

NA2XS(FL)2Y XLPE HDPE 8.7/15 (17.5) kV Cable



APPLICATION

Medium Voltage Aluminium HDPE power distribution cable with particular application in wind energy installations. Longitudinally and radially sealed cables for aid protection against water ingress.

CHARACTERISTICS

Voltage Rating U_0/U (Um)
 8.7/15 (17.5)kV

STANDARDS

IEC 60502-2, EN 60228

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

Conductor Screen

Semi-conductive extruded XLPE

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive extruded XLPE

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	22.5	28.6	780	1.5	0.6
1	70	9.5	4.5	19.7	25	29.8	29.8	950	2.1	0.63
1	95	11.3	4.5	21.5	35	25.6	31.6	1160	2.85	0.68
1	120	12.5	4.5	22.7	50	26.8	32.8	1400	3.6	0.71
1	150	14.48	4.5	24.4	50	28.5	34.5	1520	4.5	0.75
1	185	15.8	4.5	26	50	30.1	36.1	1660	5.55	0.79
1	240	17.9	4.5	28.1	50	32.2	38.2	1860	7.2	0.84
1	300	20	4.5	30.2	50	34.3	40.3	2080	9	0.89
1	400	22.9	4.5	33.1	50	37.2	43.2	2380	12	0.97
1	500	25.7	4.5	36.4	50	40.7	46.7	2800	15	1.05
1	630	29.3	4.5	40.3	50	44.5	50.8	3290	18.9	1.15
1	800	33	4.5	44.4	50	48.6	55.3	3910	24	1.25
1	1000	38	4.5	49.4	50	53.6	60.5	4630	30	1.38

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA CONDUCTOR. METALLIC SCREEN mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	MAXIMUM CONDUCTOR AC RESISTANCE AT 90°C Ω/km	EAXIUM METALLIC SCREEN DC RESISTANCE AT 20°C Ω/km	MAXIUEM METALLIC SCREEN AC RESISTANCE AT 80°C Ω/km	ELECTRICAL FIELD STRESS kV/mm		RESISTANCE Ω/km	CAPACITANCE uF/km	CAPACITANCE REACTANCE Ω/km	CHARGING CURRENT A/km	REACTANCE Ω/km
					Conductor screen	Insulation					
M9D15KV01050	0.641	0.822	1.12	1.38	2.72	1.37	1.63	0.19	17.2	0.51	0.078
M9D15KV01070	0.443	0.568	0.72	0.89	2.63	1.40	1.17	0.2	15.7	0.56	0.073
M9D15KV01095	0.32	0.411	0.51	0.63	2.53	1.45	0.88	0.23	13.9	0.63	0.066
M9D15KV01120	0.253	0.325	0.36	0.44	2.48	1.47	0.67	0.25	12.9	0.67	0.063
M9D15KV01150	0.206	0.265	0.36	0.44	2.42	1.51	0.61	0.27	11.8	0.74	0.059
M9D15KV01185	0.164	0.211	0.36	0.44	2.37	1.53	0.55	0.29	10.9	0.8	0.055
M9D15KV01240	0.125	0.161	0.36	0.44	2.32	1.56	0.5	0.32	9.9	0.88	0.052
M9D15KV01300	0.1	0.13	0.36	0.44	2.28	1.59	0.46	0.35	9.1	0.96	0.049
M9D15KV01400	0.0778	0.102	0.36	0.44	2.24	1.61	0.43	0.39	8.1	1.07	0.046
M9D15KV01500	0.0605	0.08	0.36	0.44	2.18	1.62	0.4	0.43	7.3	1.18	0.044
M9D15KV01630	0.0283	0.041	0.36	0.44	2.14	1.65	0.38	0.38	6.5	1.33	0.042
M9D15KV01800	0.0221	0.0343	0.36	0.44	2.11	1.67	0.36	0.36	5.9	1.49	0.04
M9D15KV011000	0.0176	0.0296	0.36	0.44	2.08	1.69	0.34	0.34	5.2	1.67	0.037

INDUCTANCE L mH/km			INDUCTANCE REACTANCE XL Ω/km			IMPEDANCE Ω/km		
0 0 02	0 0 03	0 0 0 4	0 0 02	0 0 03	0 0 0 4	0 0 02	0 0 03	0 0 0 4
0.44	0.73	0.62	0.137	0.230	0.195	0.833	0.853	0.845
0.42	0.71	0.6	0.131	0.222	0.189	0.583	0.61	0.599
0.39	0.67	0.58	0.124	0.212	0.182	0.429	0.462	0.449
0.38	0.66	0.57	0.12	0.206	0.178	0.346	0.385	0.37
0.37	0.63	0.55	0.115	0.199	0.173	0.289	0.331	0.316
0.35	0.62	0.54	0.111	0.193	0.169	0.238	0.286	0.27
0.34	0.59	0.53	0.107	0.187	0.165	0.193	0.247	0.231
0.33	0.58	0.51	0.103	0.181	0.161	0.166	0.223	0.207
0.32	0.55	0.5	0.099	0.174	0.157	0.142	0.202	0.187
0.31	0.54	0.49	0.097	0.169	0.155	0.126	0.187	0.174
0.30	0.52	0.48	0.094	0.163	0.152	0.113	0.175	0.165
0.29	0.5	0.48	0.092	0.158	0.15	0.105	0.166	0.158
0.28	0.48	0.47	0.088	0.151	0.147	0.098	0.157	0.153

2 - Cables in trefoil formation, the distance between cables De

3 - Cables in flat formation (in the ground), the distance between cables De + 70 mm

4 - Cables in flat formation (in the air), the distance between cables 2 x De

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		TREFOIL FORMATION		FLAT FORMATION		TREFOIL FORMATION	
			CONFIGURATIONS							
			SPP; CB	BOTH- ENDS	SPP; CB	BOTH- ENDS	SPP; CB	BOTH- ENDS	SPP; CB	BOTH- ENDS
			CABLES IN EARTH				CABLES IN AIR			
50RMC/16	4.7	3.7	228	226	214	213	236	234	200	200
70RMC/25	6.6	5.3	279	274	262	261	292	288	247	247
95RMC/35	9	7.1	336	326	315	313	357	348	302	300
120RMC/50	11.3	9.8	383	365	359	355	411	394	347	343
150RMC/50	14.2	9.8	432	407	405	400	470	445	395	391
185RMC/50	17.5	9.8	491	455	460	453	541	506	454	447
240RMC/50	22.7	9.8	572	516	535	525	639	586	536	526
300RMC/50	28.4	9.8	649	571	606	592	736	660	615	601
400RMC/50	37.8	9.8	749	638	699	677	864	755	720	699
500RMC/50	47.3	9.8	859	705	798	768	1007	852	838	808
630RMC/50	59.5	9.8	987	778	913	871	1181	960	977	935
800RMC/50	75.6	9.8	1123	846	1034	975	1368	1064	1125	1065
1000RMC/50	94.5	9.8	1271	915	1157	1078	15843	1175	1287	1206

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