

# N2XS(F)2Y XLPE MDPE 8.7/15 (17.5)kV Cable



## APPLICATION

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

## CHARACTERISTICS

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

**Temperature Rating**  
Maximum conductor operating temperature: 90°C  
Initial temperature at S.C.C for metallic screen: 80°C  
Maximum conductor temperature during S.C: 250°C

**Minimum Bending Radius**  
20 x overall diameter

## STANDARDS

IEC 60502-2, EN 60228  
UV Resistant

## 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 copper

**Conductor Screen**  
Semi-conductive material (Bonded type)

**Insulation**  
XLPE (Cross-linked Polyethylene)

**Insulation Screen**  
Semi-conductive material (Strippable type)

**Longitudinal Waterblocking**  
Semi-conductive water swelling tape

**Metallic Screen**  
Copper wires with Open Helix Copper Tape Screen

**Longitudinal Waterblocking**  
Non-conductive water swelling tape

**Outer Sheath**  
MDPE (Medium Density Polyethylene)

## DIMENSIONS

NO. OF CORE	NOMINAL CROSS SECTIONAL AREA	NOMINAL SCREEN CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm <sup>2</sup>	mm <sup>2</sup>	mm	mm	mm	kg/km
1	50	16	4.5	1.7	25.80	939
1	70	16	4.5	1.8	27.80	1171
1	95	16	4.5	1.8	29.10	1429
1	120	16	4.5	1.9	30.70	1689
1	150	25	4.5	2	32.70	2072
1	185	25	4.5	2	34.20	2415
1	240	25	4.5	2.1	36.60	2993
1	300	25	4.5	2.2	39.20	3575
1	400	35	4.5	2.3	42.20	4502
1	500	35	4.5	2.4	45.80	5505
1	630	35	4.5	2.5	50.70	6936
1	800	35	4.5	2.6	55	8728

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	MAXIMUM CONDUCTOR AC RESISTANCE AT TEMP. AND 50HZ Ω/km	CAPACITANCE uF/km	CHARGING CURRENT A/km	DIELECTRIC LOSSES W/km	REACTANCE AT 50 HZ ohm/km	CONDUCTOR S.C.C ISEC kA	COPPER SCREEN S.C.C FOR ISEC kA	CURRENT RATING A		
									Laid in ground	Laid in duct	Lain in free air
50	0.387	0.494	0.214	0.586	20.37	0.133	7.15	1.75	230	172	229
70	0.268	0.342	0.245	0.67	23.29	0.125	10.01	1.75	277	213	289
95	0.193	0.247	0.267	0.73	25.39	0.12	13.585	1.75	330	255	348
120	0.153	0.196	0.29	0.794	27.64	0.116	17.16	1.75	374	295	403
150	0.124	0.159	0.317	0.868	30.20	0.112	21.45	2.73	418	333	456
185	0.0991	0.128	0.343	0.937	32.59	0.109	26.455	2.73	472	387	525
240	0.0754	0.098	0.383	1.047	36.42	0.104	34.32	2.73	532	445	621
300	0.0601	0.078	0.423	1.156	40.23	0.101	42.9	2.73	596	509	716
400	0.047	0.062	0.466	1.275	44.35	0.097	57.2	3.82	668	580	824
500	0.0366	0.049	0.523	1.429	49.74	0.094	71.5	3.82	752	661	948
630	0.0283	0.039	0.601	1.643	57.17	0.092	90.09	3.82	834	750	1076
800	0.0221	0.032	0.669	1.829	63.65	0.089	114.4	3.82	910	840	1209

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity 120 °C.Cm/Watt
- Burial depth 0.5 m
- Ground temperature 15 °C
- Air temperature 25 °C
- Frequency 50 Hz