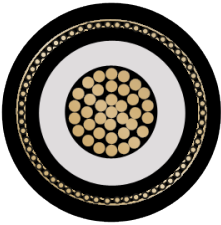


## N2XS2Y 33KV MEDIUM VOLTAGE POWER CABLE



### APPLICATION

Medium 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.

### CABLE STANDARDS

DIN EN 60228

BS EN / IEC 60332-1-2

DIN VDE 0276-620

HD 620 S1

### CONSTRUCTION

**Conductor:** Stranded Copper Conductor to BS EN 60228

**Inner Screen:** Semi Conductive Compound

**Insulation:** Cross Linked Polyethylene (XLPE)

**Core Screen:** Semi Conductive Compound

**Outer Screen:** Copper Wire Screen & Counter Helix Copper Tape

**Sheath:** UV resistant Polyethylene (PE)

**Sheath Colour:** ■ Black

### CHARACTERISTICS

**Voltage Rating:** 18/30 (36)KV

**Temperature Rating:** 0°C to +70°C

**Short Circuit Temperature:** +250°C

**Minimum Bending Radius:** As per cable manufacturer datasheet

Should not be installed below 0°C

## N2XS2Y 33KV MEDIUM VOLTAGE POWER CABLE – DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING (MM)	CWS (MM)	OVERALL DIAMETER (MM)	WEIGHT (KG/KM)
33KVN2XS2Y1X50	50	19/1.78	RM/16	33	1150
33KVN2XS2Y1X70	70	19/2.14	RM/16	35	1350
33KVN2XS2Y1X95	95	19/2.52	RM/16	36	1600
33KVN2XS2Y1X120	120	37/2.03	RM/16	38	1850
33KVN2XS2Y1X150	150	37/2.03	RM/25	39	2250
33KVN2XS2Y1X185	185	37/2.25	RM/25	41	2600
33KVN2XS2Y1X240	240	37/2.52	RM/25	44	3150
33KVN2XS2Y1X300	300	61/2.25	RM/25	46	3800
33KVN2XS2Y1X400	400	61/2.25	RM/35	49	4750
33KVN2XS2Y1X500	500	61/3.20	RM/35	52	5800

## N2XS2Y 33KV MEDIUM VOLTAGE - CARRYING CAPACITY (AMPERES)

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	HORIZONTAL	VERTICAL
1	2	3	4	5	6	7	8	9	10	11	12
(MM <sup>2</sup> )	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
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	1,085	1,008
500	-	-	783	666	990	904	1,083	998	946	1,253	1,169

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

## N2XS2Y 33KV MEDIUM VOLTAGE POWER CABLE – VOLTAGE DROP

CROSS SECTIONAL AREA	2 CABLES DC MVA/M	2 CABLES SINGLE-PHASE AC MVA/M						3 OR 4 CABLES THREE-PHASE AC MVA/M								
		MM <sup>2</sup>						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		
1	2	4			5			7			8			9		
		R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z
50	0.930	0.930	0.190	0.950	0.930	0.280	0.970	0.800	0.170	0.820	0.800	0.24	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	0.57	0.550	0.24	0.600	0.550	0.31	0.630
95	0.460	0.47	0.180	0.500	0.47	0.270	0.540	0.41	0.160	0.430	0.41	0.230	0.47	0.400	0.31	0.51
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	0.32	0.32	0.165	0.36	0.32	0.25	0.41	0.28	0.14	0.31	0.28	0.165	0.32	0.28	0.24	0.37
185	0.25	0.26	0.165	0.3	0.25	0.25	0.36	0.22	0.14	0.26	0.22	0.165	0.28	0.22	0.24	0.33
240	0.19	0.2	0.16	0.25	0.195	0.25	0.31	0.17	0.14	0.22	0.17	0.165	0.24	0.17	0.24	0.29
300	0.155	0.16	0.16	0.22	0.155	0.25	0.29	0.14	0.14	0.195	0.135	0.16	0.21	0.135	0.24	0.27
500	0.093	0.125	0.170	210	0.165	0.24	0.29	0.105	0.145	0.18	0.145	0.2	0.25	0.19	0.24	0.31

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

CONDUCTOR OPERATING TEMPERATURE: 90°C

R = RESISTIVE COMPONENT

X = REACTIVE COMPONENT

Z = IMPEDANCE VALUE

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.