

NA2XS(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 U_0/U (Um)

6/10 (12)kV

Test Voltage:

21 kV 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 to: 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)

Longitudinal Waterblocking

Semi-conductive swellable tape

Screen

Copper wires and copper tape

Longitudinal Waterblocking

Swellable Tapes

Outer Sheath

LSZH (Low Smoke Zero Halogen)
- UV Resistant

Sheath Colour

- Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		NOMINAL Conductor DIAMETER	NUMBER WIRES CONDUCTOR	NOMINAL THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
	Conductor	Screen			INNER	OUTER			
			mm	mm	mm	mm	mm	mm	mm
1	50	16	8.20	7*2.90	0.50	0.40	3.4	2.96	16.4
1	70	16	9.70	19*2.18	0.50	0.40	3.4	2.96	17.9
1	95	16	11.4	19*2.55	0.50	0.40	3.4	2.96	19.6
1	120	16	12.65	19*2.90	0.50	0.40	3.4	2.96	20.9
1	150	25	14.4	19*3.16	0.50	0.40	3.4	2.96	22.6
1	185	25	15.75	37*2.55	0.50	0.40	3.4	2.96	24.4
1	240	25	18.2	37*2.90	0.50	0.40	3.4	2.96	26.9
1	300	25	20.5	61*2.55	0.50	0.40	3.4	2.96	29.2
1	400	35	23.0	61*2.90	0.50	0.40	3.4	2.96	31.7
1	500	35	26.0	61*3.20	0.50	0.40	3.4	2.96	34.7
1	630	35	30.2	61*3.65	0.50	0.40	3.4	2.96	38.9

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	MINIMUM SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm ²	mm	mm	mm	mm	mm	kg/km	N/cm ²	N
50	44*0.66	1*0.1*10	1.8	1.24	23	600	321	1500
70	44*0.66	1*0.1*10	1.8	1.24	24	700	415	2100
95	44*0.66	1*0.1*10	1.8	1.24	26	800	508	2850
120	44*0.66	1*0.1*10	1.8	1.24	27	900	605	3600
150	71*0.66	1*0.1*10	1.9	1.32	29	1100	691	4500
185	71*0.66	1*0.1*10	1.9	1.32	31	1200	791	5550
240	71*0.66	1*0.1*10	2.0	1.40	33	1400	938	7200
300	71*0.66	1*0.1*10	2.1	1.48	36	1700	1062	9000
400	60*0.85	1*0.1*1.5	2.2	1.56	39	2000	1290	12000
500	60*0.85	1*0.1*1.5	2.3	1.64	42	2500	1471	15000
630	60*0.85	1*0.1*1.5	2.4	1.72	46	3000	1654	18900

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		REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	CONDUCTOR LOSSES IN THE GROUND kW/km
				In Ground 20°C	In Air 30°C					
50	0.641	1.320	0.825	194	215	0.18	0.36	0.22	4.70	31.0
70	0.443	0.917	0.570	236	369	0.17	0.34	0.24	6.58	31.7
95	0.320	0.662	0.412	281	327	0.17	0.32	0.27	8.93	32.5
120	0.258	0.524	0.328	318	377	0.16	0.31	0.30	11.28	33.2
150	0.203	0.426	0.268	350	424	0.16	0.30	0.33	14.10	32.8
185	0.164	0.339	0.213	393	485	0.16	0.30	0.36	17.39	32.9
240	0.125	0.258	0.160	453	573	0.15	0.28	0.40	22.56	33.4
300	0.100	0.207	0.132	507	652	0.15	0.28	0.45	28.20	33.9
400	0.0778	0.161	0.103	559	741	0.15	0.27	0.49	37.60	32.2
500	0.0605	0.125	0.0810	622	838	0.15	0.26	0.54	47.00	31.3
630	0.0469	0.0972	0.0640	860	1080	0.14	0.25	0.62	59.22	47.2

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

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