

目 錄

---

◎ 1.1 電眼電動式對線機系統 . . . . .	3
◎ 2.1 電眼電動式控制器安裝 . . . . .	4
◎ 2.2 K 型 & L 型 驅動器安裝 . . . . .	5
◎ 2.3 驅動器行程調整安裝 . . . . .	6
◎ 2.4 記號電眼 KTX-WP9114224 尺寸 . . . . .	7
◎ 3.1 電眼電動式控制面板 . . . . .	8
◎ 3.2 電眼電動式控制器後面板 . . . . .	9
◎ 4.1 電動式電眼感測器安裝 . . . . .	10
◎ 4.2 電動式電眼感測器校正 . . . . .	11
◎ 5.1 LPC 安裝相關位置(放料座使用) . . . . .	12
◎ 5.2 LPC 安裝相關位置(收料座使用) . . . . .	13
◎ 5.3 LPC 感測器安裝位置與速度關係 . . . . .	14
◎ 5.4 LPC 驅動器推力 . . . . .	15
◎ 5.5 LPC 常見問題疑難排解 . . . . .	16

**Table of contents**

---

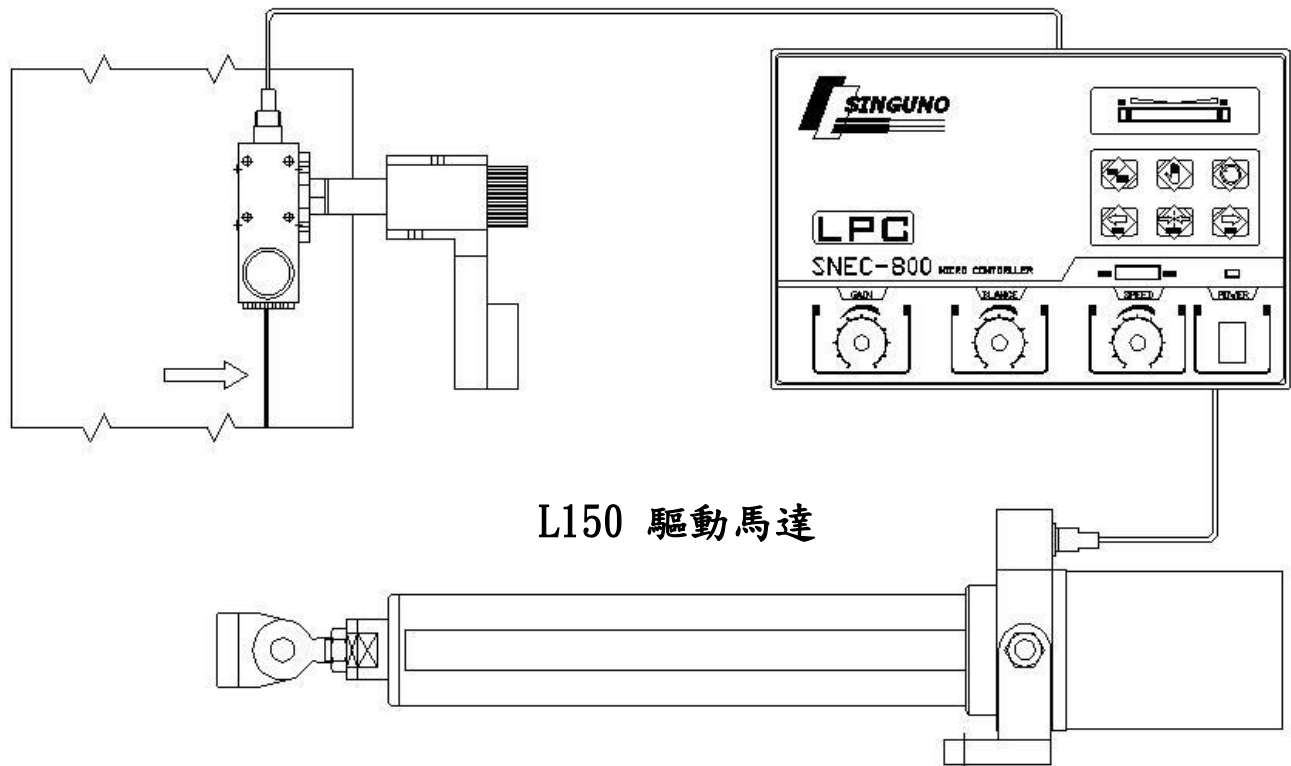
◎ 1.1	Electric LPC Specification . . . . .	17
◎ 2.1	Electric LPC Controller Installation and Wiring . . .	18
◎ 2.2	K type & L type Motor-driven Actuator Installation .	19
◎ 2.3	Motor-driven Actuator stroke Installation . . . . .	20
◎ 2.4	Sensor KTX-WP9114224 Size . . . . .	21
◎ 3.1	Electric LPC Controller Panel . . . . .	22
◎ 3.2	Electric LPC Controller Rear Panel . . . . .	23
◎ 4.1	Electric LPC Sensor Installation . . . . .	24
◎ 4.2	Electric LPC Sensor correction . . . . .	25
◎ 5.1	LPC Installation denote model(Use Delivery material plat)	26
◎ 5.2	LPC Installation denote model(Use Receipt material plat)	27
◎ 5.3	LPC Induce Position Installation and Career Connection . . .	28
◎ 5.4	LPC Impulsion Of Motor-driven Actuator . . . . .	29
◎ 5.5	LPC Problem and Solve . . . . .	30

# 1. 功能介紹

## LPC 電眼電動式對線機系統

KTX-WP9114224 線條/邊緣追蹤電眼

SNEC-800 對線控制器



1. 專為印刷線條、色差及材料邊緣追蹤，新開發 KTX-WP9114224 電眼，適用於：透明/非透明薄膜、印刷材料、紙、金屬薄膜之加工設備。
2. 由於KTX-WP9114224 電眼超強功能，可降低加工時材料損耗(追蹤精度為 $\pm 0.1\text{mm}$ )
3. 可搭 DC 馬達驅動器，從120kg 至150kg 推力之驅動器均有。
4. LPC 系統配備：
  - (1). 感測裝置：KTX-WP9114224 電眼。
  - (2). 控制裝置：SNEC-800 控制器。
  - (3). 驅動裝置：L150，K150 驅動器。
  - (4). 零配件：
    - [1]. 電眼調整架。
    - [2]. 5PIN 感測器連接線。
    - [3]. 7PIN 驅動器連接線。
    - [4]. 固定座 4 PC。
    - [5]. L架 2 PC。
    - [6]. M4螺絲 8 PC、M5螺絲 2 PC。
    - [7]. 操作說明書1本。

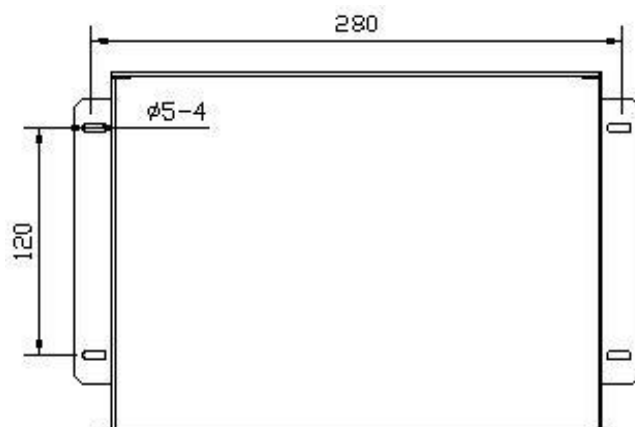
## 2. 各系統配套件介紹

### 控制器裝置

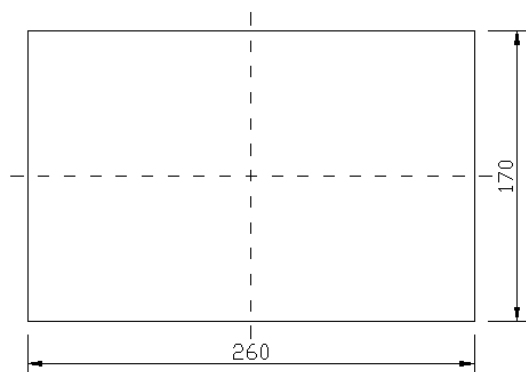
#### 2.1 電眼電動式控制器安裝



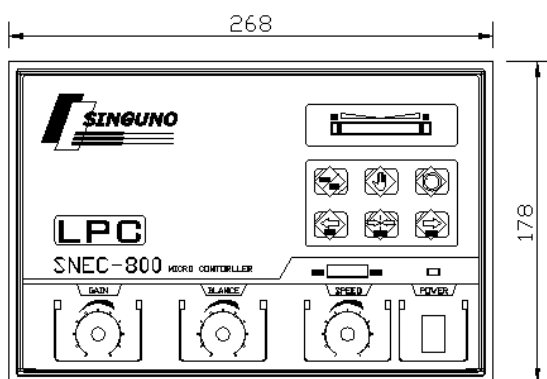
LPC 上視圖



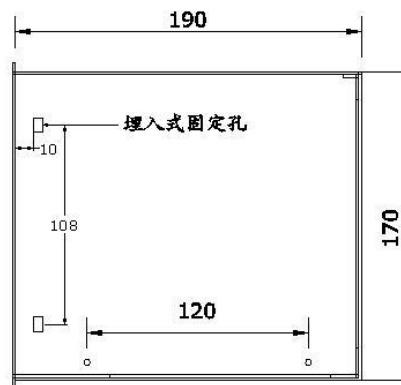
LPC 開孔圖



LPC 面板尺寸

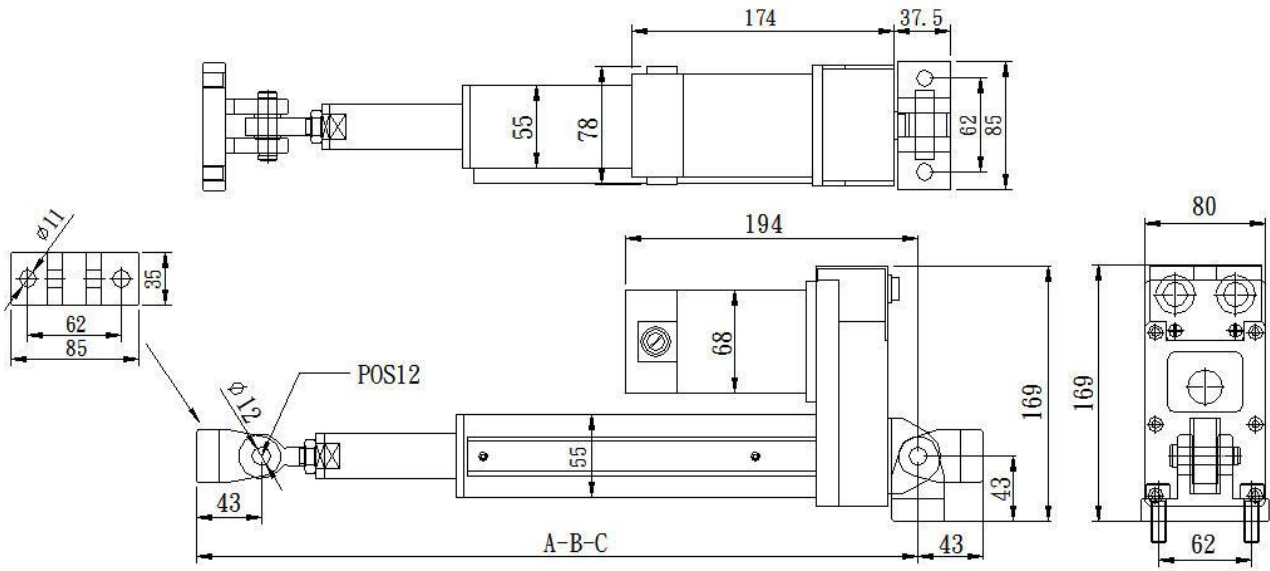


LPC 側視圖



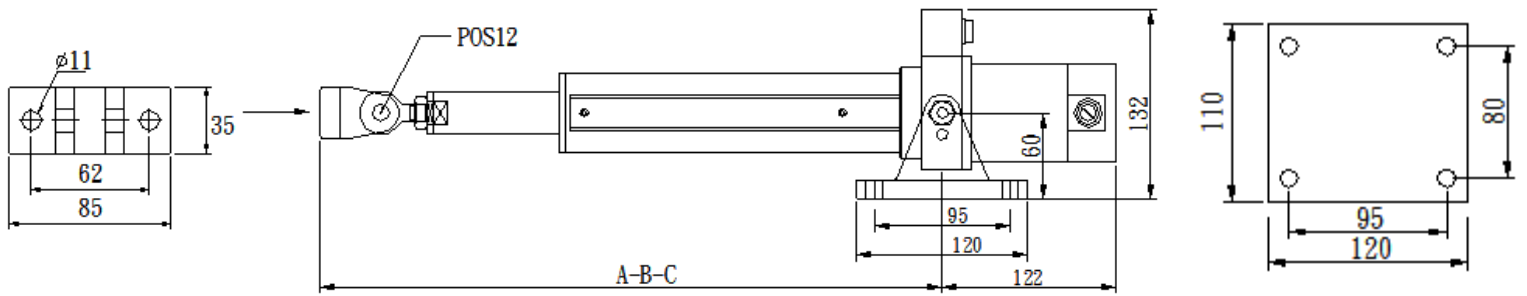
驅動器安裝

2.2 K型 & L型 驅動器安裝



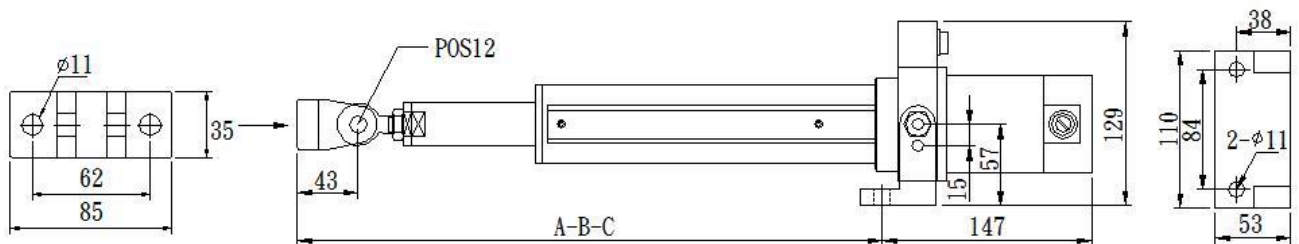
訂製品  
標準品

Type	有效行程(mm)	A(Max)	B(中心)	C(Min)
K100	85	446	403.5	361
K150	135	546	478.5	411



標準品  
標準品

Type	有效行程(mm)	A(Max)	B(中心)	C(Min)	D(馬達長度)
L100 大座	85	403	360.5	318	122
L150 大座	135	503	435.5	368	122

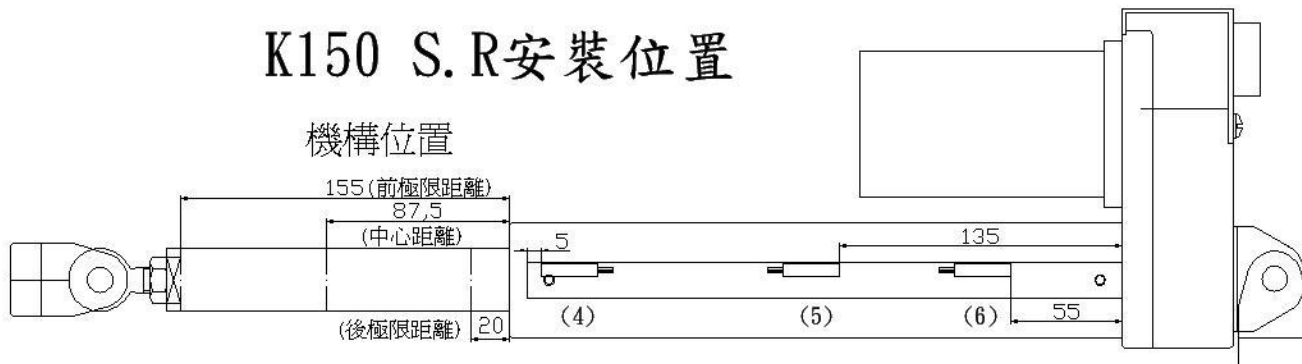


標準品  
標準品

Type	有效行程(mm)	A(Max)	B(中心)	C(Min)	D(馬達長度)
L100 小座	85	378.5	336	293.5	147
L150 小座	135	478	410.5	343	147

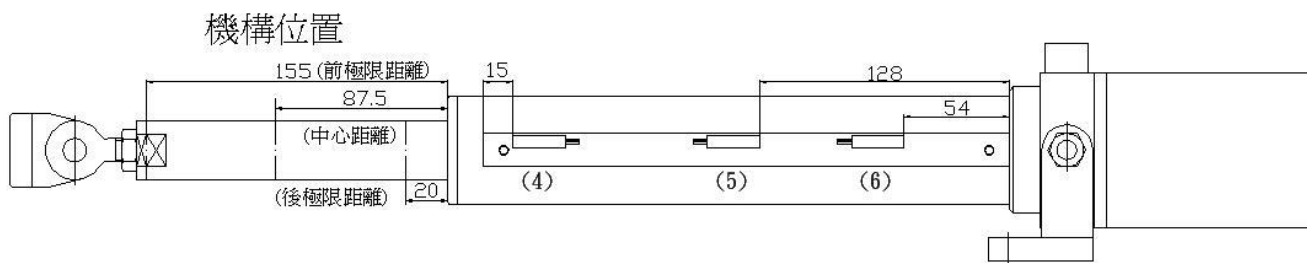
## 2.3 驅動器行程調整安裝

### K150 S.R安裝位置



[圖一]

### L150 S.R安裝位置



[圖二]

K型與L型驅動器調整行程, 使用磁簧開關調整距離。

#### ◆ 調整步驟如下：

- [1]. 將驅動器圓管側邊鋁條的兩個內六角螺絲拆下。
- [2]. 鋁條內安置三個磁簧開關, (4)前極限 (5)中心極限 (6)後極限。
- [3]. 鋁條內安置雙面膠固定, 三個磁簧開關。
- [4]. 使用者如需修改行程, 將三個磁簧開關位置調整過。

#### 注意事項：

- [1]. 使用者如調整過磁簧開關, 必須注意螺桿位置要在磁簧開關範圍內。如果螺桿位置不在磁簧開關範圍內, 必須將驅動器速度調整慢速。再移動驅動器位置, 以免驅動器齒輪傷到。

## 電眼感測器安裝

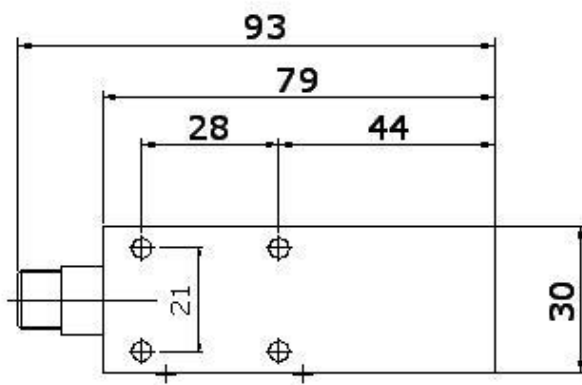
### 2.4 電眼 KTX-WP9114224 安裝



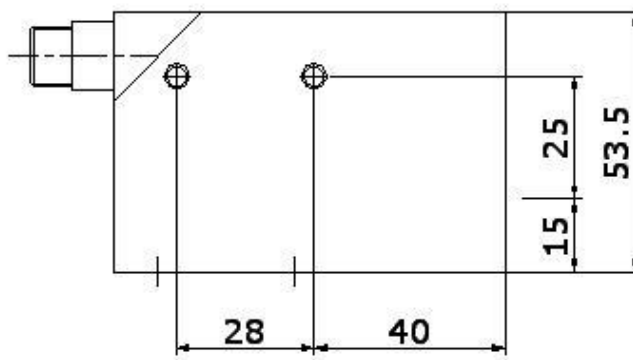
KTX-WP9114224 電眼



LPC 電眼微調座



LPC 電眼測頭尺寸圖(1)



LPC 電眼測頭尺寸圖(2)

## 3. 各系統配套件功能鍵/指示燈說明

### 控制器功能

#### 3.1 電眼電動式控制面板



功能按鍵說明：



自動模式



手動模式



手動右移



手動左移



手動中心



自動方向切換

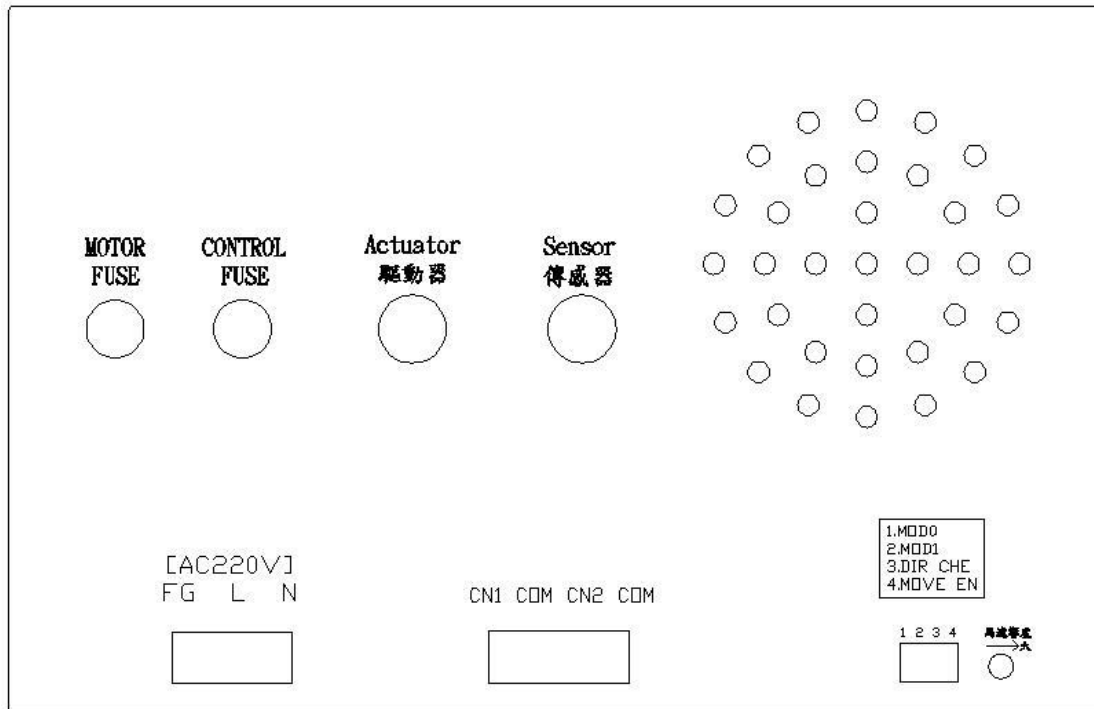
- [1]. GAIN 旋鈕：調整電眼抓取材料變化顯示低時，將感度加大。
- [2]. BLANCE旋鈕：調整電眼抓取材料，左右兩邊顯示燈號一樣多。
- [3]. SPEED旋鈕：調整驅動器速度快或慢。
- [4]. POWER開關：控制器電源開關。



- [5]. 控制器顯示燈號，左右兩側安裝極限開關。

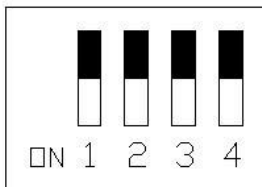


## 3.2 電眼電動式控制器後面板

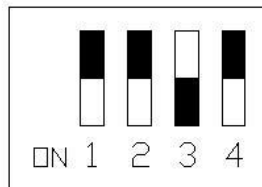


### 功能按鍵說明：

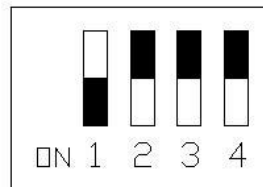
- [1]. MOTOR FUSE：驅動器電源保險絲 250V/3A。
- [2]. CONTROL FUSE：控制器電源保險絲 250V/3A。
- [3]. 驅動器連接頭：7PIN連接頭，連接至驅動器上。
- [4]. 傳感器連接頭：5PIN連接頭，連接至傳感器上。
- [5]. 3PIN歐式端子台：連接電源信號，輸入電源 110V~220V。L N => POWER IN
- [6]. 4PIN歐式端子台：可做外部信號控制。(請輸入乾接點信號)  
 註：注意！乾接點信號不可輸入電源信號，會造成控制器元件損壞。
- [7]. 4段指撥開關模式選擇如下：



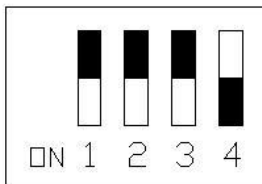
開機自動模式



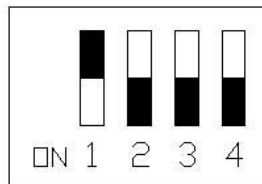
開機中心模式



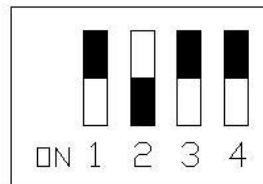
手動方向變更



開機手動模式

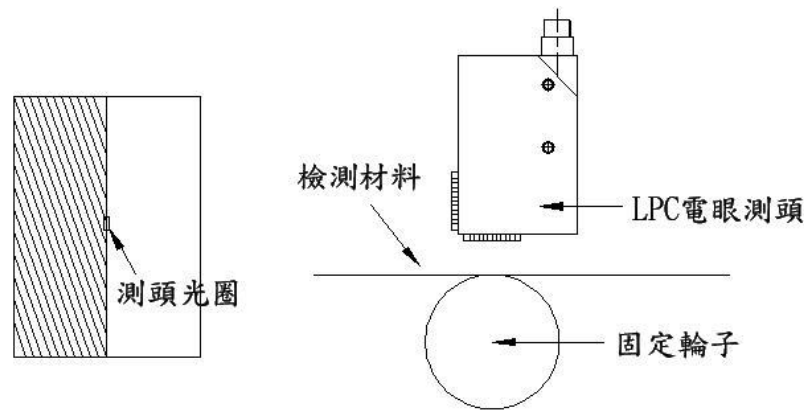


開機記憶模式

自動模式中  
手動功能有效

## 4. LPC系統操作說明

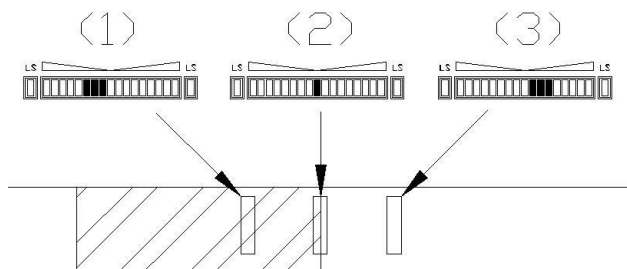
### 4.1 電動式電眼感測器安裝



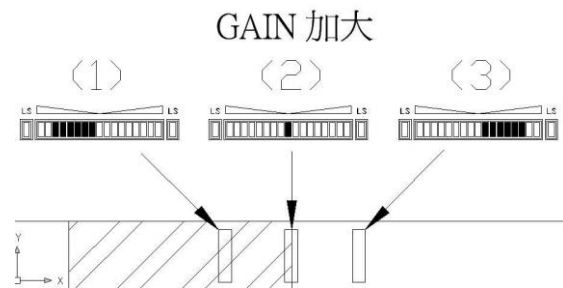
[圖三]

#### 電眼感測器校正步驟：

[1]. 請將電眼感測位置調整至輪子正上方約10mm~15mm左右，校正光圈大小（光圈1mm\*3mm）。



[圖四]



[圖五]

- [2]. 將控制器切換至手動模式，將材料放至輪子上方位置。
- [3]. 調整材料遮罩到材料(1)顯示燈號。
- [4]. 未遮罩到材料(3)顯示燈號。
- [5]. 調整電眼角度，可以容易抓取材料。
- [6]. 使用BLANCE旋鈕調整左右兩邊顯示燈號平均。
- [7]. 當電眼感測器抓到線邊時，中心(2)顯示燈號。
- [8]. 碰到材料抓取燈號顯示不明顯時，可調整GAIN旋鈕加大，將解析放大容易抓取。

注意！電眼感測器使用時，不可傷到鏡片，並請定期做鏡片保養處理。

## 4.2 電動式電眼感測器校正

### KTX-WP9114224 材料設定

1. 按SET進入選單  
2. 左右選到TCH按SET進入

3. 左右選到2P按SET

4. 出現1ST對第一點按SET

5. 出現2nd對第二點按SET  
6. 畫面會出現數值

### KTX-WP9114224 RGB光源設定

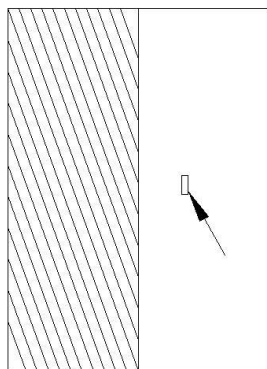
1. 按SET進入選  
2. 左右選到PRO按SET進入  
3. 左右選到COL按SET

4. 選到BLU按SET (藍燈)

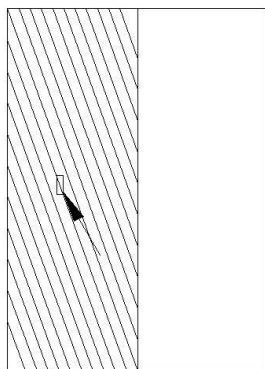
5. 選到RED按SET (紅燈)

6. 選到GRE按SET (綠燈)

### 材料設定



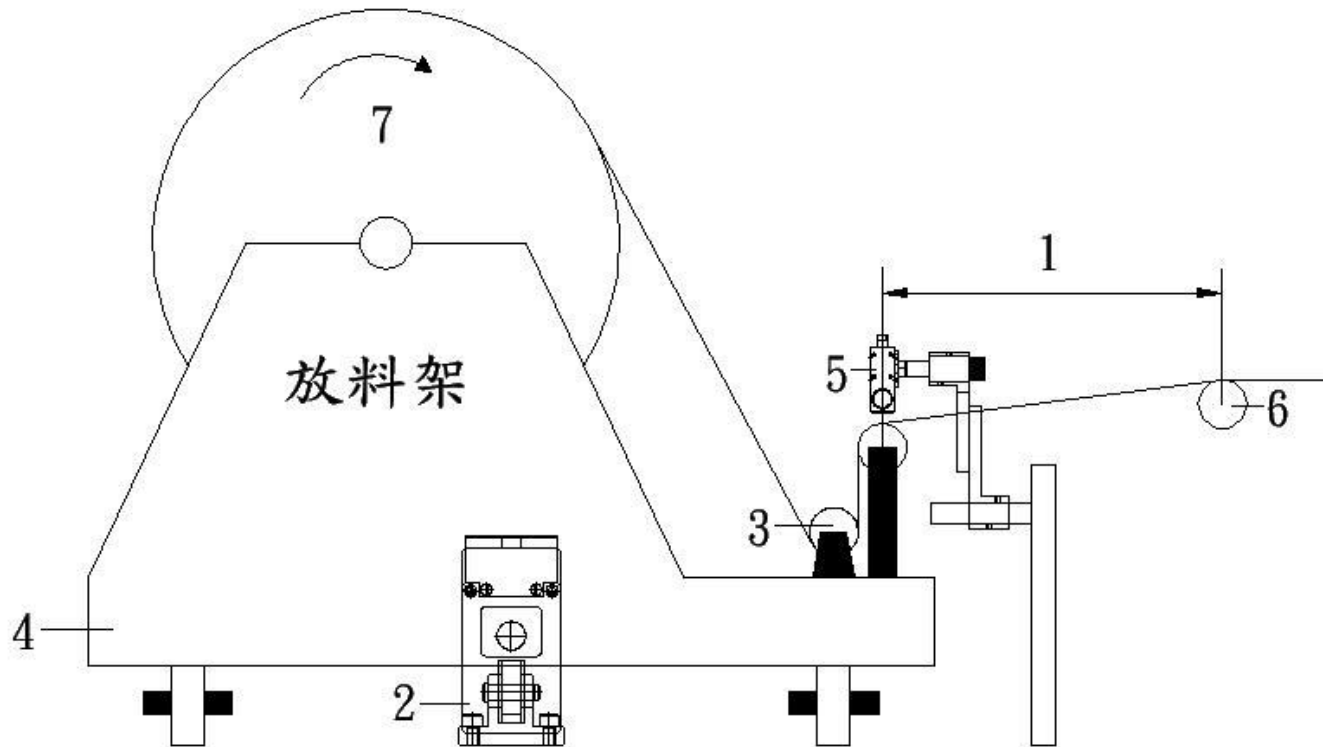
出現1ST對第一點按SET



出現2nd對第二點按SET

## 5. 試車說明

### 5.1 LPC 安裝相關位置(放料座使用)



#### 運用說明：

- [1]. 導正區
- [2]. 驅動器
- [3]. 放料架上之引導羅拉
- [4]. 放料架台車
- [5]. 電眼感測器
- [6]. 設備引導羅拉.(固定輪)
- [7]. 放料軸心

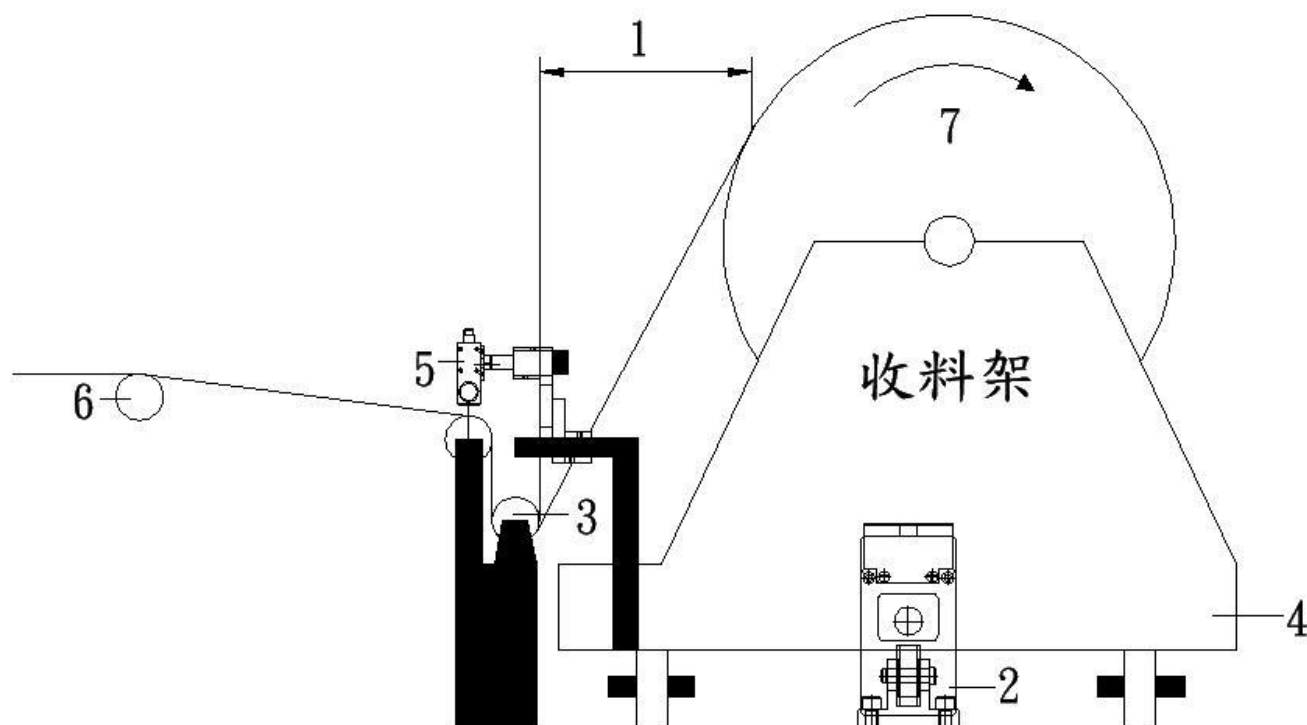
#### 1. 導正區(1)

放料：導正區距離為放料架上之引導羅拉(3)至設備引導羅拉(6)之距離，導正區距離為材料寬度的0.25到0.5倍，如果是較硬質的材料則距離須加大。

#### 2. 電眼(5)

放料：電眼須固定在機台上. 使用LPC電眼則須置於放料架引導羅拉上方。

## 5.2 LPC 安裝相關位置(收料座使用)



## 運用說明：

- [1]. 導正區
- [2]. 驅動器
- [3]. 收料架上之引導羅拉
- [4]. 收料架台車
- [5]. 電眼感測器
- [6]. 設備引導羅拉(固定輪)
- [7]. 收料軸心

## 1. 導正區(1)

收料：導正區距離為設備引導羅拉(6)至材料捲軸(7)之距離。

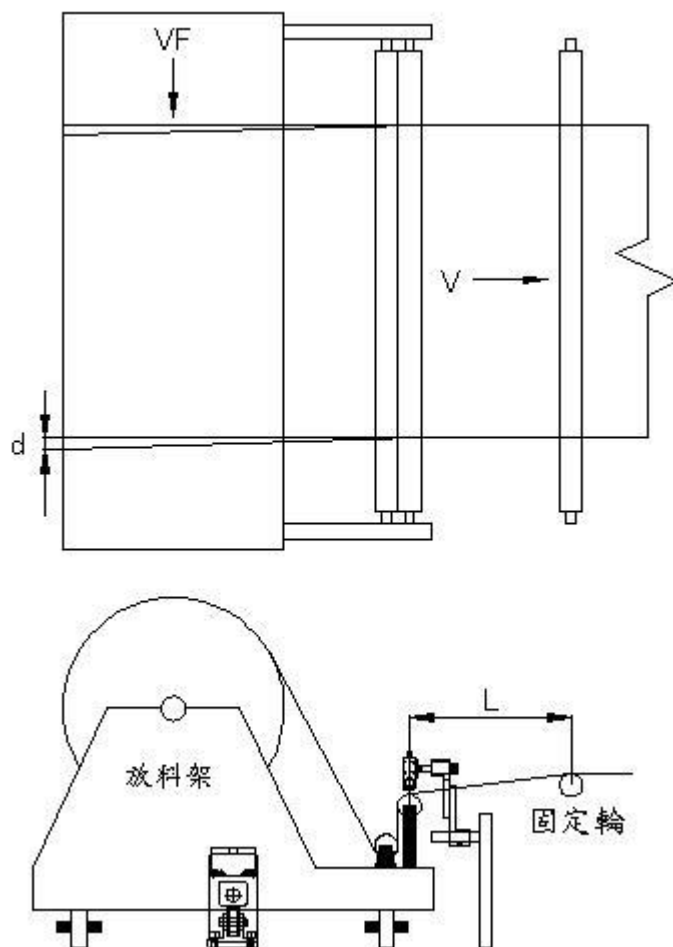
導正區距離為材料寬度的0.25到0.5倍，如果是較硬質的材料則距離須加大。

## 2. 電眼(5)

收料：電眼須固定在放料架平台上，使用EPC電眼越靠近設備引導羅拉(6)越佳。

使用LPC電眼則須置於設備引導羅拉(6)上方。

## 5.3 LPC 感測安裝位置與速度關係



[VF] 自動對線裝置修正速度(mm/sec)

[V] 機械線速度(m/min)

[d] 每米長度可能之蛇行量(mm)

[L] 電眼感測器與固定輪距離(m)

[T] 容許修正時間(SEC)

[Q] 所需之修正量(mm)

$$T = (L/V) * 60$$

$$Q = d * L$$

$$L = V * (1/60) * (d/VF)$$

## 5.4 LPC 驅動器推力

### SNEC-K TYPE

推動器 速度 ( mm/Sec )	25 mm/Sec
馬達推力 + 減數比	1 : 11
滾珠螺桿 最大推力 可承載 ( Kg )	600 Kg
驅動器垂直推力 ( Kg )	150 Kg
驅動器承載推力 ( Kg )	1500 Kg
驅動器行程 ( mm )	100 mm、150 mm

### SNEC-L TYPE

推動器 速度 ( mm/Sec )	25 mm/Sec
馬達推力 + 減數比	1 : 6
滾珠螺桿 最大推力 可承載 ( Kg )	600 Kg
驅動器垂直推力 ( Kg )	120 Kg
驅動器承載推力 ( Kg )	1200 Kg
驅動器行程 ( mm )	100 mm、150 mm

## 5.5 LPC 常見問題疑難排解

1. 當控制器電源開啟後，電源燈未亮

Ans：請檢查控制器電源連接線部份是否有脫落或接錯情況；  
請檢查保險絲部份是否有燒毀，如燒毀請更換 250V / 3A 規格。

2. 驅動器動作與感測器動作相反

Ans：請將控制器面板上自動方向切換鍵按下。

3. 驅動器無法動作

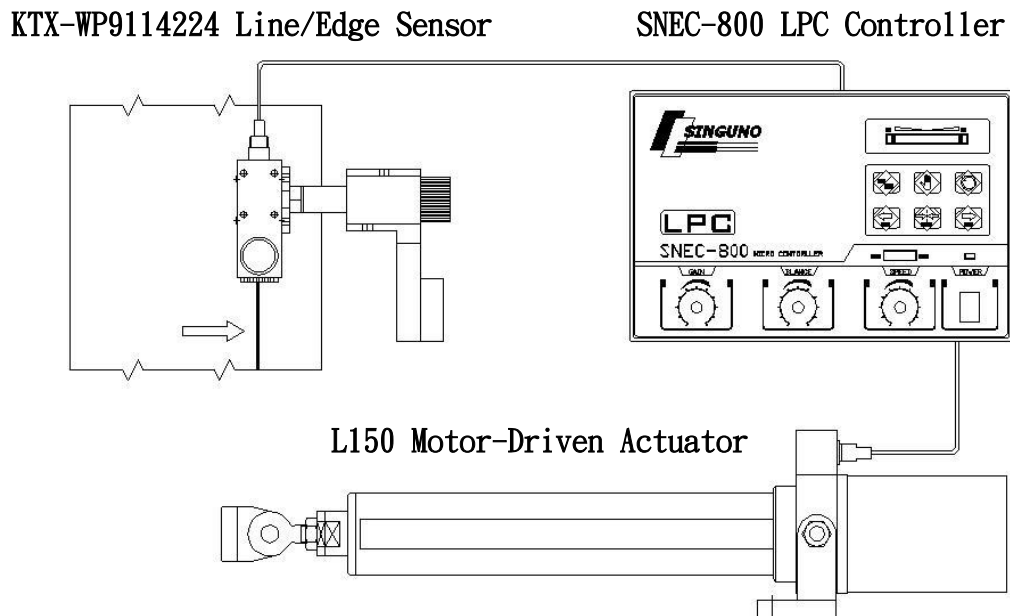
Ans：(1)請將控制器切換至手動模式測試是否有動作。  
(2)請檢查驅動器的連接線是否有脫落或未接的情況。  
(3)請檢測驅動器上的碳刷是否還有。

如客戶在使用上有碰到無法解決問題，  
請與經銷代理商聯絡，我們會盡快的為您服務。



# 1. Function introduction

## LPC Electric LPC Specification



1. Print line , Aberration and Acquisition border of material  
Specialty and Develop KTX-WP9114224 LPC Sensor.  
Application: Film of limpidity and Opacity , Material of print , Paper ,  
Work over machine of metal film .
2. Cause Electric KTX-WP9114224 have mightiness function , have abate waste material at work over of machine.(acquisition accuracy is  $\pm 0.1\text{mm}$ )
3. Conform DC Motor-Driven Actuator, we have Driven Actuator Impulsion with 120kg~150kg .
4. LPC System Fitment :
  - (1). Induce apparatus : KTX-WP9114224 LPC Sensor .
  - (2).Controller apparatus: SNEC-800 Controller .
  - (3).Motor-Driven Actuator apparatus: L150 , K150 Driven Actuator .
  - (4).Accessory : [1].Electric adjustment brace .  
[2].5PIN Sensor connection cord .  
[3].7PIN Motor-Driven Actuator connection cord .  
[4].fixation brace 4 PC .  
[5].L style brace 2 PC .  
[6].M4 bolt 8 PC ,M5 bolt 2 PC .  
[7].LPC Instruction one tome .

## 2. Various systems assembly introduction

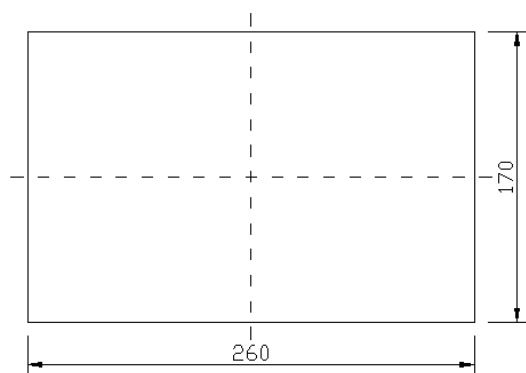
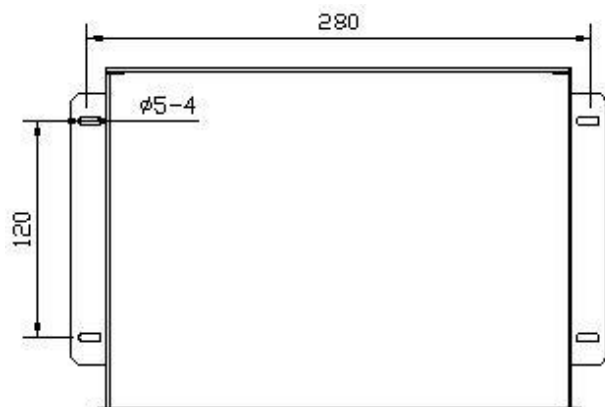
### Controller Installation

#### 2.1 LPC Controller Installation and Wiring



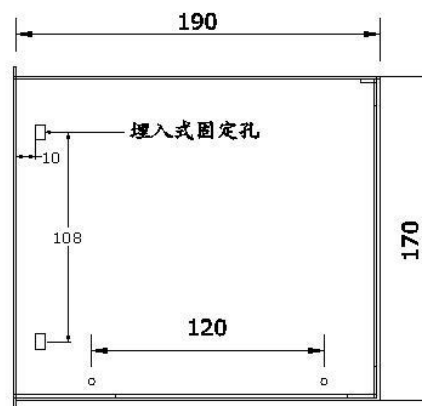
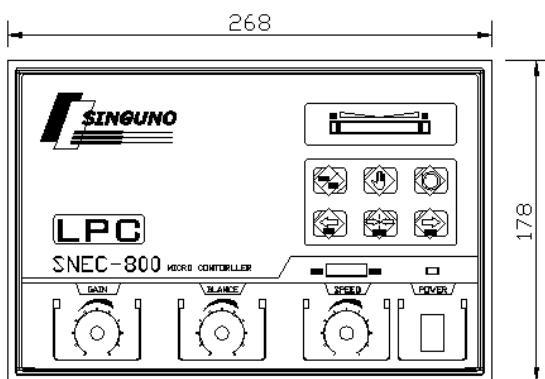
LPC Top view

LPC bore figure



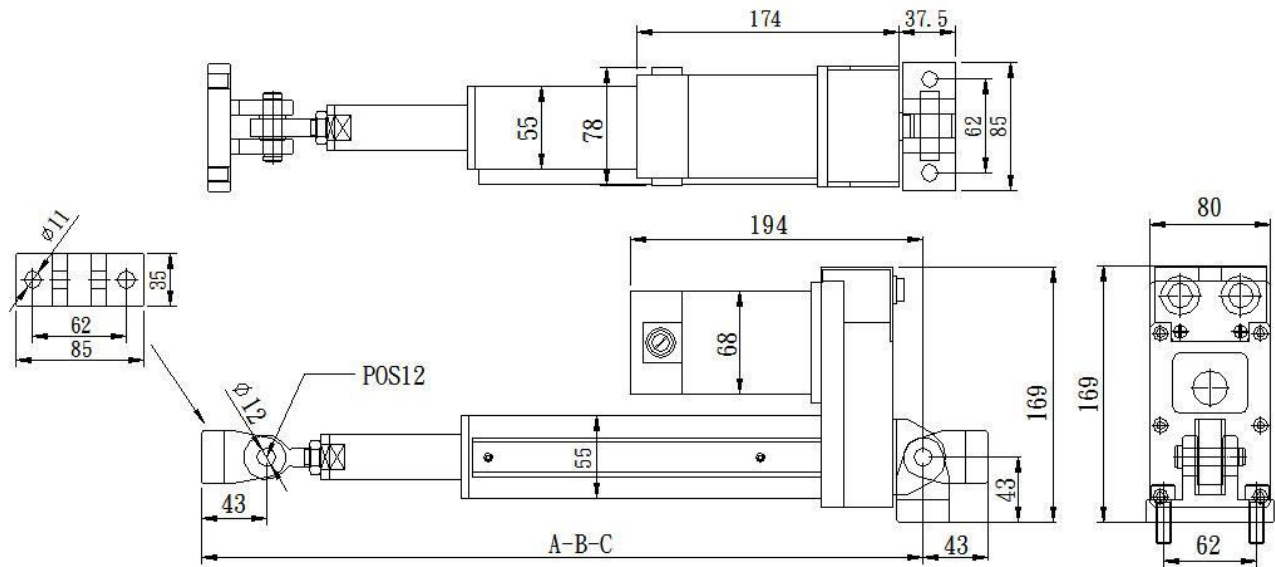
LPC board size

LPC Side view

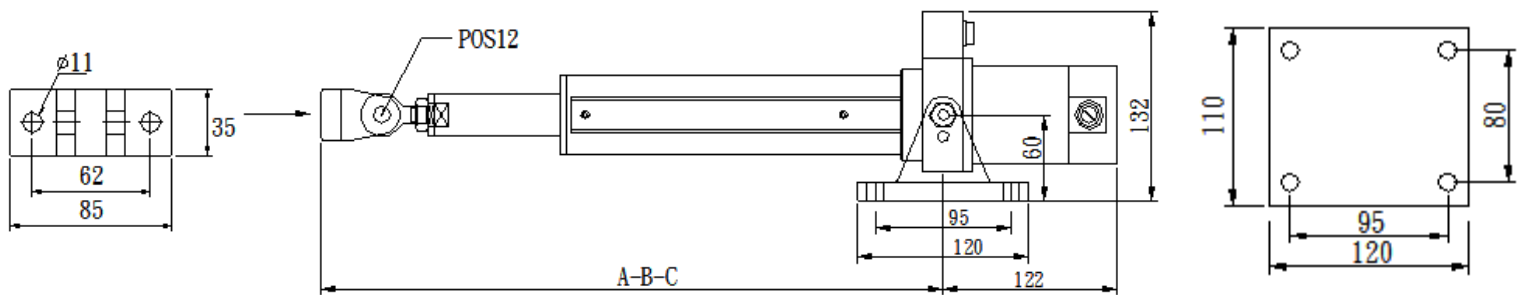


Motor-driven Actuator Installation

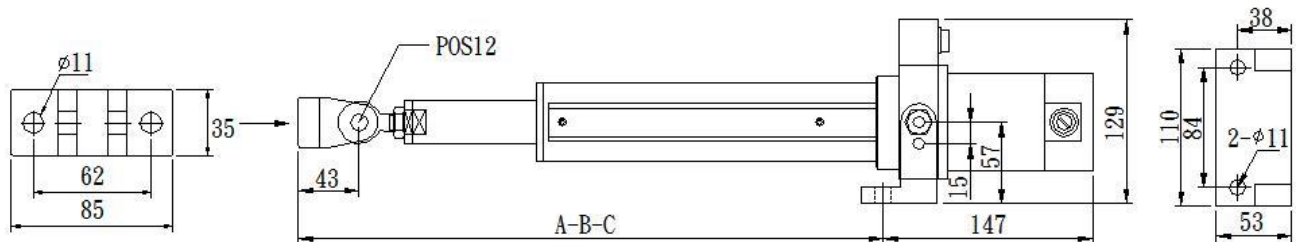
2.2 K type & L type Motor-driven Actuator Installation



Type	stroke (mm)	A(Max)	B(Center)	C(Min)	
Custom Standard	K100	85	446	403.5	361
	K150	135	546	478.5	411



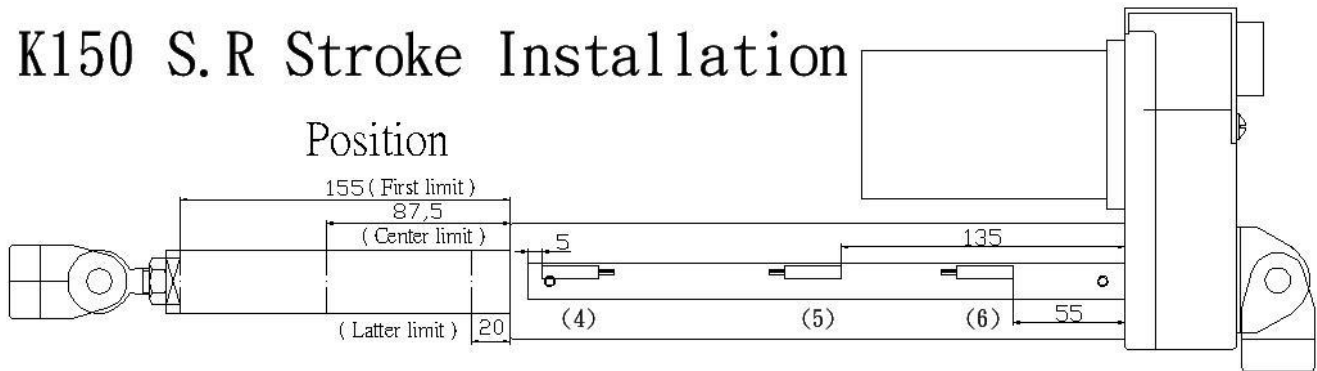
Type	stroke (mm)	A(Max)	B(Center)	C(Min)	D(馬達長度)	
Standard	L100 big	85	403	360.5	318	122
Standard	L150 big	135	503	435.5	368	122



Type	stroke (mm)	A(Max)	B(Center)	C(Min)	D(馬達長度)	
Standard	L100 small	85	378.5	336	293.5	147
Standard	L150 small	135	478	410.5	343	147

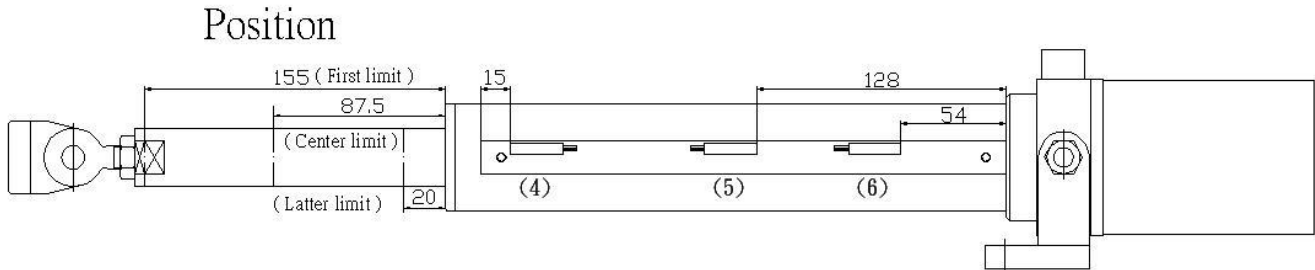
## 2.3 Motor-driven Actuator stroke Installation

### K150 S.R Stroke Installation



[Figure -]

### L150 S.R Stroke Installation



[Figure =]

Motor-driven Actuator stroke adjustment state and distance by magnetism spring stopcock .

◆ Adjustment step follow :

- [1]. Dismantles the driver circular pipe side aluminum strip two in hexagonal screw .
- [2]. In the aluminum strip places three magnetism reed switch .  
(4) First limit (5) center limit (6) latter limit
- [3]. In the aluminum strip places the two-sided rubber to be fixed, Three magnetism reed switch .
- [4]. The user like must revise the traveling schedule, Three magnetism reed switch proportional type control .

Attention :

- [1]. If you adjustment Magnetism reed switch , you have attention bolt bar situation keep up it rage . If the bolt bar situation not on it rage, you have must adjustment Driven Actuator made slow speed , then move Driven Actuator situation , voidance abrade gear of Driven Actuator .

# Sensor Installation

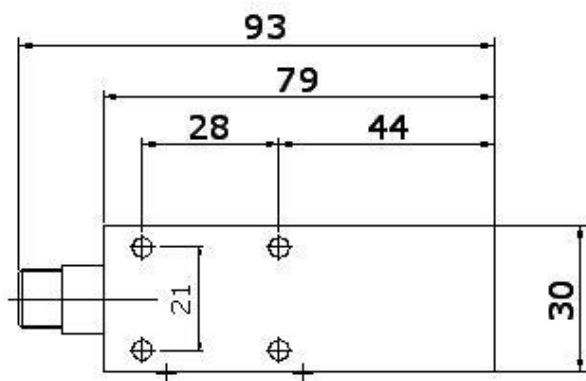
## 2.4 Sensor KTX-WP9114224 Size



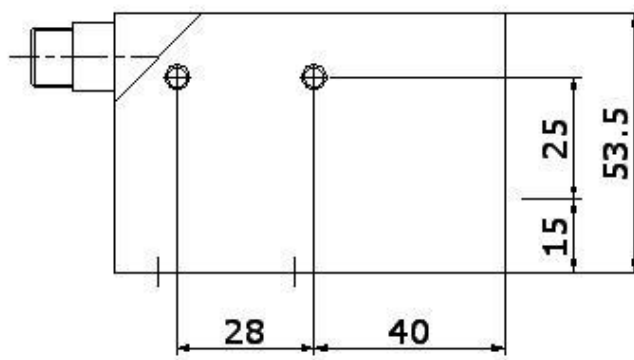
KTX-WP9114224 Sensor



LPC Electric adjustment brace



LPC Sensor Size(1)



LPC Sensor Size(2)







### 3. Various systems assembly functional key/Indicating lamp explanation

#### Controller function

#### 3.1 Electric LPC Controller Panel



function key commentary :

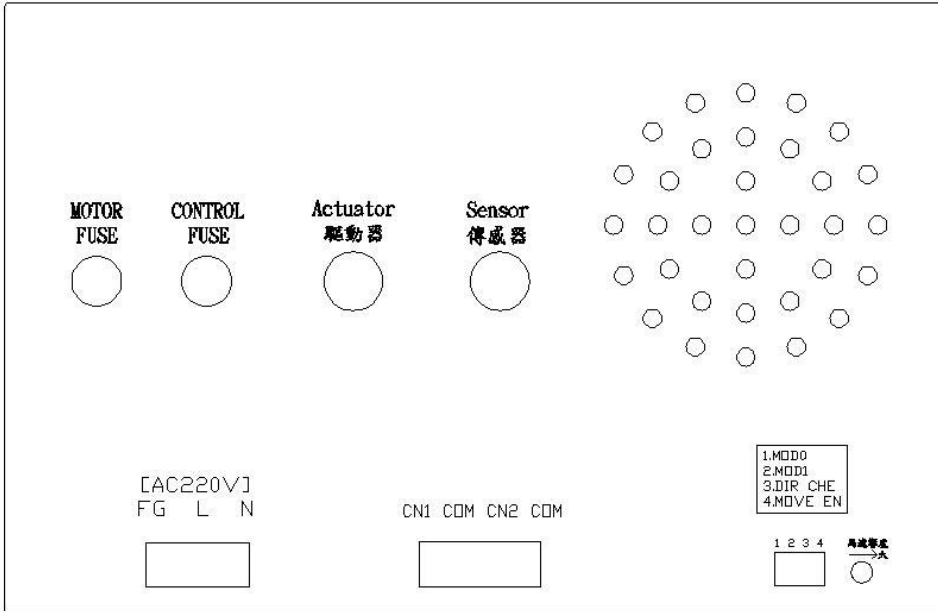
- |   |             |   |               |   |                |
|---|-------------|---|---------------|---|----------------|
|   | Auto Model  |   | Manual Model  |   | Manual right   |
|  | Manual Left |  | Manual Center |  | Auto Direction |

- [1]. GAIN screw button : When the adjustment LPC Sensor capture material change demonstrates lowly, Enlarges the sensitivity .
- [2]. BLANCE screw button : Adjustment LPC Sensor capture material, About nearby two demonstrated the lamp signal are equally many .
- [3]. SPEED screw button : Adjustment driver speed quick or slow .
- [4]. POWER Switch : Controller power switch .



- [5]. Controller demonstration lamp signal, About the both sides install the limit switch .

### 3.2 Electric LPC Controller Rear Panel

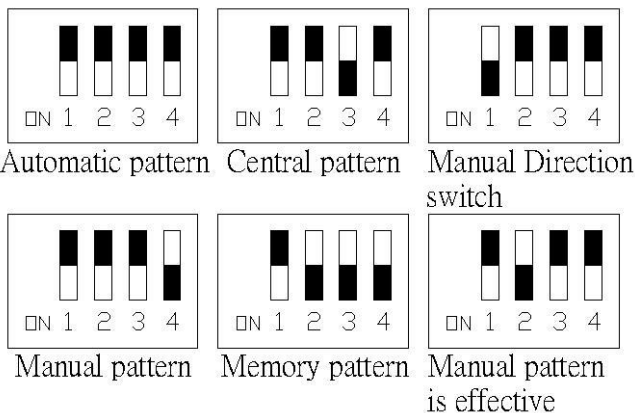


#### Function key commentary :

- [1]. **MOTOR FUSE** : Motor-Driven Actuator power fuse 250V/3A .
- [2]. **CONTROL FUSE** : Controller power fuse 250V/3A .
- [3]. **Motor-Driven Actuator Contention** : 7PIN Contention , Motor-Driven Actuator .
- [4]. **Sensor Contention** : 5PIN Contention , EPC Sensor .
- [5]. **3 PIN Europeanism terminal** : connection power signal importation Power 110V~220V . L N => POWER IN
- [6]. **4 PIN Europeanism terminal** : external sign controller .  
[Please enter a dry contact signal]

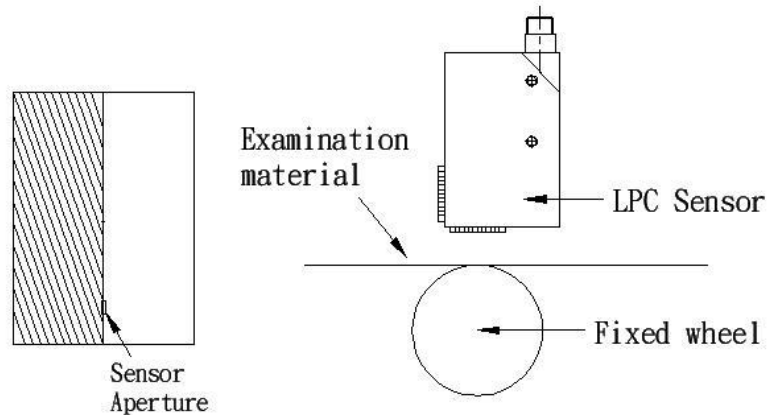
**Note :** The contact signal, not the input power signal, the controller will cause damage to components.

[7]. 4 tier finger stopcock model choice follow :



## 4. LPC system operation commentary

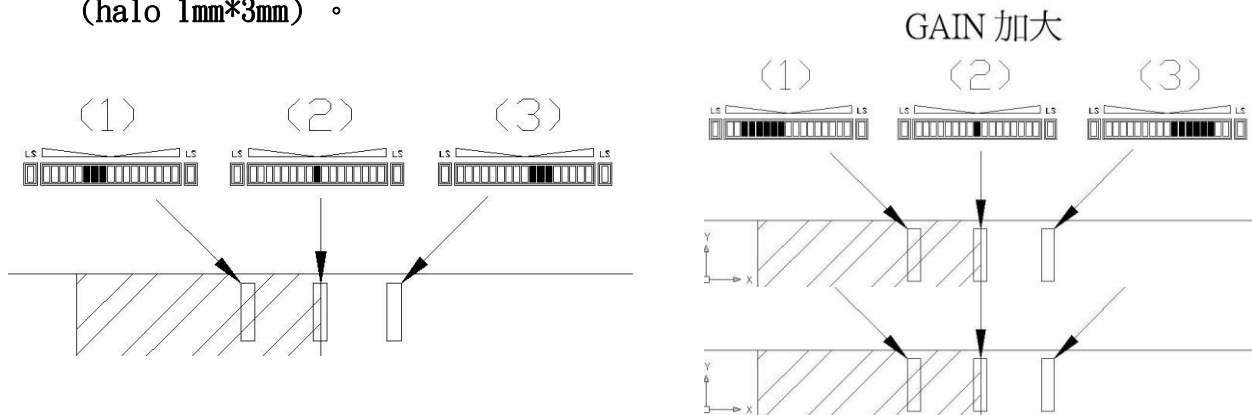
### 4.1 Electric LPC Sensor Setting



[Figure 三]

LPC Sensor adjust step :

- [1]. adjustment LPC Sensor situation front wheel about 10mm~15mm, adjust halo girth (halo 1mm\*3mm) .



[Figure 四]

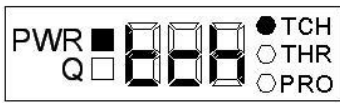
[Figure 五]

- [2]. Controller cut manual pattern, Puts the material to the wheel above the position .
- [3]. demonstrates the lamp signal the adjustment material shade to the material .
- [4]. has not demonstrated the lamp signal the shade to the material .
- [5]. The Sensor angle can be adjusted, and the material can be easily grasped.
- [6]. Uses about the BLANCE knob adjustment nearby two to demonstrate the lamp signal average .
- [7]. When LPC Sensor catch border line, center (2) display lamp signal .
- [8]. Bumps into the material capture lamp signal demonstration not to be obvious, May adjust the GAIN knob enlarge , Will analyze enlarges easily to capture
- Attention : LPC Sensor use advert cannot abrade lens , timing carry on condition lens .

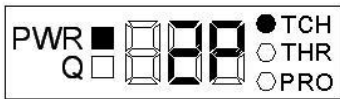


## 4.2 Electric LPC Sensor correction

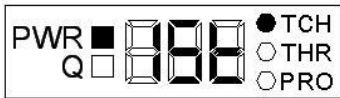
### KTX-WP9114224 Material Settings



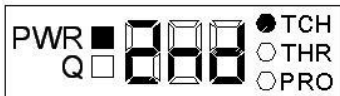
1. Press SET to enter
2. Select TCH and press SET to enter



3. Select 2P and press SET to enter



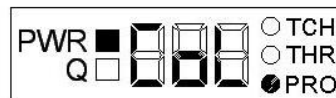
4. 1ST to the first tap SET



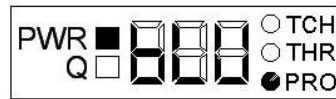
5. 2nd to the second tap SET
6. The Value will appear On the screen



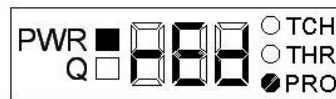
### KTX-WP9114224 RGB Light Source Settings



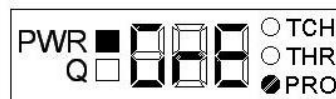
1. Press SET to enter
2. Select PRO and press SET to enter
3. Select COL and press SET to enter



4. Select BUL and press SET to enter (Blue light)



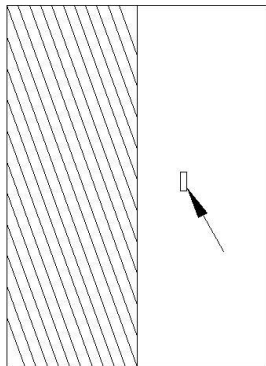
5. Select RED and press SET to enter (Red light)



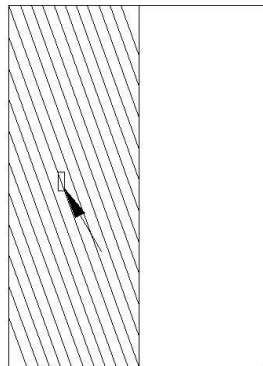
6. Select GRE and press SET to enter (Green light)



### Material Settings



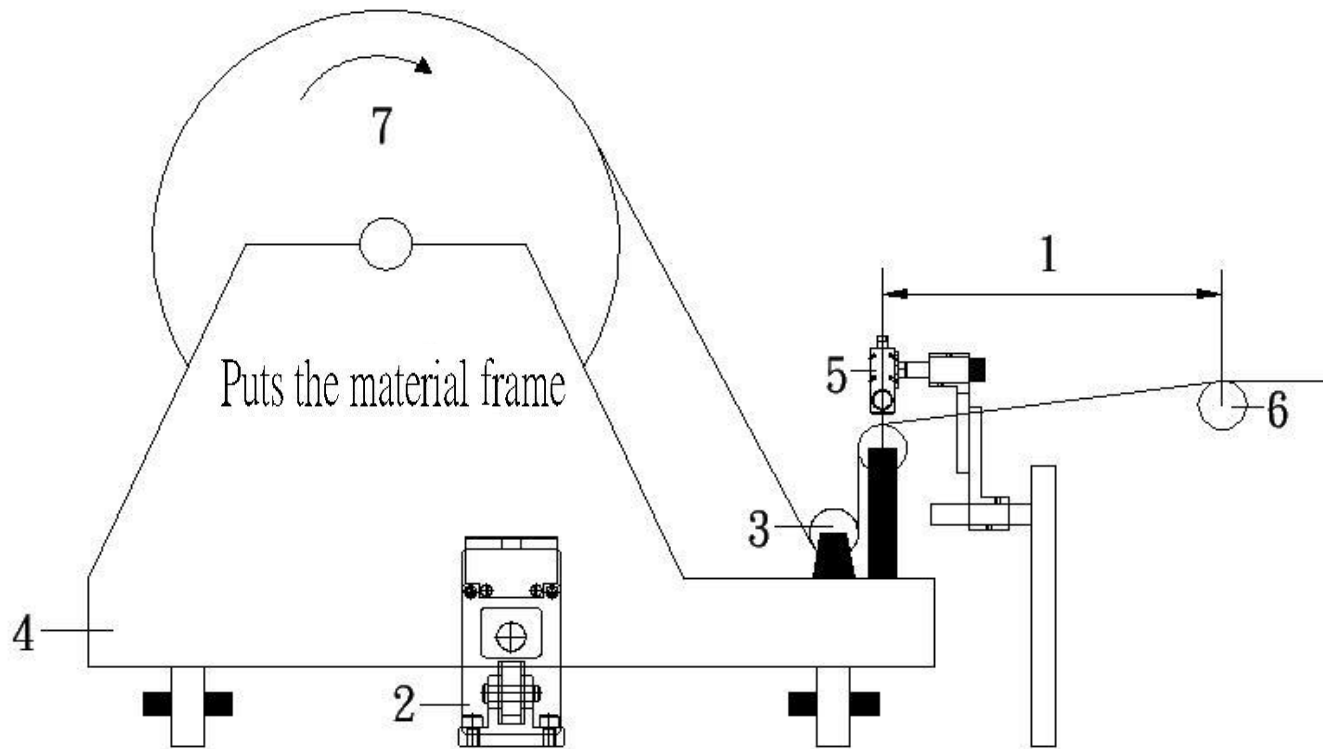
1ST to the first tap SET



2nd to the second tap SET

## 5. Testing commentary

### 5.1 LPC Installation denote model(Use Delivery material plat)



#### Use commentary :

- [1]. True area
- [2]. Motor-Driven Actuator
- [3]. True Roller Delivery material plat
- [4]. Delivery material plat
- [5]. LPC Sensor
- [6]. Contrivance guiding Roller (Fast pulley)
- [7]. Delivery material axis

#### 1. True area(1)

Delivery material : True area distance is true Roller on Delivery material plat [Distance is (3) appliance true Roller (6)]

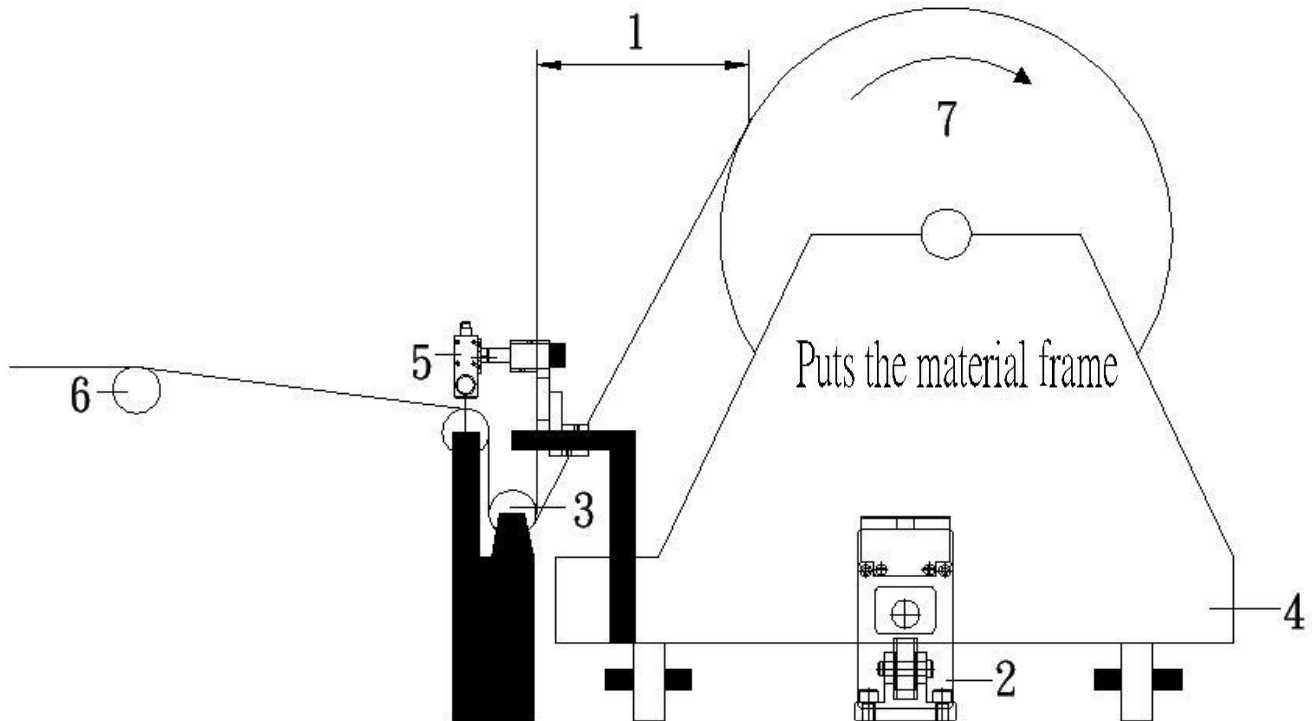
True area distance is material breadth (0.25~0.25 multiple) If is horniness material so distance must accrete

#### 2. LPC Sensor (5)

Delivery material : It must fixation on machine.

Use LPC Sensor must put delivery material plat up on true Roller

## 5.2 LPC Installation denote model(Use Receipt material plat)



## Use commentary :

- [1]. True area
- [2]. Motor-Driven Actuator
- [3]. True Roller Delivery material plat
- [4]. Delivery material plat
- [5]. LPC Sensor
- [6]. Contrivance guiding Roller (Fast pulley)
- [7]. Delivery material axis

## 1. True area (1)

Receipt material : True area distance is true Roller on Receipt material plat [Distance is (3) appliance true Roller (6)] .

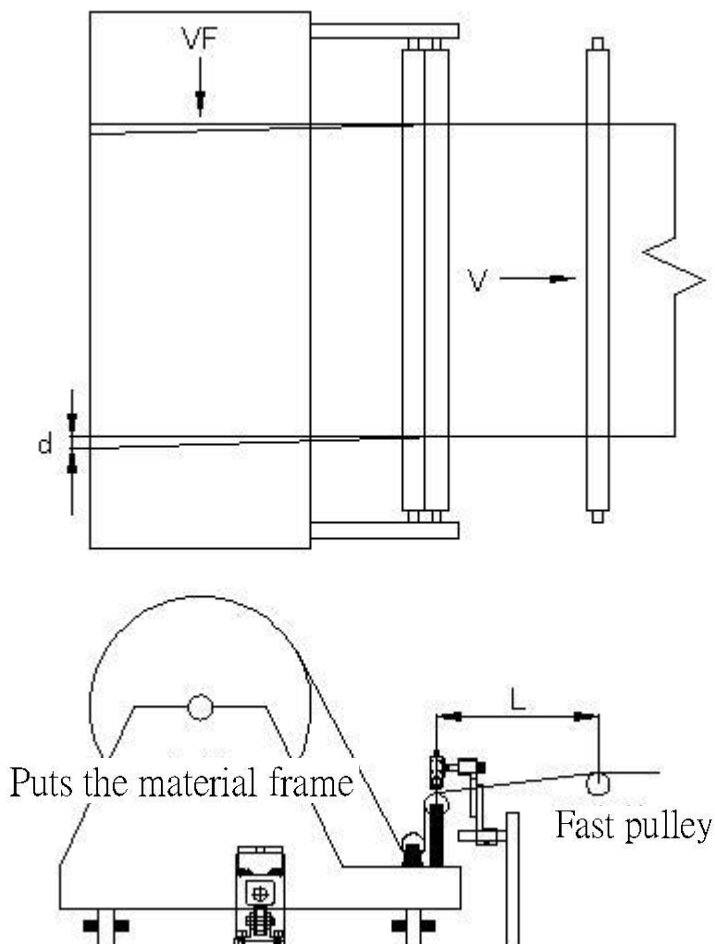
True area distance is Receipt breadth (0.25~0.25 multiple) If is horniness material so distance must accrete .

## 2. LPC Sensor (5)

Receipt material : It must fixation on machine .

If Use LPC magic eye crowded true Roller (6) of receipt material plat will well Use LPC Sensor must put receipt material plat up on true Roller .

## 5.3 LPC Induce Position Installation and Career Connection



[VF] auto aim line apparatus adjust speed(mm/sec)

[V] machine line speed (m/min)

[d] Per meter footage left and right bump mount(mm)

[L] LPC Sensor and fixation gyro distance(m) admit adjusting time (SEC)

[Q] take adjust mount (mm)

$$T = (L/V) * 60$$

$$Q = d * L$$

$$L = V * (1/60) * (d/VF)$$

## 5.4 LPC Impulsion Of Motor-driven Actuator

## SNEC-K TYPE

Motor-driven Actuator Speed ( mm/Sec )	25 mm/Sec
The Motor thrust force + reduces the ratio	1 : 11
The ball bearing screw rod maximum thrust may the load bearing ( Kg )	600 Kg
Motor-driven Actuator plumb impulse ( Kg )	150 Kg
Motor-driven Actuator run impulse ( Kg )	1500 Kg
Motor-driven Actuator Stroke ( mm )	100 mm 、 150 mm

## SNEC-L TYPE

Motor-driven Actuator Speed ( mm/Sec )	25 mm/Sec
The Motor thrust force + reduces the ratio	1 : 6
The ball bearing screw rod maximum thrust may the load bearing ( Kg )	600 kg
Motor-driven Actuator plumb impulse ( Kg )	120 Kg
Motor-driven Actuator run impulse ( Kg )	1200 Kg
Motor-driven Actuator Stroke ( mm )	100 mm 、 150 mm

## 5.5 LPC Problem and Solve

1. After turn on the controller power , the power can' t light up?

Ans : Please check the connect line of the controller it if is shed off or be connected with the wrong place .

3. The move direction of the Motor-driven Actuator and the detector are contrary ?

Ans : Please short-circuit CN2 and COM which on the terminal substrate behind the controller. .

4. Can' t operate the Motor-Driven Actuator ?

Ans : (1). Please confirm the cressets on the detector of the controller front-panel and the both sides were work .

(2). If they are , means the Motor-Driven Actuator has detected the sensor .

(3). Please check whether the conjunction lines of the Motor-driven Actuator loose or not connected .

If consumer has any question can' t solve when you using it, please get in touch with our commission agent, we will provide service as soon as possible .