

N2XS2Y 22KV Medium Voltage XLPE PE Power Cable



Description Overview

Medium voltage power cables for fixed installations. Cables can be fixed on cable trays, within conduits or fixed to walls. This cable is not suitable for direct burial.

Key Features



Voltage Rating
12/20 (24)kV

Core Colours

Should not be installed at temperatures below 0°C

Standards

Construction

- **Insulation:** Cross Linked polyethylene (XLPE)
- **Bedding:** Semi Conductive Compound
- **Sheath:** Polyethylene (PE)

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance



N2XS2Y 22KV Medium Voltage XLPE PE Power Cable - Dimensions

| Reference | Conductor Size (mm ²) | No Of Cores | Stranding(mm) | CWS(mm) | Overall Diameter(mm) | Weight(Kg/Km) |
|-----------------|-----------------------------------|-------------|---------------|---------|----------------------|---------------|
| 22KVN2XS2Y1X35 | 35 | 1 | 7/2.52 | RM/16 | 32 | 1000 |
| 22KVN2XS2Y1X50 | 50 | 1 | 19/1.78 | RM/16 | 33 | 1150 |
| 22KVN2XS2Y1X70 | 70 | 1 | 19/2.14 | RM/16 | 35 | 1350 |
| 22KVN2XS2Y1X95 | 95 | 1 | 19/2.52 | RM/16 | 36 | 1600 |
| 22KVN2XS2Y1X120 | 120 | 1 | 37/2.03 | RM/16 | 38 | 1850 |
| 22KVN2XS2Y1X150 | 150 | 1 | 37/2.03 | RM/25 | 39 | 2250 |
| 22KVN2XS2Y1X185 | 185 | 1 | 37/2.25 | RM/25 | 41 | 2600 |
| 22KVN2XS2Y1X240 | 240 | 1 | 37/2.52 | RM/25 | 44 | 3150 |
| 22KVN2XS2Y1X300 | 300 | 1 | 61/2.25 | RM/25 | 46 | 3800 |
| 22KVN2XS2Y1X400 | 400 | 1 | 61/2.25 | RM/35 | 49 | 4750 |
| 22KVN2XS2Y1X500 | 500 | 1 | 61/3.20 | RM/35 | 52 | 5800 |

N2XS2Y CABLE - CURRENT CARRYING CAPACITY

| CONDUCTOR CROSS-SECTIONAL AREA | REFERENCE METHOD A (ENCLOSED IN CONDUIT THERMALLY INSULATING WALL ETC) | | REFERENCE METHOD B (ENCLOSED IN CONDUIT ON A WALL OR IN TRUNKING ETC) | | REFERENCE METHOD C (CLIPPED DIRECT) | | REFERENCE METHOD F (IN FREE AIR ON A PERFORATED CABLE TRAY HORIZONTAL / VERTICAL) | | | | |
|--------------------------------|---|---------------------------|---|-------------------------------------|---|--|--|---------------------------------|------------------------------------|---|-----------------|
| | 2 CABLES, SINGLE - PHASE AC OR DC | 3 OR 4 CABLES, 3 PHASE AC | 2 CABLES, SINGLE - PHASE AC OR DC | 3 OR 4 CABLES, THREE PHASE AC OR DC | 2 CABLES, SINGLE - PHASE AC OR DC FLAT AND TOUCHING | 3 OR 4 CABLES, THREE - PHASE AC FLAT AND TOUCHING OR TREFOIL | TOUCHING | | | SPACED BY ONE DIAMETER | |
| | | | | | | | 2 CABLES, SINGLE - PHASE AC OR DC FLAT | 3 CABLES, THREE - PHASE AC FLAT | 3 CABLES, THREE - PHASE AC TREFOIL | 2 CABLES, SINGLE PHASE AC OR DC OR 3 CABLES THREE-PHASE AC FLAT | |
| | (MM ²) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | HORIZONTAL (A) | VERTICAL (A) |
| 25 | 80 | 73 | 101 | 89 | 114 | 104 | 131 | 114 | 110 | 146 | 130 |
| 35 | 99 | 89 | 125 | 110 | 141 | 129 | 162 | 143 | 137 | 181 | 162 |
| 50 | 119 | 108 | 151 | 134 | 182 | 167 | 196 | 174 | 167 | 219 | 197 |
| 70 | 151 | 136 | 192 | 171 | 234 | 214 | 251 | 225 | 216 | 281 | 254 |
| 95 | 182 | 164 | 232 | 207 | 284 | 261 | 304 | 275 | 264 | 341 | 311 |
| 120 | 278 | 249 | 354 | 312 | 413 | 379 | 437 | 400 | 383 | 500 | 454 |
| 150 | 318 | 285 | 393 | 342 | 476 | 436 | 504 | 464 | 444 | 577 | 527 |
| 185 | 362 | 324 | 449 | 384 | 545 | 500 | 575 | 533 | 510 | 661 | 605 |
| 240 | 424 | 380 | 528 | 450 | 644 | 590 | 679 | 634 | 607 | 781 | 719 |
| 300 | 486 | 435 | 603 | 514 | 743 | 681 | 783 | 736 | 703 | 902 | 833 |
| 400 | - | - | 683 | 584 | 868 | 793 | 940 | 868 | 823 | 1085 | 1008 |
| 500 | - | - | 783 | 666 | 990 | 904 | 1083 | 998 | 946 | 1253 | 1169 |
| 630 | - | - | 900 | 764 | 1130 | 1033 | 1254 | 1151 | 1088 | 1454 | 1362 |
| 800 | - | - | - | - | 1288 | 1179 | 1358 | 1275 | 1214 | 1581 | 1485 |
| 1000 | - | - | - | - | 1443 | 1323 | 1520 | 1436 | 1349 | 1775 | 1671 |

N2XS2Y CABLE - VOLTAGE DROP

| CROSS SECTIONAL AREA | 2 CABLES DC | 2 CABLES SINGLE-PHASE AC MV/A/M | | | | | | 3 OR 4 CABLES THREE-PHASE AC MV/A/M | | | | | | | | |
|----------------------|-------------|--|-------|-------|----------------|-------|-------|--|-------|-------|--------------------------|-------|-------|-------------------------|-------|-------|
| | | REFERENCE METHOD G (ON TRAY OR IN FREE AIR) | | | | | | REFERENCE METHODS C, F AND G (CLIPPED DIRECT, ON TRAY OR IN FREE AIR) | | | | | | | | |
| | | CABLES TOUCHING | | | CABLES SPACED* | | | CABLES TOUCHING, TREFOIL | | | CABLES TOUCHING, FLAT | | | CABLES SPACED*, FLAT | | |
| MM ² | MV/A/M | r | x | z | r | x | z | r | x | z | r | x | z | r | x | z |
| 35 | 1.250 | 1.250 | 0.200 | 1.250 | 1.250 | 0.280 | 1.300 | 1.100 | 0.170 | 1.100 | 1.100 | 0.240 | 1.100 | 1.100 | 0.320 | 1.150 |
| 50 | 0.930 | 0.930 | 0.190 | 0.950 | 0.930 | 0.280 | 0.970 | 0.800 | 0.170 | 0.820 | 0.800 | 0.240 | 0.840 | 0.800 | 0.320 | 0.860 |
| 70 | 0.630 | 0.630 | 0.185 | 0.660 | 0.630 | 0.270 | 0.690 | 0.550 | 0.160 | 0.570 | 0.550 | 0.240 | 0.600 | 0.550 | 0.310 | 0.630 |
| 95 | 0.460 | 0.470 | 0.180 | 0.500 | 0.470 | 0.270 | 0.540 | 0.410 | 0.160 | 0.430 | 0.410 | 0.230 | 0.470 | 0.400 | 0.310 | 0.510 |
| 120 | 0.360 | 0.370 | 0.180 | 0.410 | 0.370 | 0.260 | 0.450 | 0.320 | 0.150 | 0.360 | 0.320 | 0.230 | 0.400 | 0.320 | 0.300 | 0.440 |
| 150 | 0.320 | 0.320 | 0.165 | 0.360 | 0.320 | 0.250 | 0.410 | 0.280 | 0.140 | 0.310 | 0.280 | 0.165 | 0.320 | 0.280 | 0.240 | 0.370 |
| 185 | 0.250 | 0.260 | 0.165 | 0.300 | 0.250 | 0.250 | 0.360 | 0.220 | 0.140 | 0.260 | 0.220 | 0.165 | 0.280 | 0.220 | 0.240 | 0.330 |
| 240 | 0.190 | 0.200 | 0.160 | 0.250 | 0.195 | 0.250 | 0.310 | 0.170 | 0.140 | 0.220 | 0.170 | 0.165 | 0.240 | 0.170 | 0.240 | 0.290 |
| 300 | 0.155 | 0.160 | 0.160 | 0.220 | 0.155 | 0.250 | 0.290 | 0.140 | 0.140 | 0.195 | 0.135 | 0.160 | 0.210 | 0.135 | 0.240 | 0.270 |
| 500 | 0.093 | 0.125 | 0.170 | 0.210 | 0.165 | 0.240 | 0.290 | 0.105 | 0.145 | 0.180 | 0.145 | 0.200 | 0.250 | 0.190 | 0.240 | 0.310 |
| 630 | 0.073 | 0.105 | 0.165 | 0.195 | 0.150 | 0.230 | 0.270 | 0.092 | 0.145 | 0.170 | 0.135 | 0.195 | 0.240 | 0.175 | 0.230 | 0.290 |

Conductor Operating Temperature: 90°C

r = Resistive Component
 x = Reactive Component
 z = Impedance Value

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