

N2XSH 6/10 (12)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)

6/10(12)kV

Test Voltage:

21kV AC 50Hz (5 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, EN 60228

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

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

UV Resistant: ISO 4892-3

Abrasion and Tear Resistant: EN 60229-4.1

Impact rated to: AG2 EN 60364-5.51

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)

Screen

Copper Wires and copper tape

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 OVERALL DIAMETER		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	0.50	0.40	3.40	2.96	16.3
1	70	16	9.7	14*2.62	0.50	0.40	3.40	2.96	17.9
1	95	16	11.4	19*2.62	0.50	0.40	3.40	2.96	19.6
1	120	16	12.7	19*2.67	0.50	0.40	3.40	2.96	20.9
1	150	25	14.5	19*3.20	0.50	0.40	3.40	2.96	22.7
1	185	25	15.9	27*2.62	0.50	0.40	3.40	2.96	24.1
1	240	25	18.6	48*2.62	0.50	0.40	3.40	2.96	26.8
1	300	25	20.7	61*2.62	0.50	0.40	3.40	2.96	28.9
1	400	35	23.5	61*2.97	0.50	0.40	3.40	2.96	31.7
1	500	35	26.5	61*3.29	0.50	0.40	3.40	2.96	34.7
1	630	35	30.2	61*3.80	0.50	0.40	3.40	2.96	38.9

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm ²	mm	mm	mm	mm	kg/km	N/cm ²	N
50	44*0.066	1*0.1*10	1.80	1.24	850	554	2500
70	44*0.66	1*0.1*10	1.80	1.24	1100	692	3500
95	44*0.066	1*0.1*10	1.80	1.24	1300	847	4750
120	44*0.66	1*0.1*10	1.80	1.24	1600	1008	6000
150	71*0.66	1*0.1*10	1.90	1.32	2000	1149	7500
185	71*0.66	1*0.1*10	1.90	1.32	2250	1344	9250
240	71*0.66	1*0.1*10	2.00	1.40	3000	1550	12000
300	71*0.66	1*0.1*10	2.10	1.48	3500	1764	15000
400	60*0.85	1*0.1*1.5	2.20	1.56	4500	2133	20000
500	60*0.85	1*0.1*1.5	2.30	1.64	5500	2443	25000
630	60*0.85	1*0.1*1.5	2.40	1.72	6750	2756	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	CURRENT CARRYING CAPACITY (A)		REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR OR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND
				In Ground	In Air 20°C 30°C						
50	0.387	0.801	0.497	249	277	0.18	0.36	0.21	7.15	3.2	30.8
70	0.268	0.555	0.344	303	345	0.17	0.34	0.24	10.10	3.2	31.6
95	0.193	0.399	0.248	358	418	0.16	0.31	0.30	13.59	3.2	32.0
120	0.153	0.316	0.196	404	481	0.16	0.31	0.30	17.16	3.2	32.0
150	0.124	0.160	0.256	441	537	0.16	0.30	0.33	21.45	5.0	31.1
185	0.0991	0.205	0.128	493	612	0.16	0.29	0.35	26.46	5.0	31.1
240	0.0754	0.156	0.0980	563	716	0.15	0.28	0.40	34.32	5.0	31.1
300	0.0601	0.124	0.0800	626	811	0.15	0.27	0.44	42.90	5.0	31.4
400	0.047	0.0974	0.0640	676	901	0.15	0.27	0.49	57.20	7.1	29.2
500	0.0366	0.0758	0.0510	743	1006	0.15	0.28	0.54	71.50	7.1	28.2
630	0.0283	0.0420	0.0586	850	1030	0.14	0.25	0.62	90.09	7.1	30.3

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

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