

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



APPLICATION

Medium Voltage Aluminium MOPE 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

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 60364-5.51

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 extruded XLPE (Cross-linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive extruded XLPE (Cross-linked Polyethylene)

Longitudinal Waterblocking

Semi-conductive water swelling tape

Metallic Screen

Copper Wires and Tape

Longitudinal Waterblock

Non-conductive water swelling tape

Radial Waterblock

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

Sheath

MOPE (Medium Density Polyethylene)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL DIAMETER OF CONDUCTOR	INSULATION mm		METALLIC SCREEN		NOMINAL OUTER DIAMETER OF CABLE	NOMINAL WEIGHT	MAXIMUM PULLING FORCE	MINIMUM BENDING RADIUS
	mm ²	mm	NOMINAL THICKNESS	Nominal Diameter Over	Nominal Cross Section mm ²	Nominal diameter Over mm	mm	KG/KM	KN	m
1	50	8.25	4.5	18.5	16	22.5	28.6	780	1.5	0.60
1	70	9.5	4.5	19.7	25	23.8	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	14.2	4.5	24.4	50	28.5	34.5	1520	4.5	0.75
1	185	15.8	4.5	26.0	50	30.1	36.1	1660	5.55	0.79
1	240	17.9	4.5	28.1	50	32.2	38.2	1870	7.2	0.84
1	300	20.0	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	33.0	4.5	44.4	50	48.6	55.3	3910	24	1.25
1	1000	38.0	4.5	49.4	50	53.6	60.5	4630	30	1.38

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA CONDUCTOR OR METALLIC SCREEN mm ²	MAXIMM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	MAXIMM CONDUCTOR AC RESISTANCE AT 90°C Ω/km	MAXIMM METALLIC SCREEN DC RESISTANCE AT 20°C Ω/km	MAXIMM METALLIC SCREEN AC 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 screen	Insulation					
	0.641	0.822	1.12	1.38	2.72	1.37	1.63	0.19	17.2	0.51	0.078
	0.443	0.568	0.72	0.89	2.63	1.40	1.17	0.20	15.7	0.56	0.073
	0.320	0.411	0.51	0.63	2.53	1.45	0.88	0.23	13.9	0.63	0.066
	0.253	0.325	0.36	0.44	2.48	1.47	0.67	0.25	12.9	0.67	0.063
	0.206	0.265	0.36	0.44	2.42	1.51	0.61	0.27	11.8	0.74	0.059
	0.164	0.211	0.36	0.44	2.37	1.53	0.55	0.29	10.9	0.80	0.055
	0.125	0.161	0.36	0.44	2.32	1.56	0.50	0.32	9.9	0.88	0.052
	0.100	0.130	0.36	0.44	2.28	1.59	0.46	0.35	9.1	0.96	0.049
	0.0778	0.102	0.36	0.44	2.24	1.61	0.43	0.39	8.1	1.07	0.046
	0.0605	0.0800	0.36	0.44	2.18	1.62	0.40	0.43	7.3	1.18	0.044
	0.0283	0.0410	0.36	0.44	2.14	1.65	0.38	0.38	6.5	1.33	0.042
	0.0221	0.0343	0.36	0.44	2.11	1.67	0.36	0.36	5.9	1.49	0.040
	0.0176	0.0296	0.36	0.44	2.08	1.69	0.34	0.34	5.2	1.67	0.037

NOMINAL CROSS SECTIONAL AREA CONDUCTOR /METALLIC SCREEN mm ²	INDUCTANCE L mH/km			INDUCTANCE REACTANCE XL Ω/km			IMPEDANCE Ω/km		
	2	3	4	2	3	4	2	3	4
	0.44	0.73	0.62	0.137	0.230	0.195	0.833	0.853	0.845
	0.42	0.71	0.60	0.131	0.222	0.189	0.583	0.610	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	0.370
	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	0.270
	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	0.50	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	0.50	0.48	0.092	0.158	0.150	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-Cable in trefoil formation, te distance between cables De

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

4-Cable 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	MAXIMM SHORT CIRCUIT CAPACITY CONDUCTOR kA/sec	MAXIMM 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				
4.7	3.7	3.7	228	226	214	213	236	234	200	196
6.6	5.3	5.3	279	274	262	261	292	288	247	247
9.0	7.1	7.1	336	326	315	313	357	348	302	300
11.3	9.8	9.8	383	365	359	355	411	394	347	343
14.2	9.8	9.8	432	407	405	400	470	445	395	391
17.5	9.8	9.8	491	455	460	453	541	506	454	447
22.7	9.8	9.8	572	516	535	525	639	586	536	526
28.4	9.8	9.8	649	571	606	592	736	660	615	601
37.8	9.8	9.8	749	638	699	677	864	755	720	699
47.3	9.8	9.8	859	705	798	768	1007	852	838	808
59.5	9.8	9.8	987	778	913	871	1181	960	977	935
75.6	9.8	9.8	1123	846	1034	975	1368	1064	1125	1065
94.5	9.8	9.8	1271	915	1157	1078	1584	1175	1287	1206

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

Laying Condition at trefoil formation are as below:

-Soil thermal resistivity: 1/2.5 km/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.