

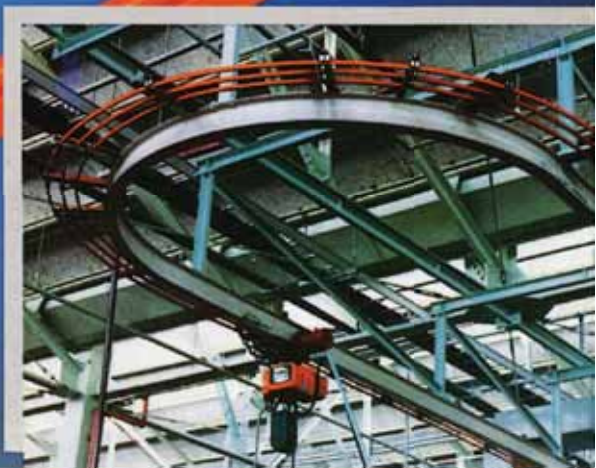


Safety Power Rails

Application of Crane 、 Hoist 、 Warehouse 、 Kinds of Assemble Line

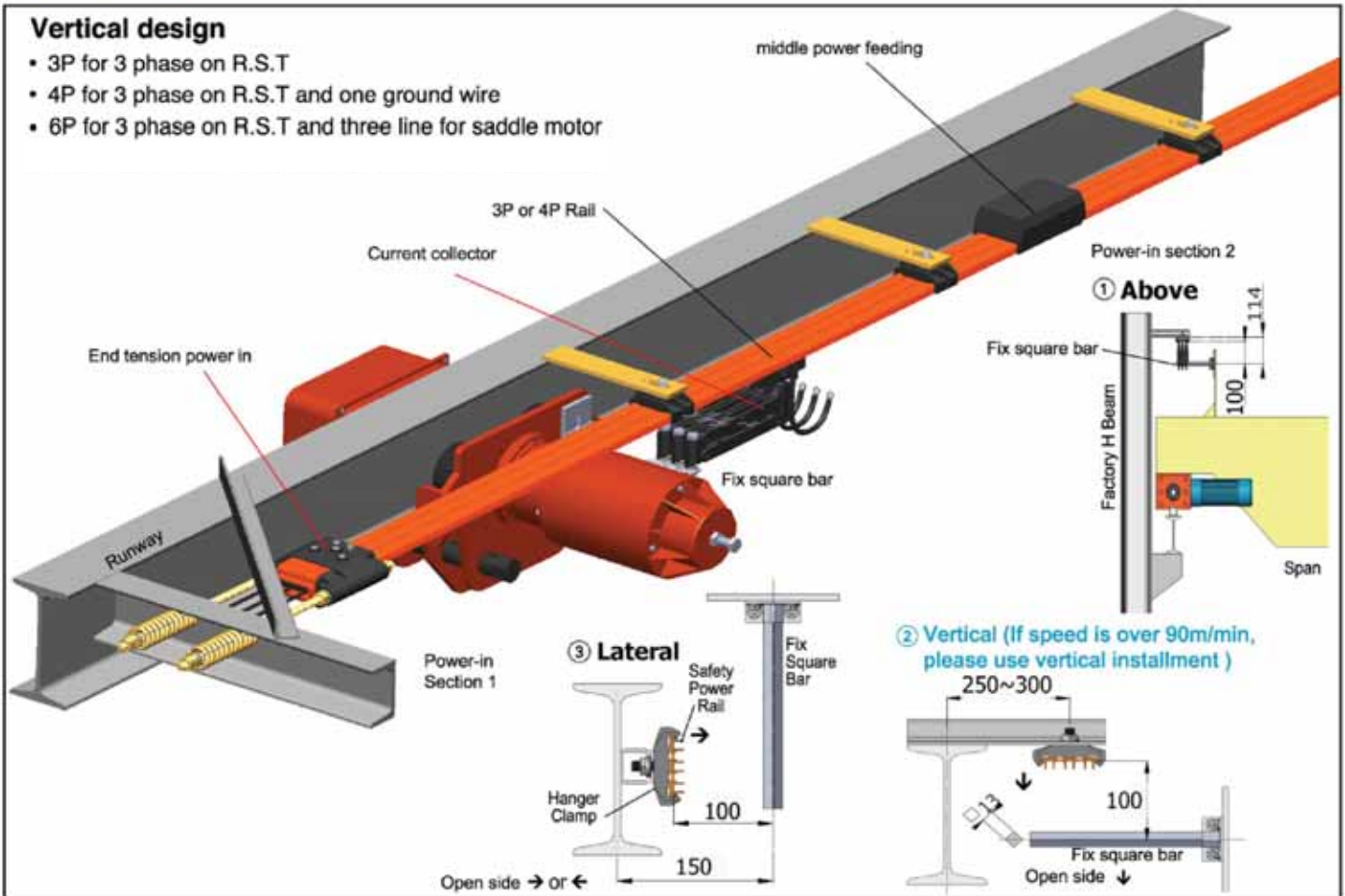
**Appointed
Mark**

**ISO 9001
Certificated
Since Year
2000**

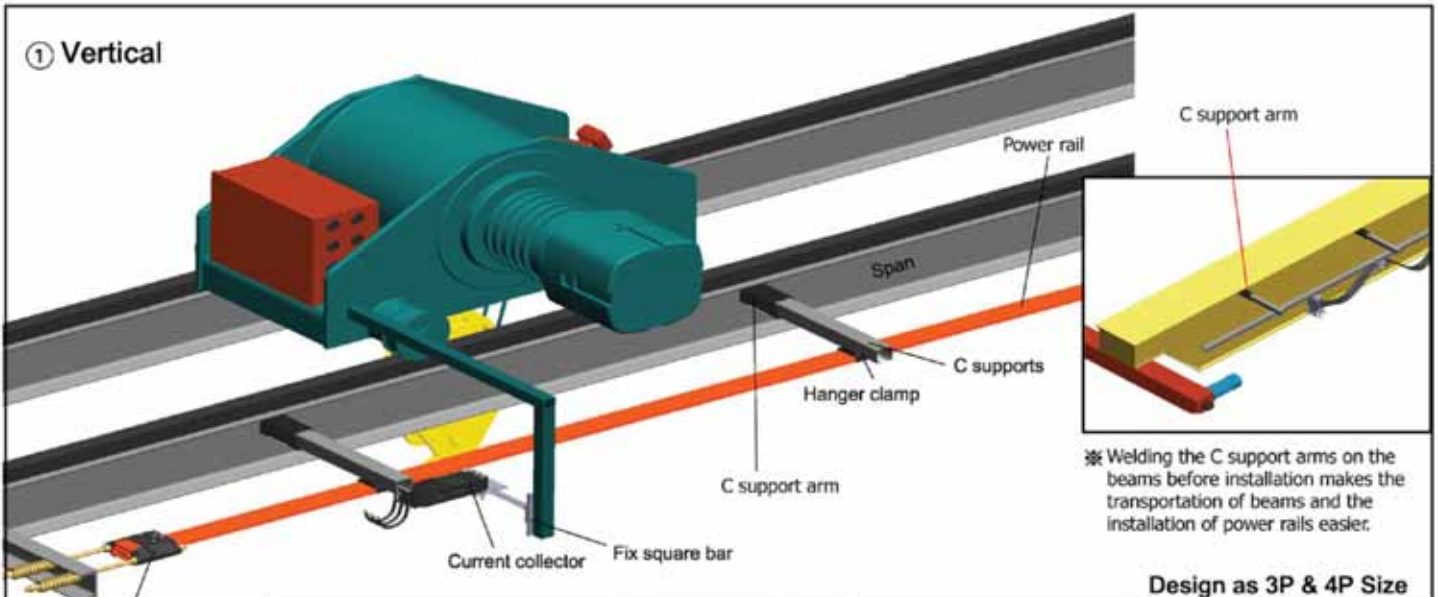


Vertical design

- 3P for 3 phase on R.S.T
- 4P for 3 phase on R.S.T and one ground wire
- 6P for 3 phase on R.S.T and three line for saddle motor

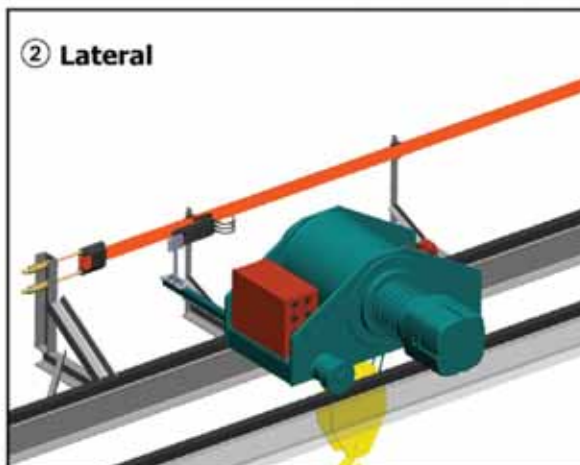


① Vertical

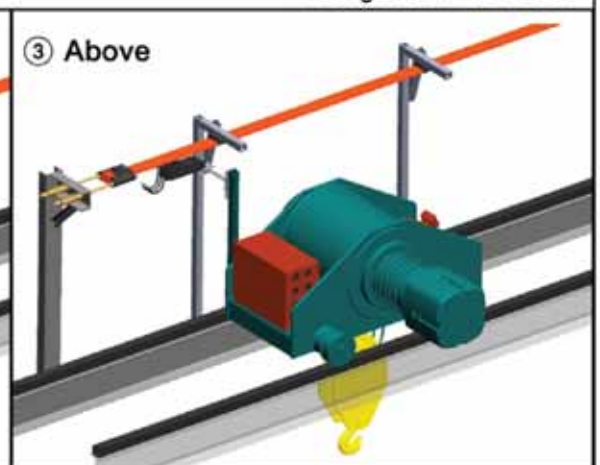


Design as 3P & 4P Size

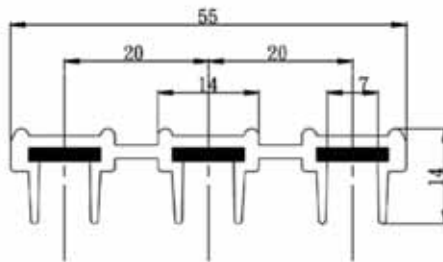
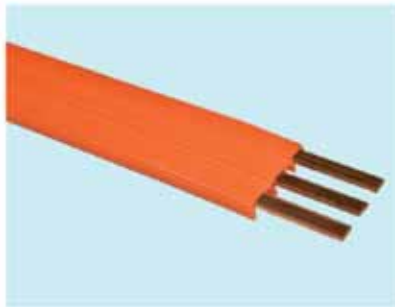
② Lateral



③ Above

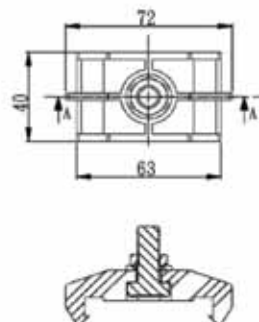


3P Safety power rail

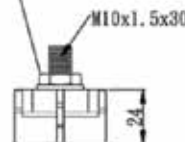


OFC 3N(99.9% ,good conductivity)

3P (Phase) Safety Power Rail			
Type	Capacity (A)	Width (mm)	Weight (Kg/m)
PWL-4-001	60	10	0.6
PWL-4-002	75	10	0.8
PWL-4-003	100	10	1.03
PWL-4-004	150	10	1.14
PWL-4-005	200	10	1.42



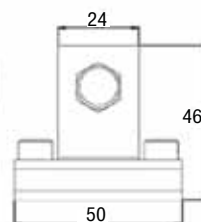
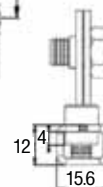
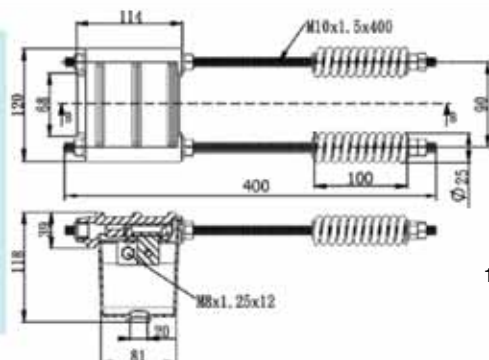
Use with C Track Support
and C Plate M10 Nut
30×20×5



PWL-4-006

3P Hanger Clamp

0.075 kg / pc

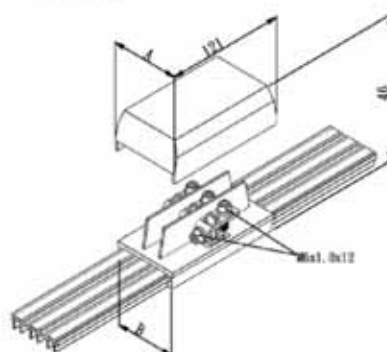


Fasten Block

Cancelled

3P End Tension & Power in

1.73 kg / pc

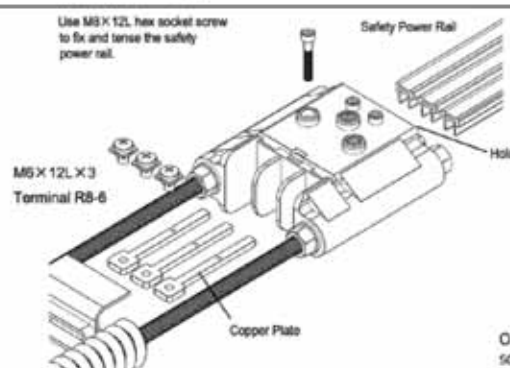


Type	Size	A	B
3P		70	62
4P		90	82
6P		130	122

PWL-4-012

3P Middle Power Feed-in

0.21 kg / pc



Use M8 X 12L hex socket screw
to fix and tense the safety
power rail.

Safety Power Rail

M8 X 12L X 3
Terminal R8-6

Copper Plate

Only two and half cycle needed when
screw meet safety power rail.

1. Insert safety power rail into the hole
2. Use M8 X 12L hex socket screw to fix and tense the safety power rail.
(only two and half cycle needed when screw meet the safety power rail)
3. Power lines fixed with terminals, and fasten the copper power plate.

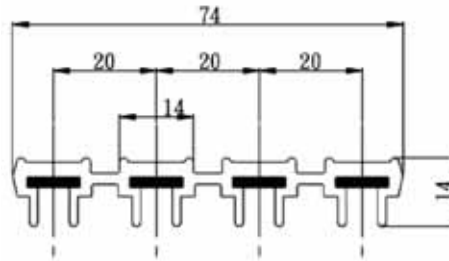
Power rail PVC peel free!

PWL-4-007

3P End Tension & Power in

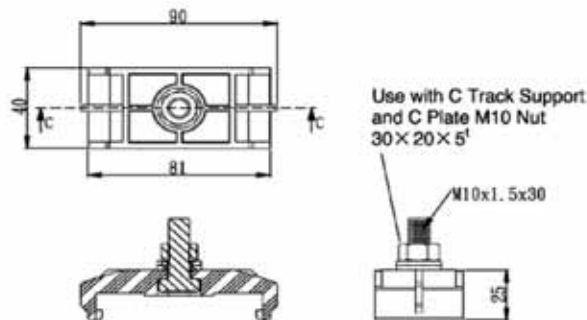
1.5 kg / pc

4P Safety power rail

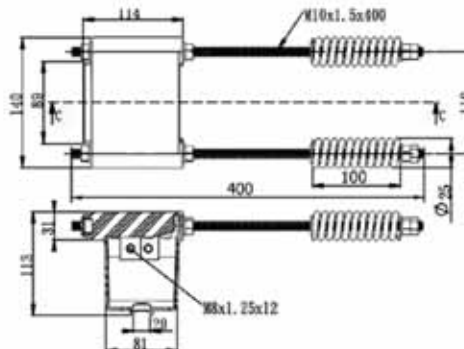


OFC 3N (99.9% ,good conductivity)

4P (Phase) Safety Power Rail			
Type	Capacity (A)	Width (mm)	Weight (Kg/m)
PWL-4-016	75	10	1.1
PWL-4-017	100	10	1.4
PWL-4-018	150	10	1.6
PWL-4-019	200	10	1.9



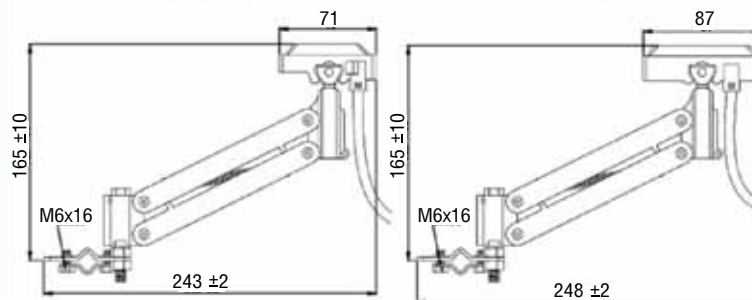
PWL-4-020
4P Hanger Clamp
0.083 kg / pc



Cancelled
End Tension & Power in
1.74 kg / pc

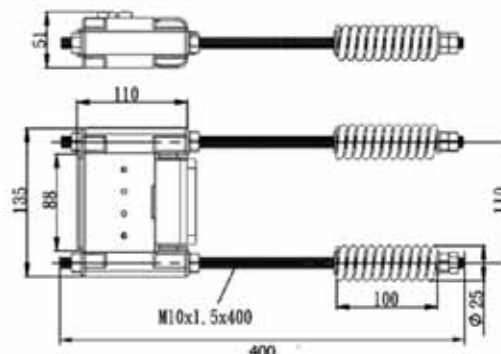
PWL-4-022

PWL-4-023



PWL-4-022
30A Current Collector
0.24 kg / pc

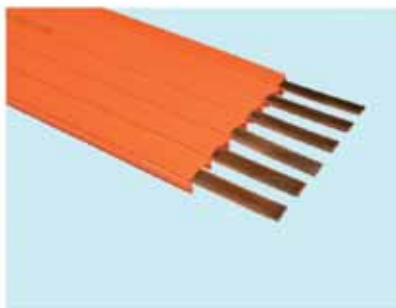
PWL-4-023
60A Current Collector
0.27 kg / pc



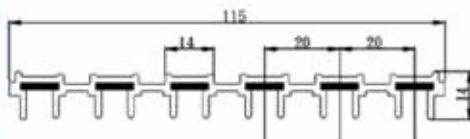
Power rail PVC peel free!

PWL-4-021
End Tension & Power in
1.28 kg / pc

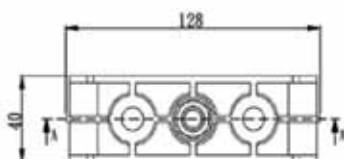
6P Safety power rail



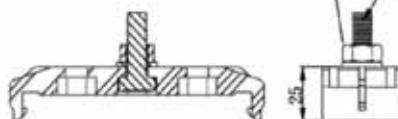
OFC 3N (99.9%, good conductivity)



6P (Phase) Safety Power Rail			
Type	Capacity (A)	Width (mm)	Weight (Kg/m)
PWL-4-026	75	10	1.64
PWL-4-027	100	10	2.06
PWL-4-028	150	10	3.28
PWL-4-029	200	10	4.12



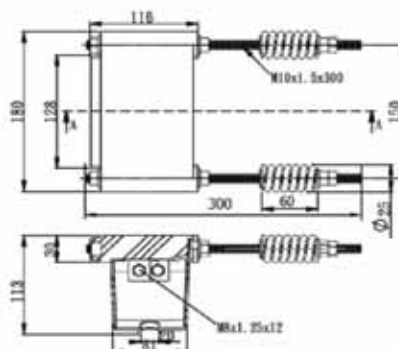
Use with C Track Support
and C Plate M10 Nut
30 x 20 x 5



PWL-4-030

6P Hanger Clamp

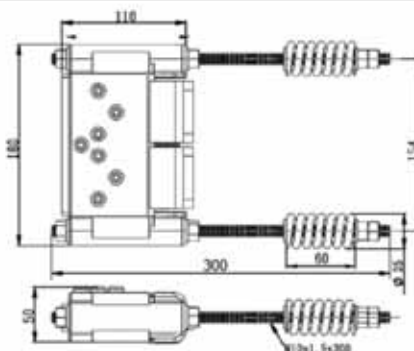
0.1 kg / pc



Cancelled

6P End Tension &
Power in

1.9 kg / pc

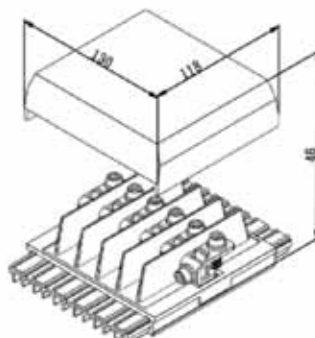


Power rail PVC peel free!

PWL-4-031

6P End Tension &
Power in

1.9 kg / pc



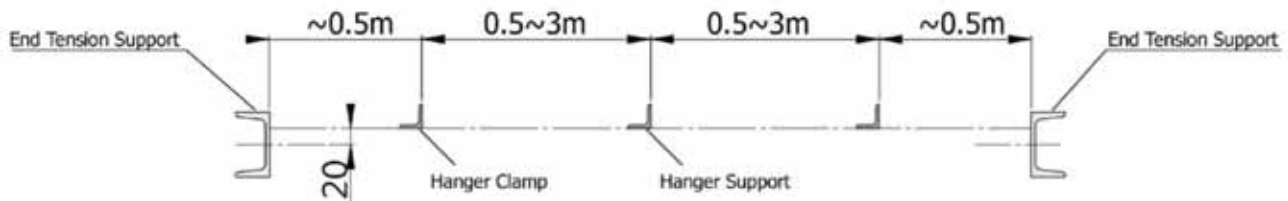
PWL-4-035

6P Middle Tension
& Power in

0.38 kg / pc

3P、4P、6P Installments Diagram

Step 1 Support Design



Remark :

- (1) The side design installment recommended when a camber occurs to the 3-6P safety power rail assembly.
- (2) The hanger clamps are supposed to be installed every 0.5 meter from the starting point of the turning.
- (3) The 3-6P tension part for safety power rails must be installed at the place about 10mm higher than the hanger clamp.

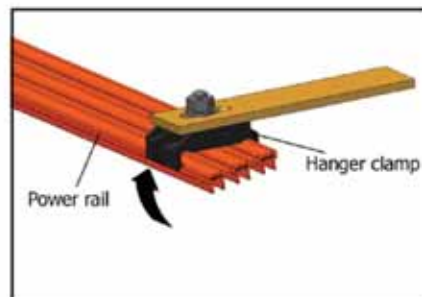
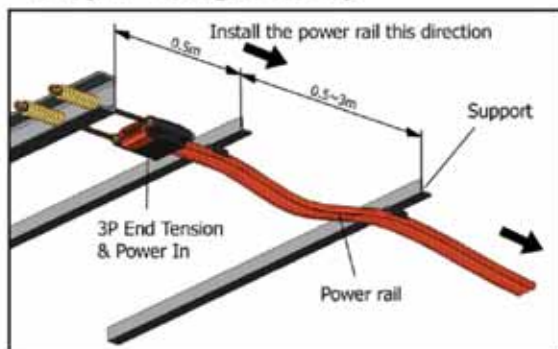
This step prevents water from flowing to the power-in place along the safety power rails; hence the short circuit won't happen.

- (4) The silica gel must be coated on the connected place of the power-in part and safety power rail as weather protection.
- (5) The 3-6P safety power rails are not suitable for outdoor usage or the place with high acid/alkali environments.

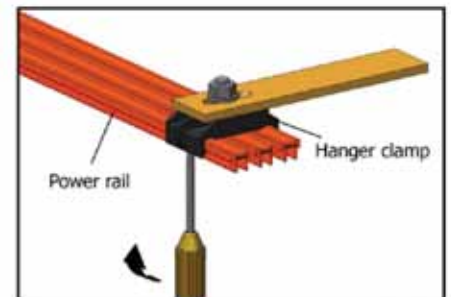
Step 2 End tension & Power-in

Remark : (1) Install one end on the ground then lift rail up to estimated location and install another.

Step 3 Hanger clamp

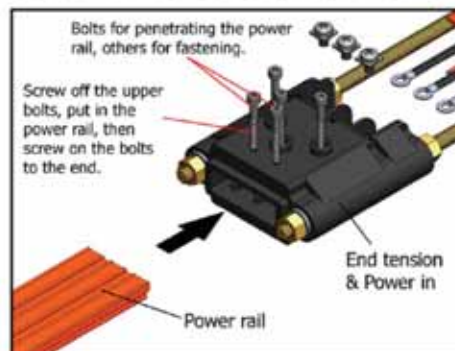


(1) Aim the hanger clamp with power rail and push up.

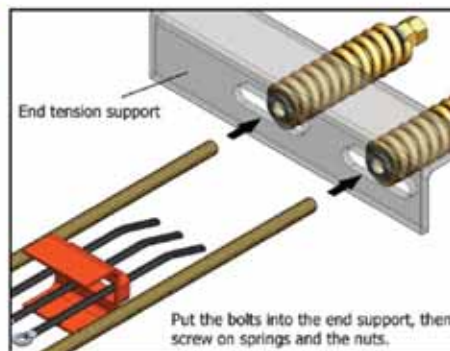


(2) Use a slotted screwdriver to dismantle the hanger clamp.

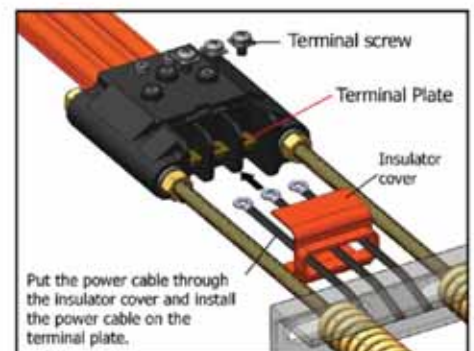
Step 4 End tension & Power-in



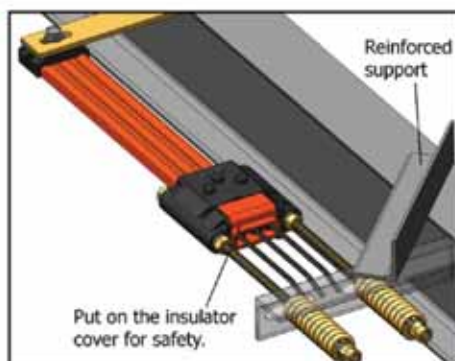
4-1



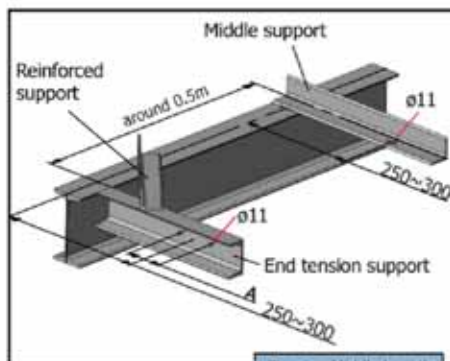
4-2



4-3

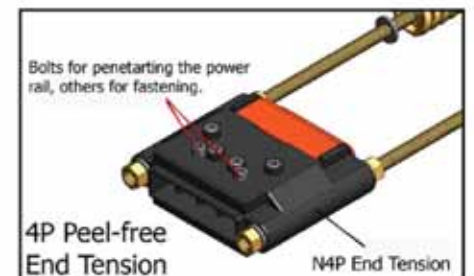


4-4



4-5

Tension Middle Length	A
3P	90
4P	110
6P	150



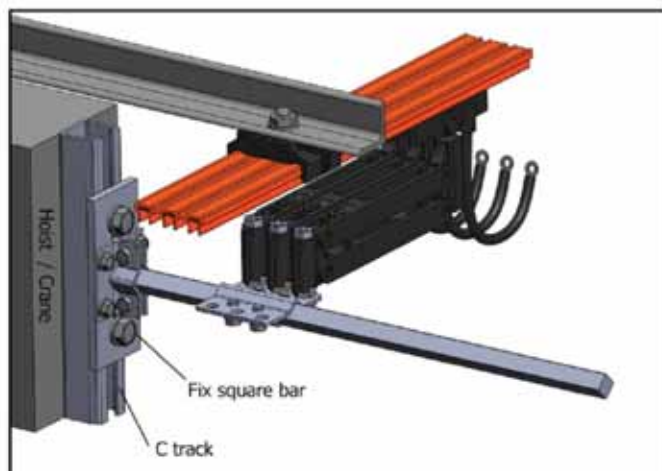
4P Peel-free End Tension



6P Peel-free End Tension

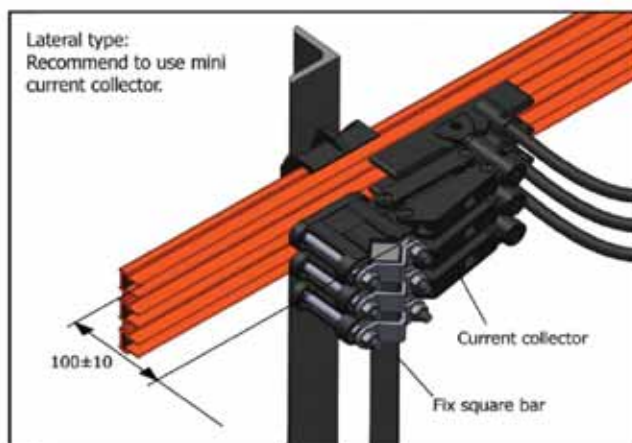
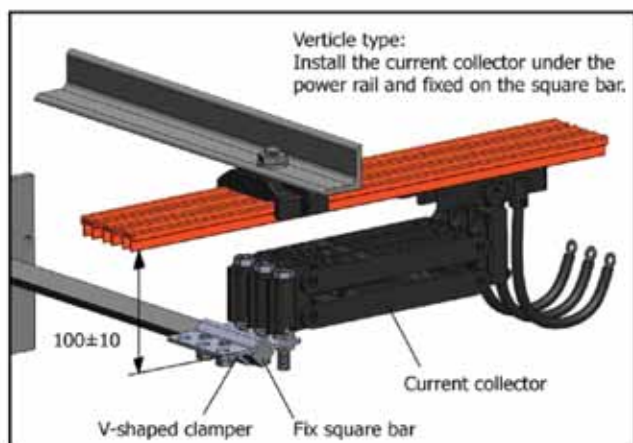
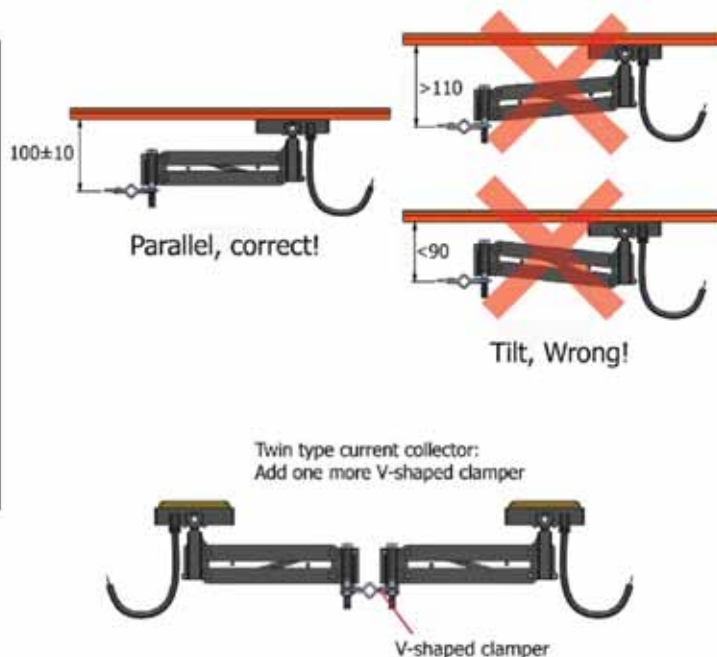
★ To avoid short circuit, please fasten the terminal plate with M8 x 16mm socket screws.

Step 5 Fix square bar/current collector

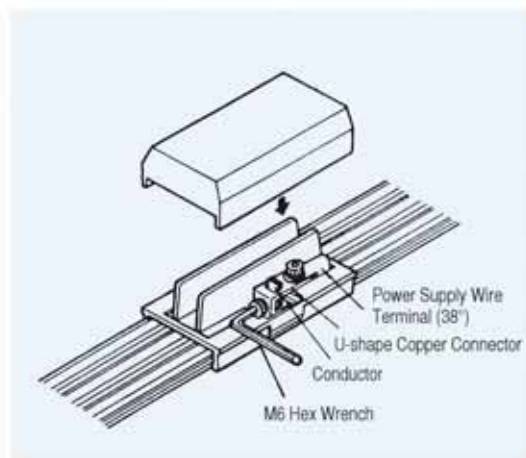
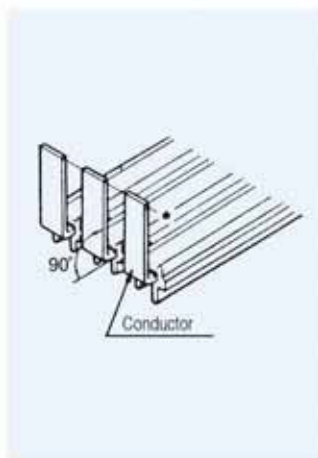
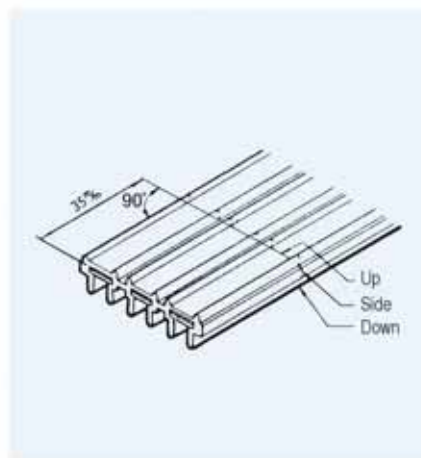


Remark:

- (1) Fix square bar could be welded on the crane or screw used.
- (2) Fix square bar's angle is supposed to be mounted. One diagonal of the bar must be parallel to ground and safety power rail, another is vertical.
- (3) Length could be cut as demand.
- (4) If carbon brushes worn, just replace a new one.

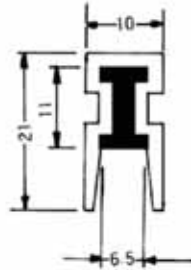


3P Rail connector and middle power in



- (1) Cut off the PVC material at 35mm from the end of safety power rail.
- (2) Bend upward copper material in vertical 90° angle.
- (3) Insert both sides of 90° vertical angle safety power rail into middle power feeding and connect both sides by screwing up M6 inner hexagon screw bolt on U type copper connector.

I type safety power rail Parts Diagram



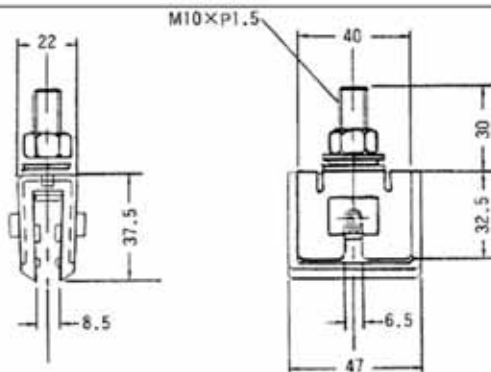
OFC 3N (99.9%, good conductivity)

PWL-5-001(150)

PWL-5-002(200)

"I" Type Rail

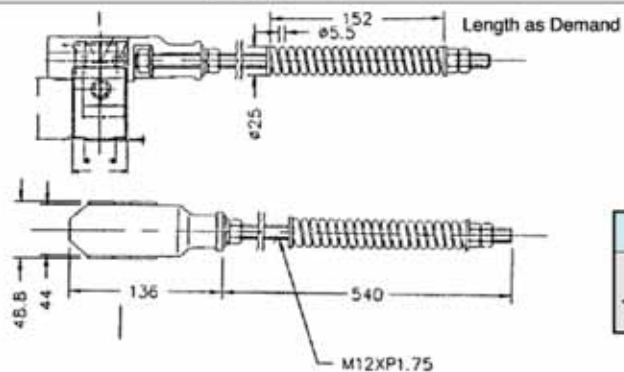
0.47 kg / M



PWL-5-003

**"I" Type
Hanger Clamp**

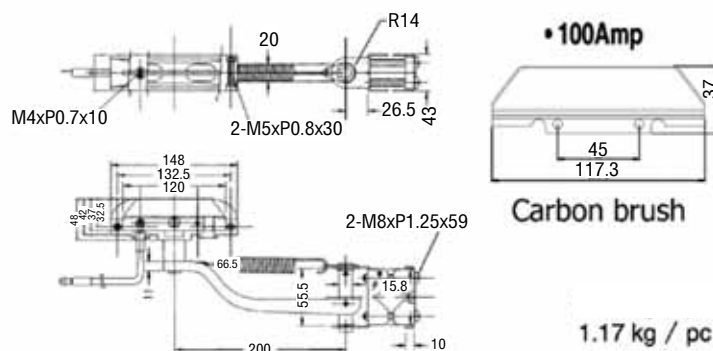
0.11 kg / pc



PWL-5-004

**"I" Type End
Tension & Power in**

1.1 kg / pc



PWL-5-006

**100 Amp
Current Collector**

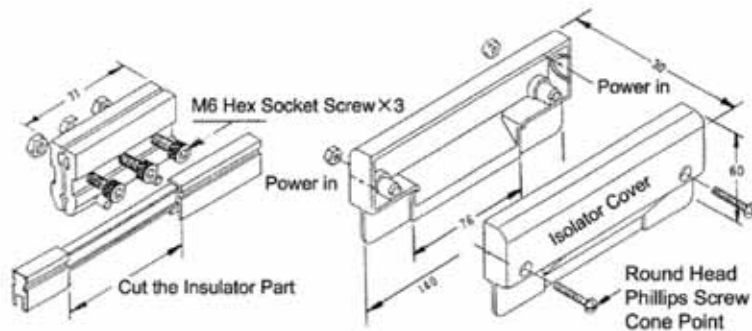
1.17 kg / pc



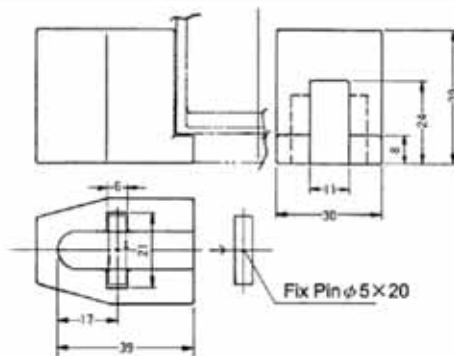
PWL-5-005

Insulator Guide

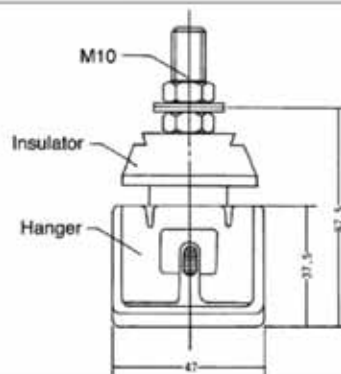
1.45 kg / pc



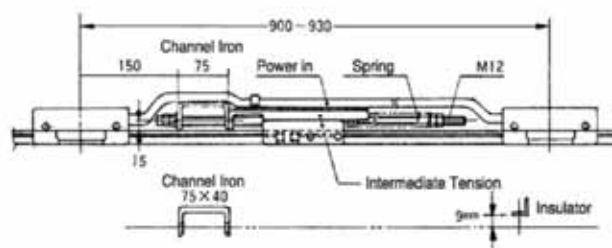
0.28 kg / pc



0.07 kg / pc



0.15 kg / pc



Technical drawing of a mechanical assembly, likely a pump or valve, showing various components and dimensions. The drawing includes a side view and a cross-sectional view. Key dimensions include 104, 22, R14, 26.5, 1.68, 48, 37.3, 66.5, 11, 130, 21, 5x5, and 10. A note indicates a thread of 2-M5 x P0.8 x 30.

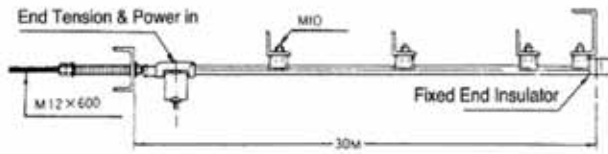
**For "8" type
power rail**

A = Aluminum body

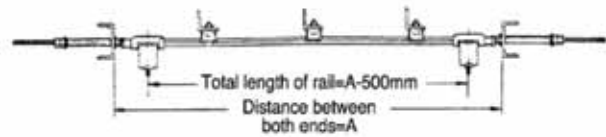
I type safety power rail installment diagram

Step 1 Support Design

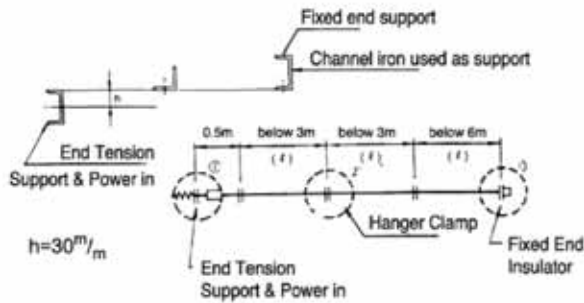
A. installment for I type in 30 meters



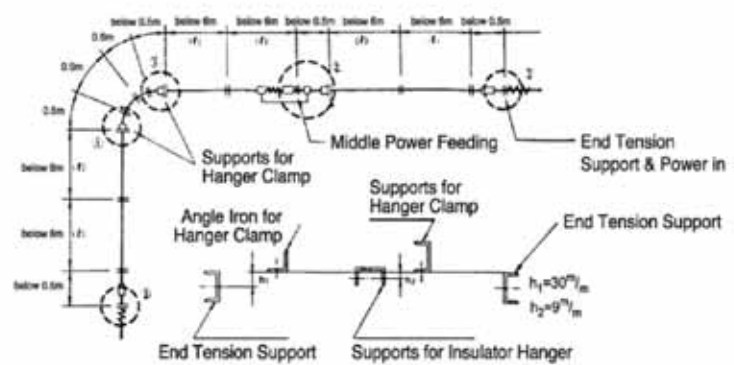
B. installment for I type over 30 meters



Line Case

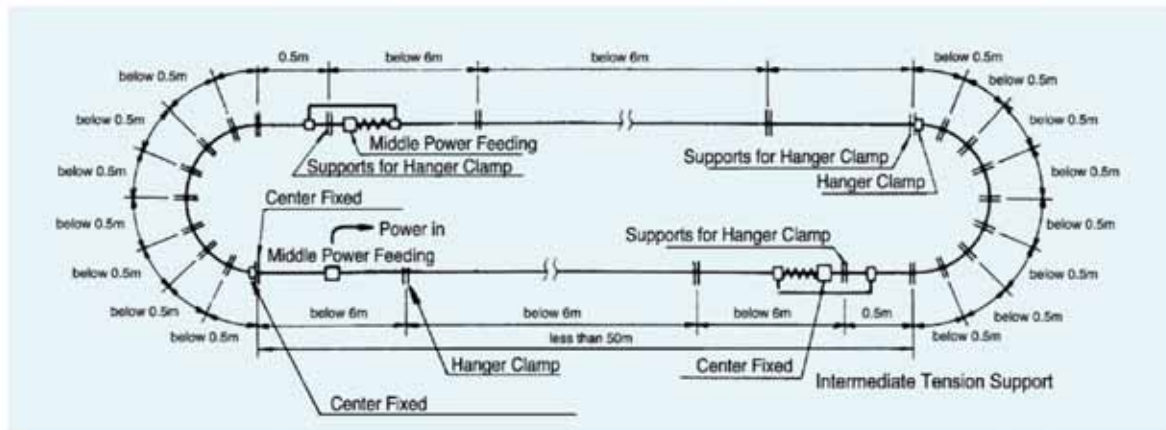


Curve Case

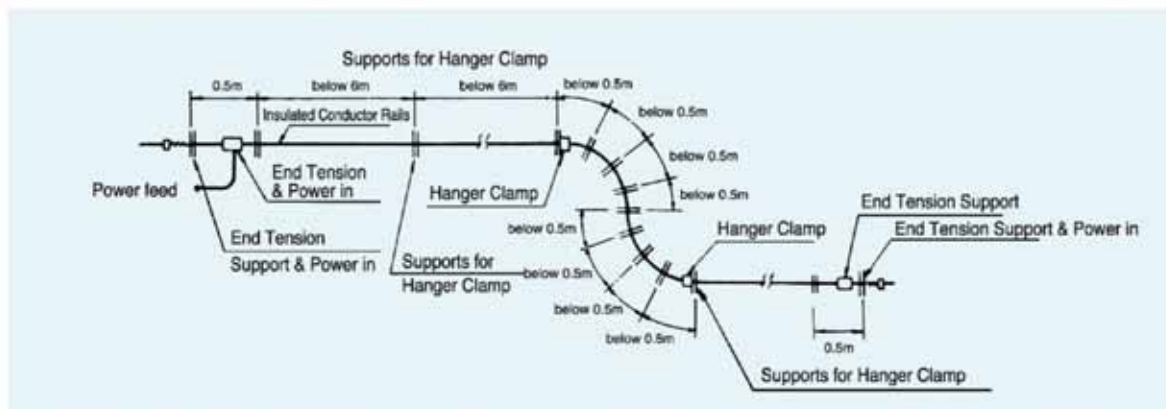


Around type

End Tension Support



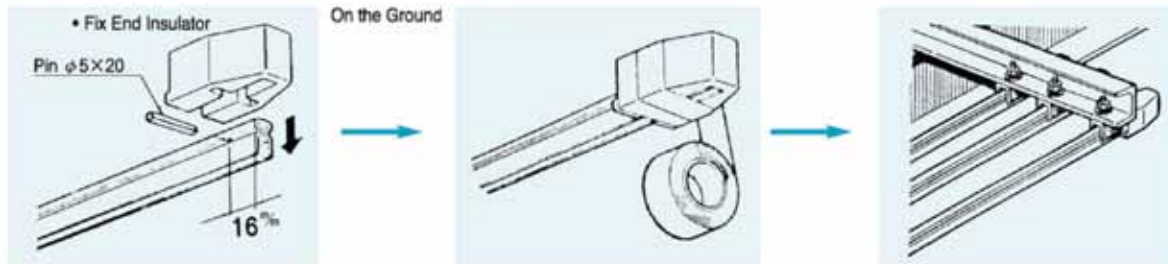
"S" type



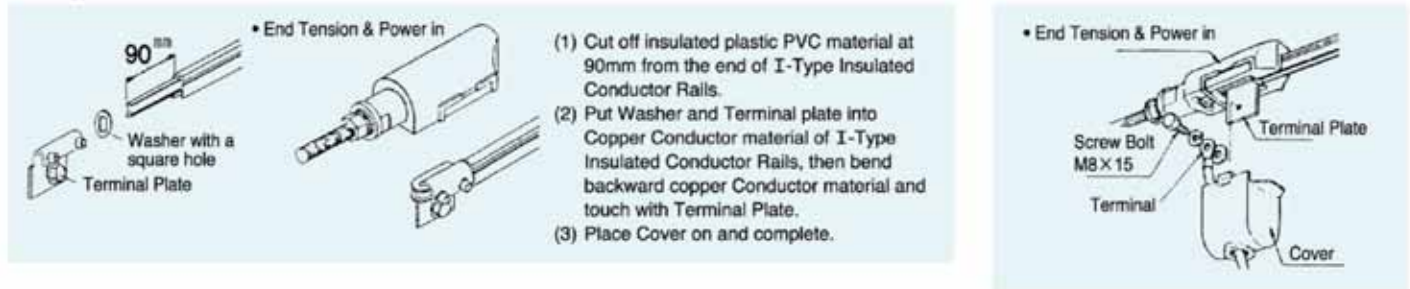
Around & Relief type

1. Distance of each hanger clamp must be under 0.5m in around type.
2. The way to pull up rail is use traverse table put on the saddle's beam, pull up the rail when crane moves. (As the commentary picture no.3 shown in end cover)

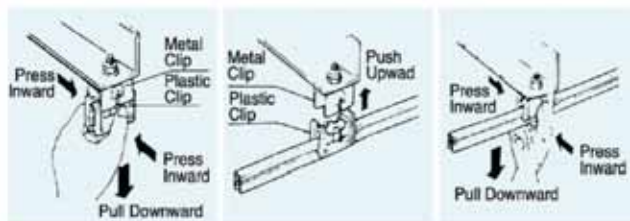
Step 2 Length in 30M



Length over 30M

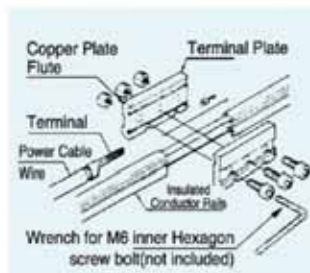


Step 3 Set & Hanger Clamp



- Use tool to clip inward Plastic Clip and pull I-Type Insulated Conductor Rails out together if necessary.

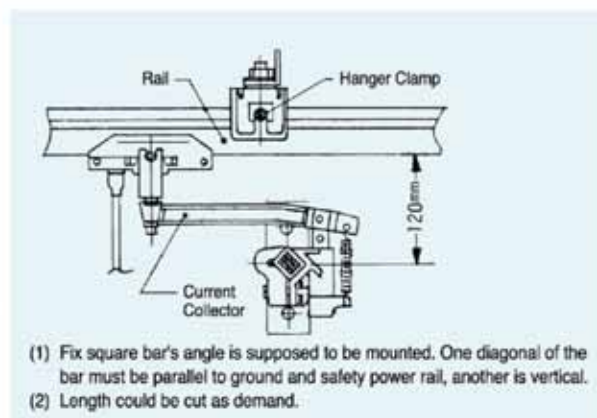
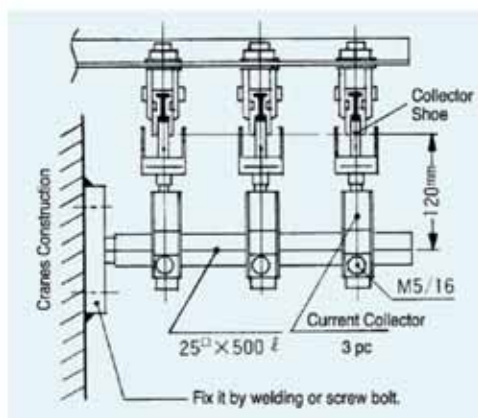
Middle power feed in



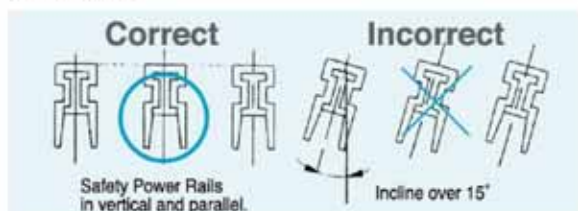
- (1) Cut off 80mm long of insulated material PVC in the middle of I-Type Insulated Conductor Rails for supplying power.
- (2) Contact Copper Conductor of I-Type Insulated Conductor Rails by two piece of Copper Plate and fix it by M6 inner hexagon screw bolt.
- (3) Drill two holes $\phi 5$ mm through both Copper Plate and Copper conductor of I-Type Insulated Conductor Rails at the bottom and insert pins to connect and fix them.

Step 4 Set, End Tension & Power in

Step 5 Set, guide & Current Collector



* Caution



- (1) It is not allowed to incline over 15° when install I-Type Insulated Conductor Rails.
- (2) If I-Type Insulated Conductor Rails Still incline after installation, then it is required to adjust forcibly.



Commentary

- ① Current Collector Set
- ② For Hoist

- ③ Around Set
- ④ For Hoist (Curve Track)

- ⑤ Amusement Grounds
- ⑥ Warehouse