

NA2XS2Y XLPE HDPE 8.7/15 (17.5) kV Cable



APPLICATION

Medium Voltage Aluminium HDPE power distribution cable with particular application in wind energy installations.

CHARACTERISTICS

Voltage Rating U₀/U

8.7/15 (17.5) kV

STANDARDS

IEC 60502-2, EN 60228

UV Resistant: ISO 4892-3

Abrasion and Tear Resistant: EN 60229-4.1

Impact rated to: AG2 EN 60364-5.5 1

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 compacted aluminium

Conductor Screen

Semi-conductive extruded XLPE
(Cross-linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive extruded XLPE
(Cross-linked Polyethylene)

Wrapping

Non swelling semi conductive tape

Metallic Screen

Copper Wires and tape

Wrapping

Polyester tape

Sheath

HDPE (High Density Polyethylene)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER OF CONDUCTOR mm	INSULATION mm		METALLIC SCREEN		NOMINAL OUTER DIAMETER OF CABLE mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING FORCE Kn	MINIMUM BENDING RADIUS m
			Nominal thickness	Nominal diameter over	Nominal cross section mm ²	Nominal diameter over mm				
1	50	8.25	4.5	18.5	16	22.4	27.1	780	1.5	0.41
1	70	9.5	4.5	19.7	25	23.6	28.4	950	2.1	0.43
1	95	11.3	4.5	21.5	35	25.4	30.2	1160	2.85	0.45
1	120	12.5	4.5	22.7	50	26.6	31.4	1400	3.6	0.47
1	150	14.48	4.5	24.4	50	28.3	33.1	1520	4.5	0.5
1	185	15.8	4.5	26	50	29.9	34.7	1660	5.55	0.52
1	240	17.9	4.5	28.1	50	32	36.8	1870	7.2	0.55
1	300	20	4.5	30.2	50	34.1	38	2080	9	0.58
1	400	22.9	4.5	33.1	50	37	41.8	2390	12	0.63
1	500	25.7	4.5	36.4	50	40.5	45.3	2810	15	0.68
1	630	29.3	4.5	40.3	50	44.4	49.3	3310	18.9	0.74
1	800	33	4.5	44.4	50	48.5	53.6	3920	24	0.8
1	1000	38	4.5	49.4	50	53.5	59	4680	30	0.89

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA CONDUCTOR OR METALLIC SCREEN mm ²	MAXIMUM CONDUCTOR OR DC RESISTANCE AT 20°C Ω/km	MAXIMUM CONDUCTOR OR AC RESISTANCE AT 90°C Ω/km	MAXIMUM METALLIC SCREEN DC RESISTANCE AT 20°C Ω/km	MAXIMUM METALLIC SCREEN DC RESISTANCE AT 80°C Ω/km	ELECTRICAL FIELD STRESS kV/mm		RESISTANCE Ω/km	CAPACITANCE μF/km	CAPACITANCE REACTANCE Ω/km	CHARGING CURRENT A/km	REACTANCE Ω/km
					Conductor	Insulation					
50/16	0.641	0.822	1.12	1.38	2.72	1.37	2.2	0.19	17.2	0.51	0.076
70/25	0.443	0.568	0.72	0.89	2.63	1.4	1.45	0.2	15.7	0.56	0.07
95/35	0.32	0.411	0.51	0.63	2.53	1.45	1.04	0.23	13.9	0.63	0.064
120/50	0.253	0.325	0.36	0.44	2.48	1.47	0.77	0.25	12.9	0.67	0.061
150/50	0.206	0.265	0.36	0.44	2.42	1.51	0.71	0.27	11.8	0.74	0.057
185/50	0.164	0.211	0.36	0.44	2.37	1.53	0.65	0.29	10.9	0.8	0.054
240/50	0.125	0.161	0.36	0.44	2.32	1.56	0.6	0.32	9.9	0.88	0.05
300/50	0.1	0.13	0.36	0.44	2.28	1.59	0.57	0.35	9.1	0.96	0.048
400/50	0.0778	0.102	0.36	0.44	2.24	1.61	0.54	0.39	8.1	1.07	0.044
500/50	0.0605	0.08	0.36	0.44	2.18	1.62	0.52	0.43	7.3	1.18	0.043
630/50	0.0469	0.0634	0.36	0.44	2.14	1.65	0.51	0.49	6.5	1.33	0.041
800/50	0.0367	0.0512	0.36	0.44	2.11	1.67	0.49	0.54	5.9	1.49	0.039
1000/50	0.0291	0.0426	0.36	0.44	2.08	1.69	0.48	0.61	5.2	1.67	0.036

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA CONDUCTOR / METALLIC SCREEN mm ²	INDUCTANCE L mH/km			INDUCTANCE REACTANCE XL Ω/km			IMPEDANCE Ω/km		
	0 0 0 2	0 0 0 3	0 0 0 4	0 0 0 2	0 0 0 3	0 0 0 4	0 0 0 2	0 0 0 3	0 0 0 4
	50/16	0.43	0.73	0.62	0.136	0.229	0.194	0.833	0.853
70/25	0.41	0.7	0.6	0.13	0.221	0.188	0.583	0.61	0.599
95/35	0.39	0.67	0.58	0.123	0.212	0.181	0.429	0.462	0.449
120/50	0.38	0.66	0.56	0.119	0.206	0.177	0.346	0.385	0.37
150/50	0.36	0.63	0.55	0.114	0.199	0.172	0.288	0.331	0.316
185/50	0.35	0.61	0.54	0.11	0.193	0.169	0.238	0.286	0.27
240/50	0.34	0.59	0.52	0.106	0.187	0.164	0.193	0.247	0.23
300/50	0.33	0.58	0.51	0.103	0.181	0.161	0.165	0.222	0.206
400/50	0.31	0.55	0.5	0.099	0.174	0.157	0.142	0.201	0.185
500/50	0.31	0.54	0.49	0.096	0.169	0.154	0.125	0.187	0.173
630/50	0.3	0.52	0.48	0.093	0.163	0.151	0.113	0.174	0.163
800/50	0.29	0.5	0.47	0.091	0.157	0.149	0.104	0.165	0.156
1000/50	0.28	0.48	0.46	0.088	0.151	0.146	0.098	0.157	0.151

CURRENT RATING FOR SINGLE-CORE CABLES - AMPERES

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM SHORT CIRCUIT CAPACITY CONDUCTOR R kA/sec	MAXIMUM SHORT CIRCUIT CAPACITY METALLIC SCREEN kA/sec	FLAT FORMATION				FLAT FORMATION				TREFOIL FORMATION	
			CONFIGURATIONS									
			SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS	SPP; CB	BOTH-ENDS
			CABLES IN EARTH						CABLES IN AIR			
50/16	4.7	3.7	225	224	212	212	231	230	196	196		
70/25	6.6	5.3	276	272	259	258	286	283	242	242		
95/35	9	7.1	333	324	312	310	350	343	295	294		
120/50	11.3	9.8	379	364	356	353	403	388	340	337		
150/50	14.2	9.8	428	407	401	397	461	440	387	384		
185/50	17.5	9.8	487	456	455	450	530	501	445	440		
240/50	22.7	9.8	567	520	530	522	627	583	526	518		
300/50	28.4	9.8	643	578	600	589	722	660	604	593		
400/50	37.8	9.8	742	650	692	676	849	758	708	692		
500/50	47.3	9.8	851	725	793	770	991	862	825	802		
630/50	59.5	9.8	979	808	908	876	1161	981	963	931		
800/50	75.6	9.8	1116	889	1028	983	1347	1101	1110	1065		
1000/50	94.5	9.8	1262	971	1152	1093	1558	1225	1271	1210		

SPB -Single Point Bonding; CB -Cross-bonding Both-ends; BE -Both-ends bonding Laying conditions at

trefoil formation are as below:

-Soil thermal resistivity: 1/2.5 k m/W

-Burial depth: 0.7m

-Ground temperature: 20°C | Ambient temperature: 30°C

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.