# Nexans - N2XH Class 5 Mains Cable - Non Armoured, LSZH - 1.5mm² to 630mm²



## Description

Nexans flexible cables are widely used European power cables for electricity supply in fixed installations, with a voltage rating of 600/1000V AC and 1.8kV DC. They are primarily used in public buildings where there is a risk from fumes and halogens in the event of a fire. 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**
600V-1000V AC
1.8kV DC

**Minimum Bending Radius**
5 x Overall Diameter

**Flame Retardancy**
BS EN/IEC 60332-1-2
BS EN/IEC 60332-3-24

**Temperature Limits**
Temperature Range: -40 to 90°C

## Core Colours

1 Core - Black **500mm also available in** Green Yellow

3 Core - Brown | Blue | Green Yellow

4 Core - Brown | Black | Grey | Blue

5 Core - Brown | Black | Grey | Blue | Green Yellow

## Standards

- BS EN/IEC 60332-3-24
- BS EN/IEC 60228
- IEC/EN 60754-1/2
- BS EN/IEC 60332-1-2
- IEC/EN 61034-1/2,
- IEC 60502-1
- VDE 0276

## Construction

- **Conductor**: Class 5 flexible, stranded copper
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Bedding**: Low Smoke Zero Halogen (LSZH)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **Sheath Colour**: Black

## Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

**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.

ISO/IEC 17025 Accredited Testing Laboratory
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**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.

CLEVELAND CABLE COMPANY

**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

ecovadis

## Nexans - N2XH Class 5 Mains Cable - Non Armoured, LSZH - 1.5mm² to 630mm² - Dimensions

| Reference | Conductor Size (mm2) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) |
|---|---|---|---|---|---|
| N2XHK1X1/5 | 1.5 | 1 | 30/0.25 | 5.4 | 66 |
| N2XHK3X1/5 | 1.5 | 3 | 30/0.25 | 10.5 | 165 |
| N2XHK4X1/5 | 1.5 | 4 | 30/0.25 | 11.3 | 193 |
| N2XHK5X1/5 | 1.5 | 5 | 30/0.25 | 12.3 | 234 |
| N2XHK1X2/5 | 2.5 | 1 | 50/0.25 | 5.8 | 70 |
| N2XHK3X2/5 | 2.5 | 3 | 50/0.25 | 11.3 | 206 |
| N2XHK4X2/5 | 2.5 | 4 | 50/0.25 | 12.2 | 243 |
| N2XHK5X2/5 | 2.5 | 5 | 50/0.25 | 13.4 | 280 |
| N2XHK1X4 | 4 | 1 | 50/0.25 | 6.3 | 74 |
| N2XHK3X4 | 4 | 3 | 50/0.25 | 12.4 | 266 |
| N2XHK4X4 | 4 | 4 | 50/0.25 | 13.4 | 320 |
| N2XHK5X4 | 4 | 5 | 50/0.25 | 14.7 | 380 |
| N2XHK1X6 | 6 | 1 | 84/0.30 | 6.8 | 95 |
| N2XHK3X6 | 6 | 3 | 84/0.30 | 13.5 | 337 |
| N2XHK4X6 | 6 | 4 | 84/0.30 | 14.6 | 411 |
| N2XHK5X6 | 6 | 5 | 84/0.30 | 16.2 | 525 |
| N2XHK1X10 | 10 | 1 | 80/0.40 | 7.9 | 138 |
| N2XHK3X10 | 10 | 3 | 80/0.40 | 16 | 103 |
| N2XHK4X10 | 10 | 4 | 80/0.40 | 17.5 | 620 |
| N2XHK5X10 | 10 | 5 | 80/0.40 | 19.3 | 810 |
| N2XHK1X16 | 16 | 1 | 126/0.40 | 9.1 | 199 |
| N2XHK3X16 | 16 | 3 | 126/0.40 | 18.6 | 718 |
| N2XHK4X16 | 16 | 4 | 126/0.40 | 20.3 | 895 |
| N2XHK5X16 | 16 | 5 | 126/0.40 | 22.4 | 851 |
| N2XHK1X25 | 25 | 1 | 196/0.40 | 10.8 | 288 |
| N2XHK3X25 | 25 | 3 | 196/0.40 | 22.7 | 1071 |
| N2XHK4X25 | 25 | 4 | 196/0.40 | 24.9 | 1340 |
| N2XHK5X25 | 25 | 5 | 196/0.40 | 27.5 | 1150 |
| N2XHK1X35 | 35 | 1 | 276/0.40 | 11.7 | 381 |
| N2XHK3X35 | 35 | 3 | 276/0.40 | 24.7 | 1388 |
| N2XHK4X35 | 35 | 4 | 276/0.40 | 27.3 | 1752 |
| N2XHK5X35 | 35 | 5 | 276/0.40 | 30.1 | 1675 |
| N2XHK1X50 | 50 | 1 | 396/0.40 | 13.7 | 526 |
| N2XHK3X50 | 50 | 3 | 396/0.40 | 29.1 | 1919 |
| N2XHK4X50 | 50 | 4 | 396/0.40 | 32 | 2449 |
| N2XHK5X50 | 50 | 5 | 396/0.40 | 34.7 | 1964 |
| N2XHK1X70 | 70 | 1 | 396/0.50 | 15.8 | 720 |
| N2XHK4X70 | 70 | 4 | 396/0.50 | 37.4 | 3379 |

| Reference | Conductor Size (mm2) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) |
|---|---|---|---|---|---|
| N2XHK5X70 | 70 | 5 | 396/0.50 | 39.4 | 4055 |
| N2XHK1X95 | 95 | 1 | 475/0.50 | 17.3 | 941 |
| N2XHK4X95 | 95 | 4 | 475/0.50 | 41.2 | 4387 |
| N2XHK5X95 | 95 | 5 | 475/0.50 | 51.3 | 5390 |
| N2XHK1X120 | 120 | 1 | 608/0.50 | 19 | 1183 |
| N2XHK4X120 | 120 | 4 | 608/0.50 | 45.9 | 5561 |
| N2XHK1X150 | 150 | 1 | 756/0.50 | 21.4 | 1456 |
| N2XHK4X150 | 150 | 4 | 756/0.50 | 51.9 | 7091 |
| N2XHK1X185 | 185 | 1 | 925/0.50 | 24.2 | 1807 |
| N2XHK4X185 | 185 | 4 | 925/0.50 | 59.2 | 8681 |
| N2XHK1X240 | 240 | 1 | 1221/0.50 | 26.4 | 2295 |
| N2XHK2X240 | 240 | 2 | 1221/0.50 | 59.1 | 6600 |
| N2XHK3X240 | 240 | 3 | 1221/0.50 | 63.7 | 8600 |
| N2XHK4X240 | 240 | 4 | 1221/0.50 | 64.4 | 10919 |
| N2XHK1X300 | 300 | 1 | 1525/0.50 | 29.7 | 2846 |
| N2XHK3X300 | 300 | 3 | 1525/0.50 | 73.2 | 10860 |
| N2XHK4X300 | 300 | 4 | 1525/0.50 | 72.6 | 13618 |
| N2XHK1X400 | 400 | 1 | 2257/0.50 | 33.4 | 3681 |
| N2XHK3X400 | 400 | 3 | 2257/0.50 | 83.3 | 14010 |
| N2XHK4X400 | 400 | 4 | 2257/0.50 | 82.9 | 17550 |
| N2XHK1X500 | 500 | 1 | 1769/0.60 | 37.3 | 4720 |
| N2XHK1X630 | 630 | 1 | 2257/0.60 | 50.4 | 6440 |

## ELECTRICAL PROPERTIES

**Class 5 Flexible N2XH Cables**

**Ambient temperature: 30 °C**
**Conductor operating temperature: 90 °C**

| Conductor Size | CURRENT-CARRYING CAPACITY | | RESISTANCE | | SHORT CIRCUIT CURRENT | Approx Voltage Drop | Impedence at 50 Hz | Reactance at 50 Hz |
|---|---|---|---|---|---|---|---|---|
| | In Free Air at $30^0$ Degrees | Underground at $20^0$ Degrees | DC at $20^0$ Degrees | AC at $90^0$ Degrees | 1 Second Maximum | | | |
| ($mm^2$) | (Amps) | (Amps) | (Ω/KM) | (Ω/KM) | kA | (VA/Km) | (Ω/Km) | (Ω/Km) |
| 1.5 | 26 | 27 | 13.30 | 17.00 | 0.21 | 33.9 | 17.00 | 0.1 |
| 2.5 | 36 | 35 | 7.98 | 10.40 | 0.36 | 20.8 | 10.40 | 0.09 |
| 4 | 42 | 37 | 4.95 | 6.47 | 0.57 | 12.90 | 6.47 | 0.09 |
| 6 | 55 | 49 | 3.30 | 4.32 | 0.86 | 8.60 | 4.32 | 0.09 |
| 10 | 74 | 65 | 1.91 | 2.56 | 1.43 | 5.10 | 2.56 | 0.08 |
| 16 | 100 | 84 | 1.210 | 1.620 | 2.29 | 3.20 | 1.62 | 0.08 |
| 25 | 135 | 107 | 0.780 | 0.986 | 3.58 | 2.00 | 0.99 | 0.08 |
| 35 | 169 | 129 | 0.554 | 0.710 | 5.00 | 1.40 | 0.716 | 0.08 |
| 50 | 207 | 153 | 0.386 | 0.527 | 7.15 | 1.10 | 0.533 | 0.08 |
| 70 | 268 | 188 | 0.272 | 0.365 | 10.00 | 0.70 | 0.374 | 0.08 |
| 95 | 328 | 226 | 0.206 | 0.263 | 13.60 | 0.50 | 0.275 | 0.08 |
| 120 | 383 | 257 | 0.161 | 0.208 | 17.20 | 0.40 | 0.233 | 0.08 |
| 150 | 444 | 287 | 0.129 | 0.170 | 21.40 | 0.40 | 0.188 | 0.08 |
| 185 | 510 | 324 | 0.106 | 0.136 | 26.50 | 0.30 | 0.158 | 0.08 |
| 240 | 607 | 375 | 0.801 | 0.104 | 34.30 | 0.30 | 0.131 | 0.08 |
| 300 | 703 | 419 | 0.0641 | 0.0850 | 42.90 | 0.20 | 0.110 | 0.07 |
| 400 | 823 | 464 | 0.0486 | 0.0680 | 57.20 | 0.20 | 0.0976 | 0.07 |
| 500 | 946 | 524 | 0.0384 | 0.0540 | 71.50 | 0.20 | 0.0884 | 0.07 |
| 630 | 1,088 | 595 | 0.0287 | 0.0450 | 90.10 | 0.10 | 0.0832 | 0.07 |

Current ratings based on IEC 60364-5-52

Conditions for installation underground (Trefoil) - Thermal resistivity of soil: 2.5 K.m/W - Burying depth: 0.7 m

Conditions for installation in air (Trefoil)

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