



铝合金轨道起重机
Aluminium Alloy Track Cranes



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→ 产品简介 Product introduction

铝合金轨道起重机介绍 Aluminium alloy track cranes introduction

铝合金轨道起重机，是一种主要应用铝合金行走轨道及滑车，用碳钢做结构支撑或配件，铝合金与碳钢组合的一种新型轻载起重设备。

铝合金轨道起重机的载重量从125kg到2000kg。顺畅平稳的系统让您操作更加便捷、更符合人体工程学原理，更新，更好运行更顺畅。标准模块化配件让安装和改造更加便捷。低摩擦系数让铝合金轨道起重机搬运重载荷更轻松。尼龙车轮与铝合金表面的摩擦噪声等级更低。系统几乎免维护，更有多重二次保护装置可选。因其模块化的系统设计，让规划更自由；跟钢轨型材的独特组合，让吊点之间获得更大间距，更加节约成本。

铝合金轨道起重机符合人体工程学的工位设计对生产力有直接影响，让您的生产获益良多，为新轻型起重机系统重新定义了顺畅运行的特征，让您的吊装更加轻松自如。

The aluminum alloy track crane is a new type of light load hoisting equipment which mainly applies the aluminum alloy walking track and the pulley, USES the carbon steel as the structure support or the accessory, the aluminum alloy and the carbon steel combination.

The load of aluminum alloy rail crane ranges from 125kg to 2000kg. Smooth and smooth system allows you to operate more convenient, more ergonomic principles, update, better operation and more smooth. Standard modular parts make installation and retrofit easier. The low friction coefficient makes the aluminum alloy rail crane easier to carry heavy loads. The friction noise level between the wheel and the aluminum alloy surface is lower. The system is almost maintenance-free and has multiple secondary protection options. Because of its modular system design, let the planning more free; With the unique combination of rail profile, so that the lifting point between the greater space, more cost saving.

The ergonomic station design of the aluminum alloy rail crane has a direct impact on productivity and benefits your productivity. It redefines the characteristics of smooth operation for the new lightweight crane system and makes your hoisting more comfortable.

→ 产品特点 Features

自重轻、抗弯强度较高 Light weight, high bending strength

铝合金标准组件有五种规格的不同型材轨道，承载能力最大达到2000kg，精密加工的铝合金型材及结构件安装简单、模块化、并保持运行更顺畅。封闭设计的铝合金轨道重量轻却有较高的抗弯强度，而且具有更好的耐磨性。由于表面阳极电镀处理以及自身的防腐特性。这种结构用于洁净厂房及汽车生产线、食品、电子业，并且较轻的自重是值得考虑的因素。

The aluminum alloy standard component has five different profile tracks of different specifications, with the maximum bearing capacity up to 2000kg. The precision machined aluminum profile and structural parts are easy to install, modular, and keep running smoothly. The aluminum alloy track with closed design is light in weight but has higher bending strength and better wear resistance. Because the surface positive electroplating treatment and its own anti-corrosion characteristics. This structure is used to clean plant and automobile production lines, food, electronics, and the light weight is worth considering.

铝合金轨道摩擦阻力更小 Aluminium alloy track friction resistance is smaller

不仅轨道的加工精度较高，精密联接部件同样是载荷运行安静顺畅的关键。运行小车采用尼龙车轮结构、车轮通用化、标准化。正是因为标准化组件的设计，行走小车可以在日后配上电驱动实现电驱运行，甚至他可以匹配其他各种不同截面的型材轨道。

The aluminum alloy track friction resistance is smaller, not only the track processing accuracy is higher, the precise connection component is also the key to the load operation is quiet and smooth. The trolley is made of nylon wheel structure, which is generalized and standardized. Because of the design of standardized components, the walking car can be equipped with electric drive to realize electric drive in the future, and it can even match the profile track of various other sections.

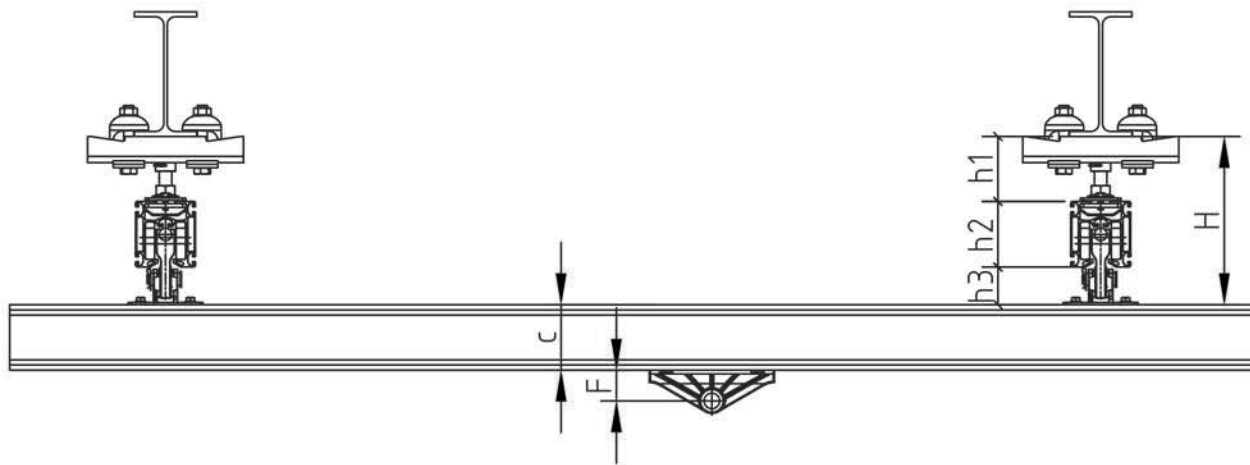
技术特性 Technical features

铝合金轨道起重机介绍 Aluminium alloy track cranes introduction

铝合金封闭轨道，阳极电镀防腐处理，耐磨性好
抗弯强度较高
自重轻，摩擦阻力低（相比KBK刚性轨道轻50%）
模块化设计，安装简易
5种型号可以选，载荷范围从125kg-2000kg
单轨吊、单梁、双梁、伸缩梁式、组合自立式等结构可选
柔性 and 刚性连接安装方式可选
轨道接头无缝对接
手动/电动运行噪音较低
尼龙车轮使轨道磨损较低
运行安静，顺滑
适合用于较大跨度

- Aluminum closed track, anodized anticorrosive treatment, good wear resistance
- High bending strength
- Light dead weight, low friction resistance (50% lighter than KBK rigid track)
- Modular design, easy to install
- Five types track .The loads range from 125kg to 2000kg
- Monorail crane, single beam, double beam, telescopic beam, combination of free-standing structure is optional
- suspension type and arc type and other structures are optional
- Flexible and rigid joints are optional
- The rail joint is seamless
- Low noise from manual/electric operation
- Nylon wheels make track wear less
- Quiet and smooth operation
- Suitable for large span

铝合金轨道系统尺寸关系 The relationship of Aluminium alloy track system



尺寸表 Size specification

轨道型号	h1 min-max (mm)	h2 (mm)	h3 (mm)	Hmin(mm)	Hmax	F (mm)	C (mm)
S-105	85-125	105	58	248	288	49.2	105
M-140	85-125	140	58	283	323	49.2	140
L-180	85-125	180	58	323	363	49.2	180
XL-220	85-125	220	58	363	403	49.2	220
XXL-280	85-125	280	58	423	463	49.2	280

轨道技术规格 Technical specifications of track

轨道型号代码 Track code

S-105 M-140 L-180 XL-220 XXL-280

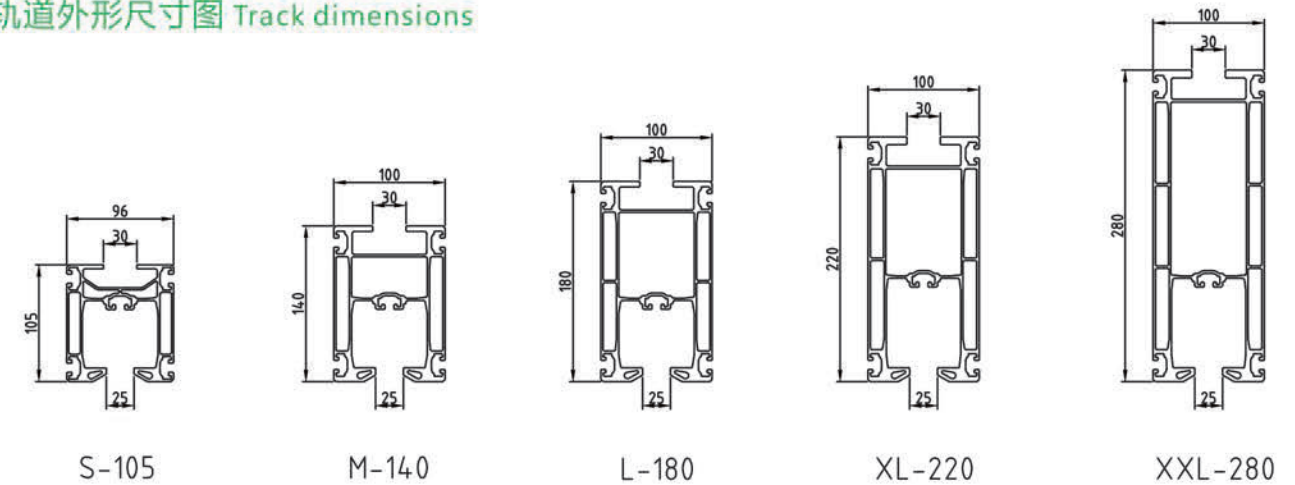
字母示意 Letters mean

S : SMALL
M : MIDDLE
L : LAGER
XL : EXTRA LARGE
XXL : EXTRA EXTRA LARGE

轨道截面高度 (mm) Height of section (mm)

105
140
180
220
280

轨道外形尺寸图 Track dimensions

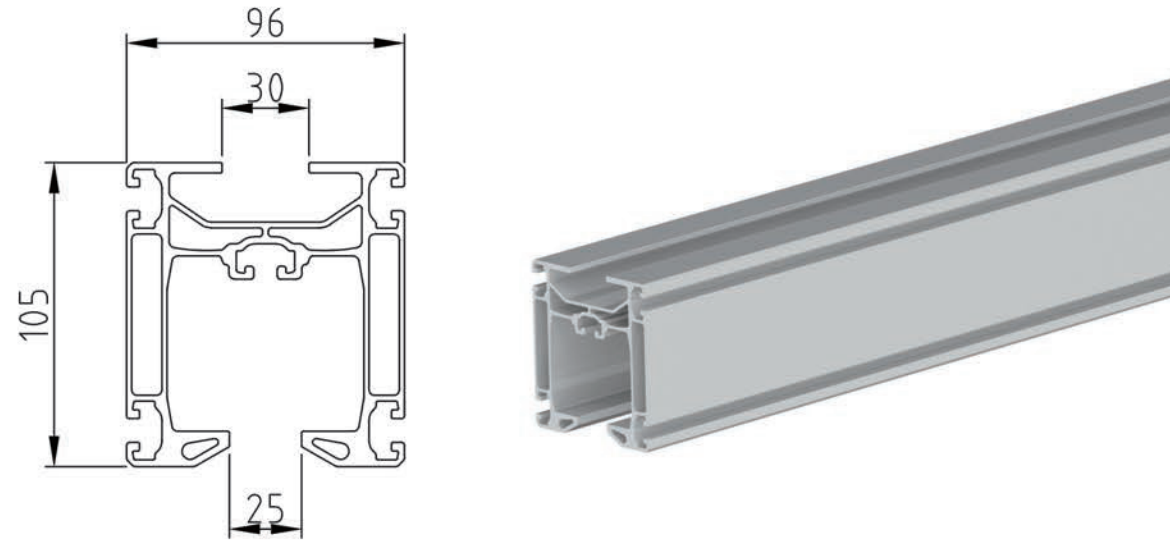


技术参数 Technical details

型号	高度 h mm	宽度 w mm	额定载荷 kg	自重 kg/m	材质	惯性距 lycm ⁴	惯性距 lz cm ⁴	阻力矩 Wycm ³	阻力矩 Wzcm ³	标准规格 (m)
S-105	105	96	250	5.4	AW6063-T66	233	209	42	44	6\7\9
M-140	140	100	500	7.4	AW6063-T66	602	328	86	68	6\7\9
L-180	180	100	750	8.5	AW6063-T66	1194	421	133	85	6\7\9
XL-220	220	100	1200	10	AW6063-T66	2188	514	196	102	6\7\9
XXL-280	280	100	2000	16.5	AW6063-T66	5403	863	400	173	6\7\9

→ 轨道类型 Track type

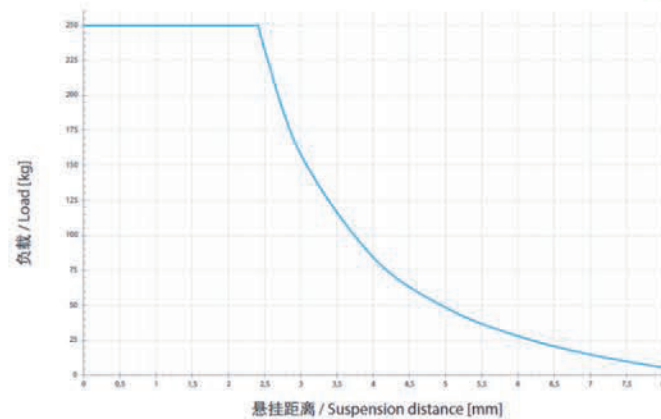
铝合金轨道S-105型 Aluminium track profile S-105



技术参数 Technical data

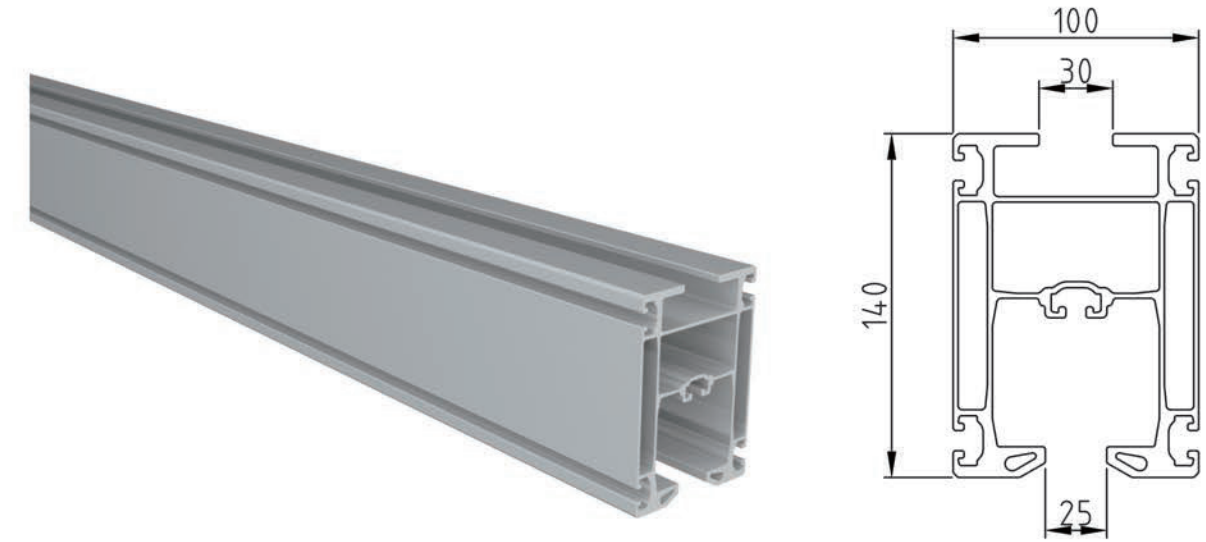
参数 Parameter	描述 Description
外形尺寸 Dimensions	高 high : 105mm 宽 width:96mm
材料 Material	AW6063 T66
单位重量 Weight	5.4kg/m
机械性能 Mechanical properties	惯性矩 Moment of inertia (IX/IY) 233/209cm ⁴ 阻力矩 Resistance moment (WX/WY) 42/44cm ³

承载力数据图 S-105 (仅供参考) Load chart profile S-105 (For reference only)



→ 轨道类型 Track type

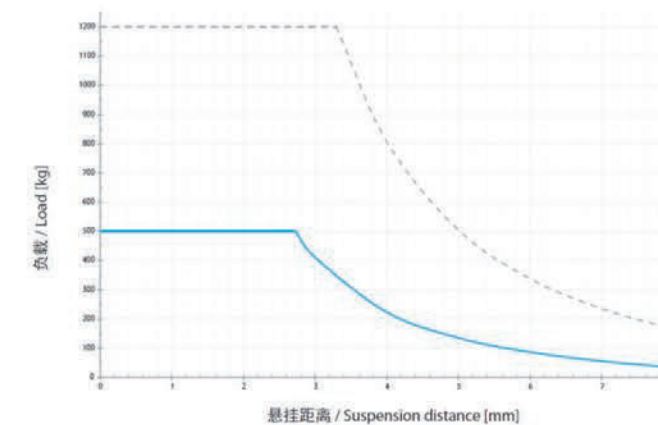
铝合金轨道M-140型 Aluminium track profile M-140



技术参数 Technical data

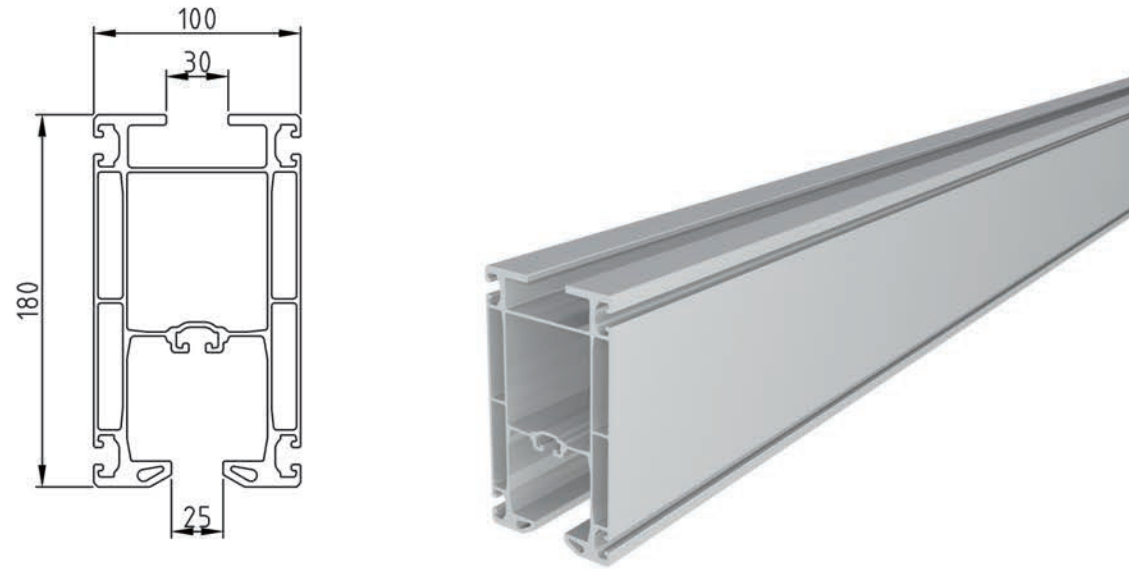
参数 Parameter	描述 Description
外形尺寸 Dimensions	高 high : 140mm 宽 width:100mm
材料 Material	AW6063 T66
单位重量 Weight	7.4kg/m
机械性能 Mechanical properties	惯性矩 Moment of inertia (IX/IY) 602/328cm ⁴ 阻力矩 Resistance moment (WX/WY) 86/68cm ³

承载力数据图 M-140 (仅供参考) Load chart profile M-140 (For reference only)



→ 轨道类型 Track type

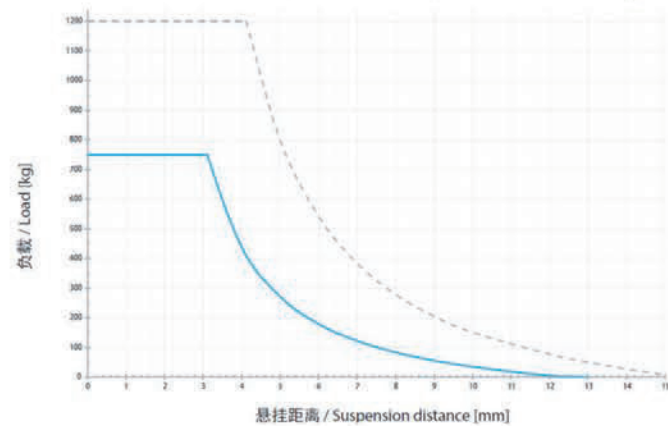
铝合金轨道L-180型 Aluminium track profile L-180



技术参数 Technical data

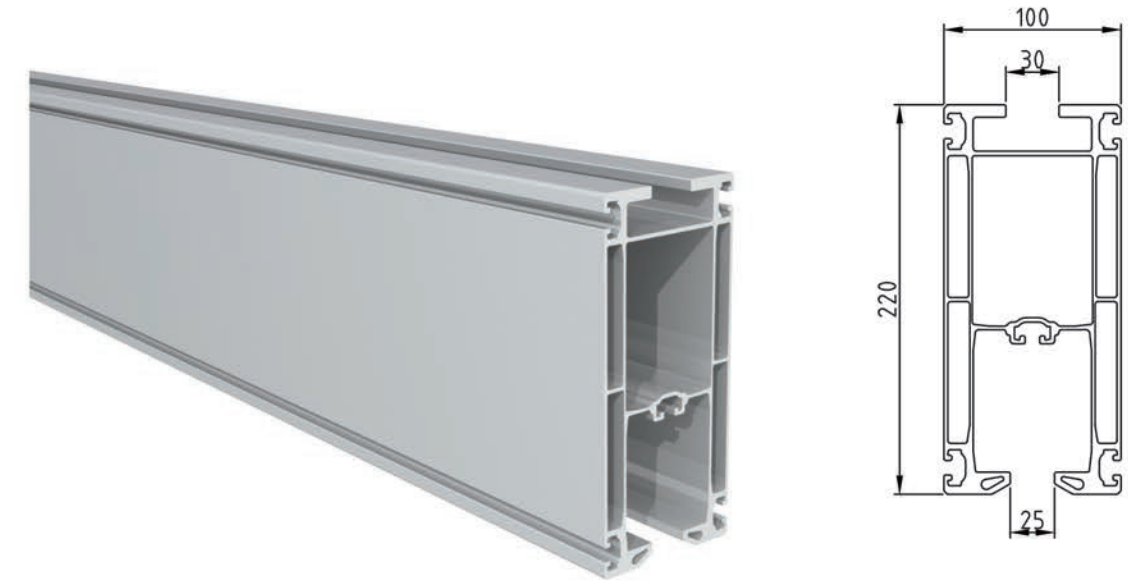
参数 Parameter	描述 Description
外形尺寸 Dimensions	高 high : 180mm 宽 width:100mm
材料 Material	AW6063 T66
单位重量 Weight	8.5kg/m
机械性能 Mechanical properties	惯性矩 Moment of inertia (IX/IY) 1194/421cm ⁴ 阻力矩 Resistance moment (WX/WY) 133/85cm ³

承载力数据图 L-180 (仅供参考) Load chart profile L-180 (For reference only)



→ 轨道类型 Track type

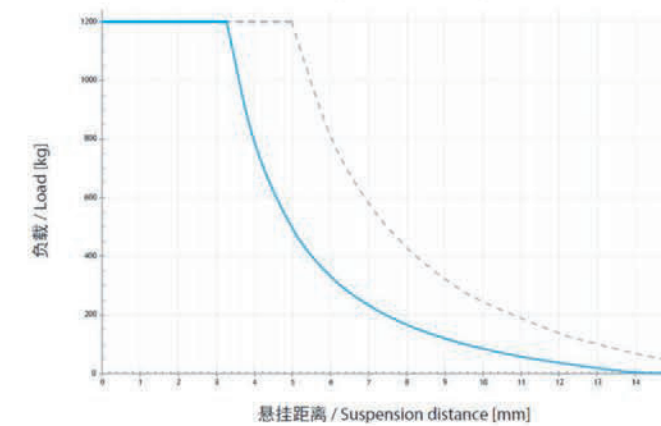
铝合金轨道XL-220型 Aluminium track profile XL-220



技术参数 Technical data

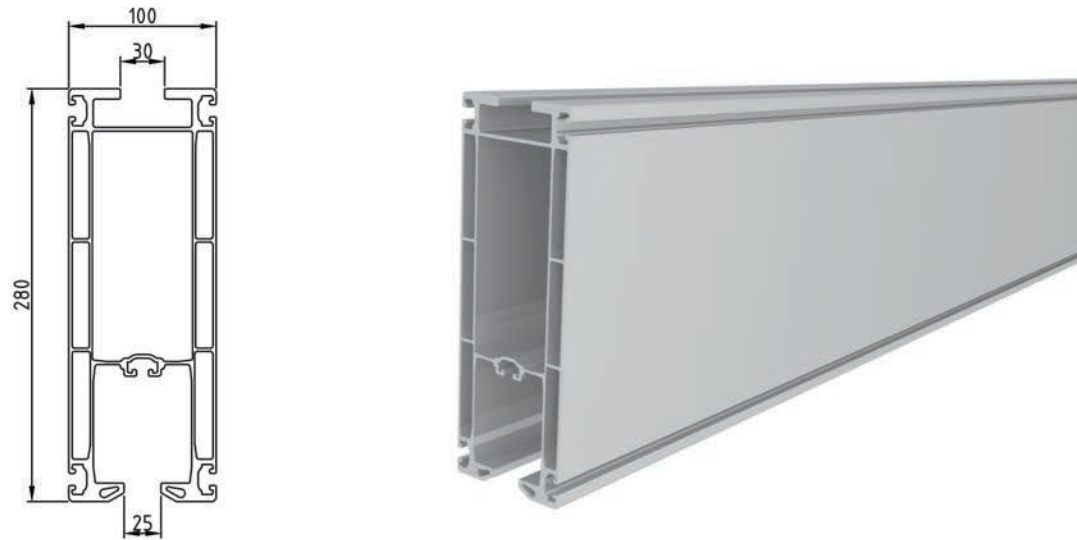
参数 Parameter	描述 Description
外形尺寸 Dimensions	高 high : 220mm 宽 width:100mm
材料 Material	AW6063 T66
单位重量 Weight	10kg/m
机械性能 Mechanical properties	惯性矩 Moment of inertia (IX/IY) 2188/514cm ⁴ 阻力矩 Resistance moment (WX/WY) 196/102cm ³

承载力数据图 XL-220 (仅供参考) Load chart profile XL-220 (For reference only)



轨道类型 Track type

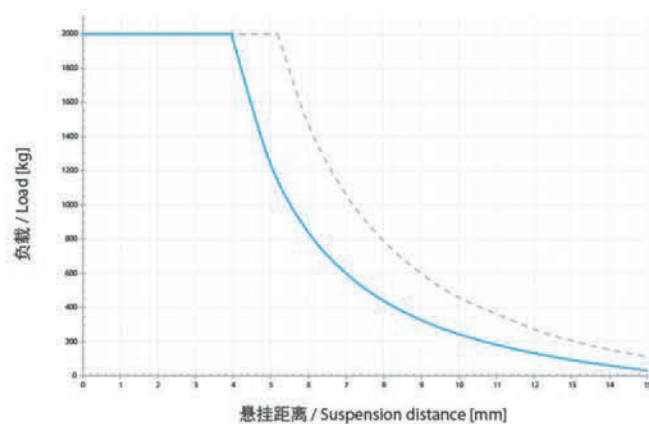
铝合金轨道XXL-280型 Aluminium Track profile XXL-280



技术参数 Technical data

参数 Parameter	描述 Description
外形尺寸 Dimensions	高 high : 280mm 宽 width:100mm
材料 Material	AW6063-T66
单位重量 Weight	16.5kg/m
机械性能 Mechanical properties	惯性矩 Moment of inertia (IX/IY) 5403/863cm ⁴ 阻力矩 Resistance moment (WX/WY) 400/173cm ³

承载力数据图 XXL-280型 (仅供参考) Load chart profile XXL-280型 (For reference only)



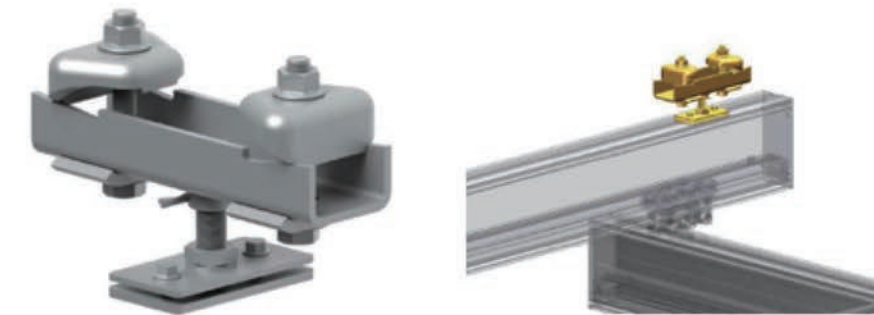
配件 Accessories

轨道吊挂件 Track mounting

连接承载钢结构和铝合金轨道，采用高度可调节的设计方式，可根据吊件的高度调节范围来补偿钢结构的高度差。根据使用工况分为刚性吊件和柔性吊件。

The bearing steel structure and the aluminum alloy track are connected, and the height is adjustable. According to the operating conditions are divided into rigid mounting and flexible mounting.

刚性吊件 Rigid mounting



特点 Feature

吊件下部法兰板与螺栓垂直硬连接，水平位置不可调节，多用于精确定位提升或者夹取重物，或者用于伸缩梁结构需要向上作用力，承受水平和垂直负载力，法兰高度可调节，根据吊件的高度调节范围补偿钢结构的高度差，葫芦主梁与轨道x和y位置始终垂直。

The lower flange plate of the lifting part is rigidly connected with the bolt, and the horizontal position is not adjustable. Positioning lifting or clamping of heavy objects, or for telescopic beam structures requires upward force, bearing. Horizontal and vertical load force, flange height adjustable, according to the height of the lifting range compensation. The height of the steel structure is different, and the main girder of the hoist is always perpendicular to the X and Y positions of the rails.

技术参数 Technical data

特征/Feature	刚性吊点 50-150 Rigid mounting 50-150	刚性吊点 150-250 Rigid mounting 150-250	刚性吊点 250-310 Rigid mounting 250-310
承重能力 Load bearing capability	2000kg	2000kg	2000kg
宽度调整 (法兰宽) Width adjustment (flange width)	50mm-150mm	150mm-250mm	250mm-310mm
高度调整 Height adjustment	58-125mm	85-125mm	85-125mm
重量 Weight	3.8kg	4.3kg	4.8kg

配件 Accessories

柔性吊件 Flexible mounting

特点 Feature

吊件下部法兰板与螺栓连接采用免维护的球形结构柔性连接，水平位置可以细微自动负载调节，内置铜垫，结构灵活，主要承受下方垂直负载力，法兰高度可调节，根据吊件的高度调节范围补偿钢结构的高度差，葫芦主梁与轨道x和y位置可不垂直。

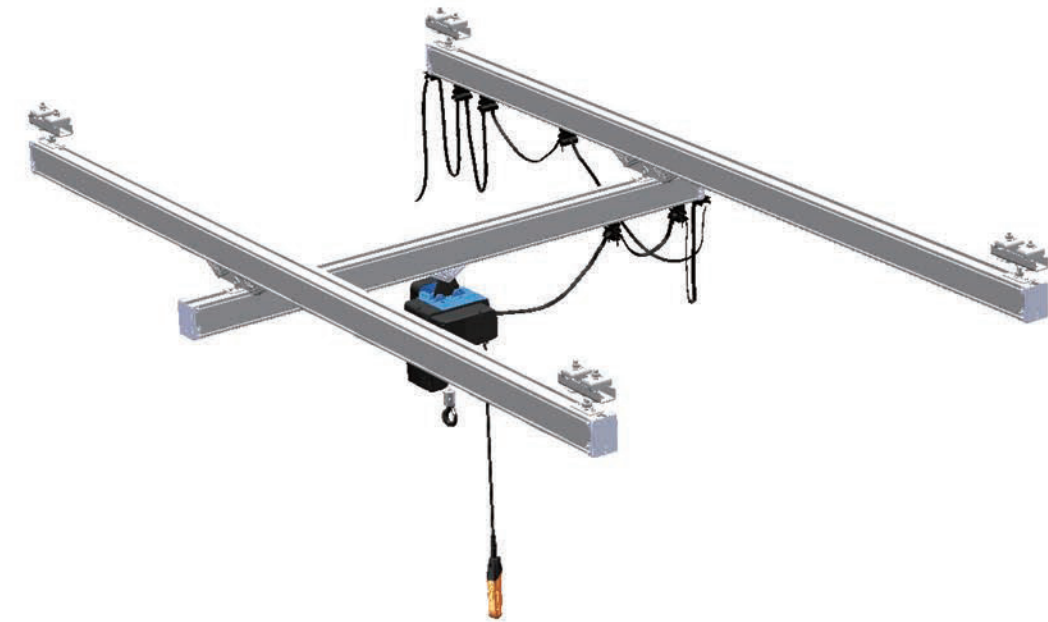
The lower flange plate of the lifting piece is connected with the bolt using the maintenance-free spherical structure flexible connection, horizontal position can be fine automatic load adjustment, built-in copper pad, flexible structure, mainly under the bear. Vertical load force, flange height can be adjusted, according to the height of the lifting range to compensate the steel knot. The height difference of the structure, the hoist girder is not perpendicular to the position of track X and Y.

技术参数 Technical data

特征/Feature	柔性吊点 50-150 Flexible mounting 50-150	柔性吊点 150-250 Flexible mounting 150-250	柔性吊点 250-310 Flexible mounting 250-310
承重能力 Load bearing capability	2000kg	2000kg	2000kg
宽度调整 (法兰宽) Width adjustment (flange width)	50mm-150mm	150mm-250mm	250mm-310mm
高度调整 Height adjustment	58-125mm	85-125mm	85-125mm
最大倾斜角度 MAX ceiling incline	10°		
重量 Weight	3.8kg	4.3kg	4.8kg

配件 Accessories

轨道吊挂件间距选型 Distance of lifting point selection



承载力与吊件数量关系图 Relationship diagram of capacity and mounting point quantity							
承载能力 Capacity (kg)	80	125	250	500	750	1200	2000
轨道型号 Track Type	吊挂件间距 Distance of mounting point (m)						
S-105	4	3.5	3	2	1.5	1	0.5
M-140	6	5	4	3	2.5	2	1.5
L-180	8	7	6	4	3	2.5	2
XL-220	10	8.5	7	5.5	4.5	3	2.5
XXL-280	11	9.5	8	6	4	3.5	3

备注 Remark

绿色数字表示当前轨道型号推荐的承载力和推荐的吊挂件间距，选型优先选择推荐型号

The green number indicates the recommended carrying capacity of the current track model and the recommended spacing of the hanging parts

有轨道接头时需要多增加吊件数量

It is necessary to increase the number of lifting parts when there are rail joints

非标吊件需要单独咨询

Non-standard mounting parts need to be consulted separately

配件 Accessories

小车 Trolley

铝合金轨道起重机小车分为葫芦小车和轨道小车两种。

The trolley of aluminium alloy track cranes include hoist trolley and the track trolley.

特点 Feature

自重轻，车体采用铝合金材质，压铸成型；

车轮采用高强度耐磨尼龙轮，低噪音，运行轻便，滑行顺畅；

缓冲装置，小车两端配置橡胶防撞头，延长轨道和小车的使用寿命；

含滚轮装置，小车可实现在双向承载的同时，保持良好的抗偏心能力，确保提升装置准确定位；

组合性强，两种小车单个小车承载力最大为630kg，超过此范围需要组合式小车。

Light dead weight, body made of aluminum alloy, die - casting molding;

The wheels are made of high-strength wear-resistant nylon wheels, which make low noise, running light and smooth.

Buffer device, both ends of the car are equipped with rubber anti-collision head, to extend the service life of the track and the car;

With roller device, the car can realize the bidirectional load bearing and maintain good anti-eccentricity ability to ensure accurate positioning of the lifting device;

Strong combination, the maximum capacity of a single car is 630kg, beyond this range requires a combined car.

主梁小车 Beam trolley

主梁小车主要用于连接起吊机构，吊环可以与电动葫芦，气动葫芦，手动葫芦或其他起升机构连接，方便安装和拆卸。

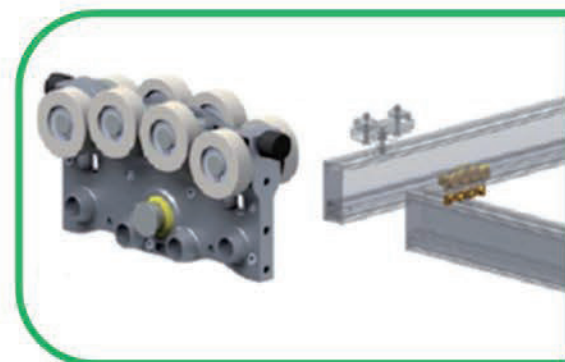
Beam trolley is mainly used to connect the lifting mechanism, the lifting ring can be connected with electric hoist, pneumatic hoist, manual hoist or other lifting mechanism, convenient installation and disassembly.



轨道小车 Track trolley

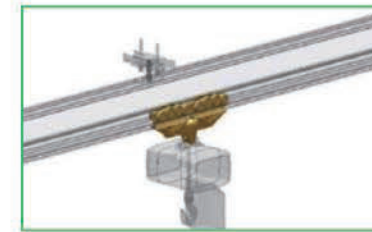
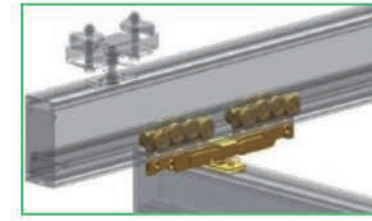
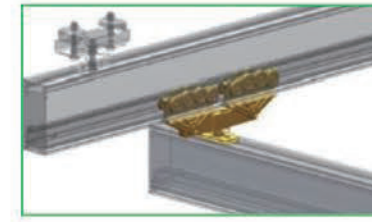
轨道小车主要用于铝合金轨道之间连接和行走。

Track trolley is mainly used for connecting and running between aluminum alloy tracks.



配件 Accessories

组合式小车 Combination trolley



组合式小车主要用于承载较大的场合，把2个小车串联在一块，最高载荷可以达到1200kg。葫芦小车和轨道小车都可以通过车架组合。

The combined trolley is mainly used for the occasion of large load, two cars in series together, the maximum load can reach 1200kg. Hoist trolley and track trolley can be combined through the frame

主梁吊件 Girder mounting

主梁吊件是一种连接纵向行轨铝合金轨道和横向主梁铝合金轨道的连接装置，通过轨道小车配合使用，精密组合，结构紧凑，运行稳定，最大承载630kg。主梁吊件有0°和90°两种规格，满足轨道不同的布置方式。

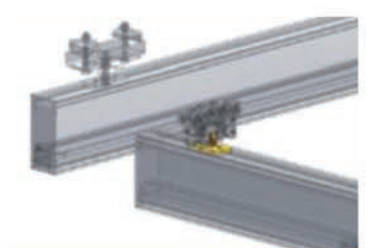
Girder mounting is a kind of connecting device connecting the aluminum alloy track of longitudinal track and the aluminum alloy track of transverse beam. It is used in combination with the track car, with precise combination, close structure, stable operation and a maximum load of 630kg. The main girder crane has two specifications of 0° and 90°, which meet the different arrangement of the track.



0° 状态



90° 状态

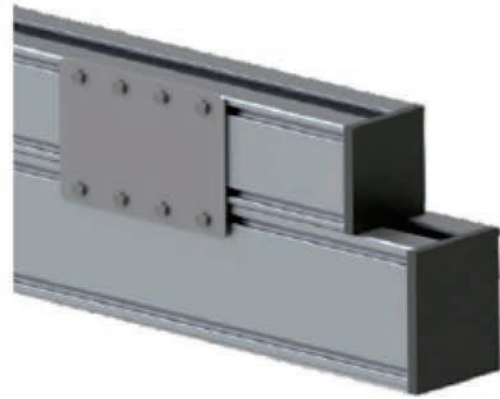


配件 Accessories

轨道接头 Track joints

轨道接头是一种对接两根铝合金轨道的连接装置，固定在铝合金轨道的凹槽内，从而实现轨道无限延长，可按照使用要求定做轨道长度。结构轻巧，安装方便，实现了轨道无缝对接。

The track joint is a kind of connection device for docking two aluminum alloy tracks, which is fixed in the groove of the aluminum alloy track, so as to extend the track infinitely, and the track length can be customized according to the use requirements. The structure is light, easy to install, and the track is seamless.



端盖 End cover



轨道端盖采用金属结构，可封闭轨道，美化外观。同时设计有螺栓对穿轨道，对小车做到二次保护，防止脱离轨道。

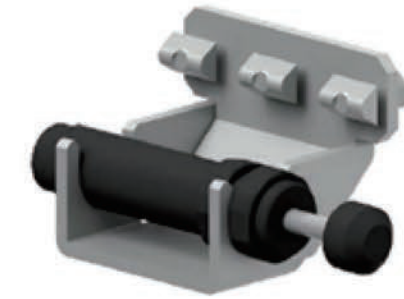
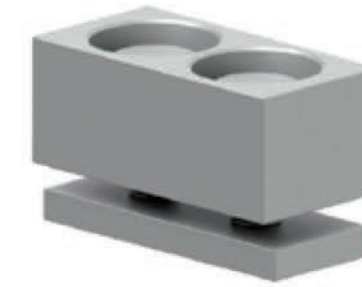
The end cover of the track adopts metal structure, which can close the track and beautify the appearance. At the same time the design has the bolt to go through the track, to the car to achieve secondary protection, to prevent derailment.

配件 Accessories

止档 End stop

止档是一种使葫芦小车和轨道小车停止运行的装置。另外具有防止葫芦小车或轨道小车撞坏电缆小车的作用，让小车和电缆夹在轨道末端分离。

End stop is a device to stop the hoist trolley and track trolley. In addition, it can prevent the hoist trolley and track trolley from damaging the cable trolley, so that the trolley and the cable can be separated at the end of the track.



供电系统 Electrical

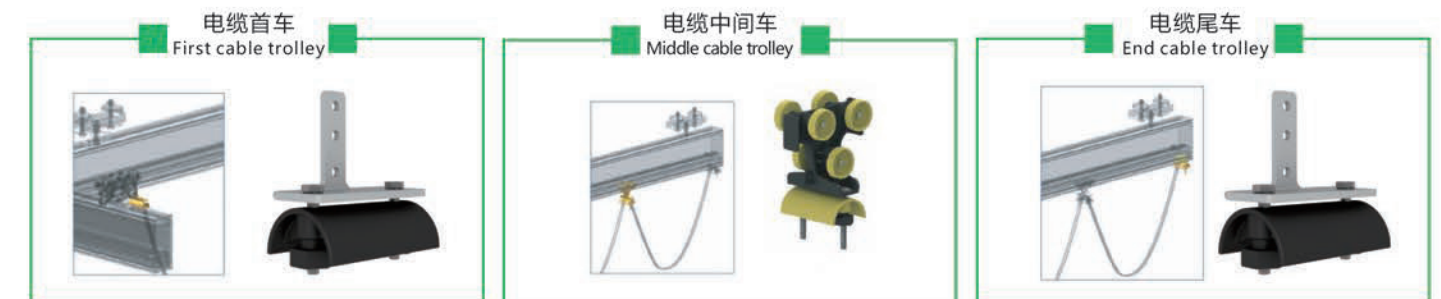
铝合金轨道起重机的供电方式主要分为三种，分别是内置扁电缆供电，外置滑触线供电和外置C型轨供电。

The power supply mode of aluminum alloy rail crane is mainly divided into three types, namely, internal flat cable power supply, external slide-contact line power supply and external c-rail power supply.

扁电缆供电 Flat cable power supply

铝合金轨道起重机两台以内主梁通常采用内置扁电缆供电，扁电缆由电缆滑车固定，电缆滑车分为首车、中间车和尾车三种。首车固定在葫芦小车或者轨道小车上，尾车固定在端盖上。

The main girders within two aluminum alloy rail cranes are powered by internal flat cable, which is fixed by cable block. Cable block is divided into three types: first cable trolley, middle car and tail cable trolley. The first cable trolley is fixed on the hoist trolley or track trolley, and the tail cable trolley is fixed on the end cover



配件 Accessories

C型轨供电 C-type rail power supply

C型轨配电适用于两台以内的主梁，使用方法同其他标准起重机
Type C rail distribution is suitable for less than two main beams, using like other standard cranes



滑触线供电 Sliding contact wire power supply

铝合金轨道起重机有三台及以上主梁时采用滑触线配电
When there are three or more main girders of aluminum rail cranes, slide-contact wire shall be used for power distribution

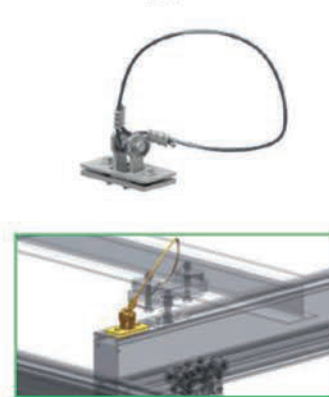


二次保护 Secondary protection

二次保护是一种防坠的安全装置，为防止小车、主梁和轨道脱落。共有三种二次防护装置，分别是小车二次保护装置、主梁二次保护装置和轨道二次保护装置。

Secondary protection is a safety device against falling, to prevent trolley, main beam and track from falling off. There are three secondary protection devices in total, which are trolley secondary protection device, main beam secondary protection device and track secondary protection device.

小车二次保护装置 Trolley secondary protection device 主梁二次保护装置 Girder secondary protection device 轨道二次保护装置 Track secondary protection device



铝合金轨道系统组合形式 Aluminium alloy track system combination form

