

# POTES RUN BETTER

## POTES 動力騎行皮帶 是您動力傳輸的解決方案

Our innovative constructions aim to satisfy the demands of your requirements in terms of efficiency, reliability and durability.

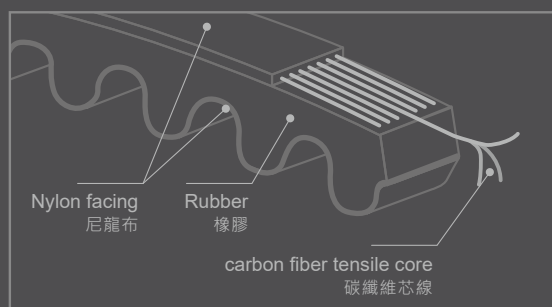
高強度動力騎行皮帶，與一般工業用皮帶相比，提升材料抗老化能力與耐衝擊性能，增益自行車及電動摩托車傳動系統之使用壽命。

### Our construction and specifications :

- High quality compounded rubber body provides durability and resistance to impact.
- Robust carbon fiber core wire provides high strength, high resistance to elongation.
- Synthetic fabrics(Nylon) facing provides a durable surface which strengthen the that is resistant to dust, UV light, water.  
The utility time of belt is prolonged.
- Operating temperature range :  
-30°C/-22°F to +100°C/+212°F.

### 特點：

- 橡膠材質，耐用耐衝擊。
- 碳纖維芯線，高強度，低延展性。
- 合成纖維布，強化皮帶剪切力，排水、抗老化，增加使用壽命。
- 運作溫度：  
-30°C/-22°F 至 +100°C/+212°F



Nylon facing  
尼龍布

Rubber  
橡膠

Potes®  
Potes®

ENGINEERED  
IN TAIWAN  
ENGINEERED  
IN TAIWAN

DO NOT CRIMP  
DO NOT CRIMP  
DO NOT CRIMP  
113GS11M  
113GS11M  
412CS11M

# Front & Rear wheel (synchronous metals)

## 輪盤組

### Features

Forged aluminum, CNC-machined, resulting great precision and enhanced circularity, a match made in heaven with POTES belts.

### 特點

以鍛造工法輔以CNC機器加工之齒輪盤工件，具備高強度，高精準度。

齒輪盤真圓度與同心度精準，能與搭配的POTES皮帶完整嚙合。



# Front wheel

## 前輪盤套件



Installation	安裝方式
48T : 4 pcs For 52T and over : 5 pcs	48T : 4 pcs 52T 以上 : 5 pcs
Material	材質
6061 T6 (Aluminum alloy)	6061 T6 (鋁合金)
Color	顏色
Anodizing colors including aluminum primitive color, black, etc.	鋁原色、黑色 等陽極氧化處理色
Teeth Number	齒數
48 / 52 / 64 T	48 / 52 / 64 T
Belt tension	安裝張力
180~200 N	180~200 N

### ■ Cranks are standard configuration :

In case of mid-motor drive : cranks are excluded.

In case of customer-owned cranks,

for 48T front wheel : BCD 104mm with 4 screws.

for 52T and over : BCD 130mm with 5 screws.

### ■ 前輪盤組原則上含曲柄：

1. 中置電機款式則不含曲柄。

2. 客戶自備曲柄，48T為四爪，BCD104mm；

52T以上為5爪，BCD130mm

# Front wheel for kids bicycles

## 童車適用前輪盤套件



對鎖螺絲 (4爪)  
Mutual to lock bolt with 4 screws



鉚合安裝 (曲柄為標配)  
Rivet jointed with cranks

Installation	安裝方式
Left : Mutual to lock bolt with 4 screws. Right : Rivet jointed with cranks.	左 : 對鎖螺絲 (4爪) 右 : 鉚合安裝 (曲柄為標配)
Material	材質
6061 T6 (Aluminum alloy)	6061 T6 (鋁合金)
Color	顏色
Anodizing colors including aluminum primitive color, black, etc.	鋁原色、黑色 等陽極氧化處理色
Teeth Number	齒數
46 / 48 / 50 / 52 T	46 / 48 / 50 / 52 T
Belt tension	安裝張力
150~180 N	150~180 N

Specification table for rear wheel / 後輪規格表



棘輪式  
Thread-on flywheel



內變速三卡  
Internal gear hub



九卡式  
Cassettes

## Rear Wheel For bike and E-bikes 後輪 自行車及電動自行車

**Material :** CrMo  
**Color :** Black

材質：鉻鉬鋼  
顏色：黑色

### Thread-on flywheel / 棘輪式

20T / 22T

\* Thread pitch / 螺牙：1.375 24T

### Cassettes / 九卡式

20 / 22 T

### Internal gear hub / 內變速三卡

3 speed / 速

7 speed / 速

8 speed / 速

20 / 22 T

22T

22T

### Our speed ratio / 現有速比

2.18~3.2 (continued)

## Rear Wheel For bike 後輪 童車規格

**Material :** 6061 T6 (Aluminum alloy)  
**Color :** Black

材質：6061 T6 (鋁合金)  
顏色：黑色

### Thread-on flywheel / 棘輪式

28 / 30 T

### Cassettes / 九卡式

22 / 24 / 26 T

### Our speed ratio / 現有速比

1.53~2.36

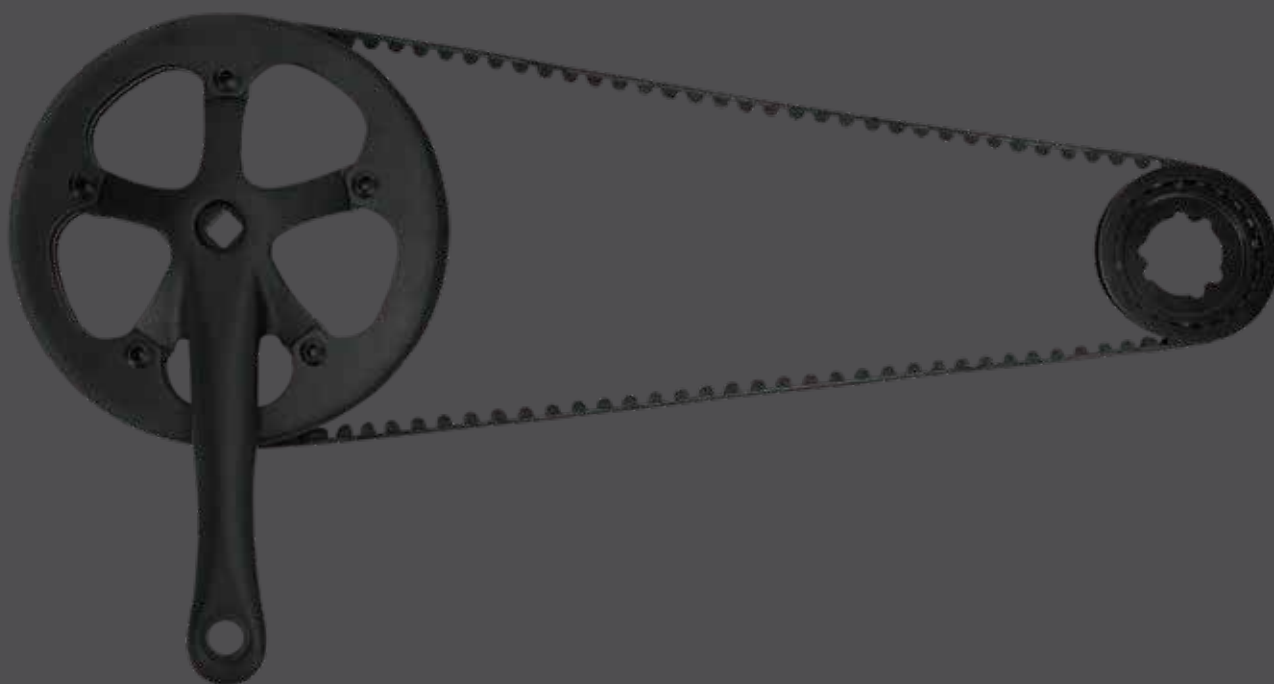
# Switch From Chain System To POTES Belting System

## POTES 動力騎行皮帶系統 優化取代鍊條系統

POTES synchronous belt system, are designed to provide a safe and maintenance-free solution to serve your mobility needs.

The utility time mobilized by POTEST system more than tripled under usual operating condition.

POTES 動力騎行皮帶系統傳動效率優於鍊條系統，維護成本低，乾淨環保，於正常使用環境下，皮帶系統使用壽命是鍊條系統的3倍以上。





## Customization

POTES belt system is proven to be applied on scooters and E-bikes. Just tip us with your required RC and speed ratio\*.

If it runs. POTÉS run better.

email : [service@potestrans.com](mailto:service@potestrans.com)

## 客製化

除了用於自行車，POTES 皮帶系統經測試，亦能應用於摩托車及電動摩托車上。請提供您產品的RC及速比資料，讓我們提供您動力十足的騎行體驗。

email : [service@potestrans.com](mailto:service@potestrans.com)

### ■ Speed ratio :

Transmission efficiency is determined by speed ratio.

Under the same circumstances. For lower ratio, normally used on the tougher climbs, a higher cadence is needed to spin the wheels quickly.

While for higher ratio, it's going to take quite a lot of effort to get it moving, yet you will move more quickly.

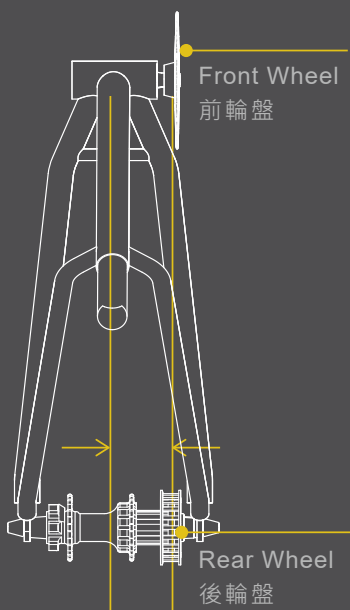
### ■ 速比 :

速比將會決定騎行效率。

相同條件下，騎行時，速比越小越省力，踏頻高，騎行速度慢；

速比越大則越費力，踏頻低，騎行速度快。

# Installation / 安裝



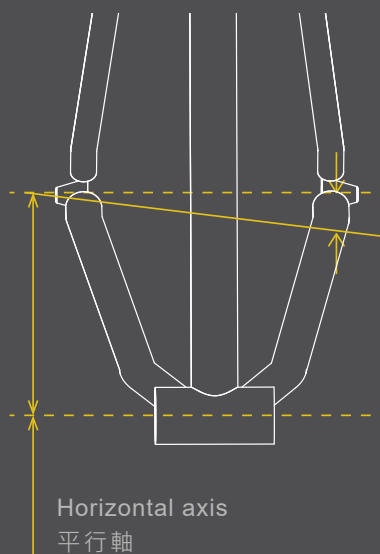
1.

## Frame center line

The horizontal distance between frame and sprockets center line  $\pm 1.5\text{mm}$

## 車架中心線

車架中心線與齒輪中心線平行距離  $\pm 1.0\text{mm}$



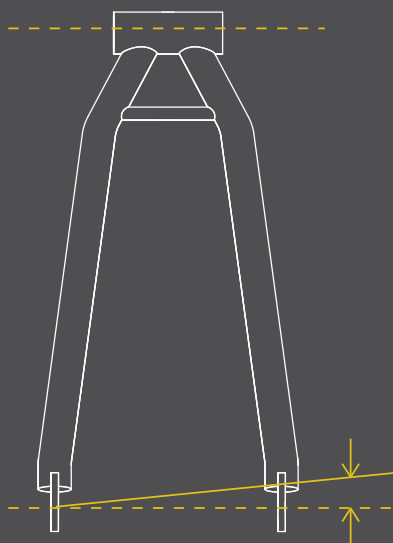
2.

## Axle center of vertical alignment

The axis of rotation  $\pm 0.5^\circ$

## 軸校正垂直

垂直基準面：旋轉軸  $\pm 0.5^\circ$



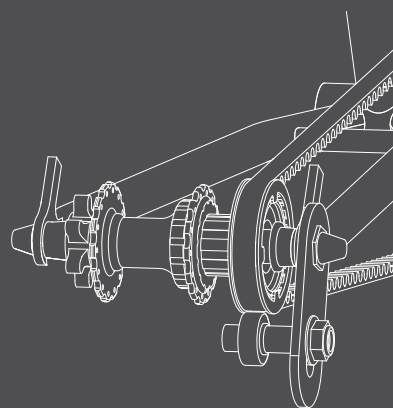
3.

## Axle center of horizontal alignment

The axis of rotation  $\pm 0.5^\circ$

## 軸校正水平

水平基準面：旋轉軸  $\pm 0.5^\circ$



4.

## Installation guide line of pulley holder

Installation guide for 8M pulley holder

## 安裝要領

適用於 8M 防跳齒結構





## Storage suggestion of POTES timing belts

Do not excessively break or bend when it is not in use. Otherwise it would be considered an abuse to its structure. Do not store the belt in an abnormally bent state for a long period. Keep in a cool place.

### POTES 皮帶儲藏建議

如附圖過度彎折，將會被視為非正常使用。



# Belts / 皮帶 : 11M

**Material :** Rubber, Carbon fiber tensil wire

**Color :** Black

**材質 :** 橡膠, 碳纖維芯線

**顏色 :** 黑色

Product Number Example / 編碼說明

**C 11 100 11 BK**

**C** Carbon fiber tensil wire  
碳纖維芯線

Teeth  
pitch  
齒距  
(mm)

Teeth  
number  
齒數

Belt  
width  
寬度  
(mm)

**BK** BLACK  
黑色

**G** Glass fiber tensil wire  
玻璃纖維芯線

**Product Number**  
產品編號

**Teeth Number**  
齒數

C11 10011BK

100

C11 10211BK

102

C11 10511BK

105

C11 10611BK

106

C11 10911BK

109

C11 11111BK

111

C11 11311BK

113

C11 11411BK

114

C11 11511BK

115

C11 11611BK

116

**Product Number**  
產品編號

**Teeth Number**  
齒數

C11 11711BK

117

C11 11811BK

118

C11 11911BK

119

C11 12011BK

120

C11 12411BK

124

C11 12611BK

126

C11 12811BK

128

C11 13011BK

130

C11 13211BK

132

C11 13411BK

134

C11 13511BK

135

Our available size / 我們現有規格

# Front Wheel / 前輪組

**Material** : 6061 Alloy : Forged with CNC machined

**Color** : Black anodized

**材質** : 6061 鋁合金 ; 鍛造 + CNC精加工

**顏色** : 黑色陽極氧化

Product Number Example / 編碼說明

**B 11 48 S N BK**

Front wheel  
前輪

Teeth pitch  
齒距  
(mm)

Teeth number  
齒數

**S** Single shield  
單護片

**Y** With exterior design  
有特殊外觀設計

**BK** BLACK  
黑色

**D** Double shields  
雙護片

**N** With exterior design(Plain)  
無特殊外觀設計

Product Number 產品編號	Specs 產品規格	Screws 爪	Shield 護片	Exterior design 外觀設計	Shield Size 護片尺寸
B1148SNBK	11M48T-BCD104mm	4	single / 單個	X	Ø 172.5mm
B1148DNBK	11M48T-BCD104mm	4	double / 雙個	X	Ø 172.5mm
B1148SYBK	11M48T-BCD104mm	4	single / 單個	O	Ø 172.5mm
B1148DYBK	11M48T-BCD104mm	4	double / 雙個	O	Ø 172.5mm
B1152SNBK	11M52T-BCD130mm	5	single / 單個	X	Ø 186.5mm
B1152DNBK	11M52T-BCD130mm	5	double / 雙個	X	Ø 186.5mm
B1152SYBK	11M52T-BCD130mm	5	single / 單個	O	Ø 186.5mm
B1152DYBK	11M52T-BCD130mm	5	double / 雙個	O	Ø 186.5mm
B1164SNBK	11M64T-BCD130mm	5	single / 單個	X	Ø 228.5mm
B1164DNBK	11M64T-BCD130mm	5	double / 雙個	X	Ø 228.5mm
B1164SYBK	11M64T-BCD130mm	5	single / 單個	O	Ø 228.5mm
B1164DYBK	11M64T-BCD130mm	5	double / 雙個	O	Ø 228.5mm

# Rear Wheel / 後輪組

**Material :** CrMo ; Forged with CNC machined

**Color :** Black

材質：鉻鉬鋼；鍛造 + CNC 精加工

顏色：黑色電泳

Product Number Example / 編碼說明

**S 11 20 A0 BK**

Front wheel  
前輪

Teeth pitch  
齒距  
(mm)

Teeth number  
齒數

A0 Thread-on flywheel  
棘輪式

BK BLACK  
黑色

B0 Cassettes  
九卡式

S3 Internal hub 3-speed.(Shimano)  
三卡內變速3速

S7 Internal hub 7-speed.(Shimano)  
三卡內變速7速

S8 Internal hub 8-speed  
三卡內變速8速

**Product Number**  
產品編號

**Specs**  
產品規格

S1120A0BK

11M20T

Thread-on flywheel / 棘輪式

S1120S3BK

■ 11M20T

Internal hub-3speed / 三卡式

S1120B0BK

11M20T

Cassettes / 九卡式

S1122A0BK

11M22T

Thread-on flywheel / 棘輪式

S1122S3BK

11M22T

Internal hub-3speed / 三卡式

S1122B0BK

11M22T

Cassettes / 九卡式

S1122S7BK

■ 11M22T

Internal hub-7speed / 三卡式內變七速適用

S1122S8BK

■ 11M22T

Internal hub-8speed / 三卡式內變八速適用

■ Shimano compatible/ 相容

# The tensile strength / 抗拉強度

## Belt pitch / 齒距 : 11mm

Belt width / 寬度 : 11.7±0.3mm

Maximum Tensile Strength

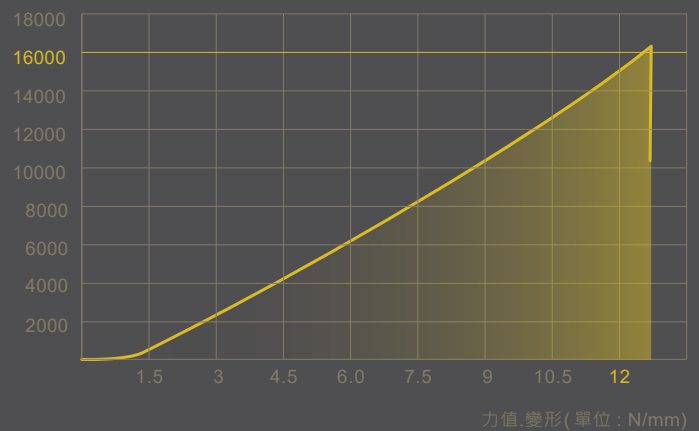
最大抗拉強度

over 16000 N (reference : JIS standard)  
(參考 : JIS 標準)

Tensile Strength

抗拉強度

1593.91 N/mm



## Belt pitch / 齒距 : 8mm

Belt width / 寬度 : 20mm

Maximum Tensile Strength

最大抗拉強度

30000 N

Tensile Strength

抗拉強度

1500 N/mm

