

# Overhead Power Transmission Cable

Stranded aluminum and steel-cored aluminum wire designed for overhead power transmission. Specifications and performance adhere to industry standards, detailing dimensions, resistance, tensile strength, and weight.

**铝绞线及钢芯铝绞线**

本产品符合GB/T 17891-2017标准。

产品执行标准

产品型号及名称：见表格 10-1

表 10-1 铝绞线及钢芯铝绞线的主要性能

规格	标称截面积 (mm²)	标称直径 (mm)	重量 (kg/km)	直流电阻 (Ω/km)	抗拉强度 (N)	伸长率 (%)
16	16.70	5.1	43.5	1.802	2480	2.5
50	50.00	9	135.5	0.5786	7930	2.5
120	120.00	14.25	333.5	0.2373	19420	2.5
300	300.00	22.4	820.4	0.09689	46850	2.5
800	800.00	36.9	2225	0.03588	115900	2.5

产品的规格、结构及性能见 表格 10-2 至 10-3

表 10-2 铝绞线的规格、结构及性能

规格	标称截面积 (mm²)	标称直径 (mm)	重量 (kg/km)	直流电阻 (Ω/km)	抗拉强度 (N)	伸长率 (%)
16	16.70	5.1	43.5	1.802	2480	2.5
25	25.00	7.5	63.5	1.210	3540	2.5
35	35.00	9	87.5	0.854	4900	2.5
50	50.00	11.5	122.5	0.5786	6700	2.5
70	70.00	14.25	172.5	0.414	9100	2.5
95	95.00	16.5	232.5	0.305	12200	2.5
120	120.00	19.25	302.5	0.2373	16400	2.5
150	150.00	22.5	382.5	0.185	21100	2.5
185	185.00	26.5	472.5	0.142	26400	2.5
240	240.00	31.5	602.5	0.108	33600	2.5
300	300.00	37.5	772.5	0.081	43600	2.5
400	400.00	45.5	1012.5	0.061	57600	2.5
500	500.00	54.5	1312.5	0.048	75600	2.5
630	630.00	64.5	1672.5	0.038	97600	2.5
800	800.00	77.5	2225	0.030	127600	2.5

## Product Overview

### High-Performance Overhead Transmission Solutions

These overhead power transmission cables are designed for efficient energy delivery across aerial power lines. Available in both aluminum stranded (JL) and steel-core aluminum stranded (JL/G) configurations, they offer a versatile solution for various structural and environmental requirements. The range includes specialized anti-corrosion models to ensure long-term reliability in challenging atmospheric conditions.

#### Application

Suitable for overhead power lines for the transmission of electrical energy.

## Technical Classifications

### Available Types

Model Type	Description
JL (LJ)	Aluminum stranded wire
JL/G1A, JL/G1B, JL/G2A, JL/G2B, JL/G3A (LGJ)	Steel-core aluminum stranded wire
JL/G1AF, JL/G2AF, JL/G3AF (LGJF)	Anti-corrosion steel-core aluminum stranded wire

## Physical Properties

### Nominal Cross-Sectional Area Range

16 mm², 25 mm², 35 mm², 50 mm², 70 mm², 95 mm², 120 mm², 150 mm², 185 mm², 210 mm², 240 mm², 300 mm², 400 mm², 500 mm², 630 mm², 800 mm²

## Technical Specifications

### Aluminum Stranded Wire Performance Data

Nominal Area (mm²)	Stranding (No./Dia. mm)	Outer Diameter (mm)	Max DC Resistance (Ω/km)	Calculated Tensile Force (N)	Weight (kg/km)
16	16/1.70	5.1	1.802	2480	43.5
50	7/3.00	9	0.5786	7930	135.5
120	19/2.85	14.25	0.2373	19420	333.5
300	37/3.20	22.4	0.09689	46850	820.4
800	61/4.10	36.9	0.03588	115900	2225

### Maximum Calculated Tensile Force

**115900 N**

Max Tensile Force

## Logistics

### Standard Delivery Lengths

- 4000m (for 16mm<sup>2</sup>)
- 1500m (for 50mm<sup>2</sup>)
- 1000m (standard for 95mm<sup>2</sup> - 500mm<sup>2</sup>)
- 800m (for 630mm<sup>2</sup> - 800mm<sup>2</sup>)