

N2XS(FL)H 18/30 (36)kV Cable



APPLICATION

Medium voltage power cables for distribution networks and generation units. LSZH outer sheathing makes the cable suitable for internal installation as well as directly in ground, outdoors, and in cable ducts. UV Resistant.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

18/30 (36)kV

Test Voltage:

63kV AC 50Hz (15 mins)

Temperature Rating

-20°C to +60°C

Permissible Conductor Operating Temperature: +90°C

Permissible Short Circuit Temperature up to 5 sec: 250°C

Minimum Bending Radius

15 x overall diameter

STANDARDS

IEC 60502-2, IEC 60228,

Low Smoke Zero Halogen: IEC 60754-1/2, IEC 61034-2

Flame Retardant: EN 60332-3-24 Cat C, IEC 60332-1-2

UV Resistant: EN 50396

Abrasion and Tear Resistant: EN 60229-4.1

Impact rated to: AG2 EN 60364-5.5

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

Guowang Cable actively implements the "carbon reduction" goal, strives to promote the green's low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company's healthy and sustainable development.

CONSTRUCTION

Conductor

Class 2 Stranded Copper

Conductor Screen

Semi-conductive material

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive material (bonded)

Longitudinal Waterblocking

Semi-conductive swellable tape

Screen

Copper Wires and copper tape

Longitudinal Waterblocking

Swellable Tapes

Radial Waterblocking

Al/PET (Aluminium/Polyester) tape tightly bonded to sheath

Outer Sheath

LSZH (Low Smoke Zero Halogen)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORE	NOMINAL CROSS SECTIONAL AREA		NOMINAL Conductor DIAMETER	NUMBER WIRES CONDUCTOR	NOMINAL THICKNESS SEMI-CON. LAYER INNER OUTER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
	Conductor	Screen	mm	mm	mm	mm	mm	mm	mm
1	50	16	8.1	10*2.62	0.5	0.4	8	7.1	25.1
1	70	16	9.7	14*2.62	0.5	0.4	8	7.1	26.7
1	95	16	11.4	19*2.62	0.5	0.4	8	7.1	28.4
1	120	16	12.7	19*2.97	0.5	0.4	8	7.1	29.7
1	150	25	14.5	19*3.20	0.5	0.4	8	7.1	31.5
1	185	25	15.9	37*2.62	0.5	0.4	8	7.1	32.9
1	240	25	18.6	48*2.62	0.5	0.4	8	7.1	25.6
1	300	25	20.7	61*2.62	0.5	0.4	8	7.1	37.7
1	400	35	23.5	61*2.97	0.5	0.4	8	7.1	40.5
1	500	35	26.5	61*3.29	0.5	0.4	8	7.1	43.5
1	630	35	30.2	61*3.80	0.5	0.4	8	7.1	47.7

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	MINIMUM SHEATH THICKNESS	NOMINAL OVERALL DIAMTER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm2	mm	mm	mm	mm	mm	kg/km	N/cm2	N
50	44*0.066	1*0.1*10	2.0	1.40	32	1400	416	2500
70	44*0.66	1*0.1*10	2.0	1.40	34	1600	534	3500
95	44*0.066	1*0.1*10	2.1	1.48	36	1900	668	4750
120	44*0.66	1*0.1*10	2.1	1.48	37	2250	805	6000
150	71*0.66	1*0.1*10	2.2	1.56	39	2750	935	7500
185	71*0.66	1*0.1*10	2.2	1.56	40	3000	1103	9250
240	71*0.66	1*0.1*10	2.3	1.64	43	3750	1299	12000
300	71*0.66	1*0.1*10	2.4	1.72	46	4250	1499	15000
400	60*0.85	1*0.1*1.5	2.5	1.80	49	5250	1939	20000
500	60*0.85	1*0.1*1.5	2.6	1.88	52	6250	2123	25000
630	60*0.85	1*0.1*1.5	2.7	1.96	56	7750	2436	31500

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR DC RESISTANCE AT 20°C Ω/km	CONDUCTOR DC RESISTANCE AT 75°C Ω/km	CONDUCTOR AC RESISTANCE BY MAX TEMP. Ω/km	NOMINAL INSULATION THICKNESS		REACTANC E ohms/km	CHARGING ADMITTANCE A/km	CAPACITANC E uF/km	S.C.C CONDUCTOR 1SEC kA	CONDUCTOR LOSSES IN THE GROUND
				In Ground 20°C	InAir 30°C					
50	0.387	0.801	0.497	251	279	0.20	0.44	0.12	7.15	31.3
70	0.268	0.555	0.344	306	348	0.20	0.41	0.13	10.1	32.2
95	0.193	0.399	0.248	363	521	0.19	0.39	0.14	13.59	32.7
120	0.153	0.316	0.196	410	483	0.18	0.38	0.15	17.16	32.9
150	0.124	0.256	0.160	449	540	0.18	0.36	0.17	21.45	32.3
185	0.0991	0.205	0.128	503	615	0.18	0.35	0.18	26.46	32.4
240	0.0754	0.156	0.0980	576	718	0.17	0.34	0.20	34.32	32.5
300	0.0601	0.124	0.0800	641	812	0.17	0.32	0.21	42.90	32.9
400	0.0470	0.0974	0.0640	697	904	0.16	0.31	0.24	57.20	31.1
500	0.0366	0.0758	0.0510	768	1011	0.16	0.30	0.26	71.50	30.1
630	0.0283	0.0586	0.0420	850	1030	0.16	0.29	0.29	90.09	30.3

Derating factor (ground): 1 (Soil thermal resistivity: 1km/W, Depth 0.8m, Flat formation - touching)

Derating factor (air): 1 (Flat formation - touching)

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.