

N2XSY XLPE PVC - 6/10 (12)kV Cable



APPLICATION

Medium voltage cables for distribution networks; also for connection to generation units and plant and process connection. To be laid directly in ground, outdoors, indoors and in cable ducts.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

6/10 (12)kV

Temperature Rating

Maximum conductor operating temperature: 90°C
 Initial temperature at S.C.C for metallic screen: 80°C
 Maximum conductor temperature during S.C: 250°C

Minimum Bending Radius

15 x overall diameter

STANDARDS

IEC 60502-2, IEC/EN 60228
 Flame Retardant according to IEC/EN 60332-1-2
 UV Resistant

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

Inner Semi-Conductive Layer

Semi-conductive material (Bonded Type)

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Semi-Conductive Layer

Semi-conductive material (Strippable Type)

Screen

Copper wires with Open Helix Copper Tape Screen

Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

- Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL SCREEN CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm ²	mm ²	mm	mm	mm	kg/km
1	50	16	3.4	1.7	21.8	897
1	70	16	3.4	1.7	23.6	1117
1	95	16	3.4	1.8	25.1	1387
1	120	16	3.4	1.8	26.5	1636
1	150	25	3.4	1.9	28.5	2020
1	185	25	3.4	1.9	30.0	2361
1	240	25	3.4	2.0	32.6	2952
1	300	25	3.4	2.1	35.0	3521
1	400	35	3.4	2.2	38.0	4450
1	500	35	3.4	2.3	41.6	5457
1	630	35	3.4	2.4	46.5	6893
1	800	35	3.4	2.5	50.8	8694

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C	MAXIMUM CONDUCTOR AC RESISTANCE AT TEMP. AND 50HZ	CAPACITANCE	CHARGING CURRENT	DIELECTRIC LOSSES	REACTANCE AT 50 HZ	CONDUCTOR OR S.C.C FOR 1SEC	COPPER SCREEN S.C.C FOR 1 SEC	CURRENT RATING A	
									Laid in ground	Laid in free air
mm ²	Ω/km	Ω/km	uF/km	A/km	W/km	ohms/km	KA	KA		
50	0.387	0.494	0.263	0.496	11.90	0.12	7.15	1.75	234	244.0
70	0.268	0.342	0.303	0.571	13.71	0.115	10.01	1.75	279	309
95	0.193	0.247	0.332	0.625	15.00	0.111	13.858	1.75	332	373
120	0.153	0.196	0.362	0.683	16.40	0.107	17.16	1.75	376	432
150	0.124	0.159	0.397	0.75	17.99	0.103	21.45	2.73	421	489
185	0.0991	0.128	0.43	0.812	19.47	0.100	26.46	2.73	476	562
240	0.0754	0.098	0.483	0.911	21.85	0.097	34.32	2.73	550	665
300	0.0601	0.078	0.535	1.009	24.22	0.093	42.9	2.73	618	765
400	0.0470	0.062	0.592	1.116	26.79	0.091	57.2	3.82	695	882
500	0.0366	0.049	0.666	1.256	30.14	0.088	71.5	3.82	779	1014
630	0.0283	0.0390	0.768	1.449	34.77	0.087	90.09	3.82	864	1152
800	0.0221	0.0320	0.858	1.617	38.81	0.084	114.40	3.82	945	1295

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity 120 °C.Cm/Watt
- Burial depth 0.5 m
- Ground temperature 15 °C
- Air temperature 25 °C
- Frequency 50 Hz