

## N2XS2Y 33KV Medium Voltage XLPE PE Power Cable



### Description Overview

High voltage power cables for use in DNO networks within power generation and for plant and process machinery. The UV resistant black PE outer sheath gives the N2XS2Y range of cables a much greater degree of resistance to mechanical stress both during the installation and during operation. Cables can be fixed on cable trays and ducts, within conduits or fixed to walls. Tested to 63kV.

### Key Features



**Voltage Rating**  
18/30 (36)kV



**Temperature Limits**  
Temperature Range: 0°C to +70°C  
Short Circuit Temperature: +250°C

### Core Colours

Should not be installed at temperatures below 0°C

### Standards

#### Construction

- **Insulation:** Cross Linked polyethylene (XLPE)
- **Sheath:** UV resistant 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

#### ecovadis

## N2XS2Y 33KV Medium Voltage XLPE PE Power Cable - Dimensions

Reference	Conductor Size (mm <sup>2</sup> )	No Of Cores	Stranding(mm)	CWS(mm)	Overall Diameter(mm)	Weight(Kg/Km)
33KVN2XS2Y1X50	50	1	19/1.78	RM/16	33	1150
33KVN2XS2Y1X70	70	1	19/2.14	RM/16	35	1350
33KVN2XS2Y1X95	95	1	19/2.52	RM/16	36	1600
33KVN2XS2Y1X120	120	1	37/2.03	RM/16	38	1850
33KVN2XS2Y1X150	150	1	37/2.03	RM/25	39	2250
33KVN2XS2Y1X185	185	1	37/2.25	RM/25	41	2600
33KVN2XS2Y1X240	240	1	37/2.52	RM/25	44	3150
33KVN2XS2Y1X300	300	1	61/2.25	RM/25	46	3800
33KVN2XS2Y1X400	400	1	61/2.25	RM/35	49	4750
33KVN2XS2Y1X500	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	HORIZONTAL
(MM <sup>2</sup> )	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(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 <sup>2</sup>	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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