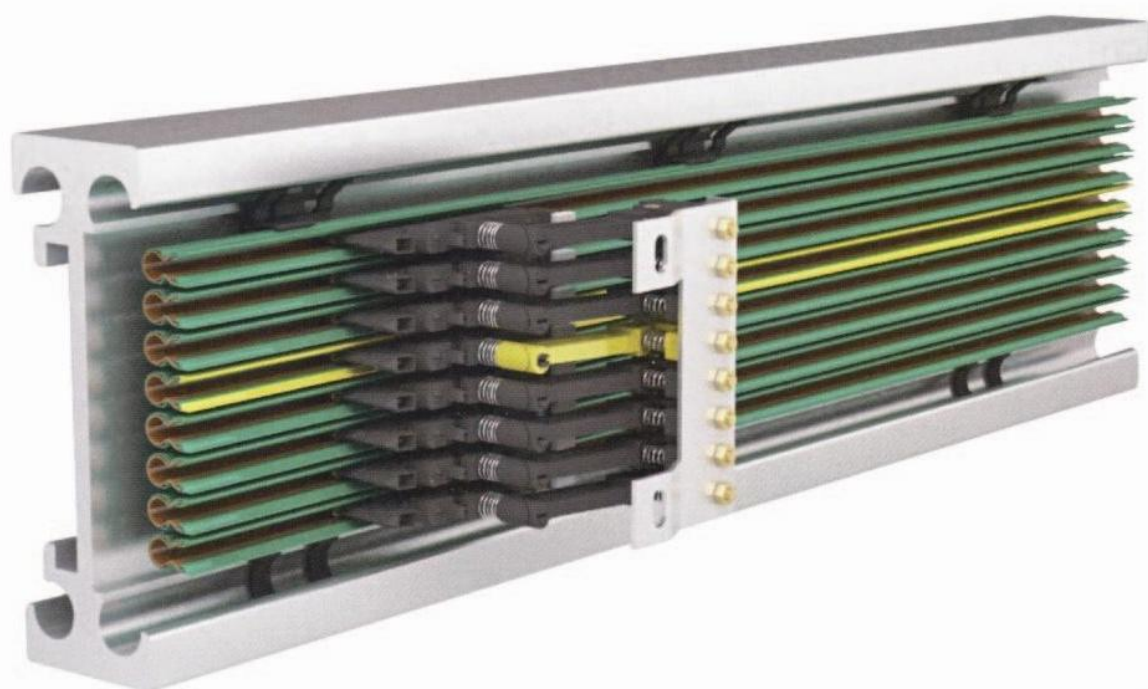


U12单极组合式滑触线

INSULATED CONDUCTOR SYSTEMS U12



产品概述

安能的绝缘滑线U12是按当今国际安全要求设计,

包裹导线的外护罩是优良的绝缘体.

因此我们的单极绝缘导线保证操作中的最大安全.

任意数量的导线可以在最小的空间要求下并排紧邻地安装在一起.

标准的滑线段6m长, 也可订购短一些的滑线.

零线由国际代码颜色黄色识别.

出于安全原因考虑, 相线和地线集电器不能互换.

通过以下认证: ISO9001、3C、CE.

支架

可订购带螺纹孔的支架和可快速安装的卡式支架.U12标准支架间距为600mm(直线),圆弧段上为300mm.

接头

快速安装的接头为导线提供了机械和电气的连续性.包括绝缘保护的塑料护套.膨胀节在单轨道的膨胀接头处使用.

供电接头

有供电接头和中间供电接着可供订购.另外道岔端帽和分段端帽处可安装供电夹.

道岔端帽

端帽用来保护滑线, 使集电器顺畅地经过道岔, 升降段等处.可以和供电夹配套订购, 也可单独订购.

分段端帽组件

导线分段组件可用于对控制线路分段, 设置维修区域等.它们可以和供电夹配套订购, 也可单独订购.

圆弧

滑线U12可以弯水平或垂直圆弧.可以订购一种针对单人现场操作使用的弯圆弧工具.

集电器

电流集电器由强化塑料和不锈钢部件组成,受弹簧力作用的集电器与导线有良好的接触, 集电器分单电刷集电器、双电刷集电器和工字钢加长杆集电器.

General

Annerg insulated conductors U12 are designed in accordance with today's international safety requirements.

The shroud which envelopes the various conductors is an excellent insulator.

Therefore our unipole insulated conductors guarantee utmost safety in operation.

Any number of conductors can be installed side by side at minimum space requirement.

Standard rail sections are 6 m long, shorter sections are available.

The ground conductor is identified by international colour coding. For obvious safety reasons phase and ground collectors are not interchangeable.

Approved and listed by: CCC, CE and ISO9001.

Hangers

Bolted, snap-in and quarter turn type hangers are available. Standard support distance for U 12 is 600 mm, in curves 300 mm.

Joints

Snap-in joint splices provide mechanical and electrical continuity. They include insulated protection covers. Expansion joint sections are only required in case of expansion joints in the monorail track.

Feed terminals

Joint assembly and mid-rail assembly feeds are available. Furthermore transfer guides and isolating assemblies allow for spade connectors.

Transfer guides

Transfer guides serve as an end protection of system runs and accomplish a smooth collector transfer in case of switches, drop sections etc. They can be supplied with or without feed clip.

Isolating assemblies

Conductor isolating assemblies are available for sectionalizing control circuits, maintenance bays etc. They can be supplied with or without feed clip.

Curves

U12 can be used for horizontal or vertical curves. A special curve tool for individual field preparation is available.

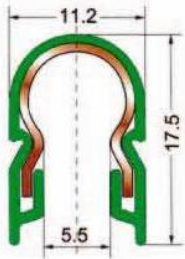
Collectors

The current collectors are made of reinforced polyamide and stainless steel parts. These spring loaded units provide positive contact with the conductor bars and have double pick-up brushes.

U12滑线/U12 Conductor

外护罩的技术数据 Engineering date of shroud

电气参数/Electrical properties	标准外护罩绿色 standard shroud color green	高温外护罩 high temp.shroud
	30-40kv/mm	45kv/mm
精确电阻值/Specific resistance	$5 \times 10^{15} \text{ Ohm} \times \text{cm}$	$5 \times 10^{17} \text{ Ohm} \times \text{cm}$
表面电阻值/Surface resistance	10^{13} Ohm	10^{15} Ohm
爬电电阻值/Leakage resistance	CTI600-1.1	CTI600-1.1
机械参数/Mechanical properties:		
弯曲强度/Flexible strength:	$75\text{N/mm}^2 \pm 10\%$	$95\text{N/mm}^2 \pm 10\%$
拉力强度/Tensile strength	$50\text{N/mm}^2 \pm 10\%$	$50\text{N/mm}^2 \pm 10\%$
工作温度/Working Temperature	-30°C 至 +55°C	-30°C 至 +110°C
火焰测试防护/Flame test proof	无火焰微粒,自熄/no flaming particles,self-extinguishing	
抗腐蚀性/Resistance to chemicals:	汽油,矿物油,油脂 gasoline,mineral oil,grease	强盐酸,腐蚀性的苏打溶液 25%和50%,硫酸至50% Hydrochloric acid.concentr. caustic soda solution 25% and 50%, sulphuric acid to 50%



滑线编码/Conductor Code

U = 单极绝缘滑线代号/unipole insulated conductor
12 = 外护罩尺寸/shroud size

25 = 导线横截面积/conductor cross sectional area(mm²)

最小安装间距/Conductor spacing

在组合型支架上为14mm或其他宽度
on compact hangers 14mm or variable.

弧线段/Curves

最小半径400mm. min.R=0.4m

长度/Length

标准长度为6m,也可提供较短的长度
6m is standard length,shorter lengths are available.

支架间距/Support spacing

直线段0.6m,弧线段0.3m.
for straight runs 0.6m,for curves 0.3m

应用/Application

仅限室内见外护罩参数
indoor use only. See "Engineering date of shroud"

型号/Type	U12/25	高温外护罩/High temperature shroud	
标准外护罩,绿色/Standard shroud,color green		产品代码,相线*Cat.-NO.phase	668316*
产品代码,相线*Cat.-NO.phase	668116*	产品代码,零线*Cat.-NO.ground	668416*
产品代码,零线*Cat.-NO.ground	668216*		

* 根据长度需要在末尾填上(1,2,3,4,5,6m作为后缀).

Fill-in last number(1,2,3,4,5,6 m suffix)in accordance to bars required.

工程技术参数/Engineering date

滑线型号 Conductor rail Type	横截面积mm ² Cross sectional area	外壳漏电距离 mm Leakage distanc of covers	最大电压 V max.voltage	连续电流流量 A Continuous ampere capacity	电阻Ohm/km Resistance
U12/25C**	25	30	600	100	0.745
U12/25F**	25	30	600	40	5.415
U12/25E**	25	30	600	10	31.56

** C=铜导线 copper conductor F=电镀钢导线 galvanized E=不锈钢导线 stainless stell conductor

目前, 安能公司主要生产和销售U12/25C (即U12/25), U12/25F和U12/25E两种滑线需要提前15个工作日订购。

滑线的选择/Selection of Conductors

选择依据: 根据电流负载和环境条件

U12/25C 铜导线用于供电,控制和数据传输

U12/25F 电镀钢导线用于无腐蚀的环境

U12/25E 不锈钢导线用于腐蚀环境下数据传输

in accordance to ampere load environmetal conditions

for power-,control-and data-transmission.

for non-corrosive environment.

for control and data-transmission in corrosive atmospheres

组合型双头集电器/Compact double collector

(双向运行two-way converging)

用于间距为14mm的滑线 for conductor spacing of 14 mm

电流量/Ampacity:1个供电端20A 1 Plug terminal 20 A

2个供电端 2×20A 2 Plug terminal 2 × 20 A

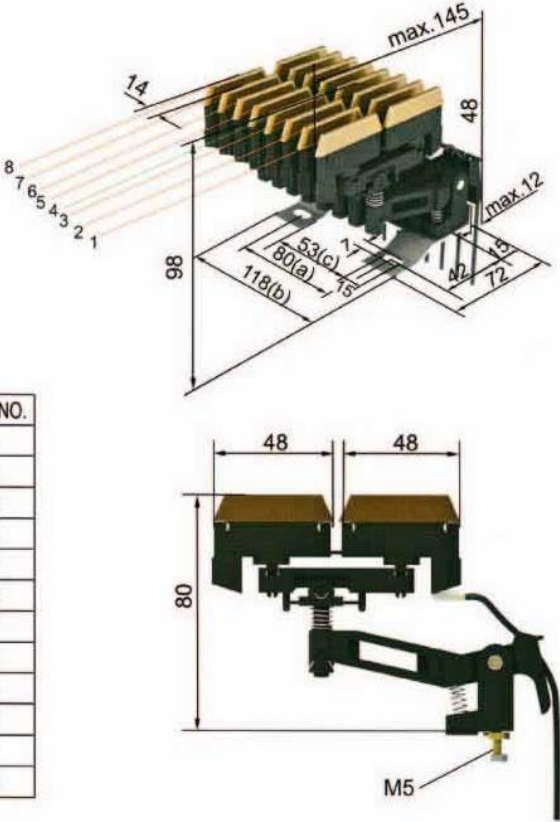
左右偏移/swivel:±15mm 上下位移/lift:±15mm

每个电刷的接触压力为3.5N contact pressure 3.5 N per brush

零线一般接在第4极,也可以按要求在其他位置.

ground at NO.4,other position on request.

型号/Type	电极/poles	尺寸a	尺寸b	尺寸c	底座base plate	产品代码/Cat.NO.
JDS2/40-1	1	80	118	-	8极(2号至8号为空)	663201
JDS2/40-2	2	80	118	-	8极(3号至8号为空)	663202
JDS2/40-3	3	80	118	-	8极(4号至8号为空)	663203
JDS2/40-4	4	80	118	-	8极(5号至8号为空)	663204
JDS2/40-5	5	80	118	-	8极(6号至8号为空)	663205
JDS2/40-6	6	80	118	-	8极(7号至8号为空)	663206
JDS2/40-7	7	80	118	53	8极(8号位置为空)	663207
JDS2/40-8	8	80	118	53	8极	663208
JDS2/40-9	9	80	146	53	10极(10号位置为空)	663209
JDS2/40-10	10	80	146	53	10极	663210
JDS2/40-11	11	120	174	80	11极	663211
JDS2/40-12	12	120	174	80	12极	663212



组合型单头集电器/Compact collector

用于间距为14mm的滑线 for conductor spacing of 14 mm

电流量/Ampacity:1个供电端40A 1 Plug terminal 40A

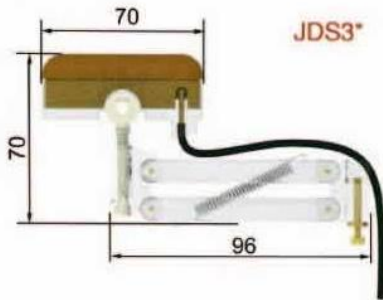
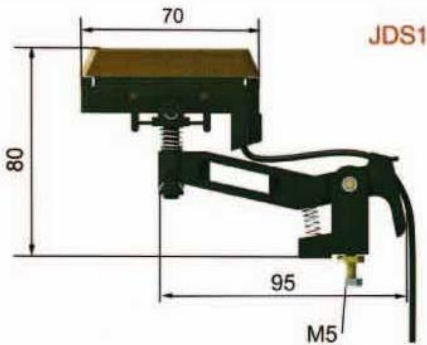
左右偏移/swivel:±15mm 上下位移/lift:±15mm

每个电刷的接触压力为3.5N contact pressure 3.5 N per brush

零线一般接在第4极,也可以按要求在其他位置.

ground at NO.4,other position on request.

型号/Type	电极/poles	尺寸a	尺寸b	尺寸c	底座base plate	产品代码/Cat.NO.
JDS1-1	1	80	118	-	8极(2号至8号为空)	663101
JDS1-2	2	80	118	-	8极(3号至8号为空)	663102
JDS1-3	3	80	118	-	8极(4号至8号为空)	663103
JDS1-4	4	80	118	-	8极(5号至8号为空)	663104
JDS1-5	5	80	118	-	8极(6号至8号为空)	663105
JDS1-6	6	80	118	-	8极(7号至8号为空)	663106
JDS1-7	7	80	118	53	8极(8号位置为空)	663107
JDS1-8	8	80	118	53	8极	663108
JDS1-9	9	80	146	53	10极(10号位置为空)	663109
JDS1-10	10	80	146	53	10极	663110
JDS1-11	11	120	174	80	11极	663111
JDS1-12	12	120	174	80	12极	663112



**JDSL- (加长杆) 的产品编码为663mnn, 加长杆集电器适用于工字钢轨道。
m表示集电器型号, nn表示组合的级数 (1-12, 编码为21-32)

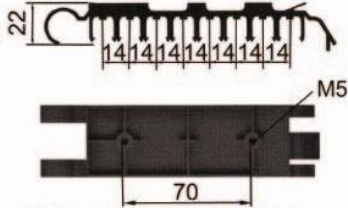
**JDSL- are used for I-beams, Fill-in last number (1-12) in accordance to bars required.
组合型单头集电器JDS1, JDL1, JDS3的底座采用与组合型双头集电器JDS2/40相同的底座。

*产品编码为6631nn, nn表示组合的极数 (1-12, 编码为01-12)
JDS3 Order-NO.:6631nn, nn are means poles of collector.

支架/Hangers

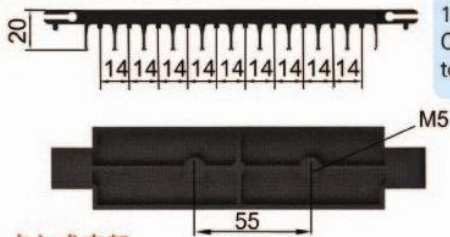
任意数量的导线可以通过增加紧凑型支架来组装在一起。
Any number of conductors can be assembled by combining the compact hangers

8极卡入式支架U12ZJA8
180铝轨专用 (Al-Track =180 mm)



卡入式支架：
180铝轨道8极组装不需要铜螺钉，
直接卡在轨道内即可；180铝轨
9极组装采用M5铜螺钉固定。

10极卡入式支架U12ZJA10
220铝轨专用 (Al-Track =220 mm)



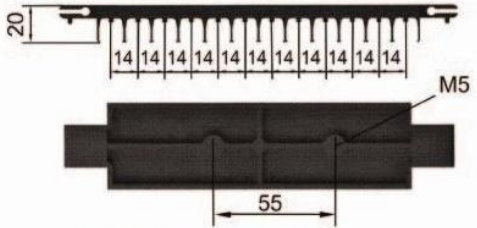
带金属构件的紧凑型支架，最多可容纳
12极滑线。
Compact hanger with hardware for up
to 12 conductors

卡入式支架

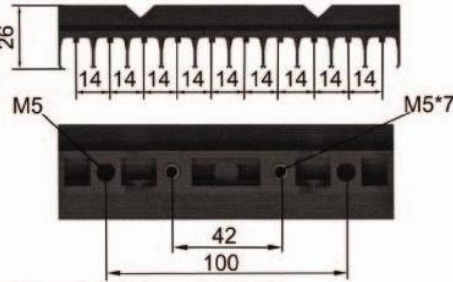
型号/Type	电极数/poles	产品代码/Cat-NO.
U12ZJA8	8	664008
U12ZJA9	9	664009
U12ZJA10	10	664010
U12ZJA11	11	664011
U12ZJA12	12	664012

标准导线间距 14mm/for conductor spacing of 14 mm

12极卡入式支架U12ZJA12
240铝轨专用 (Al-Track =240 mm)



10极螺钉式支架U12ZJB10
工字钢专用(for I-beam)

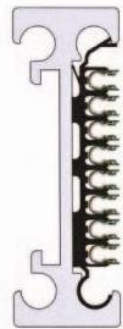


螺钉式支架

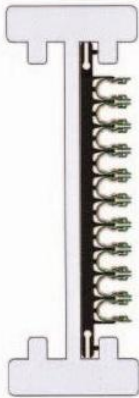
型号/Type	电极数/poles	产品代码/Cat-NO.
U12ZJB2	2	664102
U12ZJB8	8	664108
U12ZJB10	9	664110
U12ZJB11	10	664111
U12ZJB12	11	664112

铝轨道/Aluminium Track

紧凑型支架,带自锁功能,可容纳12极导线;可订购特殊的来满足您的单轨轨道。
Compact hanger,self-locking,for up to 12conductors on special order to fit your monorail track.
快速安装的直角型支架用于典型的单轨电气系统
snap-in & quarter turn type hangers for typical monorail track electrification



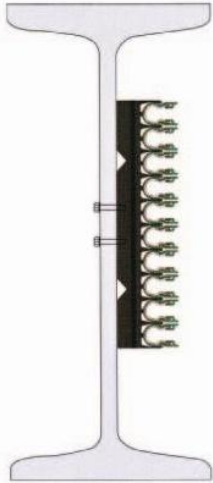
180铝轨 (Al-Track =180 mm)



220铝轨 (Al-Track =220 mm)



240铝轨 (Al-Track =240 mm)



工字钢(I-beam)

支架中心距为14mm for conductor spacing of 14 mm

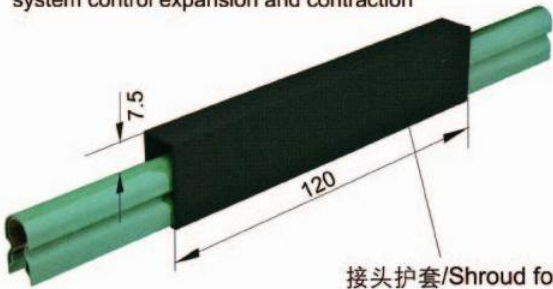
订购时请注明是工字钢轨道还是铝型材轨道。如有特殊轨道,请订购时将轨道图纸及样品发至安能公司

接头/Joints

用于连接两段滑线,也能补偿导线的热胀冷缩
system control expansion and contraction



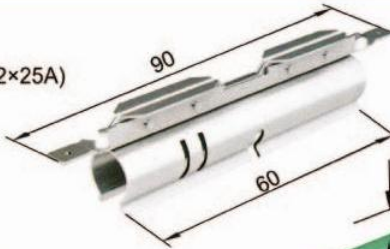
型号/Type	产品代码/Cat.NO.
UV12	663460



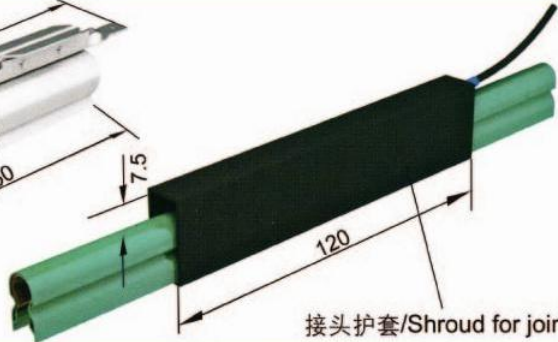
型号/Type	产品代码/Cat.NO.
U12HT	666812

供电接头/Feed terminal

(连续的电流/continous ampere capacity2×25A)

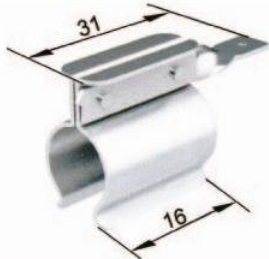


型号/Type	产品代码/Cat.NO.
UE12	663660



供电夹/Feed clip

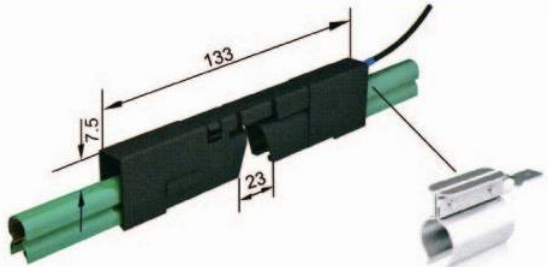
型号/Type	产品代码/Cat.NO.
U12DJ	666912



分段端帽组件/Isolating assembly



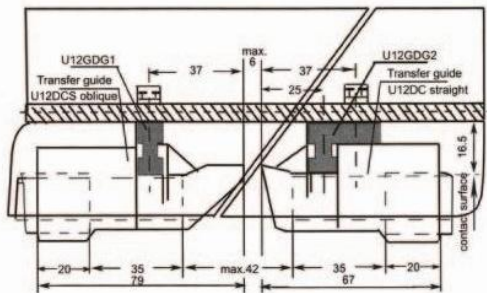
型号/Type	符号/symbol	组成/Comprising	产品代码/Cat.NO.
UE12		2个分段端帽	663660
U12FD1		2个分段端帽+1个供电夹	663724
U12FD2		2个分段端帽+2个供电夹	663725



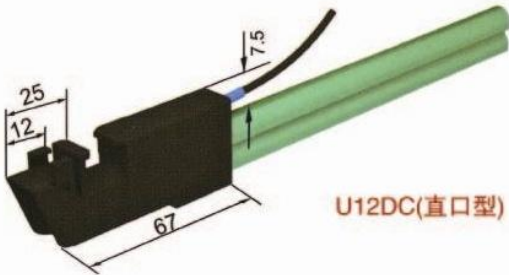
通过按压分段端帽上的导向按钮部分可以将两个端帽紧密的连接成一体。
The two transfer button elements are pressed together to form a rigid,well aligned unit.

道岔端帽/Transfer guide & end piece

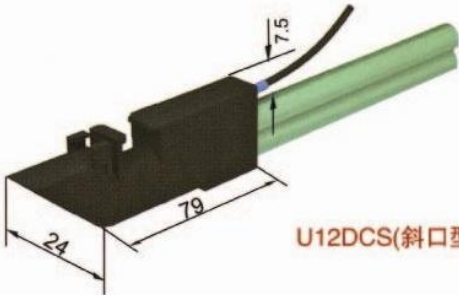
可同时订购供电夹(也能用作端帽;在道岔处与固定杆连接时, 视为固定点)



型号/Type	组成/Comprising	产品代码/Cat.NO.
U12DC	直口型道岔端帽	663867
U12DC1	直口型道岔端帽+1个供电夹	663868
U12DCS	斜口型道岔端帽	663869
U12DCS1	斜口型道岔端帽+1个供电夹	663870
供电夹U12DJ		666912



U12DC(直口型)



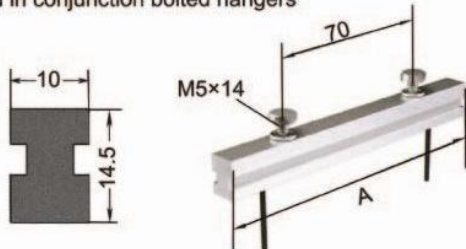
U12DCS(斜口型)

安装道岔端帽的固定杆(铝)/Anchor bar for transfer guide(Aluminium)

可拧入螺钉连接到轨道上,包括1根铝杆,2个六角形螺钉M5带垫圈,2个保险销2x20.
for bolting to the track,consisting of 1 aluminium profile bar,2 hex.screws M 5w/washer,2 locking pins 2X20.

U12GDG1

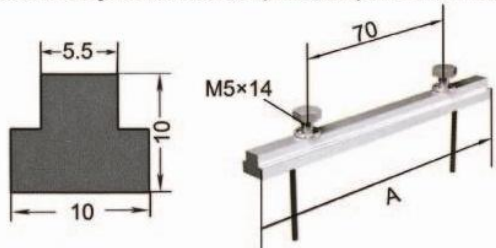
用于在轨道的直切口处与带螺纹孔的支架连接
used in conjunction bolted hangers



(导线表面和轨道距离为 16.5m/16.5mm)
Distance between conductor-surfance and track

U12GDG3

用于和快速安装的直角型(旋转型)嵌入式)支架连接
used in conjunction with snap-in and quarter turn hangers



(导线表面和轨道距离为 10m/10mm)
Distance between conductor-surfance and track

U12GDG2

用于在轨道的斜切口处与带螺纹孔的支架连接
used in conjunction with bolted hangers for oblique cut tracks



型号/Type	极数/poles	A/mm	产品代码/Cat.NO.
U12GD1-8	1-8	118	663908
U12GD1-10	1-10	143	663910
U12GD2-8	1-8	118	663918
U12GD2-10	1-10	143	663920
U12GD3-8	1-8	118	663928
U12GD3-10	1-10	143	663930

固定夹/Locating clamp

滑线上的每一个固定点使用两个定位夹和一个支架
for each anchor point use one bolted hanger with
2 locating clamps per conductor bar

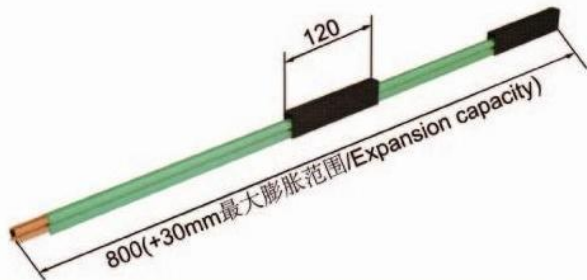
型号/Type	产品代码/Cat.NO.
U12GDJ	664112



膨胀节/Expansion section

0.8m的膨胀组件是系统长度的一部分。
The 0.8 m expansion assembly is part of the system length.

型号 Type	产品代码 Cat.NO.			
	绿色标准外护罩 Standard,green		高温外护罩 High temp.,gray	
U12PZJ	相线phase 663530	零线ground 663531	相线phase 663532	零线ground 663533



连接插件/Joints for Connecting cable

用于集电器、供电接头、道岔端帽和分段端帽的接线。
for collectors,feed terminals,transfer guides and isolating assemblies.

0.5m 长的集电器电缆带快速连接线接头 6.3×0.8(QX2.5 或 QX4.0) , 也可订购更长的电缆连接电缆建议使用高柔性软电缆
0.5 m long with quick plug 6.3×0.8(female spade connector QX2.5 or QX4.0) for collector Long cable available.

型号/Type	电缆/for cable Φ	产品代码/Cat.NO.
ZH2.5	2.5	667012
ZH4.0	4.0	667013
QX2.5	2.5	667014
QX4.0	4.0	667015
RDL-2.5	2.5	667025
RDL-4.0	4.0	667140

直插件ZH

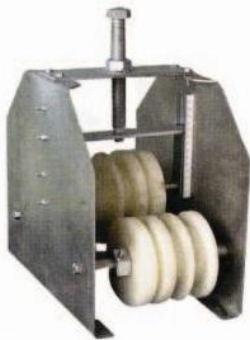
旗形插件QX

柔性电缆RDL



安装工具/Installation Tools

弯弧机/Curve tool



型号/Type	产品代码/Cat.NO.
U12WH	669001

打孔钳/Conductor punch tool



型号/Type	产品代码/Cat.NO.
U12DKQ	669005