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

Description

These flexible cables are widely used European power cables used for electricity supply for fixed installations with a voltage rating of 600/1000V AC and 1.8kV DC. The cable is primarily used in public buildings where there is risk due to fumes and halogens in case 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
6 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

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

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

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

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)