

DUNBARTON
AI TRANSPORT EXPERT

丹芭顿智能科技保定有限公司

DUNBARTON INTELLIGENT TECHNOLOGY BAODING CO., LTD.

地址：河北省保定市清苑区长城南大街3663号
电话：4006-156-555
传真：0312-8495665
邮箱：yt@dunbarton.com.cn
网址：www.dunbarton.com.cn

Add: 3663 Great Wall South Street, Qingyuan District,
Baoding City, Hebei Province
Tel: 4006-156-555
Fax: 0312-8495665
E-mail: yt@dunbarton.com.cn
Web: www.dunbarton.com.cn

北京办事处
北京远藤科技有限公司
BEIJING YUANTENG TECHNOLOGY CO., LTD

地址：北京市房山区城关街道顾八路1区1号-L198
电话：010-60257569
传真：010-60259219

Add: No. 1-L198, Guba Road, 1 District, Chengguan
Street, Fangshan District, Beijing
Tel: 010-60257569
Fax: 010-60259219



MAKE THE 让世界随心漂移
WORLD ELEVATE
SMART UPGRADE

公司简介

COMPANY PROFILE



美国丹芭顿国际集团创建于 1943 年, 是全球领先的运动控制系统和配件供应商, 在物料搬运, 工厂自动化以及人工智能领域有着卓越成就, 凭借多年的专业经验, 在运动控制设计和研发领域为全球 OEM 机器制造商提供突破性的解决方案, 实现无以伦比的可靠性和便捷性。

丹芭顿集团致力于开发起重设备及服务的行业标准技术, 公司拥有世界上最优秀的服务团队, 公司根据客户的需求、不同的环境, 向客户提供安全、高效、人性化起重解决方案, 最大的程度地减少停工时间, 并且优化总体拥有成本。

丹芭顿集团自创建至今, 已走过百年历程, 业务已遍布全球 50 个国家, 我们的客户涵盖工程机械、电子制造、机床及金属加工、造纸印刷、能源行业、航空航天、汽车及零部件、食品加工等各行业。

丹芭顿集团主要生产智能型提升机、智能型折臂起重机、气动平衡器、平衡器、组合式自立起重机、组合式悬挂起重机、单轨起重机和组合式旋臂起重机。

丹芭顿集团的智能型起重装置与传统的起重机相比, 丹芭顿智能型起重装置将生产效率提高 100%, 可实现 200:1 的生产比率, 大幅提高了生产效率。

Founded in 1943, DUNBARTON International Group is the world's leading supplier of motion control systems and accessories. It has outstanding achievements in material handling, factory automation and artificial intelligence. With years of professional experience, Dunbarton has offered breakthrough solutions, unmatched reliability and convenience for the global OEM machine builders in the field of motion control design and R&D.

DUNBARTON group is committed to the development of industry-standard technology about hoisting equipment and related services. The company has the world's most outstanding service team. According to the customer demand, different environment, We can provide a safe, efficient, user-friendly suspending solved scheme, minimize the downtime and optimize the overall cost of ownership.

DUNBARTON group has experienced a course of a century. The business has been developed in 50 countries across the globe. Our business involve engineering machinery, electronics manufacturing, machine tools and metal processing, paper printing, the energy industry, aerospace, automobiles, auto parts, food processing and other industries.

DUNBARTON group mainly produces intelligent elevator, intelligent type jib crane, gas dynamic balancer, spring balancer, combined type self-supporting crane, combined type suspension crane, monorail crane and combined type jib crane.

Compared with the traditional crane, the intelligent lifting device of DUNBARTON group will double the production efficiency, which can realize the production ratio of 200:1 and greatly improve the production efficiency.

**丹芭顿集团打造行业
最高端、最安全、最高效产品, 让所有客户满意**

**DUNBARTON BUILD THE MOST HIGH-END, SAFEST,
EFFICIENT PRODUCTS, MAKING ALL CUSTOMERS SATISFIED**

合作伙伴 PARTNERS



愿景 VISION

我们提供安全可靠的起升装备以及出色的服务。
We deliver safe and reliable lifting equipment with outstanding services.

使命 MISSION

我们致力于提供满足并超越客户期望的产品和服务。
We are committed to provide customers with products and services that exceed your expectations.

核心技术 THE CORE TECHNOLOGY



伺服电机 Servo Motor

Kollmorgen · 美国 USA

- 同类最佳性能
- 可以在标准产品中灵活找到完全匹配的解决方案
- 使用方便，调试更快



伺服驱动器 Servo Drive

Kollmorgen · 美国 USA

- 在数秒内优化性能
- 处理量更大，精度更高
- 便于使用的图形用户接口 (GUI), 可以加快调试和故障检修
- 灵活，可以扩展以满足任何应用需求



行星减速机 Planetary Reducer

Neugart · 德国 GER

- 轻盈但强劲
- 高效且可靠
- 最高转速时放热量仍很低
- 此款行星减速机即使在最高转速时也能达到最高效率需求



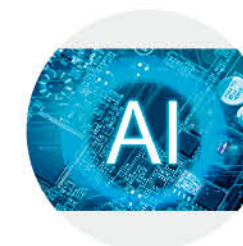
滑动式手柄 Sliding Handle

Dunbarton · 自制品



光电传感器 Photoelectric Sensors

Balluff · 德国 GER



控制主板 Control Motherboard

Dunbarton · 自制品

01 INTELLIGENT HOISTER 智能提升机

丹芭顿智能提升机 Ai 系列以智能控制为核心，采用业界领先的伺服电机驱动系统，结合精密级行星齿轮减速机，真正实现了物料搬运和部件装配的高速、精准和安全，为企业大幅提高生产效率、降低人力成本提供了一种实实在在的选择。

Intelligent control is the core in the DUNBARTON intelligence elevator Ai machine series .The industry-leading servo motor drive system and combination of precision planetary gear reducer realize the material handling and assembly of high speed, precision and safety , which provide a real choice for the company to significantly improve production efficiency and reduce the human cost.



产品优势

PRODUCT ADVANTAGE

突破双速 无极变速

我公司的 Ai 系列智能提升机突破了传统高端提升装置的双速控制模式，真正实现了无极变速控制。Ai 系列智能提升机可以在不超过最大运行速度的情况下以任何您需要的速度运行。

Breakthrough two speed, infinitely variable speeds

Ai series' intelligent elevator broke through the dual-speed control mode of the traditional high-end lifting device, realizing the variable speed control. Ai series can ran at any speed you need without exceeding the maximum operating speed.

升降有速 精准有度

Ai 系列智能提升机具有传统高端提升装置无法比拟的 60m/ 分钟的超高升降速度和无与伦比的 5mm/ 秒的超高精准度，是最快、最精确的提升装置。

There is speed, precision and accuracy

Ai series intelligent is the fastest, most accurate lifting device.It has the unparalleled high lifting speed of 60m/m in and high precision of 5mm/s. That the traditional high-end lifting device can not match .

平衡模式 上下自如

Ai 系列智能提升机设有“力平衡模式”，在该模式下操作人员只需要使用很小的力便可以让负载跟随双手上下运行。

Balance mode, up and down freely

Ai series intelligent elevator is equipped with "force balance mode" . In this mode, the operator only needs to use a very small force that can make the load follow hands up and down.

光电感应 防止误碰

Ai 系列智能提升机设有光电感应装置，能够自动识别人手的正常操作，当操作人员误碰操作装置时智能提升机仍将保持原有状态不变，有效防止误操作，避免事故。

Photoelectric induction to prevent accidental touch

Ai series intelligent hoist is equipped with a photoelectric induction device that can automatically recognize the normal operation of of hand. When the operator accidental touch the operation device , intelligent hoist will continue to maintain the original state and prevent the misoperation and accidents.

拒绝超载 安全无反弹

Ai 智能提升机能够在超载时自动停止。智能提升机具有重量感应功能，当载荷超过规定值时提升机停止运动。Ai 型智能提升机有防反弹功能，当载荷重量发生突然改变时设备不会发生反弹或偏移，减少严重事故的发生。

Refused to overload, no rebound in safety

Ai series intelligent hoist can automatically stop when overload. It has the weight sensor .When the load exceeds the specified value, the elevator will stop moving. Ai has anti-rebound function.When the loaded weight is suddenly changed, the device will not rebound or offset, which can reduce serious accidents.

断电保护 让您无忧

Ai 型智能提升机安装有电磁刹车，当设备意外断电时，载荷将被瞬间制动保持在原位。为操作人员的安全提供保障。

Power off protection, let you worry free

Ai series intelligent hoist is equipped with electromagnetic brake, when the equipment run into power outages, the load will be kept in place by an instant brake to provide security guarantee for the operators.

Ai系列智能提升机将是您手臂的延伸

DUNBARTON INTELLIGENT HOISTER AI WILL BE THE EXTENSION OF YOUR ARM



我公司自成立伊始便致力于智能提升装备的研究，以提升物料搬运及生产的自动化水平、使生产作业更安全更有效为己任，为您节约人力成本、物流成本、减少厂房空间占用、提高生产效率降低工人劳动强度提供有力的支持和帮助。

我公司的 Ai 系列智能提升机以优越的性能和可靠的安全性让物料搬运和组件装配变得轻松自如。

Ai 系列智能提升机具有超高的提升速度，智能而人性化的操作方式以及灵活多样的功能，是对物料运送和部件装配有较高要求的您最理想的选择。

Since its earliest days, the company is committed to research intelligent lifting equipment. We made it our mission to improve automation level of material handling and production and make production more safe and more effective. We provide strong support and help for you to save the manpower cost, logistics cost, workshop space, increase the production efficiency and reduce the labor intensity.

Our Ai series intelligent hoist with superior performance and reliable safety make material handling and partial assembly easy.

Ai series intelligent hoist with super high speed, intelligent and humanized operation, flexible and diverse functions is just the right choice for the customers who have higher requirements to material handling and partial assembly.

01 可以最大程度的满足您对提升能力、速度和精度的要求

Can Best Meet Your Requirements For Improvement, Speed And Accuracy

- ① 比电动葫芦具有更高的速度和更准确地定位
 - ② 比气动葫芦具有更迅速的响应能力和更高的稳定性
 - ③ 比机械手具有更简易的程序设置和更高的性价比
- ① With higher speed and more accurate positioning than electric hoist
 - ② With quicker response and higher stability than pneumatic hoist
 - ③ With more simple procedure and higher price performance ratio than manipulator

02 丹芭顿智能提升机 Ai 系列分为

Dunbarton Intelligent Elevator Ai Series Include Two Types

标准型 STANDARD TYPE 扩展型 EXTENDED TYPE

03 Ai 系列标准型和扩展型共有特点

The Common Features Of Standard And Extended Type

- ① 可选的起重量：80kg、150kg、300kg 和 600kg 起重量
 - ② 超高的运行速度：最大运行速度 60m/min
 - ③ 极高的精准度：小于 5mm/s 的调节速度
 - ④ 智能化的控制：可设定的速度、力平衡模式、负载重量显示等
- ① Optional lifting weight: 80kg, 150kg, 300kg and 600kg
 - ② High running speed: max running speed 60m/min
 - ③ High accuracy: less than 5mm/s of the adjustment speed
 - ④ Intelligent control: can set the speed, force balance model, load weight display, etc

04 Ai 系列扩展型独有特点

The Unique Features Of Extended Type

安装有功能扩展模块，可实现功能定制化，以满足客户不同的需求。

Installed with the function expansive module which can realize the function of customization, in order to meet different needs of customers.

05 应用

Application

- ① 物料搬运
 - ② 组件安装
 - ③ 模具更换
 - ④ 机械加工与制造
 - ⑤ 汽车装配线
 - ⑥ 精密设备维护
- ① Material handling
 - ② Component installing
 - ③ Mould replacing
 - ④ Machining and manufacturing
 - ⑤ Automobile assembly line
 - ⑥ Precision equipment maintaining



360° 旋转组件

360 Degree Rotating Assembly

手柄内部安装有旋转组件，允许进行 360° 旋转，您可以在任何方向上对其进行操作。

The handle is internally provided with a rotating assembly which allows for a 360 degree rotation, and you can operate it in any direction.

液晶显示功能

Liquid Crystal Displaying Function

手柄上安装有液晶显示器，可以对提升机运行参数进行菜单式设置，并且还可以显示载荷重量、运行模式、错误代码等信息。

The handle is provided with a liquid crystal display, which can be used for setting the operating parameters of the hoist by menu, and can display the load weight, operation mode, error code and other information.

光电感应

Photoelectric Induction

手柄内部配置有光电感应装置，该装置可以识别操作人员是否到位，除非操作人员发出运动指令，否则该装置不允许设备运行。

Photoelectric induction device was installed inside the handle, the device can recognize if the operation person are in place, the device will not allow the equipment to operate unless staff issue a movement command.

人体工程把手

Human Body Engineering Handle

把手外形完全符合人体工程学，使操作人员使用时更加舒适。

The shape of the handle is in full compliance with the human body engineering which makes the operators more comfortable to use.

01 独立安装式随动手柄

Independent Installation Type
Follow-Up Handle

该配置适用于不需要操作人员不需要靠近载物的场合，能够获得与同轴随动手柄同样的平稳控制。

The configuration is suitable for the situation that the operator does not need to be close to the load, and can obtain the same stable control of the coaxial servo control.



01 运用案例

Application cases



02 同轴随动手柄

Coaxial Servo Handle

使用同轴随动手柄时，载荷跟随人手的动作移动。该手柄可以使操作人员靠近载荷以便进行精确控制。

When using the coaxial servo handle, the load follows the movement of the human hand. The handle enables the operator to be close to the load for precise controlling.



02 运用案例

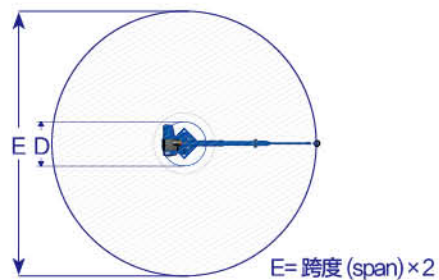
Application cases



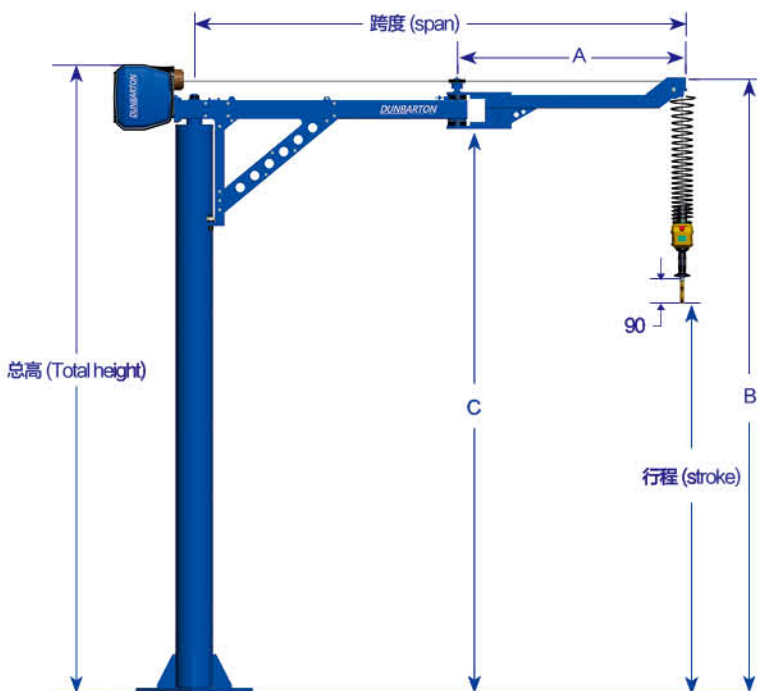
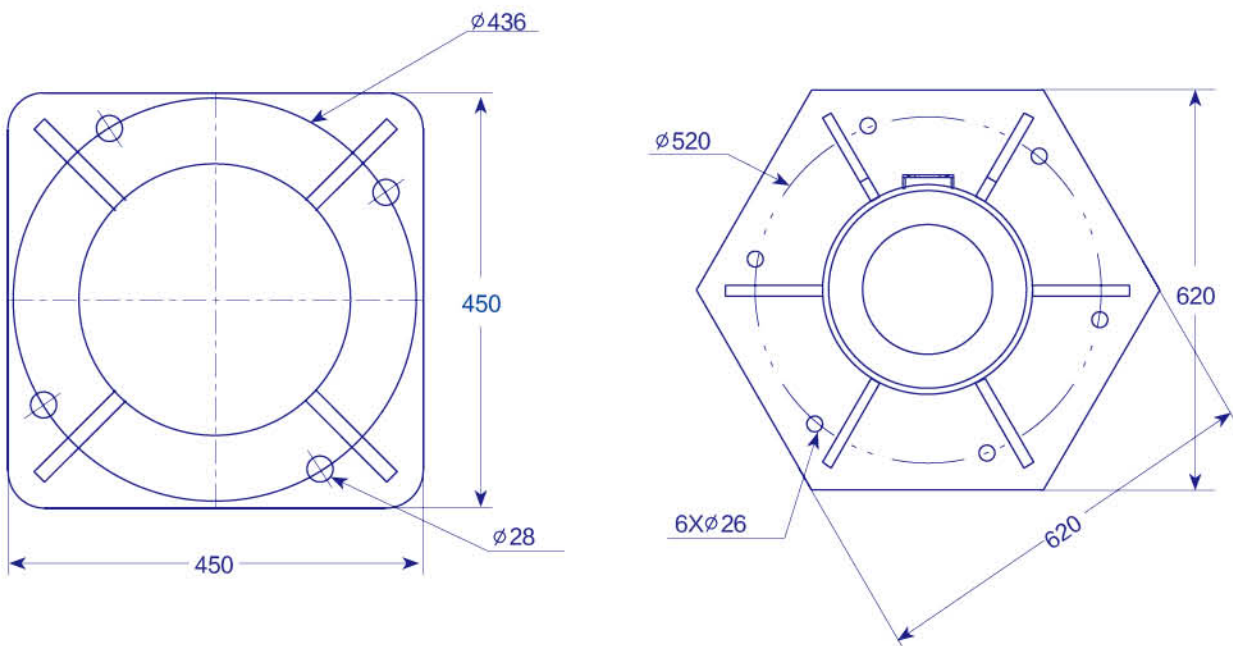
AI系列手柄配置组成
The Configuration Of AI Series Handle Composition

AI系列手柄配置选项
The Configuration Of AI Series Handle Option

挂钩范围
Hook Scope



底板尺寸 (mm)
Plate Size (mm)



80KG-150KG 设备 80Kg-150Kg Equipment

单位 / unit : mm

跨度 Span	1830	2440	3050	3660	4270	1830	2440	3050	3660	4270	1830	2440	3050	3660	4270
行程 Stroke	1830					2440					3050				
总高 Total height	2770					3380					3990				
A	860	1150	1430	1720	2010	860	1150	1430	1720	2010	860	1150	1430	1720	2010
B	2690					3300					3910				
C	2490					3100					3710				
D	630	810	1020	1220	1420	630	810	1020	1220	1420	630	810	1020	1220	1420

150KG-300KG 设备 150Kg-300Kg Equipment

单位 / unit : mm

跨度 Span	1830	2440	3050	3660	4270	1830	2440	3050	3660	4270	1830	2440	3050	3660	4270
行程 Stroke	1830					2440					3050				
总高 Total height	2800					3400					4010				
A	860	1150	1430	1720	2010	860	1150	1430	1720	2010	860	1150	1430	1720	2010
B	2710					3320					3930				
C	2480					3090					3700				
D	620	820	1090	1310	1520	620	820	1090	1310	1520	620	820	1090	1310	1520

注：上述尺寸仅适用于配备同轴式滑动手柄的设备。配备悬垂式轻触手柄的设备尺寸不同，请联系 DUNBARTON 公司以获取上述设备的尺寸。其他吊钩高度值可按特殊要求定制；请与厂方联系。

Note: The above mentioned dimensions are only suitable for the equipment with coaxial sliding handle. The devices equipped with suspension type touch handle have different size, please contact DUNBARTON to obtain the equipment size. The other hook height value can be customized according to special requirements. Please contact with the factory.

产品特点 PRODUCT FEATURES

- ① 能伸能曲 操作灵活
 - ② 分段式设计，安装运输方便快捷
 - ③ 操作灵活，可轻松绕过障碍物并深入设备内部
 - ④ 可频繁起吊和卸放
 - ⑤ 配有安装底板，无需地基
 - ⑥ 可根据您的要求量身定制，为您提供所需的强度、速度和精度
- ① Stretchable and flexible to operate
 - ② Sectional design, convenient and fast to install and transport
 - ③ Flexible to operate, easy to bypass the obstacles and get deep inside the equipment
 - ④ Able to lift and unload frequently
 - ⑤ Equipped with the mounting plate and no foundation needed
 - ⑥ Able to be customized to your requirements and provide required intensity, speed and accuracy



02 FOLDING ARM CRANE 折臂式起重机

折臂式起重机是我司结合丹芭顿智能提升机设计开发的组合吊挂装置，安装简单迅速，可即装即用。该产品可以根据您的要求量身定制。

Folding arm crane is a combined hanging device designed and developed by our company combined with DUNBARTON intelligent elevator. It's rapid and simple to install, out of the box. The product can be customized to your requirements.

02 运用案例 Application cases





03 CANTILEVER CRANE

悬臂式起重机

悬臂式起重机是我司结合丹芭顿智能提升机设计开发的组合吊挂装置，安装简单迅速，可即装即用。该产品可以根据您的要求量身定制。

Cantilever crane is a combined hanging device designed and developed by our company combined with DUNBARTON intelligent elevator. It's rapid and simple to install, out of the box. The product can be customized to your requirements.

产品特点

PRODUCT FEATURES



- ① 高效、节能、省时省力
- ② 结构新颖、简单、操作方便
- ③ 回转灵活、作业空间大等优点
- ④ 节能高效的物料吊运设备
- ⑤ 配有安装底板，无需地基
- ⑥ 可根据您的要求量身定制，为您提供所需的强度、速度和精度

- ① Efficient, energy-saving and time-saving
- ② The structure is novel, simple and easy to operate
- ③ Flexible, operating room large and other advantages
- ④ Energy-saving and efficient material handling equipment
- ⑤ Equipped with the mounting plate and no foundation needed
- ⑥ Able to be customized to your requirements and provide required intensity, speed and accuracy

03 运用案例

Application cases



04

SELF-SUPPORTING COMPOSITE CRANE

自立组合式起重机



自立组合式起重机是我司结合丹芭顿智能提升机设计开发的组合吊挂装置，安装简单迅速，可即装即用。该产品可以根据您的要求量身定制。

Self-supporting composite crane is a combined hanging device designed and developed by our company combined with DUNBARTON intelligent elevator. It's rapid and simple to install, out of the box. The product can be customized to your requirements.

产品特点

PRODUCT FEATURES



- ① 可安装在任何普通 15cm 厚的钢筋混凝土地面上，不会给建筑物的屋顶结构施加压力
 - ② 可轻松地随着工作单元中心的扩展而扩展
 - ③ 安装简易，移装轻便
 - ④ 配有安装底板，无需地基
 - ⑤ 可根据您的要求量身定制，为您提供所需的强度、速度和精度
- ① Can be installed in any ordinary 15cm thick concrete floor, will not put pressure on the roof structure of the building
 - ② It can easily be extended with the extension of the work unit center
 - ③ Easy to install and portable
 - ④ Equipped with the mounting plate and no foundation needed
 - ⑤ Able to be customized to your requirements and provide required intensity, speed and accuracy

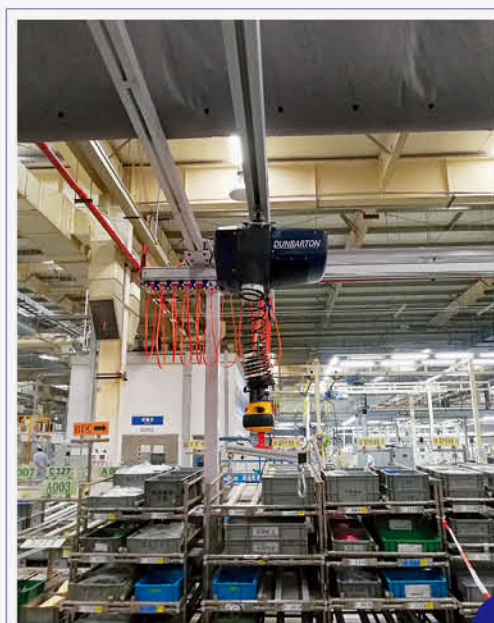
04 运用案例

Application cases



其他运用案例

OTHER APPLICATION CASES



CASE
案例



产品参数

PRODUCT PARAMETERS

型号 / Model	Ai-80	Ai-150	Ai-300	Ai-600
最大起重量 (载荷与工具) Maximum lifting weight (load and tool)	80kg	150kg	300kg	600kg
最大提升速度空载 Maximum lifting speed with no-load	60 米 / 分 (M/min)	30 米 / 分 (M/min)	15 米 / 分 (M/min)	7.5 米 / 分 (M/min)
最大提升速度满负荷 Maximum lifting speed with full load	40 米 / 分 (M/min)	24 米 / 分 (M/min)	13 米 / 分 (M/min)	6.5 米 / 分 (M/min)
浮动模式下的最大提升速度 Maximum lifting speed in a floating mode	30 米 / 分 (M/min)	20 米 / 分 (M/min)	11 米 / 分 (M/min)	5.5 米 / 分 (M/min)
最大提升范围 Maximum lifting range	3.5 米 (M)	3.5 米 (M)	3.5 米 (M)	1.75 米 (M)
标准提升行程 Standards rise stroke	2.5 米 (M)	2.5 米 (M)	2.5 米 (M)	1.25 米 (M)

型号 / Model	Ai
主电源电压 (VAC) Max main power supply voltage (VAC)	220+/-10% (maximum)
最大电流 (安培) Max current (An Pei)	10
负载循环等级 Load cycle level	H5
运行温度范围 Operating temperature range	-10-50° C
运行湿度范围 (非凝结) Operating humidity range (non condensing)	35-90%
电机功率 Motor power	1.3kW