



XINRI

江阴新日冶金装备有限公司

JIANGYIN XINRI METALLURGY EQUIP CO.,LTD



电缆卷筒系列

Cable Reel Series



XINRI

品质赢得信赖 诚信缔造未来



新日简介 XINRI Profile

致力于技术研发
走向国际化经营

江阴新日冶金装备有限公司位于美丽的港口城市 - 江阴，南接无锡，北靠长江，东临张家港，西接常州，交通十分便利。

企业创建于 90 年代初，是起重电磁铁、电缆卷筒以及金属制品电控装置的专业生产厂家。拥有高级工程师、工程师及各类技术人员数十名，科技开发力量雄厚。产品均采用计算机辅助设计（CAD）和计算机辅助制造（CAM）。近年来，公司设计、制造取得长远进步。我公司于 2008 年通过了 ISO9001 质量管理体系认证，并获得了多项实用型专利以及发明专利。

本企业以独特的外观设计、高品位的产品质量、合理的价格、良好的售后服务赢得了市场信誉。产品覆盖国内所有省市地区，出口日本，美国，意大利，英国等三十多个国家，深得用户的一致好评。

企业本着“脚踏实地创一流，明明白白创效益，为你我为企业，一切都是为用户”的宗旨，全体员工团结拼搏，为一流产品而努力奋斗。

Jiangyin Xinri Metallurgy Equip Co.,ltd. located in a beautiful port city-Jiangyin, South is Wuxi, North is Changjiang River, East is zhang jiagang city, West is Changzhou city. Transportation, is very convenient.

Our factory was found in the beginning of 1990' s , is a professional manufacturer of electromagnet, cable reel drum and electric control cabinet. Our factory has more than 10 high lever engineers, engineer and technician. All products are designed and manufactured with CAD and CMA. We have passed ISO9001 standard in 2008. All products are designed and manufactured in accordance with ISO9001 standard.

Our products have special out shape design with high quality and have reasonable price, good after- sale service , we have good market reputation in the world. Our products are exported to Japan, America, Italy, England and more than 30 countries etc. We get many good evaluate from our customers.

Our factory do our best to make our products the best in the world and make friends from all over the world. Our tenet is "Honesty, Pragmatism and Innovation.

目录

Contents

致力于技术研发
走向国际化经营

A/2 新日简介

XINRI Profile

B/4 新日的服务承诺

XINRI Sales and ServiceQualification Certificate

B/5 新日的资质与专利

XINRI Qualification and Patent

C/6 电缆卷筒系列

Cable Reel Series

C/7 弹簧式电缆卷筒

Spring type cable reel drum

C/8 DJ1 型弹簧电缆卷筒

DJ1 type spring cable reel drum

C/9 DJ2 型弹簧电缆卷筒

DJ2 type spring cable reel drum

C/10 JT2 型弹簧电缆卷筒

JT2 type spring cable reel drum

C/11 DJ5 型弹簧电缆卷筒

DJ5 type spring cable reel drum

C/12 电机驱动式电缆卷筒

Motor type cable reel drum

C/13 DJ1D 型电动式电缆卷筒

DJ1D type motor cable reel drum

C/15 DJ1C 型磁滞式电缆卷筒

DJ1C type hysteresis cable reel drum

C/17 DJ1Z 型磁滞式电缆卷筒

DJ1Z type hysteresis cable reel drum

C/18 DJ1B 型变频式电缆卷筒

DJ1B type variable-frequency cable reel drum

C/19 特殊用途电缆卷筒

Special application cable reel drum

新日的服务与承诺

致力于技术研发
走向国际化经营

XINRI Sales and Service

本企业是起重电磁铁、各类除铁器及其电气控制装置、电缆卷筒、电缆插件及各类电气控制柜（箱）的专业生产厂家。经过多年的努力，产品在质量上有较大的提高，在用户中享有较高的声誉，得到同行业的一致好评。目前，我企业已拥有雄厚的技术力量和优秀的售后服务队伍。在售前、售中、售后服务上处处为用户着想，提供必要的现场技术支持，为客户作现场调试，并为客户传授和培训相关应用技术。本企业对客户提出的技术服务及维修服务请求，在 24 小时内响应，实行一年内包修，终生服务的原则，真正为客户着想。

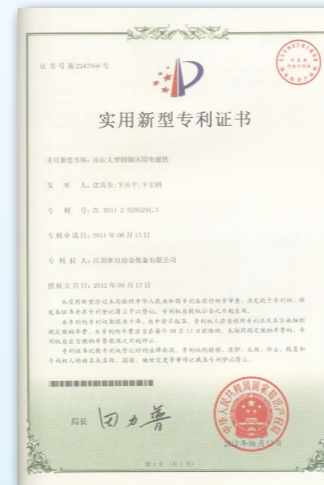
Our factory main products are lifting electromagnet, various separators, cable reel drum, cable connector, and various electric control equipment. After years of efforts, the products has great improvement in quality. We get high reputation from our customers. At present, Our company has a high technical and excellent after sale service. Customers are the importance during the whole sale, we supply the technical support during installation and adjustment. Technical and repair service will be supplied to customer with 24 hours. We guarantee one year warranty, life-long service.



新日资质与专利

致力于技术研发
走向国际化经营

XINRI Qualification and Pante



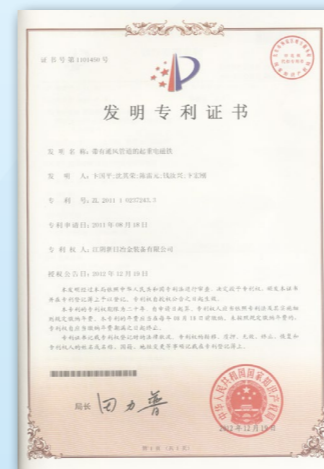
吊运大型圆钢坯用电磁铁
Electromagnet lifting round billet



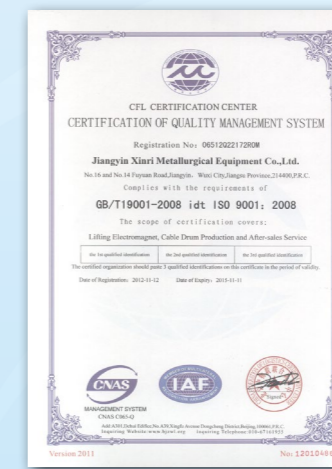
吊运空心钢卷用起重电磁铁
Electromagnet lifting hollow strip



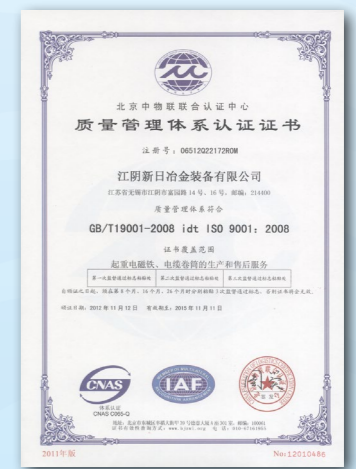
多轨道绕线器
Multi track winder



带有通风管道的起重电磁铁
Electromagnet with air conduit



ISO9001



ISO9001

电缆卷筒系列

Cable Reel Series

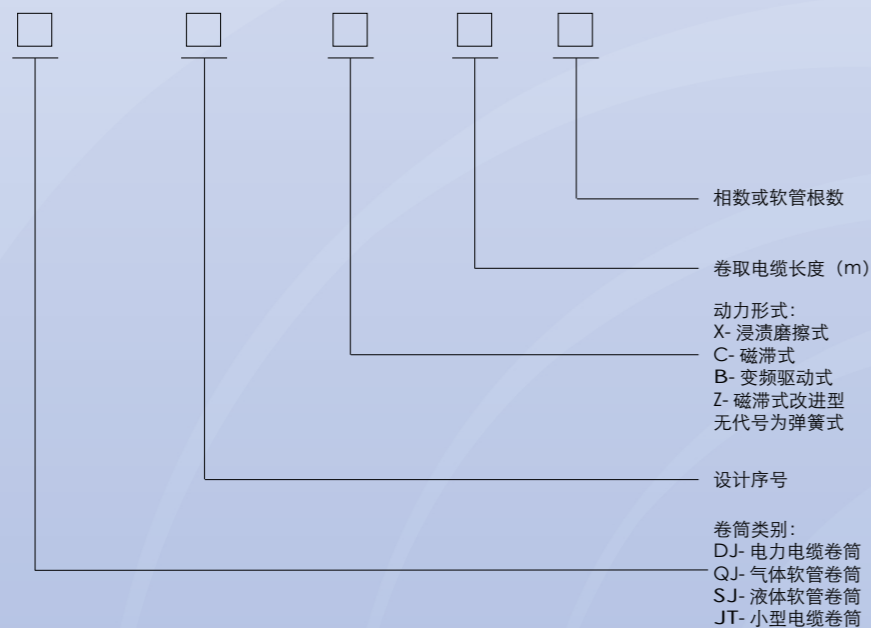
致力于技术研发
走向国际化经营

◎ 选型指南 Selection Guide

- 1、根据电缆线的卷取动力可分为弹簧钢带式 and 电动机式
 - ①短距离小电流的采用弹簧钢带式，有 DJ1、DJ2、DJ5、JT2 等型式
 - ②长距离大电流的一般采用电动机式，有 DJ1D、DJ1C、DJ2C、DJ1Z 等型式
- 2、根据电缆线卷取方式可分为水平方式和垂直方式，在订货时必须注明
- 3、根据安装需要配置过线滑轮时，在订货时必须注明。
- 4、特种用途的卷筒可以根据需要另行设计

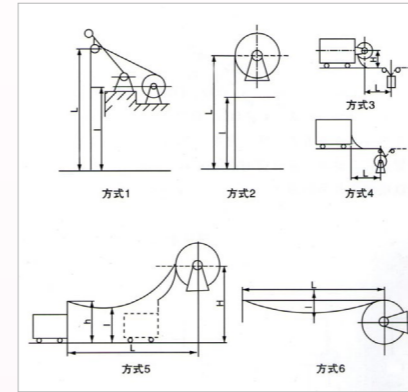
1. There are two kinds cable reel drum according the winding power: spring type and motor type.
 - ① Spring type cable reel drum is suitable for short distance and low current, type like DJ1, DJ2, DJ5, JT2 etc.
 - ② Motor type cable reel drum is suitable for long distance and high current, type like DJ1D, DJ1C, DJ2C, DJ1Z etc.
2. There are two kinds winding type according the cable winding type : horizontal and vertical type. This type should be wrote clear when booking.
3. Line pulley will be supplied or not, should be wrote clear when booking.
4. We can design special application cable reel drum according to buyers demand

◎ 型号说明 Demonstration Of The Type



弹簧式电缆卷筒 / Spring type cable reel drum

◎ 安装方式 Installation



◎ 工作原理 Works

用电设备（如小车或行车等移动设备）移动时，拉动卷筒放缆，此时平面蜗卷弹簧卷绕在芯轴上，弹簧储存能量。当用电设备返回时，在弹簧力的作用下，卷筒反方向旋转，同步收卷电缆。

When device is moving, will pull the drum release the cable, spring inside the drum will keep the strength. When device move back, the spring strength will push the cable reel retract the cable at the same step.

◎ 结构特点 Design Feature

- 1、以平面蜗卷弹簧为动力，无需电耗，工作安全可靠
- 2、采用集电滑环 - 碳刷架结构传递电能，供电连续平稳
- 3、设置了可逆转机构，避免卷筒逆转而折断弹簧
- 4、结构简单，安装、调试、维护方便

1. Safe and reliable working, no need electric, only spring power strength.
2. Using slip ring and carbon brush to transmit electric power, power supply continuous and smooth.
3. There is reversible structure inside, avoid the spring break off when spring reverse.
4. Structure is simple, installation, adjustment, maintenance are all very convenient.

◎ 主要产品型号 Main Products Types

- 1、DJ1 系列：采用链条传动，增加了产品的可塑性，可根据用户的使用要求配置弹簧规格和链条传动比，使电缆受力适宜。
- 2、DJ2 系列：具有结构紧凑，体积小，重量轻，安装方便等特点。广泛应用与电动平车、移动小车、电动抓斗等移动电气设备。
- 3、DJ5 系列：该产品采用塑料外壳制作，结构紧凑，属于微型弹簧式电缆卷筒，主要用于电流在 10A 以下，移动距离在 10 米范围内，并且安装空间较小的场合。
- 4、JT1 系列：弹簧机座，卷筒筒及滑环装置分体设计，使电缆卷筒更加平稳，维护方便。
- 5、JT2 系列：主要用于电流在 50A 以下，移动距离在 30 米范围内。主要特点和结构与 DJ2 相似。

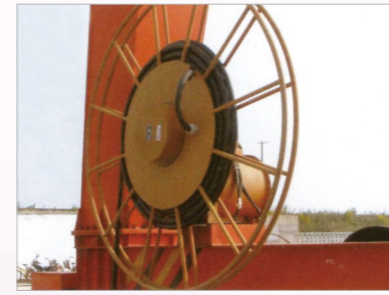
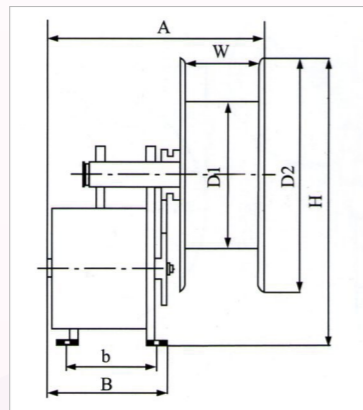
1. DJ1 series : use chain to transmit, it make the products have plasticity. It can use the spring type and chain transmission ratio according to customer' s demand, in order to make the cable can work well on the cable reel drum.
2. DJ2 series: compact structure, small size, light weight, easy and simple installation. It is widely used in electric flat car, mobile small car, electric grab and other mobile device.
3. DJ5 series: this kind cable reel use plastic shell, compact structure, it is small size spring type cable reel drum. Current is lower than 10A, move distance is no more than 10meters, and installation space should be very small.
4. JT1 series: spring base, winder drum and slip ring are designed separated, this structure make the cable reel drum is very stable, and maintenance is easy.
5. JT2 series : suitable for the current is no more than 50A, mobile distance is no more than 30meters. Main feature and structure are similar with DJ2.

DJ1 型弹簧电缆卷筒 / DJ1 type spring cable reel drum

◎选型指南 Selection Guide

- 1、DJ1 型电缆卷筒主要由机座、链条传动装置和卷线筒组合，适用于起重电磁铁、门吊、塔吊、桥式起重机等移动电气设备
- 2、弹簧机座和卷线筒分体设计，使电缆卷筒的应用更加广泛，能根据不同的使用场合进行不同的搭配组合
- 3、最大额定电流 200 安培
- 4、根据不同的使用场合，有不同的产品规格。其外形及安装尺寸见下表所示：

- 1.DJ1 type cable reel main parts are:base, chain and winder drum, It is suitable for lifting electromagnet, gantry crane,tower crane,bridge crane and other mobile device.
- 2.Base and winder drum are designed separated, this kind structure make this kind cable reel drum widely used in different working conditions.
- 3.Max current is 200A.
- 4.There is different product standard according to different using conditions, the appearance and installation size are as following:



◎外形尺寸表 Dimension Table

| 型号 | 外形尺寸 | | | | | | | 安装尺寸 | | | 重量 (kg) |
|-----------|------|-----|-----|-----|------|-----|------|------|-----|-----|---------|
| | A | B | C | D1 | D2 | W | H | b | l | d | |
| DJ1-20/4 | | | | | | | | | | | 130 |
| DJ1-25/4 | | | | | | | | | | | 130 |
| DJ1-30/4 | 702 | 313 | 260 | 500 | 800 | 250 | 900 | 260 | 200 | Φ14 | 130 |
| DJ1-40/4 | | | | | | | | | | | 150 |
| DJ1-50/4 | | | | | | | | | | | 150 |
| DJ1-60/4 | 784 | 395 | 360 | 600 | 1000 | 250 | 1100 | 340 | 300 | | 250 |
| DJ1-75/4 | | | | | | | | | | | 250 |
| DJ1-85/4 | | | | | | | | | | | 300 |
| DJ1-95/4 | 866 | 395 | 360 | 600 | 1500 | 55 | 1500 | 340 | 300 | | 350 |
| DJ1-100/4 | | | | | | | | | | | 350 |

注：表中重量是不包含电缆线的重量

表中电缆芯数均为三相四线制，若需特殊要求，可在订货时注明

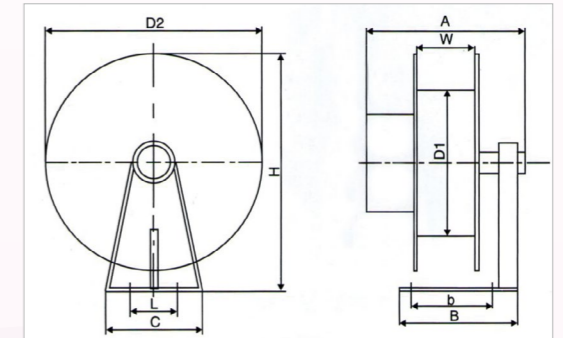
The weight in sheet is not include the cable weight.
All the cable in the sheet are three phase four cores, please write clear when booking if there is special requirements

DJ2 型弹簧电缆卷筒 / DJ2 type spring cable reel drum

◎选型指南 Selection Guide

- 1、DJ2 型电缆卷筒是 DJ1 型电缆卷筒的派生系列
- 2、弹簧机座和卷线筒合为一体，使电缆卷筒的结构更加紧凑，具有体积小、重量轻，安装方便等优点
- 3、广泛应用于电动抓斗、电动平车、中小型起重电磁铁等移动设备的供电
- 4、最大额定电流 150 安培
- 5、根据不同的使用场合，有不同的产品规格。其外形及安装尺寸见下表所示

- 1.DJ2 type cable reel derive from DJ1 series cable reel drum.
- 2.Spring base and winder drum are in one structure, this kind design make the cable reel drum compact, many advantage feature like:small size, light weight and easy installation.
- 3.It is widely used in electric grab, electric flat car, lifting electromagnet and other mobile device power supply.
- 4.Max current is 150A.
- 5.There is different product standard according to different using conditions, the appearance and installation size are as following:



◎外形尺寸表 Dimension Table

| 造型 | 外形尺寸 | | | | | | | 安装尺寸 | | | 重量 (kg) |
|----------|------|-----|-----|-----|-----|-----|-----|------|-----|-----|---------|
| | A | B | C | D1 | D2 | W | H | b | l | d | |
| DJ2-15/4 | | | | | | | | | | | |
| DJ2-20/4 | | | | | | | | | | | |
| DJ2-25/4 | 410 | 260 | 240 | 400 | 630 | 250 | 680 | 230 | 210 | Φ13 | 85 |
| DJ2-30/4 | | | | | | | | | | | |
| DJ2-40/4 | | | | | | | | | | | |

注：表中重量是不包含电缆线的重量

表中电缆芯数均为三相四线制，若需特殊要求，可在订货时注明

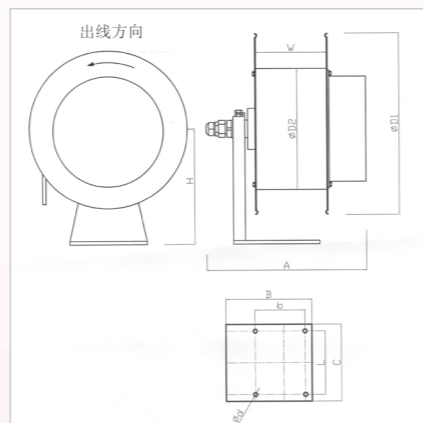
The weight in sheet is not include the cable weight.
All the cable in the sheet are three phase four cores, please write clear when booking if there is special requirements

JT2 型弹簧电缆卷筒 / JT2 type spring cable reel drum

◎选型指南 Selection Guide

- 1、JT2 型电缆卷筒是 JT1 型电缆卷筒的派生系列。将滑环和弹簧均内置于卷线筒内部（一些特殊信号场合采用旋转连接器），这样大大缩小了电缆卷筒的外形。主要由机座和卷线筒二部份组成，使电缆更加紧凑，安装方便。
- 2、最大额定电流可达 50 安培。
- 3、主要适用于多芯电缆线和小电流短距离的卷取。
- 4、根据不同的使用场合，有不同的产品规格。其外形及安装尺寸见下表所示：

- 1.JT2 type cable reel derive from JT1 series cable reel drum. Slip ring and spring are all inside the winder drum, this structure reduce the cable reel drum size to the smallest. Main parts are base and winder, structure is compact and maintenance is easy.
- 2.Max current is 50A.
- 3.It is mainly used in multi core and low current ,short distance cable winding and release.
- 4.There is different product standard according to different using conditions,the appearance and installation size are as following:



◎外形尺寸表 Dimension Table

| 参数 型号 | 外形尺寸 | | | | | | 安装尺寸 | | | |
|-----------|------|-----|-----|-----|-----|-----|------|-----|-----|----|
| | A | C | D1 | D2 | H | W | B | b | L | d |
| JT2-10/A4 | 266 | 128 | 350 | 230 | 216 | 110 | 145 | 80 | 100 | 9 |
| JT2-10/A7 | 306 | 128 | 350 | 230 | 216 | 110 | 145 | 80 | 100 | 9 |
| JT2-20/A4 | 352 | 170 | 400 | 260 | 255 | 160 | 190 | 110 | 140 | 9 |
| JT2-15/B4 | 352 | 170 | 400 | 260 | 255 | 160 | 190 | 110 | 140 | 9 |
| JT2-30/A4 | 352 | 170 | 450 | 260 | 255 | 160 | 190 | 110 | 140 | 9 |
| JT2-15/A7 | 392 | 170 | 450 | 260 | 255 | 160 | 190 | 110 | 140 | 9 |
| JT2-30/A7 | 412 | 220 | 520 | 330 | 320 | 160 | 220 | 150 | 160 | 13 |
| JT2-30/B4 | 372 | 220 | 520 | 330 | 320 | 160 | 220 | 150 | 160 | 13 |
| JT2-50/A4 | 372 | 220 | 560 | 330 | 350 | 160 | 220 | 150 | 160 | 13 |

注：表中重量是不包含电缆线的重量

表中电缆芯数均为三相四线制，若需特殊要求，可在订货时注明

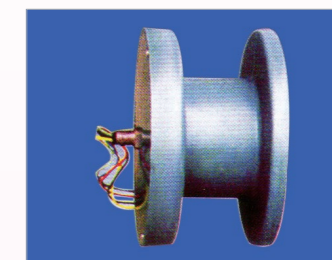
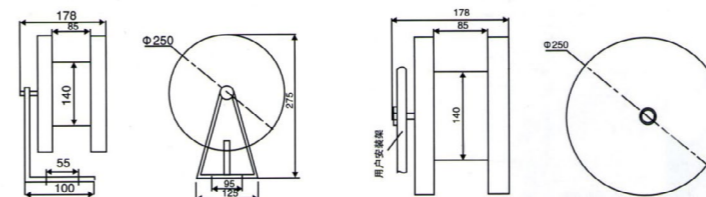
The weight in sheet is not include the cable weight.
All the cable in the sheet are three phase four cores, please write clear when booking if there is special requirements

DJ5 型弹簧电缆卷筒 / DJ5 type spring cable reel drum

◎选型指南 Selection Guide

- 1、DJ5 型电缆卷筒采用塑料外壳制作、弹簧机座和卷线筒合为一体，使电缆卷筒的结构更加紧凑，具有体积小，重量轻，安装方便等优点。
- 2、广泛应用于机床加工，各类精加工设备的配套产品。
- 3、根据不同的使用场合，安装方式可采用轴安装型和支架安装型两种。

- 1.DJ5 type cable reel shell is plastic material, spring base and winder drum are in one structure, this kind design make the cable reel drum structure is compact, many advantages like:small size, light weight and easy installation.
- 2.It is widely used in machine tool, as accessories for various accurate processing device.
- 3.There are two kinds installation type according to different using conditions: using shaft and bracket.



JT1 型弹簧电缆卷筒 / JT1 type spring cable reel drum

◎选型指南 Selection Guide

- 1、JT1 型电缆卷筒主要由弹簧机座、卷线筒和滑环装置三部分组成，并且弹簧机座，卷线筒及滑环装置分体设计，属滑环外置式电缆卷筒，使电缆卷筒更加平稳，维护方便。
- 2、最大额定电流 200 安培。
- 3、根据不同的使用场合，有不同的产品规格。其外形及安装尺寸见下表所示。

- 1.JT1 type cable reel drum three main parts are: spring base, winder drum, slip ring.spring base, winder drum and slip ring are designed separated. Cable reel drum' s slip ring is external, this structure make the cable reel drum is more steady, maintenance is easy and simple.
- 2.Max current is 200A.
- 3.There is different product standard according to different using conditions, the appearance and installation size are as following:

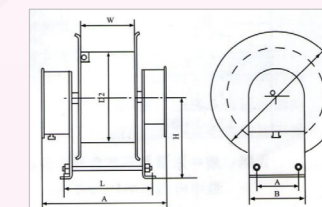
◎外形尺寸表 Dimension Table

| 参数 型号 | 外形尺寸 | | | | | | | 安装尺寸 | | | 重量 (kg) |
|----------|------|-----|-----|-----|-----|-----|-----|------|-----|-----|------------|
| | B | F | C | D1 | D2 | W | H | A | E | d | |
| JT1-15/4 | 250 | 560 | 280 | 280 | 450 | 220 | 510 | 200 | 370 | Φ13 | 100 |
| JT1-20/4 | | | | | | | | | | | |
| JT1-25/4 | 350 | 650 | 385 | 460 | 650 | 220 | 710 | 280 | 370 | Φ16 | 125 |
| JT1-30/4 | | | | | | | | | | | |

注：表中重量是不包含电缆线的重量

表中电缆芯数均为三相四线制，若需特殊要求，可在订货时注明

The weight in sheet is not include the cable weight.
All the cable in the sheet are three phase four cores, please write clear when booking if there is special requirements



电机驱动式电缆卷筒 / Motor cable reel

◎工作原理 Works

电动式电缆卷筒适用于卷取大规格的供电电缆和长距离的供电电缆，该产品采用了液浸式摩擦传动装置或磁滞式离合器为同步差速机构，保证了电缆卷筒收放电缆的速度始终与移动电气设备的速度同步。

Motor type cable reel drum is suitable for large size power supply cable and long distance power supply cable, this series cable reel drum use immersion friction drive system or hysteresis clutch as synchronous differential mechanism ensure the cable winding and release speed is the same as mobile device speed.

◎结构特点 Design Feature

- 1、同步性能好 采用良好的打滑机构，使卷取速度始终与移动设备保护同步
- 2、自锁性能好 当卷筒停转时，电缆不自动滑落
- 3、调节范围大 力矩调节范围大，张力恒定
- 4、适应性能好 能适应各种不同的使用条件

- 1.Synchronization performance is good, this kind motor cable reel use better quality skid device, it make the winding speed is the same as mobile device.
- 2.Self-locking performance is good, cable does not slip down automatic when cable drum stop moving.
- 3.Adjust scope is large, torque adjustment is large, tension is constant.
- 4.Adaptive performance is good, can work in various environment.

◎主要产品型号 Main Products Types

- 1、DJ1D 系列：主要由变速箱、液浸式摩擦传动装置、卷线盘、电动机、集电器和电气控制箱组成。安装方便、使用简单、便于维护。主要适用于港口码头、工矿企业的门吊、塔吊、桥式起重机等移动设备的供电。
- 2、DJ1C 系列：主要由行星减速机、主减速机、电动机、磁滞式联轴器、卷线盘、集电器及电气控制箱组成。安装方便、使用简单、便于维护。广泛应用于港口门座起重机、集装箱起重机、装船机、卸船机、大型龙门式起重机、塔式起重机等重型机械设备的供电。
- 3、DJ1Z 系列：DJ1Z 型电缆卷筒主要由减速机、磁滞式联轴器、卷线盘、集电器、制动式电动机、传感器及电气控制箱组成。采用磁滞式联轴器为同步差速机械，利用磁力耦合原理保证电缆卷线盘收放电缆的速度始终与移动设备同步。
- 4、DJ1B (G) 系列：DJ1B (G) 型电缆卷筒主要由变频器箱、变频电动机、圆柱-圆锥齿轮减速机、集电箱、电缆卷盘和安装底座组成。变频电动机采用 Y 系列 B5 安装结构，它直接与圆柱-圆锥齿轮减速器的圆柱齿轮端相联接，圆柱-圆锥齿轮减速器输出端为空心输出轴，其一端联接电缆卷盘，另一端联接集电箱，圆柱-圆锥齿轮减速器和集电箱均固定在安装底座上，变频器箱为单独独立的一个部分可按用户要求安装在合适的位置。

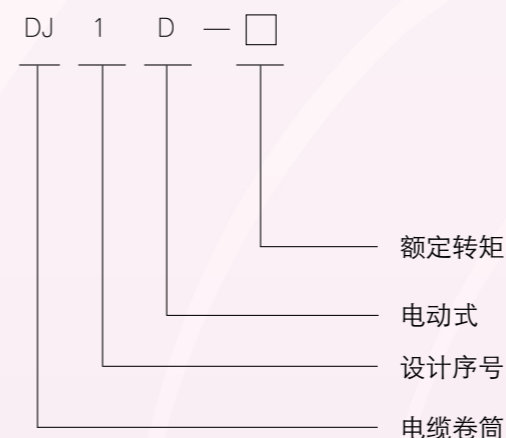
- 1.DJ1D series: main parts are speed changing box, immersion friction drive, winder, motor, current collector and electrical control cabinet. Installation is easy, simple operation, simple maintenance. It is mainly working in port,crane, tower crane, bridge crane power supply.
- 2.DJ1C series: main parts are planetary reducer, main speed reduction box, motor, hysteresis coupling, winder, current collector and electrical control cabinet. Installation is easy, simple operation, simple maintenance. It is mainly working in port,crane, container crane, ship loader, ship unloaders, large gantry crane, tower crane power supply.
- 3.DJ1Z series: main parts are reduction box, motor, hysteresis coupling, winder, current collector, braked motor, sensor and electrical control cabinet. Hysteresis coupling is synchronous differential mechanism, magnetic coupling principle make the cable winding and release speed is always the same as mobile device.
- 4.DJ1B (G) type cable reel drum main parts are: variable-frequency cabinet, variable-frequency motor, cylinder- circular cone gear reducer, current collection box, winder, installation base. Variable-frequency motor use Y series B5 installation structure, it connect to cylinder- circular cone gear reducer' s cylinder wheel gear end. Cylinder- circular cone gear reducer out put end is hollow output shaft, one end connect to cable winder, the other end connect to current collection box. Cylinder- circular cone gear reducer and current collection box are all installed on the base. Frequency converter box is a single part, can be installed on a suitable place by user.

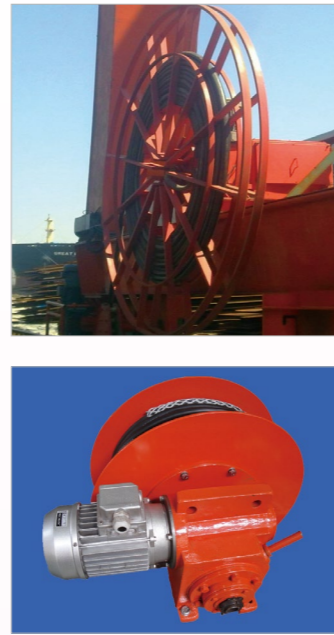
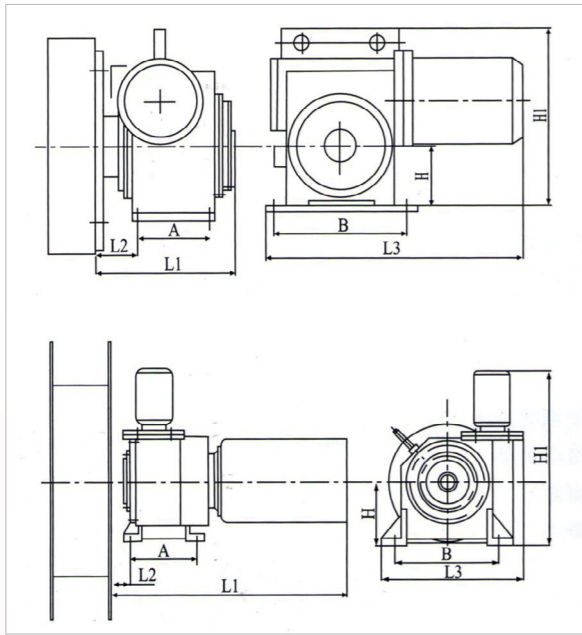
DJ1D 电机驱动式电缆卷筒 /DJ1D motor cable reel

◎工作原理 Works

- 1、DJ1D (又称为 EM 型) 型电缆卷筒主要由变速箱、液浸式摩擦传动装置、卷线盘、电动机、集电器和电气控制箱组成。安装方便、使用简单、便于维护。主要适用于港口码头、工矿企业的门吊、塔吊、桥式起重机等移动设备的供电。
- 2、电缆线的张力调节范围大，用户可自行根据需要调节张力。
- 3、同步性能好，采用液浸式摩擦传动装置，保持良好的打滑性能，使卷线筒始终与移动设备保持速度同步
- 4、自锁性能好，当电缆卷筒的传动电机断电时，变速箱的自锁性蜗轮副装置能保证电缆线不滑落。
- 5、根据安装方式，当电源供电安装在移动设备的端部时，根据移动设备的移动方向要求卷线筒卷电缆线时，移动设备控制电动机通电工作，从而达到收卷电缆线；反之而要求卷线筒放缆时，电动机停止工作，打滑机构打滑。当电源供电安装在移动设备的中间位置时，在过线滑轮部位装一限位开关，根据电缆线的偏向和移动设备的移动方向共同确定电动机的工作与停止，从而达到收揽与放缆的目的。从而保护电缆线不受损坏。
- 6、最大额定电流可达 400 安培。
- 7、根据不同的使用场合，有不同的产品规格。其外形及安装尺寸、技术参数如下页表格所示：

- 1.DJ1D (also known as EM type) type cable reel drum main parts are:speed changing box, immersion friction drive, winder, motor, current collector and electrical control cabinet. Installation is easy, simple operation, simple maintenance. It is mainly working in port,crane, tower crane, bridge crane power supply.
- 2.Cable torque adjust scope is large, user can adjust the cable torque according working conditions.
- 3.Synchronization performance is good, this kind motor cable reel use better quality skid device, it make the winding speed is the same as mobile device.
- 4.Self-locking performance is good, cable does not slip down automatic when cable drum stop moving.
- 5.According to installation type, when it is end power supply, winder wind the cable according to mobile device moving ways, mobile device control the motor working in order to wind the cable; otherwise, winder release the cable, motor stop working, skid device skid. When it is middle supply, there is a limit switch on the pulley, motor working or not is decided by cable moving way and mobile device moving way, then can up to the cable wind and release aim. Protect the cable from damage.
- 6.Max current is 400A.
- 7.There is different product standard according to different using conditions,the appearance, technical parameters and installation size are as following:





◎ 外形尺寸表 Dimension Table

| 尺寸型号 | DJ1D- I | DJ1D- II | DJ1D- III | DJ1D- IV | DJ1D- V |
|------|---------|----------|-----------|----------|---------|
| A | 165 | 210 | 230 | 230 | 250 |
| B | 142 | 175 | 325 | 365 | 480 |
| H | 92 | 150 | 185 | 204 | 255 |
| H1 | 250 | 505 | 530 | 550 | 700 |
| L1 | 240 | 600 | 665 | 750 | 820 |
| L2 | 40 | 50 | 60 | 60 | 40 |
| L3 | 440 | 400 | 355 | 480 | 570 |

◎ 技术参数表 Technical Parameter Table

| 型号 | 适用电缆 | | 卷取速度 (m/min) | 卷取力矩 (NM) | 卷取距离 (M) | | 主机重量 (kg) |
|-----------|------------------------|-----|--------------|-----------|----------|-----|-----------|
| | 截面积 (mm ²) | 外径 | | | 水平 | 垂直 | |
| DJ1D- I | 4~6 | Φ21 | ≤ 60 | ≤ 30 | ±70 | 40 | 55 |
| DJ1D- II | ≤ 25 | Φ36 | ≤ 40 | ≤ 90 | ±100 | 60 | 88 |
| DJ1D- III | ≤ 35 | Φ39 | ≤ 45 | ≤ 180 | ±150 | 80 | 120 |
| DJ1D- IV | ≤ 50 | Φ46 | ≤ 45 | ≤ 350 | ±150 | 100 | 225 |
| DJ1D- V | ≤ 70 | Φ51 | ≤ 45 | ≤ 460 | ±150 | 120 | 245 |

注：表中重量是不包含电缆线的重量

表中更多芯电缆线的卷取，可在订货时注明

The weight in sheet is not include the cable weight.

All the cable in the sheet are three phase four cores, please write clear when booking if there is special requirements

DJ1C 型磁滞式电缆卷筒 / DJ1C type hysteresis cable reel drum

◎ 工作原理 Works

1、DJ1C 型电缆卷筒主要由行星减速箱、主减速箱、电动机、磁滞式联轴器、卷线盘、集电器及电气控制箱组成。采用磁滞式联轴器为同步差速机构，利用磁力耦合原理保证电缆卷线盘收放电缆的速度始终与移动设备同步。

2、其基本原理过程是这样的：由电动机将动力传到磁滞联轴器，经行星减速箱、主减速箱二级变速后将放大的力矩传到电缆卷线盘。电缆卷筒工作时，电动机始终向收揽方向旋转，当移动设备朝供电电源点反方向移动时，通过对电缆拖拽克服磁滞联轴器上磁场扭矩，使磁滞联轴器内部永久磁钢与感应盘之间磁场产生滑差，将卷线盘上的电缆放下，由于磁力耦合的作用，保证了放缆过程中电缆线始终处于张紧状态；当移动设备朝供电电源点移动时，电缆卷线筒朝设定的卷取方向旋转而收揽。通过调整磁滞联轴器的工作状态，用户可自行根据需要调节张力。

3、DJ1C 型磁滞式电缆卷筒广泛应用于港口门座起重机、集装箱起重机、装船机、卸船机、大型龙门式起重机、塔式起重机等重型机械设备的供电

4、根据安装方式，当电源供电安装在移动设备的端部时，根据移动设备的移动方向要求卷线筒卷电缆线时，移动设备控制电动机通电工作，从而达到收卷电缆线；反之而要求卷线筒放缆时，电动机停止工作。当电源供电安装在移动设备的中间位置时，在过线滑轮部位装一限位开关，根据电缆线的偏向和移动设备的移动方向共同确定电动机的工作与停止，从而达到收揽与放缆的目的。从而保护电缆线不受损坏。

5、根据使用场合的需要可设定电动机的数量，最多可配置 4 台电机，提高其卷取力矩。每个驱动头输出转矩调整范围为 130~300NM。

6、单环的最大额定电流可达 800 安培。

7、最大额定工作电压可达 10KV。

8、根据不同的使用场合，有不同的产品规格。其外形及安装尺寸、技术参数如下页表格所示。

1.DJ1C series: main parts are planetary reducer, main speed reduction box, motor, hysteresis coupling, winder, current collector and electrical control cabinet. Hysteresis coupling is synchronous differential mechanism, magnetic coupling principle make the cable winding and release speed is always the same as mobile device.

2.Working principle and process is : motor transfer the power strength to coupling, then planetary reducer, main speed reduction box' s two stage speed change, this amplifying torque will transfer to cable reel drum winder. Cable reel drum working, motor rotate way is the same as cable winding way, when mobile device move to the opposite direction of power supply, cable dragging surmount the magnetic torque from coupling, there will be sliding between permanent magnet steel of coupling and magnetic field of sense element, this sliding make the cable reel drum winder release the cable, magnetism-stress coupling keep the cable release process in tension state; when mobile device move to the direction of power supply, cable reel drum move to the winding direction rotate and wind the cable.

3.DJ1C type hysteresis cable reel drum mainly working in port, crane, container crane, ship loader, ship unloaders, large gantry crane, tower crane power supply.

4.According to installation type, when it is end power supply, demand winder wind the cable according to device mobile moving ways, mobile device control the motor working in order to wind the cable; otherwise, demand winder release the cable, motor stop working, skid device skid. When it is middle supply, there is a limit switch on the pulley, motor working or not is decided by cable moving way and mobile device moving way, then can up to the cable wind and release aim. Protect the cable from damage.

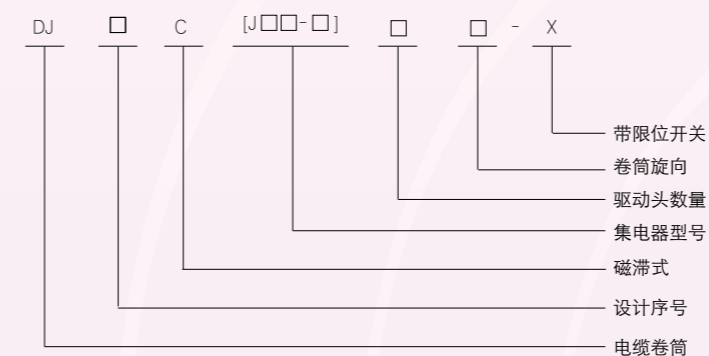
5.Motor quantity can be specified according to using environment, the max is 4 PCS motor, improve the winding torque. Every motor driving head output torque scope is 130-300NM.

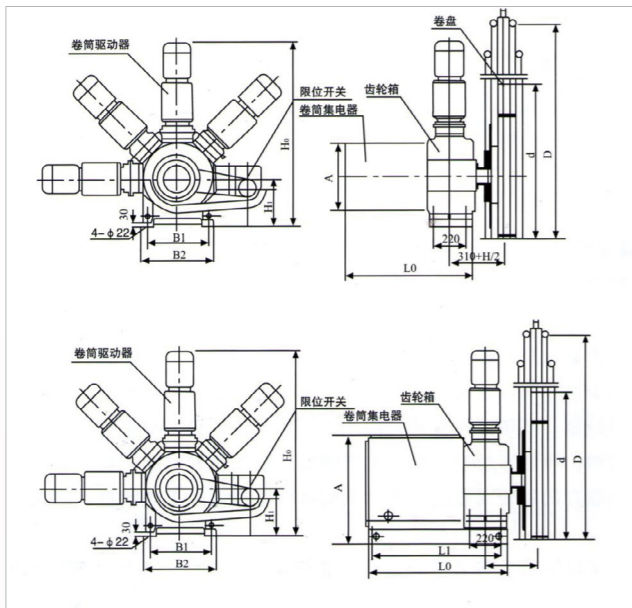
6.Single ring max current is 800A.

7.Max working voltage is 10KV.

8.There is different product standard according to different using conditions, the appearance, technical parameters and installation size are as following:

◎ 型号说明 Demonstration Of The Type





DJ1C 型电缆卷筒 (适用于: J1D、J1K、J2K、J2D、J3D、J4K)



◎ 外形及安装尺寸表 Outline Overall And Installing Dimensions

| 卷筒集电器型号 | L0 | H0 | H1 | B1 | B2 | A | 安装支架 | |
|----------------|-------------|------|------|-----|-----|-----|------|----|
| 动力用 (380V) J1D | 633 | 1205 | 325 | 420 | 480 | 583 | 不用 | |
| 动力用 (380V) J3D | 922 | 1346 | 461 | 636 | 682 | 837 | 用 | |
| 动力用 (10KV) J2D | 1228 | 1346 | 466 | 698 | 745 | 896 | 用 | |
| 控制用 | 14 环 J1K-14 | 633 | 1205 | 325 | 420 | 480 | 583 | 不用 |
| | 24 环 J2K-24 | 753 | 1346 | 466 | | | | |
| | 37 环 J3K-37 | 970 | | | | | 747 | 用 |
| | 48 环 J4K-48 | 1100 | | | | | | |

◎ 电缆卷筒集电器型号及规格表 Cable Reel Collector Type And Specification Table

| | 滑环碳刷配置数量 | | | | | | | | | | | | 重量 | 备注 | | |
|--------------|----------|------|--------|------|---------|------|---------|------|--------|------|--------|------|----|----|----------|--------------|
| | I 型动力环 | 每环碳印 | I 型接地环 | 每环碳印 | II 型动力环 | 每环碳印 | IV 型接地环 | 每环碳印 | V 型动力环 | 每环碳印 | V 型接地环 | 每环碳印 | | | III 型控制环 | 每环碳印 |
| J1D-4(380V) | 3 | 3 | 1 | 2 | | | | | | | | | | | 45 | 用于动力 电缆卷筒 |
| J2D-4(10KV) | | | | | 3 | 1 | 1 | 1 | | | | | | | 100 | |
| J3D-4(380V) | | | | | | | | | 3 | 4 | 1 | 2 | | | 120 | |
| J4D-4(10KV) | | | | | 3 | 1 | 1 | 1 | | | | | | | 100 | 用于控制 电缆卷筒 |
| J1K-14(380V) | | | | | | | | | | | | 14 | 1 | 60 | | |
| J2K-24(380V) | | | | | | | | | | | | 24 | 1 | 70 | | |
| J3K-37(380V) | | | | | | | | | | | | 37 | 1 | 80 | | |
| J4K-48(380V) | | | | | | | | | | | | 48 | 1 | 90 | | |

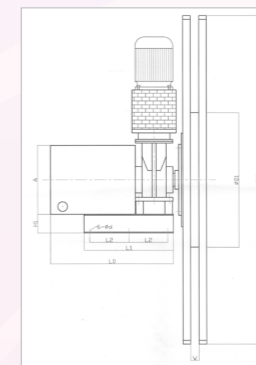
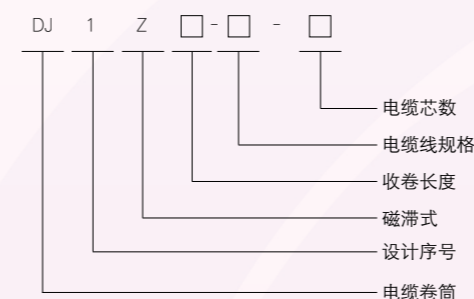
DJ1Z 型磁滞式电缆卷筒 / DJ1Z type hysteresis cable reel drum

◎ 工作原理 Works

- DJ1Z 型电缆卷筒主要由减速箱、磁滞式联轴器、卷线盘、集电器、制动式电动机、传感器及电气控制箱组成。采用磁滞式联轴器为同步差速机械，利用磁力耦合原理保证电缆卷线盘收放电缆的速度始终与移动设备同步。
- 其基本原理过程是这样的：收缆：由移动设备移动信号传递到电气控制箱，通过传感器检测为要求收缆，电机上制动器工作释放，同时控制电动机工作，通过磁滞联轴器传递到减速箱，将放大的力矩转动电缆卷线盘，达到收缆的目的。同时，通过磁滞联轴器的作用，使电动机的转速与移动设备之间的转速差，在磁滞联轴器内产生滑差，达到电缆线的收卷速度与设备移动速度同步。需要说明的是，通过调整联轴器永久磁块与扼磁板间的距离，可调整电缆卷筒的收卷力矩大小。放缆：通过移动设备移动信号传递到电气控制箱，通过传感器检测为要求放缆，则控制电动机不工作，同时电机上制动器不释放，使卷线盘有一定的锁紧力(但不完全锁紧)。电缆通过移动设备的移动将电缆线从卷线盘上拉出。
- DJ1Z 型磁滞式电缆卷筒广泛使用于港口门座起重机、集装箱式起重机、装船机、卸船机、大型龙门式起重机、塔式起重机等重型机械设备的供电，是 DJ1C 型磁滞式的升级产品，只需采用一只电动机，具有安装简单，使用维护方便等特点。
- 单环的最大额定电流可达 800 安培。
- 最大额定工作电压可达 10KV。

- DJ1Z series: main parts are reduction box, motor, hysteresis coupling, winder, current collector, braked motor, sensor and electrical control cabinet. Hysteresis coupling is synchronous differential mechanism, magnetic coupling principle make the cable winding and release speed is always the same as mobile device.
- Working principle and process is: winding cable: transfer mobile device moving signal to electrical control cabinet, sensor test this winding cable signal, the brake working of the motor release, control the motor working at the same time, transfer to reduction box through coupling, amplifying torque turn the cable winder, in order to up to the winding cable aim. At the same time, coupling make motor rotate speed and mobile device' s speed discrepancy produce sliding in the coupling, in order to keep cable winding speed is the same as mobile device. Noted:adjust the cable reel torque is through adjusting distance between permanent magnet and conjugate magnetic plate. Release cable:transfer mobile device moving signal to electrical control cabinet, sensor test this release cable signal, control motor stop working. At the same time, the brake of the motor do not release, cable drum has tight locking force. cable will be pulled out through the mobile device' s moving.
- DJ1Z type hysteresis cable reel drum mainly working in port, crane, container crane, ship loader, ship unloaders, large gantry crane, tower crane power supply. DJ1Z is the upgrade product of DJ1C. It only use one PCS motor, installation is simple, maintenance is convenient.
- Single ring max current is 800A.
- Max working voltage is 10KV.

◎ 型号说明 Demonstration Of The Type



◎ 外形尺寸表 Dimension Table

| 电缆线规格 | L0 | L1 | L2 | H1 | A | d |
|-----------|-----|-----|-----|-----|-----|----|
| 70 平方线以下 | 650 | 474 | 207 | 100 | 368 | 17 |
| 70 平方线以上 | 870 | 630 | 250 | 120 | 530 | 17 |
| 控制用 | 650 | 474 | 207 | 100 | 368 | 17 |
| 动力 (10KV) | 870 | 630 | 250 | 120 | 530 | 17 |

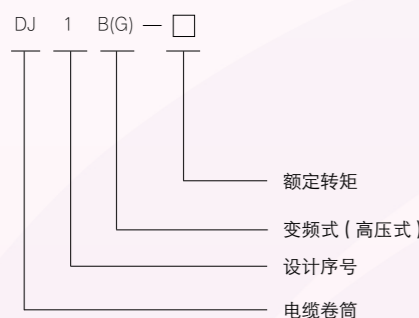
DJ1B(G) 型变频式高压式电缆卷筒 / DJ1B(G) type variable-frequency cable reel drum

工作原理 Works

- 1、DJ1B (G) 型电缆卷筒主要由变频器箱、变频电动机、圆柱-圆锥齿轮减速机、集电箱、电缆卷盘和安装底座组成。变频电动机采用 Y 系列 B5 安装结构，它直接与圆柱-圆锥齿轮减速器的圆柱齿轮端相联接，圆柱-圆锥齿轮减速机输出端为空心输出轴，其一端联接电缆卷盘，另一端联接集电箱，圆柱-圆锥齿轮减速器和集电箱均固定在安装底座上，变频器箱为单独独立的一个部分可按用户要求安装在合适的位置。
- 2、变频驱动电动机式电缆卷筒可根据设定的扭矩或张力，根据主机速度自行改变电动机控制频率，使变频电动机依据主机运行速度在任意转速下正常工作，从而使卷筒上的卷盘在收放电缆时速度始终与主机保护最佳状态。
- 3、变频调速工作原理及使用方法可详见变频器使用说明书，此处略去。
- 4、电缆卷筒还可以根据用户要求安装行程限位器。
- 5、电缆卷筒还可以根据用户要求另行设计信号类、软管类变频卷筒。

1. DJ1B (G) type cable reel drum main parts are: variable-frequency cabinet, variable-frequency motor, cylinder-circular cone gear reducer, current collection box, winder, installation base. Variable-frequency motor use Y series B5 installation structure, it connect to cylinder-circular cone gear reducer's cylinder wheel gear end. Cylinder-circular cone gear reducer out put end is hollow output shaft, one end connect to cable winder, the other end connect to current collection box. Cylinder-circular cone gear reducer and current collection box are all installed on the base. Frequency converter box is a single part, can be installed on a suitable place by user.
2. Variable-frequency motor cable reel drum has setting torque or tension, motor control frequency can be changed automatic according to main engine speed, variable-frequency motor can work regularly according to main engine speed, keep winder winding and release cable speed is the same as device all the time.
3. Frequency control working principle and application, Please check specifications.
4. Stroke limiter can be installed on the cable reel drum or not is buyer's demand.
5. We also can design signal and other soft hose variable-frequency cable reel drum.

型号说明 Demonstration Of The Type



型号及主要技术参数 Types And Main Technical Parameters

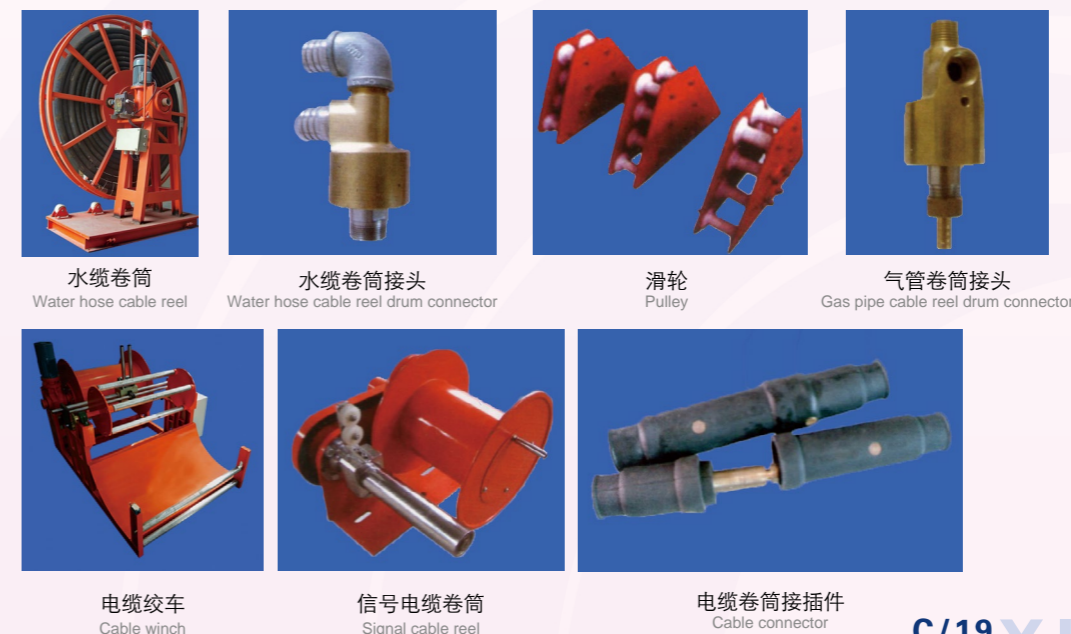
| 型号 | 定额输出电压 | 定额输出电流 | 电机功率 | 卷绕速度 |
|-----------|--------|--------|----------|-----------|
| DJ1B-650 | 380v | 500A | 1.5kw/4p | 0~40m/min |
| | 6kv | 200A | | |
| DJ1B-1250 | 380v | 800A | 2.2kw/4p | |
| DJ1B-2000 | 380v | 800A | 3kw/4p | |
| | 10KV | 200A | | |
| DJ1B-3000 | 380v | 800A | 5kw/4p | |

特殊用途电缆卷筒 / Special application cable reel drum

- 1、液（气）体软管卷筒 根据需要也分为弹簧式和电动机式两种。主要结构采用高速旋转式接头，一般卷筒采用不锈钢制作，或经过一些特殊处理。
- 2、微型电缆卷筒 使用场合主要是额定电流小，并且卷取距离短。卷筒采用不锈钢或塑料制作。结构紧凑、密封防雨、使用方便，集电器采用旋转连接器，导电安全可靠。
- 3、小电流长距离电缆卷筒 由于所需的额定电流较小，所以使用的电缆线较细，经不起较大的拉力。针对这一情况我们专门设计生产了这种小型电缆卷筒，外壳产用铝合金制作，结构轻巧，电缆线卷取轻松自如。
- 4、防爆型电缆卷筒 针对一些要求防爆的特殊场合使用的电缆卷筒，我们采用无滑环方式，使在运转过程中无火花产生，并且外壳符合防爆等级要求。
- 5、信号电缆卷筒 信号电缆卷筒是一种小型的信号电缆卷取装置，适用于各种平台移动车、小功率升降台以及各种移动设备的信号传输和控制，在通信、工控、计算机网络设施等行业得到广泛应用。依据使用场合可以制作为手动卷取式和自动卷取式两种。手动通过摇手柄进行手动收卷信号电缆线；而自动卷取方式依靠所使用的机械力自动拉出，同时卷绕弹簧组产生弹力作用于电缆，使电缆保持拉紧状态；回收电缆时，依靠弹簧的回弹力自动绕取电缆。导电方式也分为两种，一种是采用旋转连接器或水银接头，实现无间断连接；另一种是采用双卷筒方式，实现无触点连接。

1. liquid (gas) soft hose cable reel drum there are spring type and motor type. Main structure is high-speed rotary connector, material is stainless steel, or special handling.
2. Mini cable reel used on low current and short distance conditions. Material is stainless steel or plastic. Structure is compact, waterproof, collector with rotate connector, electric conduction is safe and reliable.
3. Low current long distance cable reel drum during the low current, cable is very thin, can not hold the strong puller strength. We design this special cable reel drum for this special condition. The shell material is aluminum alloy, light structure, cable winding is free and relaxed.
4. Explosion proof type cable reel drum A special working condition that demand anti-explosion. Signal cable reel drum signal cable reel drum is a small kind signal cable winding device. It is suitable for various flat car, low voltage lifting platform and various mobile device's signal transfer and control. There are two kinds winding type: winding by hand and winding automatic. Winding by hand means winding and release cable by hand through hand shank. Winding automatic means pulling cable by machine strength, spring produce elastic force, this elastic force keep cable in tension condition; when getting back cable, this elastic force of spring get cable back automatically.

卷筒配套产品 Reel Supporting Products





XINRI

江阴新日冶金装备有限公司

JIANGYIN XINRI METALLURGY EQUIP CO.,LTD

地址：江苏省江阴市皮弄村富园路16号

电话：0510-86117960

传真：0510-86110655

网址：www.xryj.com

邮编：214432