuit temperature (max.)** | **Minimum laying temperature** |
| +90 °C | +250 °C | -5 °C |
| **Minimum storage temperature** | **CPR class** | **Flame retardant** |
| -25 °C | Eca | EN 60 332-1-2 / EN 60 332-1-3 / ... |

| Designation | Cond. | C [uF/km] | DI [mm] | RI [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x35/16 | Cu | 0.22 | 15.3 | 0.524 | 3.4 | 197 | 187 | 5 | 2.1 | 360 | 24 | 904 |
| 1x50/16 | Cu | 0.24 | 16.3 | 0.387 | 3.4 | 238 | 220 | 7.1 | 2.1 | 390 | 26 | 1039 |
| 1x70/16 | Cu | 0.28 | 17.9 | 0.268 | 3.4 | 294 | 268 | 10 | 2.1 | 405 | 27 | 1271 |
| 1x95/16 | Cu | 0.3 | 19.4 | 0.193 | 3.4 | 358 | 320 | 13.6 | 2.1 | 435 | 29 | 1530 |
| 1x120/16 | Cu | 0.34 | 20.9 | 0.153 | 3.4 | 413 | 363 | 17.1 | 2.1 | 450 | 30 | 1809 |
| 1x150/25 | Cu | 0.36 | 22.3 | 0.124 | 3.4 | 468 | 405 | 21.4 | 2.1 | 480 | 32 | 2158 |
| 1x185/25 | Cu | 0.4 | 23.9 | 0.099 | 3.4 | 535 | 456 | 26.4 | 2.1 | 495 | 33 | 2524 |
| 1x240/25 | Cu | 0.44 | 26.4 | 0.075 | 3.4 | 631 | 526 | 34.3 | 2.1 | 540 | 36 | 3117 |
| 1x300/25 | Cu | 0.49 | 28.8 | 0.06 | 3.4 | 722 | 591 | 42.9 | 2.1 | 570 | 38 | 3786 |
| 1x400/35 | Cu | 0.54 | 31.4 | 0.047 | 3.4 | 827 | 662 | 57.2 | 2.1 | 615 | 41 | 4750 |
| 1x500/35 | Cu | 0.61 | 34.6 | 0.037 | 3.4 | 949 | 744 | 71.4 | 2.1 | 660 | 44 | 5786 |

## CROSS-SECTION DATA — 12/20 kV

| Voltage | Test voltage | Operating temperature range |
|---|---|---|
| 12/20 kV | 42 kV | -35-+90 °C |
| **Conductor temperature (max.)** | **Short-circuit temperature (max.)** | **Minimum laying temperature** |
| +90 °C | +250 °C | -5 °C |
| **Minimum storage temperature** | **CPR class** | **Flame retardant** |
| -25 °C | Eca | EN 60 332-1-2 |

| Designation | Cond. | C [uF/km] | DI [mm] | RI [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x35/16 | Cu | 0.16 | 19.5 | 0.524 | 5.5 | 200 | 189 | 5 | 2.1 | 435 | 29 | 1069 |
| 1x50/16 | Cu | 0.17 | 20.5 | 0.387 | 5.5 | 239 | 222 | 7.1 | 2.1 | 450 | 30 | 1203 |
| 1x70/16 | Cu | 0.19 | 22.1 | 0.268 | 5.5 | 297 | 271 | 10 | 2.1 | 465 | 31 | 1447 |
| 1x95/16 | Cu | 0.21 | 23.6 | 0.193 | 5.5 | 361 | 323 | 13.6 | 2.1 | 495 | 33 | 1718 |
| 1x120/16 | Cu | 0.23 | 25.1 | 0.153 | 5.5 | 416 | 367 | 17.1 | 2.1 | 510 | 34 | 2007 |
| 1x150/25 | Cu | 0.25 | 26.5 | 0.124 | 5.5 | 470 | 409 | 21.4 | 2.1 | 540 | 36 | 2364 |
| 1x185/25 | Cu | 0.27 | 28.1 | 0.099 | 5.5 | 538 | 461 | 26.4 | 2.1 | 555 | 37 | 2744 |

# N2XSY

| Designation | Cond. | C [uF/km] | Dl [mm] | Rl [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x240/25 | Cu | 0.3 | 30.6 | 0.075 | 5.5 | 634 | 532 | 34.3 | 2.1 | 600 | 40 | 3352 |
| 1x300/25 | Cu | 0.35 | 33 | 0.06 | 5.5 | 724 | 599 | 42.9 | 2.1 | 630 | 42 | 4032 |
| 1x400/35 | Cu | 0.36 | 35.6 | 0.047 | 5.5 | 829 | 671 | 57.2 | 2.1 | 675 | 45 | 4988 |
| 1x500/35 | Cu | 0.43 | 38.8 | 0.037 | 5.5 | 953 | 754 | 71.4 | 2.1 | 720 | 48 | 6080 |

## CROSS-SECTION DATA — 18/30 kV

| Voltage | Test voltage | Operating temperature range |
|---|---|---|
| 18/30 kV | 63 kV | -35-+90 °C |
| **Conductor temperature (max.)** | **Short-circuit temperature (max.)** | **Minimum laying temperature** |
| +90 °C | +250 °C | -5 °C |
| **Minimum storage temperature** | **CPR class** | **Flame retardant** |
| -25 °C | Eca | EN 60 332-1-2 |

| Designation | Cond. | C [uF/km] | Dl [mm] | Rl [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x50/16 | Cu | 0.13 | 25.5 | 0.387 | 8 | 241 | 225 | 7.1 | 2.1 | 525 | 35 | 1439 |
| 1x70/16 | Cu | 0.15 | 27.1 | 0.268 | 8 | 299 | 274 | 10 | 2.1 | 540 | 36 | 1697 |
| 1x95/16 | Cu | 0.16 | 28.6 | 0.193 | 8 | 363 | 327 | 13.6 | 2.1 | 570 | 38 | 1979 |
| 1x120/16 | Cu | 0.17 | 30.1 | 0.153 | 8 | 418 | 371 | 17.1 | 2.1 | 585 | 39 | 2279 |
| 1x150/25 | Cu | 0.19 | 31.5 | 0.124 | 8 | 472 | 414 | 21.4 | 2.1 | 615 | 41 | 2648 |
| 1x185/25 | Cu | 0.2 | 33.1 | 0.099 | 8 | 539 | 466 | 26.4 | 2.1 | 630 | 42 | 3036 |
| 1x240/25 | Cu | 0.22 | 35.6 | 0.075 | 8 | 635 | 539 | 34.3 | 2.1 | 675 | 45 | 3661 |
| 1x300/25 | Cu | 0.24 | 38 | 0.06 | 8 | 725 | 606 | 42.9 | 2.1 | 705 | 47 | 4368 |
| 1x400/35 | Cu | 0.26 | 40.6 | 0.047 | 8 | 831 | 680 | 57.2 | 2.1 | 750 | 50 | 5347 |
| 1x500/35 | Cu | 0.29 | 43.8 | 0.037 | 8 | 953 | 765 | 71.4 | 2.4 | 795 | 53 | 6472 |