

# CH

## 電動夾爪系列

## Electric Gripper

### Contents

蝸桿式 Worm Drive

CHZ2-S14



新發售

本體寬幅 80mm  
Width  
夾持力 92.5N .....217  
Gripping force  
最高速度 35.5mm/s  
Max. speed

螺桿 Ball Screw

CHS2B-S40



本體寬幅 130.5mm  
Width  
夾持力 40~258N .....253  
Gripping force  
最高速度 41mm/s  
Max. speed

連桿 Linkage

CHZ20



本體寬幅 50mm  
Width  
夾持力 22~98N .....225  
Gripping force  
最高速度 50mm/s  
Max. speed

螺桿 Ball Screw

CHS2B-S68



本體寬幅 194.5mm  
Width  
夾持力 80~509N .....257  
Gripping force  
最高速度 50mm/s  
Max. speed

連桿 Linkage

CHZ25



本體寬幅 63mm  
Width  
夾持力 22~98N .....229  
Gripping force  
最高速度 50mm/s  
Max. speed

螺桿 Ball Screw

CHS2C-S20



Class 10

新發售

本體寬幅 87mm  
Width  
夾持力 20~124N .....261  
Gripping force  
最高速度 33.3mm/s  
Max. speed

凸輪 Cam structure

CHB6-S11



本體寬幅 30mm  
Width  
夾持力 0.72~2.4N .....233  
Gripping force  
最高速度 100mm/s  
Max. speed

螺桿 Ball Screw

CHS2C-S40



Class 10

新發售

本體寬幅 130.5mm  
Width  
夾持力 40~258N .....265  
Gripping force  
最高速度 41mm/s  
Max. speed

凸輪 Cam structure

CHB6-S14



本體寬幅 38mm  
Width  
夾持力 2.1~7N .....237  
Gripping force  
最高速度 100mm/s  
Max. speed

螺桿 Ball Screw

CHS2C-S68



Class 10

新發售

本體寬幅 194.5mm  
Width  
夾持力 80~509N .....269  
Gripping force  
最高速度 50mm/s  
Max. speed

凸輪 Cam structure

CHB6T-S14



新發售

本體寬幅 38mm  
Width  
夾持力 1.2~4N .....241  
Gripping force  
最高速度 100mm/s  
Max. speed

凸輪 Cam structure

CHG2



本體寬幅 95mm  
Width  
夾持力 4.5~15N .....273  
Gripping force  
最高速度 150mm/s  
Max. speed

螺桿 Ball Screw

CHS2-S12



本體寬幅 56.5mm  
Width  
夾持力 6.5~22N .....245  
Gripping force  
最高速度 70mm/s  
Max. speed

連桿 Linkage

CHY2B-S80



新發售

本體寬幅 74mm  
Width  
夾持力 40~90N .....277  
Gripping force  
最高速度 200mm/s  
Max. speed

螺桿 Ball Screw

CHS2B-S20



本體寬幅 87mm  
Width  
夾持力 20~124N .....249  
Gripping force  
最高速度 33.3mm/s  
Max. speed

連桿 Linkage

CHY2B-S150



新發售

本體寬幅 74mm  
Width  
夾持力 15~30N .....283  
Gripping force  
最高速度 200mm/s  
Max. speed

## 規格索引

## Spec Index

CH 電動夾爪系列  
CH Electric Gripper

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	開閉行程 <sup>*1</sup> Open/close stroke (mm)	開閉速度 Open/close speed (mm/s)	本體重量 <sup>*2</sup> Main body weight (g)	
一般環境 Standard	蝸桿式 Worm Drive	CHZ2-S14	25□	80	±0.02	14	1~35.5	573	
	滑動連桿式 Slider linkage	CHZ20	25□	50	±0.02	10	5~50	368	
		CHZ25	25□	63	±0.02	14	5~50	552	
	凸輪式 Cam type	CHB6-S11	20□	30	±0.02	11	20~100	80	
		CHB6-S14	25□	38	±0.02	14	20~100	250	
		CHB6T-S14	25□	38	±0.02	14	20~100	230	
	螺桿式 Ball screw type	CHS2-S12	20□	56.5	±0.01	12	10~70	160	
		CHS2B-S20	20□	87	±0.01	20	6.66~33.3	310	
		CHS2B-S40	25□	130.5	±0.01	40	8.2~41	625	
		CHS2B-S68	35□	194.5	±0.01	68	10~50	1730	
		CHS2C-S20	20□	87	±0.01	20	6.66~33.3	310	
		CHS2C-S40	25□	130.5	±0.01	40	8.2~41	625	
		CHS2C-S68	35□	194.5	±0.01	68	10~50	1730	
	凸輪式 Cam type	CHG2	53□	95	±0.05	30	30~150	450	
	連桿式 Linkage type	CHY2B-S80	35□	74	±0.05	80	40~200	915	
		CHY2B-S150	35□	74	±0.05	150	40~200	940	

\*1: 雙邊合計行程。

Total stroke of both sides.

\*2: 重量包含本體與馬達。

Weight of model with motor.

\*3: 92.5=100% 電流。

92.5=100% current

	夾持力 Gripping force(N)																開閉速度 Open/close speed (mm/s)										頁數 Page		
	5	10	20	30	60	90	120	150	180	210	240	270	300	400	500	600	0	5	10	20	30	60	90	120	150	180		200	
	1~92.5 <sup>*3</sup>																1~35.5										217		
				22~98													5~50										225		
				22~98													5~50										229		
	0.72~2.4																20~100										233		
	2.1~7																20~100										237		
	1.2~4																20~100										241		
		6.6~22															10~70										245		
				20~124													6.66~33.3										249		
					40~258												8.2~41										253		
						80~509													10~50										257
				20~124													6.66~33.3										261		
					40~258												8.2~41										268		
						80~509													10~50										269
	4.5~15																30~150										273		
				40~90													40~200										277		
		15~30															40~200										283		

# CHZ2-S14



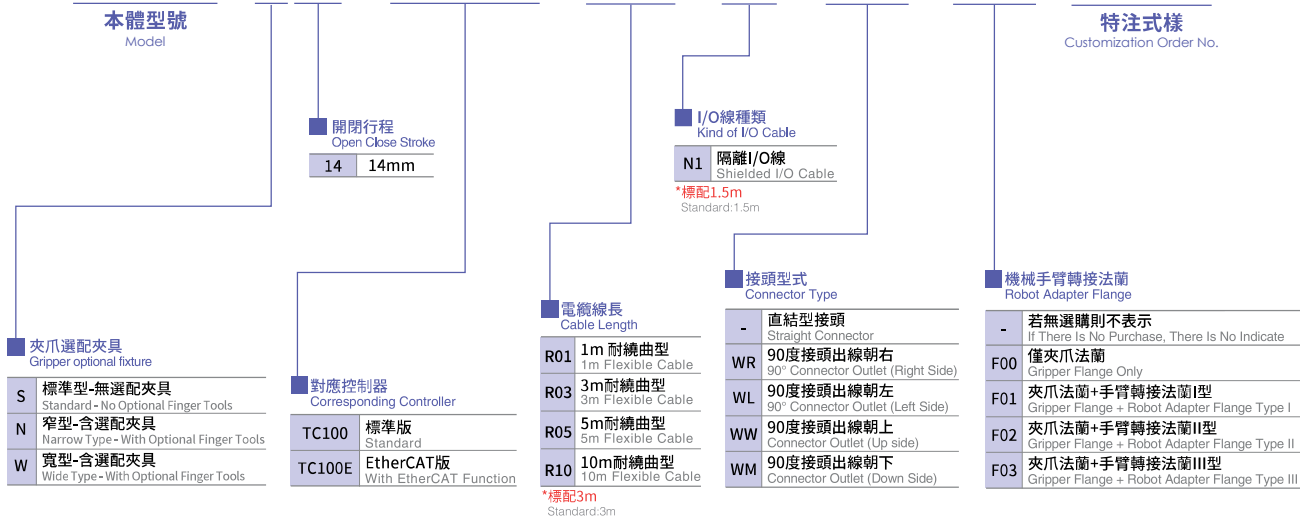
## 蝸桿式 Worm Drive



馬達尺寸 25□mm  
Motor Dimension

### 型號表示方式 Ordering Method

## CHZ2 - S14 - TC100 - R03 - N1 - WR - F01 - A001

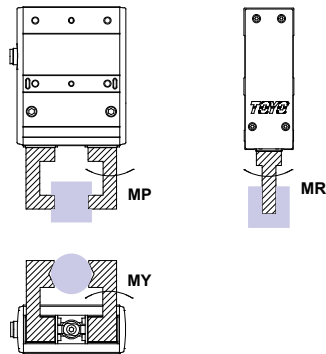


基本仕様 Specification

規格 Spec	耐衝擊 / 耐震動 Shock/vibration resistance (m/s <sup>2</sup> )	50 / 20
	夾持重量 Weight (kg)	0.98 <sup>**4</sup>
	夾持力範圍 Gripping force (N)	92.5 <sup>**3</sup>
	開閉行程 Open/Close stroke (mm) <sup>**1</sup>	14
	開閉速度 Open/Close Speed (mm/s)	35.5
	位置重複精度 Repeatability (mm)	±0.02
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	5~45( 避免結凍 ) 5~45(Avoid freezing)
	使用濕度範圍 Operating humidity range (%)	RH35~85 以下 ( 無結露 ) Below RH35-85 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25口
	重量 Weight (g) <sup>**2</sup>	573±5

<sup>\*\*1</sup> 雙邊合計行程。 Total stroke of both sides.  
<sup>\*\*2</sup> 不包含選配件。 The weight includes the body and motor, excluding optional accessories.  
<sup>\*\*3</sup> 92.5=100% 電流 92.5=100% current  
<sup>\*\*4</sup> 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

容許夾持負載力矩表 Allowable Moment

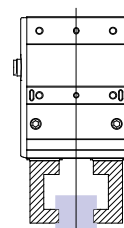
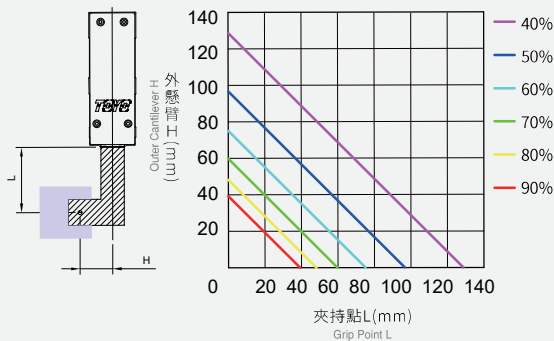


(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	<b>MY</b>	7.12
俯仰力矩 Allowable pitching moment	<b>MP</b>	7.12
滾動力矩 Allowable rolling moment	<b>MR</b>	26.41

\* 表中負荷及力矩的值表示靜的負荷  
The value in the chart is static, not dynamic loading and torque.

夾持點與外懸臂距離限制 Limited Distance Between The Gripping Point And Outer Cantilever



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

222.73

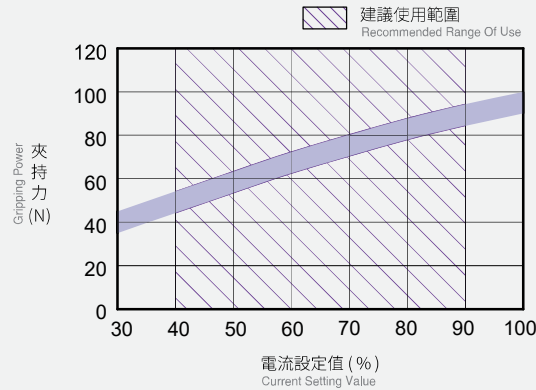
對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	<b>EtherCAT</b> 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

## CHZ2-S14

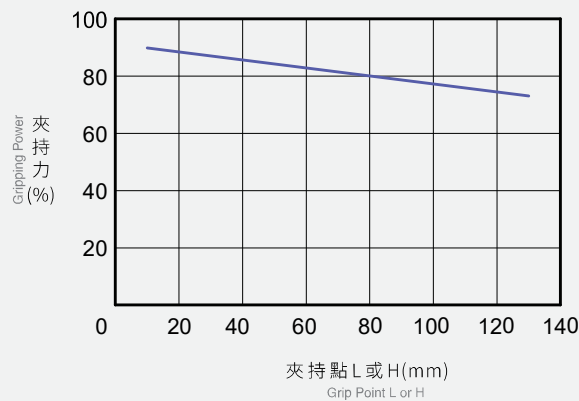
蝸桿式  
Worm Drive

## 夾持力與電流值曲線表 Clamping Force And Current Value Curve Table



\* 夾持力誤差約  $\pm 10\%$   
Clamping force error is about  $\pm 10\%$

## 夾持力與夾持距離關係 Relationship Between Clamping Force And Clamping Distance



\* 此數據以 100% 之電流值做測試，夾具使用之材料為中碳鋼。  
This data is tested with 100% current value, and the material of the fixture is medium carbon steel.  
\* 此數據會因使用夾具的選用材料與形狀設計而有所不同。  
The data will vary depending on the selected material and shape design of the fixture used.

選配夾具 Optional Clamps

N 型示意圖 Type N, schematic	W 型示意圖 Type W, schematic	夾具尺寸圖 Fixtures, Dimensions
<p>開時：1.5 Open</p> <p>開時：15.5 Close</p> <p>25.5</p> <p>69.5</p> <p>9</p> <p>(單位 Unit: mm)</p>	<p>開時：49.5 Close</p> <p>開時：63.5 Open</p> <p>73.5</p> <p>9</p> <p>(單位 Unit: mm)</p>	<p>4-Ø3.2 Thr</p> <p>2-Ø3 H8(+0.014)▽4</p> <p>鎖附面 Lock Surface</p> <p>27</p> <p>夾持面(N型) Clamping Surface (N Type)</p> <p>40</p> <p>夾持面(W型) Clamping surface (W type)</p> <p>18</p> <p>15</p> <p>20</p> <p>2-M4 Thr.</p> <p>材質：碳鋼 (鍍化學黑鎳) Material: carbon steel (chemically black nickel plated) 總質量：約100g (一組2入) Total mass: about 100g (a set of 2)</p> <p>(單位 Unit: mm)</p>

選用注意事項：Selection Notice：

1. 使用時一支夾爪僅可搭配一組夾具。1. One gripper can only be used with one set of clamps.
2. 夾具一組 2 入：出貨時預先鎖附於夾爪上。2. A set of 2 clamps, which are pre-assembled on the gripper when shipped.
3. 若有購買多組、或出貨不需鎖附等需求，請事先與業務人員洽詢。3. If you need to purchase multiple sets, or do not need to pre-assemble while shipment, please contact the sales staff in advance.

選配機械手臂轉接法蘭 Optional Robot Adapter Flange

夾爪法蘭尺寸圖 Gripper Flange Dimensions	
<p>66.6</p> <p>52</p> <p>26</p> <p>4-Ø4.3 Thr</p>	<p>11</p> <p>3</p> <p>5</p> <p>65</p> <p>轉接法蘭接觸面 Rotating adapter flange connecting surface</p> <p>夾爪接觸面 Gripper connecting surface</p> <p>4- L Ø10▽5.4 Ø5.3 Thr</p> <p>28</p> <p>63</p> <p>25</p> <p>Ø67 G8(+0.056)±0.01</p> <p>Ø3 H8(+0.014)▽5</p> <p>(單位 Unit: mm)</p>

手臂轉接法蘭尺寸圖 Robot Flange Dimensions			
代號 Code	F01	F02	F03
符合 Suitable	ISO 9409-1 50-4-M6	ISO 9409-1 31.5-4-M5	ISO 9409-1 40-4-M6
尺寸 Size	<p>4- L Ø11▽6.4 Ø6.4 Thr EQUALLY SPACED</p> <p>L Ø6 F8(+0.028)±0.01</p> <p>P.C.D. Ø50</p> <p>Ø67 H8(+0.028)±0.01</p> <p>63 G8(+0.028)±0.01</p> <p>5</p> <p>12</p> <p>2.5</p> <p>1.65</p> <p>20</p> <p>Ø50 G8(+0.028)±0.01</p> <p>手臂接觸面 Arm connecting surface</p> <p>夾爪法蘭接觸面 Gripper flange connecting surface</p> <p>A-A View</p> <p>(單位 Unit: mm)</p>	<p>4- L Ø10▽5.4 Ø5.3 Thr EQUALLY SPACED</p> <p>L Ø5 F8(+0.028)±0.01</p> <p>P.C.D. Ø31.5</p> <p>Ø67 H8(+0.028)±0.01</p> <p>5</p> <p>15.75</p> <p>2.5</p> <p>1.65</p> <p>20</p> <p>Ø40 G8(+0.028)±0.01</p> <p>手臂接觸面 Arm connecting surface</p> <p>夾爪法蘭接觸面 Gripper flange connecting surface</p> <p>A-A View</p> <p>(單位 Unit: mm)</p>	<p>4- L Ø11▽6.4 Ø6.4 Thr EQUALLY SPACED</p> <p>L Ø6 F8(+0.028)±0.01</p> <p>P.C.D. Ø40</p> <p>Ø67 H8(+0.028)±0.01</p> <p>5</p> <p>12</p> <p>2.5</p> <p>1.65</p> <p>20</p> <p>Ø50 G8(+0.028)±0.01</p> <p>手臂接觸面 Arm connecting surface</p> <p>夾爪法蘭接觸面 Gripper flange connecting surface</p> <p>A-A View</p> <p>(單位 Unit: mm)</p>
重量 Weight	82g	97g	90g

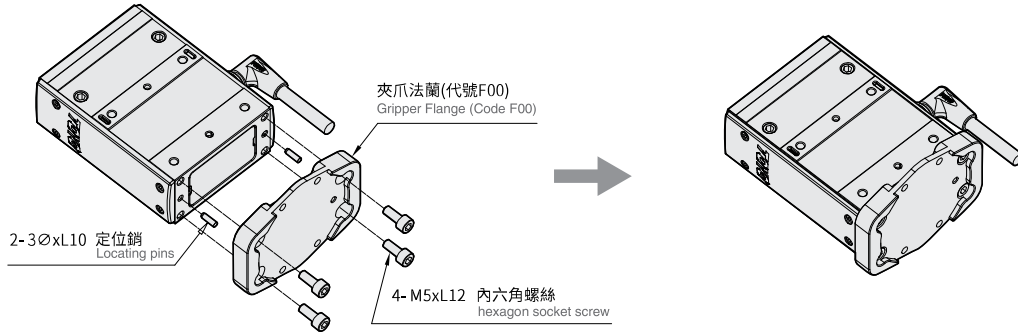
# CHZ2-S14



## 蝸桿式 Worm drive

### 機械手臂轉接法蘭組裝步驟 Robotic arm adapter flange Assembly steps

#### 步驟一、組裝夾爪法蘭 Step 1. Assemble the gripper flange



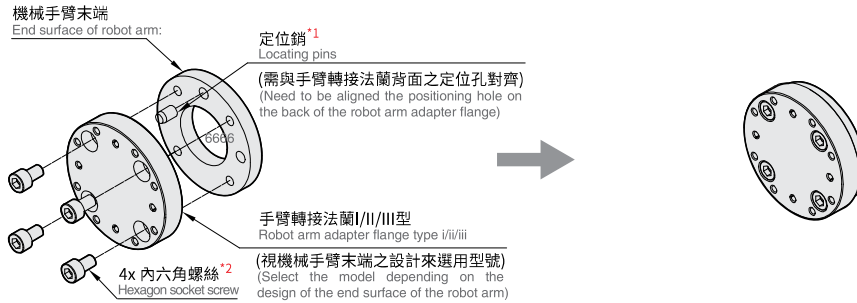
備註：Remark:

1. 有選配法蘭時，出貨時會隨附組裝步驟對應之螺絲包。  
1. When there is an optional flange, it will be shipped with a screw package corresponding to the assembly steps.
2. 步驟二之螺絲需客戶自行準備，若需協助提供則需事先告知業務。  
2. The screw in step 2 needs to be prepared by the customer. If need any assistance please inform to the sales person in advance.
3. 法蘭出廠時不預先組裝。若步驟一有預先組裝需求請事先告知業務。  
3. The flange is not pre-assembled when shipping from the factory. Please inform the salesperson in advance if it requires pre-assembly (step 1).

#### 步驟二、組裝手臂轉接法蘭 Step 2. Assemble the robot arm adapter flange

(此步驟之螺絲需自行準備)

(Screws & positioning pins required for this step need to be prepared by yourself)



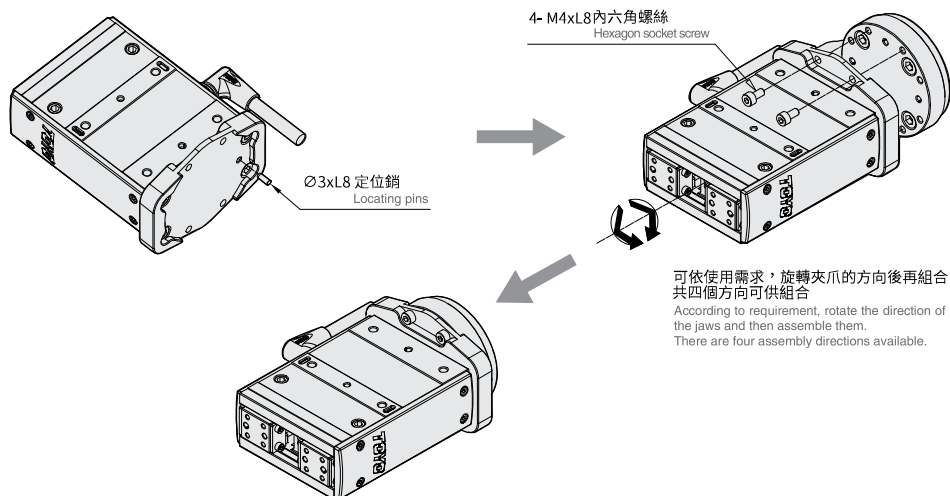
\*1：轉接法蘭 I/III 型，需使用  $\varnothing 6$  定位銷；轉接法蘭 II 型，需使用  $\varnothing 5$  定位銷。長度取決於手臂末端設計。

\*1: Type I/III of adapter flange needs to use 6 positioning pins; Type II of adapter flange needs to use 5 positioning pins. The length depends on the end surface of the robot arm design.

\*2：轉接法蘭 I/III 型，需使用 M6 螺絲；轉接法蘭 II 型，需使用 M5 螺絲。螺絲長度取決於手臂末端設計。

\*2: Type I/III of adapter flange needs to use M6 screws; type II of adapter flange needs to use M5 screws. The screw length depends on the end surface of the robot arm design.

#### 步驟三、組合夾爪 & 手臂 Step 3. Assembly of Gripper & Arm



選用注意事項：Selection Notice:

1. 使用時一支夾爪僅可搭配一組夾具。1. One gripper can only be used with one set of clamps.
2. 夾具一組 2 入，出貨時預先鎖附於夾爪上。2. A set of 2 clamps, which are pre-assembled on the gripper when shipped.
3. 若有購買多組、或出貨不需鎖附等需求，請事先與業務人員洽詢。3. If you need to purchase multiple sets, or do not need to pre-assemble while shipment, please contact the sales staff in advance.



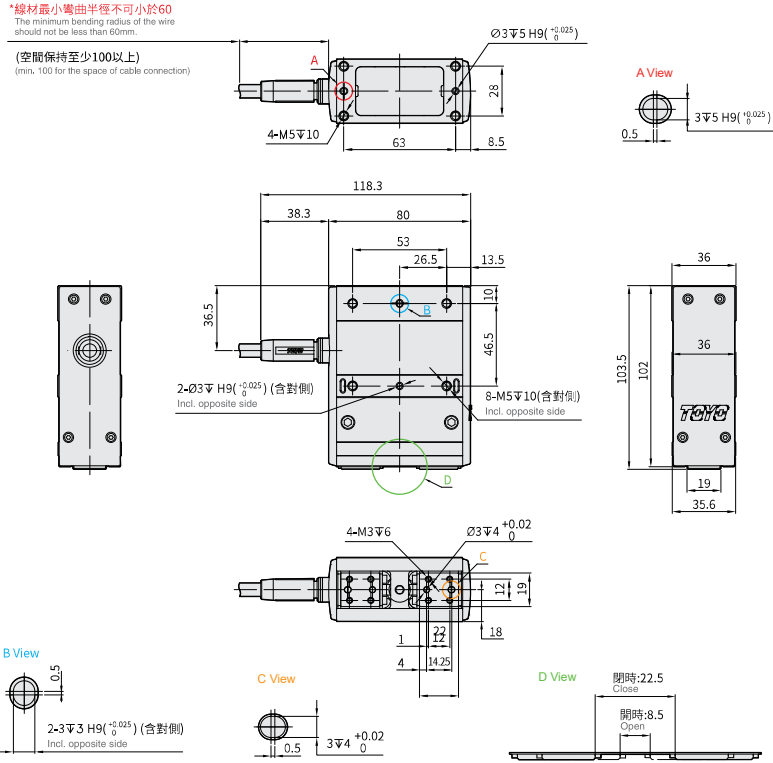
**S14 標準型 Standard Type**

(180度金屬接頭) 180° metal connector



CAD圖面可至www.toyorobot.com下載  
Please do unload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



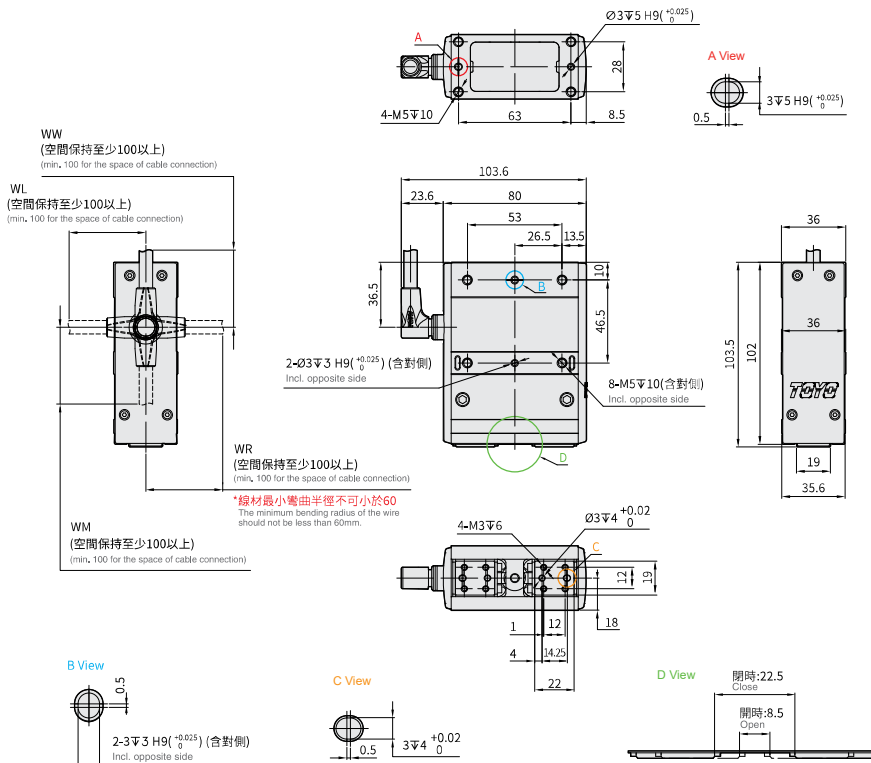
**S14 標準型 Standard Type**

(90度金屬接頭) 90° metal connector



CAD圖面可至www.toyorobot.com下載  
Please do unload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHZ2-S14



## 蝸桿式 Worm drive

**N14 窄型 Narrow Type**  
(180度金屬接頭) 180° metal connector

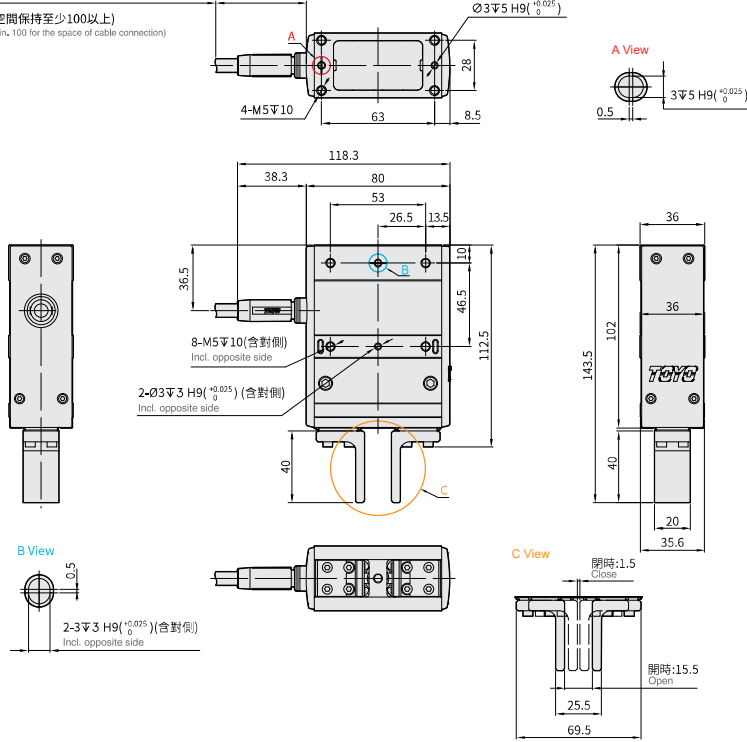


• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

\*線材最小彎曲半徑不可小於60  
The minimum bending radius of the wire should not be less than 60mm.

(空間保持至少100以上)  
(min, 100 for the space of cable connection)

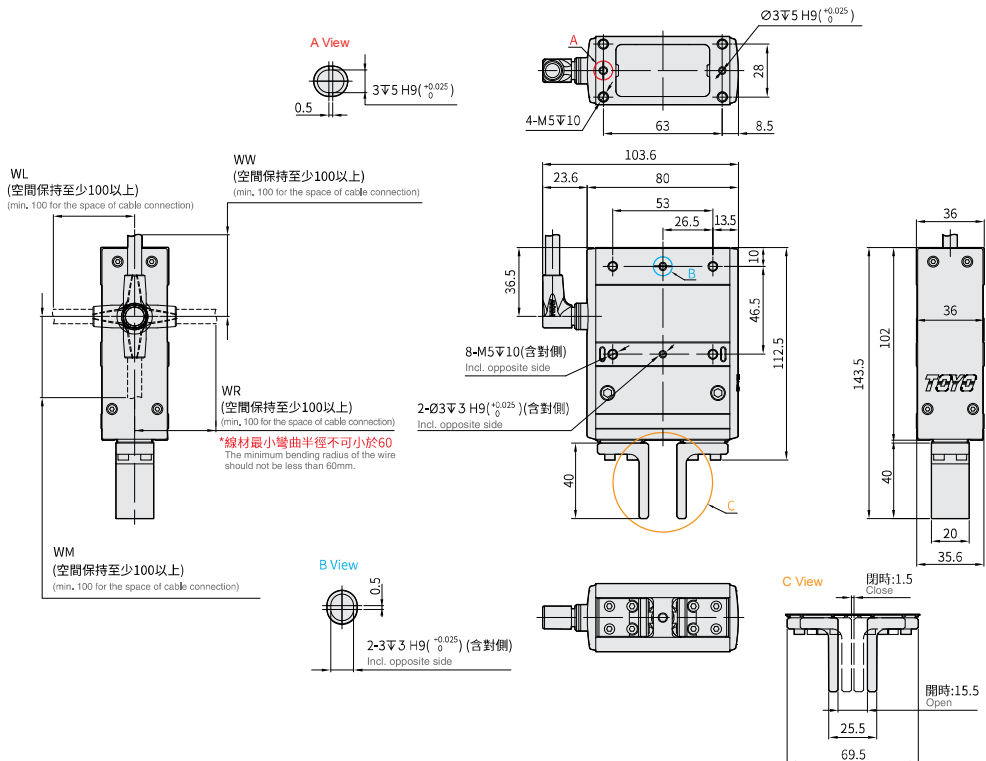


**N14 窄型 Narrow Type**  
(90度金屬接頭) 90° metal connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



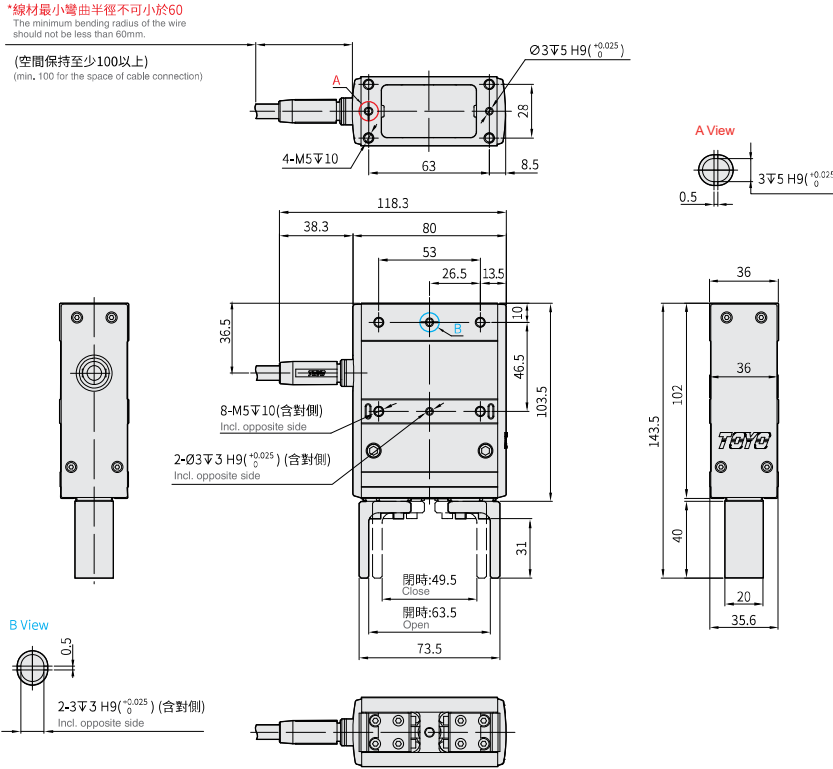
**W14 寬型 Wide Type**

(180度金屬接頭) 180° metal connector



● CAD圖面可至www.toyorobot.com下載  
Please do wload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



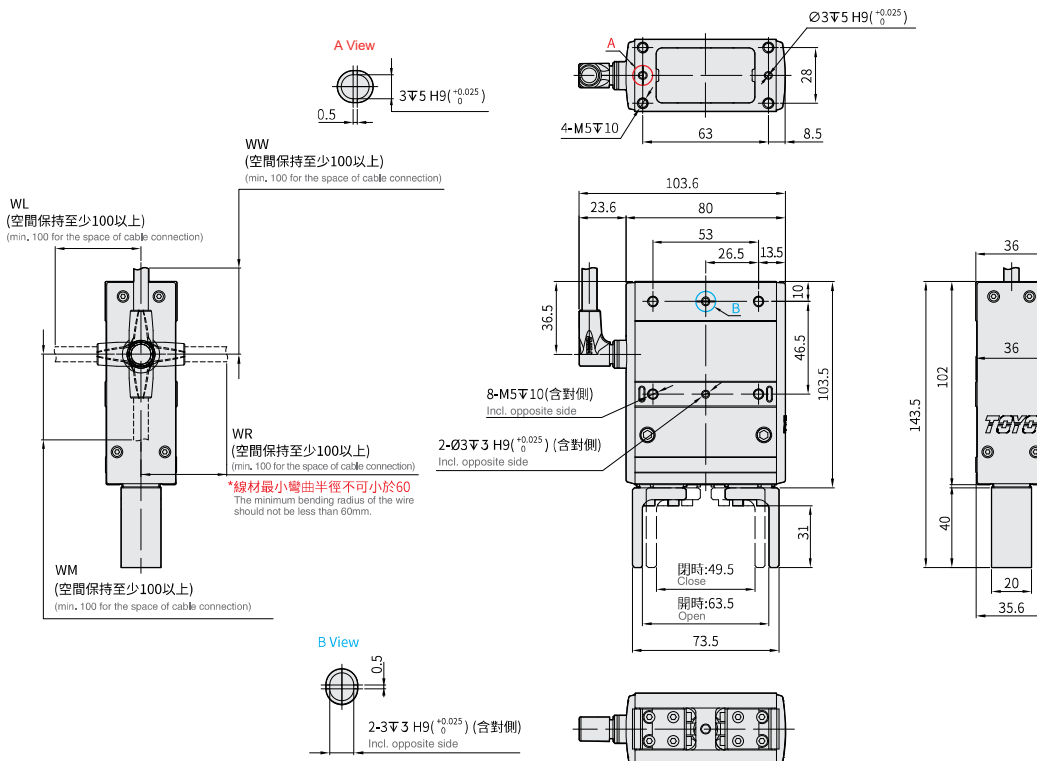
**W14 寬型 Wide Type**

(90度金屬接頭) 90° metal connector



● CAD圖面可至www.toyorobot.com下載  
Please do wload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHZ20



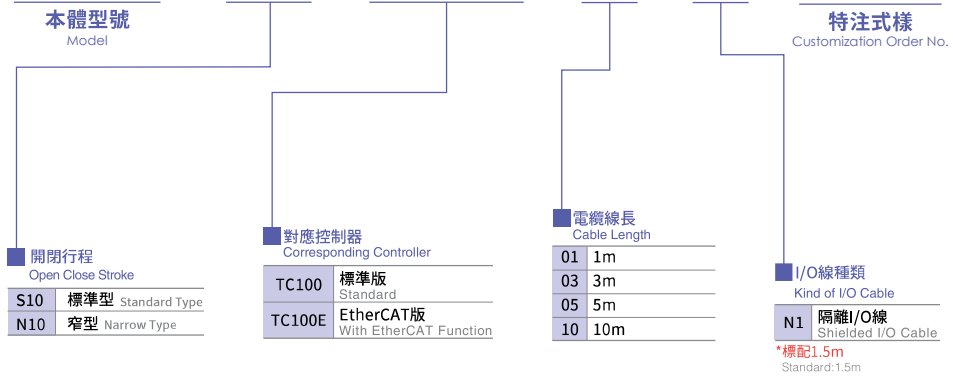
## 滑動連桿 Slider Linkage



馬達尺寸 Motor Dimension **25□mm**

### 型號表示方式 Ordering Method

## CHZ20 - S10 - TC100 - 03 - N1 - A001



基本仕様 Specification

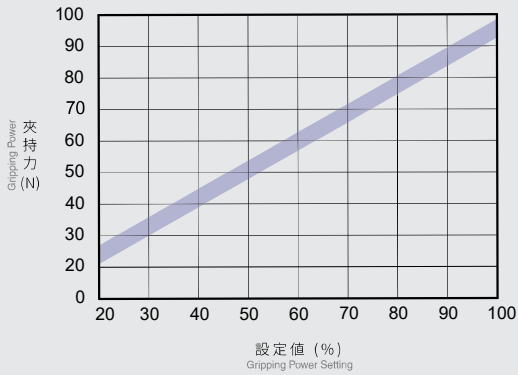
規格 Spec	夾持重量 Weight (kg)	0.98 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	22~98(20-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	10
	開閉速度 Open/Close Speed (mm/s)	5~50
	位置重複精度 Repeatability (mm)	±0.02
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight (g) <sup>※2</sup>	368

※1 雙邊合計行程。 Total stroke of both sides.

※2 重量包含本體與馬達。 Weight of model with motor.

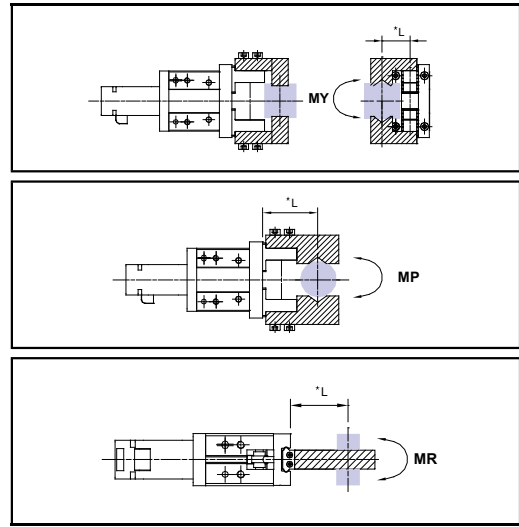
※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式 ... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment



\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

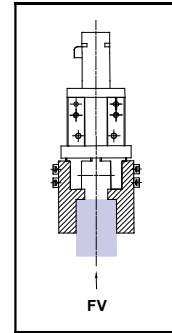
(單位 Unit: N.m)

最大容許力矩  
Maximum moment

偏力矩 Allowable yawing moment	MY	1.32
俯仰力矩 Allowable pitching moment	MP	1.32
滾動力矩 Allowable rolling moment	MR	2.65

\* 表中負荷及力矩的值表示靜的值

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

147

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. Operating voltage DC48V, rated current 1A, peak current 2A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHZ20



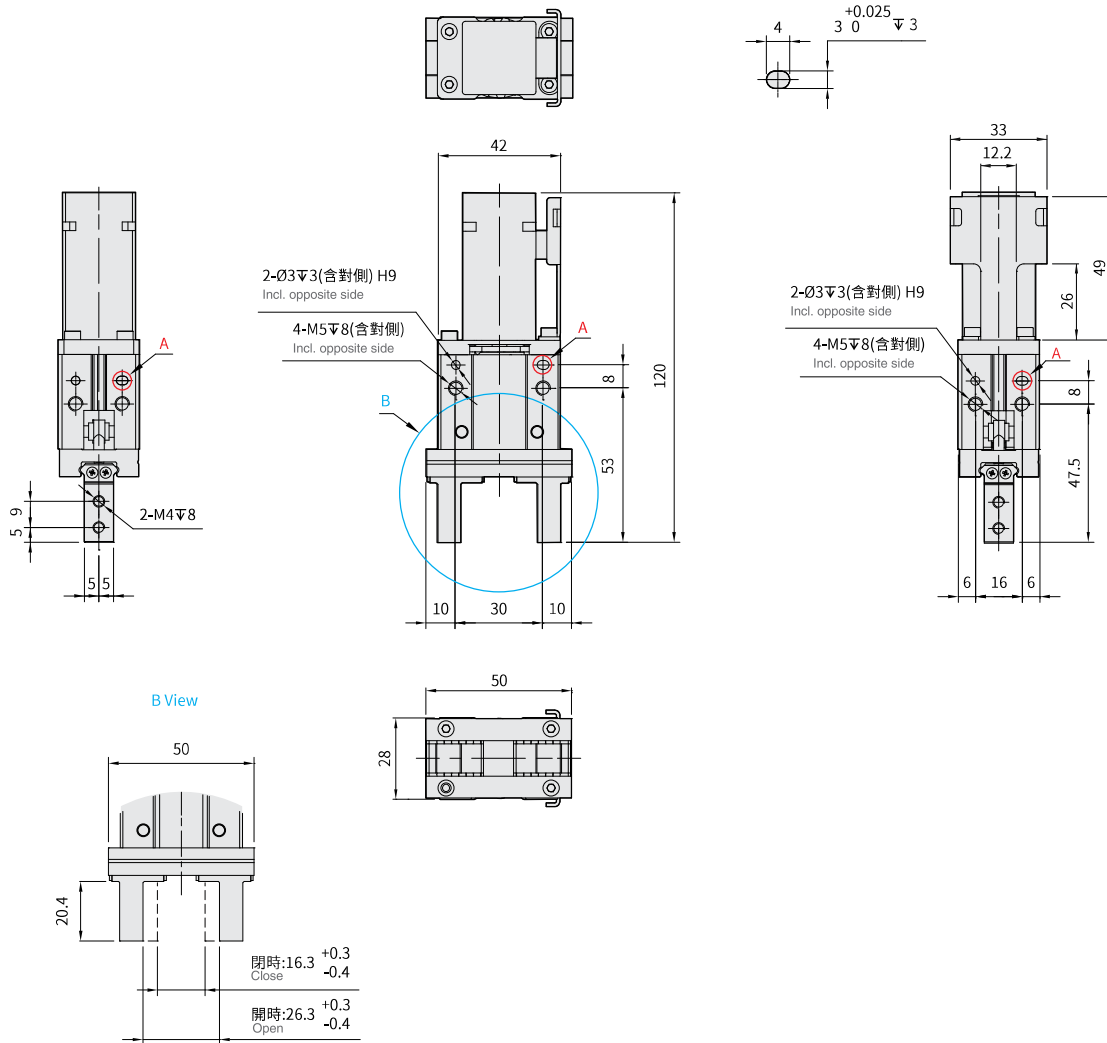
## 滑動連桿 Slider Linkage

S10 標準型 Standard Type



● CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 ●  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

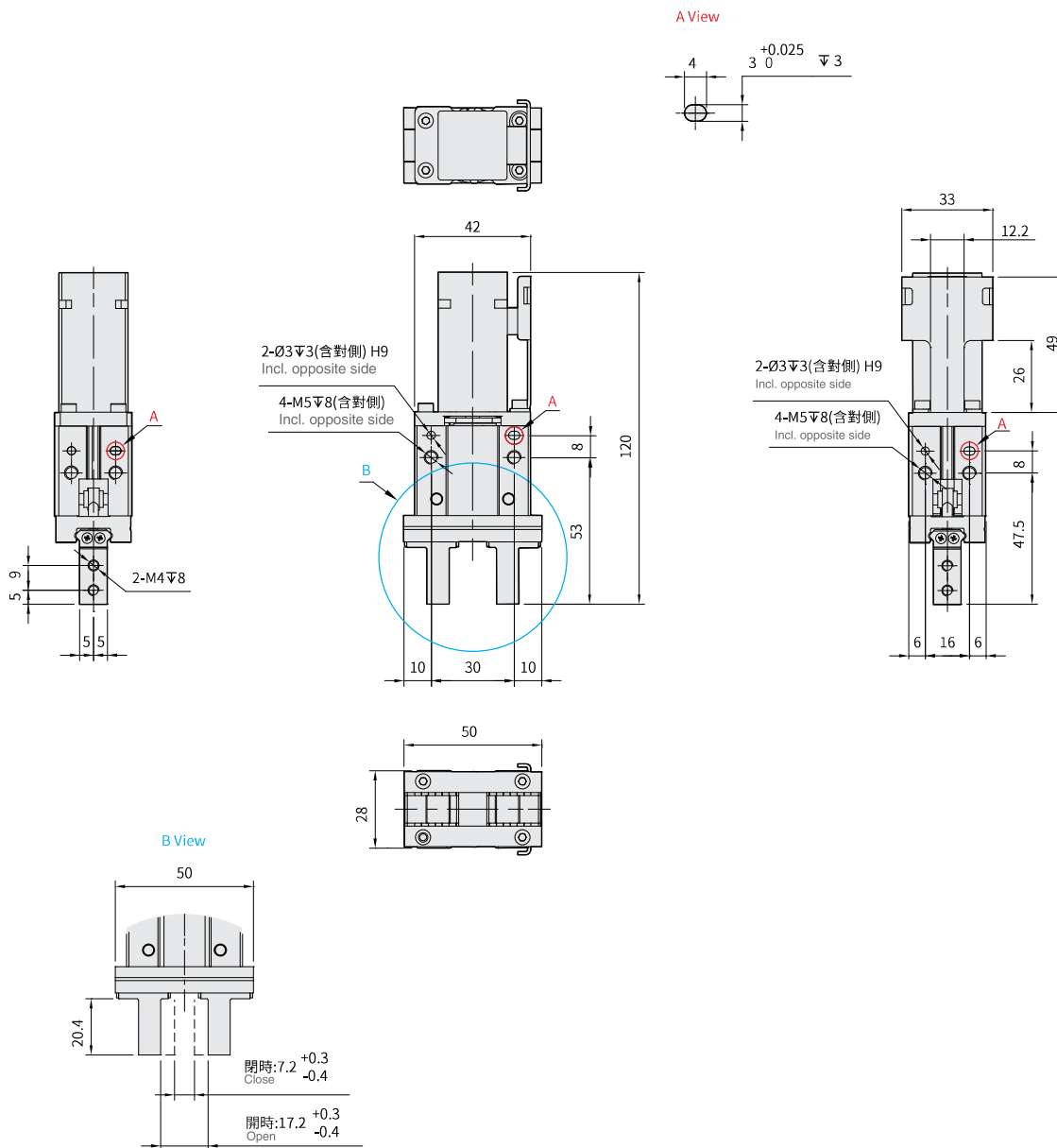


**N10** 窄型 Narrow Type



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



## CHZ25

滑動連桿  
Slider Linkage馬達尺寸  
Motor Dimension 25□mm

## 型號表示方式 Ordering Method

CHZ25 - S14 - TC100 - 03 - N1 - A001

本體型號  
Model開閉行程  
Open Close StrokeS14 標準型 Standard Type  
N14 窄型 Narrow Type對應控制器  
Corresponding ControllerTC100 標準版 Standard  
TC100E EtherCAT版 With EtherCAT Function電纜線長  
Cable Length01 1m  
03 3m  
05 5m  
10 10m特注式樣  
Customization Order No.I/O線種類  
Kind of I/O CableN1 隔離I/O線 Shielded I/O Cable  
\*標配1.5m Standard: 1.5m



基本仕様 Specification

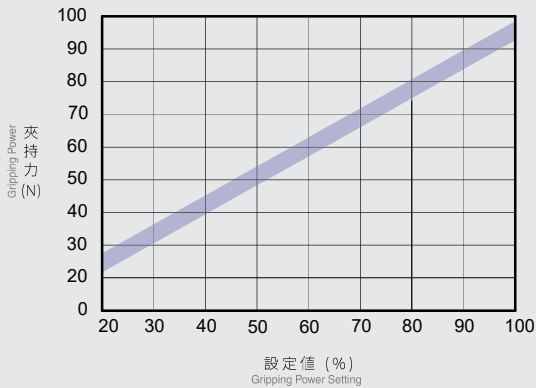
規格 Spec	夾持重量 Weight (kg)	0.98 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	22~98(20-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	14
	開閉速度 Open/Close Speed (mm/s)	5~50
	位置重複精度 Repeatability (mm)	±0.02
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight(g) <sup>※2</sup>	552

※1 雙邊合計行程。 Total stroke of both sides.

※2 重量包含本體與馬達。 Weight of model with motor.

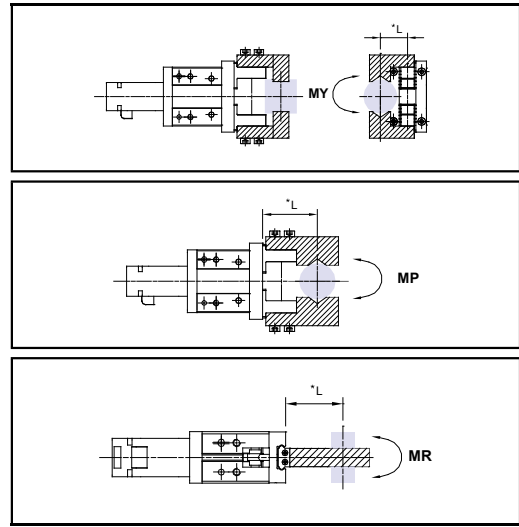
※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式 ... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment



\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

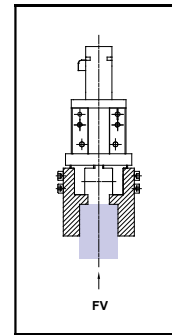
(單位 Unit: N.m)

最大容許力矩

Maximum moment		
偏力矩 Allowable yawing moment	MY	1.94
俯仰力矩 Allowable pitching moment	MP	1.94
滾動力矩 Allowable rolling moment	MR	3.88

\* 表中負荷及力矩的值表示靜的值

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

255

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. Operating voltage DC48V, rated current 1A, peak current 2A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHZ25



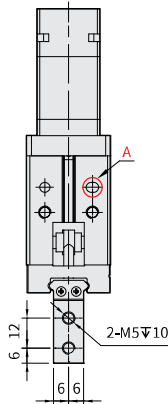
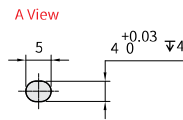
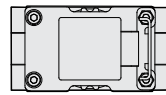
## 滑動連桿 Slider Linkage

S10 標準型 Standard Type



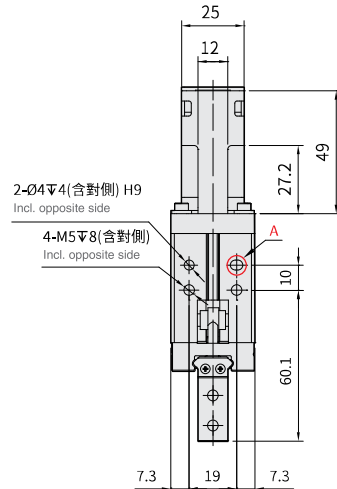
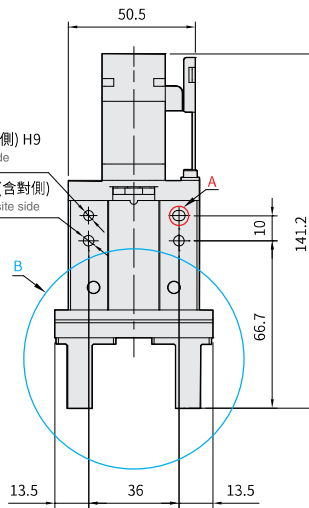
• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

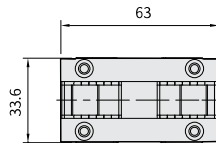
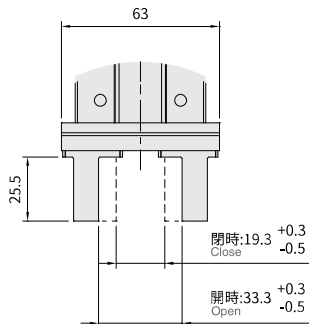


2- $\varnothing$ 4 $\nabla$ 4(含對側) H9  
Incl. opposite side

4-M5 $\nabla$ 8(含對側)  
Incl. opposite side



B View



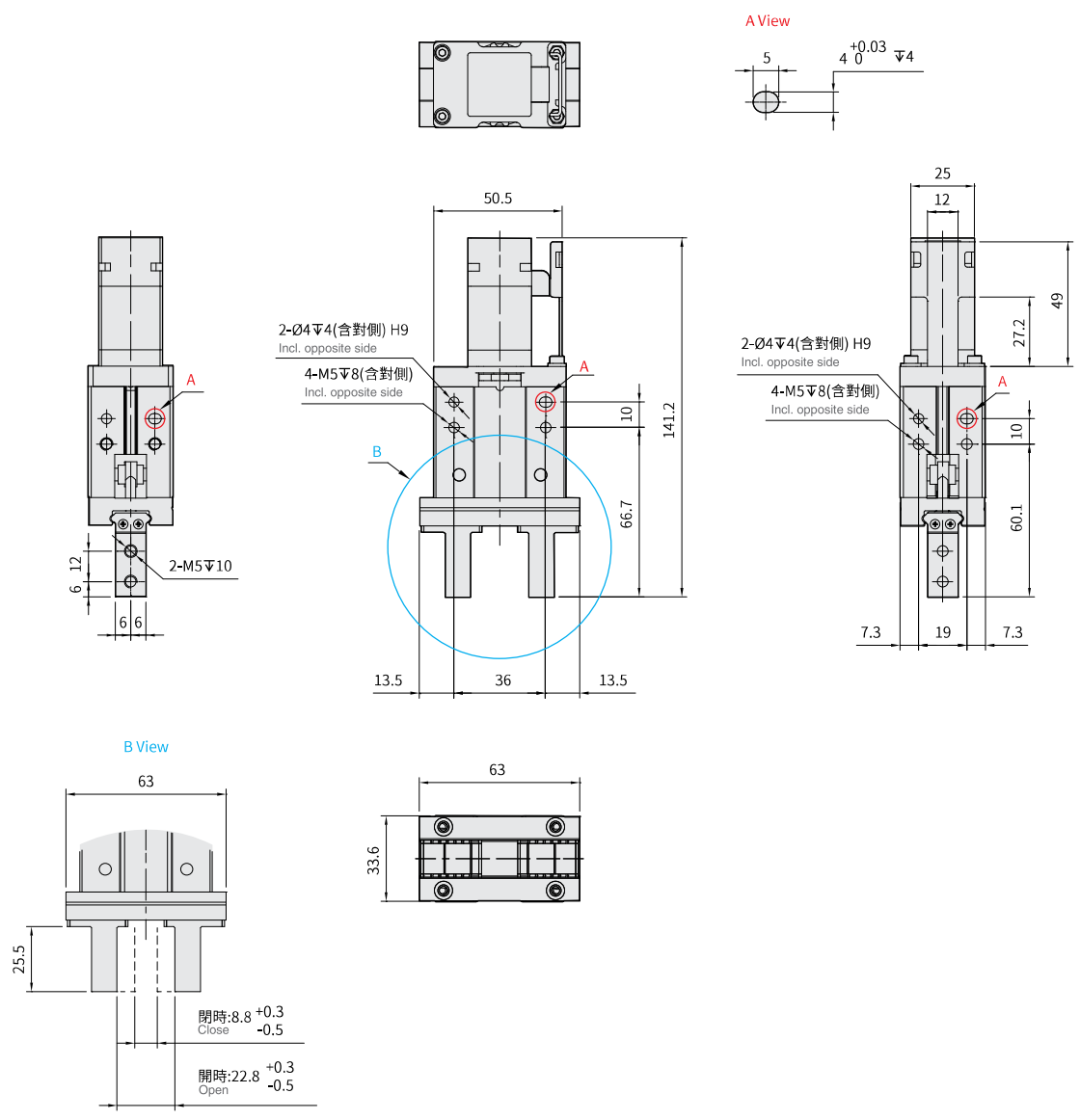
免費服務專線：大陸 400-875-0009 台灣 0800-800-893  
Toll-free Number China Taiwan

N10 窄型 Narrow Type



• CAD圖面可至www.toyorobot.com下載 •  
Please do wnlod the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHB6-S11



## 凸輪式 Cam Type



馬達尺寸 Motor Dimension **20□mm**

### 型號表示方式 Ordering Method

## CHB6 - S11 - TC100 - 03 - N1 - A001

本體型號  
Model

特注式樣  
Customization Order No.

開閉行程  
Open Close Stroke

11	11mm
----	------

對應控制器  
Corresponding Controller

TC100	標準版 Standard
TC100E	EtherCAT版 With EtherCAT Function

電纜線長  
Cable Length

01	1m
03	3m
05	5m
10	10m

\*標配3m  
Standard:3m

I/O線種類  
Kind of I/O Cable

N1	隔離I/O線 Shielded I/O Cable
----	------------------------------

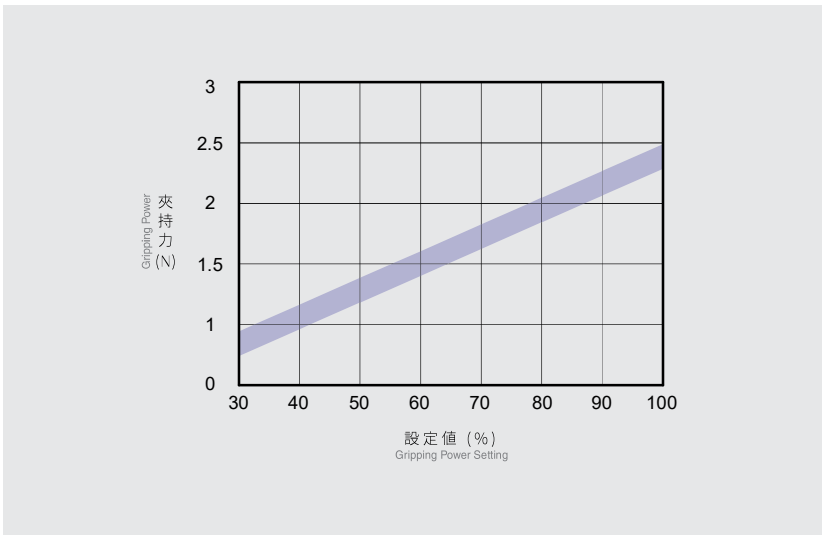
\*標配1.5m  
Standard: 1.5m

基本仕様 Specification

規格 Spec	夾持重量 Weight (kg)	0.024 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	0.72~2.4(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	11
	開閉速度 Open/Close Speed (mm/s)	20~100
	位置重複精度 Repeatability (mm)	±0.02
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight (g) <sup>※2</sup>	80

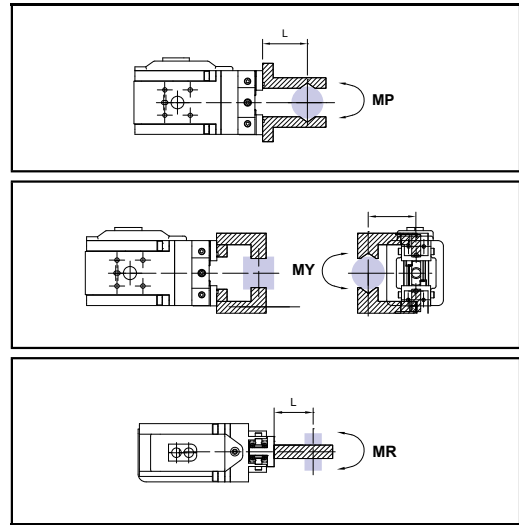
※1 雙邊合計行程。 Total stroke of both sides.  
 ※2 重量包含本體與馬達。 Weight of model with motor.  
 ※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差: ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment

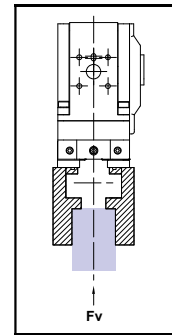


\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	0.4
俯仰力矩 Allowable pitching moment	MP	0.4
滾動力矩 Allowable rolling moment	MR	0.6

\* 表中負荷及力矩的值表示靜的值  
The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

310

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. Operating voltage DC48V, rated current 1A, peak current 2A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHB6-S11



## 凸輪式 Cam Type

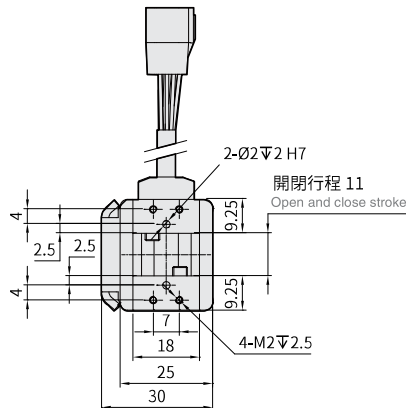
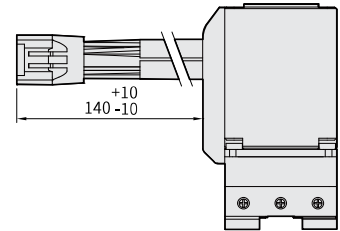
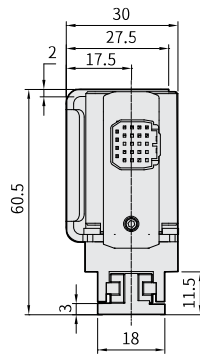
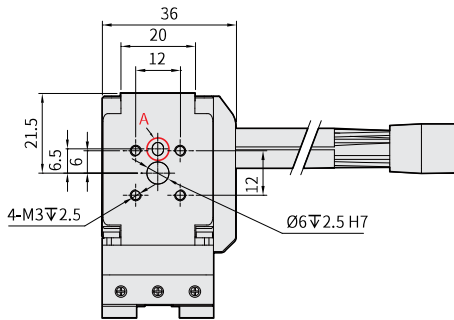
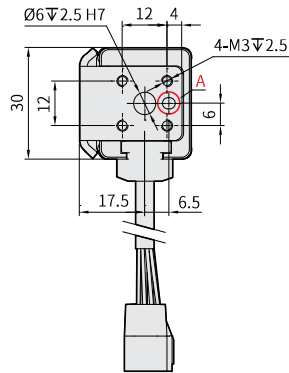
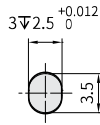
S11 標準型 Standard Type



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

A View



免費服務專線：大陸 400-875-0009 台灣 0800-800-893  
Toll-Free Number China Taiwan

# Memo

# CHB6-S14



## 凸輪式 Cam Type



馬達尺寸  
Motor Dimension **25□mm**

### 型號表示方式 Ordering Method

## CHB6 - S14 - TC100 - 03 - N1 - A001

本體型號  
Model

開閉行程  
Open/Close Stroke

14	14mm
----	------

對應控制器  
Corresponding Controller

TC100	標準版 Standard
TC100E	EtherCAT版 With EtherCAT Function

電纜線長  
Cable Length

01	1m
03	3m
05	5m
10	10m

\*標配3m  
Standard:3m

特注式樣  
Customization Order No.

I/O線種類  
Kind of I/O Cable

N1	隔離I/O線 Shielded I/O Cable
----	------------------------------

\*標配1.5m  
Standard:1.5m

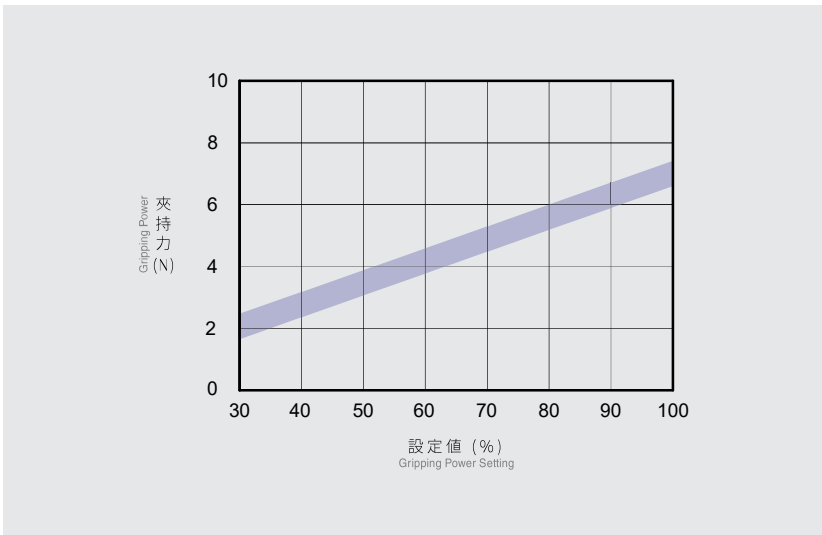


基本仕様 Specification

規格 Spec	夾持重量 Weight (kg)	0.07 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	2.1~7(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	14
	開閉速度 Open/Close Speed (mm/s)	20~100
	位置重複精度 Repeatability (mm)	±0.02
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight (g) <sup>※2</sup>	250

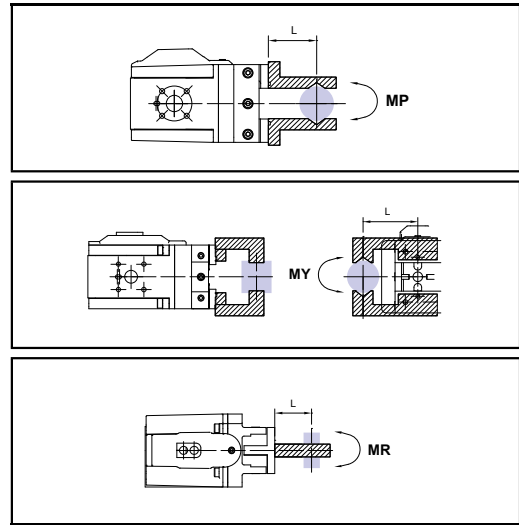
※1 雙邊合計行程。 Total stroke of both sides.  
 ※2 重量包含本體與馬達。 Weight of model with motor.  
 ※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment

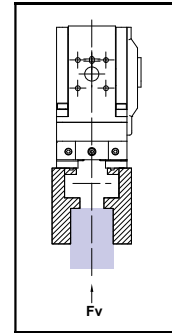


\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	0.4
俯仰力矩 Allowable pitching moment	MP	0.4
滾動力矩 Allowable rolling moment	MR	0.6

\* 表中負荷及力矩的值表示靜的值  
The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

310

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 軸以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. Operating voltage DC48V, rated current 1A, peak current 2A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHB6-S14



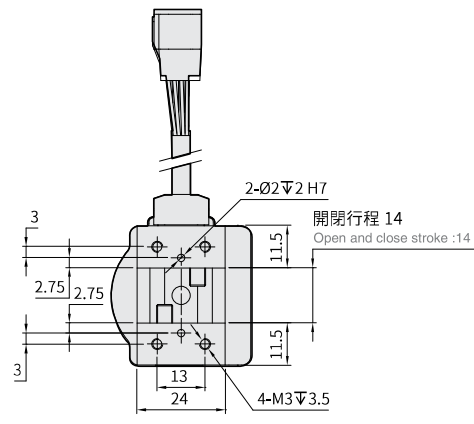
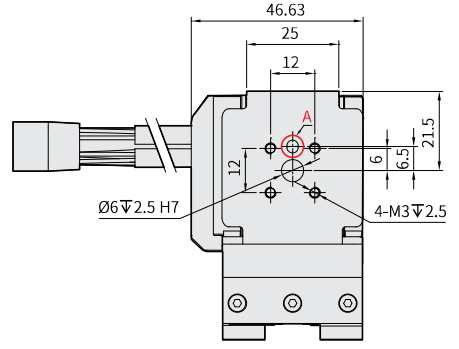
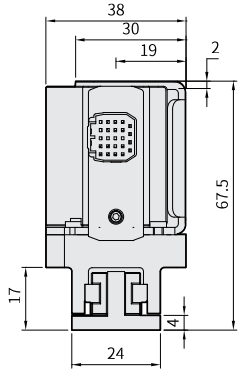
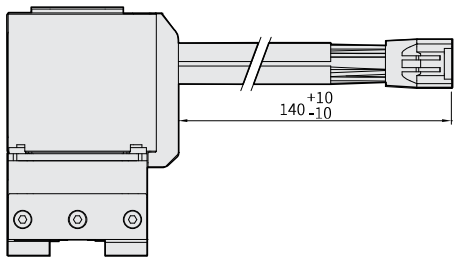
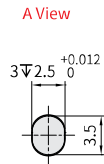
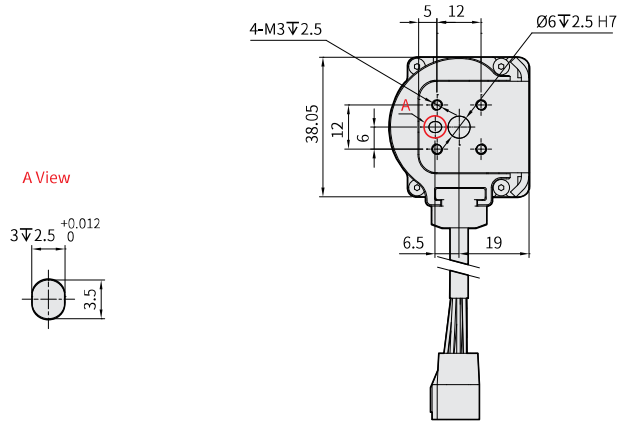
## 凸輪式 Cam Type

S14 標準型 Standard Type



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnlod the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



伺服電動缸  
Servo Motor Cylinder

閉迴路步進電動缸  
Stepping Motor Cylinder

無塵系列  
Clean Room type

電動夾爪  
Electric Gripper

控制器規格  
Controller

免費服務專線：大陸 400-875-0009 台灣 0800-800-893  
Toll-Free Number China Taiwan

# Memo

Blank memo area for notes.

# CHB6T-S14



## 凸輪式 Cam Type



馬達尺寸  
Motor Dimension **25□mm**

### 型號表示方式 Ordering Method

## CHB6T - S14 - TC100 - 03 - N1 - A001

本體型號  
Model

■ 開閉行程 Open Close Stroke	<b>14</b> 14mm
-----------------------------	----------------

■ 對應控制器  
Corresponding Controller

TC100	標準版 Standard
TC100E	EtherCAT版 With EtherCAT Function

■ 電纜線長  
Cable Length

01	1m
03	3m
05	5m
10	10m
*標配3m Standard:3m	

■ 特注式樣  
Customization Order No.

■ I/O線種類  
Kind of I/O Cable

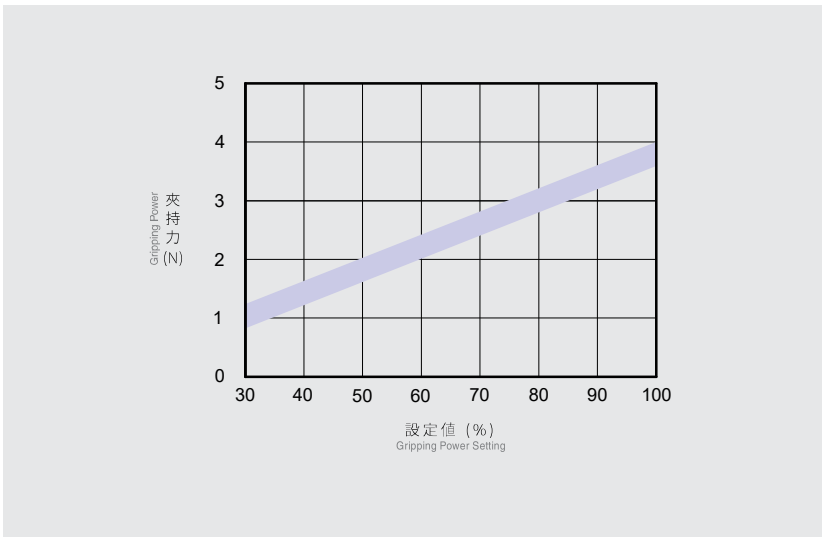
N1	隔離I/O線 Shielded I/O Cable
*標配1.5m Standard:1.5m	

基本仕様 Specification

規格 Spec	夾持重量 Weight (kg)	0.04 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	1.2~4(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	14(單爪) 14 Single clamp
	開閉速度 Open/Close Speed (mm/s)	20~100
	位置重複精度 Repeatability (mm)	±0.02
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight (g) <sup>※2</sup>	230

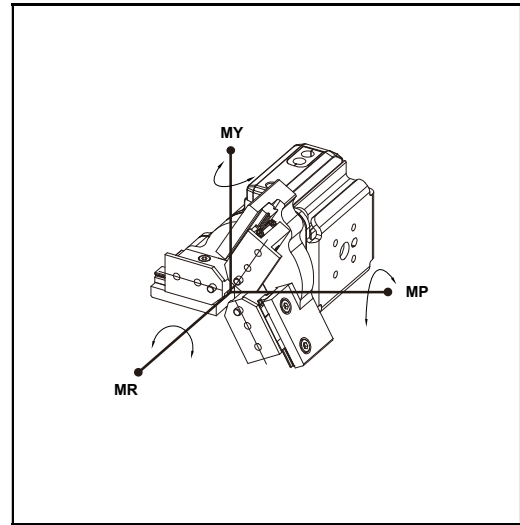
※1 雙邊合計行程。 Total stroke of both sides.  
 ※2 重量包含本體與馬達。 Weight of model with motor.  
 ※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment

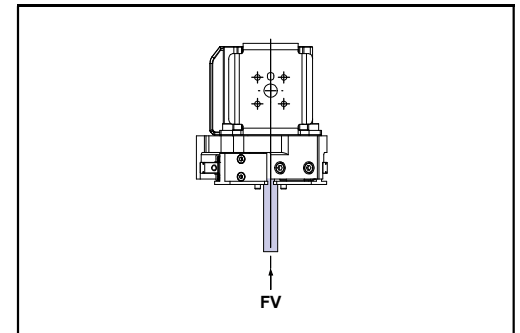


\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	0.6
俯仰力矩 Allowable pitching moment	MP	0.5
滾動力矩 Allowable rolling moment	MR	1.0

\* 表中負荷及力矩的值表示靜的值  
The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

550

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. Operating voltage DC48V, rated current 1A, peak current 2A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window for details.	

# CHB6T-S14



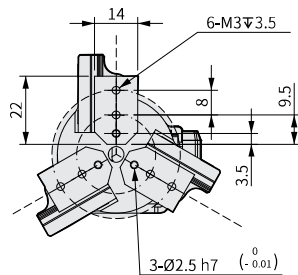
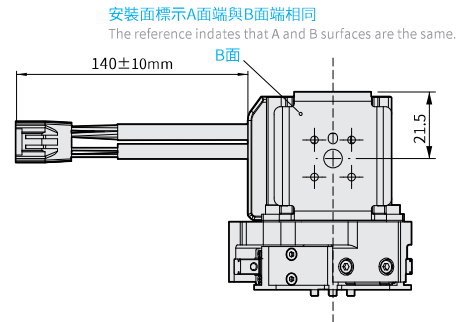
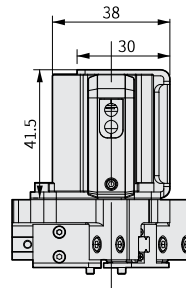
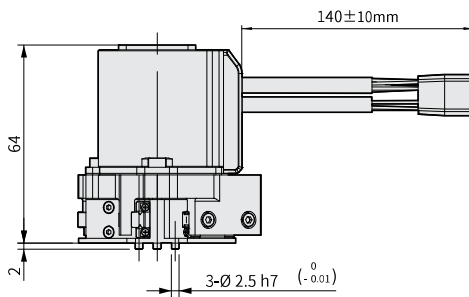
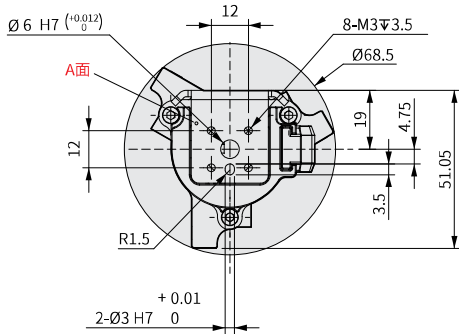
## 凸輪式 Cam Type

S11 標準型 Standard Type



• CAD圖面可至[www.toyorobot.com](http://www.toyorobot.com)下載 •  
Please do wnlod the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



免費服務專線：大陸 400-875-0009 台灣 0800-800-893  
 Toll-Free Number China Taiwan

# Memo

# CHS2-S12



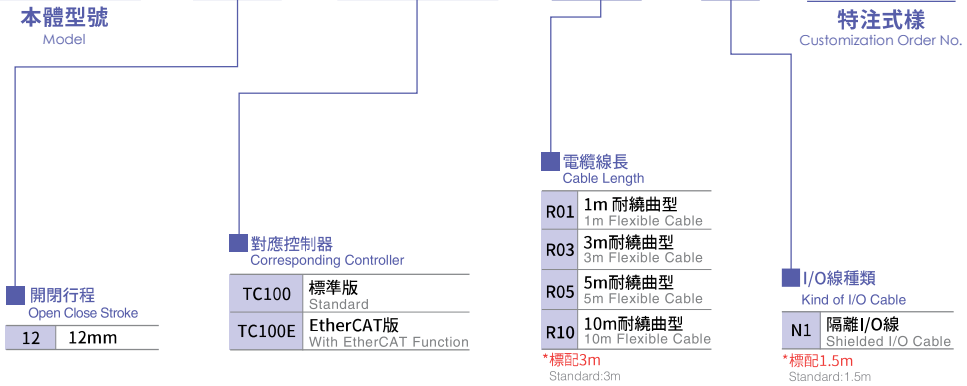
## 螺桿驅動 Ball Screw Drive



馬達尺寸  
Motor Dimension **20□mm**

### 型號表示方式 Ordering Method

## CHS2 - S12 - TC100 - R03 - N1 - A001



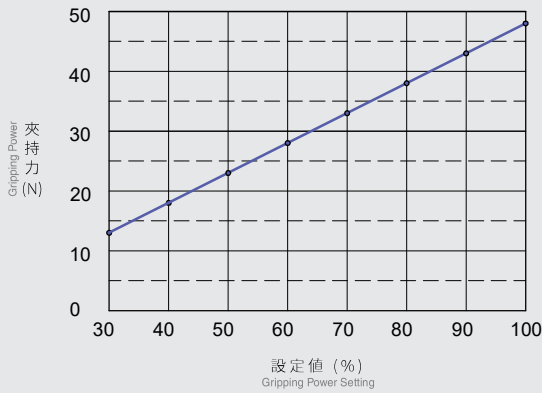


基本仕様 Specification

規格 Spec	夾持重量 Weight (kg)	0.22 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	12~48(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	12
	開閉速度 Open/Close Speed (mm/s)	10~70
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	20□
	重量 Weight (g) <sup>※2</sup>	160

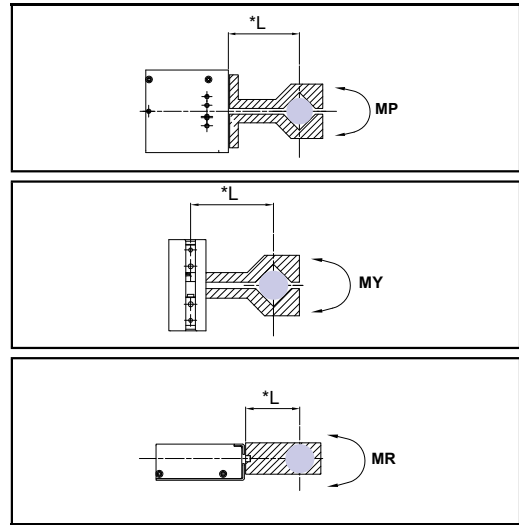
※1 雙邊合計行程。 Total stroke of both sides.  
 ※2 重量包含本體與馬達。 Weight of model with motor.  
 ※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment

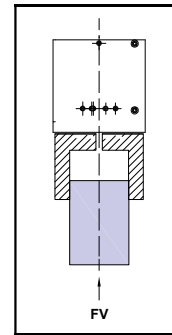


\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment	
偏力矩 Allowable yawing moment	MY 1
俯仰力矩 Allowable pitching moment	MP 1
滾動力矩 Allowable rolling moment	MR 1.7

\* 表中負荷及力矩的值表示靜的  
The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

550

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.		

# CHS2-S12



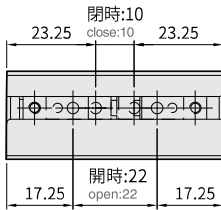
## 螺桿驅動 Ball Screw Drive

S12 標準型 Standard Type



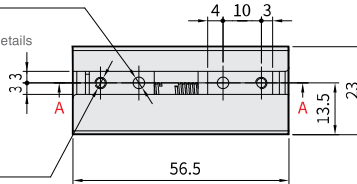
• CAD圖面可至www.toyorobot.com下載 •  
Please do wnlod the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



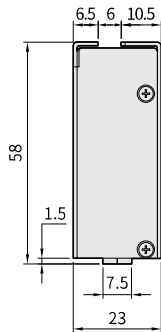
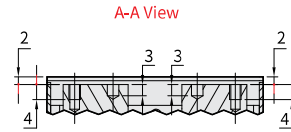
2- $\varnothing 3 H7^{+0.01}_0 \nabla 3$ (含對側)  
Incl. opposite side

\*深度詳細見A-A剖面  
See section A-A for depth details



2-M3xP0.5 $\nabla 4$ (含對側)  
Incl. opposite side

\*深度詳細見A-A剖面  
See section A-A for depth details

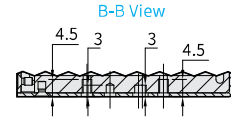
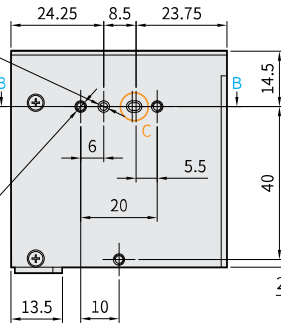


$\varnothing 2 H7^{+0.01}_0 \nabla 3$

\*深度詳細見B-B剖面  
See section B-B for depth details

3-M2.5xP0.45 $\nabla 4.5$

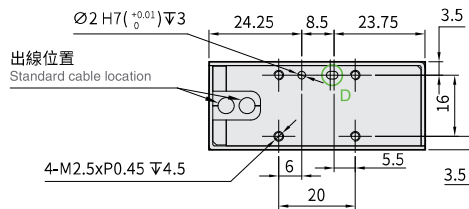
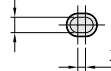
\*深度詳細見B-B剖面  
See section B-B for depth details



C View

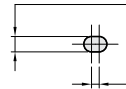
$\sqsubset \varnothing 2 H7^{+0.01}_0 \nabla 3$

\*深度詳細見B-B剖面  
See section B-B for depth details



D View

$\sqsubset \varnothing 2 H7^{+0.01}_0 \nabla 3$



免費服務專線：大陸 400-875-0009 台灣 0800-800-893  
 Toll-Free Number China Taiwan

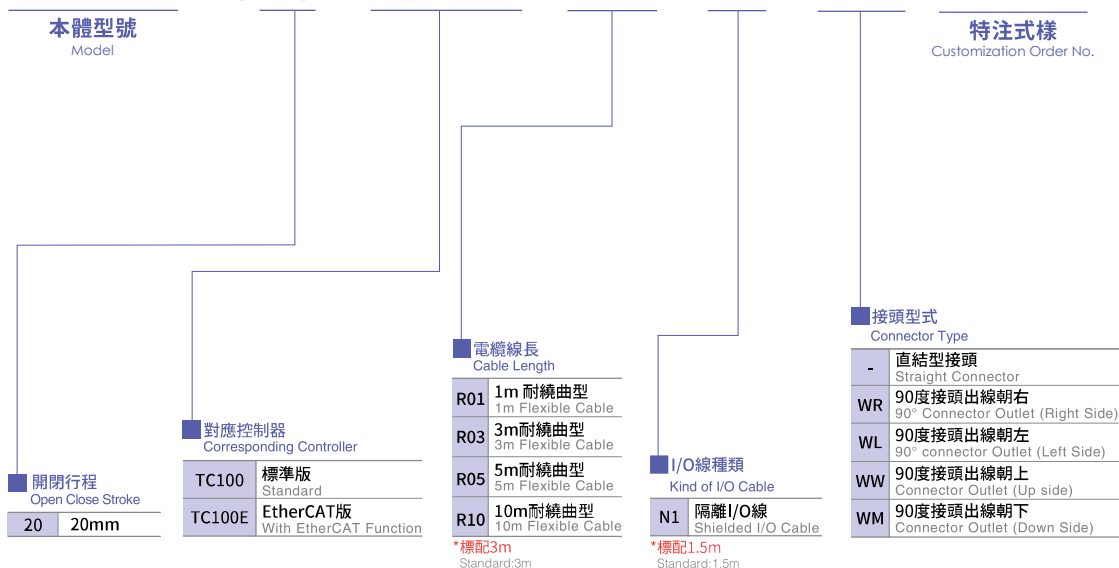
# Memo

CHS2B-S20

螺桿驅動  
Ball Screw Drive馬達尺寸  
Motor Dimension 20□mm

## 型號表示方式 Ordering Method

CHS2B - S20 - TC100 - R03 - N1 - WR - A001

本體型號  
Model特注式樣  
Customization Order No.

基本仕様 Specification

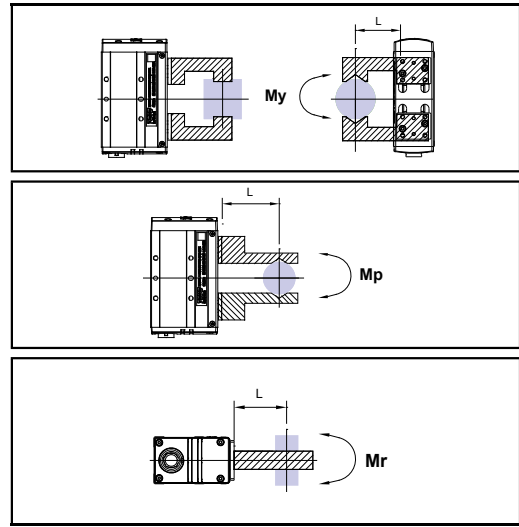
規格 Spec	夾持重量 Weight (kg)	1.24 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	20~124(20-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	20
	開閉速度 Open/Close Speed (mm/s)	6.66~33.3
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	20□
	重量 Weight (g) <sup>※2</sup>	310

※1 雙邊合計行程。Total stroke of both sides.

※2 重量包含本體與馬達。Weight of model with motor.

※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

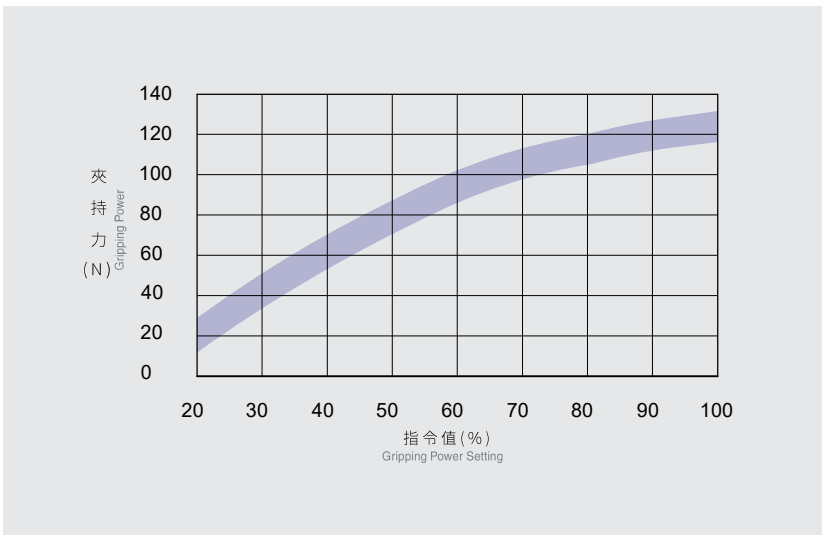
容許夾持負載力矩表 Allowable Moment



\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



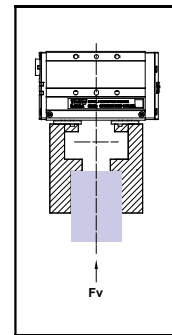
\* 夾持力誤差: ±15% ±15% clamping force tolerance.

最大容許力矩  
Maximum moment

偏力矩 Allowable yawing moment	<b>MY</b>	6.54
俯仰力矩 Allowable pitching moment	<b>MP</b>	6.54
滾動力矩 Allowable rolling moment	<b>MR</b>	19.78

\* 表中負荷及力矩的值表示靜的

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

1700

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	<b>EtherCAT</b> 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHS2B-S20



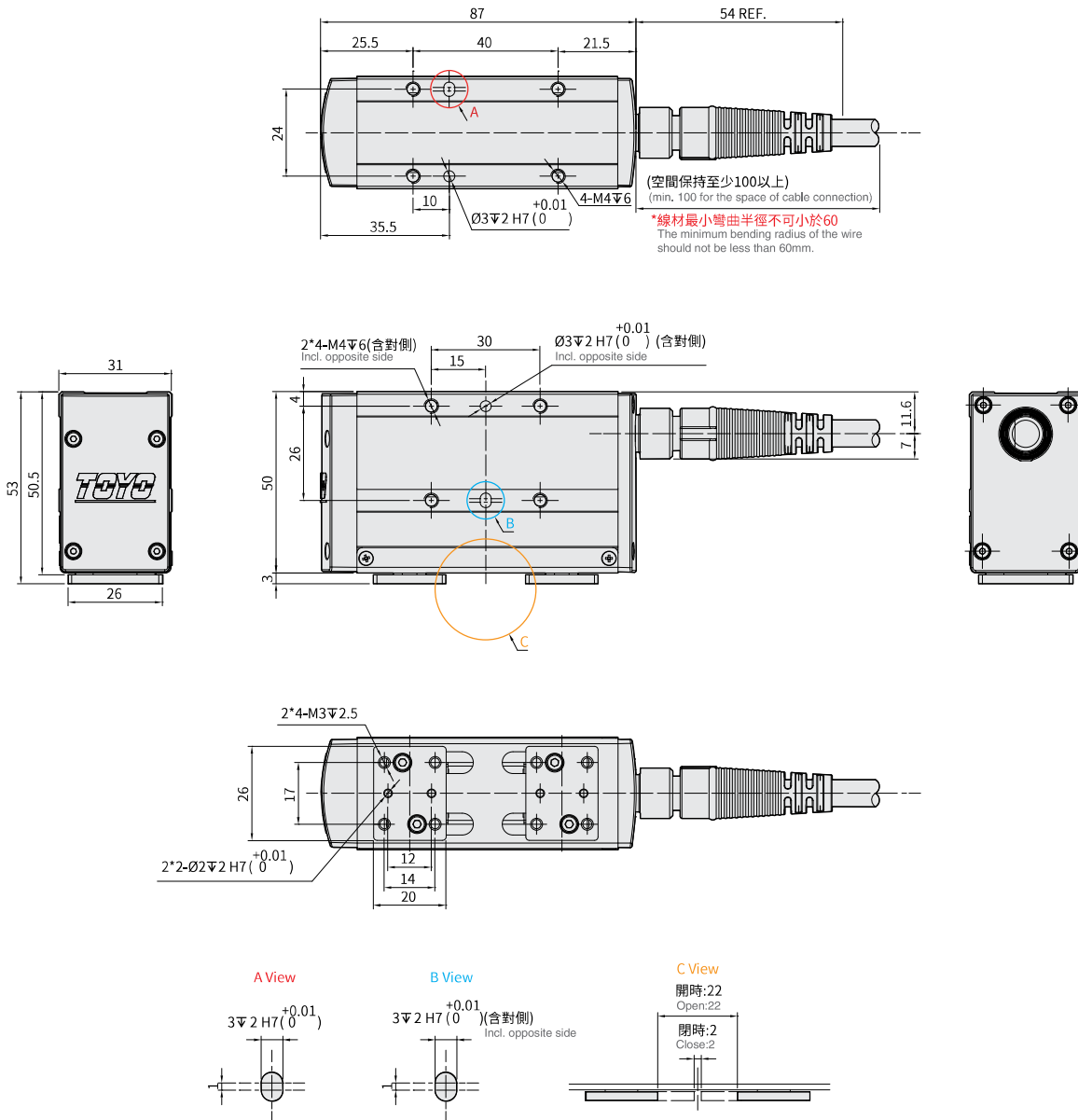
## 螺桿驅動 Ball Screw Drive

S20 直結型接頭 Straight Connector



• CAD圖面可至www.toyorobot.com下載 •  
Please do not unload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm

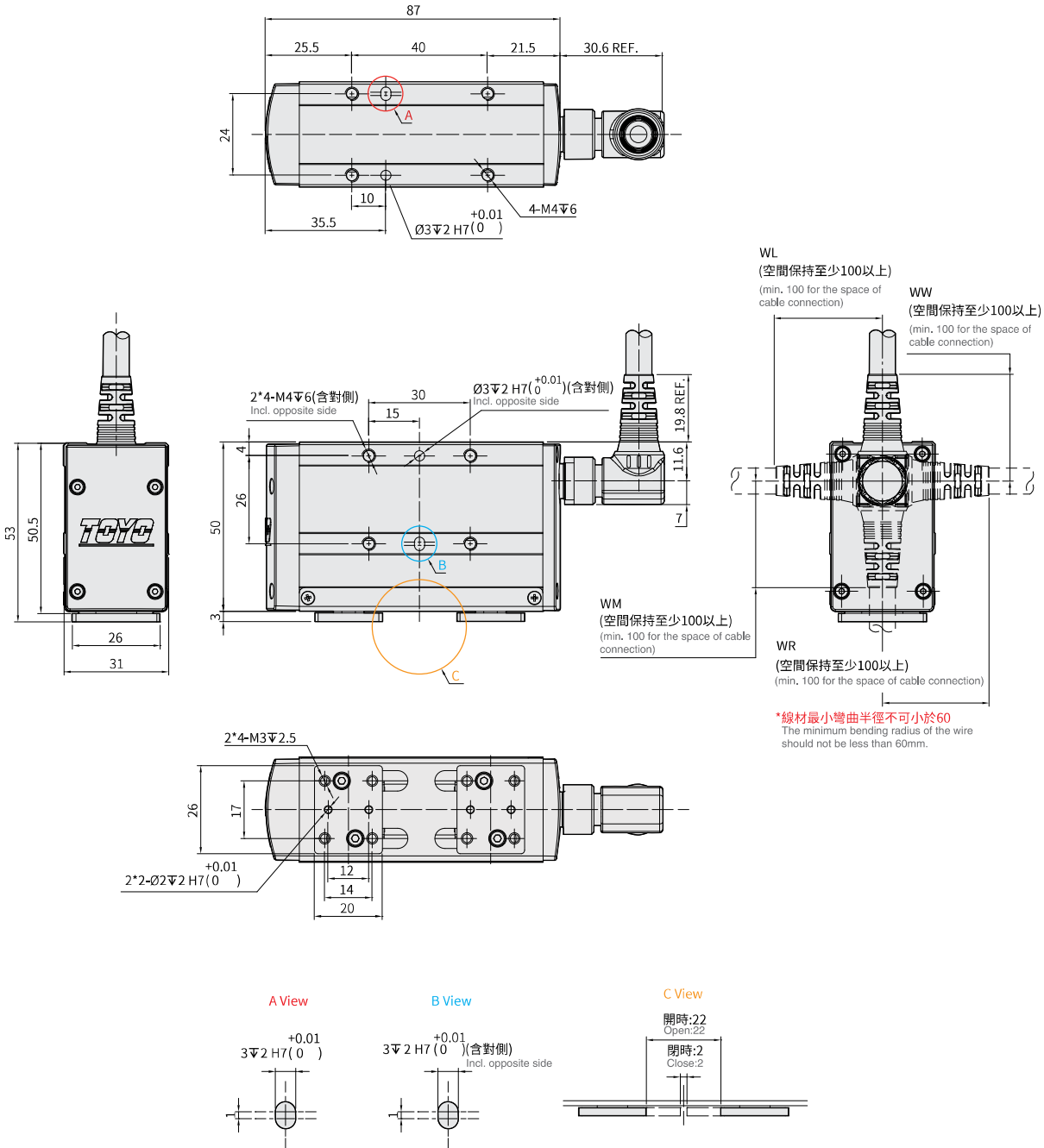


S20 90° 金屬接頭 90° Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



# CHS2B-S40



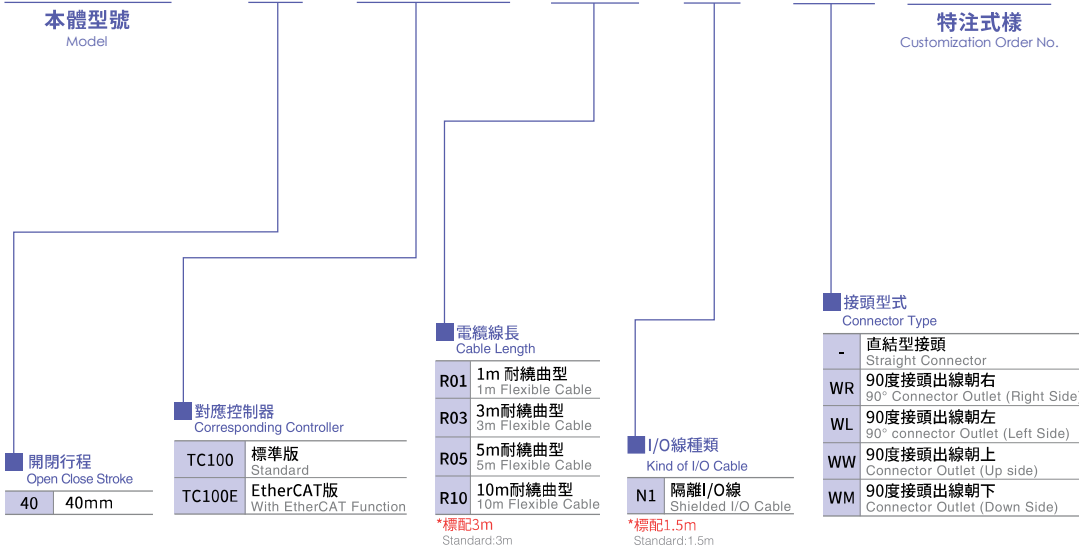
## 螺桿驅動 Ball Screw Drive



馬達尺寸 Motor Dimension **25□mm**

### 型號表示方式 Ordering Method

## CHS2B - S40 - TC100 - R03 - N1 - WR - A001





基本仕様 Specification

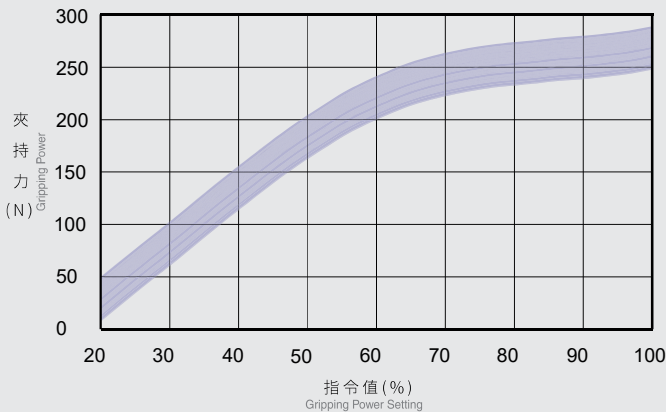
規格 Spec	夾持重量 Weight (kg)	2.58 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	40~258(20-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	40
	開閉速度 Open/Close Speed (mm/s)	8.2~41
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight (g) <sup>※2</sup>	625

※1 雙邊合計行程。Total stroke of both sides.

※2 重量包含本體與馬達。Weight of model with motor.

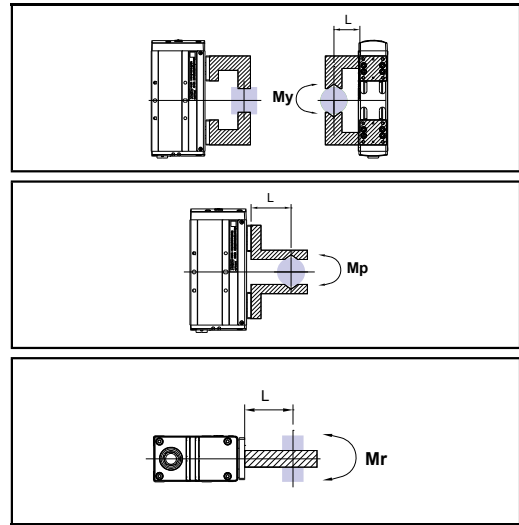
※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差：±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment



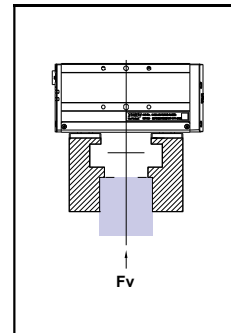
\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	<b>MY</b>	13.74
俯仰力矩 Allowable pitching moment	<b>MP</b>	13.74
滾動力矩 Allowable rolling moment	<b>MR</b>	37.08

\* 表中負荷及力矩的值表示靜的

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

2550

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	<b>EtherCAT</b> 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHS2B-S40



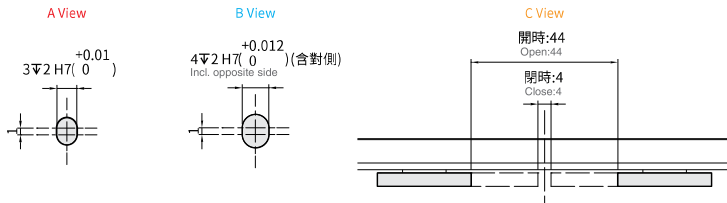
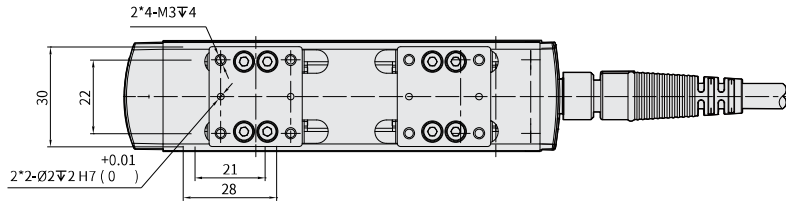
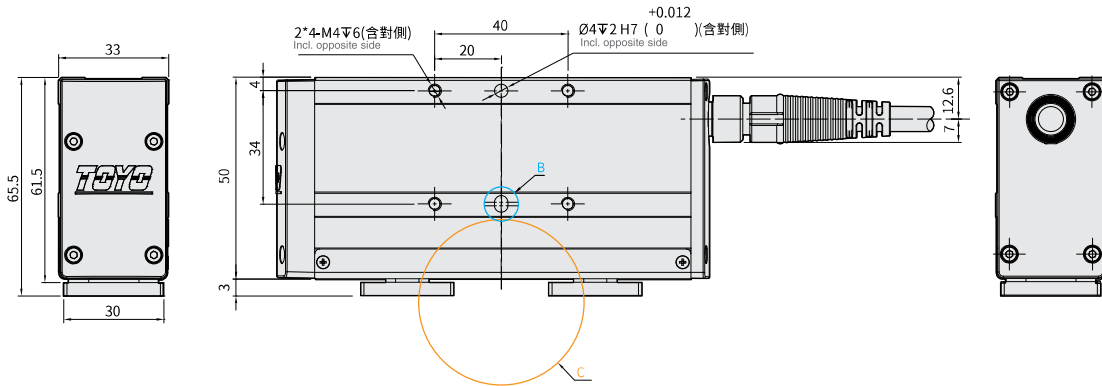
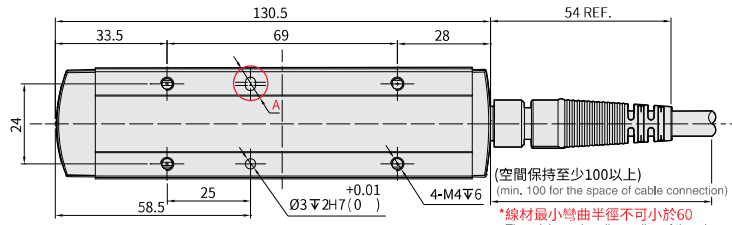
## 螺桿驅動 Ball Screw Drive

S40 直結型接頭 Straight Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

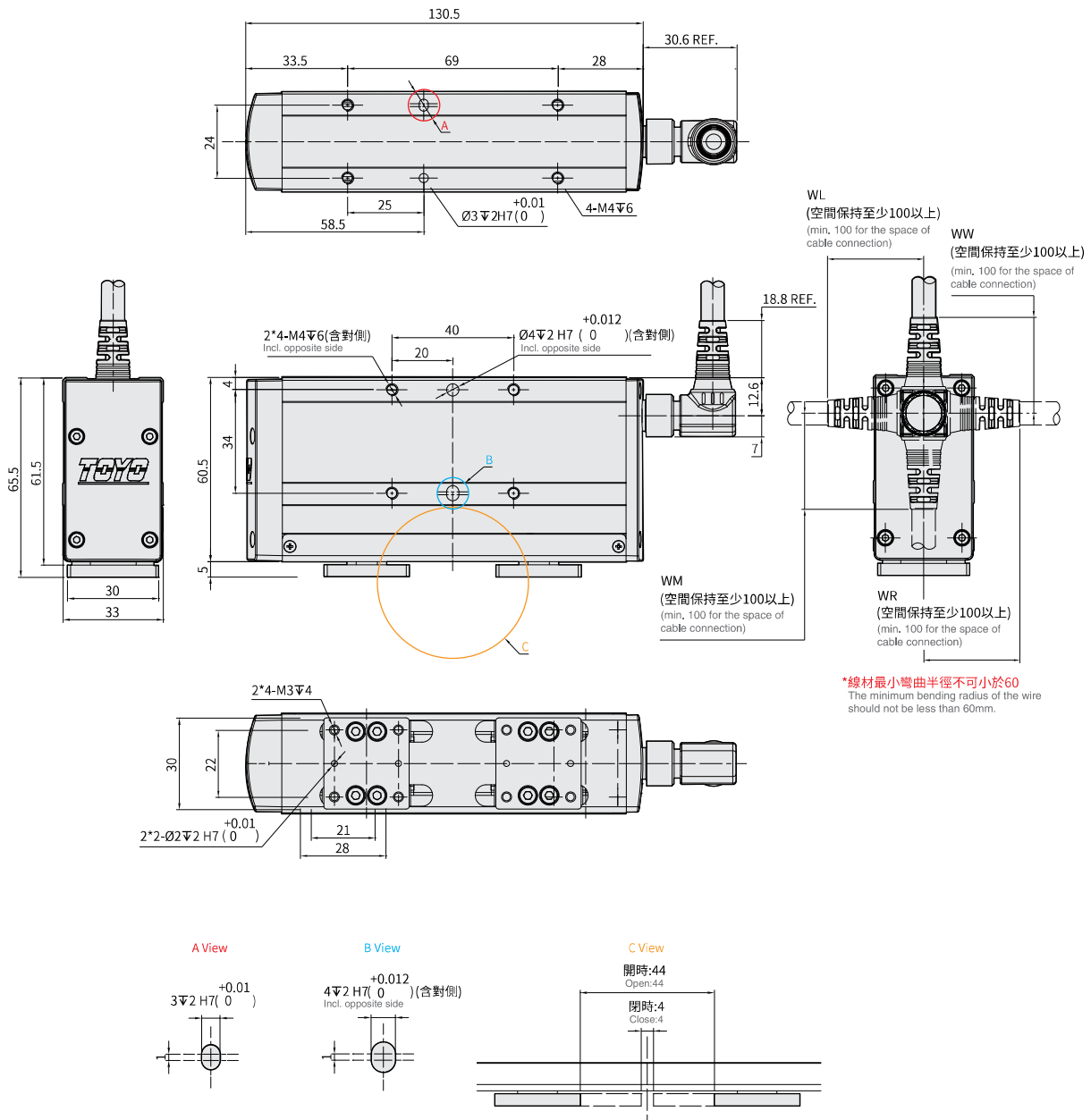


S40 90° 金屬接頭 90° Connector



• CAD圖面可至www.toyorobot.com下載 •  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHS2B-S68



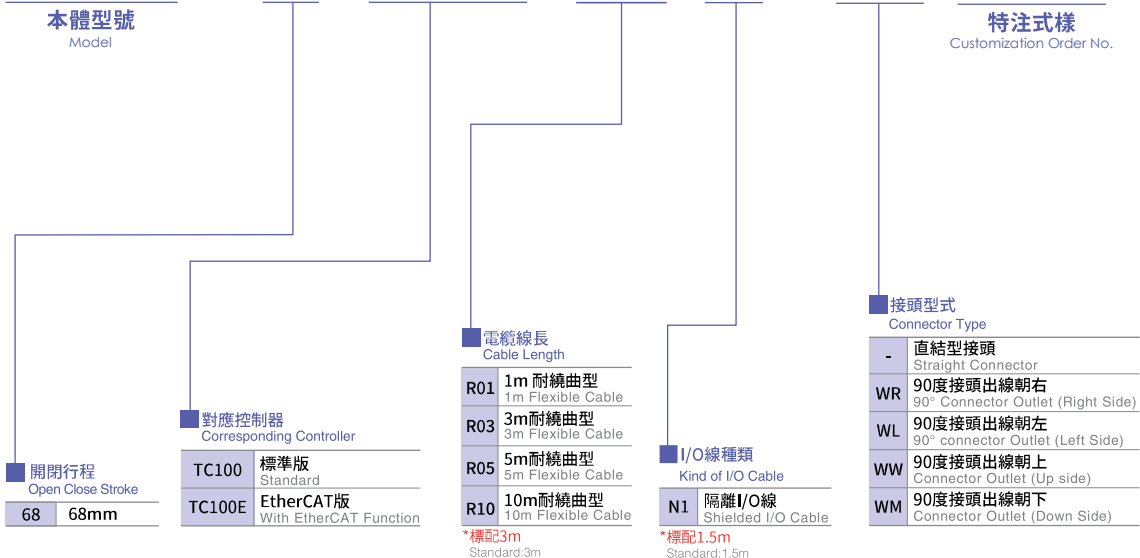
## 螺桿驅動 Ball Screw Drive



馬達尺寸 Motor Dimension **35□mm**

### 型號表示方式 Ordering Method

## CHS2B - S68 - TC100 - R03 - N1 - WR - A001



基本仕様 Specification

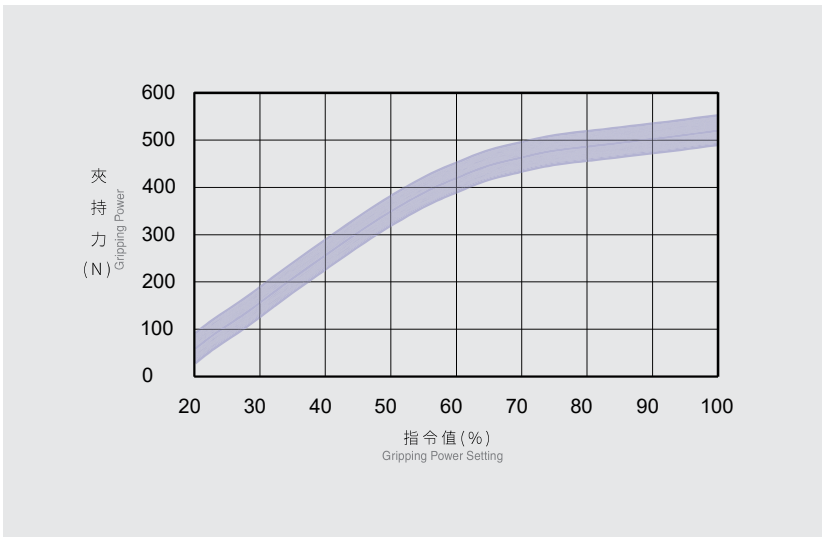
規格 Spec	夾持重量 Weight (kg)	5.09 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	80~509(20-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	68
	開閉速度 Open/Close Speed (mm/s)	10~50
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	35□
	重量 Weight (g) <sup>※2</sup>	1730

※1 雙邊合計行程。 Total stroke of both sides.

※2 重量包含本體與馬達。 Weight of model with motor.

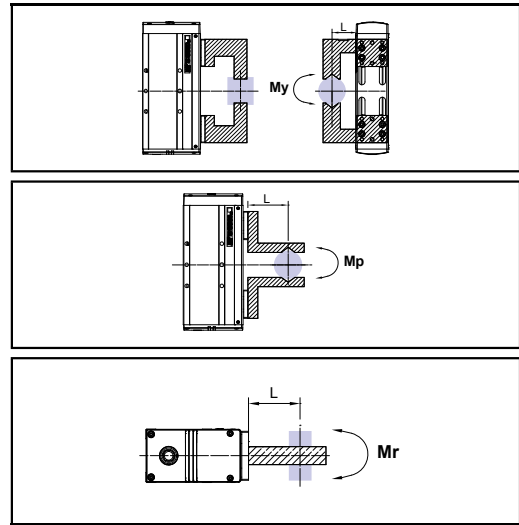
※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差：±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment

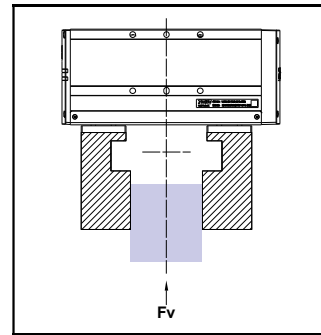


\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	18.32
俯仰力矩 Allowable pitching moment	MP	18.32
滾動力矩 Allowable rolling moment	MR	67.06

\* 表中負荷及力矩的值表示靜的  
The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

3000

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHS2B-S68



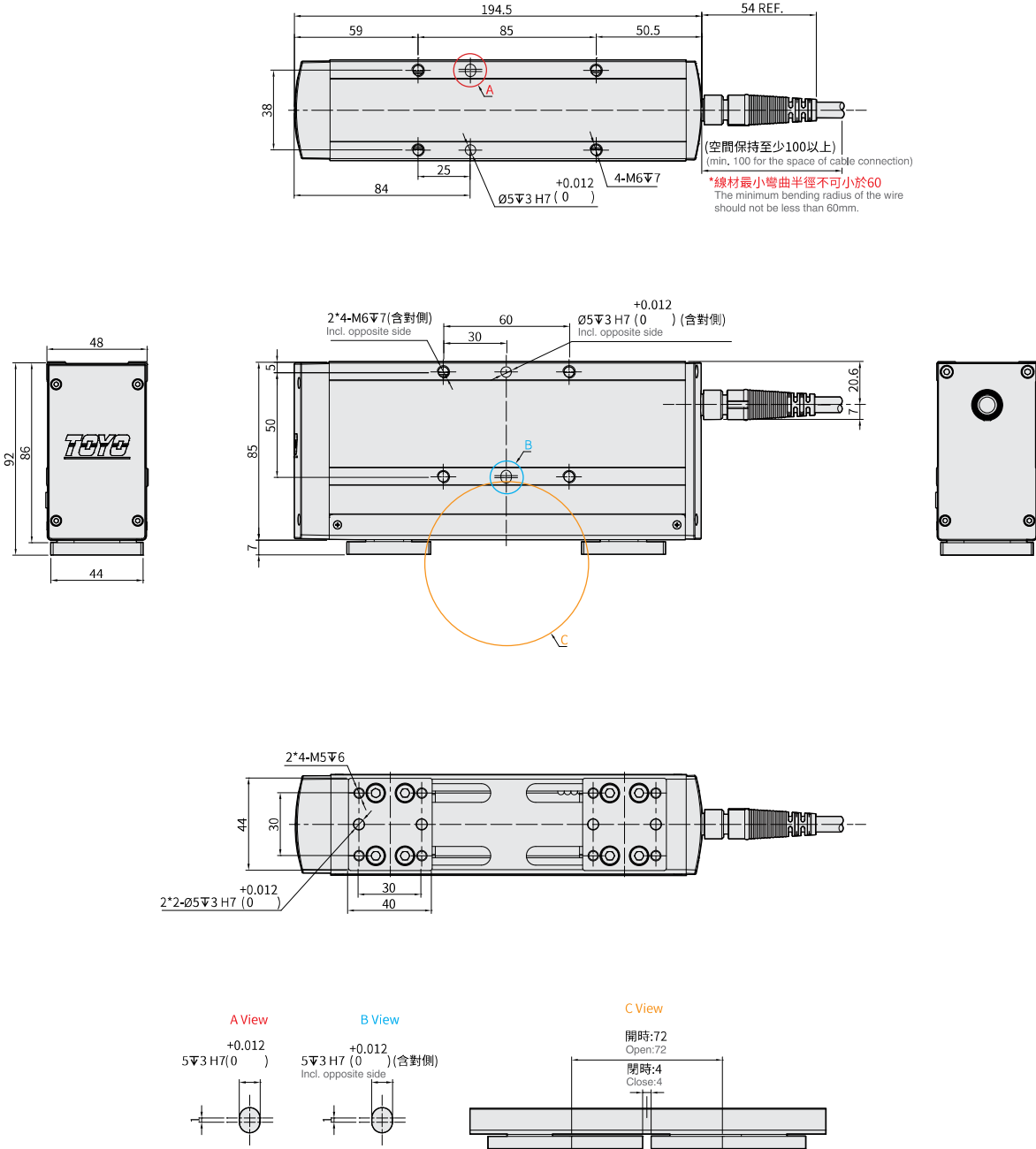
## 螺桿驅動 Ball Screw Drive

S68 直結型接頭 Straight Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnlod the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

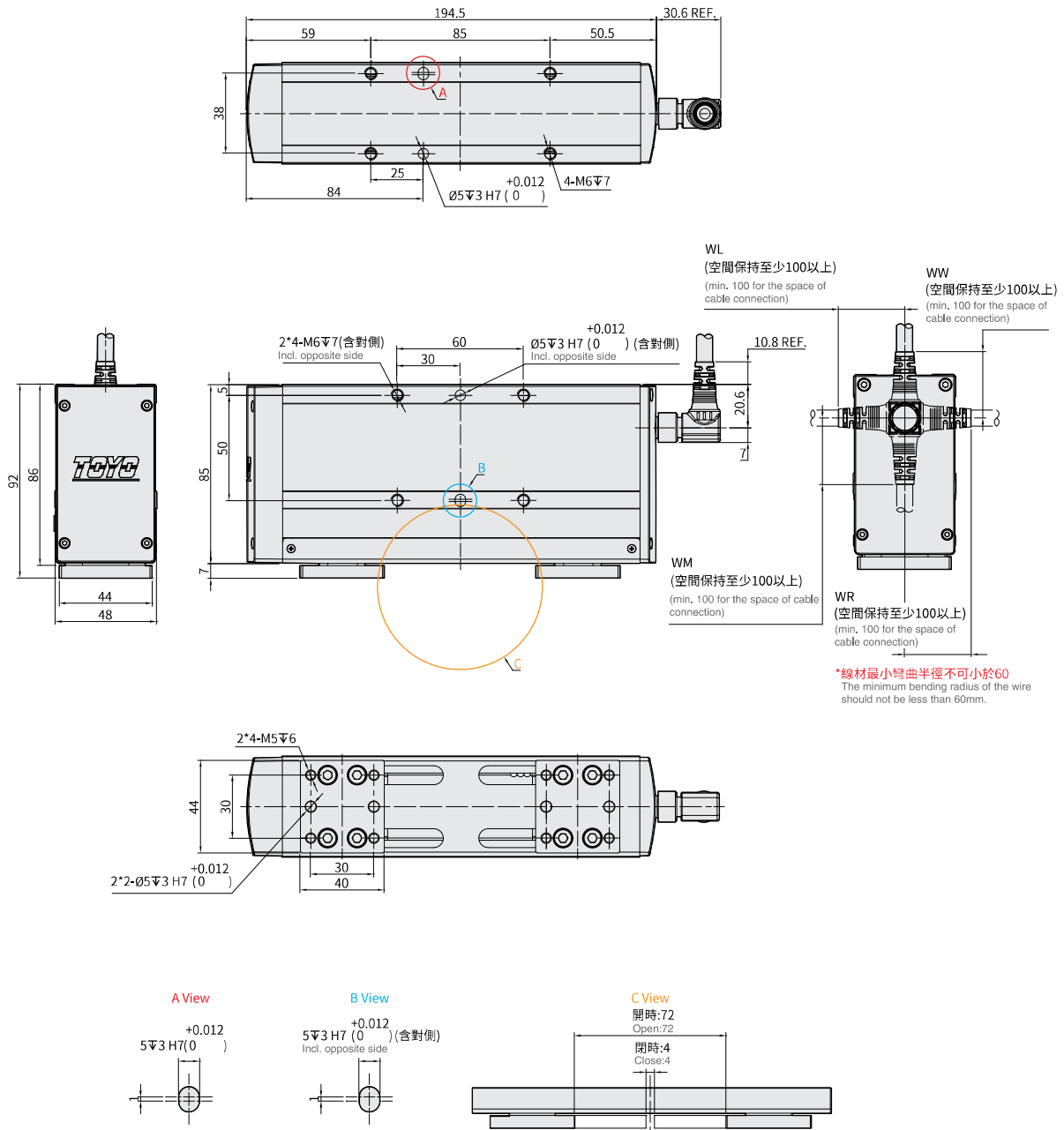


S68 90° 金屬接頭 90° Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



CHZ2-S14
CHZ20
CHZ25
CHB6-S11
CHB6-S14
CHB6T-S14
CHS2-S12
CHS2B-S20
CHS2B-S40
CHS2B-S68
CHS2C-S20
CHS2C-S40
CHS2C-S68
CHG2
CHY2B-S80
CHY2B-S150

# CHS2C-S20



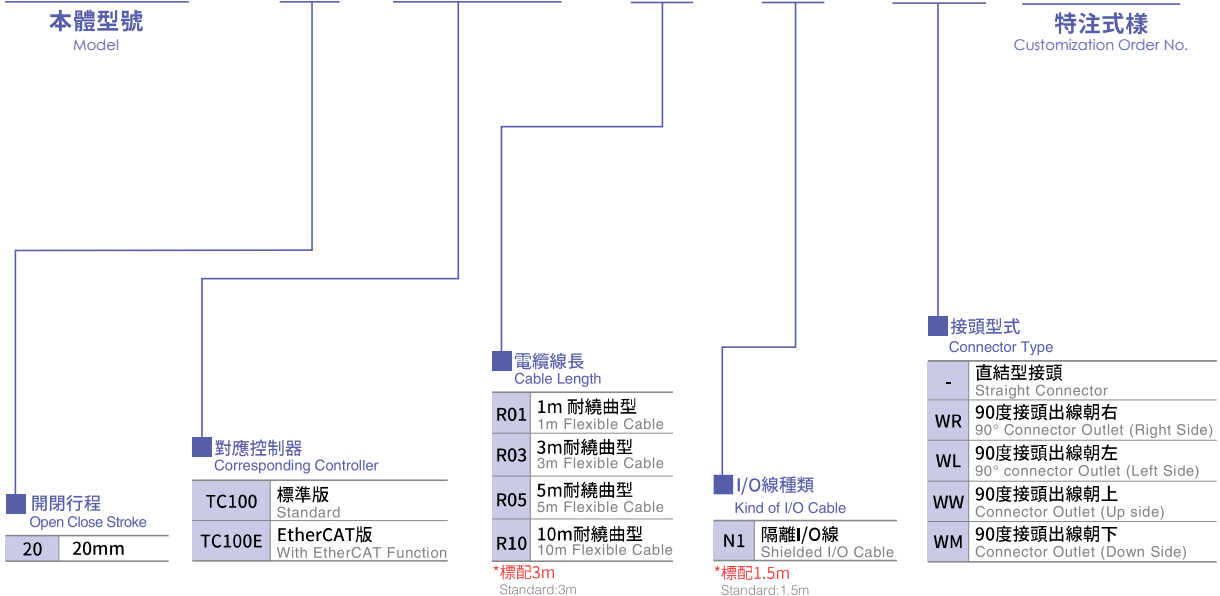
## 螺桿驅動 Ball Screw Drive



馬達尺寸  
Motor Dimension **20□mm**

### 型號表示方式 Ordering Method

# CHS2C - S20 - TC100 - R03 - N1 - WR - A001





基本仕様 Specification

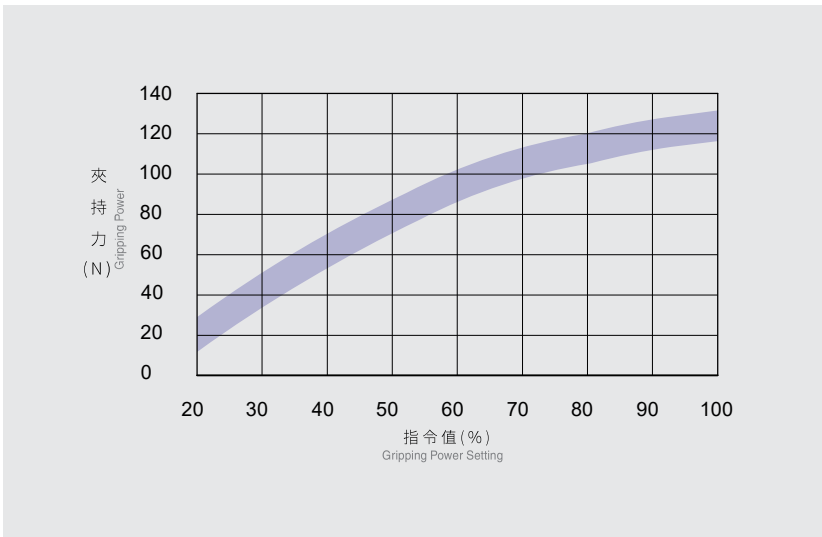
規格 Spec	夾持重量 Weight (kg)	1.24 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	20~124(15-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	20
	開閉速度 Open/Close Speed (mm/s)	6.66~33.3
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	20□
	重量 Weight (g) <sup>※2</sup>	310

※1 雙邊合計行程。Total stroke of both sides.

※2 重量包含本體與馬達。Weight of model with motor.

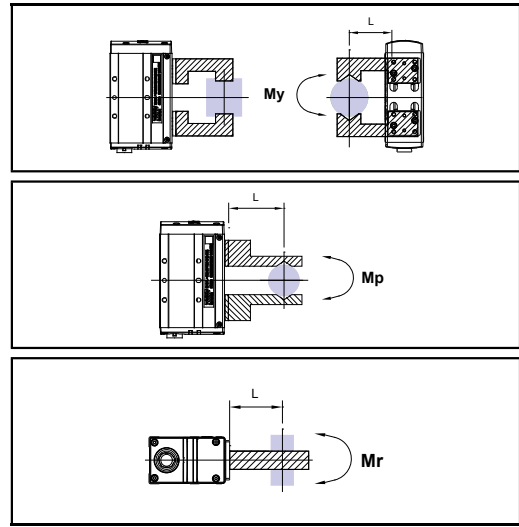
※3 夾持量受夾具/夾持物的材質、形狀、夾持方式...等因素影響，故此值僅供參考。The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差：±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment



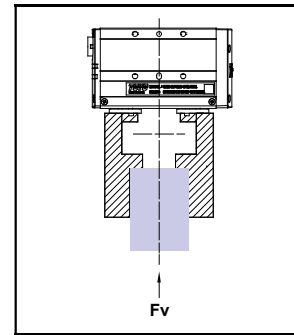
\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	6.54
俯仰力矩 Allowable pitching moment	MP	6.54
滾動力矩 Allowable rolling moment	MR	19.78

\* 表中負荷及力矩的值表示靜的值

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

2746.9

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	<b>EtherCAT</b> 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHS2C-S20



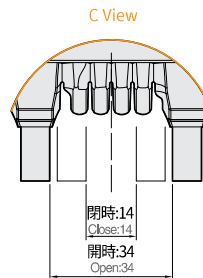
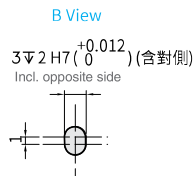
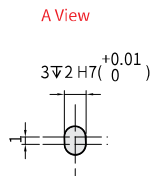
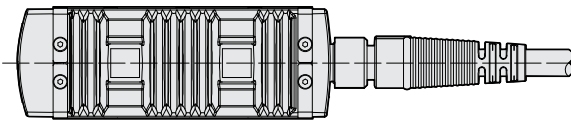
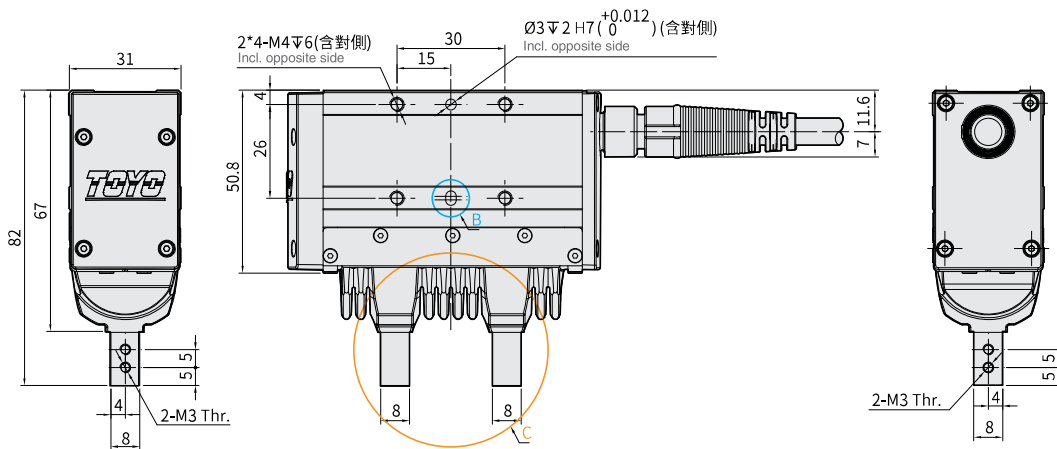
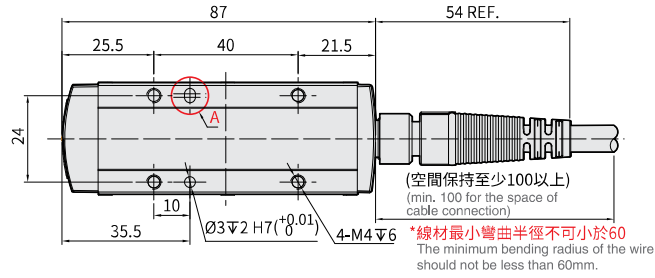
## 螺桿驅動 Ball Screw Drive

S20 直結型接頭 Straight Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnlod the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

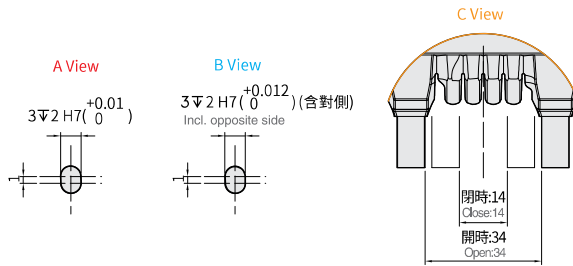
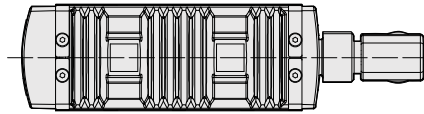
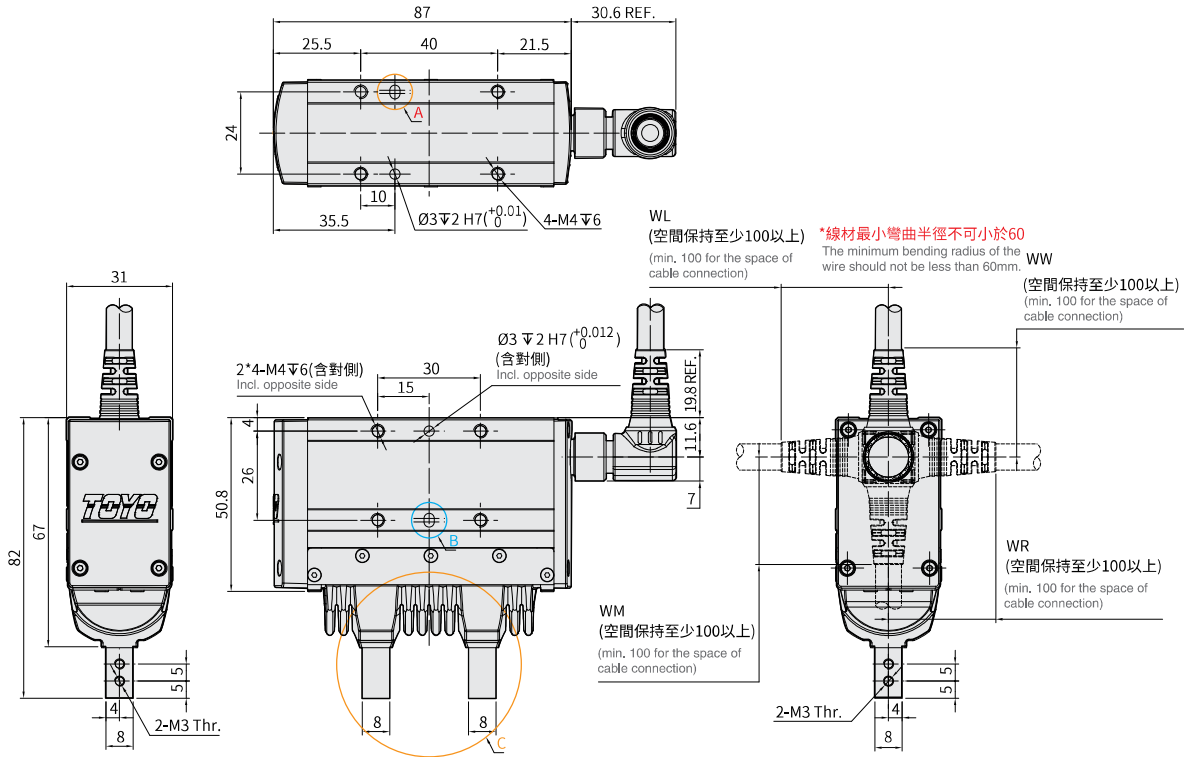


S20 90° 金屬接頭 90° Connector



CAD圖面可至www.toyorobot.com下載  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHS2C-S40



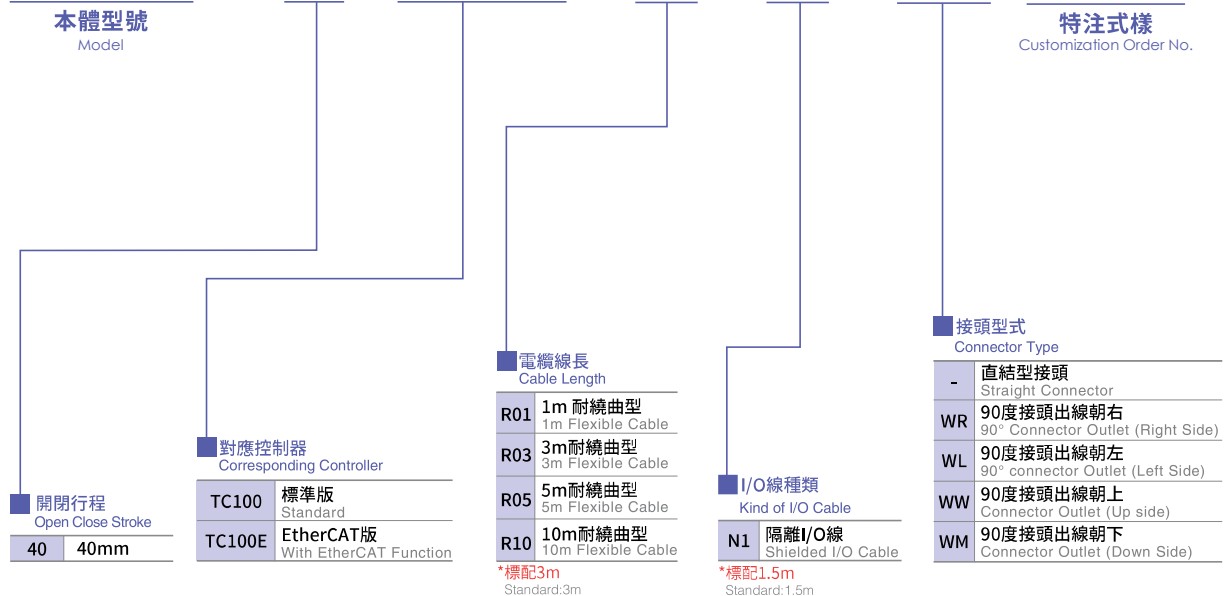
## 螺桿驅動 Ball Screw Drive



馬達尺寸  
Motor Dimension 25□mm

### 型號表示方式 Ordering Method

# CHS2C - S40 - TC100 - R03 - N1 - WR - A001



基本仕様 Specification

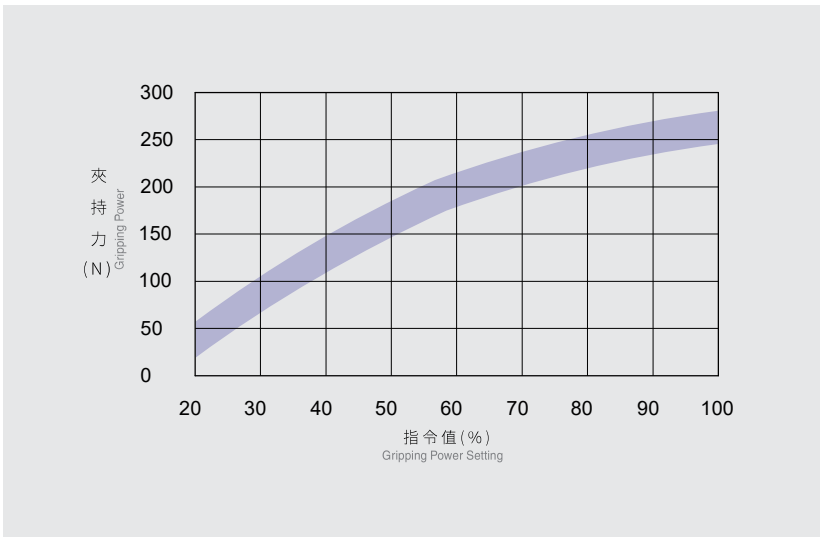
規格 Spec	夾持重量 Weight (kg)	2.58 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	40~258(15-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	40
	開閉速度 Open/Close Speed (mm/s)	8.2~41
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	25□
	重量 Weight (g) <sup>※2</sup>	625

※1 雙邊合計行程。Total stroke of both sides.

※2 重量包含本體與馬達。Weight of model with motor.

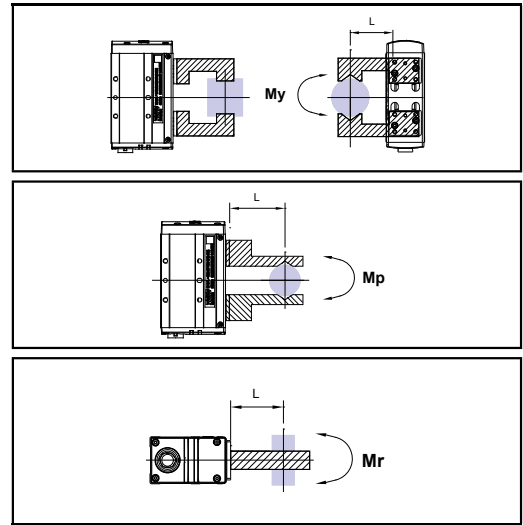
※3 夾持量受夾具/夾持物的材質、形狀、夾持方式...等因素影響，故此值僅供參考。The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差：±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment



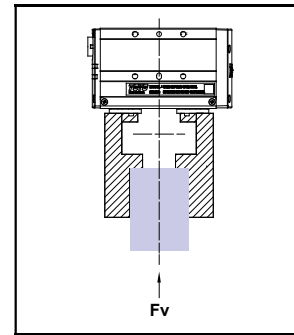
\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	13.74
俯仰力矩 Allowable pitching moment	MP	13.74
滾動力矩 Allowable rolling moment	MR	37.08

\* 表中負荷及力矩的值表示靜的

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

2550

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHS2C-S40



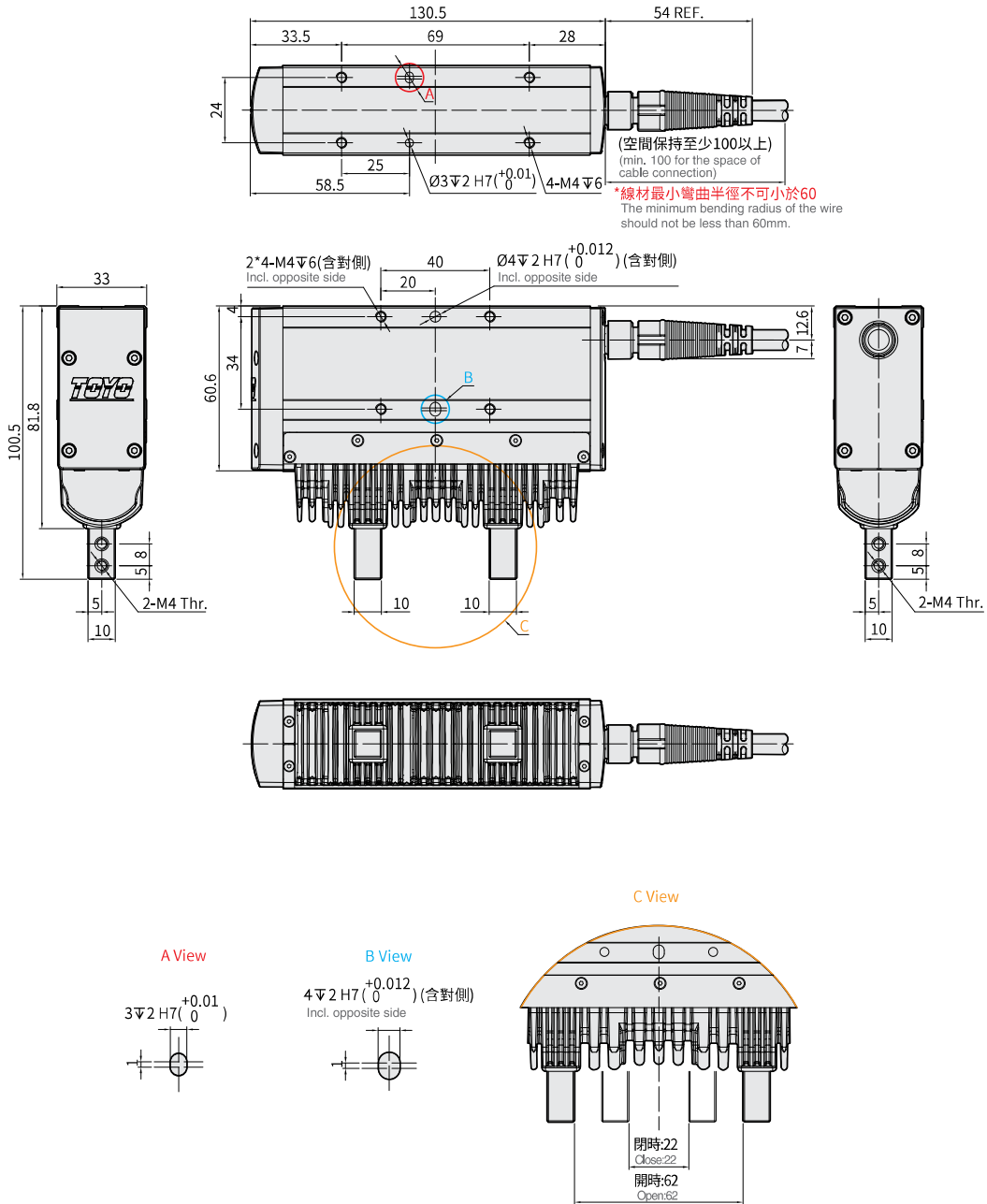
## 螺桿驅動 Ball Screw Drive

S40 直結型接頭 Straight Connector



• CAD圖面可至www.toyorobot.com下載 •  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm

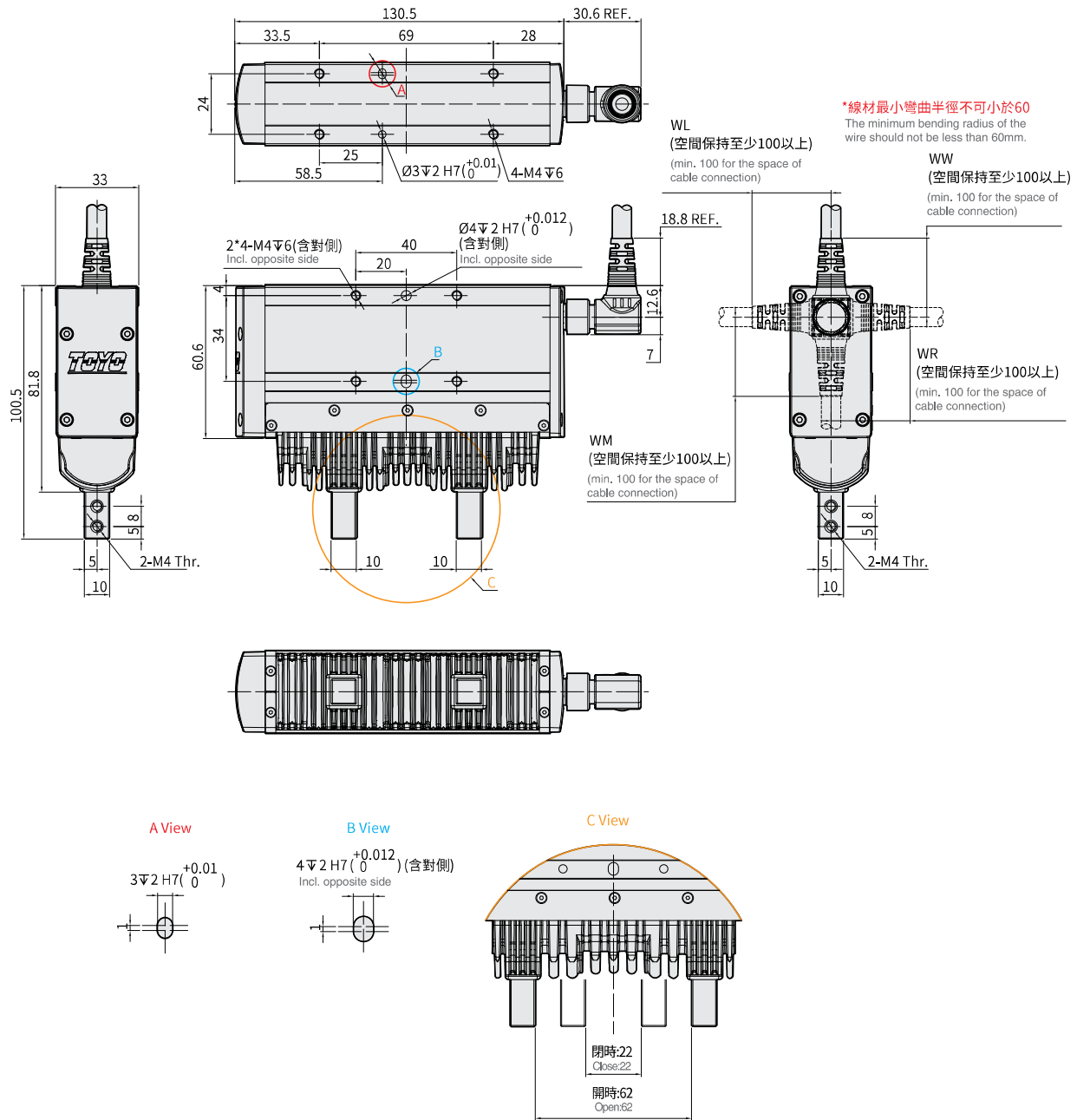


S40 90° 金屬接頭 90° Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



# CHS2C-S68



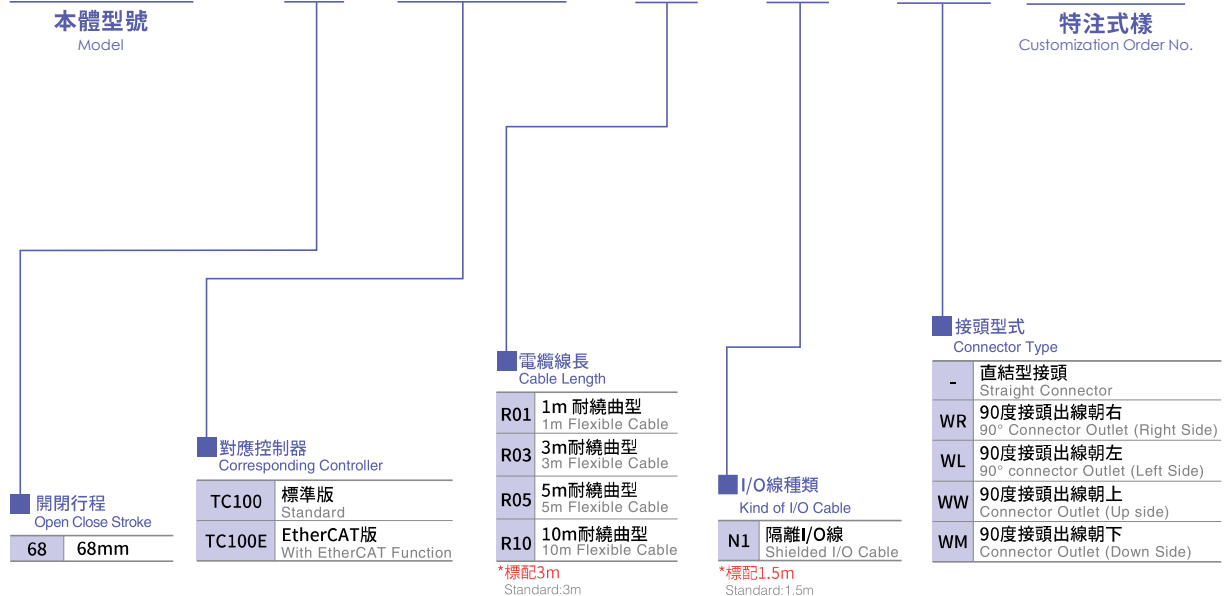
## 螺桿驅動 Ball Screw Drive



馬達尺寸 Motor Dimension **35□mm**

### 型號表示方式 Ordering Method

# CHS2C - S68 - TC100 - R03 - N1 - WR - A001





基本仕様 Specification

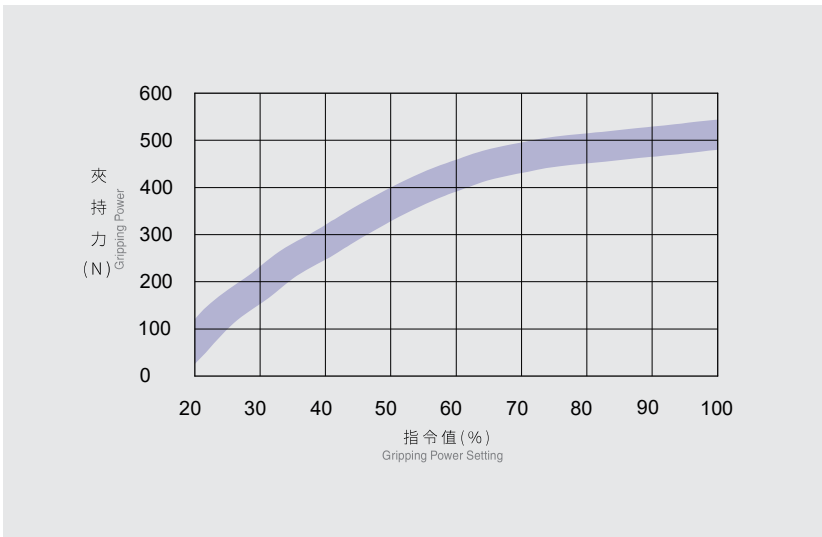
規格 Spec	夾持重量 Weight (kg)	5.09 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	80~509(15-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	68
	開閉速度 Open/Close Speed (mm/s)	10~50
	位置重複精度 Repeatability (mm)	±0.01
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	35□
	重量 Weight (g) <sup>※2</sup>	1730

※1 雙邊合計行程。Total stroke of both sides.

※2 重量包含本體與馬達。Weight of model with motor.

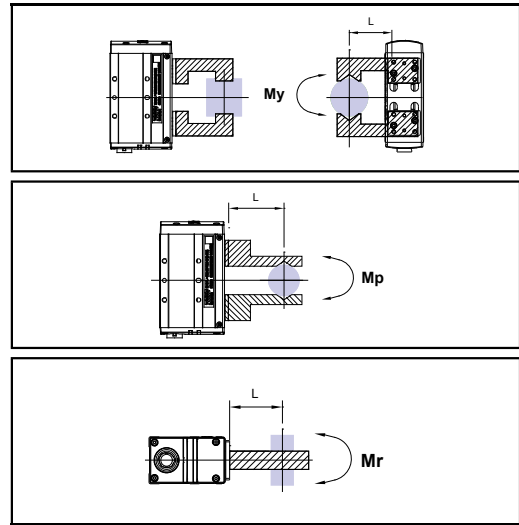
※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差：±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment



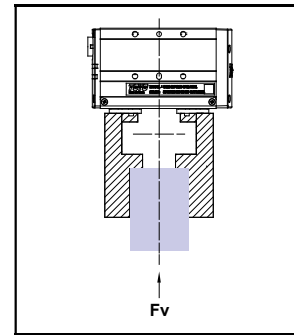
\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	MY	18.32
俯仰力矩 Allowable pitching moment	MP	18.32
滾動力矩 Allowable rolling moment	MR	67.06

\* 表中負荷及力矩的值表示靜的

The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

3000

對應控制器一覽表 Corresponding Controller Chart

外觀 Exterior	控制器型號 Controller Model	控制介面 Control Mode	特點 Features	電氣規格 Electrical Spec	詳細參閱 Reference Page
	TC100	I/O 控制 I/O Control Mode	利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed.	控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 工作電壓 DC48V，額定電流 1A，峰值電流 2A。	P.297
		通訊控制 Communication Control Mode	採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module	使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A.	
		選配 Optional	<b>EtherCAT</b> 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series.	Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised. Please contact your service window to details.	

# CHS2C-S68



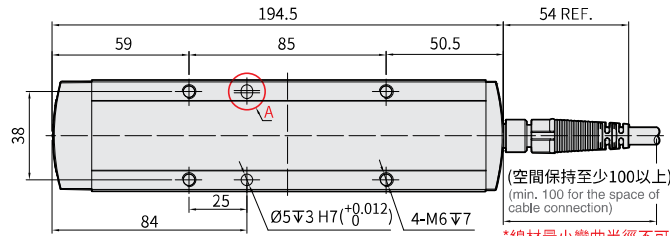
## 螺桿驅動 Ball Screw Drive

S68 直結型接頭 Straight Connector



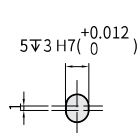
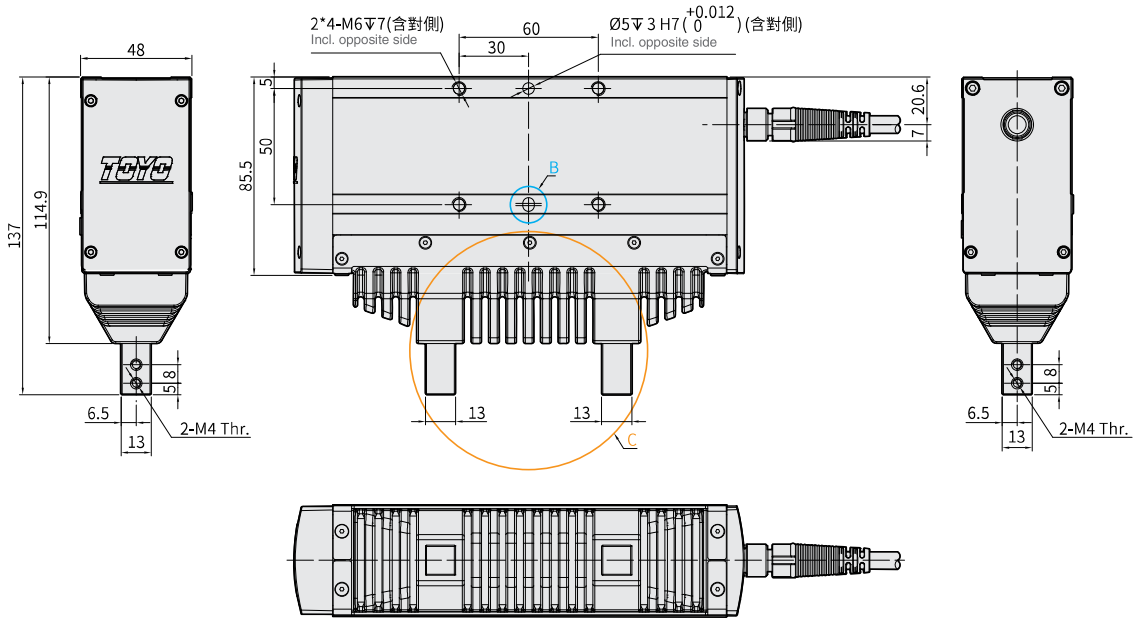
• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnlod the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

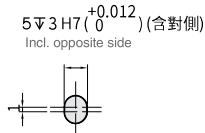


(空間保持至少100以上)  
(min. 100 for the space of cable connection)

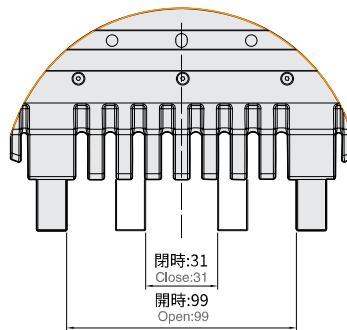
\*線材最小彎曲半徑不可小於60  
The minimum bending radius of the wire should not be less than 60mm.



A View



B View



C View

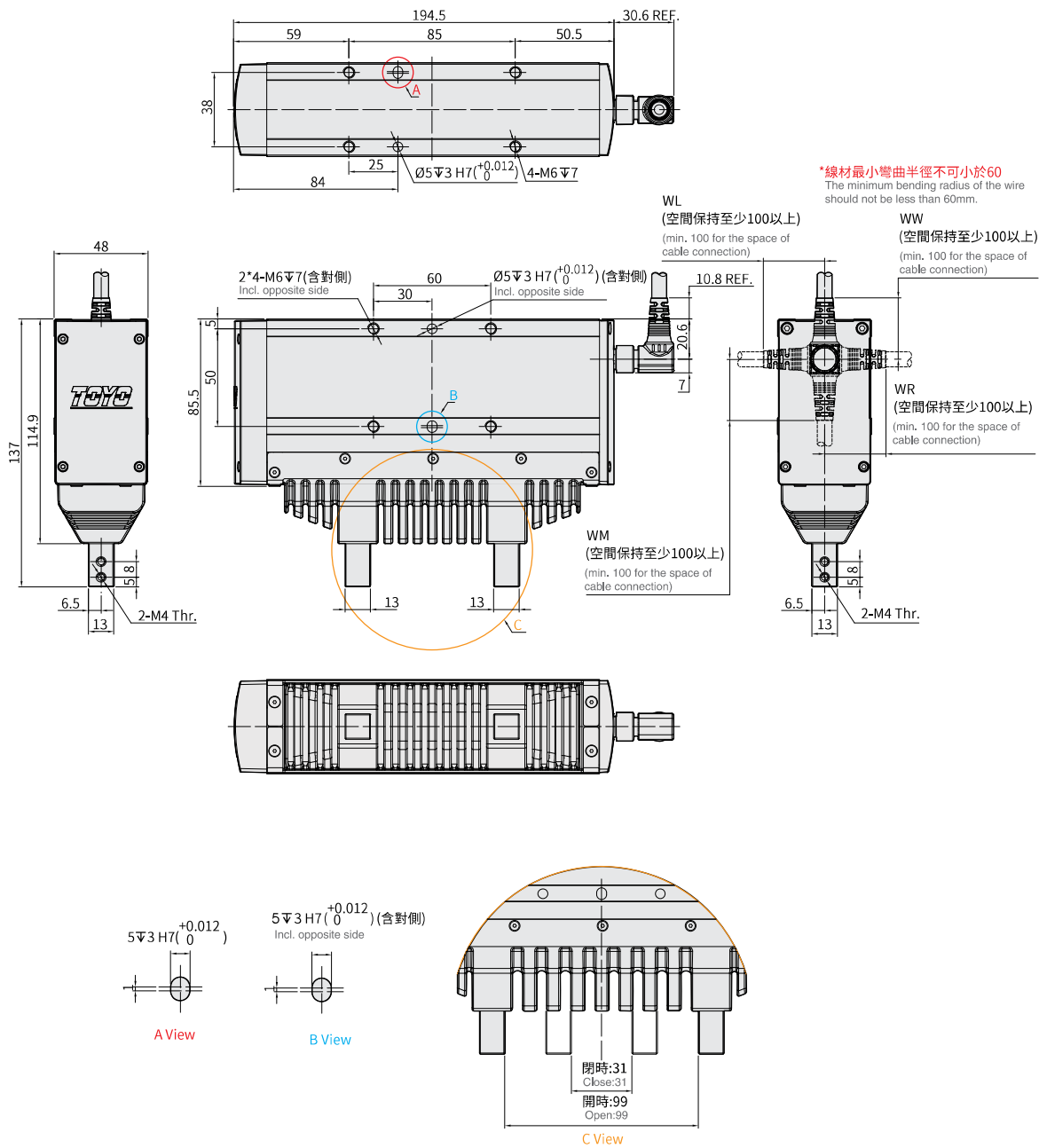
S68 90° 金屬接頭 90° Connector



• CAD圖面可至www.toyorobot.com下載 •

Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHG2



## 凸輪式 Cam Type



馬達尺寸  
Motor Dimension 53□mm

### 型號表示方式 Ordering Method

**CHG2 - S30 - 002 - L - A001**

本體型號  
Model

特注式樣  
Customization Order No.

開閉行程  
Open/Close Stroke  
30 30mm

電纜線長  
Cable Length  
002 0.2m

接頭型式  
Connector Type

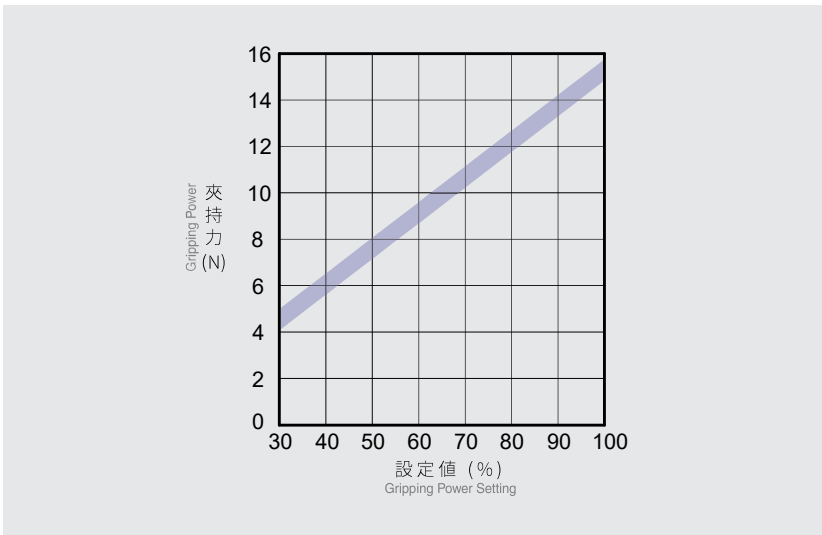
-	直型接頭 Straight type Connector
L	L型90度接頭 90° L type Connector

基本仕様 Specification

規格 Spec	夾持重量 Weight (kg)	0.15 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	4.5~15(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	30
	開閉速度 Open/Close Speed (mm/s)	30~150
	位置重複精度 Repeatability (mm)	±0.05
	導引機構 Guide structure	線性滑軌 Linear guide
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	53□
	重量 Weight (g) <sup>※2</sup>	450

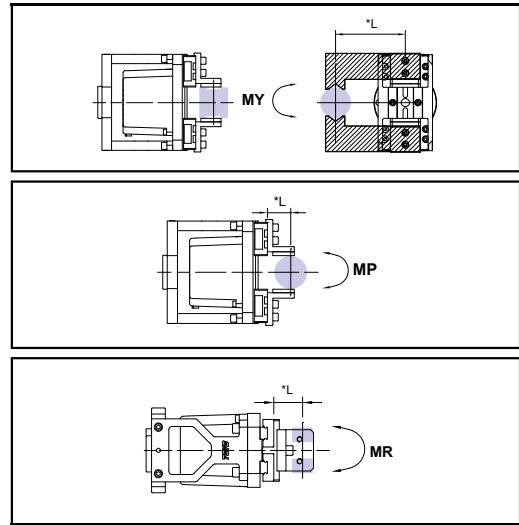
※1 雙邊合計行程。 Total stroke of both sides.  
 ※2 重量包含本體與馬達。 Weight of model with motor.  
 ※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與指令值曲線表 Gripping Power vs. Gripping Power Setting (%)



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

容許夾持負載力矩表 Allowable Moment

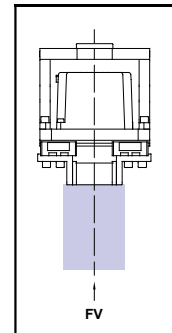


\*L: 夾爪至負荷作用點之距離 (mm) Distance to the loading location.

(單位 Unit: N.m)

最大容許力矩 Maximum moment		
偏力矩 Allowable yawing moment	<b>MY</b>	7.4
俯仰力矩 Allowable pitching moment	<b>MP</b>	7.4
滾動力矩 Allowable rolling moment	<b>MR</b>	11.8

\* 表中負荷及力矩的值表示靜的值  
The value in the chart is static, not dynamic loading and torque.



(單位 Unit: N)

垂直方向容許靜負荷 FV Vertical Maximum Force

500

# CHG2



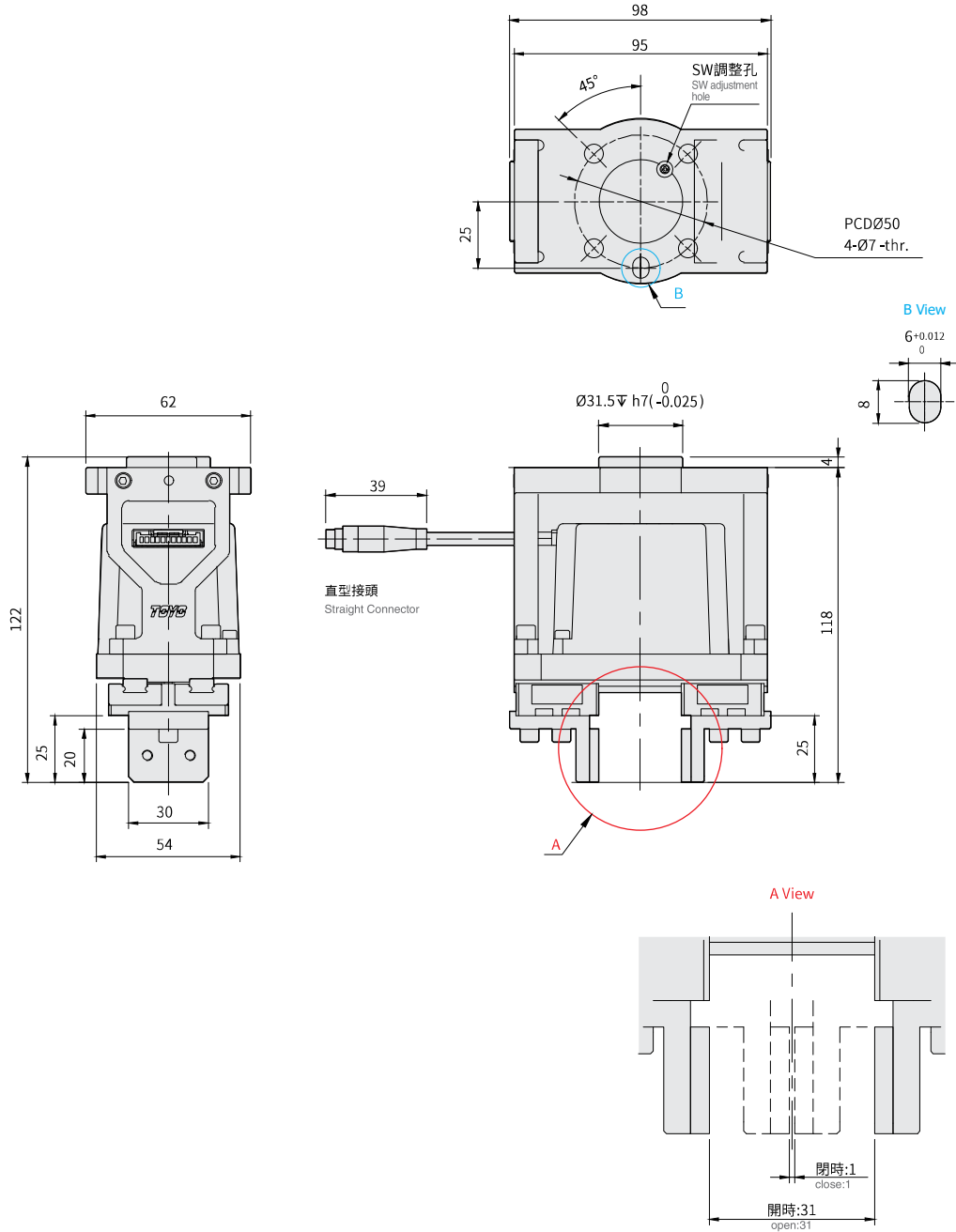
## 凸輪式 Cam Type

### S30 直型接頭 Straight type Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do wnload the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

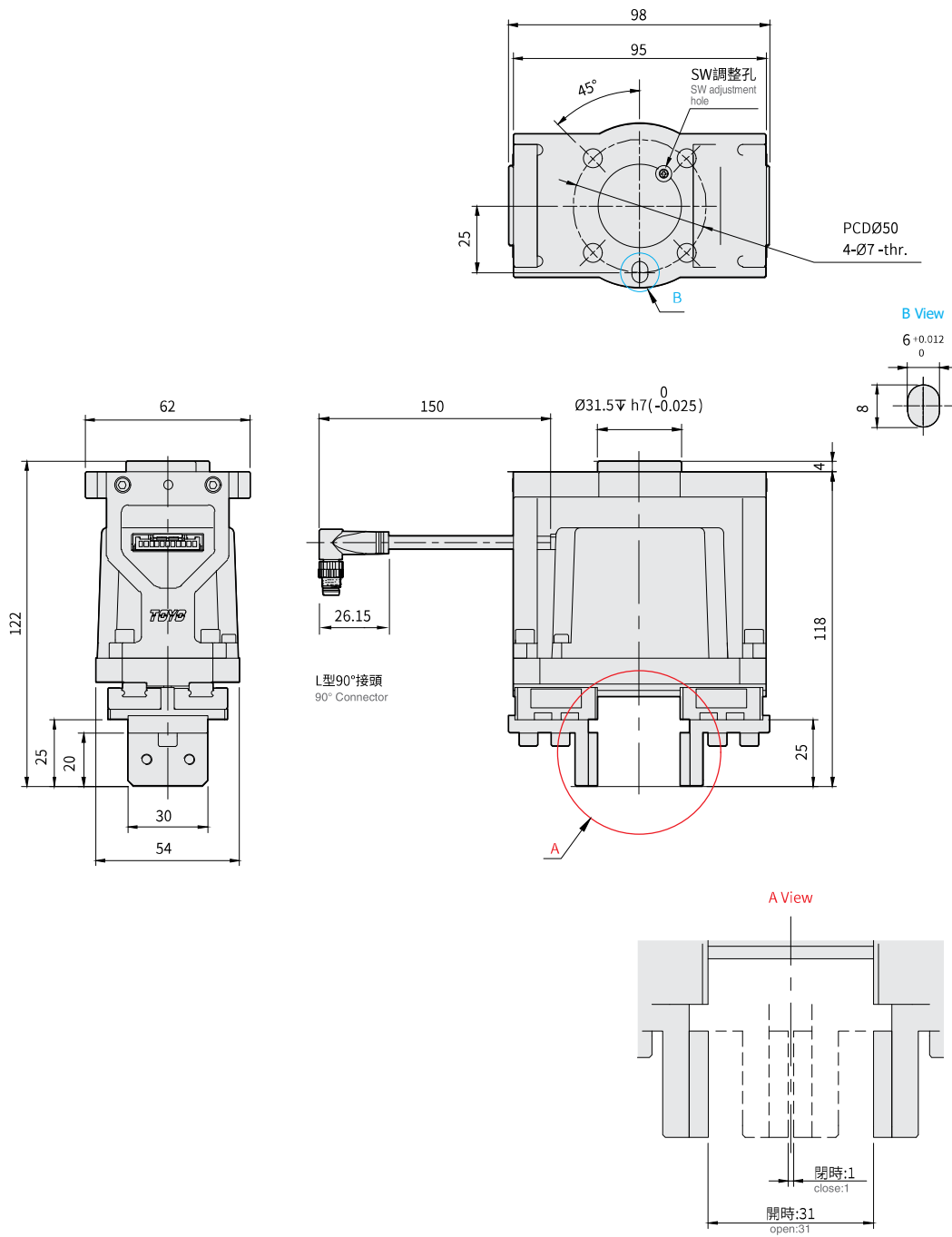


S30 L 型 90° 接頭 90° L type Connector



• CAD圖面可至www.toyorobot.com下載 •  
 Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHY2B-S80



## 連桿式 Linkage Type



馬達尺寸  
Motor Dimension **35□mm**

### 型號表示方式 Ordering Method

## CHY2B - S80 - 002 - F01 - A001

本體型號  
Model

本體外觀  
Body Color

B	標準黑色 Standard Black Color
-	鋁原色 Aluminum Color

關閉行程  
Open Close Stroke

S80	80mm
-----	------

電纜線長  
Cable Length

01	1m
03	3m
05	5m
10	10m*1
002	0.2m 直型接頭*2 Straight type Connector
002L	0.2m 90度接頭*2 90° Connector

\*1 驅控線，末端為排線型式  
Drive and control cable, flat cable type  
\*2 8PIN的I/O短線，可與協作機  
器人連接  
8PIN I/O short wire, can be connected  
with collaborative robot

特注式樣  
Customization Order No.

機械手臂轉接法蘭  
Robot Adapter Flange

-	若無選購則不表示 If There is No Purchase, There is No Indicate
F00	僅夾爪法蘭 Gripper Flange Only
F01	夾爪法蘭+手臂轉接法蘭I型 Gripper Flange + Robot Adapter Flange Type I
F02	夾爪法蘭+手臂轉接法蘭II型 Gripper Flange + Robot Adapter Flange Type II
F03	夾爪法蘭+手臂轉接法蘭III型 Gripper Flange + Robot Adapter Flange Type III



### 基本仕様 Specification

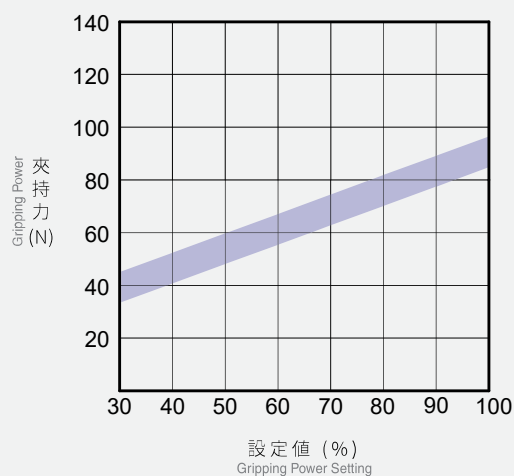
規格 Spec	夾持重量 Weight (kg)	3 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	40~90(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	80
	開閉速度 Open/Close Speed (mm/s)	40~200
	位置重複精度 Repeatability (mm)	±0.05
	導引機構 Guide structure	連桿機構 Shafts
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	35□
	重量 Weight (g) <sup>※2</sup>	450

※1 雙邊合計行程。 Total stroke of both sides.

※2 重量包含本體與馬達。 Weight of model with motor.

※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式 ... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

### 夾持力與電流值曲線表 Clamping Force And Current Value Curve Table



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

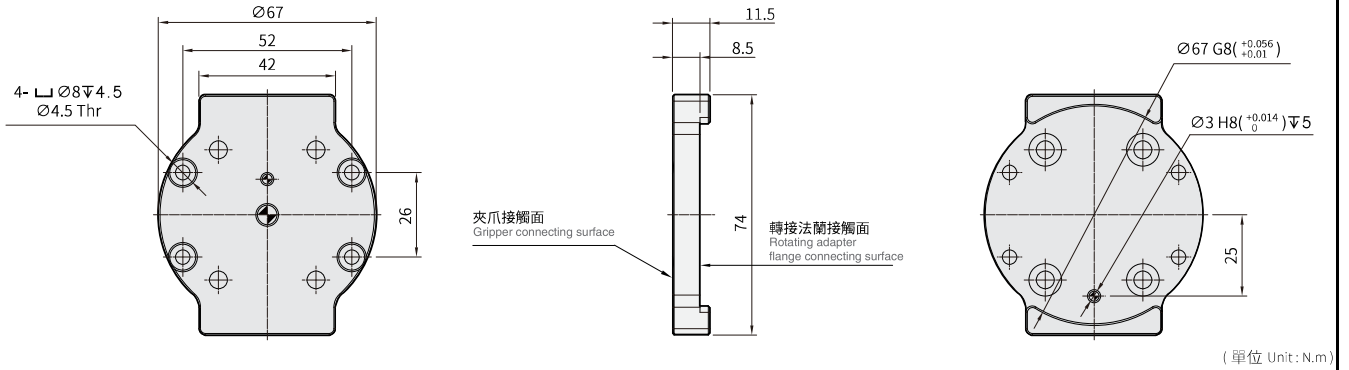
# CHY2B-S80



## 連桿式 Linkage Type

### 選配機械手臂轉接法蘭 Optional Robot Adapter Flange

夾爪法蘭尺寸圖  
Gripper Flange Dimensions

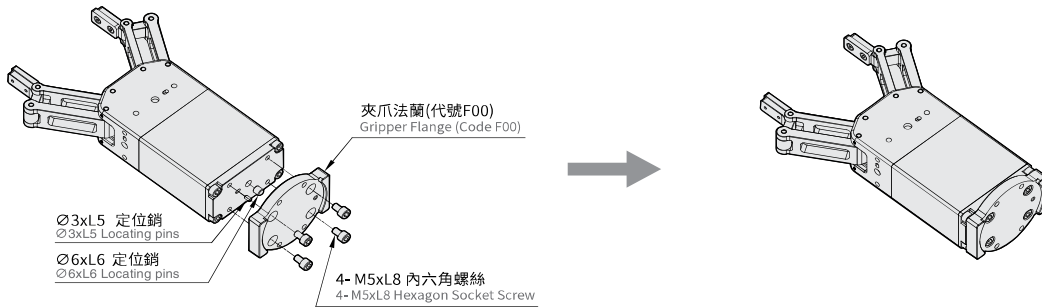


手臂轉接法蘭尺寸圖  
Robot Flange Dimensions

代號 Code	F01	F02
符合 Suitable	ISO 9409-1 50-4-M6	ISO 9409-1 31.5-4-M5
尺寸 Size	<p>Technical drawing of Robot Flange F01 showing front and A-A views:</p> <ul style="list-style-type: none"> <li>Front View: Four holes with diameter <math>\varnothing 11 \nabla 6.4</math> and thread <math>\varnothing 6.4</math> Thr. Equally spaced. P.C.D. <math>\varnothing 50</math>. Hole diameter tolerance: <math>\varnothing 6 F8 (+0.028 / +0.01)</math>. Hole angle: <math>45^\circ</math>.</li> <li>A-A View: Total thickness 6.5. Gripper flange connecting surface thickness 5. Arm connecting surface thickness 2.5. P.C.D. <math>\varnothing 67 H8 (+0.046 / 0)</math>. Hole diameter tolerance: <math>63 G8 (+0.056 / +0.01)</math>.</li> </ul> <p>(單位 Unit: N.m)</p>	<p>Technical drawing of Robot Flange F02 showing front and A-A views:</p> <ul style="list-style-type: none"> <li>Front View: Four holes with diameter <math>\varnothing 10 \nabla 5.4</math> and thread <math>\varnothing 5.3</math> Thr. Equally spaced. P.C.D. <math>\varnothing 31.5</math>. Hole diameter tolerance: <math>\varnothing 5 F8 (+0.028 / +0.01)</math>. Hole angle: <math>45^\circ</math>.</li> <li>A-A View: Total thickness 15.75. Gripper flange connecting surface thickness 5. Arm connecting surface thickness 2.5. P.C.D. <math>\varnothing 67 H8 (+0.046 / 0)</math>. Hole diameter tolerance: <math>\varnothing 67 G8 (+0.046 / +0.09)</math>.</li> </ul> <p>(單位 Unit: N.m)</p>
重量 Weight	82g	97g
代號 Code	F03	
符合 Suitable	ISO 9409-1 40-4-M6	
尺寸 Size	<p>Technical drawing of Robot Flange F03 showing front and A-A views:</p> <ul style="list-style-type: none"> <li>Front View: Four holes with diameter <math>\varnothing 11 \nabla 6.4</math> and thread <math>\varnothing 6.4</math> Thr. Equally spaced. P.C.D. <math>\varnothing 40</math>. Hole diameter tolerance: <math>\varnothing 6 F8 (+0.028 / +0.01)</math>. Hole angle: <math>45^\circ</math>.</li> <li>A-A View: Total thickness 20. Gripper flange connecting surface thickness 5. Arm connecting surface thickness 2.5. P.C.D. <math>\varnothing 67 H8 (+0.046 / 0)</math>. Hole diameter tolerance: <math>\varnothing 50 G8 (+0.046 / +0.009)</math>.</li> </ul> <p>(單位 Unit: N.m)</p>	
重量 Weight	90g	

## 機械手臂轉接法蘭 組裝步驟 Robotic arm adapter flange Assembly steps

### 步驟一、組裝夾爪法蘭 Step 1. Assemble the gripper flange



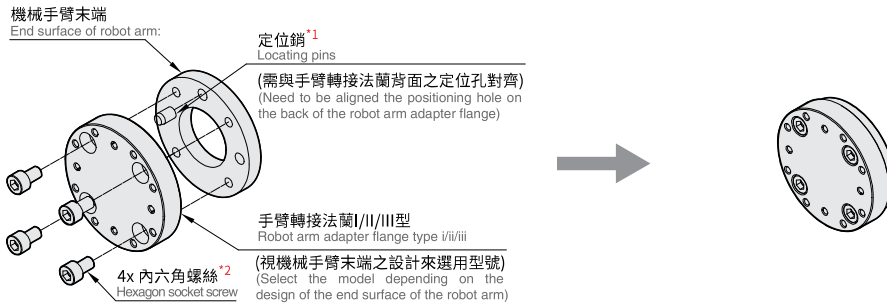
備註：Remark:

1. 有選配法蘭時，出貨時會隨附組裝步驟對應之螺絲包。  
1. When there is an optional flange, it will be shipped with a screw package corresponding to the assembly steps.
2. 步驟二之螺絲需客戶自行準備，若需協助提供則需事先告知業務。  
2. The screw in step 2 needs to be prepared by the customer. If need any assistance please inform to the sales person in advance.
3. 法蘭出廠時不預先組裝。若步驟一有預先組裝需求請事先告知業務。  
3. The flange is not pre-assembled when shipping from the factory. Please inform the salesperson in advance if it requires pre-assembly (step 1).

### 步驟二、組裝手臂轉接法蘭 Step 2. Assemble the robot arm adapter flange

(此步驟之螺絲需自行準備)

(Screws & positioning pins required for this step need to be prepared by yourself)



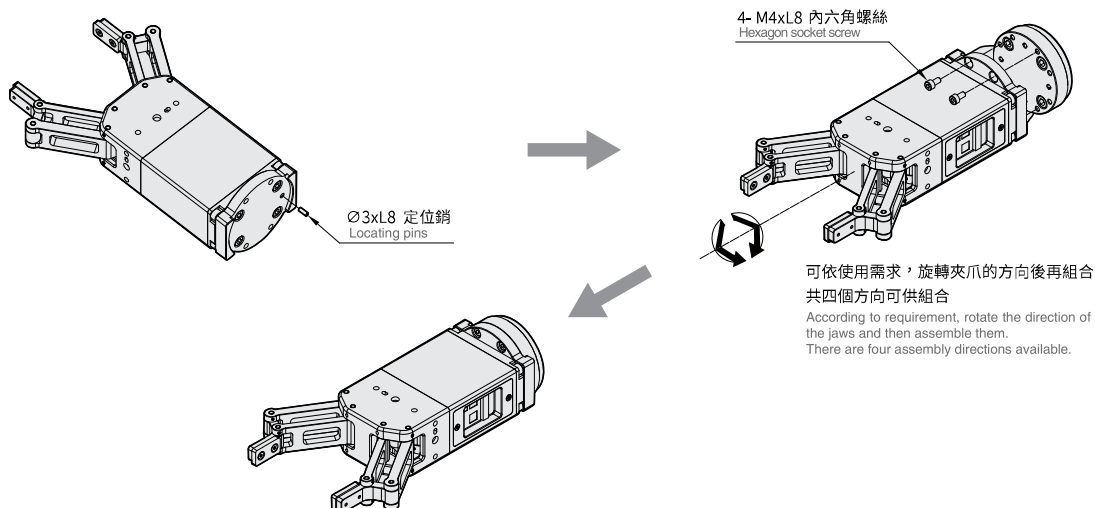
\*1：轉接法蘭 I/III 型，需使用 Ø 6 定位銷；轉接法蘭 II 型，需使用 Ø 5 定位銷。長度取決於手臂末端設計。

\*1: Type I/III of adapter flange needs to use 6 positioning pins; Type II of adapter flange needs to use 5 positioning pins. The length depends on the end surface of the robot arm design.

\*2：轉接法蘭 I/III 型，需使用 M6 螺絲；轉接法蘭 II 型，需使用 M5 螺絲。螺絲長度取決於手臂末端設計。

\*2: Type I/III of adapter flange needs to use M6 screws; type II of adapter flange needs to use M5 screws. The screw length depends on the end surface of the robot arm design.

### 步驟三、組合夾爪 & 手臂 Step 3. Assembly of Gripper & Arm



選用注意事項：Selection Notice：

1. 使用時一支夾爪僅可搭配一組夾具。1. One gripper can only be used with one set of clamps.
2. 夾具一組 2 入，出貨時預先鎖附於夾爪上。2. A set of 2 clamps, which are pre-assembled on the gripper when shipped.
3. 若有購買多組、或出貨不需鎖附等需求，請事先與業務人員洽詢。3. If you need to purchase multiple sets, or do not need to pre-assemble while shipment, please contact the sales staff in advance.

# CHY2B-S80



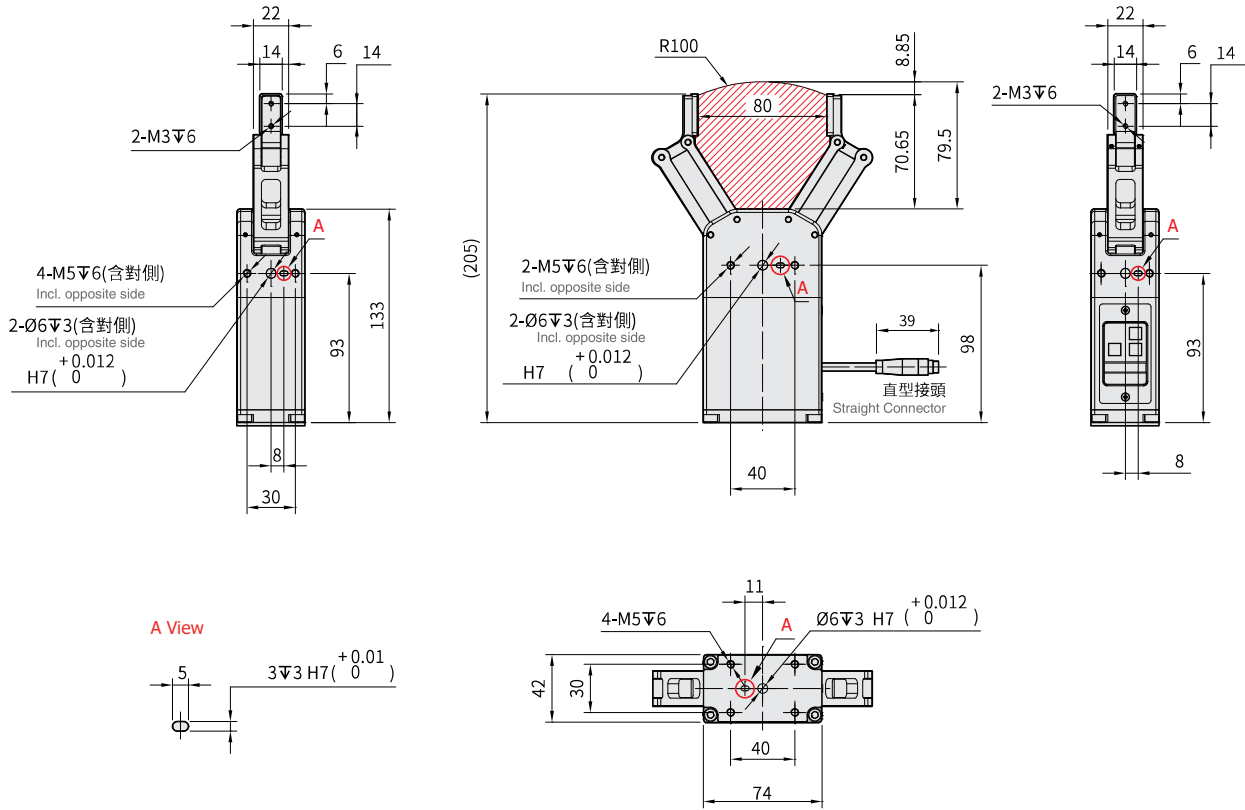
## 連桿式 Linkage Type

S80 直型接頭 Straight type Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do not download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm

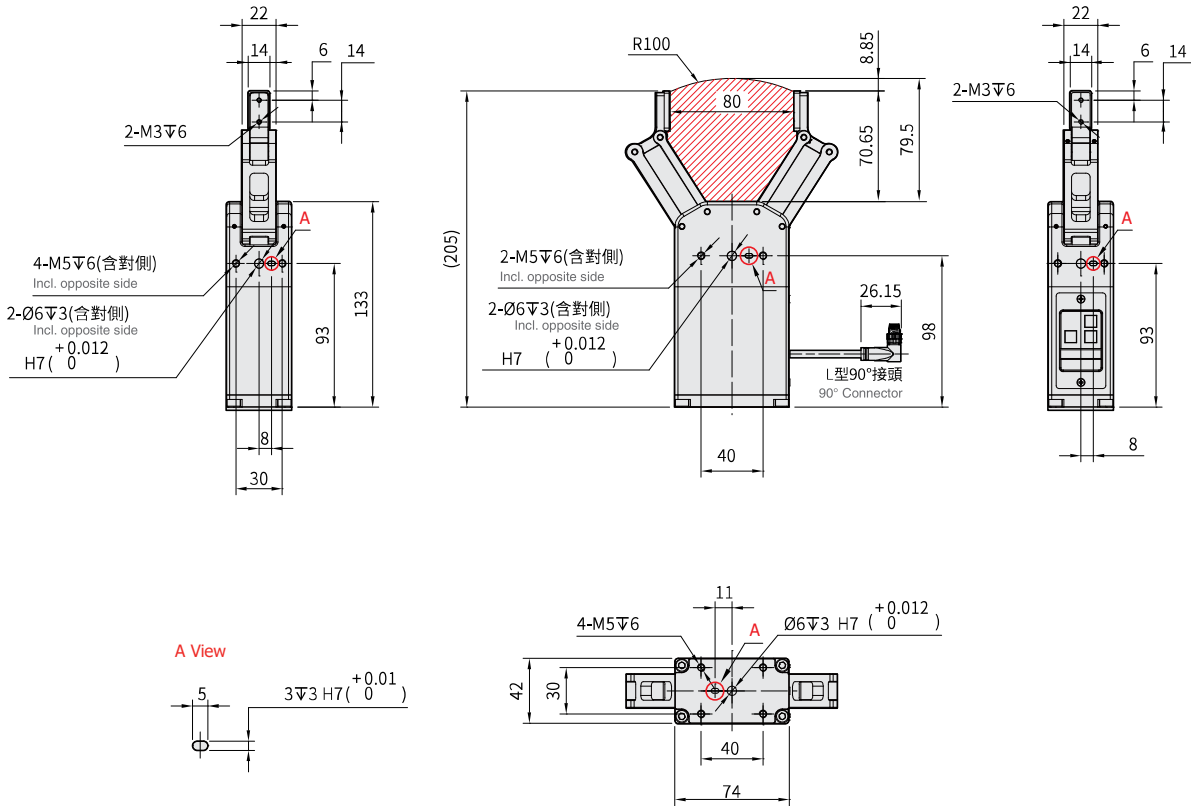


S80 L型 90° 接頭 90° L type Connector



• CAD圖面可至www.toyorobot.com下載 •  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



# CHY2B-S150



## 連桿式 Linkage Type



馬達尺寸  
Motor Dimension **35□mm**

### 型號表示方式 Ordering Method

# CHY2B - S150 - 002 - F01 - A001

本體型號  
Model

特注式樣  
Customization Order No.

■ 本體外觀  
Body Color

B	標準黑色 Standard Black Color
-	鋁原色 Aluminum Color

■ 開閉行程  
Open Close Stroke

S150	150mm
------	-------

■ 電纜線長  
Cable Length

01	1m
03	3m
05	5m
10	10m*1
002	0.2m 直型接頭 *2 Straight type Connector
002L	0.2m 90度接頭 *2 90° Connector

■ 機械手臂轉接法蘭  
Robot Adapter Flange

-	若無選購則不表示 If There Is No Purchase, There Is No Indicate
F00	僅夾爪法蘭 Gripper Flange Only
F01	夾爪法蘭+手臂轉接法蘭I型 Gripper Flange + Robot Adapter Flange Type I
F02	夾爪法蘭+手臂轉接法蘭II型 Gripper Flange + Robot Adapter Flange Type II
F03	夾爪法蘭+手臂轉接法蘭III型 Gripper Flange + Robot Adapter Flange Type III

\*1 驅控線，末端為排線型式  
Drive and control cable, flat cable type  
\*2 8PIN的I/O短線，可與協作機  
器人連接  
8PIN I/O short wire, can be connected  
with collaborative robot

基本仕様 Specification

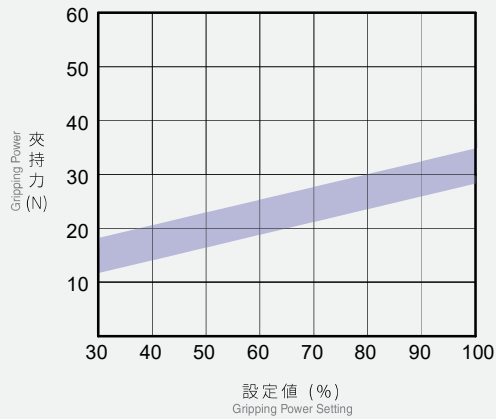
規格 Spec	夾持重量 Weight (kg)	1 <sup>※3</sup>
	夾持力範圍 Gripping force (N)	15~30(30-100%)
	開閉行程 Open/Close stroke (mm) <sup>※1</sup>	150
	開閉速度 Open/Close Speed (mm/s)	40~200
	位置重複精度 Repeatability (mm)	±0.05
	導引機構 Guide structure	連桿機構 Shafts
	使用溫度範圍 Operating temperature range (°C)	0~+40
	使用濕度範圍 Operating humidity range (%)	RH90 以下 (無結露) Below RH90 Dew free
部品 Parts	馬達尺寸 Motor Dimension (mm)	35□
	重量 Weight (g) <sup>※2</sup>	940

※1 雙邊合計行程。 Total stroke of both sides.

※2 重量包含本體與馬達。 Weight of model with motor.

※3 夾持量受夾具 / 夾持物的材質、形狀、夾持方式... 等因素影響，故此值僅供參考。 The clamping capacity is affected by factors such as the material, shape, and clamping method of the fixture/clamping object, so this value is for reference only.

夾持力與電流值曲線表 Clamping Force And Current Value Curve Table



\* 夾持力誤差 : ±15% ±15% clamping force tolerance.

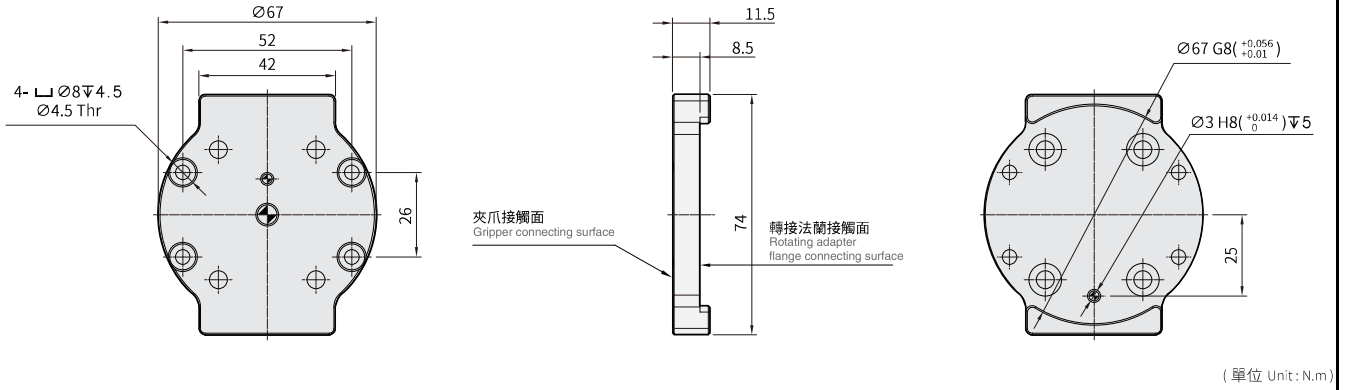
# CHY2B-S150



## 連桿式 Linkage Type

### 選配機械手臂轉接法蘭 Optional Robot Adapter Flange

夾爪法蘭尺寸圖  
Gripper Flange Dimensions

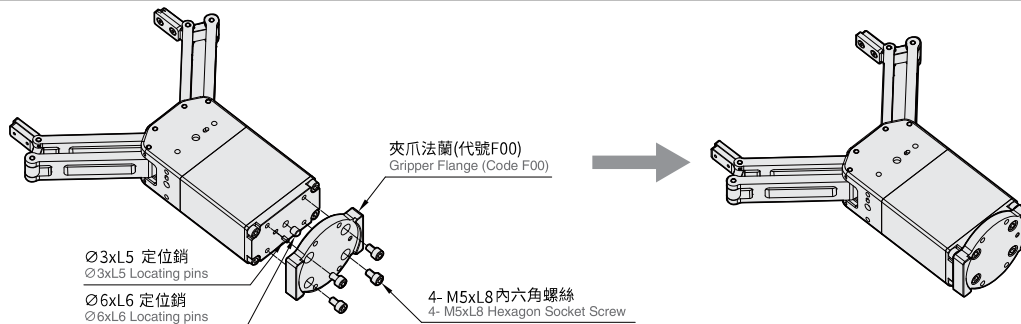


手臂轉接法蘭尺寸圖  
Robot Flange Dimensions

代號 Code	F01	F02
符合 Suitable	ISO 9409-1 50-4-M6	ISO 9409-1 31.5-4-M5
尺寸 Size	<p>夾爪法蘭接觸面 (Gripper flange connecting surface), 手臂接觸面 (Arm connecting surface), A-A View</p> <p>(單位 Unit: N.m)</p>	<p>夾爪法蘭接觸面 (Gripper flange connecting surface), 手臂接觸面 (Arm connecting surface), A-A View</p> <p>(單位 Unit: N.m)</p>
重量 Weight	82g	97g
代號 Code	F03	
符合 Suitable	ISO 9409-1 40-4-M6	
尺寸 Size	<p>夾爪法蘭接觸面 (Gripper flange connecting surface), 手臂接觸面 (Arm connecting surface), A-A View</p> <p>(單位 Unit: N.m)</p>	
重量 Weight	90g	



## 機械手臂轉接法蘭 組裝步驟 Optional Clamps

步驟一、組裝夾爪法蘭  
Step 1. Assemble the gripper flange

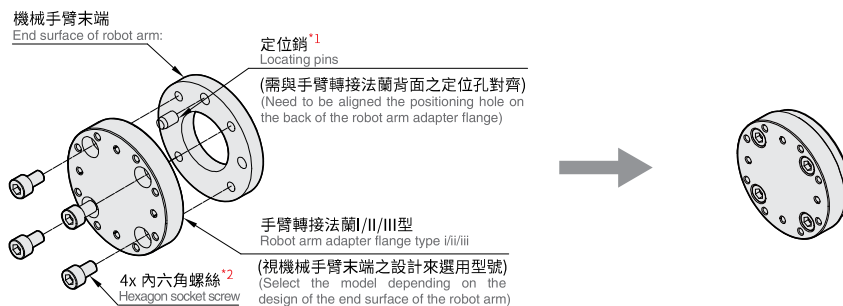
## 備註：Remark:

1. 有選配法蘭時，出貨時會隨附組裝步驟對應之螺絲包。  
1. When there is an optional flange, it will be shipped with a screw package corresponding to the assembly steps.
2. 步驟二之螺絲需客戶自行準備，若需協助提供則需事先告知業務。  
2. The screw in step 2 needs to be prepared by the customer. If need any assistance please inform to the sales person in advance.
3. 法蘭出廠時不預先組裝。若步驟一有預先組裝需求請事先告知業務。  
3. The flange is not pre-assembled when shipping from the factory. Please inform the salesperson in advance if it requires pre-assembly (step 1).

步驟二、組裝手臂轉接法蘭  
Step 2. Assemble the robot arm adapter flange

(此步驟之螺絲需自行準備)

(Screws &amp; positioning pins required for this step need to be prepared by yourself)

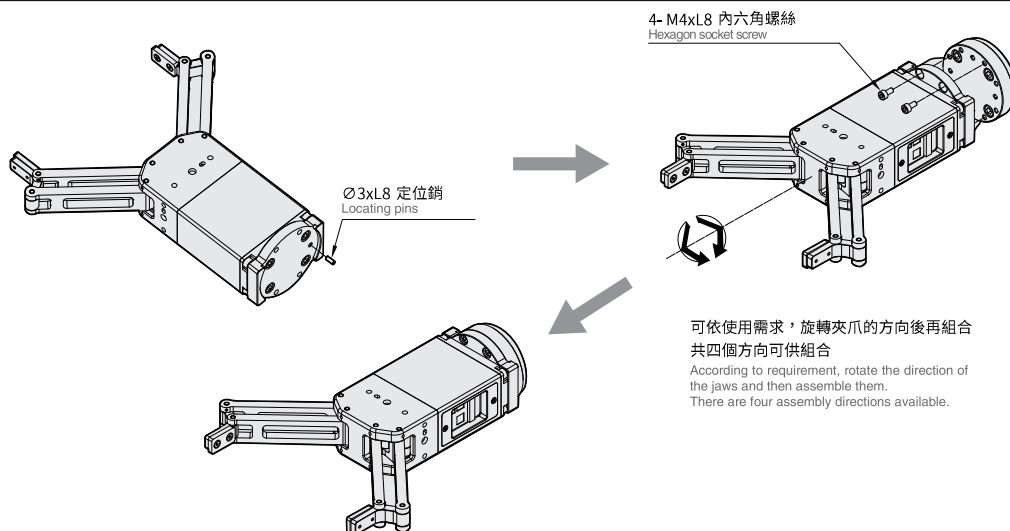


\*1：轉接法蘭 I/III 型，需使用 Ø 6 定位銷；轉接法蘭 II 型，需使用 Ø 5 定位銷。長度取決於手臂末端設計。

\*1: Type I/III of adapter flange needs to use 6 positioning pins; Type II of adapter flange needs to use 5 positioning pins. The length depends on the end surface of the robot arm design.

\*2：轉接法蘭 I/III 型，需使用 M6 螺絲；轉接法蘭 II 型，需使用 M5 螺絲。螺絲長度取決於手臂末端設計。

\*2: Type I/III of adapter flange needs to use M6 screws; type II of adapter flange needs to use M5 screws. The screw length depends on the end surface of the robot arm design.

步驟三、組合夾爪 & 手臂  
Step 3. Assembly of Gripper & Arm

## 選用注意事項：Selection Notice：

1. 使用時一支夾爪僅可搭配一組夾具。  
1. One gripper can only be used with one set of clamps.
2. 夾具一組 2 入，出貨時預先鎖附於夾爪上。  
2. A set of 2 clamps, which are pre-assembled on the gripper when shipped.
3. 若有購買多組、或出貨不需鎖附等需求，請事先與業務人員洽詢。  
3. If you need to purchase multiple sets, or do not need to pre-assemble while shipment, please contact the sales staff in advance.

# CHY2B-S150



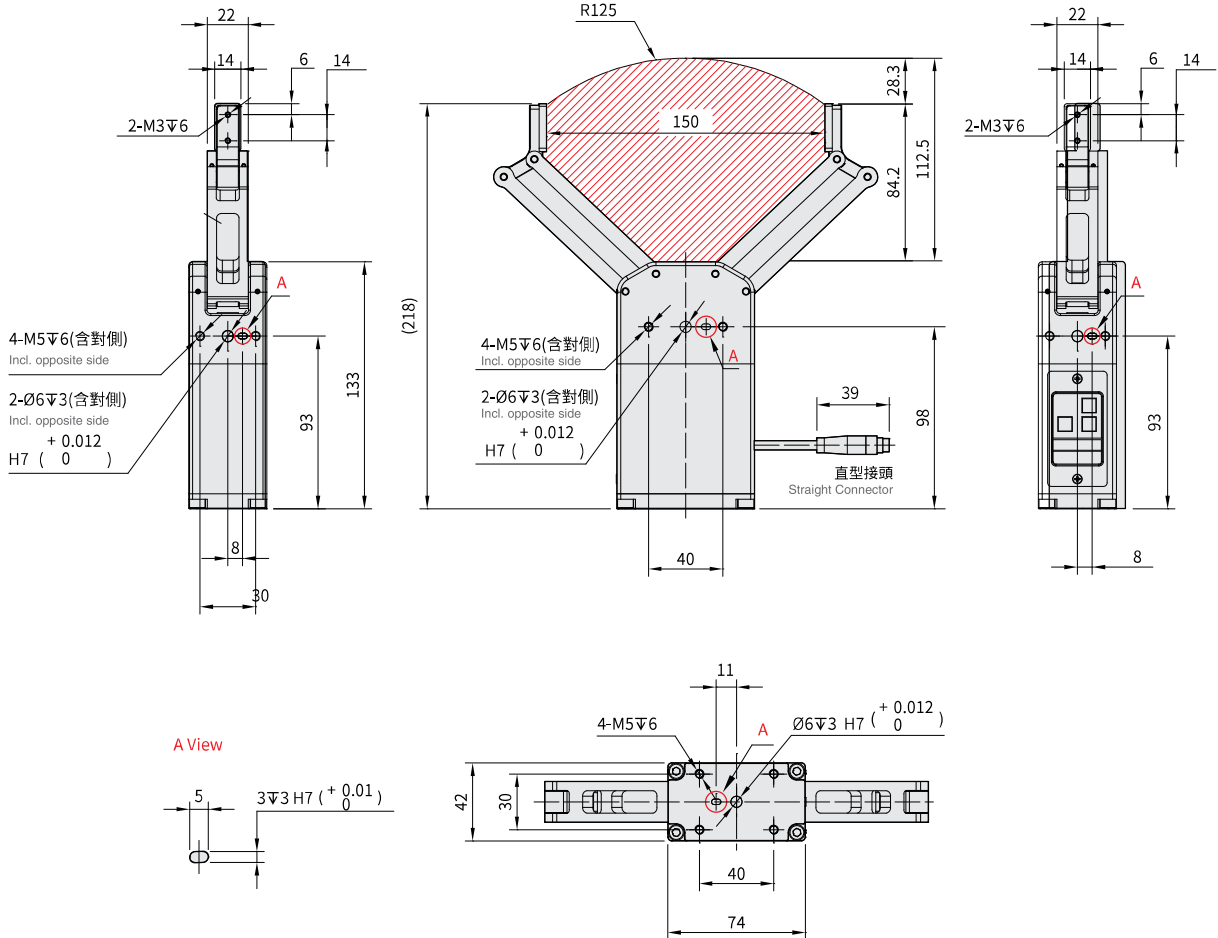
## 連桿式 Linkage Type

S150 直型接頭 Straight type Connector



• CAD圖面可至 [www.toyorobot.com](http://www.toyorobot.com) 下載 •  
Please do not download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit : mm



S150 L型 90° 接頭 90° L type Connector



• CAD圖面可至www.toyorobot.com下載 •  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm

