

# N2XS(F)2Y 18/30 (36)kV Cable



## APPLICATION

Medium voltage power cables for distribution networks and generation units, suitable for external installation including direct buried and in buried cable ducts. UV Resistant.

## CHARACTERISTICS

**Voltage Rating**  $U_0/U$  ( $U_m$ )  
18/30 (36)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, IEC 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 Copper

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

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

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

**Longitudinal Waterblocking**  
Semi-conductive swellable tape

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

**Longitudinal Waterblocking**  
Swellable Tapes

**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	8	2	33.4	1248
1	70	16	8	2	35.2	1492
1	95	16	8	2.1	36.5	1765
1	120	16	8	2.1	37.9	2030
1	150	25	8	2.2	39.9	2430
1	185	25	8	2.2	41.4	2792
1	240	25	8	2.3	44.0	3409
1	300	25	8	2.4	46.6	4020
1	400	35	8	2.5	49.6	4983
1	500	35	8	2.6	53.2	6025
1	630	35	8	2.7	58.1	7510
1	800	35	8	2.8	62.4	9350

## 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 1SEC kA	COPPER SCREEN S.C.C FOR 1SEC kA	CURRENT RATING A		
									Laid in ground	Laid in duct	Lain in free air
50	0.387	0.494	0.141	0.799	57.52	0.149	7.15	1.75	230	172	233
70	0.268	0.342	0.159	0.898	64.62	0.14	10.01	1.75	279	216	289
95	0.193	0.247	0.171	0.968	69.68	0.135	13.585	1.75	334	262	356
120	0.153	0.196	0.184	1.043	75.09	0.13	17.16	1.75	380	302	411
150	0.124	0.159	0.199	1.128	81.23	0.125	21.45	2.73	424	240	464
185	0.0991	0.128	0.213	1.208	86.95	0.121	26.455	2.73	478	395	533
240	0.0754	0.098	0.236	1.334	96.06	0.116	34.32	2.73	537	451	628
300	0.0601	0.078	0.258	1.46	105.11	0.111	42.9	2.73	602	515	725
400	0.047	0.062	0.282	1.595	114.87	0.107	57.2	3.82	673	585	828
500	0.0366	0.049	0.313	1.772	127.59	0.103	71.5	3.82	756	663	953
630	0.0283	0.039	0.356	2.015	145.11	0.101	90.09	3.82	836	754	1077
800	0.0221	0.032	0.394	2.227	160.34	0.097	114.4	3.82	911	845	1213

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