



# 蓄电池化成充电连接线

*BATTERY FORMING CHARGING CABLE*



**安徽康诺自控设备有限公司**

ANHUI KANGNUO AUTOMATIC EQUIPMENT CO., LTD.



## 公司简介 → → COMPANY PROFILE

安徽康诺自控设备有限公司，坐落于风景秀丽、物产丰富的安徽省滁州市天长市——这片被誉为“皖东明珠，鱼米之乡”的土地上。我们是一家集研发、生产、销售与外贸于一体的综合性企业，致力于为客户提供高品质，多品类的蓄电池化成充电连接线和自动化设备及相关产品。

我们的主营产品包括：工业自动控制系统装置，蓄电池化成充电连接线，仪器仪表，电线、电缆，五金产品，金属制品，金属结构，货物进出口，技术进出口。

我们坚持“质量第一，客户至上”的经营理念，产品不仅畅销全国各地，更远销海外多个国家和地区。为了确保产品的高质量和安全性，我们获得了AAA认证、ISO9000系列认证、RoHS认证以及CE认证等多项权威认证。

安徽康诺自控设备有限公司将继续秉持创新精神，不断优化产品和服务，努力成为全球领先的自动化设备供应商。我们热忱欢迎国内外客户前来洽谈合作，共同开创美好未来。



Anhui Kangnuo Automatic Equipment Co., Ltd. is located in Tianchang City, Chuzhou City, Anhui Province, which is known as the "Pearl of Eastern Anhui and A Land of Abundance" due to its beautiful scenery and abundant resources. We are a comprehensive enterprise integrating R & D, production, sales, and foreign trade, committed to providing customers with a variety of high-quality battery conversion charging connection lines, automation equipment, and related products.

Our main products cover industrial automatic control devices, battery conversion and charging connection lines, instruments and meters, wires and cables, hardware products, metal products, metal structures, import and export of goods and technology.

We adhere to our business philosophy of "quality first, customer first", and our products are not only sold well throughout the country, but also exported to a number of countries and regions overseas. In order to ensure the high quality and safety of our products, we have obtained many authoritative certifications, such as AAA certification, ISO9000 certification, RoHS certification, and CE certification.

Kangnuo will continue to uphold the spirit of innovation, continuously optimize products and services, and strive to become a leading global supplier of automatic equipment. Customers, whether at home or abroad, are warmly welcome to cooperate with us jointly for a promising future.

# 蓄电池专用充电连接线技术说明

## Specifications of Charging Cable Dedicated for Battery

### 一. 产品的应用:

该产品应用于SLI铅酸蓄电池, AGM, EFB高能蓄电池, 阀控式蓄电池的化成充电。

### 二. 产品的工作原理:

通过对蓄电池正负两极的串联, 使之达到快速的能量转换。

### 三. 产品的工作特点:

1. 具有优良的导电性能。
2. 具有极好的抗腐蚀, 耐温, 耐候性能。
3. 具有良好的阻燃性能。
4. 操作简单, 使用方便, 高效节能。

### 四. 产品的主要技术特点:

符合标准SAE/DIN, JIS(锥度接线柱: 1/9)。

电缆绝缘- 特种橡胶 (EPDM/CPE)

铜绞线-多股柔性镀锡铜线

端子绝缘- PVC/PE

锡铅含量高, 寿命长

#### 载流容量:

8mm<sup>2</sup> = 高达40安培

10 mm<sup>2</sup> = 高达50安培

16 mm<sup>2</sup> = 高达85安培

25 mm<sup>2</sup> = 高达100安培

最高工作温度80℃

### 五. 产品的主要技术参数:

1. 多股软芯特种阻燃耐腐橡胶电缆:

252/0.20      316/0.20

509/0.20      793/0.20

2. 载流量: 40A/50A/85A/100A

3. 连接电缆长度: 按照客户需要定制

4. 导体截面: 8/10/16/25mm<sup>2</sup>

5. 电缆外径: 7.5 ± 0.5mm ( 8mm<sup>2</sup> )

9.5 ± 0.5mm

( 10mm<sup>2</sup>/16mm<sup>2</sup> )

11.5 ± 0.5mm ( 25mm<sup>2</sup> )

6. 额定电压: 600V/1KV 450V/750V

7. 使用温度: -20℃-+90℃

8. 铅锡合金: 锡 4.57%

9. 加工要求: 详见图纸。

### 1. Application:

used for the formation and charging of SLI lead-acid batteries, AGM, EFB high-energy batteries, and valve regulated batteries.

### 2. Working principle:

to achieve rapid energy conversion by connecting the positive and negative poles of the battery in series.

### 3. Advantages it has:

- a. excellent conductivity.
- b. excellent corrosion resistance, temperature resistance, and weather resistance.
- c. excellent flame-retardant properties.
- d. easy to operate, convenient to use, efficient and energy-saving.

### 4. Main technical features:

Compliant with SAE/DIN, JIS (taper terminal: 1/9) standards.

Cable Insulation - Special Rubber (EPDM/CPE)

Copper stranded wire - multi strand flexible tinned copper wire

Terminal insulation - PVC/PE

Current carrying capacity:

8mm<sup>2</sup> = up to 40 A      10 mm<sup>2</sup> = up to 50 A

16 mm<sup>2</sup> = up to 85 A      25 mm<sup>2</sup> = up to 100 A

Maximum working temperature up to 80 °C

### 5. Main technical parameters:

a. Multi strand soft core special flame-retardant and corrosion-resistant rubber cable:

8 mm<sup>2</sup> = 252/0.20 / 10 mm<sup>2</sup> = 316/0.20 / 16 mm<sup>2</sup> = 509/0.20 / 25 mm<sup>2</sup> = 793/0.20

b. Current carrying capacity: 40A/50A/85A/100A

c. The length of the connecting cable can be customized as per customer needs

d. Conductor cross-section: 8/10/16/25mm<sup>2</sup>

e. Cable outer diameter: 7.5 ± 0.5mm (8mm<sup>2</sup>)

9.5 ± 0.5mm (10mm<sup>2</sup>/16mm<sup>2</sup>)

11.5 ± 0.5mm (25mm<sup>2</sup>)

f. Rated voltage: 600V/1KV

g. Operating temperature: -20 °C - +90 °C

h. Lead antimony alloy: antimony 4.57%

i. Processing requirements: Please refer to the drawings for details.

## 1.KSTL系列 KSTL series

( 充电电流适用范围：大于60A,电池适用范围：SLI EFB AGM )

(applicable charging current: >60A, applicable battery: SLI, EFB, AGM)

### 充电线的命名:

Nomination of charging cable:

|      |   |                          |   |                                   |   |                   |   |                |   |           |
|------|---|--------------------------|---|-----------------------------------|---|-------------------|---|----------------|---|-----------|
| KSTL | — | □                        | — | □                                 | — | □                 | — | □              | — | □         |
|      |   | ↓                        |   | ↓                                 |   | ↓                 |   | ↓              |   | ↓         |
|      |   | 电缆长度                     |   | 电缆截面积                             |   | B-粗端柱             |   | S-双头           |   | W-无       |
|      |   | Cable length             |   | Cross-sectional area of the cable |   | B- Thick terminal |   | S- Double head |   | W- None   |
|      |   | 客户要求                     |   | 10mm <sup>2</sup>                 |   | S-细端柱             |   | D-单头           |   | G-绿色      |
|      |   | As per customer's demand |   | 16mm <sup>2</sup>                 |   | S- Thin terminal  |   | D- Single head |   | G- Green  |
|      |   |                          |   | 25mm <sup>2</sup>                 |   | P-正极              |   |                |   | Y-黄色      |
|      |   |                          |   |                                   |   | P- Positive pole  |   |                |   | Y- Yellow |
|      |   |                          |   |                                   |   | N-负极              |   |                |   | B-蓝色      |
|      |   |                          |   |                                   |   | N- Negative pole  |   |                |   | B- Blue   |
|      |   |                          |   |                                   |   | L-螺旋              |   |                |   |           |
|      |   |                          |   |                                   |   | L- Helix          |   |                |   |           |
|      |   |                          |   |                                   |   | Z-直角              |   |                |   |           |
|      |   |                          |   |                                   |   | Z- Right angle    |   |                |   |           |

### 产品展示 Products on display



## 2.KNTL系列 KNTL series

( 充电电流适用范围: 40A-60A, 电池适用范围: SLI EFB AGM )

(applicable charging current: 40A-60A, applicable battery: SLI, EFB, AGM)

### 充电线的命名:

Nomination of charging cable:

|                          |   |                                   |   |                   |   |                |   |           |
|--------------------------|---|-----------------------------------|---|-------------------|---|----------------|---|-----------|
| KNTL                     | — | □                                 | — | □                 | — | □              | — | □         |
| 电缆长度                     |   | 电缆截面面积                            |   | B-粗端柱             |   | S-双头           |   | W-无       |
| Cable length             |   | Cross-sectional area of the cable |   | B- Thick terminal |   | S- Double head |   | W- None   |
| 客户要求                     |   | 8mm <sup>2</sup>                  |   | S-细端柱             |   | D-单头           |   | G-绿色      |
| As per customer's demand |   | 10mm <sup>2</sup>                 |   | S- Thin terminal  |   | D- Single head |   | G- Green  |
|                          |   | 16mm <sup>2</sup>                 |   | P-正极              |   |                |   | Y-黄色      |
|                          |   |                                   |   | P- Positive pole  |   |                |   | Y- Yellow |
|                          |   |                                   |   | N-负极              |   |                |   | B-蓝色      |
|                          |   |                                   |   | N- Negative pole  |   |                |   | B- Blue   |
|                          |   |                                   |   | L-螺旋              |   |                |   |           |
|                          |   |                                   |   | L- Helix          |   |                |   |           |
|                          |   |                                   |   | Z-直角              |   |                |   |           |
|                          |   |                                   |   | Z- Right angle    |   |                |   |           |

### 产品展示 Products on display



### 3.KCTL系列 KCTL series

( 充电电流适用范围：小于40A,电池适用范围：SLI EFB AGM )

(applicable charging current: <40A, applicable battery: SLI, EFB, AGM)

#### 充电线的命名:

Nomination of charging cable:

|      |   |                          |   |                                   |   |                   |   |                |   |           |
|------|---|--------------------------|---|-----------------------------------|---|-------------------|---|----------------|---|-----------|
| KCTL | — | □                        | — | □                                 | — | □                 | — | □              | — | □         |
|      |   | ↓                        |   | ↓                                 |   | ↓                 |   | ↓              |   | ↓         |
|      |   | 电缆长度                     |   | 电缆截面积                             |   | B-粗端柱             |   | S-双头           |   | W-无       |
|      |   | Cable length             |   | Cross-sectional area of the cable |   | B- Thick terminal |   | S- Double head |   | W- None   |
|      |   | 客户要求                     |   | 8mm <sup>2</sup>                  |   | S-细端柱             |   | D-单头           |   | G-绿色      |
|      |   | As per customer's demand |   | 10mm <sup>2</sup>                 |   | S- Thin terminal  |   | D- Single head |   | G- Green  |
|      |   |                          |   |                                   |   | P-正极              |   |                |   | Y-黄色      |
|      |   |                          |   |                                   |   | P- Positive pole  |   |                |   | Y- Yellow |
|      |   |                          |   |                                   |   | N-负极              |   |                |   | B-蓝色      |
|      |   |                          |   |                                   |   | N- Negative pole  |   |                |   | B- Blue   |
|      |   |                          |   |                                   |   | L-螺旋              |   |                |   |           |
|      |   |                          |   |                                   |   | L- Helix          |   |                |   |           |
|      |   |                          |   |                                   |   | Z-直角              |   |                |   |           |
|      |   |                          |   |                                   |   | Z- Right angle    |   |                |   |           |

#### 产品展示 Products on display



## 4.KFTL系列 KFTL series

( 充电电流适用范围：不大于100A,电池适用范围：阀控式蓄电池 )

(applicable charging current:  $\leq 100A$ , applicable battery: valve-regulated battery)

### 充电线的命名:

Nomination of charging cable:



## 产品展示 Products on display



## 5.KZTL系列 KZTL series

(适用范围: T1→T2 螺纹端子→T2 直角端子→T2)

(applicable: T1→T2, thread terminal→T2, right angle terminal→T2)

### 转换头的命名:

Nomination of adaptor:

KZTL — ZH



P-正极  
P- positive pole

N-负极  
N- negative pole



01 - T1→T2

02-螺纹端子→T2  
02-thread terminal→T2

03-直角→T2  
03-Right Angle→T2



W-无色  
W-none

Y-黄色  
Y-Yellow

B-绿色  
B-Green

## 产品展示 Products on display



## 6.KSCWZ/KSCWR系列温度传感器（自动化温度控制系统）

KSCWZ/KSCWR series temperature sensor

(automatic temperature control system)

### 产品展示 Products on display



## 7.化成充电线的生产及检测场景

### PRODUCTION AND TESTING SCENES FOR FORMATION CHARGING CABLES

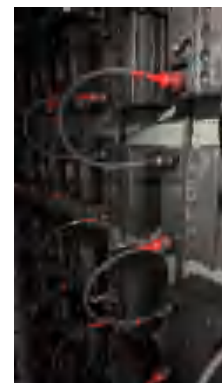
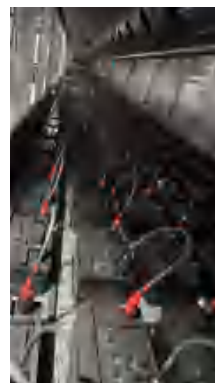
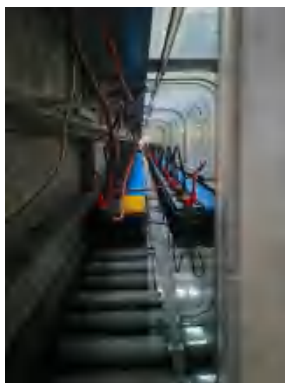
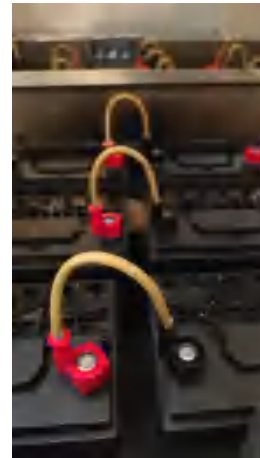
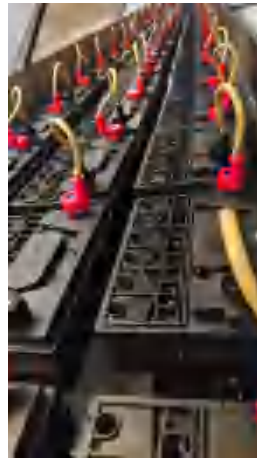
#### 产品展示 Products on display



## 8.化成充电线的使用场景

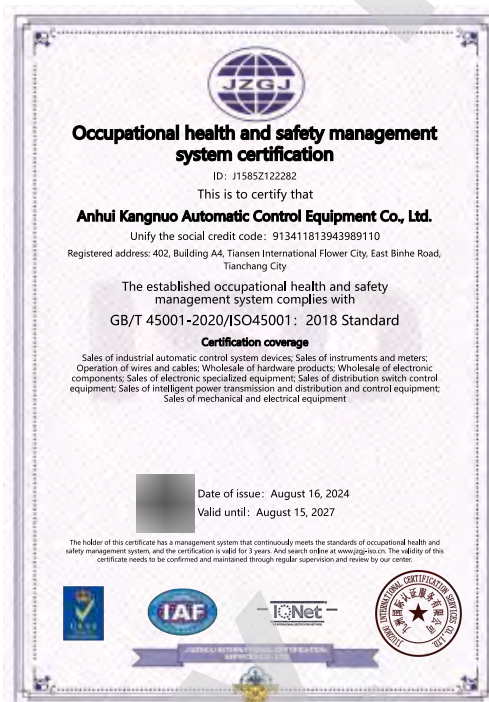
### APPLICABLE SCENES FOR FORMATION CHARGING CABLES

#### 产品展示 Products on display



# 公司资质 Qualifications









## 公司业绩 Corporate performance

### 公司部分销售业绩表

| 序号 | 用户名称              | 项目名称       | 规格 | 数量      | 交货时间    |
|----|-------------------|------------|----|---------|---------|
| 1  | 柯锐世(长兴)电气有限公司     | SLI/AGM充电线 | 全系 | 360000根 | 2010年至今 |
| 2  | 柯锐世(重庆)电气有限公司     | SLI 充电线    | 全系 | 168000根 | 2012年至今 |
| 3  | 柯锐世(滨州)电气有限公司     | AGM充电线     | 全系 | 48500根  | 2016年至今 |
| 4  | 安徽理士电源技术有限公司      | SLI/ 工业充电线 | 全系 | 45000根  | 2022年至今 |
| 5  | 安徽力普拉斯电源技术有限公司    | 工业充电线      | 全系 | 27000根  | 2022年至今 |
| 6  | 肇庆理士电源技术有限公司      | 工业充电线      | 全系 | 8700根   | 2022年至今 |
| 7  | 江苏理士电池技术有限公司      | 工业充电线      | 全系 | 16500根  | 2023年至今 |
| 8  | 风帆有限责任公司清苑分公司     | SLI 充电线    | 全系 | 20000根  | 2021年至今 |
| 9  | 风帆有限责任公司徐水高新电源分公司 | SLI/AGM充电线 | 全系 | 19000根  | 2022年至今 |
| 10 | 风帆(扬州)有限责任公司      | SLI/AGM充电线 | 全系 | 7500根   | 2023年至今 |
| 11 | 唐山风帆宏文蓄电池有限公司     | SLI 充电线    | 全系 | 16000根  | 2021年至今 |
| 12 | 河南超威正效电源有限公司      | SLI/AGM充电线 | 全系 | 73000根  | 2018年至今 |
| 13 | 骆驼集团襄阳蓄电池有限公司     | SLI/AGM充电线 | 全系 | 120000根 | 2016年至今 |
| 14 | 骆驼集团华中蓄电池有限公司     | SLI 充电线    | 全系 | 42000根  | 2021年至今 |
| 15 | 骆驼集团华南蓄电池有限公司     | SLI/AGM充电线 | 全系 | 92000根  | 2016年至今 |

|    |                   |            |    |         |         |
|----|-------------------|------------|----|---------|---------|
| 16 | 骆驼集团安徽蓄电池有限公司     | SLI 充电线    | 全系 | 28700根  | 2022年至今 |
| 17 | 吐鲁番铅酸蓄电池有限公司      | SLI 充电线    | 全系 | 19700根  | 2023年至今 |
| 18 | 骆驼集团马来西亚分公司       | SLI 充电线    | 全系 | 31600根  | 2023年至今 |
| 19 | 骆驼集团美国分公司         | SLI/AGM充电线 | 全系 | 46000根  | 2023年至今 |
| 20 | 扬州阿波罗蓄电池有限公司      | SLI/AGM充电线 | 全系 | 62000根  | 2019年至今 |
| 21 | 浙江天能汽车电池有限公司      | SLI/AGM充电线 | 全系 | 18600根  | 2023年至今 |
| 22 | 武汉南都新能源科技有限公司     | SLI/AGM充电线 | 全系 | 23000根  | 2021年至今 |
| 23 | 艾诺斯（中国）华达电源系统有限公司 | SLI 充电线    | 全系 | 123000根 | 2015年至今 |
| 24 | 艾诺斯（扬州）华达电源系统有限公司 | SLI 充电线    | 全系 | 135000根 | 2015年至今 |
| 25 | 艾诺斯（重庆）华达电源系统有限公司 | SLI 充电线    | 全系 | 110000根 | 2016年至今 |

注：

- 1.以上为我公司国内销售的部分业绩。
- 2.目前我公司针对海外市场的开发，组建了一支专业的销售团队，产品远销欧洲，亚洲，非洲等 46 个国家，2024年实现化成连接线年销售四十多万根的业绩。
- 3.公司将以最好的品质，实惠的价格，热情周到的服务喜迎接海内外客户的到来。
- 4.具体联系方式如下：

**Davis**

Sales Department

Anhui Kangnuo Automatic Equipment Co.,Ltd.

WhatsApp/Wechat:+86 13909601448

E-mail:sales@ahkangnuo.com

## Part of Sales Performance

| Item | User Name                                       | Project Name                   | Specification | Quantity   | Delivery Time |
|------|-------------------------------------------------|--------------------------------|---------------|------------|---------------|
| 1    | Clarios (Changxing) Electric Co., Ltd.          | SLI/AGM charging cable         | Full series   | 360000 pcs | 2010 till now |
| 2    | Clarios (Chongqing) Electric Co., Ltd.          | SLI charging cable             | Full series   | 168000 pcs | 2012 till now |
| 3    | Clarios (Binzhou) Electric Co., Ltd.            | AGM charging cable             | Full series   | 48500 pcs  | 2016 till now |
| 4    | Anhui LEOCH I Power Technology Co., Ltd.        | SLI/ industrial charging cable | Full series   | 45000 pcs  | 2022 till now |
| 5    | Anhui LEOCH II Power Technology Co., Ltd.       | Industrial charging cable      | Full series   | 27000 pcs  | 2022 till now |
| 6    | Zhaoqing LEOCH Power Technology Co., Ltd.       | Industrial charging cable      | Full series   | 8700 pcs   | 2022 till now |
| 7    | Jiangsu LEOCH Battery Technology Co., Ltd.      | Industrial charging cable      | Full series   | 16500 pcs  | 2023 till now |
| 8    | Sail Co., Ltd. Qingyuan Subsidiary              | SLI charging cable             | Full series   | 20000 pcs  | 2021 till now |
| 9    | Sail Co., Ltd. Xushui High New Power Subsidiary | SLI/AGM charging cable         | Full series   | 19000 pcs  | 2022 till now |
| 10   | Sail (Yangzhou) Co.,                            | SLI/AGM charging               | Full          | 7500 pcs   | 2023 till now |

|    |                                                     |  |                              |                |               |                  |
|----|-----------------------------------------------------|--|------------------------------|----------------|---------------|------------------|
|    | Ltd.                                                |  | cable                        | series         |               |                  |
| 11 | Tangshan Sail<br>Hongwen Battery<br>Co.,Ltd.        |  | SLI charging<br>cable        | Full<br>series | 16000 pcs     | 2021 till<br>now |
| 12 | Henan Chilwee<br>Genshore Power Co.,<br>Ltd.        |  | SLI/AGM<br>charging<br>cable | Full<br>series | 73000 pcs     | 2018             |
| 13 | Camel Group<br>Xiangyang Battery<br>Co.,Ltd.        |  | SLI/AGM<br>charging<br>cable | Full<br>series | 120000<br>pcs | 2016 till<br>now |
| 14 | Camel Group<br>Huazhong Battery<br>Co.,Ltd.         |  | SLI charging<br>cable        | Full<br>series | 42000 pcs     | 2021 till<br>now |
| 15 | Camel Group<br>Huanan BatteryCo.,<br>Ltd.           |  | SLI/AGM<br>charging<br>cable | Full<br>series | 92000 pcs     | 2016 till<br>now |
| 16 | Camel Group Anhui<br>BatteryCo.,Ltd.                |  | SLI charging<br>cable        | Full<br>series | 28700 pcs     | 2022 till<br>now |
| 17 | Turpan Lead Acid<br>BatteryCo.,Ltd.                 |  | SLI charging<br>cable        | Full<br>series | 19700 pcs     | 2023 till<br>now |
| 18 | Camel Group<br>MalaysiaSubsidiary                   |  | SLI charging<br>cable        | Full<br>series | 31600 pcs     | 2023 till<br>now |
| 19 | Camel Group<br>America Subsidiary                   |  | SLI/AGM<br>charging<br>cable | Full<br>series | 46000 pcs     | 2023 till<br>now |
| 20 | Yangzhou Apollo<br>BatteryCo.,Ltd.                  |  | SLI/AGM                      | Full<br>series | 62000 pcs     | 2019 till<br>now |
| 21 | Zhejiang Tianneng<br>Automobile Battery<br>Co.,Ltd. |  | SLI/AGM<br>charging<br>cable | Full<br>series | 18600 pcs     | 2023 till<br>now |

|    |                                                           |                              |                |               |                  |
|----|-----------------------------------------------------------|------------------------------|----------------|---------------|------------------|
| 22 | Wuhan Nandu New<br>Energy Technology<br>Co., Ltd.         | SLI/AGM<br>charging<br>cable | Full<br>series | 23000 pcs     | 2021 till<br>now |
| 23 | EnerSys (China)<br>Huada Power<br>System Co., Ltd.        | SLI charging<br>cable        | Full<br>series | 123000<br>pcs | 2015 till<br>now |
| 24 | EnerSys (Yangzhou)<br>Huada Power<br>System Co., Ltd.     | SLI charging<br>cable        | Full<br>series | 135000<br>pcs | 2015 till<br>now |
| 25 | EnerSys<br>(Chongqing) Huada<br>Power System Co.,<br>Ltd. | SLI charging<br>cable        | Full<br>series | 110000<br>pcs | 2016 till<br>now |

Remarks:

1. The above mentioned is part of our domestic sales performance.
2. For the overseas market exploration we have built up a professional team of marketing, with products sold to 46 countries in Europe, Asia and Africa. In 2024, we have sold as many as over 400 thousand pieces of charging cable.
3. Customers, whether domestic or overseas, are warmly welcome with our best quality and thoughtful service at fair prices.
4. Detailed contact as follows:

**Davis**

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## 安徽康诺自控设备有限公司

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