

NA2XS(FL)2Y 12/20 (24)kV Cable



APPLICATION

Medium voltage power cables with additional waterblocking properties 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 U_0/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, IEC 60228,

UV Resistant to: ISO 4892-3

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

Radial Waterblocking

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

Outer Sheath

MDPE (Medium Density Polyethylene)

Sheath Colour

● Black

DIMENSIONS

NO.OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		NOMINAL CONDUCTOR DIAMETER mm	NUMBER WIRES CONDUCTOR mm	NOM. THICKNESS SEMI-CON. LAYER OUTER		NOMINAL INSULATION THICKNESS mm	MINIMUM INSULATION THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm
	Conductor	Screen			INNER mm	OUTER mm			
1	50	16	8.2	7 x 2.90	0.50	0.40	5.50	4.85	20.40
1	70	16	9.7	19 x 2.18	0.50	0.40	5.50	4.85	21.90
1	95	16	11.4	19 x 2.55	0.50	0.40	5.50	4.85	23.60
1	120	16	12.65	19 x 2.90	0.50	0.40	5.50	4.85	24.90
1	150	25	14.4	19 x 3.16	0.50	0.40	5.50	4.85	26.60
1	185	25	15.8	37 x 2.55	0.50	0.40	5.50	4.85	28.40
1	240	25	18.2	37 x 2.90	0.50	0.40	5.50	4.85	30.90
1	300	25	20.5	61 x 2.55	0.50	0.40	5.50	4.85	33.20
1	400	35	23.0	61 x 2.90	0.50	0.40	5.50	4.85	35.70
1	500	35	26.0	61 x 3.20	0.50	0.40	5.50	4.85	38.70
1	630	35	30.2	61 x 3.65	0.50	0.40	5.50	4.85	42.90

NOMINAL CROSS SECTIONAL AREA mm ²	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 N/cm ²	MAXIMUM PULLING TENSION N
50	44 x 0.66	1x0.1x10	1.80	1.24	27	750	284	1500
70	44 x 0.66	1x0.1x10	1.90	1.32	29	900	362	2100
95	44 x 0.66	1x0.1x10	1.90	1.32	31	1000	448	2850
120	44 x 0.66	1x0.1x10	2.00	1.40	32	1100	538	4500
150	71 x 0.66	1x0.1x10	2.00	1.40	34	1300	620	7500
185	71 x 0.66	1x0.1x10	2.10	1.48	36	1500	715	5550
240	71 x 0.66	1x0.1x10	2.10	1.48	38	1700	854	7200
300	71 x 0.66	1x0.1x10	2.20	1.56	41	2000	976	9000
400	60 x 0.85	1x0.1x15	2.30	1.64	44	2500	1194	12000
500	60 x 0.85	1x0.1x15	2.40	1.72	47	2750	1370	15000
630	60 x 0.85	1x0.1x15	2.50	1.80	51	3250	1552	18900

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	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)		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
				In Ground 20°C	In Air 30°C						
50	0.641	1.320	0.825	195	217	0.19	0.40	0.15	4.70	3.20	31.40
70	0.443	0.917	0.570	237	270	0.19	0.38	0.17	6.58	3.20	32.00
95	0.320	0.662	0.412	282	328	0.18	0.36	0.19	8.93	3.20	32.80
120	0.258	0.524	0.328	320	378	0.18	0.35	0.20	11.28	3.20	33.60
150	0.203	0.426	0.268	353	425	0.17	0.33	0.22	14.10	5.00	33.40
185	0.1650	0.339	0.213	396	485	0.17	0.33	0.24	17.39	5.00	33.40
240	0.1250	0.258	0.1600	457	573	0.16	0.31	0.27	22.56	5.00	34.00
300	0.1000	0.207	0.1320	511	652	0.16	0.30	0.29	28.20	5.00	34.50
400	0.0778	0.1610	0.1030	566	740	0.16	0.29	0.32	37.60	7.10	33.00
500	0.0605	0.1250	0.0810	630	838	0.15	0.28	0.35	47.00	7.10	32.10
630	0.0469	0.0972	0.0640	860	1080	0.15	0.27	0.40	59.22	7.10	47.30

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

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