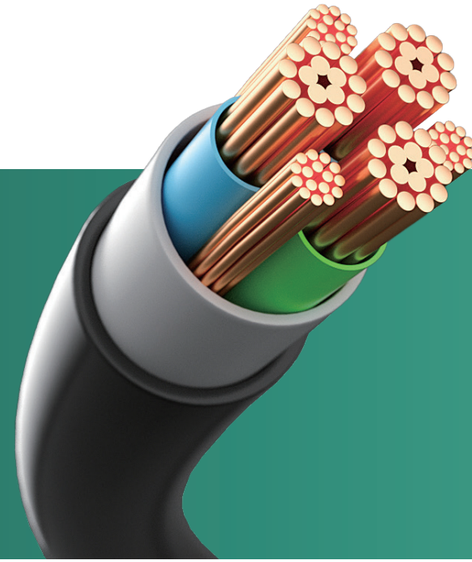
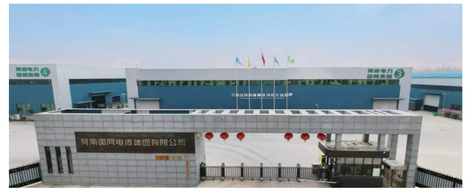
国网电缆集团
GUOWANG CABLE GROUP

专注 | 专业 | 诚信 | 共赢
Focused | Professional | Integrity | Win-win

WIRE CABLE SELECTION GUIDE





GUOWANG CABLE GROUP

BUILD GLOBAL HIGH-END PRECISION CABLE PIONEER BRAND

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GROUP PROFILE

Guowang Cable Group (private enterprise) was founded in 2008. it is a comprehensive cable -enterprise integrating scientific research, manufacturing and sales, with a registered capital of 200 milion yuan. The group consists of Henan Guowang Cable Co., Ltd., Henan Guowang Precision Cable Co., Ltd., Zhengzhou Guowang Cable co. Ltd. and manyother subsidiaries. Has passed ISO9001 quality management system certification, ISO14001 environmental management system certification, 1SO45001 occupation health and safety management system certification, 3C certificotion. etc. The company is mainly engaged in the design, development, manufacture, marketing and service of four major categories of cable products: overhead conductors, power cables, wire and cable for electrical equipment, and special cables. Products are widely used in construction engineering, fire engineering, power engineering, municipal, transportation, chemical andother fields. With reliable product quality and perfect after-sales service, it is deeply trusted by users at home and abroad The products are sold well all over the country and exported to Southeast Asia, Africa, Europe and the United States andother countries.

The group company is located in Weishi industrial Cluster, Kaifeng, covering an ared of about 330,000square meters and a construction area of 180,000 square meters. The company has more than 400 employees, including more than 90 technicians and more than 60 engineers. It has more than 200 sets of advanced wire and cable production and testing equipment at home and abroad, with an annual output value of 2 billion yuan. The company has built an intelligent production workshop, successfully applied for "National High-tech Enterprise" and "Specialized New Enterprise", and hasobtained more than 30 patents in total. Industry-academia research base. The company adheres to the business philosophyof"innovative technology +, continuous improvement +", and always practices the core values of"focus, professionalism integrity, and win-win", and builds quality and refined service with ingenuity and action, it has successively won the "chinaBuilding Materials Market Association Strategic Cooperation Supplier". "National Top Ten Suppliers for Government Procurement".

"Excellent Supplier of Construction Engineering Projects in Henan Province". "china's 315 integrity Performance Model Enterprise", "National Consumer Reassurance and Satisfaction Brand". "Green Environmental Protection Preferred Brand" and dozens of honorary certificates.

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01

GUOWANG CABLE

MEDIUM VOLTAGE POWER CABLE

GUOWANG CABLE GROUP

N2XSH 12/20 (24)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 Uo/U (Um)
12/20 (24)kV
Test Voltage
42kV 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 CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NUMBER WIRES CONDUCTOR mm	NOMINAL INSULATION THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm	MINIMUM INSULATION THICKNESS mm	NOM. THICKNESS SEMI-CON. LAYER INNER mm	NOM. THICKNESS SEMI-CON. LAYER OUTER mm
1	50	16	8.1	10 x 2.62	5.50	20.3	4.85	0.50	0.40
1	70	16	9.7	14 x 2.62	5.50	21.9	4.85	0.50	0.40
1	95	16	11.4	19 x 2.62	5.50	23.6	4.85	0.50	0.40
1	120	16	12.7	19 x 2.97	5.50	24.9	4.85	0.50	0.40
1	150	25	14.5	19 x 3.20	5.50	26.7	4.85	0.50	0.40
1	185	25	15.9	27 x 2.62	5.50	28.1	4.85	0.50	0.40
1	240	25	18.6	48 x 2.62	5.50	30.8	4.85	0.50	0.40
1	300	25	20.7	61 x 2.62	5.50	32.9	4.85	0.50	0.40
1	400	35	23.5	61 x 2.97	5.50	35.7	4.85	0.50	0.40
1	500	35	26.5	61 x 3.29	5.50	38.7	4.85	0.50	0.40
1	630	35	30.2	61 x 3.80	5.50	42.9	4.85	0.50	0.40

NOMINAL CROSS SECTIONAL AREA mm²	NUMBER WIRES SCREEN mm	NOMINAL SHEATH THICKNESS mm	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM SIDEWALL N/cm2	MAXIMUM PULLING TENSION N	DIAMETER TAPE SCREEN mm
50	44 x 0.66	1.80	1.240	26	1000	489	2500	1x0.1x10
70	44 x 0.66	1.90	1.320	28	1200	619	3500	1x0.1x10
95	44 x 0.66	1.90	1.320	30	1500	785	4750	1x0.1x10
120	44 x 0.66	2.00	1.400	31	1800	915	6000	1x0.1x10
150	71 x 0.66	2.00	1.400	33	2250	1053	7500	1x0.1x10
185	71 x 0.66	2.10	1.480	35	2500	1236	9250	1x0.1x10
240	71 x 0.66	2.10	1.480	38	3250	1413	12000	1x0.1x10
300	71 x 0.66	2.20	1.560	40	3750	1647	15000	1x0.1x10
400	60 x 0.85	2.30	1.640	43	4750	2005	20000	1x0.1x15
500	60 x 0.85	2.40	1.720	48	5750	2299	25000	1x0.1x15
630	60 x 0.85	2.50	1.800	51	7000	2586	31500	1x0.1x15

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ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm2	CONDUCTOR DC RESISTANCE AT 20oC ohms/km	CONDUCTOR DC RESISTANCE AT 75oC ohms/km	CONDUCTOR AC RESISTANCE BY MAX TEMP ohms/km	CURRENT CARRYING CAPACITY (A) In Ground 20oC	CURRENT CARRYING CAPACITY (A) In Air 30oC	REACTANCE ohms/km	CHARGING ADMITTANCE A/km	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND kW/km	CAPACITANCE uF/km
50	0.387	0.801	0.497	250.0	279.0	0.19	0.40	7.15	3.20	31.10	0.15
70	0.268	0.555	0.344	304.0	347.0	0.18	0.37	10.10	3.20	31.80	0.17
95	0.193	0.399	0.248	361.0	420.0	0.18	0.36	13.59	3.20	32.30	0.19
120	0.153	0.316	0.196	407.0	483.0	0.17	0.34	17.16	3.20	32.50	0.20
150	0.124	0.160	0.256	445.0	540.0	0.17	0.33	21.45	5.00	31.70	0.22
185	0.0991	0.205	0.128	498.0	614.0	0.17	0.32	26.46	5.00	31.70	0.24
240	0.0754	0.156	0.0980	569.0	718.0	0.16	0.31	34.32	5.00	31.70	0.27
300	0.0601	0.124	0.0800	633.0	813.0	0.16	0.30	42.90	5.00	32.10	0.29
400	0.0470	0.0974	0.0640	686.0	904.0	0.16	0.29	57.20	7.10	30.10	0.32
500	0.0366	0.0758	0.0510	756.0	1011.0	0.15	0.28	71.50	7.10	29.10	0.36
630	0.0283	0.0420	0.0586	850.0	1030.0	0.15	0.27	90.09	7.10	30.30	0.40

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

N2XS(F)H 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 Uo/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 60332-1-2
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)

Longitudinal Waterblocking
Semi-conductive swellable tape

Screen
Copper Wires and copper tape

Longitudinal Waterblocking
Swellable Tapes

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 DIAMTER INNER	OUTER	NOMINAL INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATIOIN
	Conductor	Screen	mm	mm	mm	mm	mm	mm
1	50	16	8.1	10*2.62	0.50	0.40	2.96	16.3
1	70	16	9.7	14*2.62	0.50	0.40	2.96	17.9
1	95	16	11.4	19*2.62	0.50	0.40	2.96	19.6
1	120	16	12.7	19*2.67	0.50	0.40	2.96	20.9
1	150	25	14.5	19*3.20	0.50	0.40	2.96	22.7
1	185	25	15.9	27*2.62	0.50	0.40	2.96	24.1
1	240	25	18.6	48*2.62	0.50	0.40	2.96	26.8
1	300	25	20.7	61*2.62	0.50	0.40	2.96	28.9
1	400	35	23.5	61*2.97	0.50	0.40	2.96	31.7
1	500	35	26.5	61*3.29	0.50	0.40	2.96	34.7
1	630	35	30.2	61*3.80	0.50	0.40	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
mm2	mm	mm	mm	mm	kg/km	N/cm2	N
50	44*.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*.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 mm²	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) In Ground 20°C	In Air 30°C	REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND
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	10.1	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	0.300	0.33	21.45	5.0	31.1
185	0.0991	0.205	0.128	493	612	0.16	0.290	0.35	26.46	5.0	31.1
240	0.0754	0.156	0.0980	563	716	0.15	0.280	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)

N2XS(FL)H 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 Uo/U (Um)
6/10 (12)kV

Test Voltage:
21kV 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 to: 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 60364-5.51

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)

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 INSULATIOIN
	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*2.97	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	37*2.62	0.50	0.40	3.40	2.96	24.1
1	240	25	18.6	37*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	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*.066	1*0.1*10	1.8	1.24	23	950	536	2500
70	44*0.66	1*0.1*10	1.8	1.24	25	1200	672	3500
95	44*.066	1*0.1*10	1.8	1.24	26	1400	847	4750
120	44*0.66	1*0.1*10	1.8	1.24	28	1700	983	6000
150	71*0.66	1*0.1*10	1.9	1.32	30	2000	1124	7500
185	71*0.66	1*0.1*10	1.9	1.32	31	2500	1315	9250
240	71*0.66	1*0.1*10	2.0	1.40	34	3000	1521	12000
300	71*0.66	1*0.1*10	2.1	1.48	36	3750	1764	15000
400	60*0.85	1*0.1*1.5	2.2	1.56	39	4500	2133	20000
500	60*0.85	1*0.1*1.5	2.3	1.64	42	5750	2398	25000
630	60*0.85	1*0.1*1.5	2.4	1.72	47	7000	2720	31500

GUOWANG
CABLE GROUP
Focused | Professional | Integrity | Win-win

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	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 In Ground 20°C	In Air 30°C	REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	CONDUCTOR LOSSES IN THE GROUND
50	0.387	0.801	0.497	249	277	0.18	0.36	0.21	7.15	30.8
70	0.268	0.555	0.344	303	345	0.18	0.34	0.24	10.01	31.6
95	0.193	0.399	0.248	358	418	0.17	0.33	0.27	13.59	31.8
120	0.153	0.316	0.196	404	481	0.17	0.32	0.30	17.16	32.0
150	0.124	0.256	0.160	441	537	0.16	0.30	0.33	21.45	31.1
185	0.0991	0.205	0.128	493	612	0.16	0.30	0.35	26.46	31.1
240	0.0754	0.156	0.0980	563	716	0.15	0.28	0.40	34.32	31.1
300	0.0601	0.124	0.0800	626	811	0.15	0.28	0.44	42.90	31.4
400	0.0470	0.0974	0.0640	676	901	0.15	0.27	0.49	57.20	29.2
500	0.0366	0.0758	0.0510	743	1006	0.15	0.26	0.54	71.50	28.2
630	0.0283	0.0586	0.0420	850	1030	0.14	0.26	0.62	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)

NA2XSH 18/30 (36)kV Cable

APPLICATION

UV resistant Medium voltage cables for distribution networks; also for connection to generation units and plant and process connection. LSZH outer sheath allows internal and external installation including directly in ground and in cable ducts.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
18/30 (36)kV

Test Voltage:
63kV AC 50Hz (15 mins)

Temperature Rating
Permissible operating temperature of conductor: +90°C
Permissible short-circuit temperature up to 5 sec: +250°C

Minimum Bending Radius
15 x overall diameter

STANDARDS

IEC 60502-2,
Flame Retardant according to IEC/EN 60332-1-2
Low Smoke Zero Halogen according to IEC/EN 61034-1/2,
IEC/EN 60754-1/2

CONSTRUCTION

Conductor
Class 2 Stranded Aluminium

Conductor Screen
Semi-conductive material

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive material

Filler
LSZH (Low Smoke Zero Halogen)

Screen
Copper Wires and copper tape

Sheath
LSZH (Low Smoke Zero Halogen)

Sheath Colour
● Black

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.

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm2		NOMINAL Conductor DIAMETER	NUMBER WIRES CONDUCTOR	NOMINAL THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATIOIN
	Conductor	Screen			INNER	OUTER			
	mm	mm	mm	mm	mm	mm	mm	mm	mm
1	50	16	8.20	7*2.90	0.50	0.40	8.00	7.10	25.2
1	70	16	9.70	19*2.18	0.50	0.40	8.00	7.10	26.7
1	95	16	11.40	19*2.55	0.50	0.40	8.00	7.10	28.4
1	120	16	12.65	19*2.90	0.50	0.40	8.00	7.10	29.7
1	150	25	14.4	19*3.16	0.50	0.40	8.00	7.10	31.4
1	185	25	15.75	37*2.55	0.50	0.40	8.00	7.10	33.2
1	240	25	18.2	37*2.90	0.50	0.40	8.00	7.10	35.7
1	300	25	20.5	61*2.55	0.50	0.40	8.00	7.10	38.0
1	400	35	23.0	61*2.90	0.50	0.40	8.00	7.10	40.5
1	500	35	26.0	61*3.20	0.50	0.40	8.00	7.10	43.5
1	630	35	30.2	61*3.65	0.50	0.40	8.00	7.10	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*.066	1*0.1*10	2.00	1.40	32	900	255	1500
70	44*0.66	1*0.1*10	2.00	1.40	33	1100	328	2100
95	44*.066	1*0.1*10	2.10	1.48	35	1200	409	2850
120	44*0.66	1*0.1*10	2.10	1.48	36	1300	493	3600
150	71*0.66	1*0.1*10	2.20	1.56	38	1500	573	4500
185	71*0.66	1*0.1*10	2.20	1.56	40	1700	664	5550
240	71*0.66	1*0.1*10	2.30	1.64	43	1900	784	7200
300	71*0.66	1*0.1*10	2.40	1.72	45	2250	916	9000
400	60*0.85	1*0.1*1.5	2.50	1.80	48	2750	1127	12000
500	60*0.85	1*0.1*1.5	2.60	1.88	51	3000	1299	15000
630	60*0.85	1*0.1*1.5	2.70	1.96	56	3500	1462	18900

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	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 In Ground 20°C	In Air 30°C	REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND
50	0.641	1.32	0.825	196	217	0.20	0.43	0.12	4.70	3.2	31.7
70	0.443	0.917	0.57	238	270	0.19	0.41	0.13	6.58	3.2	32.3
95	0.32	0.662	0.412	284	328	0.19	0.39	0.14	8.98	3.2	33.2
120	0.258	0.524	0.328	322	378	0.18	0.38	0.15	11.28	3.2	34.0
150	0.203	0.426	0.268	355	425	0.18	0.36	0.17	14.10	5.0	33.8
185	0.164	0.339	0.213	400	485	0.18	0.35	0.18	17.39	5.0	34.1
240	0.125	0.258	0.1600	461	572	0.17	0.33	0.20	22.56	5.0	34.6
300	0.1000	0.207	0.1320	516	649	0.17	0.32	0.22	28.20	5.0	35.1
400	0.0778	0.161	0.1030	572	737	0.16	0.32	0.24	37.60	7.1	33.7
500	0.0605	0.125	0.0810	638	835	0.16	0.30	0.26	47.00	7.1	33.0
630	0.0469	0.0972	0.0640	860	1080	0.15	0.29	0.29	59.22	7.1	47.3

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

NA2XSH / NA2XSEH 12/20 (24)kV Cable

APPLICATION

UV resistant Medium voltage cables for distribution networks; also for connection to generation units and plant and process connection. LSZH outer sheath allows internal and external installation including directly in ground and in cable ducts.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
12/20 (24)kV

Temperature Rating
Permissible operating temperature of conductor: +90°C
Permissible short-circuit temperature up to 5 sec: +250°C

Minimum Bending Radius
15 x overall diameter

STANDARDS

IEC 60502-2,
Flame Retardant according to IEC/EN 60332-1-2
Low Smoke Zero Halogen according to IEC/EN 61034-1/2,
IEC/EN 60754-1/2

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 Aluminium

Conductor Screen
Semi-conductive material

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive material

Filler
LSZH (Low Smoke Zero Halogen)

Screen
Copper Wires and copper tape

Outer Sheath
LSZH (Low Smoke Zero Halogen)

Sheath Colour
- Black

DIMENSIONS

NO.OF CORES	NOMINAL CROSS SECTIONAL AREA mm^2 Conductor	NOMINAL CROSS SECTIONAL AREA mm^2 Copper Wire Screen	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
1	35	16	27.0	800.0
1	50	16	28.0	850.0
1	70	16	30.0	950.0
1	95	16	32.00	1100.0
1	120	16	33.0	1200.0
1	150	25	34.0	1400.0
1	185	25	36.0	1600.0
1	240	25	38.0	1800.0
1	300	25	38.0	2000.0
1	400	35	43.0	2500.0
1	500	35	46.0	2900.0
1	630	35	50.0	3500.0
3	35	16	52.0	2750.0
3	50	16	55.0	3000.0
3	70	16	60.0	3500.0
3	95	16	63.0	4200.0
3	120	16	66.0	4500.0
3	150	25	70.0	5250.0
3	185	25	73.0	5800.0
3	240	25	79.0	6800.0
3	300	25	84.0	7800.0
3	400	25	90.0	9400.0

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm^2	NOMINAL SHORT-CIRCUIT CURRENT FOR 1 SECOND OF CONDUCTOR kA	CONDUCTOR DC RESITANCE AT 20ºC Ohm/km	CONDUCTOR AC RESISTANCE BY MAX. TEMPERATURE Ohm/km	CURRENT CARRYING CAPACITY In Ground at 20ºC	CURRENT CARRYING CAPACITY In Air at 30ºC
35	3.29	0.868	1.120	145	154
50	4.70	0.641	0.825	195	217
70	6.58	0.443	0.570	237	270
95	8.93	0.320	0.412	282	328
120	11.28	0.253	0.328	320	378
150	14.10	0.206	0.268	353	425
185	17.39	0.164	0.213	396	485
240	22.56	0.125	0.163	457	573
300	28.20	0.100	0.132	511	652
400	37.60	0.078	0.103	566	740
500	47.00	0.0605	0.081	630	838
630	59.22	0.0469	0.064	701	882

NOMINAL CROSS SECTIONAL AREA mm2	NOMINAL SHORT-CIRCUIT CURRENT FOR 1 SECOND OF CONDUCTOR kA	CONDUCTOR DC RESITANCE AT 20ºC Ohm/km	CONDUCTOR AC RESISTANCE BY MAX. TEMPERATURE Ohm/km	CURRENT CARRYING CAPACITY (A) In Ground 20ºC	CURRENT CARRYING CAPACITY (A) In Air 30ºC
35	3.29	0.868	1.12	142	140
50	4.700	0.641	0.825	167.0	167.0
70	6.580	0.443	0.570	205.0	208.0
95	8.930	0.320	0.412	244.0	251.0
120	11.280	0.253	0.328	279.0	291.0
150	14.100	0.206	0.268	312.0	329.0
185	17.3900	0.164	0.213	355.0	379.0
240	22.5600	0.125	0.1630	412.0	446.0
300	28.2000	0.100	0.1320	476.0	513.0
400	37.6000	0.0780	0.1030	552.0	593.0

NA2XS(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 Uo/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 60364-5.51

THE CABLE TEST

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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 Aluminium

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 THCKNESS SEMI-CON. LAYER INNER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATIOIN
	Conductor	Screen	mm	mm	mm	mm	mm	mm	mm
1	50	16	8.20	7*2.90	0.50	0.40	8	7.1	25.2
1	70	16	9.70	19*2.18	0.50	0.40	8	7.1	26.7
1	95	16	11.4	19*2.55	0.50	0.40	8	7.1	28.4
1	120	16	12.65	19*2.90	0.50	0.40	8	7.1	29.7
1	150	25	14.4	19*3.16	0.50	0.40	8	7.1	31.4
1	185	25	15.75	37*2.55	0.50	0.40	8	7.1	33.2
1	240	25	18.2	37*2.90	0.50	0.40	8	7.1	35.7
1	300	25	20.5	61*2.55	0.50	0.40	8	7.1	38.0
1	400	35	23.0	61*2.90	0.50	0.40	8	7.1	40.5
1	500	35	26.0	61*3.20	0.50	0.40	8	7.1	43.5
1	630	35	30.2	61*3.65	0.50	0.40	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*.066	1*0.1*10	2.0	1.40	32	1100	249	1500
70	44*0.66	1*0.1*10	2.0	1.40	34	1200	320	2100
95	44*.066	1*0.1*10	2.1	1.48	36	1300	401	2850
120	44*0.66	1*0.1*10	2.1	1.48	37	1400	483	3600
150	71*0.66	1*0.1*10	2.2	1.56	39	1700	562	4500
185	71*0.66	1*0.1*10	2.2	1.56	41	1800	652	5550
240	71*0.66	1*0.1*10	2.3	1.64	43	2250	784	7200
300	71*0.66	1*0.1*10	2.4	1.72	46	2500	902	9000
400	60*0.85	1*0.1*1.5	2.5	1.80	49	2750	1111	12000
500	60*0.85	1*0.1*1.5	2.6	1.88	52	3250	1282	15000
630	60*0.85	1*0.1*1.5	2.7	1.96	56	3750	1462	18900

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	CONDUCTOR DC RESISTANCE AT 20°C Ω/km	CONDUCTOR DC RESISTANCE AT 75°CΩ/km	CONDUCTOR AC RESISTANCE BY MAX TEMP. Ω/km	CURRENT CARRYING CAPACITY (A) In Ground 20°C	In Air 30°C	REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND
50	0.641	1.32	0.825	196	217	0.20	0.43	0.12	4.70	3.2	31.7
70	0.443	0.917	0.57	238	270	0.19	0.41	0.13	6.58	3.2	32.3
95	0.32	0.662	0.412	284	328	0.19	0.39	0.14	8.98	3.2	33.2
120	0.258	0.524	0.328	322	378	0.18	0.38	0.15	11.28	3.2	34.0
150	0.203	0.426	0.268	355	425	0.18	0.36	0.17	14.10	5.0	33.8
185	0.164	0.339	0.213	400	485	0.18	0.35	0.18	17.39	5.0	34.1
240	0.125	0.258	0.1600	461	572	0.17	0.33	0.20	22.56	5.0	34.6
300	0.1000	0.207	0.1320	516	649	0.17	0.32	0.22	28.20	5.0	35.1
400	0.0778	0.161	0.1030	572	737	0.16	0.32	0.24	37.60	7.1	33.7
500	0.0605	0.125	0.0810	638	835	0.16	0.30	0.26	47.00	7.1	33.0
630	0.0469	0.0972	0.0640	860	1080	0.15	0.29	0.29	59.22	7.1	47.3

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

N2XS2Y XLPE MDPE 8.7/15 (17.5) kV Cable

APPLICATION

Medium Voltage MDPE sheathed power distribution cables particularly noted for applications in wind energy installations.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
8.7/15 (17.5)kV
Test Voltage
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
20 x overall diameter

STANDARDS

IEC 60502-2, EN 60228

THE CABLE TEST

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SUSTAINABILITY COMMITMENT

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CONSTRUCTION

Conductor
Class 2 Stranded Aluminium
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
Outer Sheath
MDPE (Medium Density Polyethylene)
Sheath Colour
● Black

DIMENSIONS

NO. OF CORE	NOMINAL CROSS SECTIONAL AREA	NOMINAL SCREEN CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL SHEATH THICKNESS	NOMINAL OVERALL DIAMTER	NOMINAL WEIGHT
	mm2	mm2	mm	mm	mm	kg/km
1	50	16	4.5	1.7	23.80	904
1	70	16	4.5	1.8	25.80	1132
1	95	16	4.5	1.8	27.10	1389
1	120	16	4.5	1.9	28.70	1647
1	150	25	4.5	2	30.70	2027
1	185	25	4.5	2	32.20	2368
1	240	25	4.5	2.1	34.60	2943
1	300	25	4.5	2.2	37.20	3522
1	400	35	4.5	2.3	40.20	4445
1	500	35	4.5	2.4	43.80	5444
1	630	35	4.5	2.5	48.70	6869
1	800	35	4.5	2.6	53	8655

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm2	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	MAXIMUM CONDUCTOR AC RESISTANCE AT TEMP. AND 50HZ Ω/km	CAPACITANCE uF/km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/km	REACTANCE AT 50 HZ ohm/km	CONDUCTOR S.C.C 1SEC kA	COPPER SCREEN S.C.C FOR 1SEC kA	CURRENT RATING A	
									Laid in ground	Lain in free air
50	0.387	0.494	0.214	0.586	20.37	0.128	7.15	1.75	227	238
70	0.268	0.342	0.245	0.67	23.29	0.121	10.01	1.75	273	300
95	0.193	0.247	0.267	0.73	25.39	0.116	13.585	1.75	325	362
120	0.153	0.196	0.29	0.794	27.64	0.112	17.16	1.75	369	419
150	0.124	0.159	0.317	0.868	30.20	0.108	21.45	2.73	413	474
185	0.0991	0.128	0.343	0.937	32.59	0.105	26.455	2.73	465	545
240	0.0754	0.098	0.383	1.047	36.42	0.101	34.32	2.73	536	645
300	0.0601	0.078	0.423	1.156	40.23	0.097	42.9	2.73	601	744
400	0.047	0.062	0.466	1.275	44.35	0.094	57.2	3.82	673	856
500	0.0366	0.049	0.523	1.429	49.74	0.091	71.5	3.82	758	985
630	0.0283	0.039	0.601	1.643	57.17	0.090	90.09	3.82	840	1118
800	0.0221	0.032	0.669	1.829	63.65	0.087	114.4	3.82	945	1256

Laying conditions at trefoil formation are as below:
-Soil thermal resistivity 120 °C.Cm/Watt
-Ground temperature 15 °C
-Air temperature 25 °C
-Frequency 50 Hz

NA2XS2Y 18/30 (36)kV Cable

APPLICATION

Medium voltage power cables for distribution networks and generation units, suitable for external installation including in direct in ground and in buried cable ducts. UV Resistant.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
18/30 (36)kV
Test Voltage
63kV 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
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 Aluminium
Conductor Screen
Semi-conductive material
Insulation
XLPE (Cross-Linked Polyethylene)
Insulation Screen
Semi-conductive material (bonded)
Screen
Copper wires and copper tape
Outer Sheath
MDPE (Medium Density Polyethylene)
Sheath Colour
● Black

DIMENSIONS

NO. OF CORE	NOMINAL CROSS SECTIONAL AREA mm2		NOMINAL CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
	Conductor	Screen	mm	mm	INNER mm	OUTER mm	mm	mm	mm
1	50	16	8.20	7*2.90	0.50	0.40	8.00	7.10	25.2
1	70	16	9.70	19*2.18	0.50	0.40	8.00	7.10	26.7
1	95	16	11.4	19*2.55	0.50	0.40	8.00	7.10	28.4
1	120	16	12.65	19*2.90	0.50	0.40	8.00	7.10	29.7
1	150	25	14.4	19*3.16	0.50	0.40	8.00	7.10	31.4
1	185	25	15.75	37*2.55	0.50	0.40	8.00	7.10	33.2
1	240	25	18.2	37*2.90	0.50	0.40	8.00	7.10	35.7
1	300	25	20.5	61*2.55	0.50	0.40	8.00	7.10	38.0
1	400	35	23.0	61*2.90	0.50	0.40	8.00	7.10	40.5
1	500	35	26.0	61*3.20	0.50	0.40	8.00	7.10	43.5
1	630	35	30.2	61*3.65	0.50	0.40	8.00	7.10	47.7

NOMINAL CROSS SECTIONAL AREA mm2	NUMBER WIRES SCREEN mm	DIAMETER TAPE SCREEN mm	NOMINAL SHEATH THICKNESS mm	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM SIDEWALL PRESSURE N/CM2	MAXIMUM PULLING TENSION N
50	44*0.66	1*0.1*10	2.00	1.40	32	900	255	1500
70	44*0.66	1*0.1*10	2.00	1.40	33	1100	328	2100
95	44*0.66	1*0.1*10	2.10	1.48	35	1200	409	2850
120	44*0.66	1*0.1*10	2.10	1.48	36	1300	493	3600
150	71*0.66	1*0.1*10	2.20	1.56	38	1500	573	4500
185	71*0.66	1*0.1*10	2.20	1.56	40	1700	664	5550
240	71*0.66	1*0.1*10	2.30	1.64	43	1900	784	7200
300	71*0.66	1*0.1*10	2.40	1.72	45	2250	916	9000
400	60*0.85	1*0.1*15	2.50	1.80	48	2750	1127	12000
500	60*0.85	1*0.1*15	2.60	1.88	51	3000	1299	15000
630	60*0.85	1*0.1*15	2.70	1.96	56	3500	1462	18900

GUOWANG
CABLE GROUP
Focused | Professional | Integrity | Win-win

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	CONDUCTOR DC RESISTANCE AT 20°C ohms/km	CONDUCTOR DC RESISTANCE AT 75°C ohms/km	CONDUCTOR AC RESISTANCE BY MAX TEMP ohms/km	CURRENT CARRYING CAPACITY (A) In Ground 20°C	CURRENT CARRYING CAPACITY (A) InAir 30°C	REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND kW/km	NOMINAL CROSS SECTIONAL AREA mm²
50	0.641	1.32	0.825	196	217	0.20	0.43	0.12	4.70	3.2	31.7	50
70	0.443	0.917	0.57	238	270	0.19	0.41	0.13	6.58	3.2	32.3	70
95	0.32	0.662	0.412	284	328	0.19	0.39	0.14	8.93	3.2	33.2	95
120	0.258	0.524	0.328	322	378	0.18	0.38	0.15	11.28	3.2	34.0	120
150	0.203	0.426	0.268	355	425	0.18	0.36	0.17	14.10	5.0	33.8	150
185	0.164	0.339	0.213	400	485	0.18	0.35	0.18	17.39	5.0	34.1	185
240	0.125	0.258	0.160	461	572	0.17	0.33	0.20	22.56	5.0	34.6	240
300	0.100	0.207	0.1320	516	649	0.17	0.32	0.22	28.20	5.0	35.1	300
400	0.0778	0.161	0.1030	572	737	0.16	0.32	0.24	37.60	7.1	33.7	400
500	0.0605	0.125	0.0810	638	835	0.16	0.30	0.26	47.00	7.1	33.0	500
630	0.0469	0.0972	0.0640	860	1080	0.15	0.29	0.29	59.22	7.1	47.3	630

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

N2XSY XLPE PVC - 12/20 (24)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 Uo/U (Um)

12/20 (24)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
	mm2	mm2	mm	mm	mm	kg/km
1	50	16	5.5	1.8	26.0	1056
1	70	16	5.5	1.9	28.0	1301
1	95	16	5.5	1.9	29.3	1567
1	120	16	5.5	2	30.9	1840
1	150	25	5.5	2	32.7	2221
1	185	25	5.5	2.1	34.2	2572
1	240	25	5.5	2.2	36.8	3182
1	300	25	5.5	2.2	39.2	3764
1	400	35	5.5	2.3	42.2	4715
1	500	35	5.5	2.4	45.8	5748
1	630	35	5.5	2.5	50.7	7215
1	800	35	5.5	2.7	55.2	9072

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 S.C.C for 1 SEC	COPPER SCREEN S.C.C FOR 1 SEC	CURRENT RATING A	
mm²	Ω/km	Ω/km	uF/km	A/Km	W/Km	ohms/km	KA	KA	Laid in ground	Laid in free air
50	0.387	0.494	0.184	0.693	33.24	0.133	7.15	1.75	234	245
70	0.268	0.342	0.209	0.787	37.78	0.126	10.01	1.75	284	309
95	0.193	0.247	0.227	0.855	41.03	0.121	13.585	1.75	337	378
120	0.153	0.196	0.246	0.928	44.52	0.117	17.16	1.75	384	436
150	0.124	0.159	0.268	1.01	48.48	0.112	21.45	2.73	428	491
185	0.0991	0.128	0.288	1.087	52.18	0.109	26.455	2.73	483	567
240	0.0754	0.098	0.321	1.21	58.08	0.104	34.32	2.73	553	669
300	0.0601	0.078	0.353	1.333	63.97	0.101	42.9	2.73	621	772
400	0.047	0.062	0.388	1.465	70.33	0.097	57.2	3.82	697	883
500	0.0366	0.049	0.434	1.638	78.63	0.094	71.5	3.82	783	1019
630	0.0283	0.039	0.498	1.876	90.08	0.092	90.09	3.82	866	1153
800	0.0221	0.032	0.553	2.084	100.05	0.089	114.40	3.82	945	1299

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

NA2XSY Aluminium Conductor 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 Uo/U (Um)
6/10 (12)kV

Temperature Rating
Fixed: -20°C to +90°C

Minimum Bending Radius
15 x overall diameter

STANDARDS

EN 60228, IEC 60502-2
Flame retardant according to IEC/EN 60332-1-2

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 aluminium conductor

Inner Semi-Conductive Layer
Semi-conductive material

Insulation
XLPE (Cross-Linked Polyethylene)

Outer Semi-Conductive Layer
Semi-conductive material

Screen
Copper wires

Sheath
PVC (Polyvinyl Chloride)

Sheath Colour
● Black

DIMENSIONS

NO.OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NUMBER WIRES CONDUCTOR mm	NOMINAL INSULATION THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm	MINIMUM INSULATION THICKNESS mm	NOM. THICKNESS SEMI-CON. LAYER INNER mm	NOM. THICKNESS SEMI-CON. LAYER OUTER mm
1	50	16	8.1	10 x 2.62	5.50	20.3	4.85	0.50	0.40
1	70	16	9.7	14 x 2.62	5.50	21.9	4.85	0.50	0.40
1	95	16	11.4	19 x 2.62	5.50	23.6	4.85	0.50	0.40
1	120	16	12.7	19 x 2.97	5.50	24.9	4.85	0.50	0.40
1	150	25	14.5	19 x 3.20	5.50	26.7	4.85	0.50	0.40
1	185	25	15.9	27 x 2.62	5.50	28.1	4.85	0.50	0.40
1	240	25	18.6	48 x 2.62	5.50	30.8	4.85	0.50	0.40
1	300	25	20.7	61 x 2.62	5.50	32.9	4.85	0.50	0.40
1	400	35	23.5	61 x 2.97	5.50	35.7	4.85	0.50	0.40
1	500	35	26.5	61 x 3.29	5.50	38.7	4.85	0.50	0.40
1	630	35	30.2	61 x 3.80	5.50	42.9	4.85	0.50	0.40

NOMINAL CROSS SECTIONAL AREA mm²	NUMBER WIRES SCREEN mm	NOMINAL SHEATH THICKNESS mm	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM SIDEWALL N/cm2	MAXIMUM PULLING TENSION N	DIAMETER TAPE SCREEN mm
50	44 x 0.66	1.80	1.240	26	1000	489	2500	1x0.1x10
70	44 x 0.66	1.90	1.320	28	1200	619	3500	1x0.1x10
95	44 x 0.66	1.90	1.320	30	1500	785	4750	1x0.1x10
120	44 x 0.66	2.00	1.400	31	1800	915	6000	1x0.1x10
150	71 x 0.66	2.00	1.400	33	2250	1053	7500	1x0.1x10
185	71 x 0.66	2.10	1.480	35	2500	1236	9250	1x0.1x10
240	71 x 0.66	2.10	1.480	38	3250	1413	12000	1x0.1x10
300	71 x 0.66	2.20	1.560	40	3750	1647	15000	1x0.1x10
400	60 x 0.85	2.30	1.640	43	4750	2005	20000	1x0.1x15
500	60 x 0.85	2.40	1.720	48	5750	2299	25000	1x0.1x15
630	60 x 0.85	2.50	1.800	51	7000	2586	31500	1x0.1x15