

320A. 600A. 800A.

W Type Power Rails

公司簡介

壹、W型電軌特點

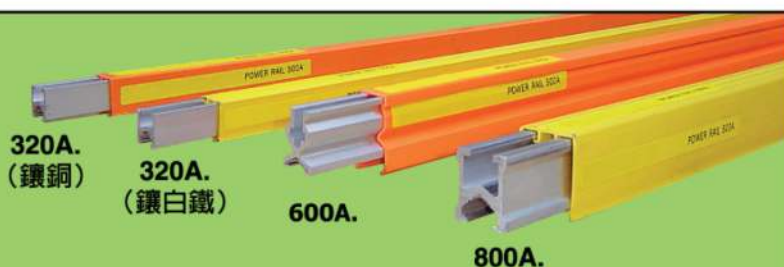
貳、工程實績照片

參、選用何種安培數及叫料

肆、W320A零配件、施工圖

伍、W600A、W800A

陸、尾頁工程實績照片



* 電壓降 ΔU 計算方法：Formulas for the calculation of the voltage drop ΔU

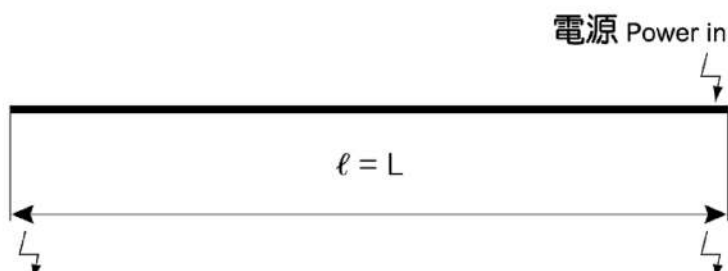
$\Delta U = \sqrt{3} \cdot \ell \cdot I_G \cdot Z$ 三相電源供電 For three phase current
 $\Delta U = 2 \cdot \ell \cdot I_G \cdot Z$ 單相電源供電 For alternating current
 $\Delta U\% = \Delta U / U_N \cdot 100\%$ <3.0% (安全數據) Safety index number
 ΔU : 電壓降 Voltage drop [V] ℓ : 供電位置值 feeder length [m]
 I_G : 總負載電流量 Total Currents [A] Z : 電阻抗 Impedance of conductor [Ω/m]
 U_N : 供電電壓 Operating Voltage [V]

Z 值——

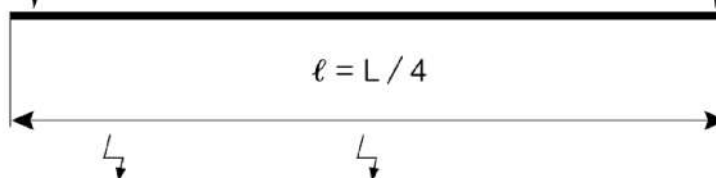
型 號	W320	W500	W800
Z 值	0.00032	0.00017	0.00016

ℓ 值——

末端供電源
Endfeed



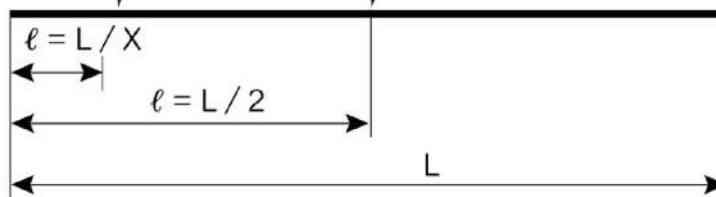
末兩端供電源
Feed-in at both ends



L / X處供電源 L / X feed

中間供電源 Center-feed

行走總長 System length



* 範例 Calculation sample

現場資料 Problem to be solved：行走長度 $L = 190\text{m}$.

供電電壓 $U_N = 3$ 相，380v.

中間供給電源 Center - feed

吊車共5台如下

	主機 Hoist	小車 Cross-travel	大車 Long-travel	合計 Total
1.	5 Ton.	0.75KW	1.5KW	54A
2.	5 Ton.	0.75KW	1.5KW	54A
3.	3 Ton.	0.37KW	0.74KW	31A
4.	3 Ton.	0.37KW	0.74KW	31A
5.	3 Ton.	0.37KW	0.74KW	31A

第一步： $I_G = 54A + 54A + 31A + 31A + 31A = 201A$

第二步： $\therefore I_G = 201A \quad \therefore$ 選用 W320

第三步：W320 $Z = 0.00032$

代入公式

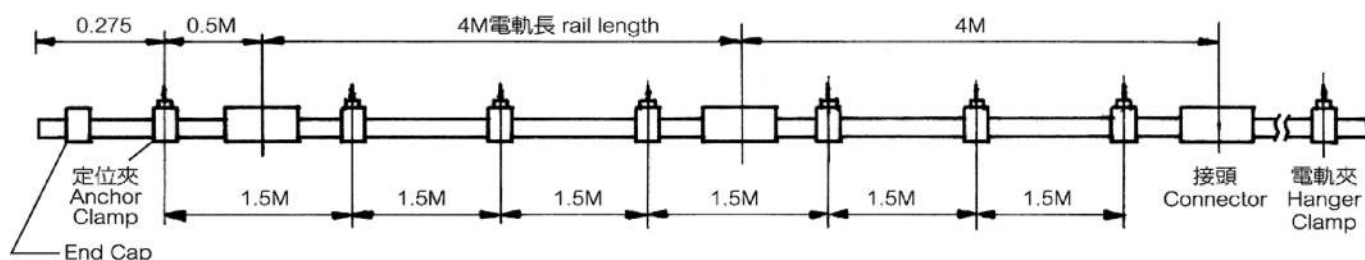
$$\begin{aligned}\Delta U &= \sqrt{3} \cdot \ell \cdot I_G \cdot Z \\ &= \sqrt{3} \cdot 190 / 2 \cdot 201 \cdot 0.00032 \\ &= 10.58\end{aligned}$$

$$\begin{aligned}\text{第四步：} \Delta U\% &= \frac{\Delta U}{U_N} \cdot 100\% \\ &= 10.58 / 380 \cdot 100\% = 2.8\% \cdots \cdots < 3.0\%\end{aligned}$$

結 果：所以選用 W320

※ 如何叫料 Order example

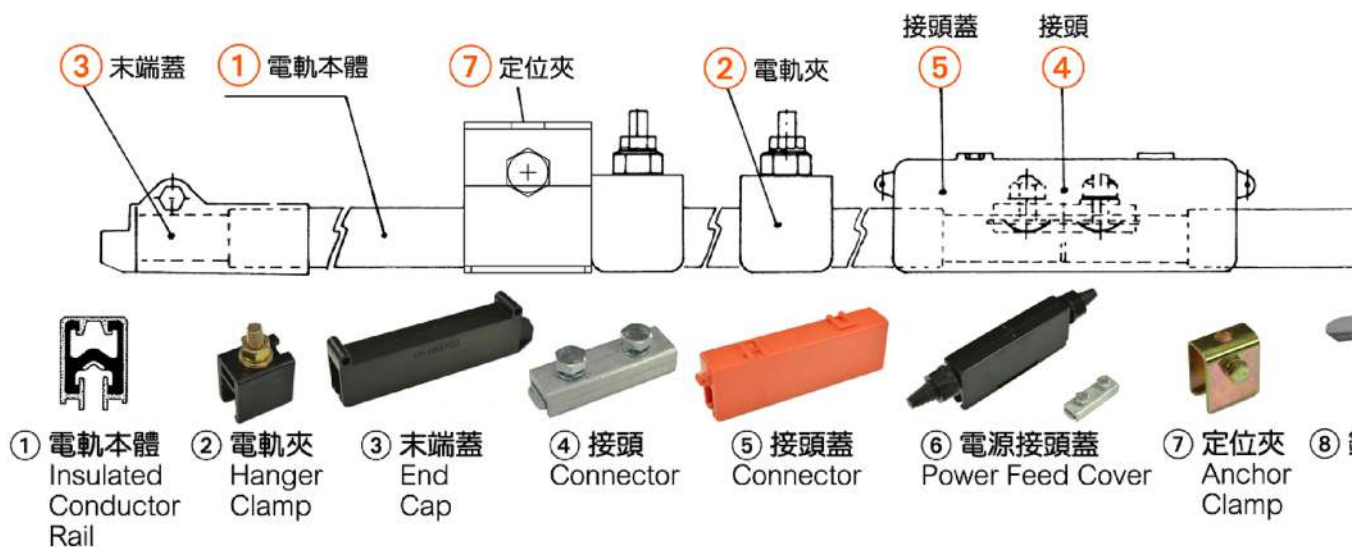
一、W320 · W500 · W800



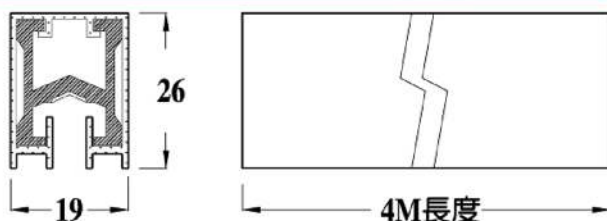
* 三相米 叫料標準參考表 Order Specification

長度	W電軌	電軌夾	接頭	接頭蓋	電源蓋	末端蓋	定位夾	集電架&棒組
30M	24支	66只	21只	18只	3只	6只	6只	Current collector ※ One crane be used One setg pole 一台吊車用一組
60M	45支	120只	42只	39只	3只	6只	6只	
120M	90支	20只	84只	81只	3只	6只	6只	

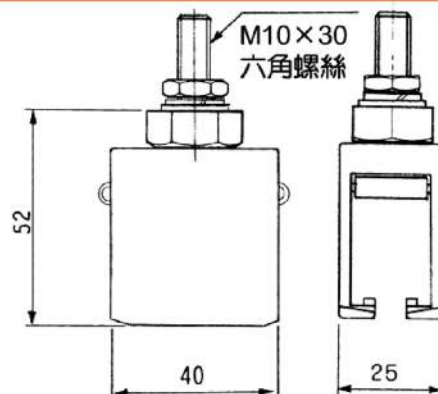
備註：W500、W800入電位置不同時，再行調整用量。



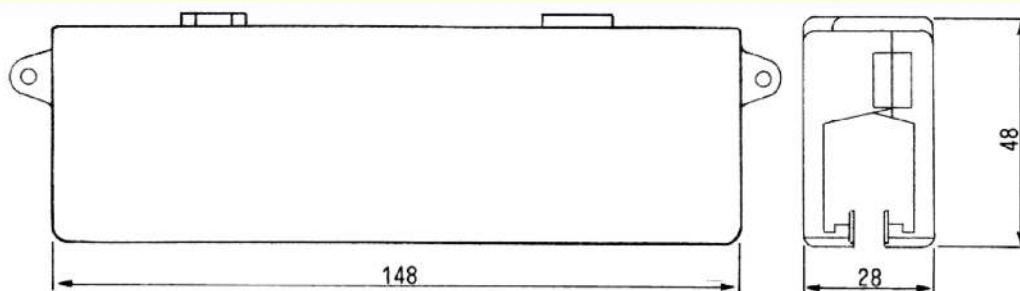
1 電軌本體 PWL-6-001A (鑲銅) PWL-6-001B (鑲白鐵)



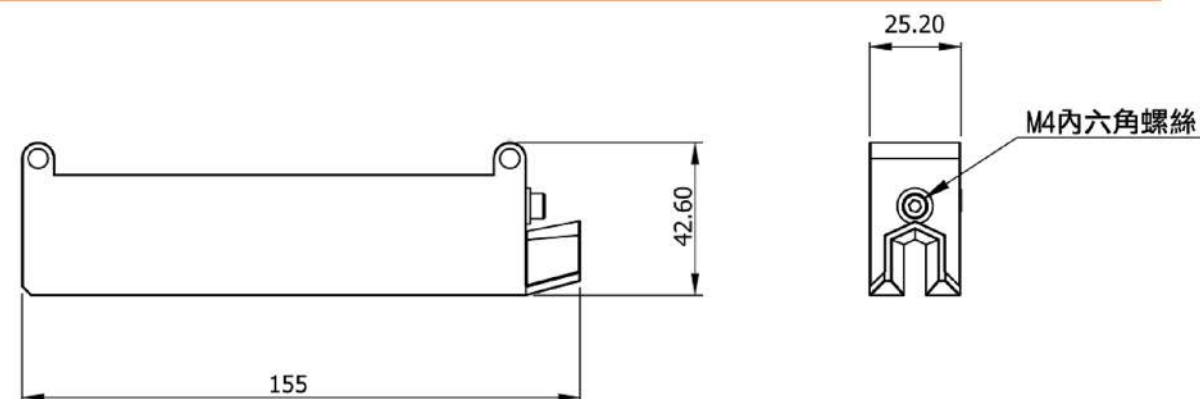
2 電軌夾 PWL-6-002



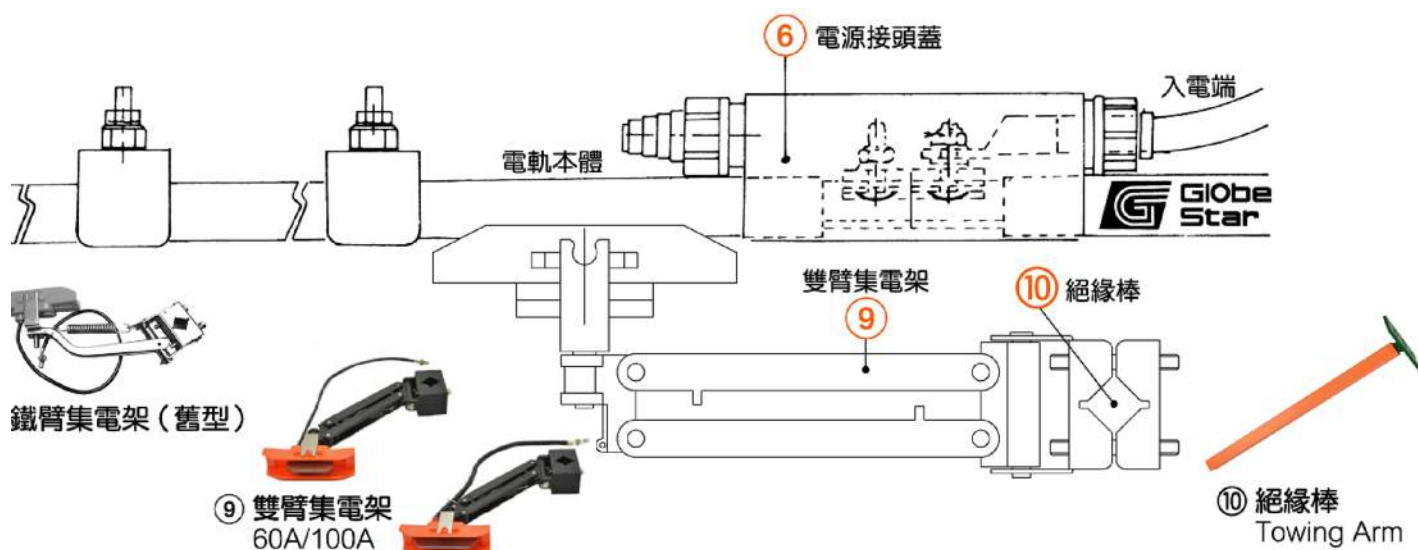
5 接頭蓋 PWL-6-004(A)



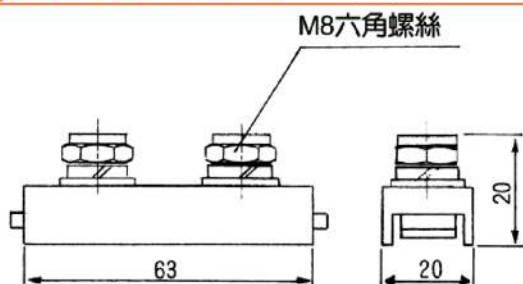
3 末端蓋 PWL-6-003



Globe Star W型320A 零件圖



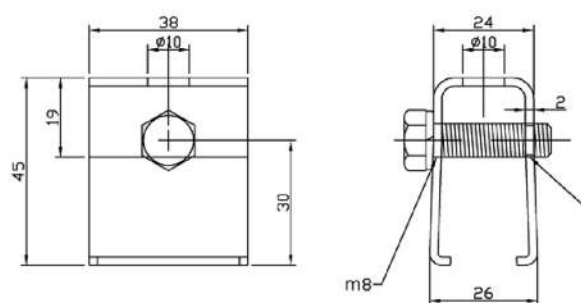
4 接頭 PWL-6-004(B)



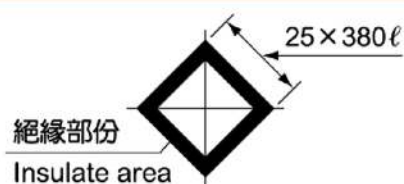
9 雙臂集電架 PWL-6-008(60) PWL-6-008(100)



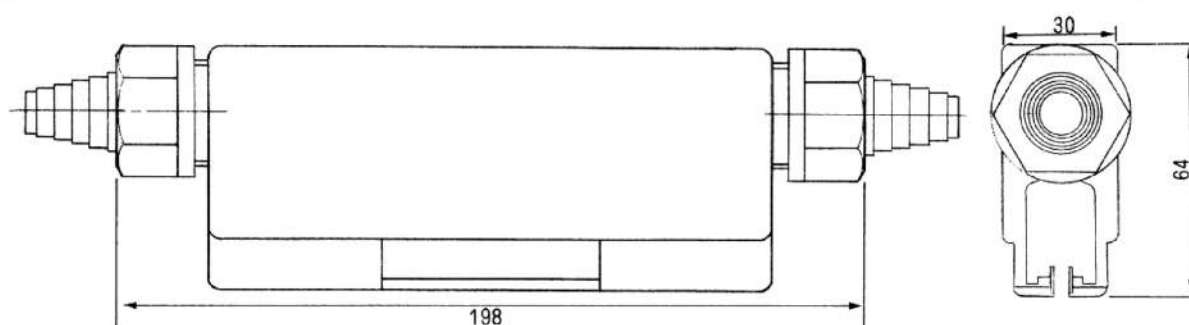
7 定位夾 PWL-6-007

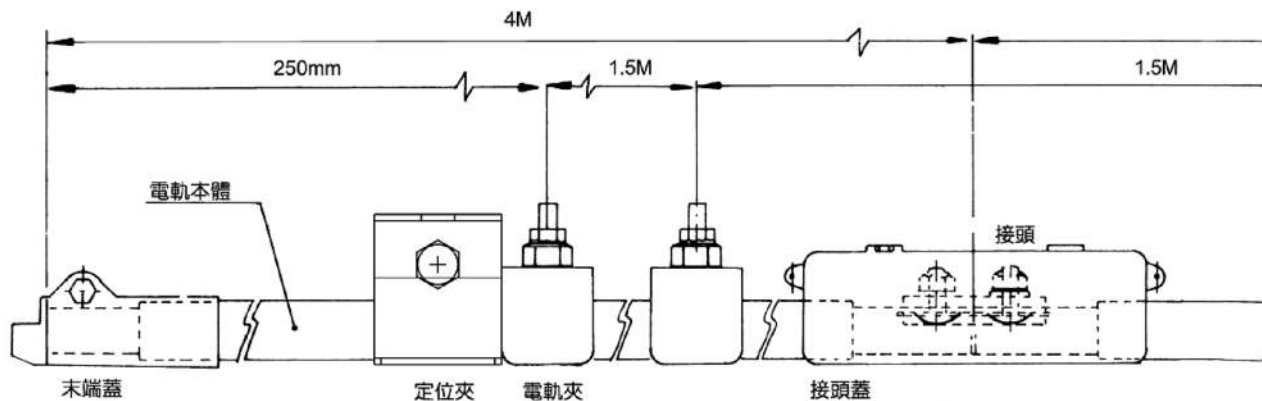


10 絕緣棒 PWL-6-006



6 電源接頭蓋 PWL-6-005



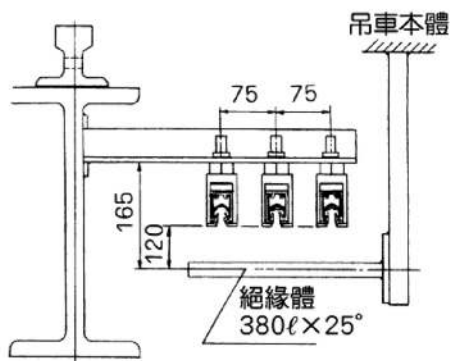


壹、施工設計

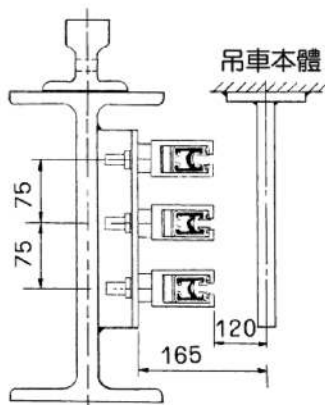
★吊架若不想鑽孔，本公司另有C型軌切一截，附上螺母片，旋轉六角座即可鎖緊。

1. Construction Design

* If you don't want to drill holes on the hanger, there is a C track available for you to cut off to get a portion. Attach the nut and tighten the hexagonal set, then you may fasten the thing.



A、立式施工圖 Vertical



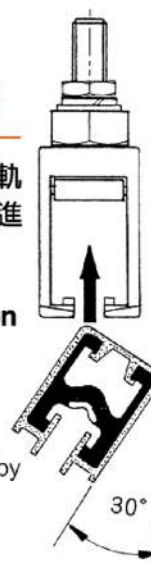
B、側式施工圖 Side

貳、電軌夾按裝圖

★由電軌夾開口，直接將電軌傾斜30°直接壓入，即可嵌進電軌吊夾。

2. Hanger Clamp Installation Diagram

* Insert the power rail into the opening of the hanger clamp in an obliqueness of 30 degrees, then the power rail can be hold by the clamp.



參、接頭蓋、電源蓋按裝圖

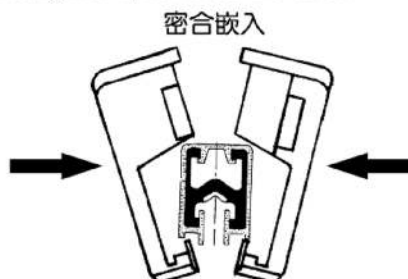
★電軌接頭蓋：先將蓋扣打開後，由下往上30°角以鉤角對凹槽，相向對中合在一起即可。

★電源蓋：方法與接頭蓋相同，先旋鬆塑膠螺母座，取下橡膠帽依電源線直徑，截出適合之孔徑穿線，鎖緊電源線，合蓋即可。

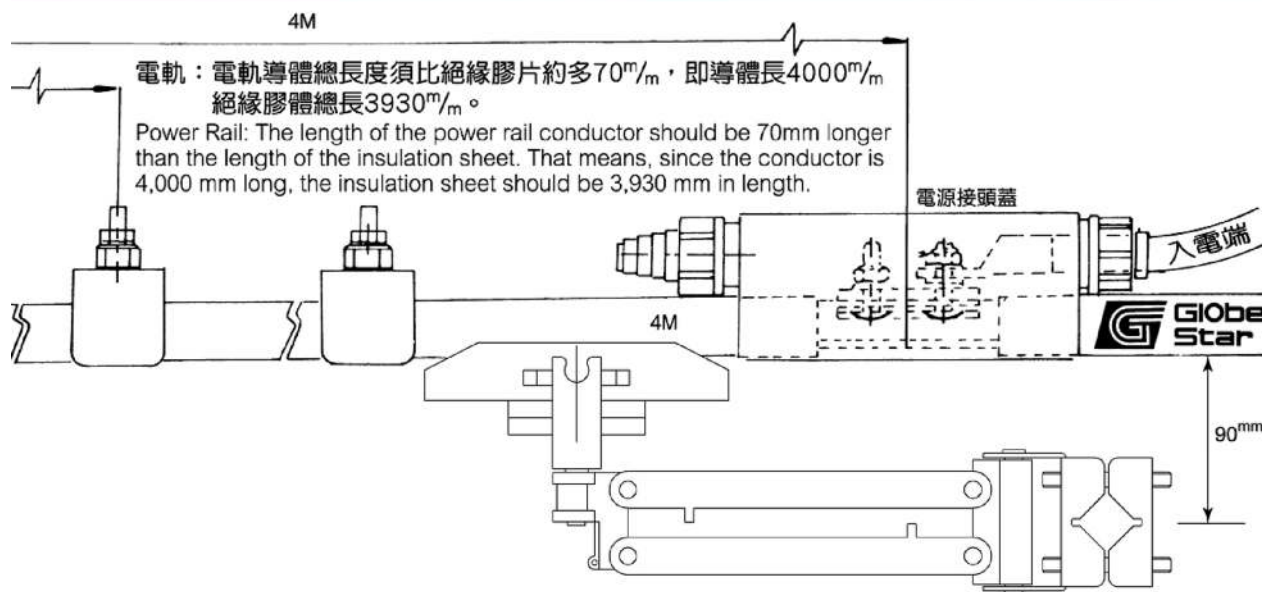
3. Connector Cover and Power Feed Cover Installation Diagram

* Connector cover: Open the cover, hook the scoop slot from bottom to top in 30 degrees and combine them together.

* Power feed cover: loosen the plastic nut, take the plastic cap off and cut it for a proper aperture for piercing through the transmission line, tighten it, then close the cover.



Globe Star W型320A 施工圖

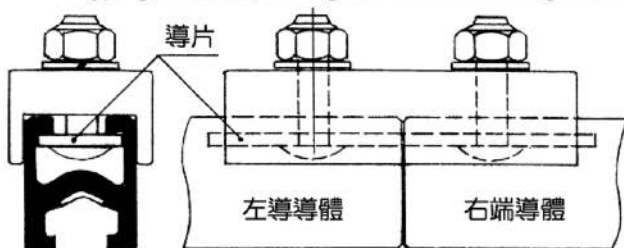


肆、接頭按裝圖

★先將接頭六角螺帽鬆開，順著U型導入座，插入電軌導體上方凹槽，兩端對中鎖緊即可。

4. Connector Installation Diagram

* Loosen the loose-resistant nut on the joint, plug it to the scoop slot on top of power rail conductor according to the "U" type guide base, then tighten the two units together.



柒、絕緣棒、集電架按裝

★集電架與電軌平行，固定於絕緣棒。

7. Towing Arm and Current Collector Installation Diagram

* Put the collector parallelly with the power rail and fasten it on the insulating rod

伍、定位夾按裝圖

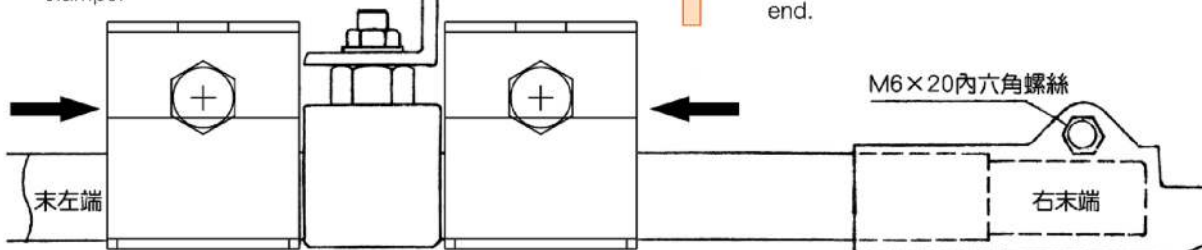
★每一條電軌線路，於電軌夾內外兩側以定位夾鎖緊防止電軌在電軌夾中間滑動。

在電軌夾未上前，先置入定位夾，待電軌夾鎖住後，再旋緊定位夾之六角螺絲即完成。

★安裝於最後那一端。

5. Anchor Clamp Installation Diagram

* The positioning clamp is for tightening from inside and outside the power rail clamp for each power rail circuit to protect the power rail from moving in between the power rail clamps.



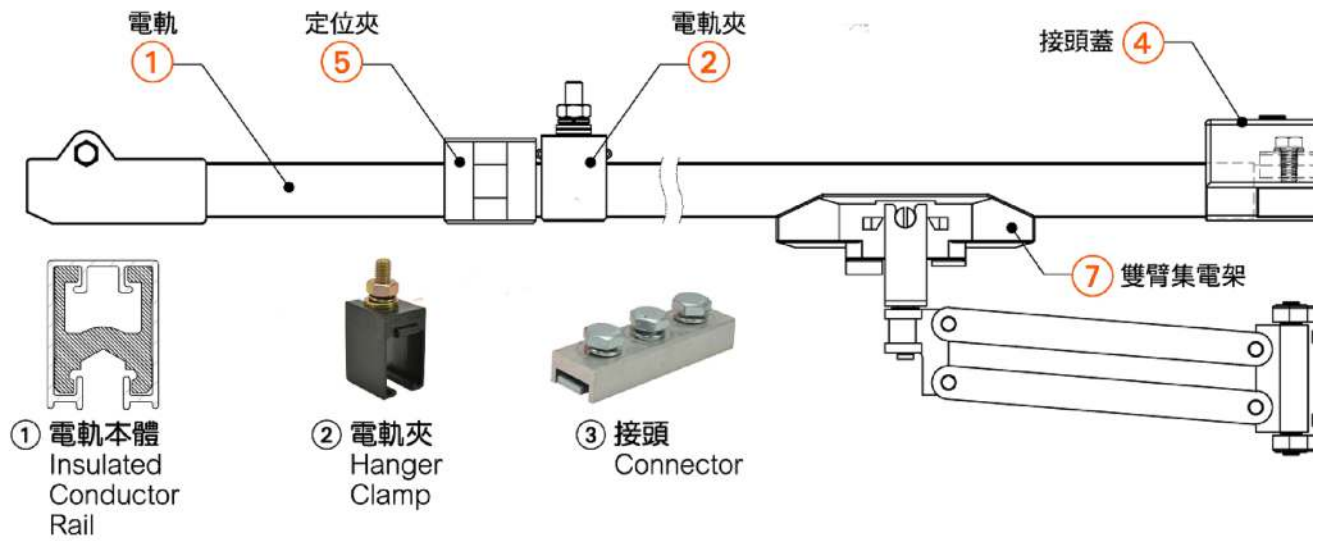
陸、末端蓋按裝圖

★將末端蓋插入電軌導體末端，敲二下即可。電軌導體末端須比絕緣膠多35^m/_m。

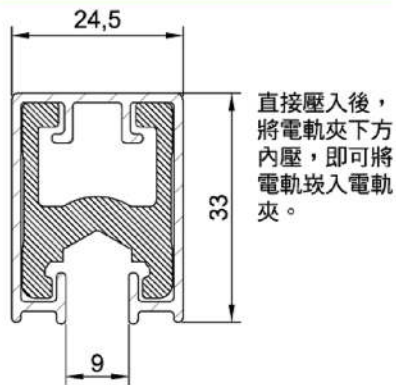
★左右末端各一

6. End Cap Installaiton Diagram

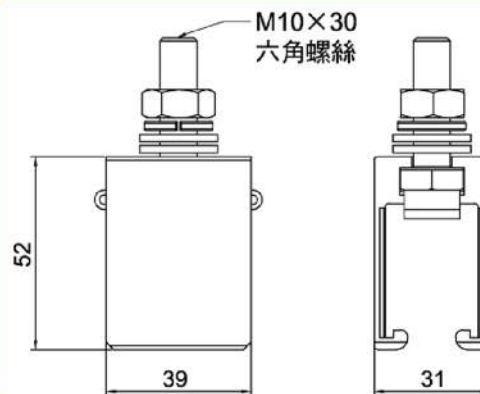
* Insert the end cap to the end of the power rail conductor. knock twice will be OK. The end of the power rail conductor should be 35mm longer than the insulating plastics.
* There should be one at each individual end.



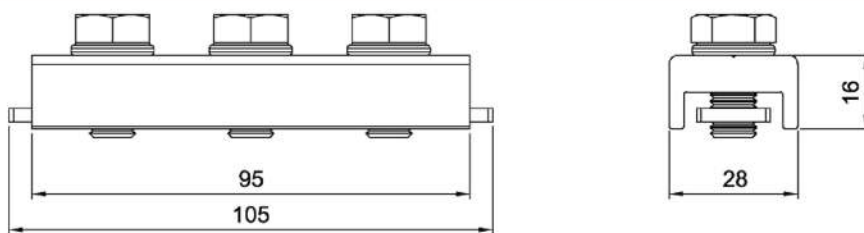
① 電軌 PWL-6-010



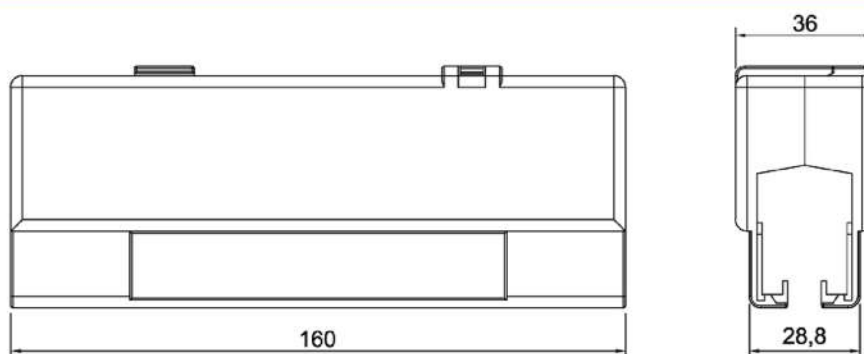
② 電軌夾 PWL-6-011



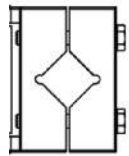
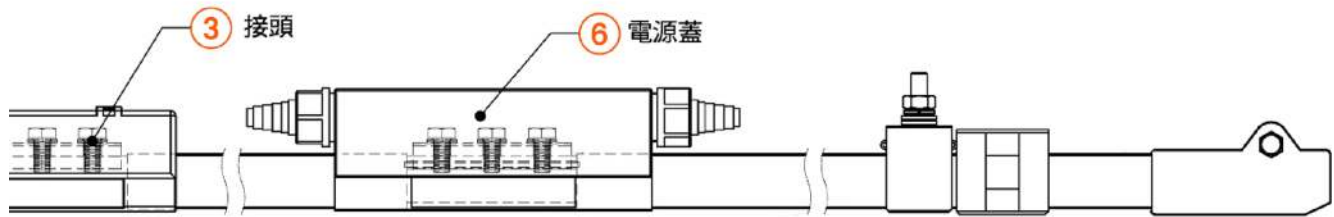
③ 接頭 PWL-6-013(A)



④ 接頭蓋 PWL-6-013(B)



Globe Star W型600A 零件圖



④ 接頭蓋
Connector
Cover



⑤ 定位夾
Anchor
Clamp

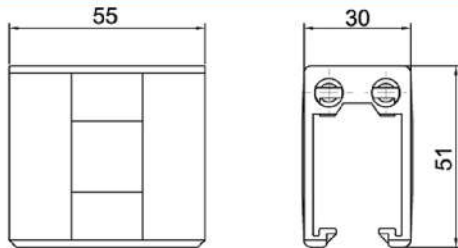


⑥ 電源蓋
Power Feed
Cover

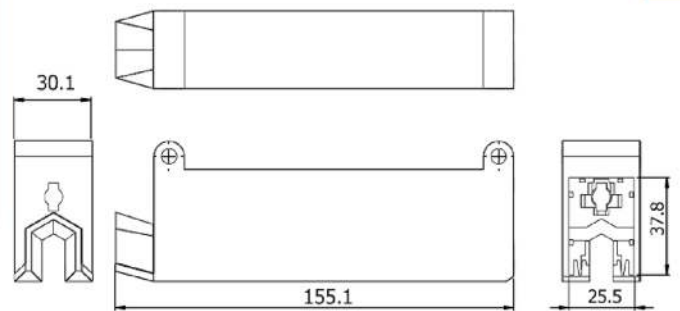


⑦ 雙臂集電架200A.
Current collector
(Double arm)

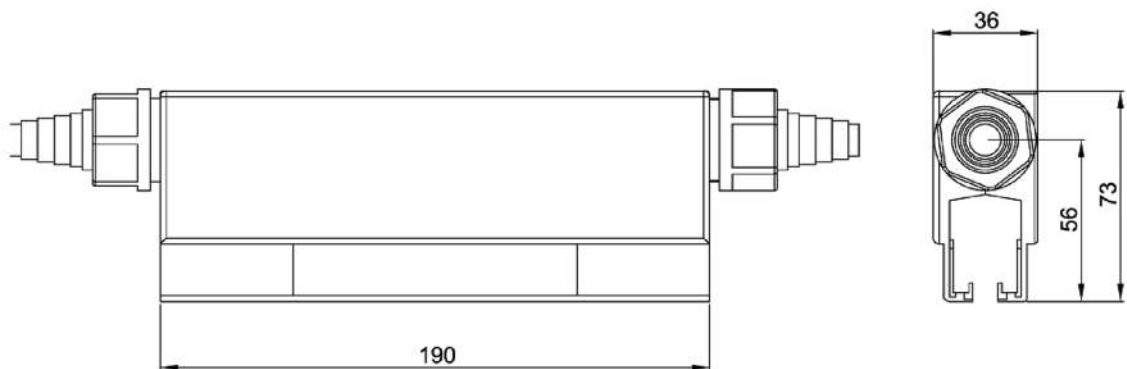
⑤ 定位夾 PWL-6-015



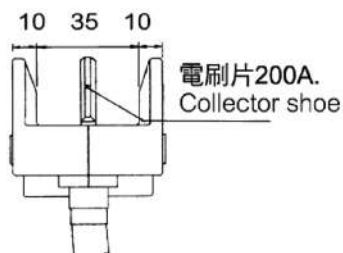
⑧ 末端蓋



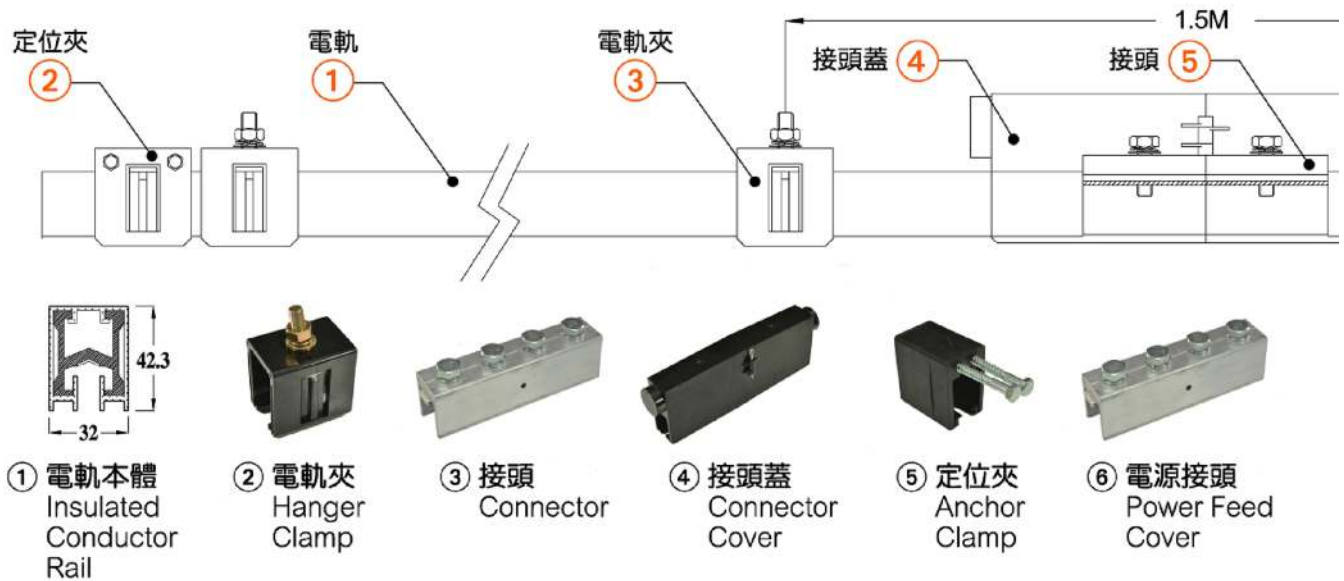
⑥ 電源蓋 PWL-6-012



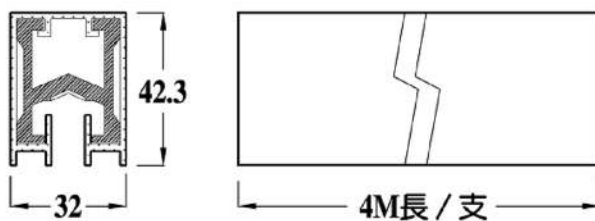
⑦ 雙臂集電架200A PWL-6-016



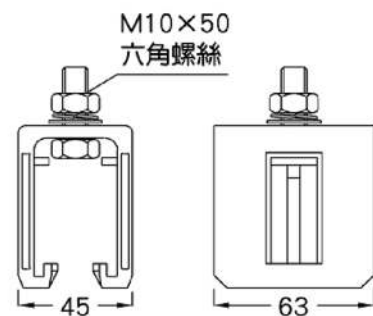
電刷片200A.
Collector shoe



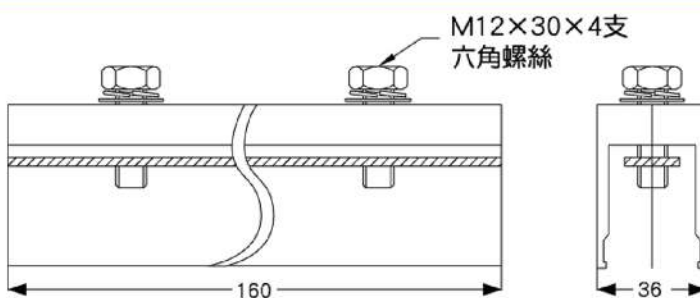
① 電軌 PWL-6-018



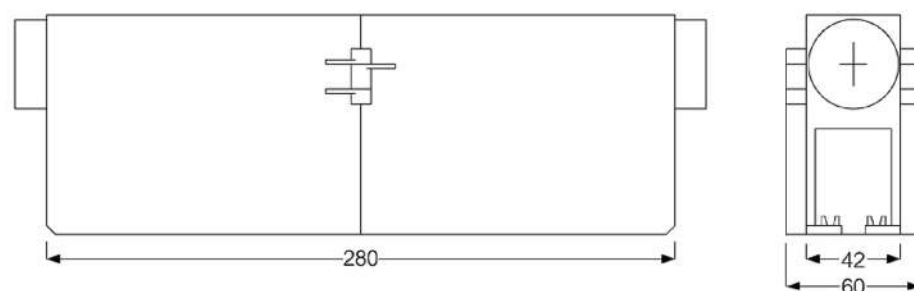
② 電軌夾 PWL-6-019



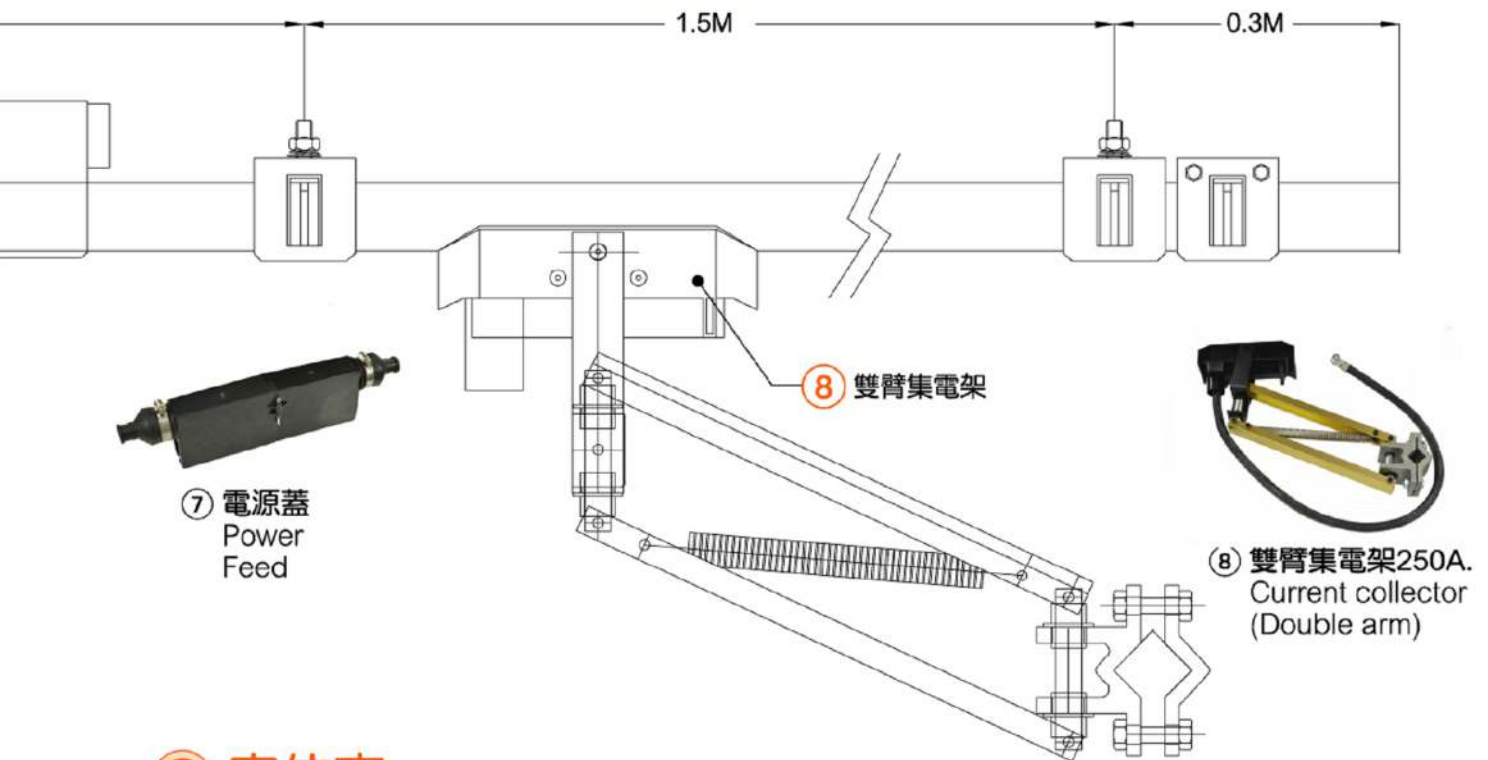
③ 接頭 PWL-6-021(A)



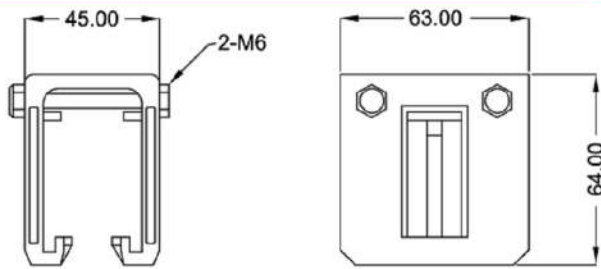
④ 接頭蓋 PWL-6-021(B)



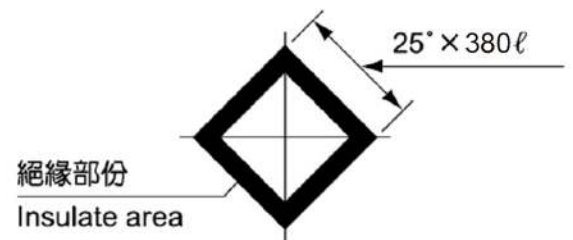
Globe Star W型800A 零件圖



⑤ 定位夾 PWL-6-024



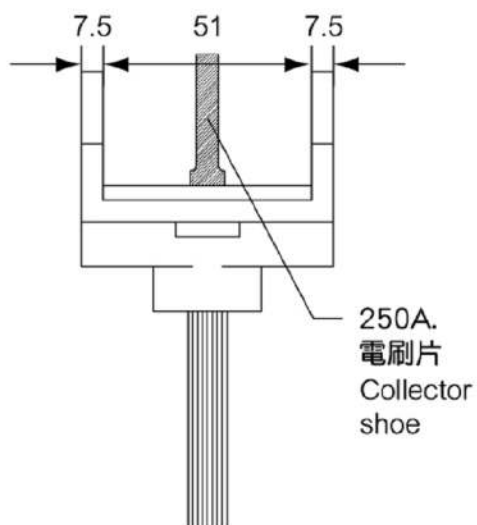
⑨ 絕緣棒 PWL-6-006 (380 m/ml)



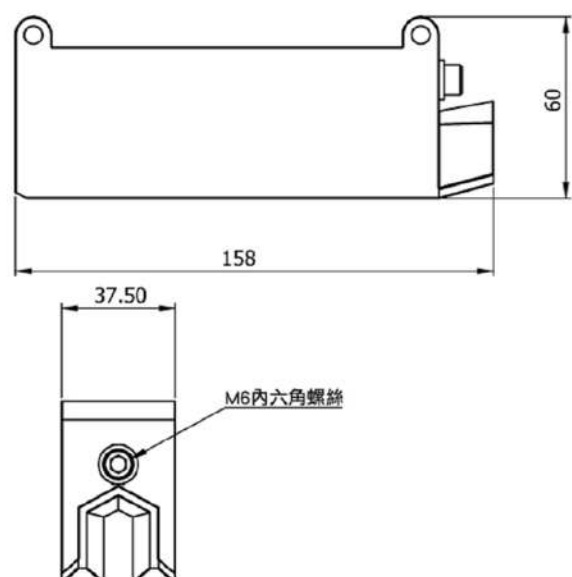
⑥ 電源接頭 (與接頭共用)

⑦ 電源蓋 (與接頭蓋共用)

⑧ 雙臂集電架 250A. PWL-6-025



⑩ 末端蓋





▲ W800A.



▲ W320A.



▲ 800A



▲ 800A



▲ W320A.



▲ W320A.



▲ 500A



▲ 320A



▲ W500A. / W320A. / W320A.



▲ 320A



▲ 800A



▲ 320A. / 500A.



▲ 320A



▲ W320A.