TOYO

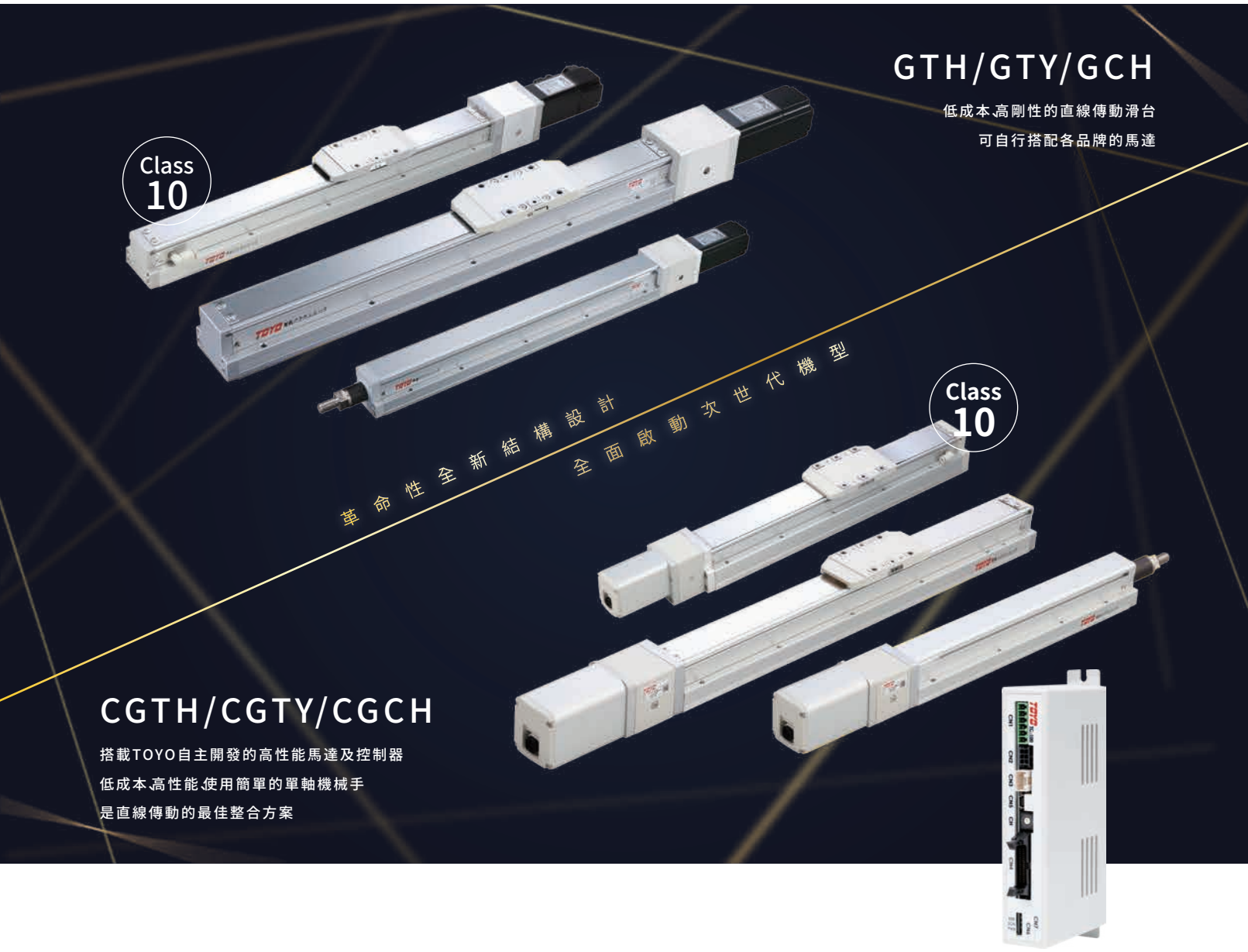
ISO 9001 ISO 14001 OHSAS 18001

EN CH

高剛性電動模組G系列 軌道內嵌型

TOYO 2020
G Series Catalog

GTH / GTY / GCH / XYGT / CGTH / CGTY / CGCH / Series



東佑達自動化科技股份有限公司
TOYO AUTOMATION CO., LTD

TOYO 全系列產品一覽

Products Line up of TOYO

標準品 10天 交貨

標準品10天交貨。
特注品交期詳情請洽各區域業務。

Taiwan：0800-800-893
China ：400-875-0009

滑台模組系列（不附馬達）

可自由搭配各品牌馬達

滑台模組-滑台式
GTH 螺桿驅動
GTH4
GTH5
GTH8
GTH12
GTH5S
GTH8S

滑台模組-推桿式
GTY 螺桿驅動
GTY4
GTY5
GTY8
GTY12

標準螺桿滑台
ETH 螺桿驅動
ETH13 ETH22
ETH14 ETH17M
ETH17 ETH22M

IP66防水型滑台
GPH 螺桿驅動
IP66
GPH5
GPH8
GPH12

新發售

標準皮帶滑台
ETB 皮帶驅動
ETB5 ETB14M
ETB6 ETB17M
ETB10 ETB22M

歐規皮帶滑台
M 皮帶驅動
MH65
MH80
MK65
MK85
MK110

無塵螺桿滑台
ECH 螺桿驅動
Class 10
ECH14 ECH17M
ECH17 ECH22M
ECH22

無塵皮帶滑台
ECB 皮帶驅動
Class 10
ECB5 ECB14
ECB6 ECB17
ECB10 ECB22

軌道內嵌式滑台模組
GCH 螺桿驅動
GCH4
GCH5
GCH8

Class 10

多軸模組系列（不附馬達）

2軸/3軸組合，大幅縮短設計組裝工時

螺桿型直交模組
XYTH 螺桿驅動

XYTH650-A
XYTH760-A
XYTH870-A
XYTH876-A

懸臂型 A-Type

XYTH760-G
XYTH870-G
XYTH876-G

龍門型 G-Type

XYTH650-P
XYTH760-P
XYTH880-P
XYTH886-P

極座標型 P-Type

XYTH760-F

十字型 F-Type

皮帶型直交模組
XYTB 皮帶驅動

XYTB650-A
XYTB760-A
XYTB870-A
XYTB876-A

懸臂型 A-Type

XYTB870-G
XYTB876-G

龍門型 G-Type

軌道內嵌螺桿式
直交機械手
XYGT 螺桿驅動

XYGT210
XYGT320
XYGT430
XYGT440
XYGT321
XYGT432

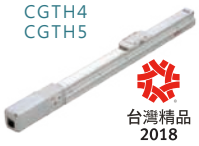
懸臂型 A-Type

小型電動缸系列 Servo Cylinder

替代氣壓缸最好的選擇

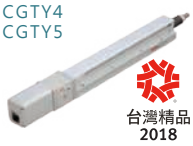
閉迴路步進馬達

小型電動缸-滑台式
CGTH
CGTH4
CGTH5



台灣精品 2018

小型電動缸-推桿式
CGTY
CGTY4
CGTY5



台灣精品 2018

小型電動缸-滑台式
CGCH
CGCH4
CGCH5

Class 10

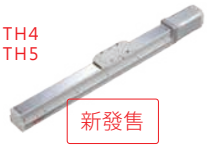
微型電動缸
CS
CSH20
CSF20
CSS20

電動夾爪
CH
CHZ20 CHS2-S20
CHZ25 CHS2-S40
CHG2 CHS2-S68
CHY2-S80 CHB6-S11
CHY2-S150 CHB6-S14

新發售

中空伺服馬達

小型電動缸-滑台式
DGTH
DGTH4
DGTH5



新發售

小型電動缸-推桿式
DGTY
DGTY4
DGTY5

新發售

中空馬達微型電動缸
DM
DMG25
DMG40
DMH25
DMH40

新發售

中空旋轉平台
DNT
DNT60

新發售

東佑達 搜尋
www.toyorobot.com

會員資料免費登錄

2D/3D圖檔下載

即時選型軟體

Taiwan：0800-800-893
China ：400-875-0009

單軸機械手系列 Single Robot

三種規格，高可靠度、高信賴度

中空伺服馬達

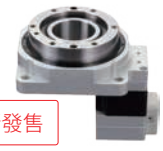
單軸機械手-滑台式
SGTH
螺桿驅動
SGTH4
SGTH5
SGTH8

第二代

單軸機械手-推桿式
SGTY
螺桿驅動
SGTY4
SGTY5
SGTY8

第二代

中空旋轉平台
SNT
SNT85
SNT130
SNT200



新發售

線性馬達機械手系列 Linear Motor Robot

高速、高加減速、雙載台

線性馬達

有鐵芯式平板型線馬
LTF
平板 一般型式
LTF15
LTF20
LTF30
LTF45
LTF75

無塵有鐵芯式平板型線馬
LCF
平板 無塵型式
LCF15
LCF20
LCF30
LCF45
LCF75
Class 10

有鐵芯式平板型線馬
LAF/LSF
平板 鋁 平板 鐵
LAF7/LSF7
LAF15/LSF15
LAF20/LSF20
LAF30/LSF30

無鐵芯式U型線馬
LAU
U型
LAU3
LAU5

軸棒式線馬
LMR
軸棒
LMR20
LMR25
LMR32

軌道內嵌型線馬
LGF
一般
LGF15

新發售

直角座標系機械手系列

龍門、懸臂、極座標、十字型等多種組合

螺桿型
桌上型機械手
JTH

皮帶型
桌上型機械手
JTB
JTB-200
JTB-300
JTB-400
JTB-500
JTB-500D

第二代

螺桿型
高剛性機械手
DTH/DTHS
伺服馬達 步進馬達
DTH650-A DTH876-A
DTH760-A
DTH870-A

皮帶型
高剛性機械手
DTB/DTBS
伺服馬達 步進馬達

機械手專用控制器系列(1～4軸)

高性能控制系統，支援單軸多軸機械手

單軸用
閉迴路步進馬達控制器
TC
步進馬達
TC100

台灣精品 2018

TC100

單軸用
伺服馬達控制器
XC/SC
伺服馬達
XC100
SC100

新發售

XC100 SC100

4軸用
控制器
TSC
TSC400
TSC400S

TSC400 伺服馬達

TSC400S 步進馬達

無人搬運車系列 AGVS

可結合MES，發揮工業4.0綜效

基本型
UWR20B

標準型
UWR30B

基本型
SWR

標準型
AWRII

伺服驅控器
ABH3

驅動套件

基本型搬運車
Pickup-85D

標準型搬運車
Pickup-E64

舉升型搬運車
Carry-K65

成車

認識G系列
About G Series

G系列規格一覽 Line up of G Series

G系列規格一覽 Gseries all Spec		滑台模組系列 Electric Actuator		小型電動缸系列 Servo Cylinder			單軸機械手系列 Single Robot
軌道內嵌型 Built-in linear motion guide	滑台式 Slider Type	一般 General	GTH	一般 General	CGTH	DGTH	Coming Soon SGTH
		無塵 Clean room	Class 10 GCH	無塵 Clean room	Class 10 CGCH		
	推桿式 Rod Type	GTY		CGTY		DGTY	Coming Soon SGTY
馬達 Motor		不附馬達 Without Motor		閉迴路步進馬達 Stepping Motor (Step)		伺服馬達 Servo Motor (Servo)	伺服馬達 Servo Motor (Servo)
控制器 Controller		不附控制器 Without Controller		TC100控制器 TC100 Controller (TC)		XC100控制器 XC100 Controller (XC)	SC100控制器 SC100 Controller (SC)

G系列所有規格照片一覽 All G Series Photos

滑台模組系列 Electic Actuator

GTH Series

GTY Series

GCH Series

小型電動缸系列 Servo Cylinder CG：TC Step / DG：XC Servo

CGTH Series

CGTY Series

CGCH Series

DGTH Series

DGTY Series

單軸機械手系列 Single Robot SC Servo

SGTH Series

SGTY Series

本型錄所有圖示之意義說明

滑台式 Slider Type | 推桿式 Rod Type | 不附馬達 Without Motor | 不附控制器 Without Controller | 閉迴路步進馬達 Stepping Motor | 伺服馬達 Servo Motor | TC100控制器 TC100 Controller | XC100控制器 XC100 Controller | SC100控制器 SC100 Controller

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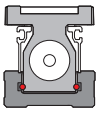
G系列特色說明 Main Features

特色說明



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滑台模組系列 Electric Actuator

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GTH8 043
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GTH8S 059

GTY Series

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GTY4 071
GTY5 079
GTY8 083
GTY12 091

Class 10

GCH Series

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多軸模組系列 Multi Axis

XYGT Series

XYGT 系列規格索引 XYGT Spec index 124
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XYGT430 147

XYGT440 157
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XYGT432 177

小型電動缸系列 Servo Cylinder

CGTH Series

CGTH 系列規格索引 CGTH Spec index 188
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Class 10

CGCH Series

CGCH 系列規格索引 CGCH Spec index 212
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CGCH5 219

CGTY Series

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TC100

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關於東佑達

About TOYO

以 <誠信 技術 服務>為根基
創造社會與產業的最大價值
並以超越客戶的需求為目標來努力

Based on the foundation of (Integrity, Technology and Service), TOYO create the maximum value for the society and industry and strive for the goal of exceeding the need of the customer.

自西元2000年東佑達成立以來，一直在各產業支持下，成為台灣及中國兩岸工業機械手閃耀第一品牌。東佑達公司累積了數十年在機械手製造的經驗，近期結合控制器與傳動模組發展出高性價比的工業用單軸/直交機械手及水平多關節機械手，讓產品更達到一個新的水平。無論您在哪個產業面臨哪種生產製造難題，東佑達高性價比的工業化機械手隨時滿足您的需求。

Since TOYO group has been set up at 2000 in Taiwan, with the support by partners in different business fields, TOYO has become the premium and preferred shinning brand in industrial robot market of Taiwan and China. Recently, TOYO create a innovative situation by the combination of controller and transmission module to develop high CP value industrial single/multi axis and SCARA robot. No matter which industry you are in or what kind of difficulty you are facing, TOYO's high CP value industrial robot will fulfill your demand.

直線傳動的六大產品

6 Major Products of Linear Drive

滑台模組
Electric Actuator

電動缸
Servo Cylinder

電動夾爪
Electric Gripper

單軸機械手
Single Robots

桌上型機械手
Desktop Robots

無人搬運車
Automated Guided Vehicle

- 高性價比 High price-performance ratio
- 彈性的客製化 Flexible customization
- 短交期 Short delivery time
- 穩定的品質 Stable quality
- 豐富的產品線 Versatile product line

服務系統

Srevice System

樣品機免費借出
Free demo machine

備有標準品的樣品測試機，可免費借出給客戶使用，請洽各地區業務及代理店。

TOYO prepare standard unit for customer’s demonstration and test. They are free rental for our customers. (15 days advanced notice / The longest rental period 30 days.) Please contact our sales and local agents.

24小時線上服務
24 hours online service

全年無休的 24 小時的 On Call Service，有任何產品問題請隨時來電。

臺灣 0800-800-893
中國 400-875-0009

0800-800893 (Taiwan , toll-free)400-875-0009 (China , toll-free)24hr on call service, please contact us for any questions or enquiries.

技術分享
Technical conference

我們定期舉辦產品說明會 / 技術研討會，將我們擁有的先端技術與客戶做交流與分享。

New product seminars and technical conferences are hold regularly to share our latest technology with free demo machine customers.

展示會
Exhibitions

為了讓客戶更了解產品，舉辦相關展示會，相關日程請洽本公司。

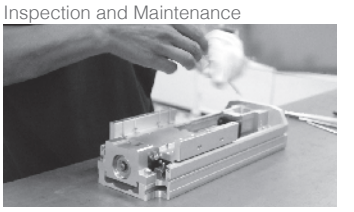
We participate in exhibitions frequently. Please contact us for more information.

巡迴展示車
Puncar Action

為了讓全台灣各地的客戶都可以親身體驗及了解的展示實品樣貌，成立了全台巡迴胖卡展示車，相關辦法請洽本公司。

For the purpose of leting the clients all over the island to have a chance to experience and be more familiar with the demonstrated product personally, we therefore build a mobile puncar cruising around the Taiwan island enable the clients to test it. For more details, please do not hesitate to contact us.

檢查、維修
Inspection and Maintenance



若您購買的產品發生故障或異常，本公司可為您檢查、修理。即使過了保固期，若產品經由修理仍維持、回復使用功能時，可以依客戶需求進行有償修理。

If the product has problem or out of order, you can send it back for inspection and maintenance. If the product is out of warranty, we still can repair it for certain charge.

品保認證 Quality Assurance Certification

ISO 9001 ISO 14001 OHSAS 18001

通過ISO9001、ISO14001、OHSAS18001國際認證
Passed ISO9001, ISO14001 and OHSAS18001 international certification.

專利技術 Patented Technologies

#M398055 #M429543 #M440838 #M523013 #M523014 #M523015

#M523016 #M523017 #M534739 #M523019 #M523018 #I530627

多項經濟部智慧財產局專利認證申請通過
Patent applications certified by the Intellectual Property Office of Ministry of Economic Affairs.

得獎肯定 Awards

榮獲第9屆新創事業獎
Got 9th Taiwan Business Startup Award

台灣精品 2018

CGTH/CGTY系列產品
榮獲 2018 台灣精品獎
CGTH/CGTY Sreies
Got 2018 Taiwan Excellence Awards

榮獲第19屆小巨人獎
Got 19th Taiwan Business Rising Star Award

滑台模組規格索引

Spec Index of Electric Actuator

GTH 軌道內嵌式滑台模組-滑台式

GTH built-in linear motion guide Electric Actuator-Slider Type

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec 外徑 Outer Diameter(mm)	螺桿規格(C7級) Ball Screw Spec 導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	最大可搬重量 Maximum Payload(kg) 垂直使用 Vertical	最高速度*1 Maximum Speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	GTH4	50W	44	±0.005	10	2	25	8	100
							6	20	5	300
							12	12	2	600
			100W				2	25	8	100
							6	20	8	300
							12	12	3.5	600
		GTH5	100W	54	±0.005	12	2	30	10	100
							5	30	10	250
							10	15	5	500
							20	10	2.5	1000
		GTH8	200W	82	±0.005	16	5	50	15	250
			400W				10	30	8	500
							20	18	3	1000
		GTH12	400W	120	±0.005	16	5	110	33	250
							10	88	22	500
							20	40	10	1000
							32	30	8	1600

*1:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

反向同動雙滑座系列 Dual Carriage Synchronous Movement In Reverse Direction

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec 外徑 Outer Diameter(mm)	螺桿規格(C7級) Ball Screw Spec 導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	最大可搬重量 Maximum Payload(kg) 垂直使用 Vertical	最高速度*1 Maximum Speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	GTH5S	100W	54	±0.005	12	2	30	10	100
		GTH8S	200W	82	±0.005	16	5	50	15	250
			400W							

*1:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

GTY 軌道內嵌式滑台模組-推桿式

GTY built-in linear motion guide Electric Actuator-Rod Type

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec 外徑 Outer Diameter(mm)	螺桿規格(C7級) Ball Screw Spec 導程 Lead(mm)	最大可搬重量*1 Maximum Payload(kg) 水平使用 Horizontal	最大可搬重量*1 Maximum Payload(kg) 垂直使用 Vertical	最高速度*2 Maximum Speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	GTY4	50W	44	±0.01	10	2	25	8	100
							6	20	5	300
			100W				12	12	2	600
		GTY5	100W	54	±0.01	12	2	30	10	100
							5	30	10	250
							10	15	5	500
							20	10	2.5	1000
		GTY8	200W	82	±0.01	16	5	50	15	250
			400W				10	30	8	500
							20	18	3	1000
		GTY12	400W	120	±0.01	16	5	110	33	250
							10	88	22	500
							20	40	10	1000
							32	30	8	1600

*1:此荷重條件外部需搭配輔助滑軌以承受徑向負載。
When the stroke is over 300mm, the run-out of the ballscrew will occur.
*2:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

標準行程及最高使用速度*2 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																												頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	
						100						90	80	70	60	50												031
						300						270	240	210	180	150												
						600						540	480	420	360	300												
						100						90	80	70	60	50												
						300						270	240	210	180	150												
						600						540	480	420	360	300												
							100						90	80	70	60												039
							250						270	200	175	150												
							500						450	400	350	300												
							1000						900	800	700	600												
								250								225	200	175	150	125	100	75						043
								500								450	400	350	300	250	200	150						
								1000								900	800	700	600	500	400	300						
									250								225	200	175	167	158	150	133	125	117			051
									500								450	400	350	333	317	300	267	250	233			
									1000								900	800	700	667	633	600	533	500	467			
									1600								1440	1280	1120	1067	1013	900	853	800	747			

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

標準行程及最高使用速度*2 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																												頁數 Page
行程 Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	
							100																					055
										250																		059

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

標準行程及最高使用速度*3 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																												頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1200	1300	1400	1500	1600	
						100																						071
						300																						
						600																						
						100																						079
						250																						
						500																						
						1000																						
						250										225												083
						500										450												
						1000										900												
						250																						091
						500																						
						1000																						
						1600																						

*3:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

滑台模組規格索引

Spec Index of Electric Actuator

GCH 軌道內嵌式滑台模組-無塵室專用

GCH built-in linear motion guide Electric Actuator-Clean Room Type

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec 外徑 Outer Diameter(mm)	螺桿規格(C7級) Ball Screw Spec 導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	最大可搬重量 Maximum Payload(kg) 垂直使用 Vertical	最高速度*1 Maximum Speed (mm/s)
無塵環境 Clean room	滾珠螺桿 Ball screw	GCH4	50W	44	±0.005	10	2	25	8	100
							6	20	5	300
							12	12	2	600
			100W				2	25	8	100
							6	20	8	300
							12	12	3.5	600
		GCH5	100W	54	±0.005	12	2	30	10	100
							5	30	10	250
							10	15	5	500
							20	10	2.5	1000
		GCH8	200W	82	±0.005	16	5	50	15	250
							10	30	8	500
			400W				20	18	3	1000
		GCH12	400W	120	±0.005	16	5	110	33	250
							10	88	22	500
							20	40	10	1000
							32	30	8	1600

*1:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

多軸模組規格索引

Spec Index of Multi Axis

XYGT 軌道內嵌式直交機械手-螺桿式

XYGT built-in linear motion guide Multi Axis -Ball Screw Type

使用環境 Use Where	傳動方式 Driven Mode	仕樣 Specification	連結型式 Combination	連結軸數 Axis Numbers	各軸導程 Lead X軸 X axis	各軸導程 Lead Y軸 Y axis	各軸導程 Lead Z軸 Z axis	各軸最高速度 Maximum Speed(mm/s) X軸 X axis	各軸最高速度 Maximum Speed(mm/s) Y軸 Y axis	各軸最高速度 Maximum Speed(mm/s) Z軸 Z axis	各軸行程範圍 Stroke(mm) X軸 X axis	各軸行程範圍 Stroke(mm) Y軸 Y axis	各軸行程範圍 Stroke(mm) Z軸 Z axis
一般環境 Standard	滾珠螺桿 Ball screw	XYGT210-A	懸臂型 (A) Arm Type	2軸 2-axis	L20	L2	-	1000	100	-	50~800	100~300	-
		XYGT320-A			L20	L10	-	1000	500	-	50~1100	100~500	-
		XYGT430-A			L20	L10	-	1000	500	-	50~1250	100~600	-
					L20	L20	-	1000	1000	-	50~1250	100~600	-
		XYGT440-A			L20	L20	-	1000	1000	-	50~1250	100~500	-
					L10	L10	-	500	500	-	50~1250	100~600	-
		XYGT321-A		3軸 3-axis	L20	L10	L2	1000	500	100	50~1100	100~500	50~100
		XYGT432-A			L20	L10	L5	1000	500	250	50~1250	100~550	50~350

標準行程及最高使用速度*2 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																												頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	
				100								90	80	70	60	50												099
				300								270	240	210	180	150												
				600								540	480	420	360	300												
				100								90	80	70	60	50												
				300								270	240	210	180	150												
				600								540	480	420	360	300												
					100								90	80	70	60												107
					250								270	200	175	150												
					500								450	400	350	300												
					1000								900	800	700	600												
						250										225	200	175	150	125	100	75						111
						500										450	400	350	300	250	200	150						
						1000										900	800	700	600	500	400	300						
							250										225	200	175	167	158	150	133	125	117			119
							500										450	400	350	333	317	300	267	250	233			
							1000										900	800	700	667	633	600	533	500	467			
							1600										1440	1280	1120	1067	1013	900	853	800	747			

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

Y軸行程及負荷軸 (Y軸或Z軸) 最大可搬重量 Y-axis Stroke (mm) and payload axis' (Y-axis or Z-axis) maximum payload (kg) 代表重量 Payload												頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	
	-	4.5	3.9	3.6	3	2.8	-	-	-	-	-	-	127
	-	8.12	7.74	7.36	6.98	6.6	6.22	5.84	5.46	5	-	-	137
	-	24	24	24	24	21	18	13	10	7	4	2	147
	-	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	7	4	2	
	-	26	26	24	19	15	11	7	4	2	-	-	157
	-	57	56	39	31	26	20	16	12	9	5	3	
	-	3.3	2.6	2.4	1.7	1.5	0.8	0.6	0.5	0.5	-	-	167
	-	10	10	10	10	10	10	10	7.77	4.77	1.77	-	177

小型電動缸規格索引

Spec Index of Servo Cylinder

CGTH 軌道內嵌式小型電動缸-滑台式

CGTH built-in linear motion guide Servo Cylinder-Slider Type

使用環境 Environment	傳動方式 Drive mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width of profile (mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball screw spec (Accuracy C7) 外徑 Outer dia.(mm)	導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	垂直使用 Vertical	最高速度*1 Maximum speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	CGTH4	35□	44	±0.01	10	2	25	8	110
							6	20	8	331
							12	12	3.5	661
		CGTH5	42□	54	±0.01	12	2	30	10	109
							5	30	10	273
							10	15	5	538
							20	10	2.5	1102

*1:最高速度的使用條件有限制，請參閱各仕樣內頁的速度-荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

CGTY 軌道內嵌式小型電動缸-推桿式

CGTY built-in linear motion guide Servo Cylinder-Rod Type

使用環境 Environment	傳動方式 Drive mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width of profile (mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball screw spec (Accuracy C7) 外徑 Outer dia.(mm)	導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	垂直使用 Vertical	最高速度*1 Maximum speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	CGTY4	35□	44	±0.01	10	2	25	8	110
							6	20	8	331
							12	12	3.5	661
		CGTY5	42□	54	±0.01	12	2	30	10	109
							5	30	10	273
							10	15	5	538
							20	10	2.5	1102

*1:最高速度的使用條件有限制，請參閱各仕樣內頁的速度-荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

標準行程及最高使用速度*2 Stroke(mm) & Maximum speed(mm/s) 代表速度 Speed																							頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
110												100	90	80	70	60							191
331												300	270	240	210	180							
661												600	540	480	420	360							
109													90	80	70	60							195
273													225	200	175	150							
538													450	400	350	300							
1102													900	800	700	600							

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

The number written in the column means the highest safe speed within stroke.
If the speed is over the value shown in the chart , the vibration will be caused on the actuator.

標準行程及最高使用速度*2 Stroke(mm) & Maximum speed(mm/s) 代表速度 Speed																						頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	
110																						203
331																						
661																						
109																						207
273																						
538																						
1102																						

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

The number written in the column means the highest safe speed within stroke.
If the speed is over the value shown in the chart , the vibration will be caused on the actuator.

小型電動缸規格索引

Spec Index of Servo Cylinder

CGCH 軌道內嵌式小型電動缸-無塵室專用

CGCH built-in linear motion guide Servo Cylinder-Clean Room Type

使用環境 Environment	傳動方式 Drive mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width of profile (mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball screw spec (Accuracy C7)		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum speed (mm/s)
						外徑 Outer dia.(mm)	導程 Lead(mm)	水平使用 Horizontal	垂直使用 Vertical	
無塵環境 Clean room	滾珠螺桿 Ball screw	CGCH4	35□	44	±0.01	10	2	25	8	110
							6	20	8	331
							12	12	3.5	661
		CGCH5	42□	54	±0.01	12	2	30	10	109
							5	30	10	273
							10	15	5	538
							20	10	2.5	1102

*1:最高速度的使用條件有限制，請參閱各仕樣內頁的速度-荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

	標準行程及最高使用速度*2 Stroke(mm) & Maximum speed(mm/s) 代表速度 Speed																							頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		
	110											100	90	80	70	60								215
	331											300	270	240	210	180								
	661											600	540	480	420	360								
	109												90	80	70	60								219
	273												225	200	175	150								
	538												450	400	350	300								
	1102												900	800	700	600								

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

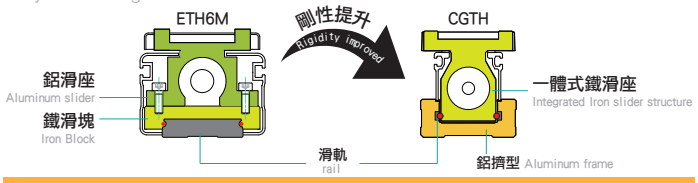
The number written in the column means the highest safe speed within stroke.
If the speed is over the value shown in the chart , the vibration will be caused on the actuator.

CGTH內部結構圖說明

CGTH Inner Structure

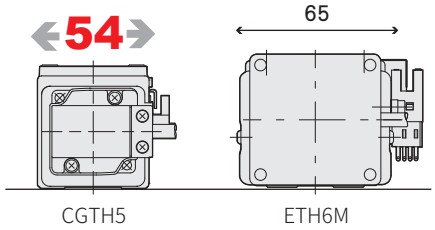
滑座剛性強化 Carriage rigidity strengthened

本體與滑座一體成型鋼材，改善原始鋁滑座剛性較差問題。
Actuator body and carriage are made from steel that can improve the rigidness of body and carriage.



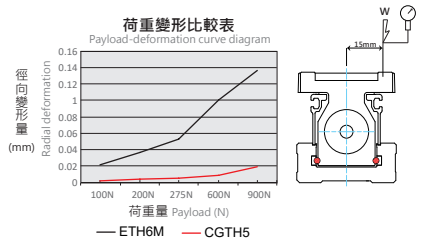
體積更小 Smaller size

寬度縮小，讓設備安裝所需空間更小。
Reduced width that can fitting in the compact environments.



*相同條件荷重30kg與ETH系列比較。
Compare with ETH series at same condition (30 kg payload).

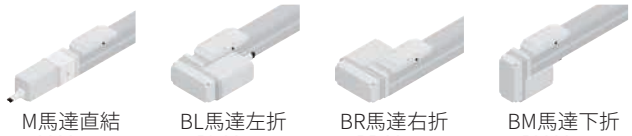
動態力矩大幅提升 Dynamic torque highly Improved



台灣精品 2018

馬達安裝位置 Motor install options

多方向馬達安裝位置可供選擇，讓機台設計更有彈性。
Multiple motor installation positions provides the flexibility for machine design.



M馬達直結	BL馬達左折	BR馬達右折	BM馬達下折
M Motor Hidden In	BL Motor Left Side	BR Motor Right Side	BM Motor Bottom Side

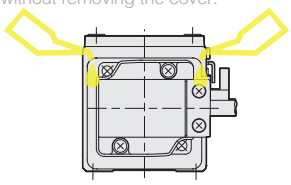
馬達、編碼器一體式接頭設計 Motor cable and encoder cable are integrated to one connector.

優勢：
Advantage:

1. 無中繼電纜省空間
   No extra cables and space saving.
2. 一體化設計更美觀
   Integrated compact design and better outlooking.

保養簡單 Easy to maintain

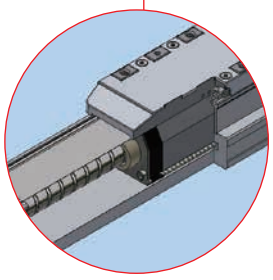
全系列兩側皆外拉注油嘴可直接外部注油，不須拆蓋。
External greasing design, easy maintenance without removing the cover.



不易發塵 Reduce dust

※另可特注無塵室使用
Please contact us for clean room type.

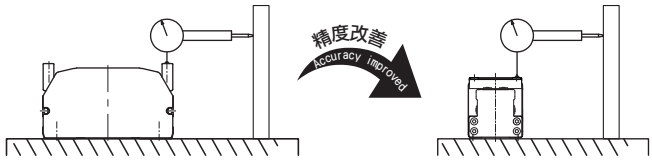
特殊鋼帶結構設計，可減少發塵；可用於潔淨室環境。
Special steel strip cover sealing design can prevent dirt and foreign objects from penetrating inside. Can be used in Clean Room environment.



內嵌型直線滾珠滑軌
Built-in liner circular guideway

本體強度增加，順暢度更好 Rigidity higher, better fluency for mainframe

因為採用鋁本體結構，本體強度大幅增加。(與 ETH5M/6M 對比) 且鋼材軌道坎入鋁本體後再研磨處理，因此走行的等高度及直線度精度也提升到 ±0.02mm 以下。(與 ETH10/12 對比)
Adopt aluminum material for mainframe which makes body strengthened (Compared to ETH5M/6M).Combined steel guide with aluminum mainframe and grinded which make linear accuracy increase to ±0.02mm.(Compared to ETH10/12)



ETH10直線度±0.05mm
Straightness of ETH10 is ±0.05mm.
*行走1000mm時。
*Measure length is 1000mm.

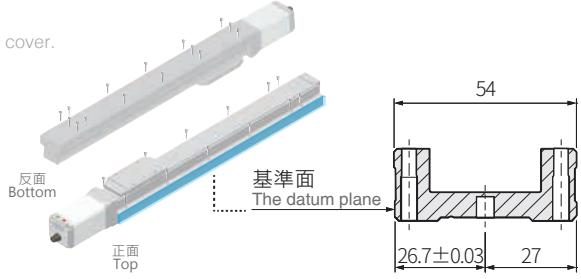
CGTH5直線度±0.02mm
Straightness of CGTH5 is ±0.02mm.
*行走800mm時。
*Measure length is 800mm.

組裝省時、方便 Easy assemble

①不需拆卸鋼帶，即可由上往下固定或由下往上固定。
Can be fixed from the top and bottom without removing the cover.

②本體側面增加安裝基準面承靠。
Mounting datum plane designed on the side of the body.

③本體底部有定位PIN孔。
Built in Pin holes.



CGTY內部結構圖說明

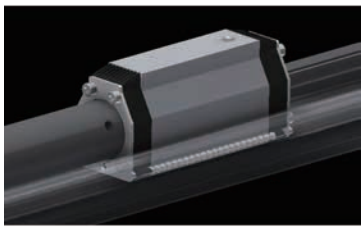
CGTY Inner Structure

剛性強化 Rigidness improved

本體與滑座一體成型鋼材，改善原始鋁滑座剛性較差問題。
Actuator body and carriage are made from steel that can improve the rigidness of body and carriage.

內藏循環型導軌 Built-in circular guideway

內藏滾珠循環型導軌，大幅增加徑向荷重與力矩。可抑制停止時的振動，行程最長可做到 800。無負荷時的推桿防止迴轉精度可到達「0 度」，品質大幅向上提升。
With built-in circular guideway, it can much improve torque and radial load. It can improve vibration while actuator stop working, and the maximum of stroke can be 800mm.Rod prevent-reverse accuracy can be 0 degree and highly improve the quality of product.

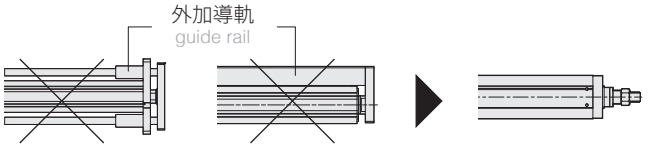


防止迴轉精度「0度」
Rod prevent-reverse accuracy can be 0 degree.

台灣精品 2018

體積更小 Smaller

不需要加裝外導軌。縮減設置體積。改善過去規格內部無直線導軌樣式，為了增加剛性而需外加導軌，較不方便。
No need to add additional ancillary guide , decreasing space for location.



過去結構需外裝導軌
Additional guide rail structure is needed for anti-rotating accuracy.

軸心防止迴轉精度「±0.05度」
Rod prevent-reverse accuracy can be ±0.05°.

CGTY5

軸心防止迴轉精度「0度」
Rod prevent-reverse accuracy can be 0°.

馬達、編碼器一體式接頭設計
Motor cable and encoder cable are integrated to one connector.

優勢：
Advantage:

1. 無中繼電纜省空間
   No extra cables and space saving.
2. 一體化設計更美觀
   Integrated compact design and better outlooking.

馬達安裝位置 Motor install options

搭載閉迴路步進馬達，多方向馬達安裝位置可供選擇，讓機台設計更有彈性。
With closed loop stepping motor, multiple motor installation positions provides the flexibility for machine design.

M馬達直結
M Motor
Hidden In

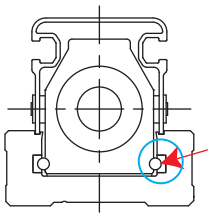
BL馬達左折
BL Motor
Left Side

BR馬達右折
BR Motor
Right Side

BM馬達下折
BM Motor
Bottom Side

直線度 Flat straightness

軌道嵌入於本體後研磨，因此直線度可在±0.02mm內。
Built in linear rail design, Straightness and flathess are highly improved to ±0.02mm.

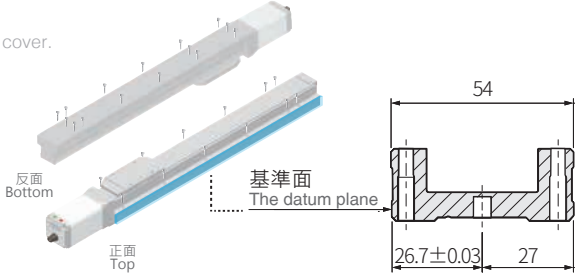


組裝省時、方便 Easy assemble

①不需拆卸鋼帶，即可由上往下固定或由下往上固定。
Can be fixed from the top and bottom without removing the cover.

②本體側面增加安裝基準面承靠。
Mounting datum plane designed on the side of the body.

③本體底部有定位PIN孔。
Built in Pin holes.



滑台模組系列訂購型號說明

Ordering Code of Electric Actuator

GTH & GTY& GCH

GTH4 - L2 - 100 - BC -

型號 Model

滑台式 Slider Type
GTH4
GTH5
GTH8
GTH12
GTH5S
GTH8S
推桿式 Rod Type
GTY4
GTY5
GTY8
GTY12
無塵室 Clean room
GCH4
GCH5
GCH8
GCH12

導程 Lead

L2	2mm
L5	5mm
L6	6mm
L10	10mm
L12	12mm
L20	20mm
L32	32mm

行程 Stroke

滑台型號 Slider Model	標準行程 Standard Stroke
GTH4	50~800mm
GTH5	50~800mm
GTH8	50~1100mm
GTH12	50~1250mm
GTH5S	25~325mm
GTH8S	25~450mm
GTY4	50~500mm
GTY5	50~600mm
GTY8	50~800mm
GTY12	50~800mm
GCH4	50~800mm
GCH5	50~800mm
GCH8	50~1100mm
GCH12	50~1250mm

馬達位置 Motor position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

GTH 軌道內嵌式滑台模組-滑台式 GTH built-in linear motion guide Electric Actuator-Slider Type


▲ GTH4


▲ GTH5


▲ GTH8


▲ GTH12


▲ GTH5S


▲ GTH8S

M05B	-	C	4	-	0001
馬達廠牌、功率 Motor Brand、Power Output		原點感應器 Home Sensor	端點極限感應器 Limit Sensor		特注碼 Customization coding

M	三菱 Mitsubishi	05	50W	B
P	松下 Panasonic	10	100W	-
Y	安川 Yaskawa	20	200W	-
T	台達 Delta	40	400W	-

*若無煞車則不表示。
If No Brake,No Description.

外掛型 Out Side	
C	馬達側 Motor Side
D	反馬達側 OppoSite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇 GTH5S,GTH8S 行程 25/50/75 其餘規格的行程 50 時，有以下限制：
When choosing GTH5S or GTH8S (stroke: 25/50/75); other specifications (stroke: 50), there are retrictions as following.
1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to instal

外掛型 Out Side	
3	1只 1 PC
4	2只 2 PC
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

GTY 軌道內嵌式滑台模組-推桿式 GTY built-in linear motion guide Electric Actuator-Rod Type


▲ GTY4


▲ GTY5


▲ GTY8


▲ GTY12

GCH 軌道內嵌式滑台模組-無塵室專用 GCH built-in linear motion guide Electric Actuator-Clean room Type

▲ GCH4

▲ GCH5

▲ GCH8

▲ GCH12

多軸模組系列訂購型號說明

Ordering Code of Multi Axis

XYGT

XYGT210 - A - 1 - 300 -

型號 Model

XYGT210-A
XYGT320-A
XYGT430-A
XYGT440-A
XYGT321-A
XYGT432-A

連結方式 Combination

A	懸臂型 Arm Type

組合方向 Combination Direction

1
2
3
4

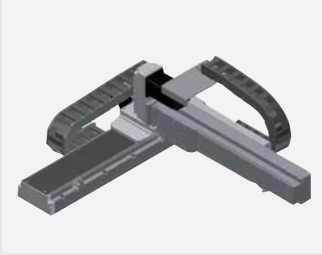
X軸行程 X Stroke

滑台型號 Slider Model	標準行程 Standard Stroke
XYGT210-A	50~800 mm
XYGT320-A	50~1100 mm
XYGT430-A	50~1250 mm
XYGT440-A	50~1250 mm
XYGT321-A	50~1100 mm
XYGT432-A	50~1250 mm

XYGT 軌道內嵌式直交機械手-螺桿式 XYGT built-in linear motion guide Multi Axis -Ball Screw Type

▲ XYGT210

▲ XYGT320



▲ XYGT430

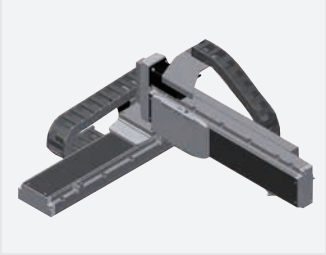
300	-	100	-	M	-	C	-	0001
Y軸行程 Y Stroke		Z軸行程 Z Stroke		馬達廠牌 Motor Brand		出貨方式 Delivery Methode		特注碼 Customization coding

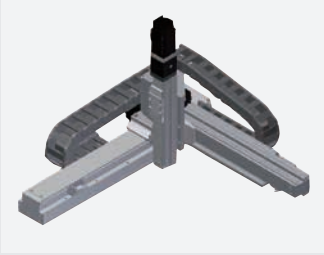
滑台型號 Slider Model	標準行程 Standard Stroke
XYGT210-A	100~300 mm
XYGT320-A	100~500 mm
XYGT430-A	100~600 mm
XYGT440-A	100~500 mm
	100~600 mm
XYGT321-A	100~500 mm
XYGT432-A	100~550 mm

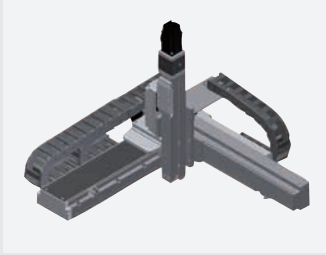
滑台型號 Slider Model	標準行程 Standard Stroke
XYGT321-A	50~100 mm
XYGT432-A	50~350 mm

M	三菱 Mitsubishi
P	國際 Panasonic
Y	安川 Yaskawa
T	台達 Delta

C	連結出貨 By Set
K	單軸出貨 By Kit


▲ XYGT440


▲ XYGT321


▲ XYGT432

小型電動缸系列訂購型號說明

Ordering Code of Servo Cylinder

CGTH & CGTY & GCGH

CGTH4 - L1 - 100 - M -

型號 Model

滑台式 Slider Type
CGTH4
CGTH5
推桿式 Rod Type
CGTY4
CGTY5
無塵室 Clean room
CGCH4
CGCH5

導程 Lead

L2	2mm
L5	5mm
L6	6mm
L10	10mm
L12	12mm
L20	20mm

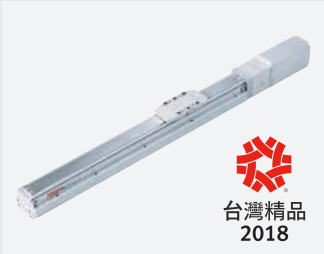
行程 Stroke

滑台型號 Slider Model	標準行程 Standard Stroke
CGTH4	50~800 mm
CGTH5	50~800 mm
CGTY4	50~500 mm
CGTY5	50~600 mm
CGCH4	50~800 mm
CGCH5	50~800 mm

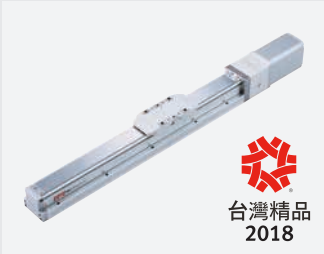
馬達位置 Motor position

M	馬達直結 Motor built-in
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

CGTH 軌道內嵌式小型電動缸-滑台式 CGTH built-in linear motion guide Servo Cylinder-Slider Type



▲ CGTH4



▲ CGTH5

CGCH 軌道內嵌式小型電動缸-無塵室專用 CGCH built-in linear motion guide Servo Cylinder-Clean room Type

▲ CGCH4

▲ CGCH5

TC100	-	03	-	N1	-	0001
控制器 Controller		電纜線長 Cable length		I/O線種類 Kind Of I/O Cable		特注碼 Customization coding

TC100

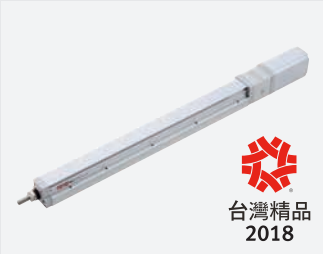
01	1m
03	3m
05	5m
10	10m

*標配3m
Standard:3m

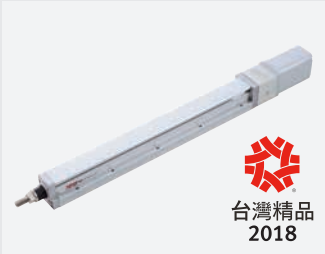
-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

*標配1.5m
Standard:1.5m

CGTY 軌道內嵌式小型電動缸-推桿式 CGTY built-in linear motion guide Servo Cylinder-Rod Type



▲ CGTY4



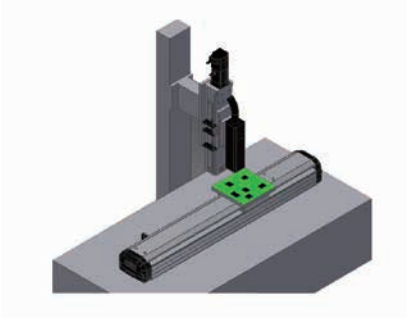
▲ CGTY5

使用範例

Application Samples

PCB基板噴字裝置 Spray-Printing device for PCB substrate boards

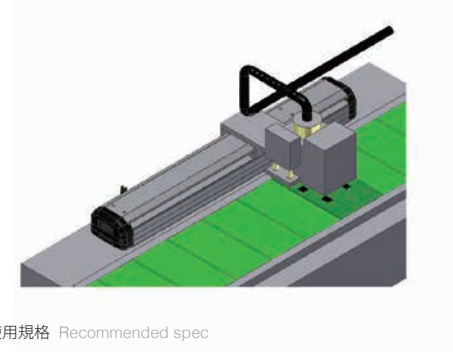
- 將基板固定於電動滑台上，利用滑台等速移動的特性，執行基板的噴字作業。
  Fix the substrate board onto the electric cylinder. Use the character of equal-speed sliding to execute the spray printing.



- 使用規格 Recommended spec
  CGTH5 / CGTH8

電路板表面清潔裝置 Surface cleaning device for circuit boards

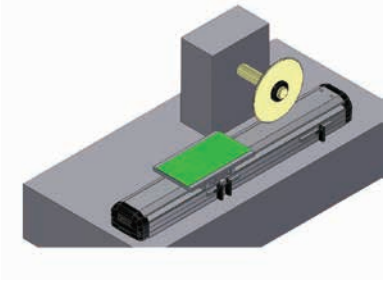
- 將PLASMA固定在電動滑台上，在輸送帶上方來回移動，做電路板表面的清潔工作。
  Fix the PLASMA onto the electric cylinder and move back and forth on the conveyor to do the surface cleaning for the circuit boards.



- 使用規格 Recommended spec
  CGTH5 / CGTH8

PCB電路板切割裝置 Cutting device for PCB circuit boards

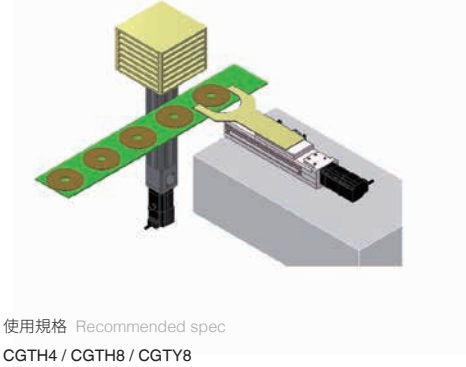
- 將PCB電路板放置在電動滑台上，搭配外部切刀機構，做裁切的動作。
  Place the PCB board on the electric cylinder and do the cutting by using external cutting devices.



- 使用規格 Recommended spec
  CGTH4 / CGTH5 / CGTH8

光碟收料裝置 Compact disc receiving device

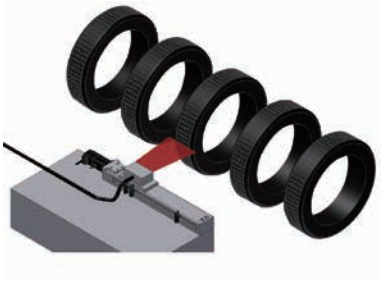
- 利用電動滑台可多點定位的特性，將光碟片收料盒做上下移動定位收料。
  Use the feature "multi-positioning" of electric cylinder to do loading and unloading of the disc box.



- 使用規格 Recommended spec
  CGTH4 / CGTH8 / CGTY8

輪胎表面檢查裝置 Tire surface inspection machine

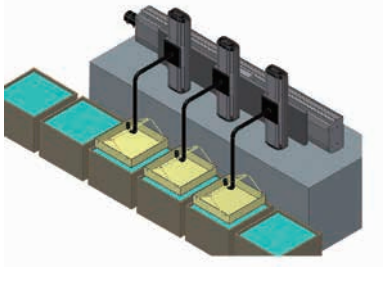
- 將C.C.D安裝在滑台上，利用滑台等速移動的特性，檢查輪胎表面上的缺陷，並即時回報給現場人員。
  Mount the C.C.D on the electric cylinder. Use the character of equal-speed sliding to check the defects on the tire surface and report to the on-site worker immediately.



- 使用規格 Recommended spec
  CGTH4 / CGTH5 / CGTH8

表面處理移動裝置 Mobile device for surface processing

- 利用滑台可上下左右高速移動的特性，將工作置掛在滑台上浸入溶劑內，做表面處理的工作。
  Mount the working piece on the electric cylinder and dip it into the solvents. Use the character of moving up and down, left and right at high speed to do the surface treatment processing.



- 使用規格 Recommended spec
  CGTH4 / CGTH5 / CGTH8

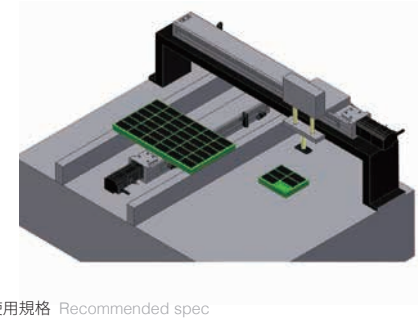
IC打印裝置 IC printer device

- 將IC裝置放於滑台上，利用滑台搭配伺服或步進馬達，可等速度移動的特性，執行雷射打印工作。
  Place the IC device on the electric cylinder. Use the character of equal-speed sliding and capable to adapt servo motor and stepping motor to execute the laser printing.

- 使用規格 Recommended spec
  CGTH5 / CGTH8

IC取放整列裝置 Aligning device for pick-and-place of IC boards

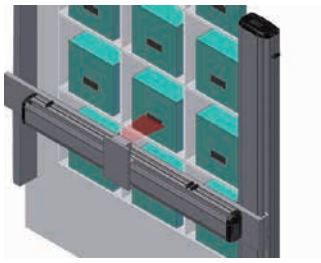
- 使用2支單軸電動滑台，可組合成簡易式IC取放機構。
  Install two single electric cylinder to combine a simple IC pick-and-place system.



- 使用規格 Recommended spec
  CGTH4 / CGTH5 / CGTH8

條碼掃描裝置 Barcode scanning device

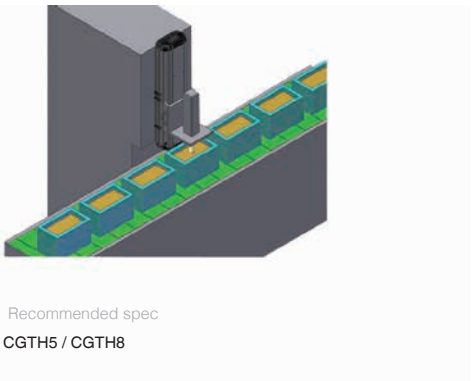
- 將XY滑台安裝在小型的自動倉儲內，執行物品條碼的掃描作業。
  Install the X-Y multi-axis system to automated warehouse to execute the scanning of barcode.



- 使用規格 Recommended spec
  CGTH4 / CGTH5 / CGTH8

充填裝置 Fillings device

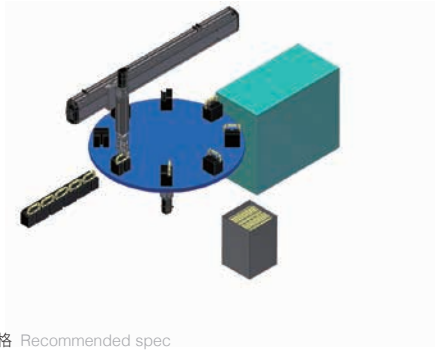
- 為了因應不同產品的填充作業，利用滑台可程式化的特性，可於不同高度的位置，執行充填作業。
  In order to adapt to filling of different products, we can execute the filling at different height of position by programmable feature.



- 使用規格 Recommended spec
  CGTH4 / CGTH5 / CGTH8

圓盤機上組立裝置 Assembling device on disc machine

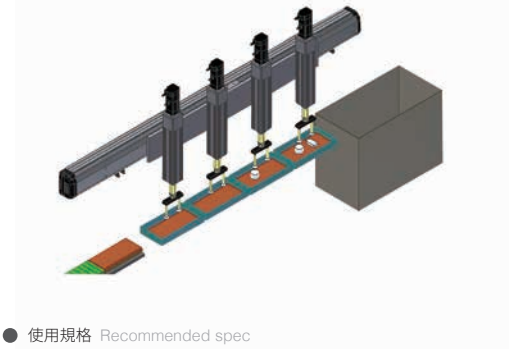
- 利用2支單軸組合成XY機構，可架在圓盤機上，做零件的組立。
  Install two single electric cylinders to combine an X-Y system. Then mount it onto the disc machine to do the components assembly.



- 使用規格 Recommended spec
  CGTH8 / CGTY8

小型部品組立裝置 Assembling device for small components

- 利用電動滑台可多點定位的特性，帶動吸盤及氣缸作小型零件的組立作業。
  Use the feature multi-positioning of the electric cylinder to drive the sucker and cylinders to do the assembly of small components.



- 使用規格 Recommended spec
  CGTH8 / CGTY5

Memo

GTH

軌道內嵌式滑台模組-滑台式

GTH built-in linear motion guide Electric Actuator-Slider Type

Contents

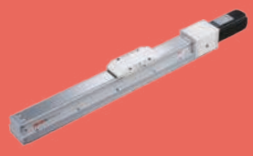
小型 SMALL

GTH4

本體寬幅 44mm
Width
最大行程 800mm 031
Max. stroke
最大荷重 25kg
Max. payload

小型 SMALL

GTH5



本體寬幅 54mm
Width
最大行程 800mm 039
Max. stroke
最大荷重 30kg
Max. payload

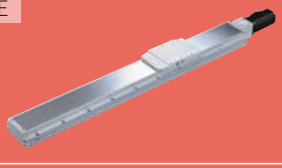
中型 MEDIUM

GTH8

本體寬幅 82mm
Width
最大行程 1100mm 043
Max. stroke
最大荷重 50kg
Max. payload

大型 LARGE

GTH12



本體寬幅 120mm
Width
最大行程 1250mm 051
Max. stroke
最大荷重 110kg
Max. payload

中型 MEDIUM

GTH5S

本體寬幅 54mm
Width
最大行程 325mm 055
Max. stroke
最大荷重 30kg
Max. payload

中型 MEDIUM

GTH8S

本體寬幅 82mm
Width
最大行程 450mm 059
Max. stroke
最大荷重 50kg
Max. payload

規格索引

Spec Index

GTH 軌道內嵌式滑台模組-滑台式

GTH built-in linear motion guide Electric Actuator-Slider Type

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec 外徑 Outer Diameter(mm)	螺桿規格(C7級) Ball Screw Spec 導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	最大可搬重量 Maximum Payload(kg) 垂直使用 Vertical	最高速度*1 Maximum Speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	GTH4	50W	44	±0.005	10	2	25	8	100
							6	20	5	300
							12	12	2	600
			100W				2	25	8	100
							6	20	8	300
							12	12	3.5	600
		GTH5	100W	54	±0.005	12	2	30	10	100
							5	30	10	250
							10	15	5	500
							20	10	2.5	1000
		GTH8	200W	82	±0.005	16	5	50	15	250
			400W				10	30	8	500
							20	18	3	1000
		GTH12	400W	120	±0.005	16	5	110	33	250
							10	88	22	500
							20	40	10	1000
							32	30	8	1600

*1:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

反向同動雙滑座系列 Dual Carriage Synchronous Movement In Reverse Direction

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec 外徑 Outer Diameter(mm)	螺桿規格(C7級) Ball Screw Spec 導程 Lead(mm)	最大可搬重量 Maximum Payload(kg) 水平使用 Horizontal	最大可搬重量 Maximum Payload(kg) 垂直使用 Vertical	最高速度*1 Maximum Speed (mm/s)
一般環境 Standard	滾珠螺桿 Ball screw	GTH5S	100W	54	±0.005	12	2	30	10	100
		GTH8S	200W	82	±0.005	16	5	50	15	250
			400W							

*1:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

	標準行程及最高使用速度*2 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																											頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	
						100						90	80	70	60	50												031
						300						270	240	210	180	150												
						600						540	480	420	360	300												
						100						90	80	70	60	50												
						300						270	240	210	180	150												
						600						540	480	420	360	300												
							100						90	80	70	60												039
							250						270	200	175	150												
							500						450	400	350	300												
							1000						900	800	700	600												
								250								225	200	175	150	125	100	75						043
								500								450	400	350	300	250	200	150						
								1000								900	800	700	600	500	400	300						
									250								225	200	175	167	158	150	133	125	117			051
									500								450	400	350	333	317	300	267	250	233			
									1000								900	800	700	667	633	600	533	500	467			
									1600								1440	1280	1120	1067	1013	900	853	800	747			

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

	標準行程及最高使用速度*2 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																											頁數 Page
行程 Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	
							100																					055
										250																		059

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

GTH4

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	800mm
最高速度 Maximum Speed	600mm/s
馬達容量 Motor Output	50W
滾珠螺桿 Ball Screw	⌀10mm

型號表示方式 Ordering Method

GTH4 - L2 - 100 - BC - M05B - C4 - 0001

本體型號 Model

特注式樣 Customization Order No.

行程 Stroke

50-800mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	50W	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

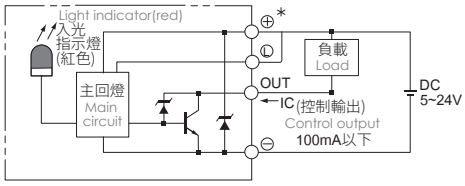
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1		100	300	600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	25	20	12
		垂直使用 Vertical (kg)	8	5	2
	定格推力 Rated Thrust (N)		424	141	71
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		50		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø10		
	連軸器 Coupling (mm)		7X8		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

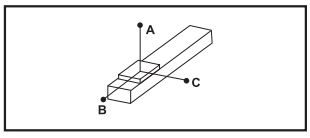
感應器接線圖<原點及端點> Sensor Layout



※1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

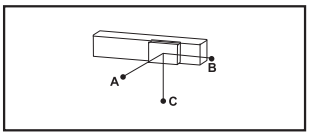
※2 行程超過550時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P29頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P29 for details.

容許負載力距表 Allowable Moment



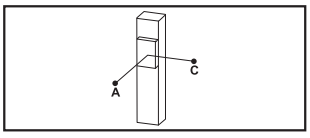
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	12kg	1000	55	80
	18kg	750	35	50
	25kg	500	23	32
導程 6 Lead	10kg	550	53	70
	15kg	350	32	45
	20kg	250	22	31
導程 12 Lead	8kg	305	59	75
	10kg	240	45	57
	12kg	195	37	47



(單位 Unit:mm)

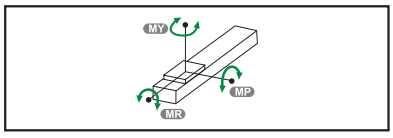
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	12kg	80	55	1000
	18kg	50	35	750
	25kg	32	23	500
導程 6 Lead	10kg	72	52	550
	15kg	45	32	345
	20kg	31	22	250
導程 12 Lead	8kg	75	59	300
	10kg	58	45	240
	12kg	47	37	190



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	4kg	200	200
	8kg	100	100
	-	-	-
導程 6 Lead	3kg	200	200
	5kg	120	120
	-	-	-
導程 12 Lead	1.5kg	350	350
	2kg	260	260
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	79
MP	79
MR	116

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	HG-KR053	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	HG-KR053B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	MSMD5A2G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	MSMD5A2G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	ECMA-C1040FES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	ECMA-C1040FFS	ASD-B20121-B

GTH4

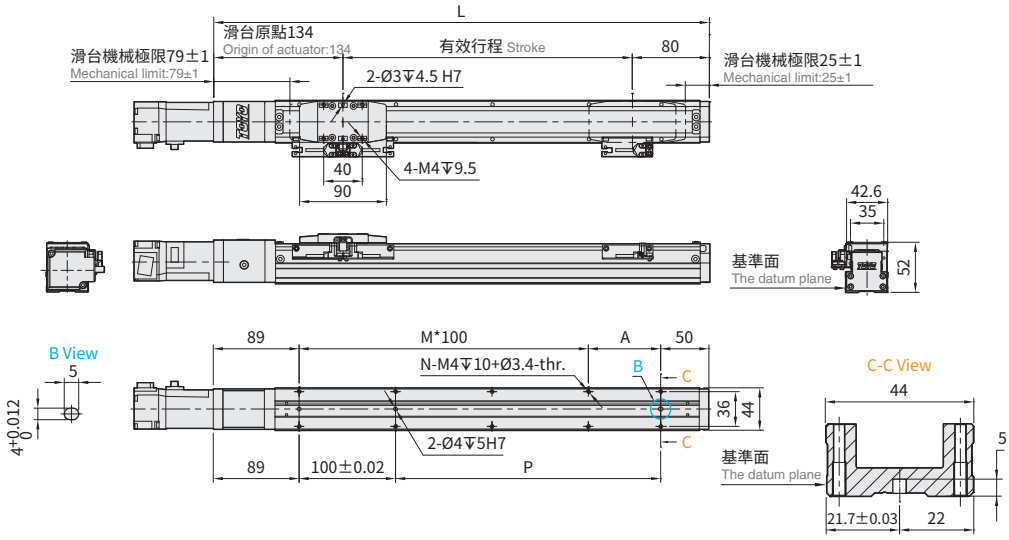
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	0.95	1.12	1.29	1.47	1.65	1.83	2.01	2.19	2.37	2.55	2.73	2.91	3.09	3.27	3.45	3.63

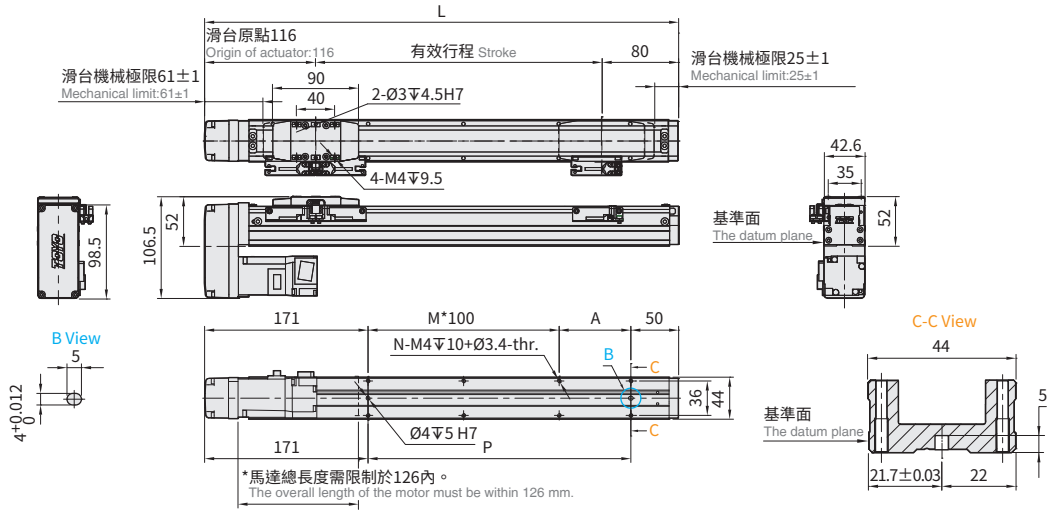
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



*馬達總長度需限制於126內。
The overall length of the motor must be within 126 mm.

有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

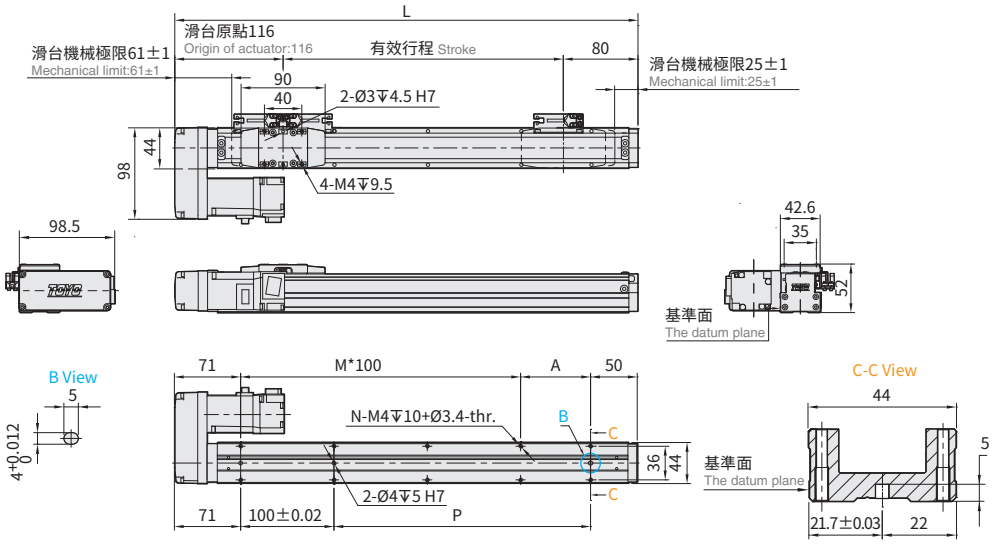
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

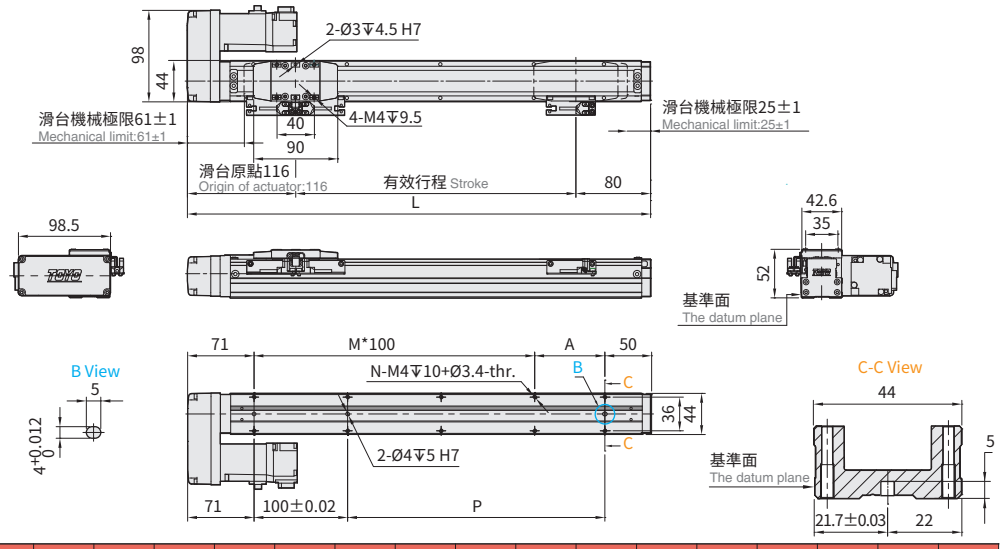
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH4

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke	800mm
最高速度 Maximum Speed	600mm/s
馬達容量 Motor Output	100W
滾珠螺桿 Ball Screw	⌀10mm

型號表示方式 Ordering Method

GTH4 - L2 - 100 - BC - M10B - C4 - 0001

- GTH4: 本體型號 Model
- 0001: 特注式樣 Customization Order No.

行程 Stroke

50-800mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:
1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

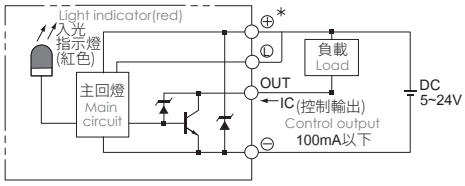
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1		100	300	600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	25	20	12
		垂直使用 Vertical (kg)	8	8	3.5
	定格推力 Rated Thrust (N)		424	141	71
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø10		
	連軸器 Coupling (mm)		7X8		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

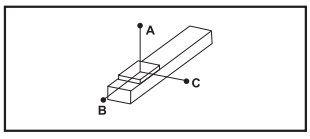
感應器接線圖<原點及端點> Sensor Layout



※1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

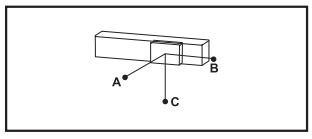
※2 行程超過550時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P29頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P29 for details.

容許負載力距表 Allowable Moment



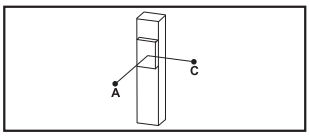
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	12kg	1000	55	80
	18kg	750	35	50
	25kg	500	23	32
導程 6 Lead	10kg	550	53	70
	15kg	350	32	45
	20kg	250	22	31
導程 12 Lead	8kg	305	59	75
	10kg	240	45	57
	12kg	195	37	47



(單位 Unit:mm)

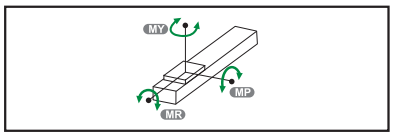
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	12kg	80	55	1000
	18kg	50	35	750
	25kg	32	23	500
導程 6 Lead	10kg	72	52	550
	15kg	45	32	345
	20kg	31	22	250
導程 12 Lead	8kg	75	59	300
	10kg	58	45	240
	12kg	47	37	190



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	4kg	195	195
	8kg	100	100
	-	-	-
導程 6 Lead	4kg	150	150
	8kg	75	75
	-	-	-
導程 12 Lead	2kg	260	260
	3.5kg	150	150
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	79
MP	79
MR	116

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

GTH4

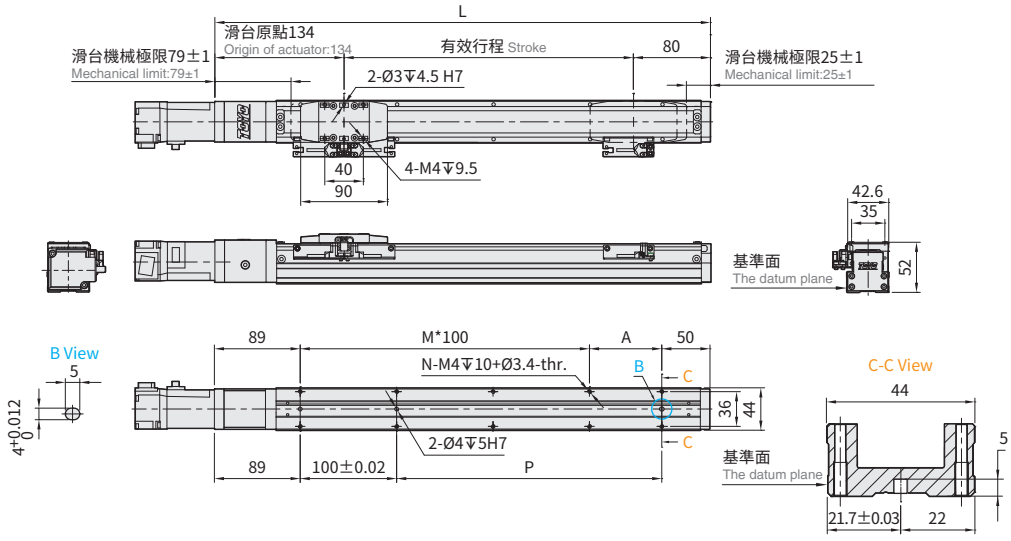
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	0.95	1.12	1.29	1.47	1.65	1.83	2.01	2.19	2.37	2.55	2.73	2.91	3.09	3.27	3.45	3.63

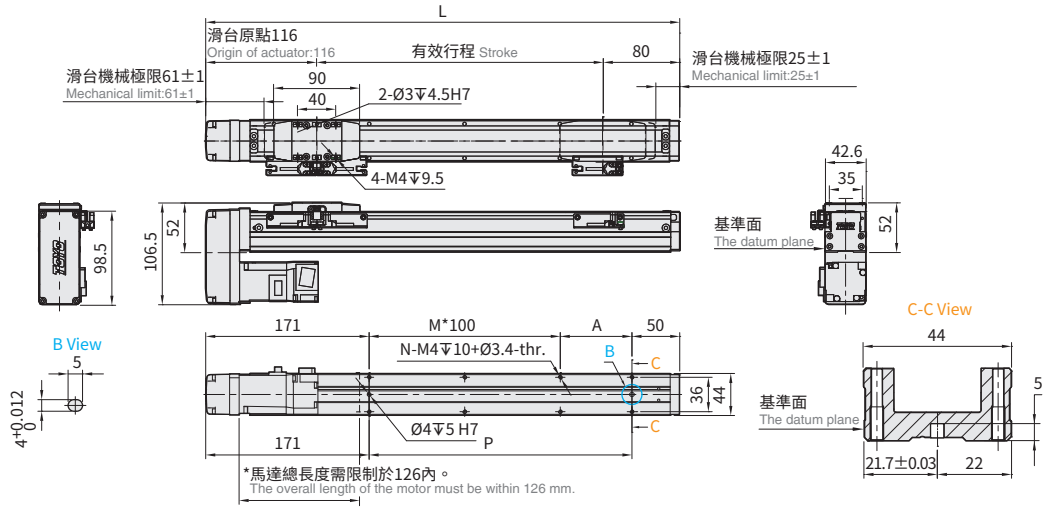
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

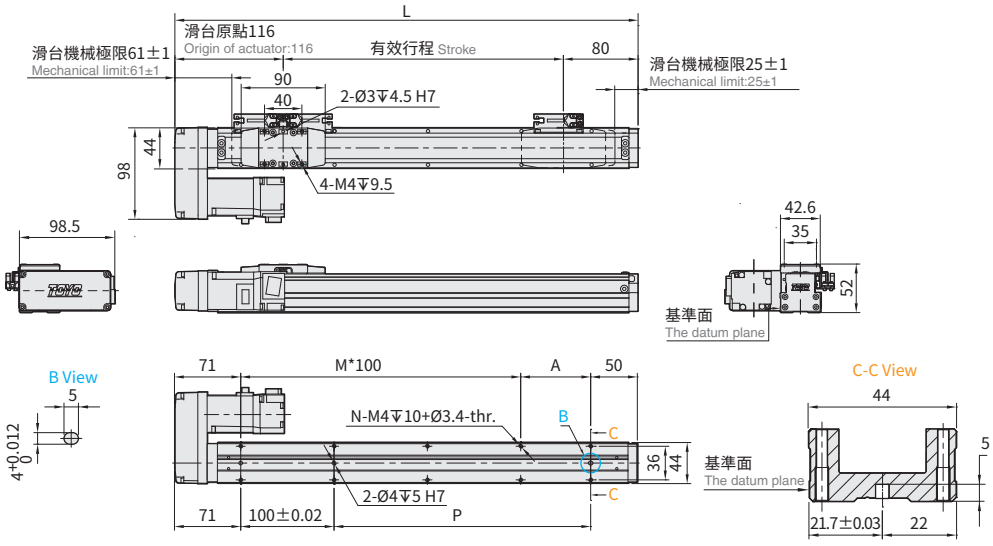
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

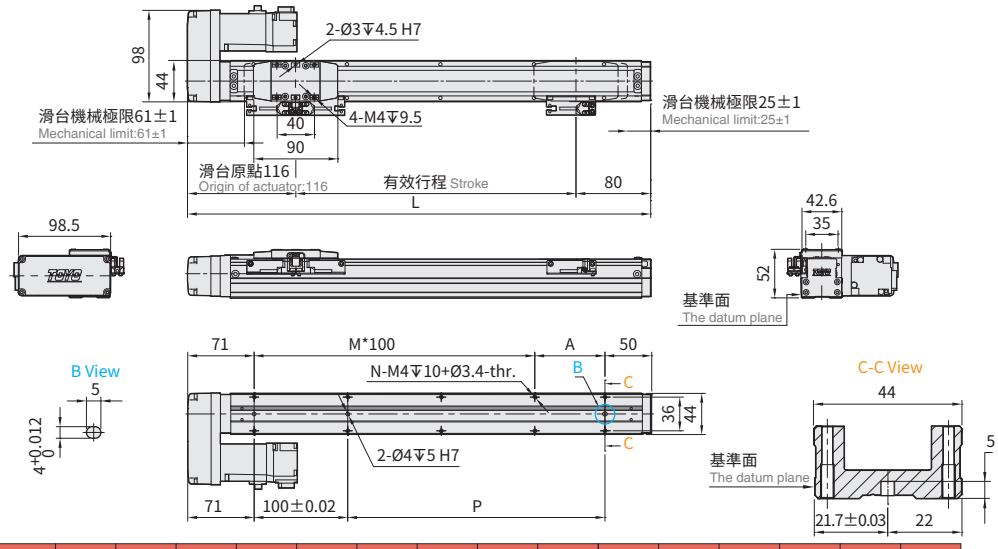
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)

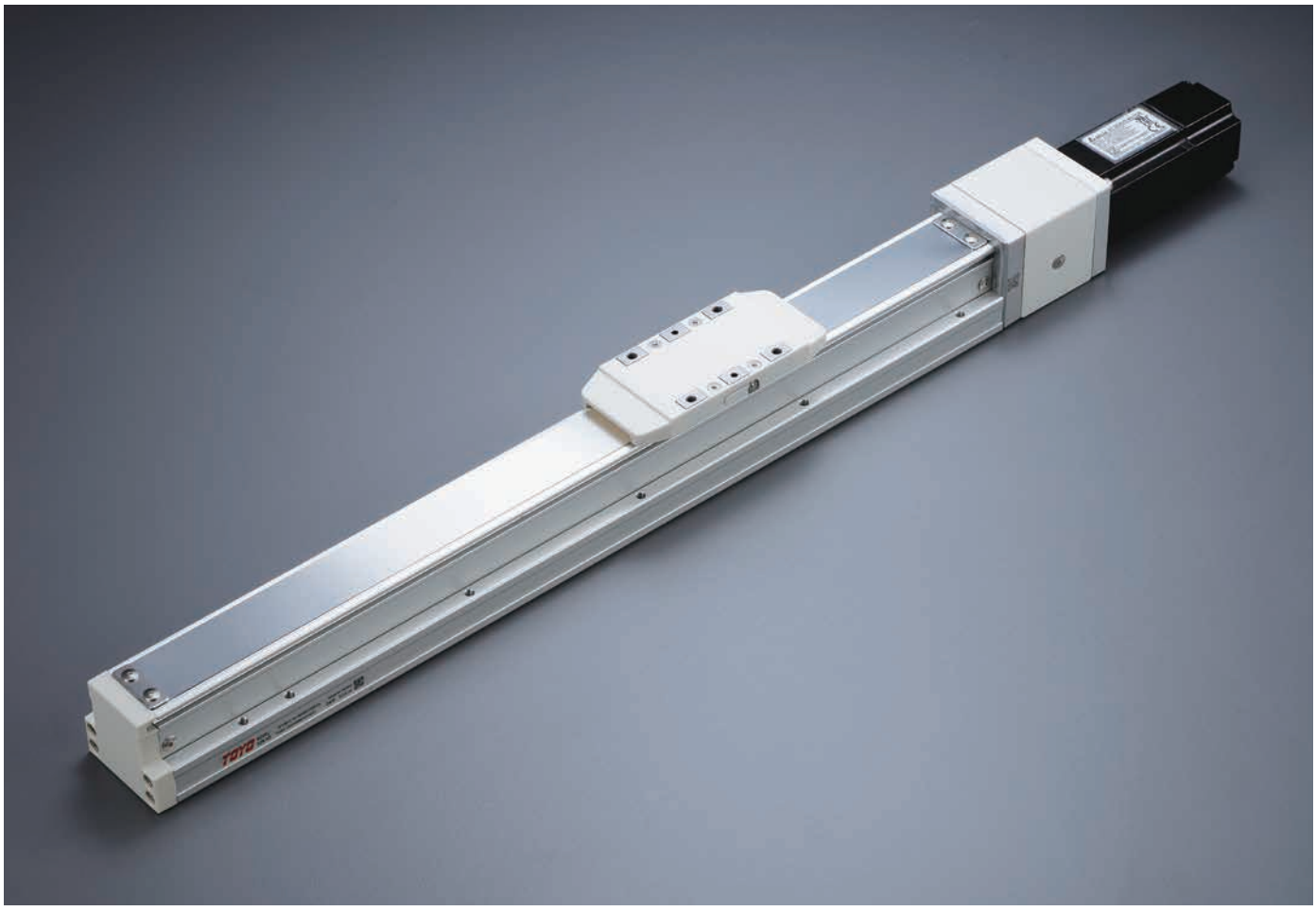


有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH5

螺桿驅動
Ball Screw Drive



最大行程 Maximum Stroke	800mm
最高速度 Maximum Speed	1000mm/s
馬達容量 Motor Output	100W
滾珠螺桿 Ball Screw	⌀12mm

型號表示方式 Ordering Method

GTH5 - L5 - 100 - BC - M10B - C4 - 0001

- GTH5: 本體型號 Model
- 100: 行程 Stroke
- L5: 螺桿導程 Ball Screw Lead
- BC: 馬達位置 Motor Position
- M10B: 馬達廠牌、功率 Motor Brand、Power Output
- C4: 原點感應器 Home Sensor / 端點極限感應器 Limit Sensor
- 0001: 特注式樣 Customization Order No.

行程 Stroke

50-800mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

2	2mm
5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

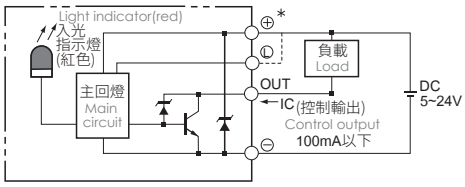
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005			
	螺桿導程 Ball Screw Lead (mm)		2	5	10	20
	最高速度 Maximum Speed (mm/s)※1		100	250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	30	30	15	10
		垂直使用 Vertical (kg)	10	10	5	2.5
	定格推力 Rated Thrust (N)		854	341	170	85
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch			
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100			
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø12			
	連軸器 Coupling (mm)		7X8			
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)			

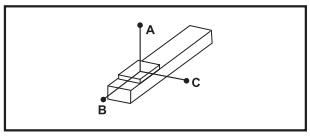
感應器接線圖<原點及端點> Sensor Layout



※1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

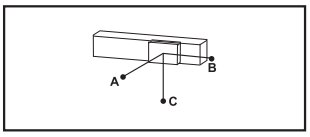
※2 行程超過600時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P29頁說明。
When the stroke is over 600mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P29 for details.

容許負載力距表 Allowable Moment



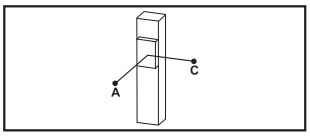
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	10kg	900	100	135
	20kg	700	45	60
	30kg	550	25	35
導程 5 Lead	10kg	650	75	100
	20kg	440	32	45
	30kg	270	19	25
導程 10 Lead	5kg	600	145	185
	10kg	370	70	85
	15kg	250	42	52
導程 20 Lead	5kg	320	120	130
	8kg	220	70	80
	10kg	175	55	60



(單位 Unit:mm)

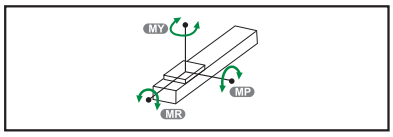
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	10kg	135	100	900
	20kg	60	45	700
	30kg	37	27	550
導程 5 Lead	10kg	100	75	650
	20kg	45	32	420
	30kg	25	19	260
導程 10 Lead	5kg	180	145	600
	10kg	85	68	370
	15kg	52	42	250
導程 20 Lead	5kg	130	120	320
	8kg	75	70	220
	10kg	60	55	170



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	6kg	180	180
	8kg	135	135
	10kg	110	110
導程 5 Lead	6kg	145	145
	8kg	110	110
	10kg	90	90
導程 10 Lead	1kg	800	800
	3kg	260	260
	5kg	155	155
導程 20 Lead	1kg	600	600
	2kg	300	300
	2.5kg	250	250

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	103
MP	103
MR	144

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

GTH5

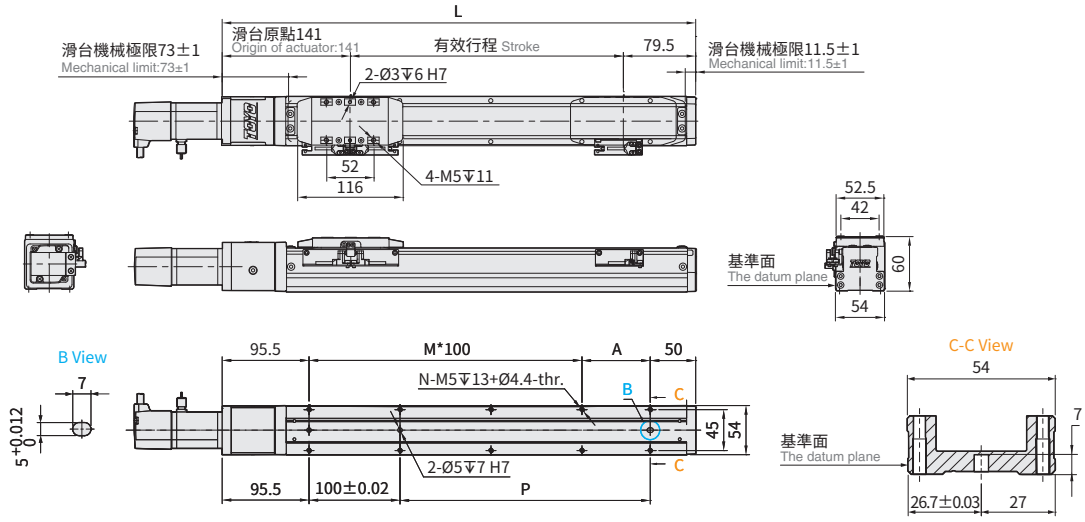
螺桿驅動
Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.65	1.79	1.92	2.11	2.39	2.50	2.52	2.75	2.86	2.95	3.15	3.28	3.44	3.58	3.71	4.09

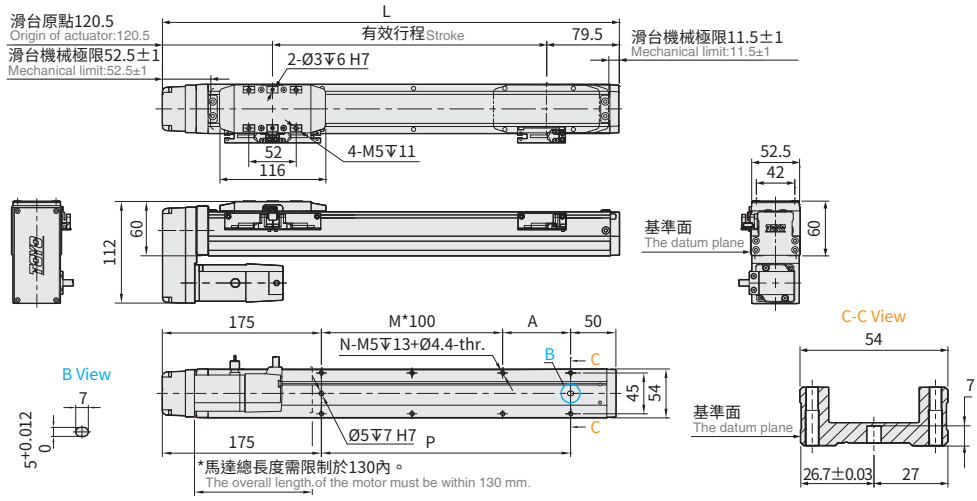
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.68	1.80	2.03	2.14	2.42	2.53	2.58	2.78	2.89	2.98	3.18	3.31	3.47	3.60	3.74	4.12

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

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BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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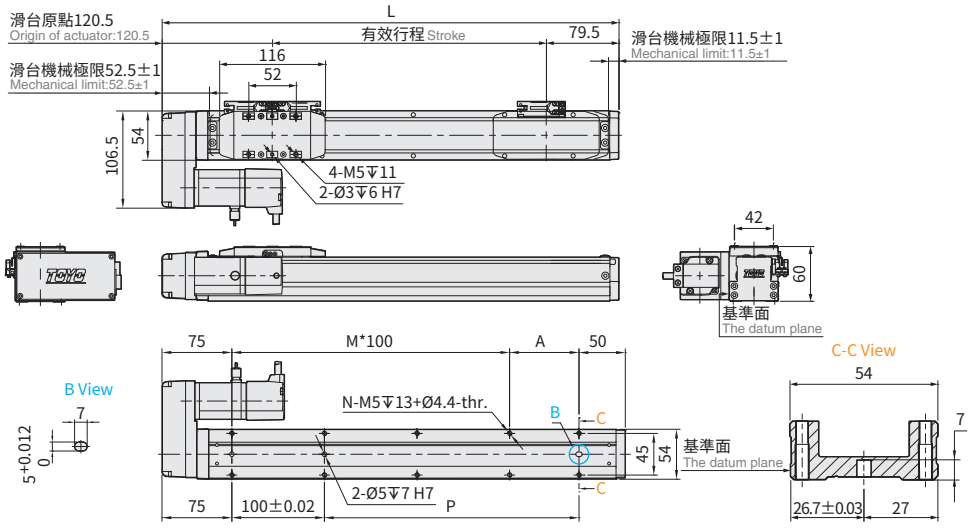
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.68	1.80	2.03	2.14	2.42	2.53	2.58	2.78	2.89	2.98	3.18	3.31	3.47	3.60	3.74	4.12

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When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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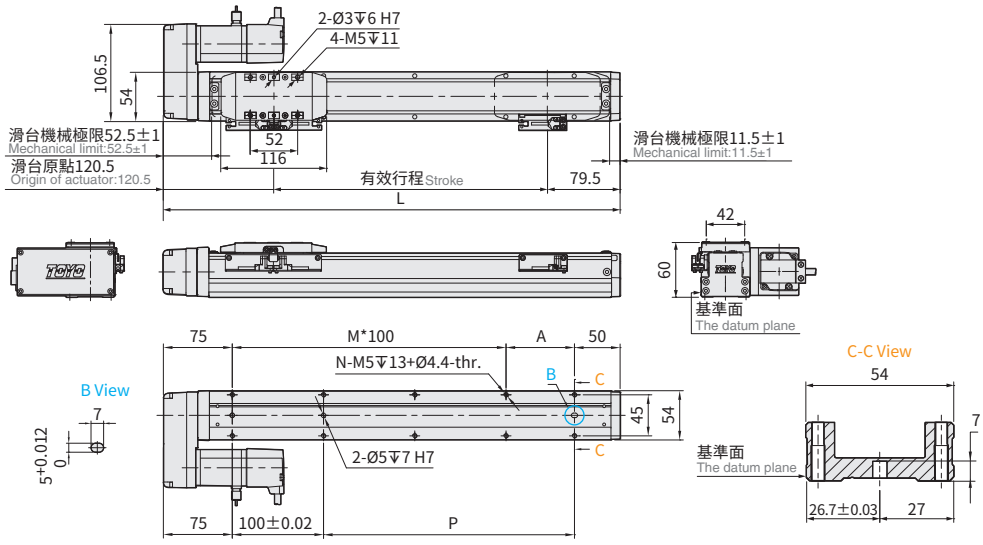
(單位 Unit：mm)

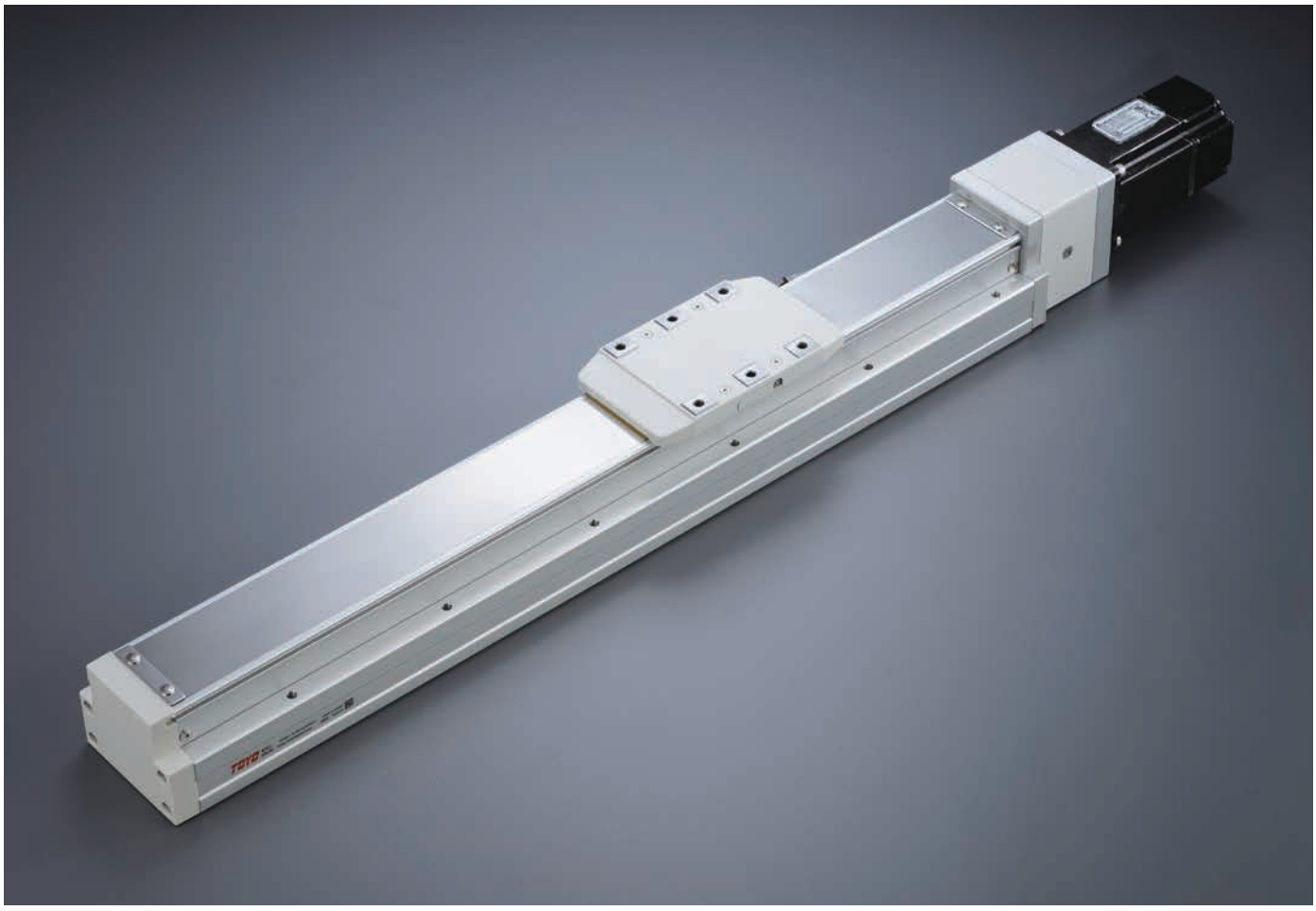


有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.68	1.80	2.03	2.14	2.42	2.53	2.58	2.78	2.89	2.98	3.18	3.31	3.47	3.60	3.74	4.12

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH8

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke 1100mm

最高速度 Maximum Speed 1000mm/s

馬達容量 Motor Output 200W

滾珠螺桿 Ball Screw ⌀16mm

型號表示方式 Ordering Method

GTH8 - L10 - 100 - BC - M20B - C4 - 0001

本體型號 Model

行程 Stroke

50-1100mm
間隔50 50 mm Pitch

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	200W	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

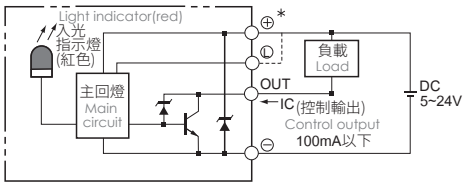
規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		5	10	20
	最高速度 Maximum Speed (mm/s)※1		250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	50	30	18
		垂直使用 Vertical (kg)	15	8	3
	定格推力 Rated Thrust (N)		683	341	174
	標準行程 Stroke / Pitch (mm)※2		50-1100mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		200		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16		
	連軸器 Coupling (mm)		10X14/11(註1)		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

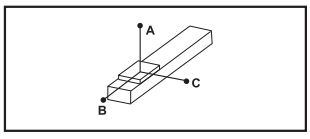
※ 2 行程超過750時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P29頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P29 for details.

註1:使用Panasonic 200W馬達時，馬達軸心為Ø11；其他廠牌，馬達軸心為Ø14。
Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

感應器接線圖<原點及端點> Sensor Layout

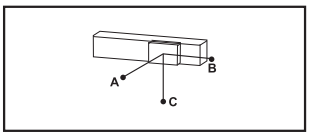


容許負載力距表 Allowable Moment



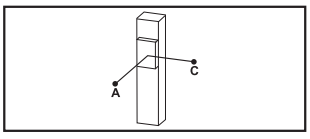
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 5 Lead	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82
導程 10 Lead	10kg	1730	286	412
	20kg	839	136	196
	30kg	541	86	124
導程 20 Lead	6kg	1213	403	493
	9kg	800	264	323
	18kg	592	194	238



(單位 Unit:mm)

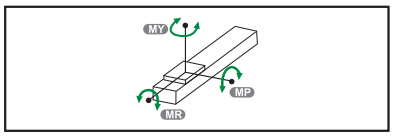
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	20kg	214	153	1435
	35kg	113	81	845
	50kg	74	53	506
導程 10 Lead	10kg	370	286	1400
	20kg	176	136	800
	30kg	112	86	495
導程 20 Lead	6kg	444	403	760
	9kg	292	264	650
	18kg	214	194	544



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	10kg	331	331
	15kg	220	220
	-	-	-
導程 10 Lead	5kg	589	589
	8kg	368	368
	-	-	-
導程 20 Lead	3kg	935	935
	-	-	-
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	318
MP	318
MR	626

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.
※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	HG-KR23	MR-J4-20A
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	HG-KR23B	MR-J4-20A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	MHMD022G1U	MADHT1507
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	MHMD022G1V	MADHT1507
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	ECMA-C20602ES	ASD-B20221-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	ECMA-C20602FS	ASD-B20221-B

GTH8

螺桿驅動
Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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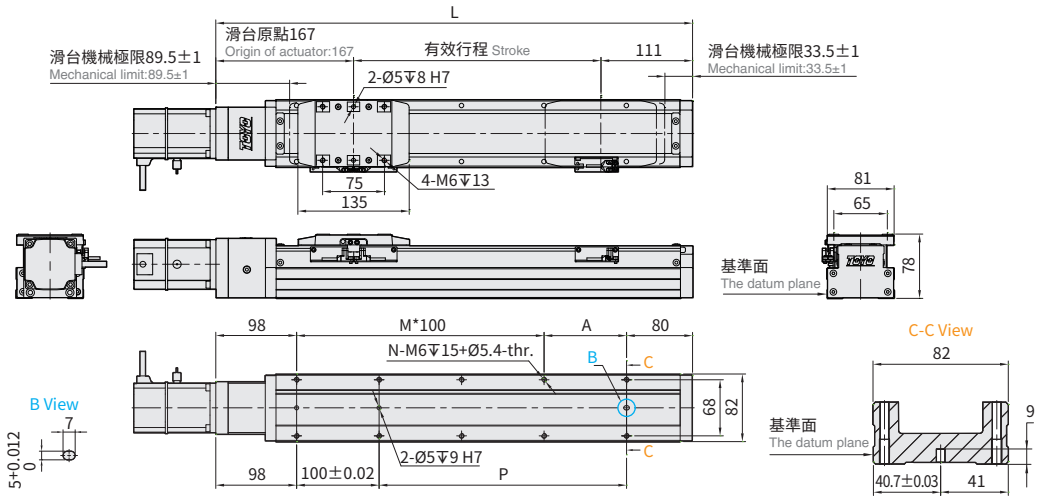
(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.91	4.29	4.70	5.00	5.35	5.68	6.00	6.35	6.64	6.97	7.41	7.71	8.12	8.41	8.65	8.96	9.37	9.62	10.01	10.28	10.70	11.12

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

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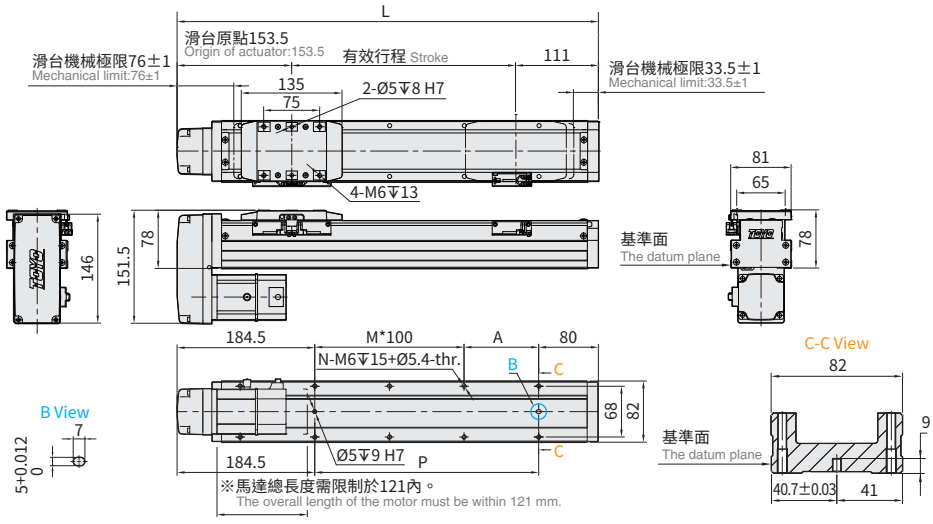
(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

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BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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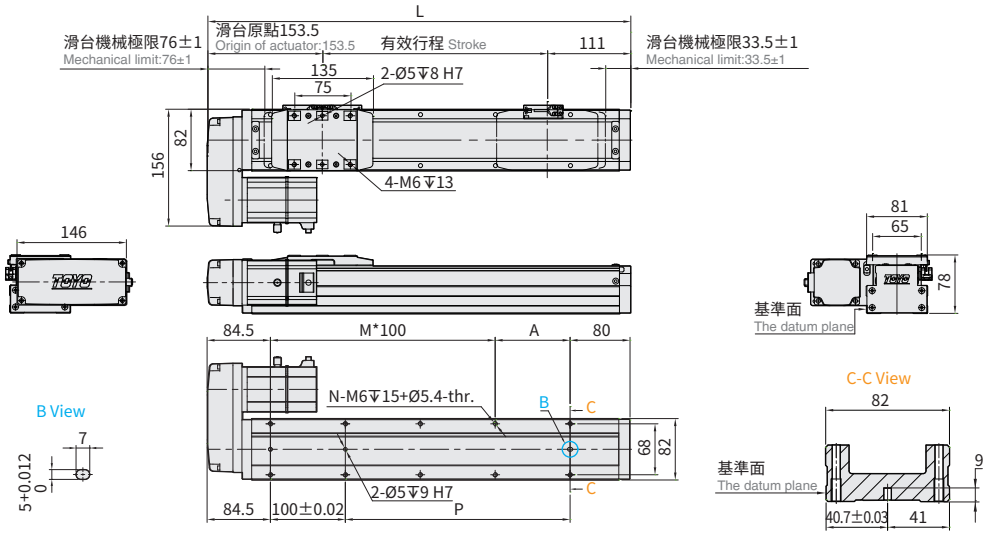
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
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BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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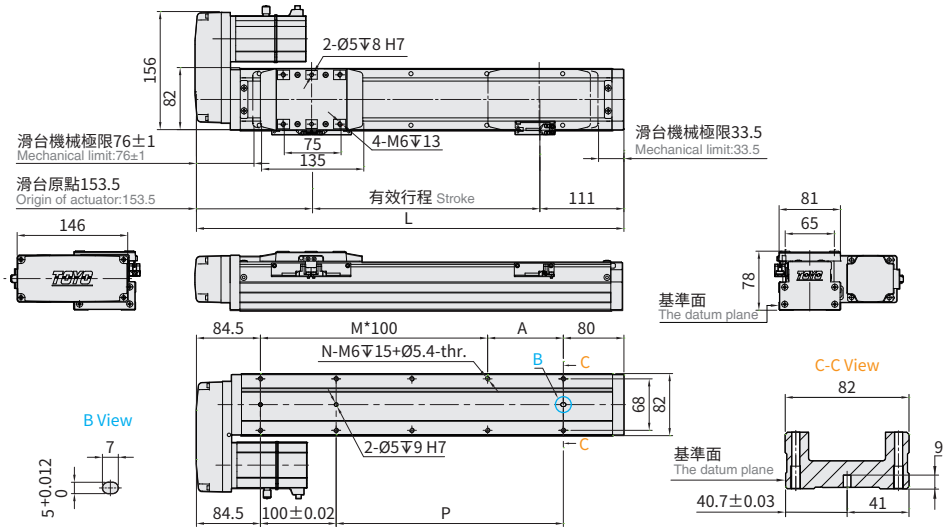
(單位 Unit：mm)

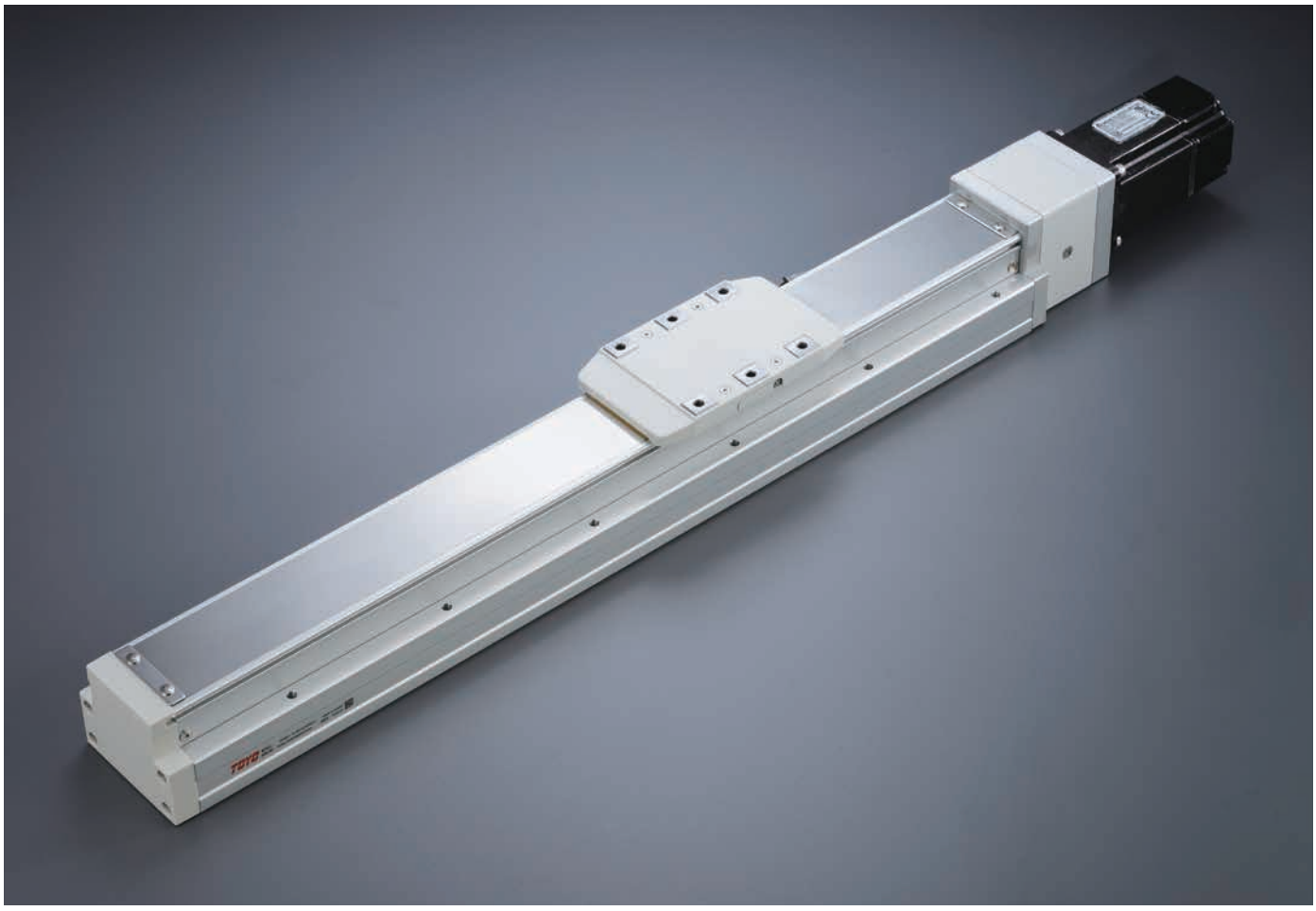


有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH8

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke 1100mm

最高速度 Maximum Speed 1000mm/s

馬達容量 Motor Output 400W

滾珠螺桿 Ball Screw ⌀16mm

型號表示方式 Ordering Method

GTH8 - L10 - 100 - BC - M40B - C4 - 0001

本體型號 Model

行程 Stroke

50-1100mm
間隔50 50 mm Pitch

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

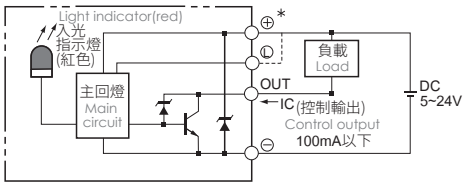
外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

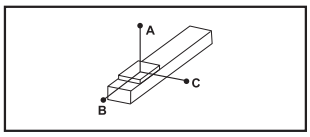
規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		5	10	20
	最高速度 Maximum Speed (mm/s)※1		250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	50	30	18
		垂直使用 Vertical (kg)	15	8	3
	定格推力 Rated Thrust (N)		1388	694	347
	標準行程 Stroke / Pitch (mm)※2		50-1100mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16		
	連軸器 Coupling (mm)		10X14		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.
※ 2 行程超過750時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P29頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P29 for details.

感應器接線圖<原點及端點> Sensor Layout

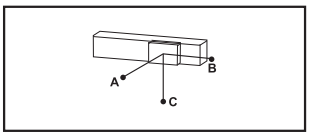


容許負載力距表 Allowable Moment



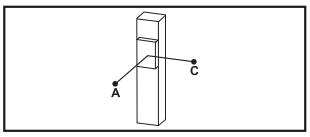
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 5 Lead	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82
導程 10 Lead	10kg	1730	286	412
	20kg	839	136	196
	30kg	541	86	124
導程 20 Lead	6kg	1213	403	493
	9kg	800	264	323
	18kg	592	194	238



(單位 Unit:mm)

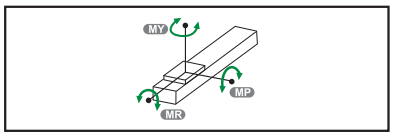
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	20kg	214	153	1435
	35kg	113	81	845
	50kg	74	53	506
導程 10 Lead	10kg	370	286	1400
	20kg	176	136	800
	30kg	112	86	495
導程 20 Lead	6kg	444	403	760
	9kg	292	264	650
	18kg	214	194	544



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	10kg	331	331
	15kg	220	220
	-	-	-
導程 10 Lead	5kg	589	589
	8kg	368	368
	-	-	-
導程 20 Lead	3kg	935	935
	-	-	-
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	318
MP	318
MR	626

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.
※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	HG-KR43	MR-J4-40A
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MHMD042G1U	MBDHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MHMD042G1V	MBDHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GTH8

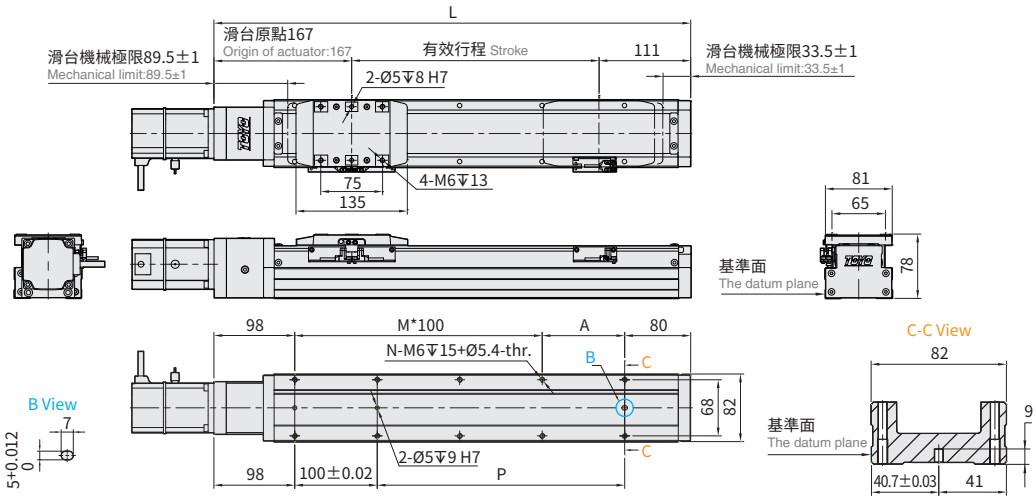
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.91	4.29	4.70	5.00	5.35	5.68	6.00	6.35	6.64	6.97	7.41	7.71	8.12	8.41	8.65	8.96	9.37	9.62	10.01	10.28	10.70	11.12

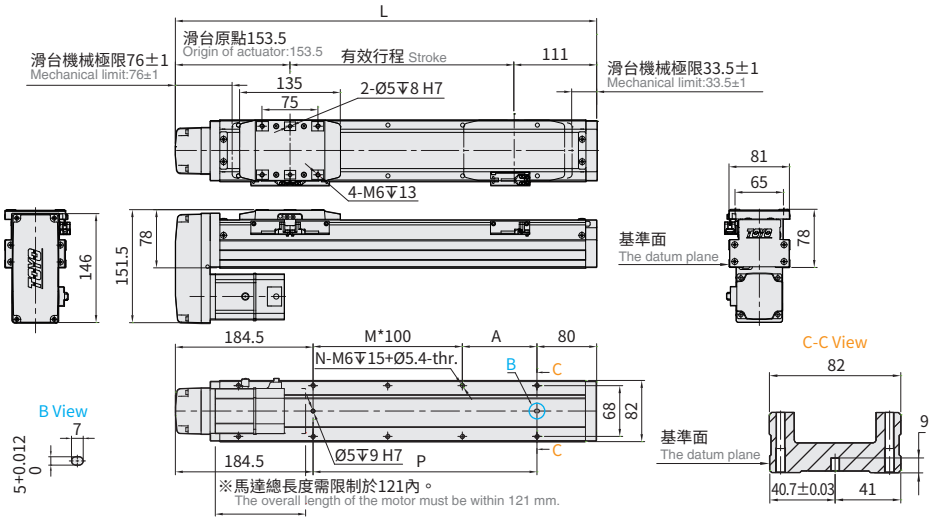
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

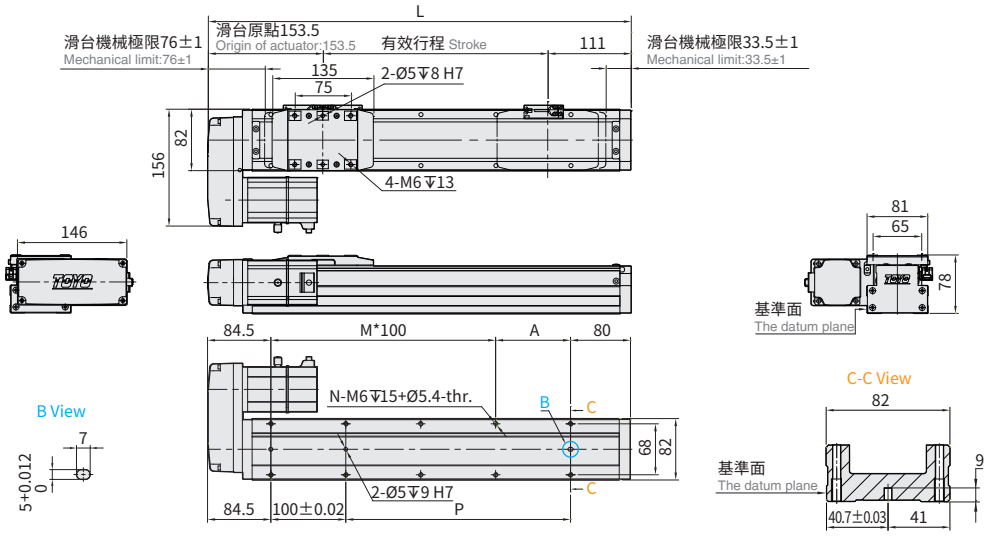
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

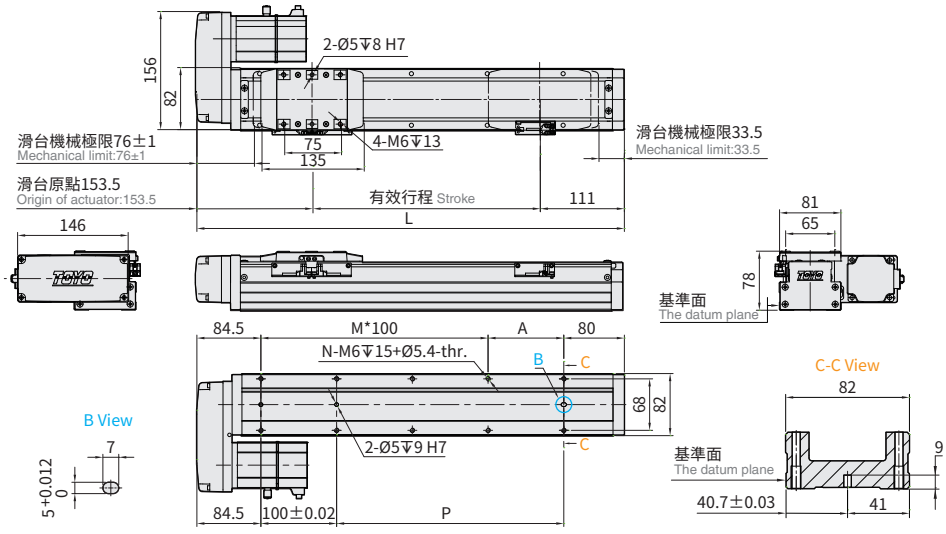
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)

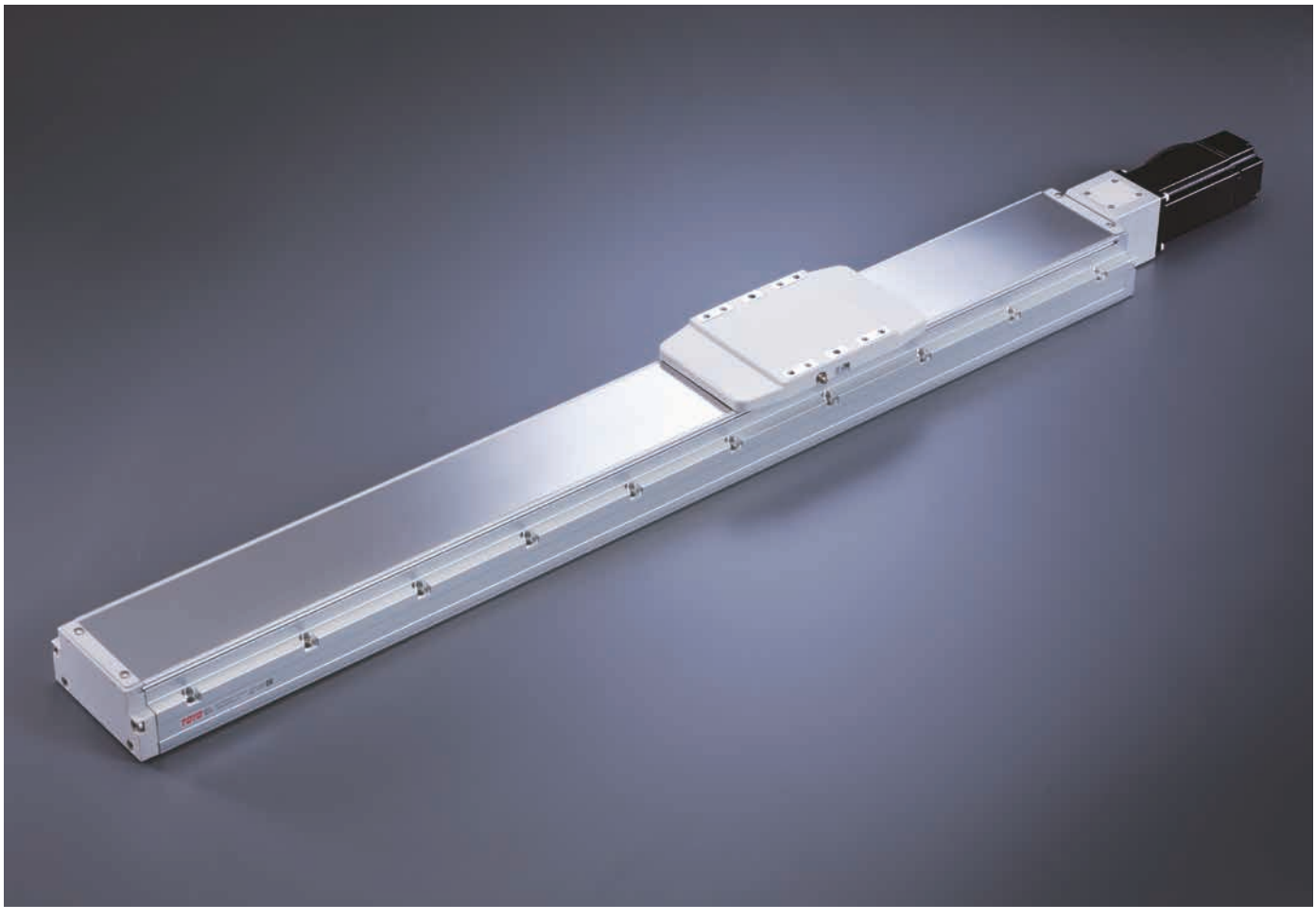


有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH12

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke 1250mm

最高速度 Maximum Speed 1600mm/s

馬達容量 Motor Output 400W

滾珠螺桿 Ball Screw ⌀16mm

型號表示方式 Ordering Method

GTH12 - L5 - 100 - BC - M40 B - C4 - 0001

本體型號 Model

行程 Stroke

50-1250mm
間隔50 50 mm Pitch

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm
32	32mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

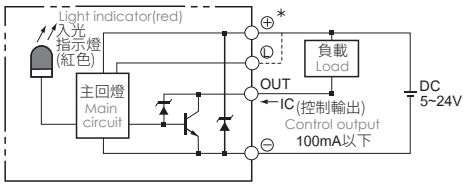
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005			
	螺桿導程 Ball Screw Lead (mm)		5	10	20	32
	最高速度 Maximum Speed (mm/s)※1		250	500	1000	1600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	110	88	40	30
		垂直使用 Vertical (kg)	33	22	10	8
	定格推力 Rated Thrust (N)		1388	694	347	218
	標準行程 Stroke / Pitch (mm)※2		50-1250mm/50 間隔 50 mm Pitch			
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400			
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16			
	連軸器 Coupling (mm)		10X14			
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)			

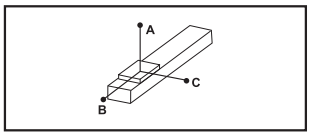
感應器接線圖<原點及端點> Sensor Layout



※1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

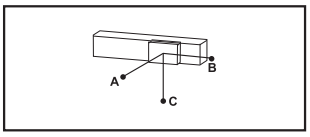
※2 行程超過800時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P29頁說明。
When the stroke is over 800mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P29 for details.

容許負載力距表 Allowable Moment



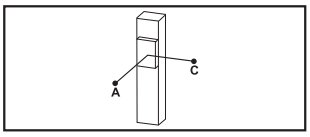
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 5 Lead	60kg	2850	250	340
	80kg	2100	180	250
	110kg	1500	120	170
導程 10 Lead	30kg	2850	490	600
	50kg	1700	280	350
	88kg	950	140	190
導程 20 Lead	10kg	3400	1250	1400
	22kg	1650	550	620
	40kg	900	290	330
導程 32 Lead	15kg	1100	570	550
	25kg	620	330	320
	30kg	520	270	260



(單位 Unit:mm)

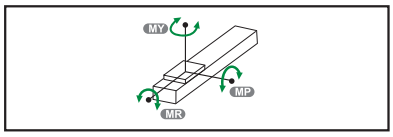
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	55kg	280	280	3300
	75kg	200	195	2400
	110kg	130	125	1550
導程 10 Lead	35kg	400	410	2500
	55kg	245	250	1550
	88kg	150	150	950
導程 20 Lead	12kg	900	1070	3000
	20kg	550	630	1800
	40kg	260	300	900
導程 32 Lead	15kg	440	570	1050
	30kg	210	270	520
	-	-	-	-



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	15kg	1200	1200
	22kg	820	820
	33kg	550	550
導程 10 Lead	10kg	1600	1600
	14kg	1150	1150
	22kg	730	730
導程 20 Lead	7kg	1800	1800
	10kg	1250	1250
	-	-	-
導程 32 Lead	5kg	1600	1600
	8kg	1000	1000
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	1168
MP	606
MR	606

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	HG-KR43	MR-J4-40A
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MSMD042G1U	MBDHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MSMD042G1V	MBDHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GTH12

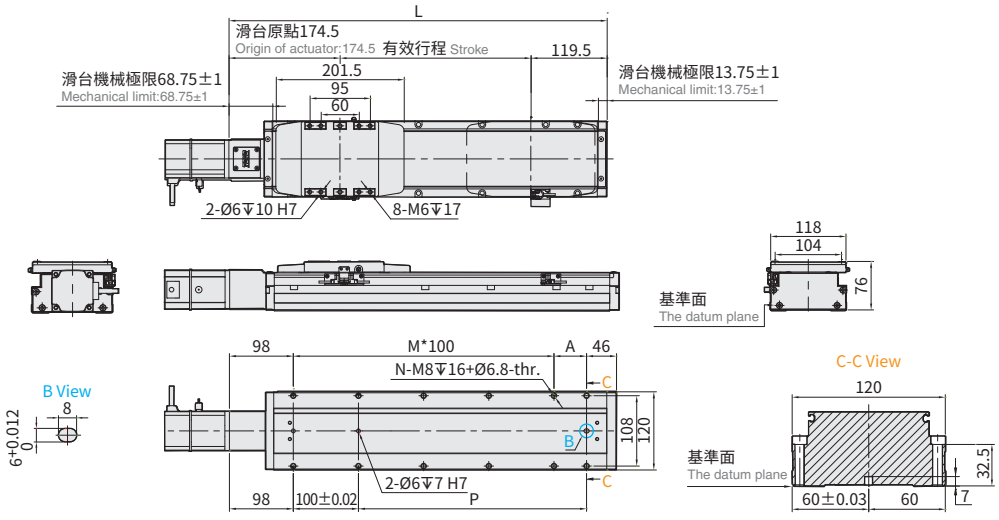
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.05	5.4	5.75	6.1	6.45	6.8	7.15	7.5	7.85	8.2	8.55	8.9	9.25	9.6	9.95	10.3	10.65	11	11.35	11.7	12.05	12.4	12.75	13.1	13.45

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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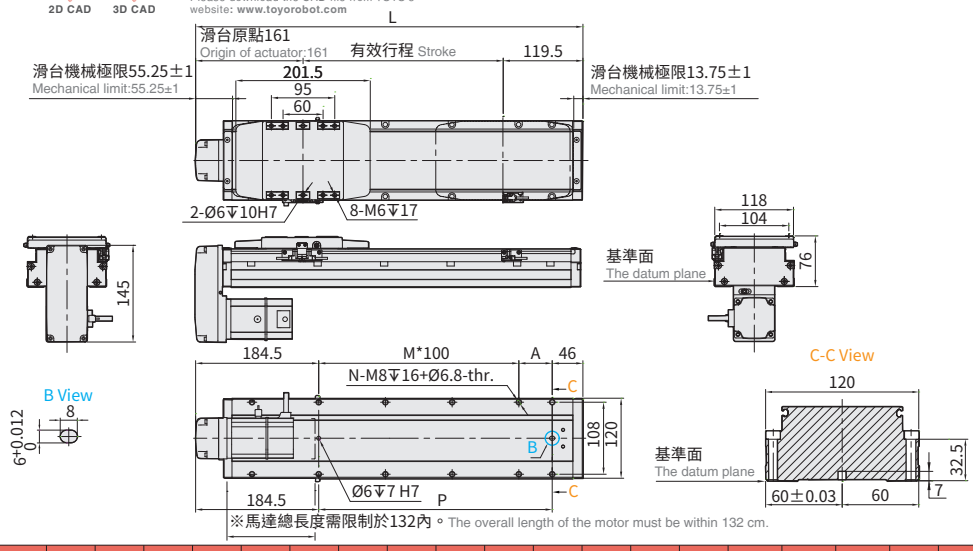
(單位 Unit：mm)



※馬達總長度需限制於132內。The overall length of the motor must be within 132 cm.

有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	330.5	380.5	430.5	480.5	530.5	580.5	630.5	680.5	730.5	780.5	830.5	880.5	930.5	980.5	1030.5	1080.5	1130.5	1180.5	1230.5	1280.5	1330.5	1380.5	1430.5	1480.5	1530.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.21	5.56	5.91	6.26	6.61	6.96	7.31	7.66	8.01	8.36	8.71	9.06	9.41	9.76	10.11	10.46	10.81	11.16	11.51	11.86	12.21	12.56	12.91	13.26	13.61

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

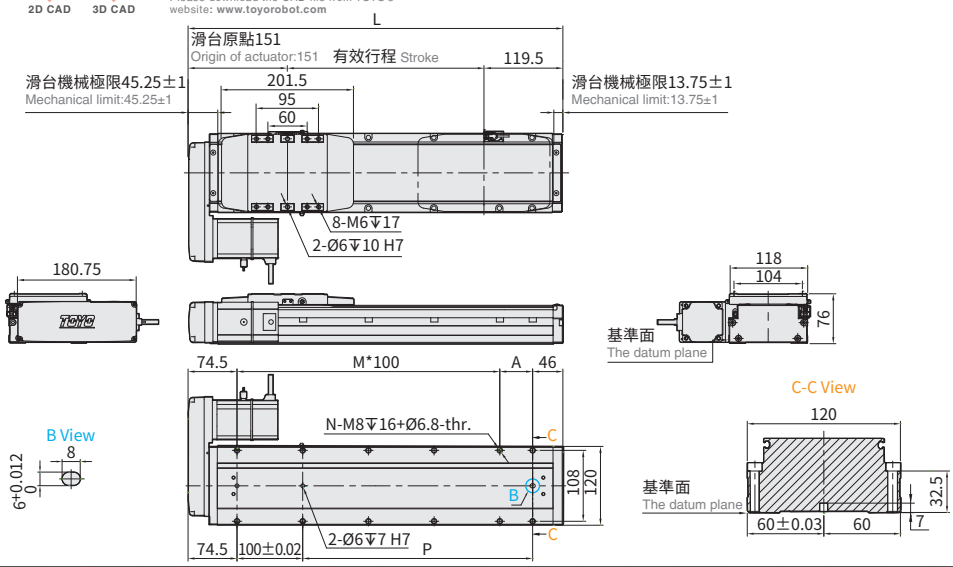
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

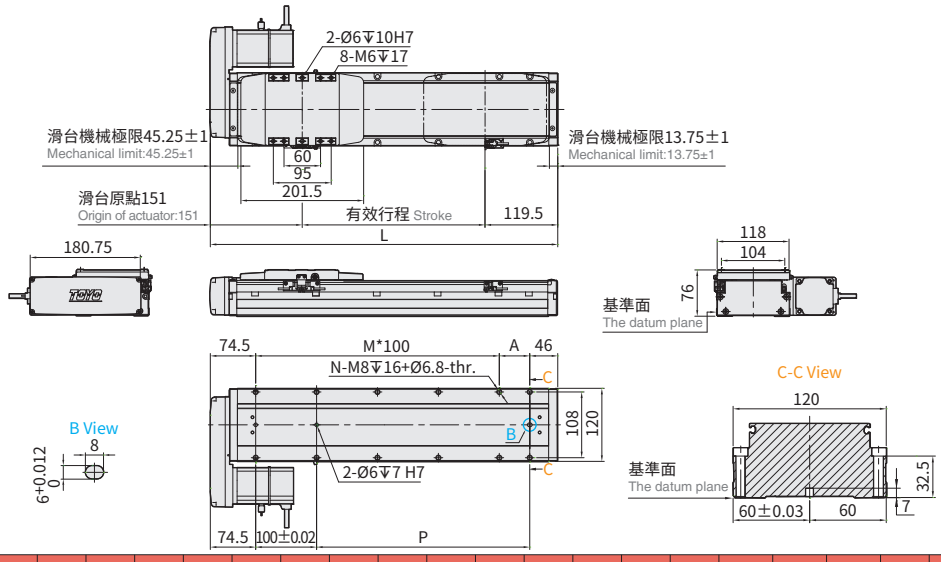
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)

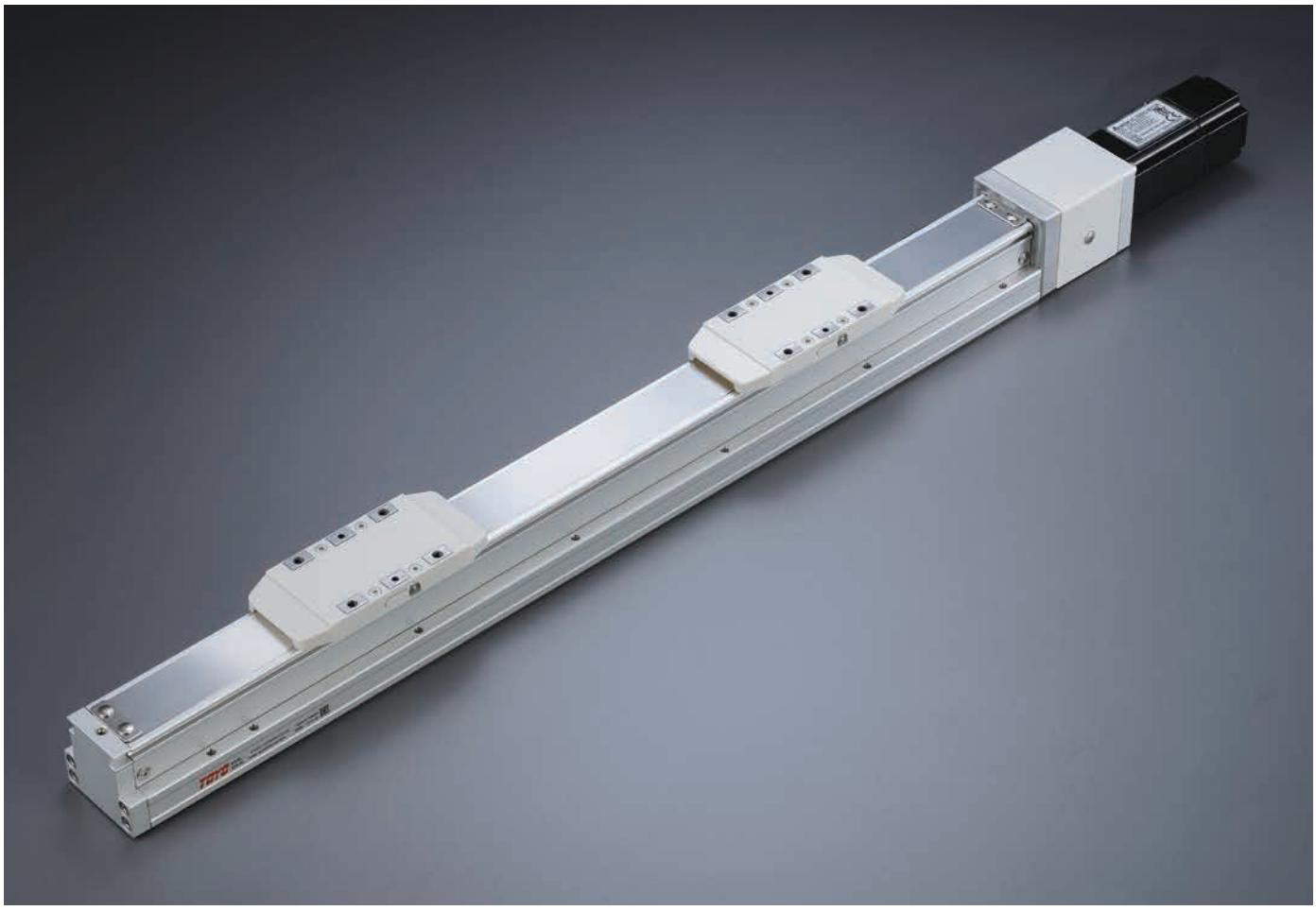


有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH5S

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke 325mm

最高速度 Maximum Speed 100mm/s

馬達容量 Motor Output 100W

滾珠螺桿 Ball Screw ⌀12mm

型號表示方式 Ordering Method

GTH5S - L2 - 100 - BC - M10B - C4 - 0001

本體型號 Model

行程 Stroke

25-325mm
間隔25 25 mm Pitch

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

2	2mm

*反向同動只能對應導程2。
Dual carriage synchronous movement in reverse direction can only fit at lead of 2mm.

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 25/50/75 時，有以下限制：
When the stroke is 25 / 50 / 75mm the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

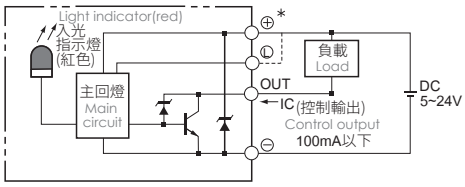
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005
	螺桿導程 Ball Screw Lead (mm)		2
	最高速度 Maximum Speed (mm/s)※1		100
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	30 (雙滑座 Dual carriage)
		垂直使用 Vertical (kg)	10 (雙滑座 Dual carriage)
	定格推力 Rated Thrust (N)		854
	標準行程 Stroke / Pitch (mm)※2		25-325mm/25 間隔 50 mm Pitch
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø12
	連軸器 Coupling (mm)		7X8
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)

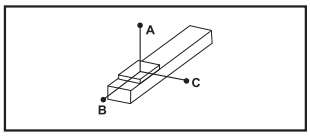
感應器接線圖<原點及端點> Sensor Layout



※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

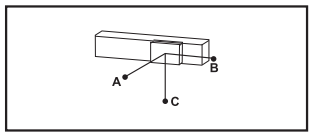
※ 2 反向同動只能對應導程2。
Dual carriage synchronous movement in reverse direction can only fit at lead of 2mm.

容許負載力距表 Allowable Moment



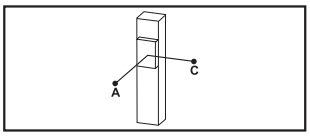
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	10kg	900	100	135
	20kg	700	45	60
	30kg	550	25	35



(單位 Unit:mm)

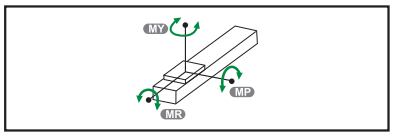
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	10kg	135	100	900
	20kg	60	45	700
	30kg	37	27	550



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	6kg	180	180
	8kg	135	135
	10kg	110	110

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	103
MP	103
MR	144

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

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廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

GTH5S

螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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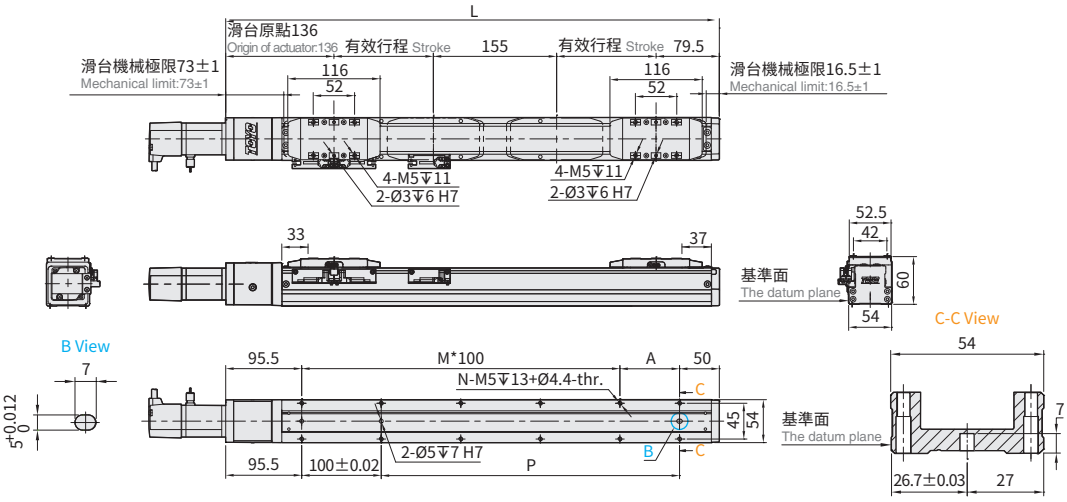
(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325
L	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.82	3.01	3.21	3.41	3.6	3.8	4	4.19	4.39	4.59	4.78	4.98	5.18

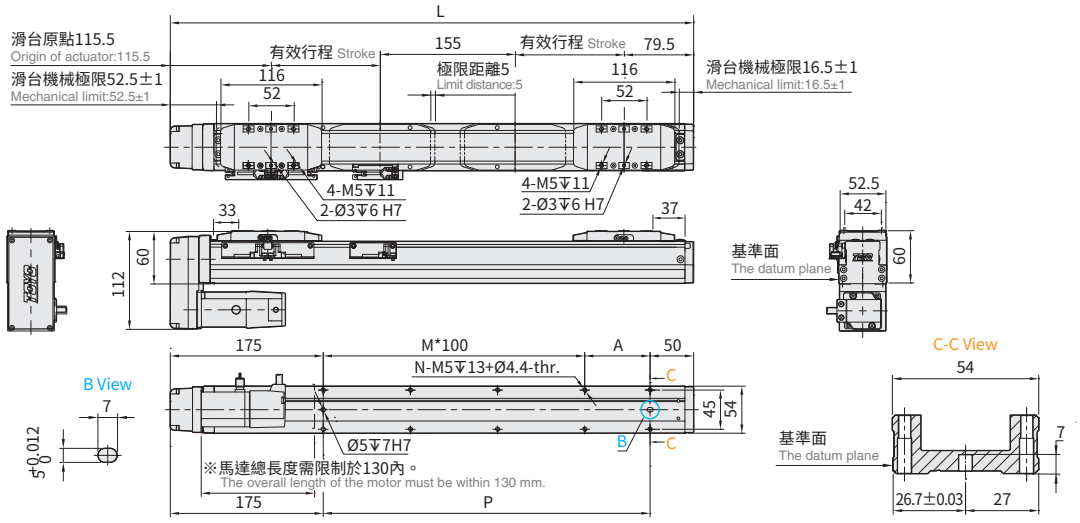
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325
L	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	2	2	3	3	4	4	5	5	6	6	7	7
N	6	8	8	10	10	12	12	14	14	16	16	18	18
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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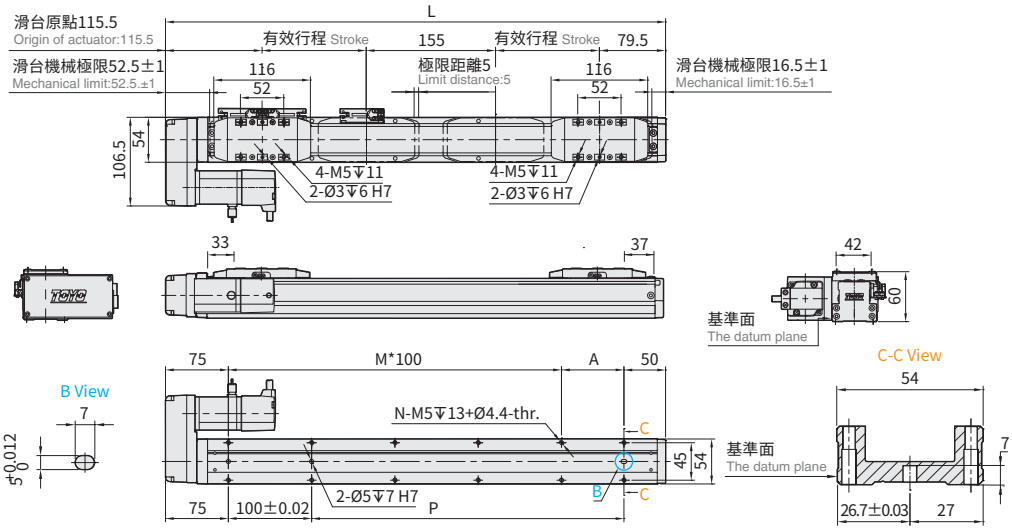
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325
L	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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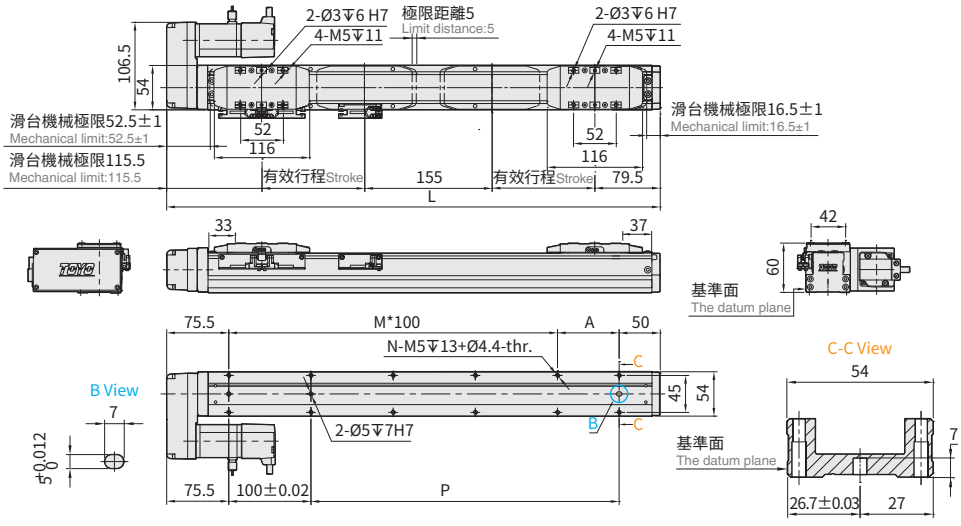
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit：mm)

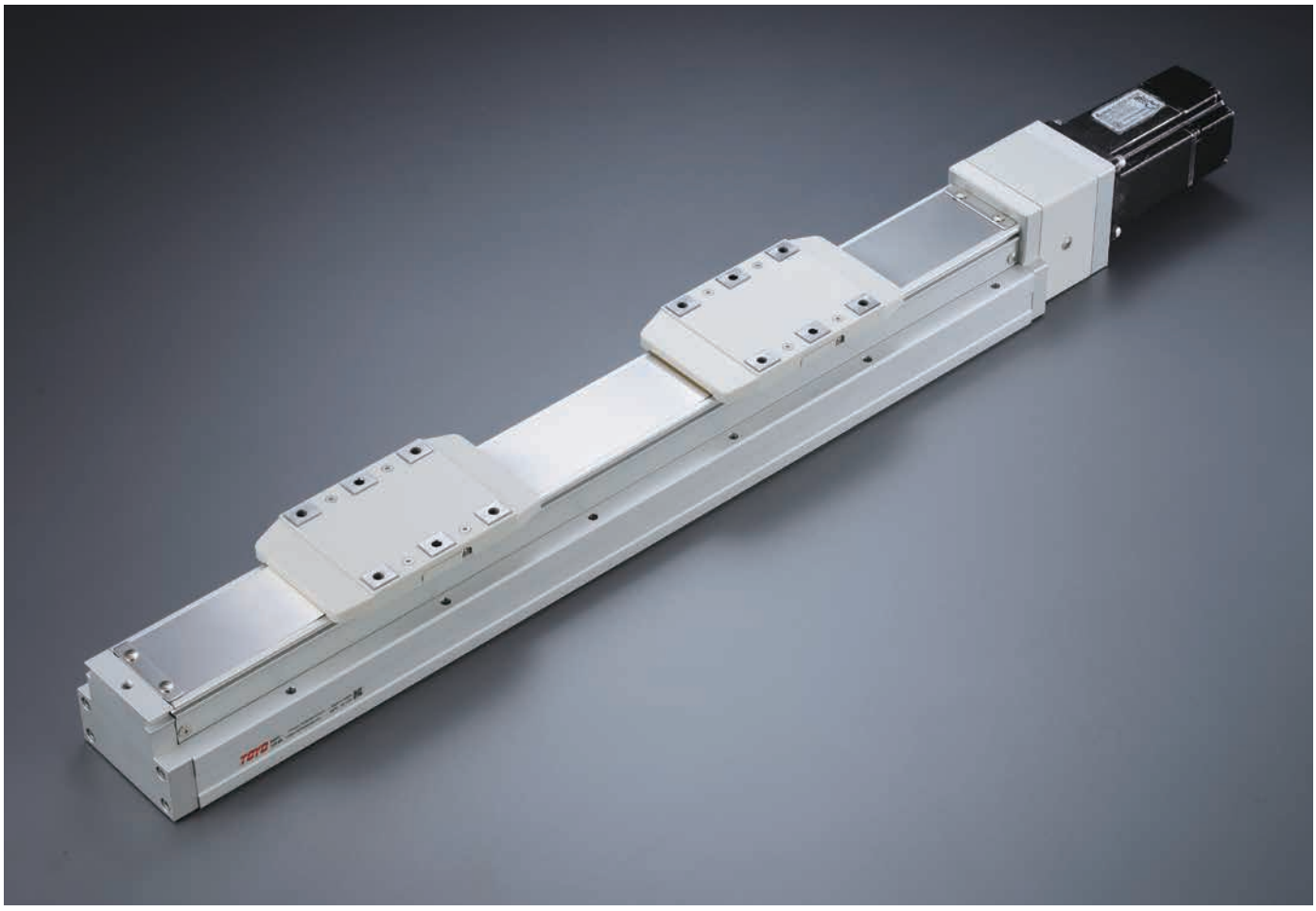


有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325
L	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH8S

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
450mm	250mm/s	200W	⌀16mm

型號表示方式 Ordering Method

GTH8S - L5 - 100 - BC - M20B - C4 - 0001

本體型號 Model

行程 Stroke

25-450mm
間隔25 25 mm Pitch

螺桿導程 Ball Screw Lead

5	5mm

*反向同動只能對應導程5。
Dual carriage synchronous movement in reverse direction can only fit at lead of 5mm.

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	200W	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 25/50/75 時，有以下限制：
When the stroke is 25 / 50 / 75mm the sensor installation has the following restrictions:
1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

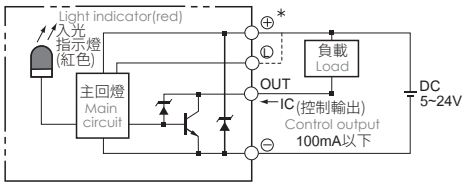
外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

特注式樣 Customization Order No.

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005
	螺桿導程 Ball Screw Lead (mm)		5
	最高速度 Maximum Speed (mm/s)※1		250
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	50 (雙滑座 Dual carriage)
		垂直使用 Vertical (kg)	15 (雙滑座 Dual carriage)
	定格推力 Rated Thrust (N)		683
	標準行程 Stroke / Pitch (mm)※2		25-450mm/25 間隔 25 mm Pitch
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		200
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16
	連軸器 Coupling (mm)		10x14/11(註1)
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)

感應器接線圖<原點及端點> Sensor Layout

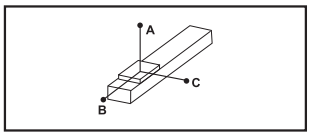


※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

※ 2 反向同動只能對應導程5。
Dual carriage synchronous movement in reverse direction can only fit at lead of 5mm.

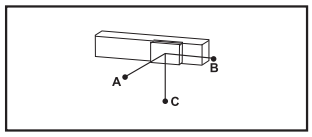
註1:使用Panasonic 200W馬達時，馬達軸心為Ø11；其他廠牌，馬達軸心為Ø14。
Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

容許負載力距表 Allowable Moment



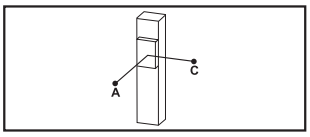
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82



(單位 Unit:mm)

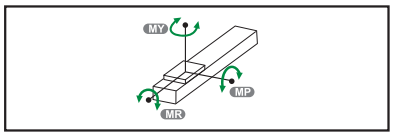
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	20kg	214	153	1435
	35kg	113	81	845
	50kg	74	53	506



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	10kg	331	331
	15kg	220	220
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	318
MP	318
MR	626

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	HG-KR23	MR-J4-20A
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	HG-KR23B	MR-J4-20A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	MSMD022G1U	MADHT1507
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	MSMD022G1V	MADHT1507
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	ECMA-C20602ES	ASD-B20221-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	ECMA-C20602FS	ASD-B20221-B

GTH8S

螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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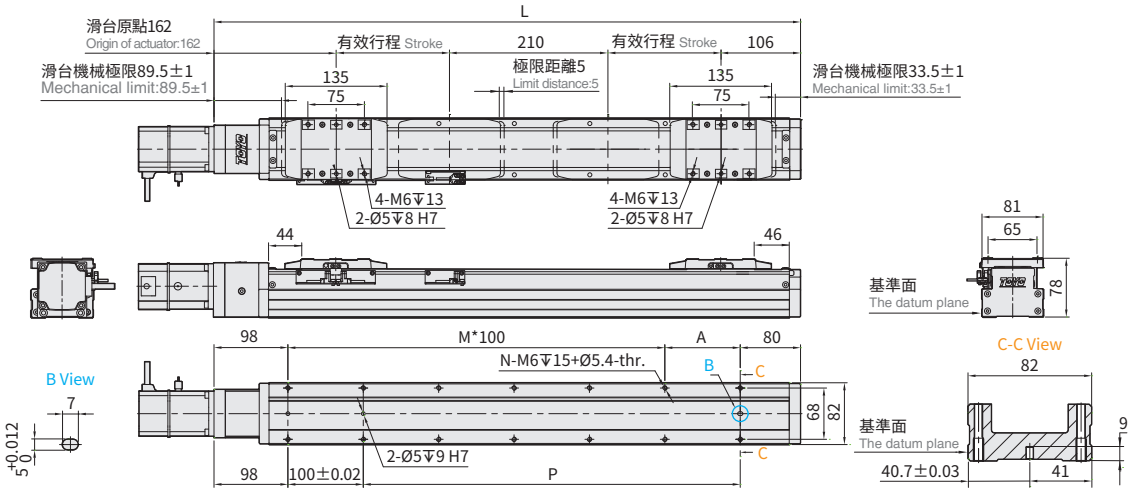
(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	6.64	7.00	7.37	7.73	8.10	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48	12.85

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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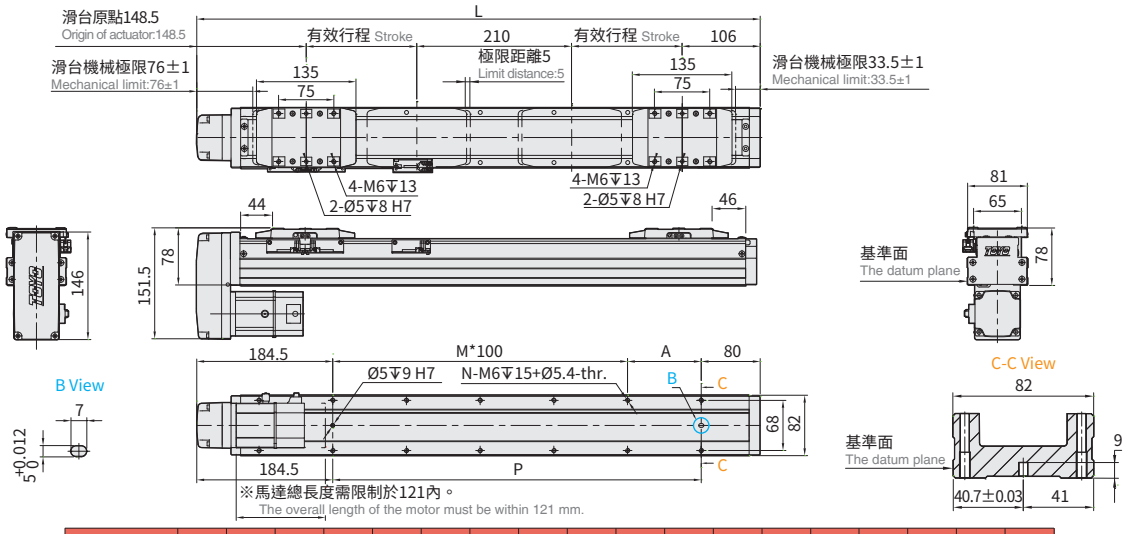
(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	12.85

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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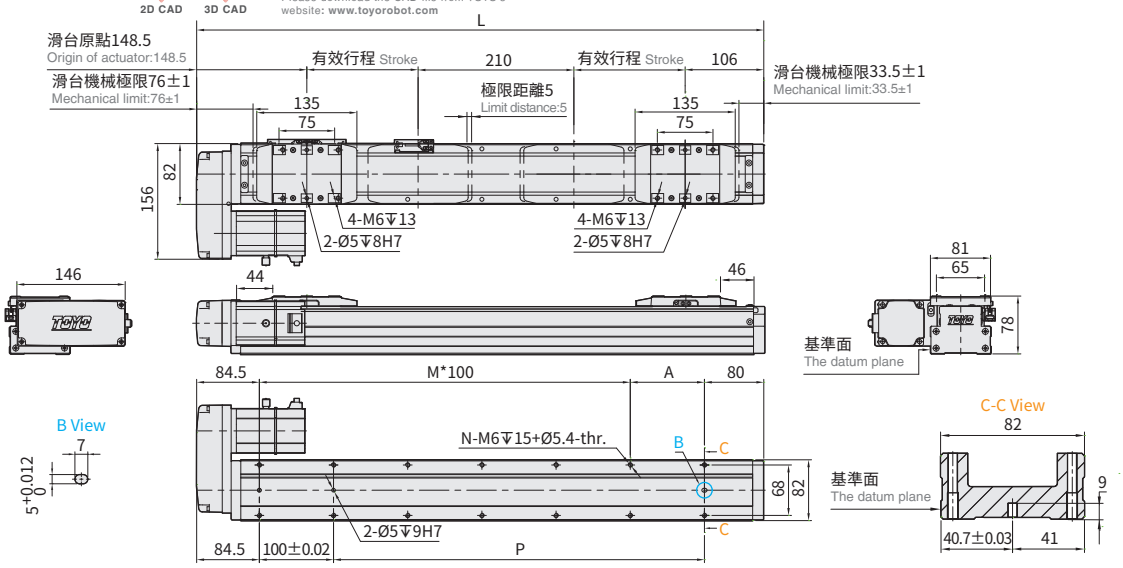
(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	12.85

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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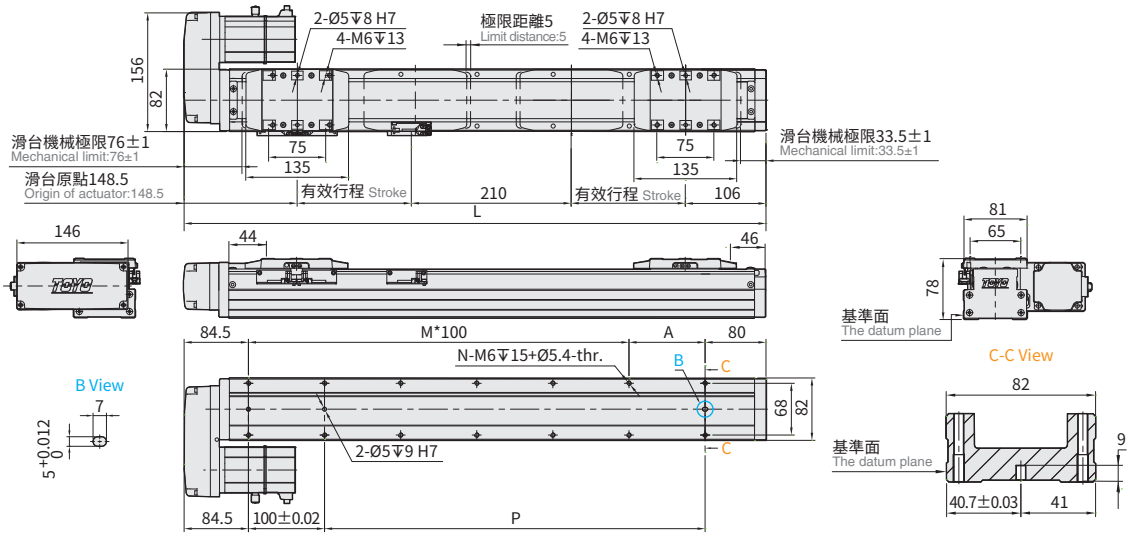
(單位 Unit：mm)

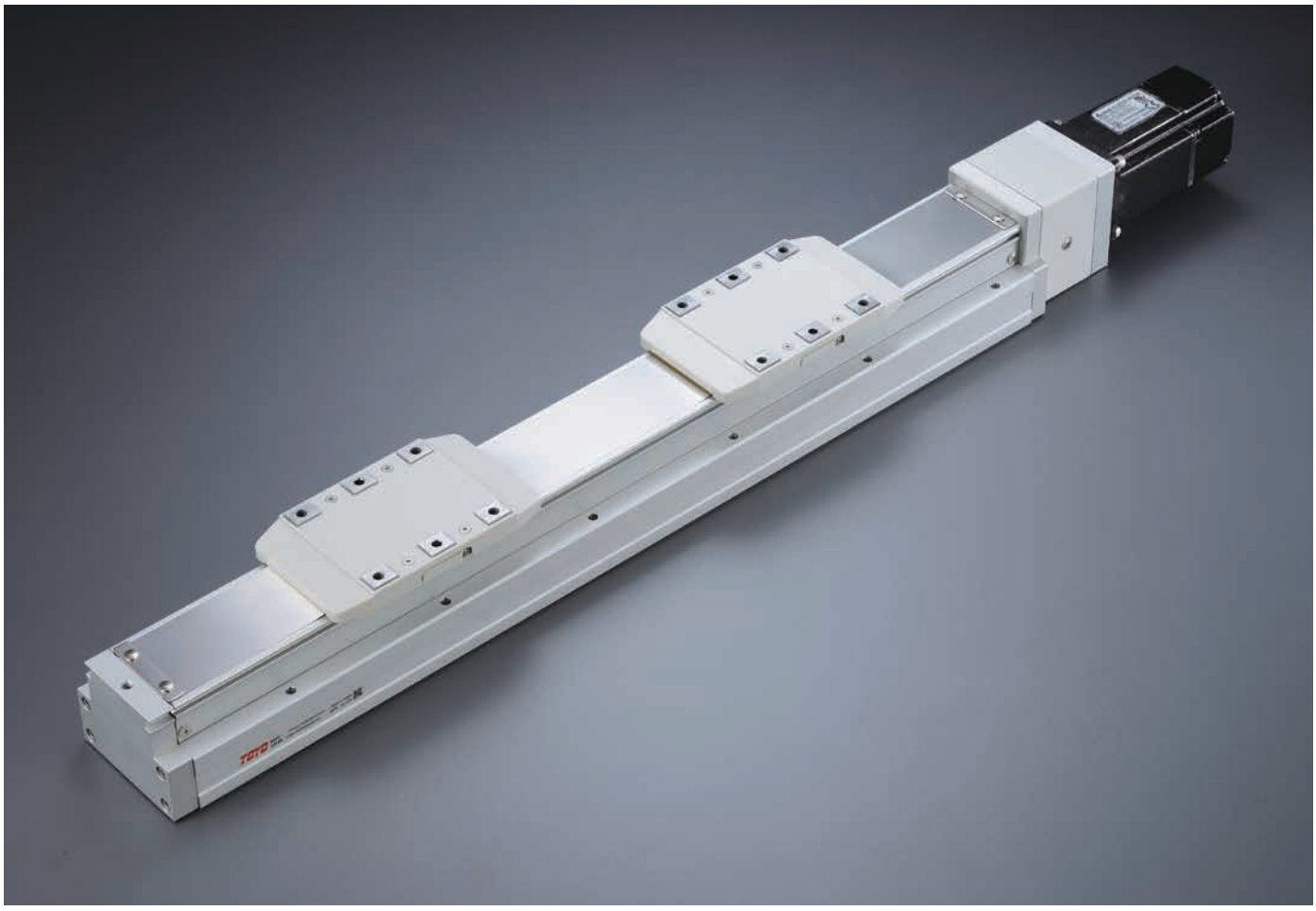


有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	615.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	12.85

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GTH8S

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke 450mm

最高速度 Maximum Speed 250mm/s

馬達容量 Motor Output 400W

滾珠螺桿 Ball Screw ⌀16mm

型號表示方式 Ordering Method

GTH8S - L5 - 100 - BC - M40B - C4 - 0001

本體型號 Model

行程 Stroke

25-450mm
間隔25 25 mm Pitch

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

5	5mm

*反向同動只能對應導程5。
Dual carriage synchronous movement in reverse direction can only fit at lead of 5mm.

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 25/50/75 時，有以下限制：
When the stroke is 25 / 50 / 75mm the sensor installation has the following restrictions:
1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

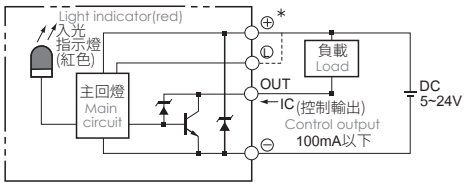
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005
	螺桿導程 Ball Screw Lead (mm)		5
	最高速度 Maximum Speed (mm/s)※1		250
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	50 (雙滑座 Dual carriage)
		垂直使用 Vertical (kg)	15 (雙滑座 Dual carriage)
	定格推力 Rated Thrust (N)		1388
	標準行程 Stroke / Pitch (mm)※2		25-450mm/25 間隔 25 mm Pitch
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16
	連軸器 Coupling (mm)		10x14
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)

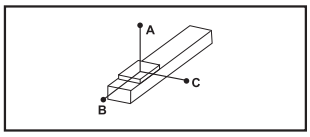
感應器接線圖<原點及端點> Sensor Layout



※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

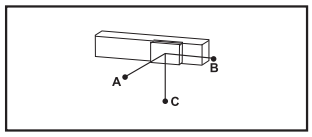
※ 2 反向同動只能對應導程5。
Dual carriage synchronous movement in reverse direction can only fit at lead of 5mm.

容許負載力距表 Allowable Moment



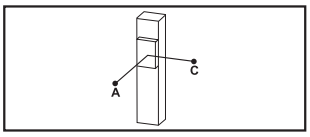
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82



(單位 Unit:mm)

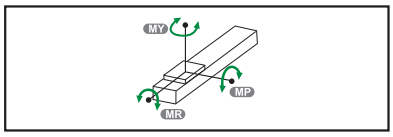
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	20kg	214	153	1435
	35kg	113	81	845
	50kg	74	53	506



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	10kg	331	331
	15kg	220	220
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	318
MP	318
MR	626

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.
※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	HG-KR43	MR-J4-40A
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MHMD042G1U	MBDHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MHMD042G1V	MBDHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GTH8S

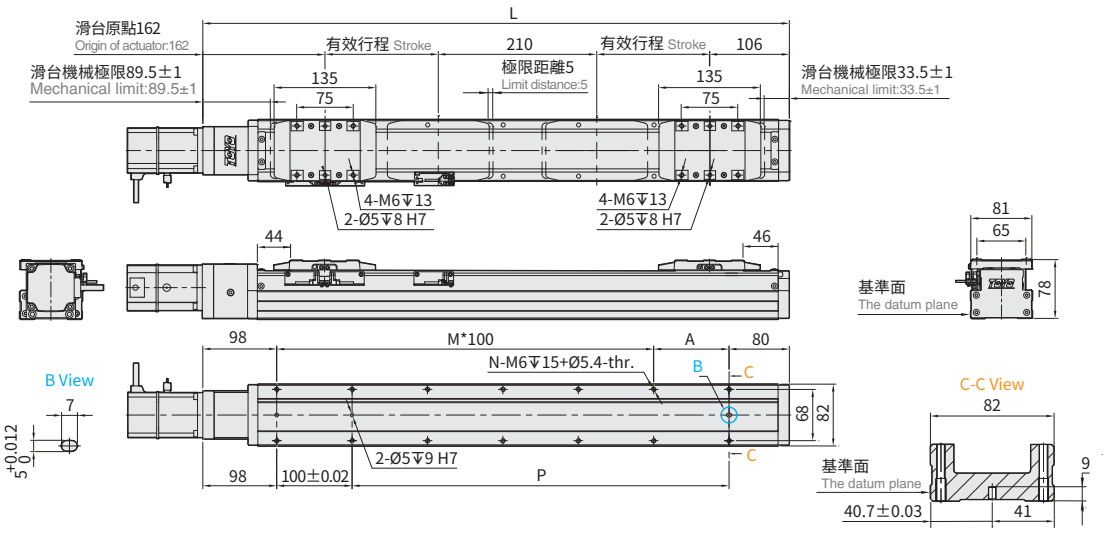
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	6.64	7.00	7.37	7.73	8.10	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48	12.85

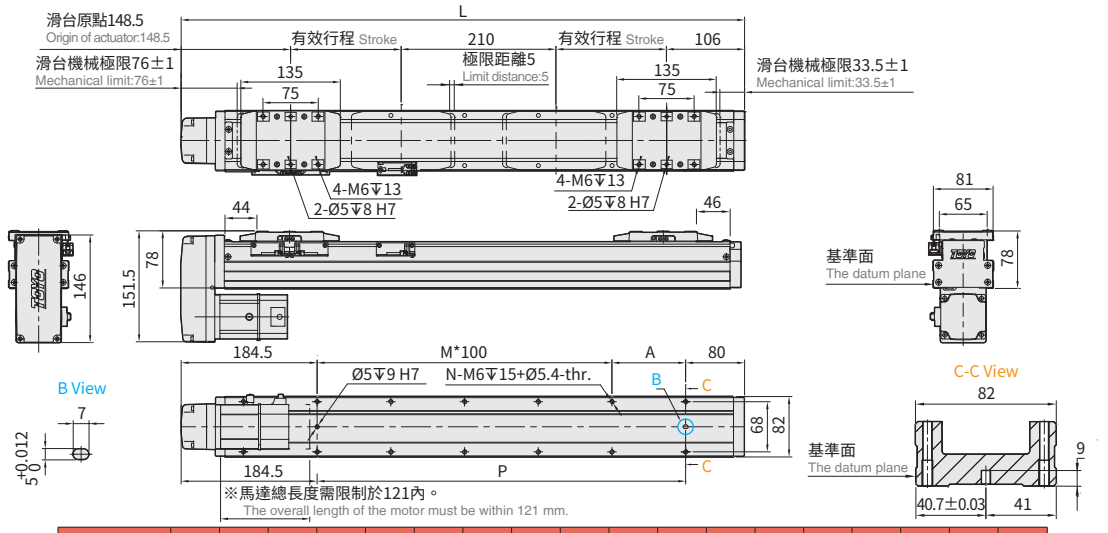
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	12.85

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

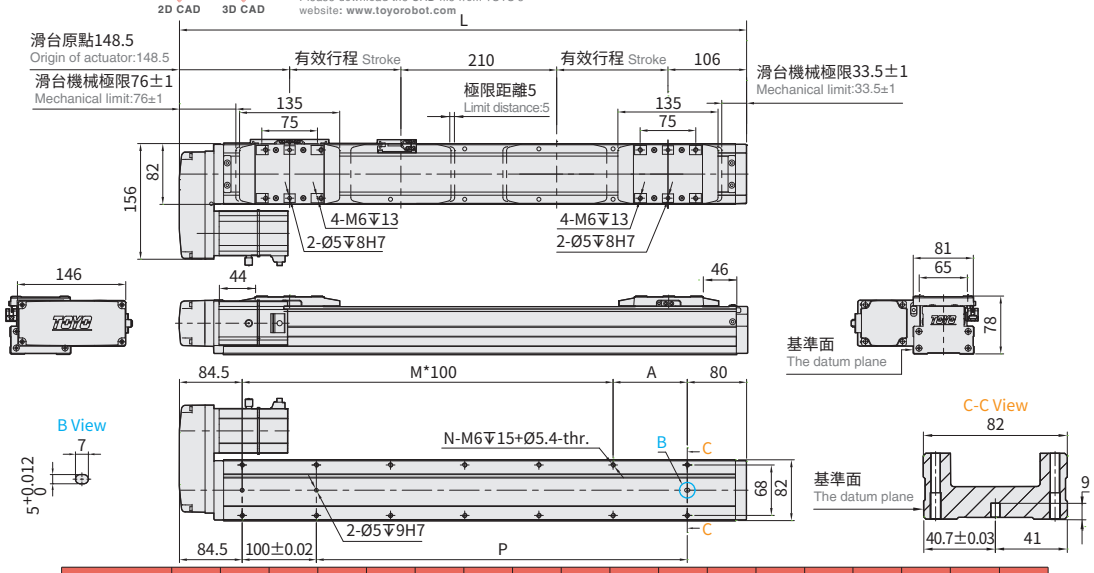
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	12.85

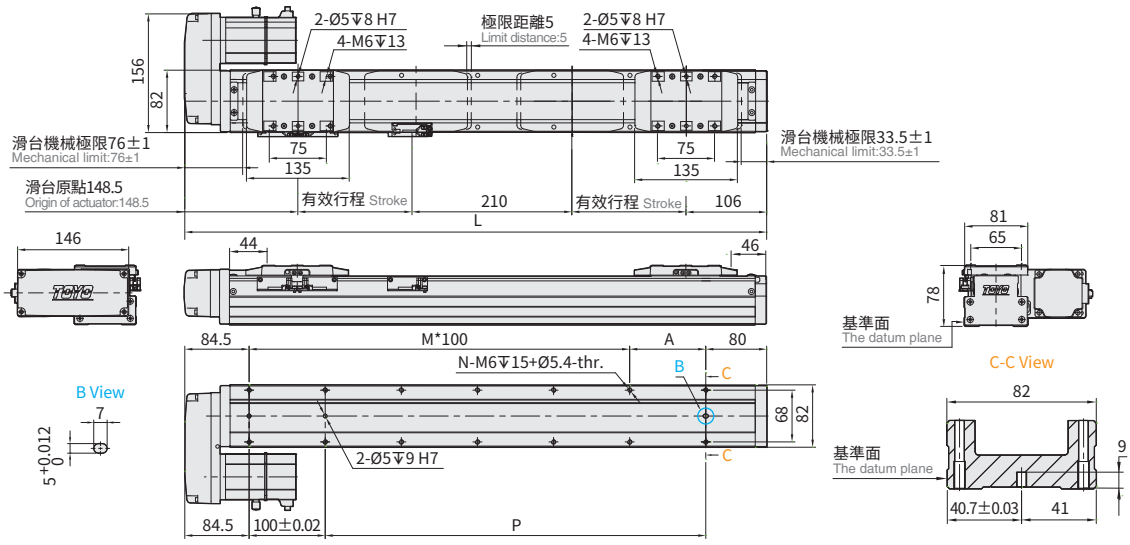
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	25	50※	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	615.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	12.85

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

Memo

GTY

軌道內嵌式滑台模組-推桿式

GTY built-in linear motion guide Electric Actuator-Rod Type

Contents

小型 SMALL

GTY4

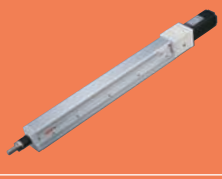
本體寬幅 44mm
Width

最大行程 500mm 071
Max. stroke

最大荷重 25kg
Max. payload

小型 SMALL

GTY5



本體寬幅 54mm
Width

最大行程 600mm 079
Max. stroke

最大荷重 30kg
Max. payload

中型 MEDIUM

GTY8

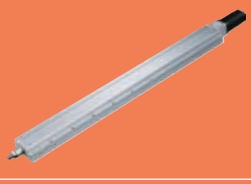
本體寬幅 82mm
Width

最大行程 800mm 083
Max. stroke

最大荷重 50kg
Max. payload

大型 LARGE

GTY12



本體寬幅 120mm
Width

最大行程 800mm 091
Max. stroke

最大荷重 110kg
Max. payload

規格索引

Spec Index

GTY 軌道內嵌式滑台模組-推桿式

GTY built-in linear motion guide Electric Actuator-Rod Type

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec		最大可搬重量*1 Maximum Payload(kg)		最高速度*2 Maximum Speed (mm/s)
						外徑 Outer Diameter(mm)	導程 Lead(mm)	水平使用 Horizontal	垂直使用 Vertical	
一般環境 Standard	滾珠螺桿 Ball screw	GTY4	50W	44	±0.01	10	2	25	8	100
							6	20	5	300
			100W				12	12	2	600
		GTY5	100W	54	±0.01	12	2	30	10	100
							5	30	10	250
							10	15	5	500
							20	10	2.5	1000
		GTY8	200W	82	±0.01	16	5	50	15	250
							10	30	8	500
			400W				20	18	3	1000
		GTY12	400W	120	±0.01	16	5	110	33	250
							10	88	22	500
							20	40	10	1000
							32	30	8	1600

*1:此荷重條件外部需搭配輔助滑軌以承受徑向負載。
When the stroke is over 300mm, the run-out of the ballscrew will occur.

*2:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

	標準行程及最高使用速度*3 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																											頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1200	1300	1400	1500	1600	
						100																						071
						300																						
						600																						
						100																						079
						250																						
						500																						
						1000																						
						250										225												083
						500										450												
						1000										900												
						250																						091
						500																						
						1000																						
						1600																						

*3:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

GTY4

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke 500mm

最高速度 Maximum Speed 600mm/s

馬達容量 Motor Output 50W

滾珠螺桿 Ball Screw ⌀10mm

型號表示方式 Ordering Method

GTY4 - L2 - 100 - BC - M05B - C4 - 0001

本體型號 Model

特注式樣 Customization Order No.

行程 Stroke

50-500mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	50W	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

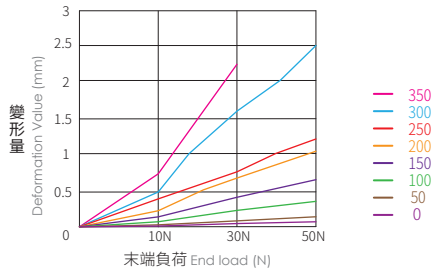
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1		100	300	600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg) (註1)	25	20	12
		垂直使用 Vertical (kg)	8	5	2
	定格推力 Rated Thrust (N)		424	141	71
	標準行程 Stroke / Pitch (mm)		50-500mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		50		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø10		
	連軸器 Coupling (mm)		7X8		
	原點感應器 Home Sensor	外掛 Outside	CS-6T (NPN)		

出力軸變形量 Shaft Output Deformation Value



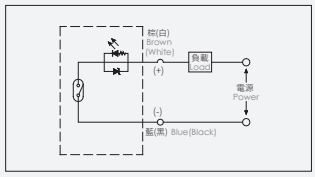
※此圖表為參考值。
This form is only reference values.

※1 馬達加減速設定 0.2 秒。
Acceleration and deacceleration value is set 0.2 second.

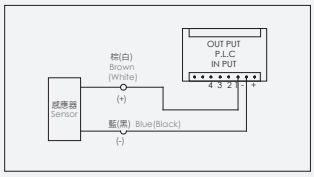
註1: 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

感應器接線圖<原點極端點> Sensor Layout

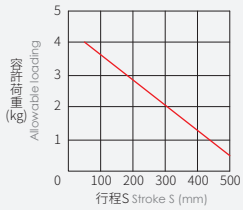
一般性負載：如繼電器或其它之電阻性負載
General load : Such as relay or other resistive load

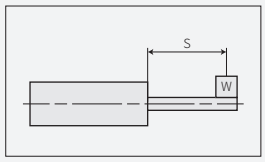


可程式控制器接線圖
Programmable controller connection diagram



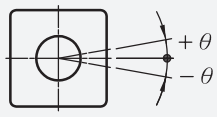
允許安裝負載 Allowable installation load





※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

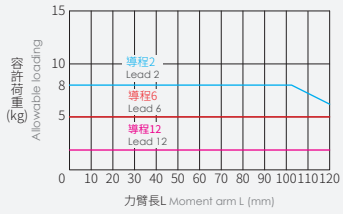
出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod

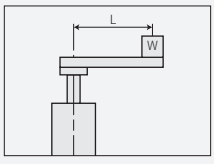


防止迴轉精度 θ Anti-rotating accuracy
±0°

※使用時請避免活塞桿承受迴轉扭力，因為有可能會造成防轉塊變形，導致自動開關反應異常，內部滑軌變形，進而造成增加作動阻抗。
Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod. This may cause deformation of the Anti-rotating guide, abnormal responses of the auto switch, play in the internal guide or an increase in the sliding resistance.

垂直安裝負載 Load in vertical installation





※計算條件:3000rpm/min , 加減速0.2s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.2s.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	HG-KR053	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	HG-KR053B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	MSMD5A2G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	MSMD5A2G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	ECMA-C1040FES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	ECMA-C1040FFS	ASD-B20121-B

GTY4

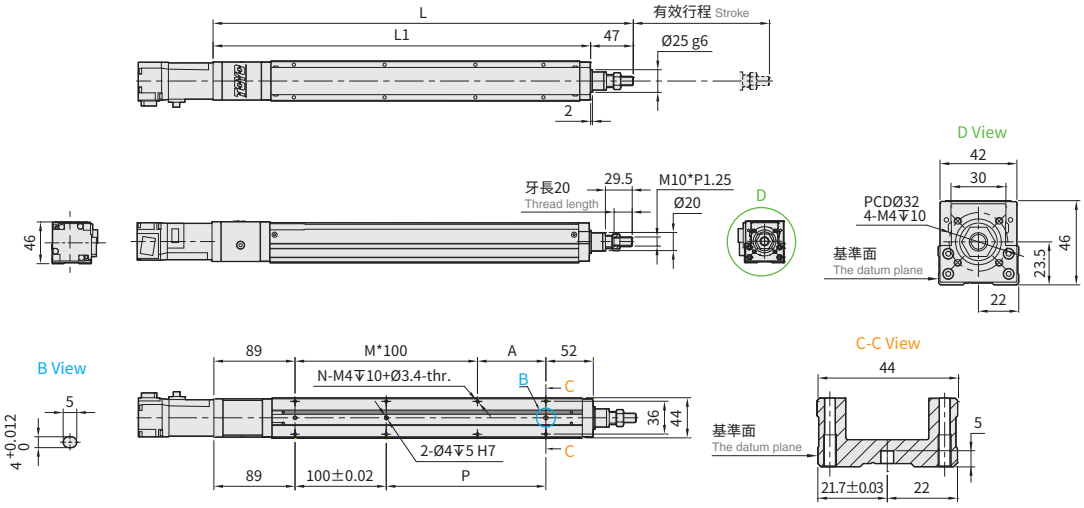
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



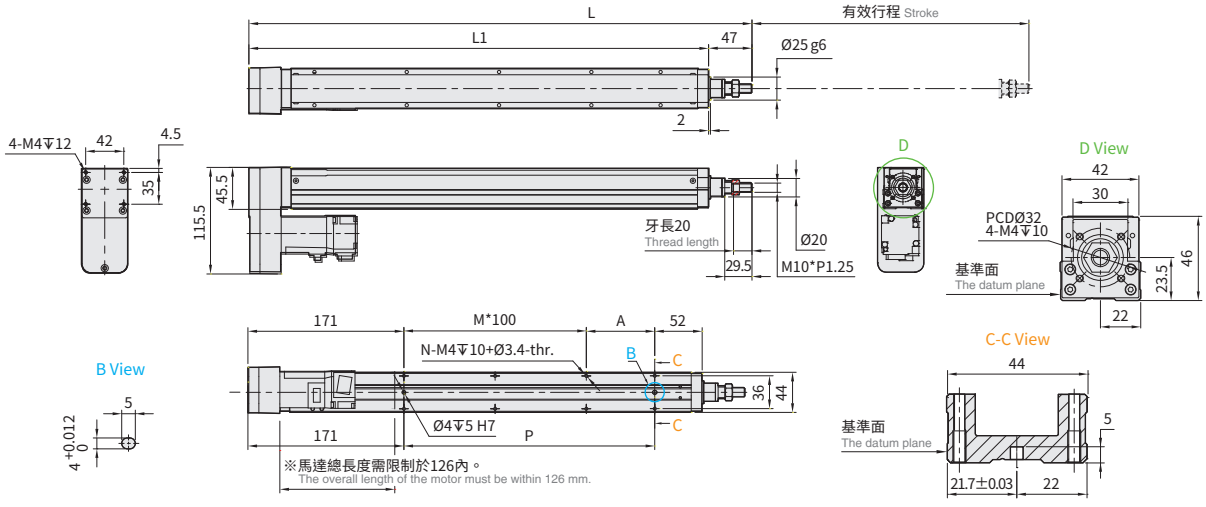
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	313	363	413	463	513	563	613	663	713	763
L1	266	316	366	416	466	516	566	616	666	716
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.87	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4
N	4	4	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.88	1.06	1.24	1.42	1.60	1.78	1.96	2.14	2.32

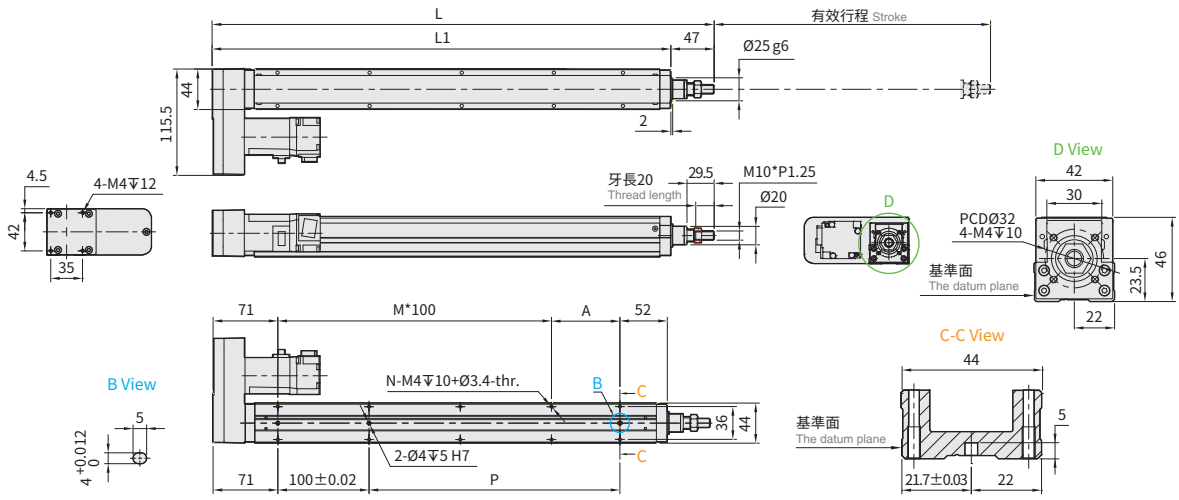
※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準 PIN 孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



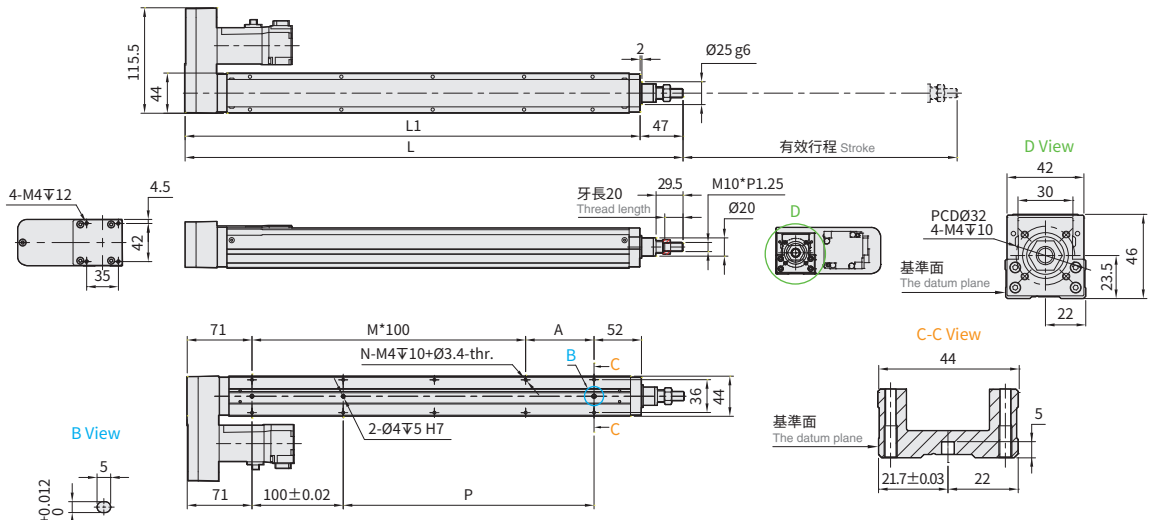
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.88	1.06	1.24	1.42	1.60	1.78	1.96	2.14	2.32

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.88	1.06	1.24	1.42	1.60	1.78	1.96	2.14	2.32

GTY4

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke 500mm

最高速度 Maximum Speed 600mm/s

馬達容量 Motor Output 100W

滾珠螺桿 Ball Screw ⌀10mm

型號表示方式 Ordering Method

GTY4 - L2 - 100 - BC - M10B - C4 - 0001

本體型號 Model

特注式樣 Customization Order No.

行程 Stroke

50-500mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

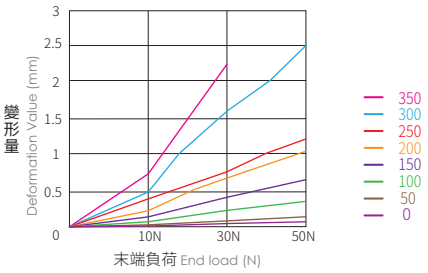
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1		100	300	600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg) (註1)	25	20	12
		垂直使用 Vertical (kg)	8	5	2
	定格推力 Rated Thrust (N)		424	141	71
	標準行程 Stroke / Pitch (mm)		50-500mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø10		
	連軸器 Coupling (mm)		7X8		
	原點感應器 Home Sensor	外掛 Outside	CS-6T (NPN)		

出力軸變形量 Shaft Output Deformation Value



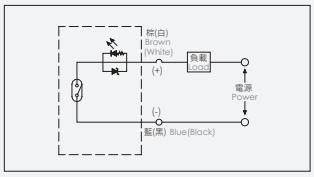
※此圖表為參考值。
This form is only reference values.

※1 馬達加減速設定 0.2 秒。
Acceleration and deacceleration value is set 0.2 second.

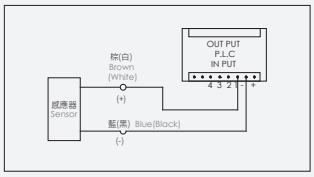
註1: 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

感應器接線圖<原點極端點> Sensor Layout

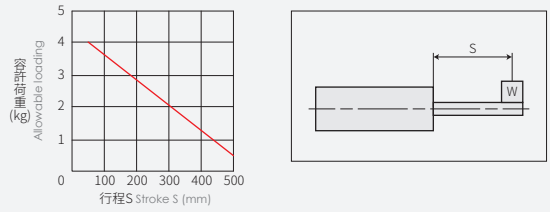
一般性負載：如繼電器或其它之電阻性負載
General load : Such as relay or other resistive load



可程式控制器接線圖
Programmable controller connection diagram

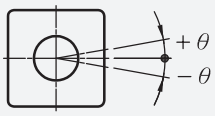


允許安裝負載 Allowable installation load



※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

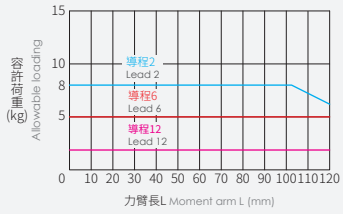
出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod

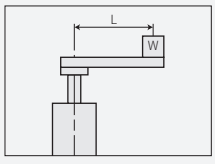


防止迴轉精度 θ Anti-rotating accuracy
±0°

※使用時請避免活塞桿承受迴轉扭力，因為有可能會造成防轉塊變形，導致自動開關反應異常，內部滑軌變形，進而造成增加作動阻抗。
Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod. This may cause deformation of the Anti-rotating guide, abnormal responses of the auto switch, play in the internal guide or an increase in the sliding resistance.

垂直安裝負載 Load in vertical installation





※計算條件:3000rpm/min , 加減速0.2s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.2s.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

GTY4

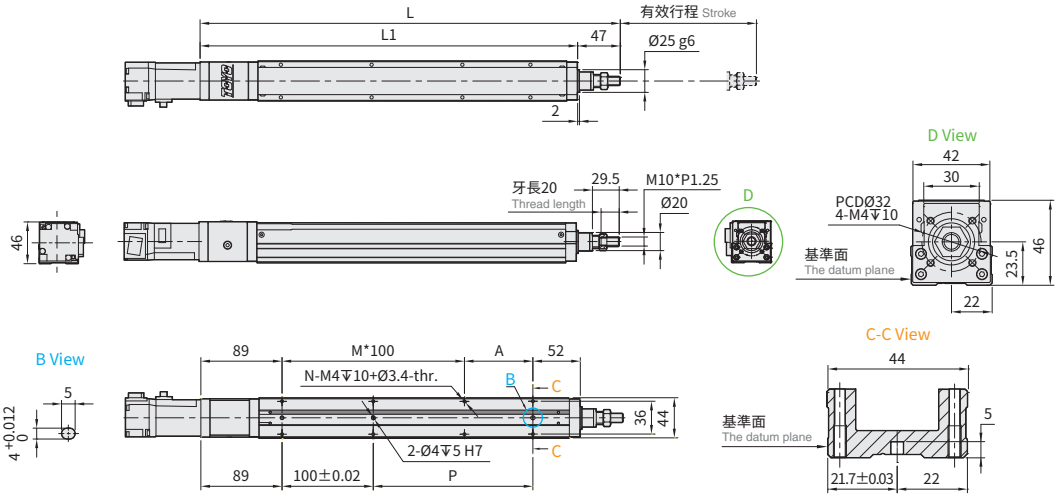
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



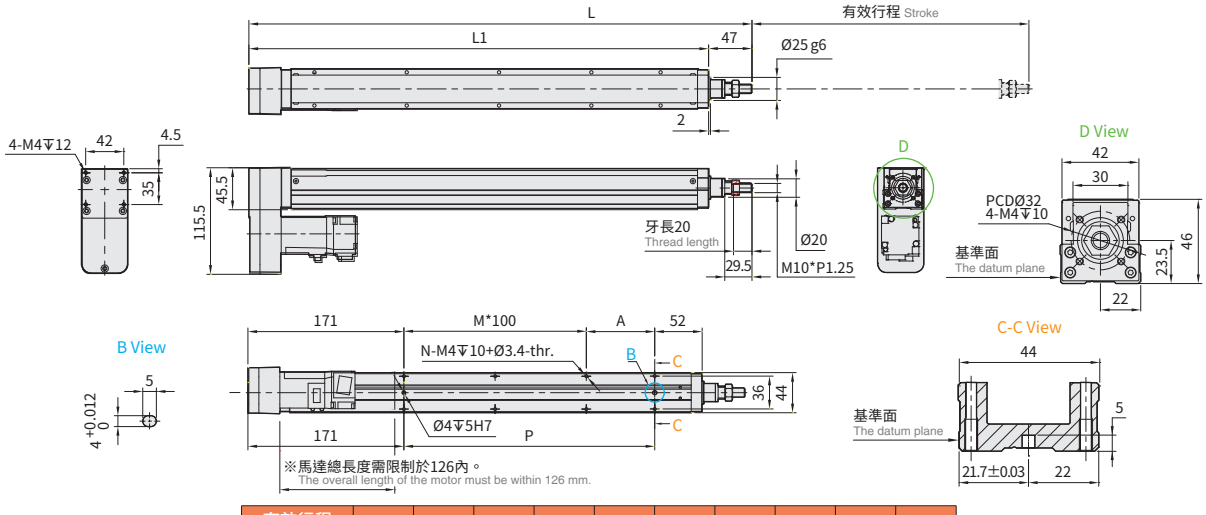
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	313	363	413	463	513	563	613	663	713	763
L1	266	316	366	416	466	516	566	616	666	716
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.87	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4
N	4	4	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.88	1.06	1.24	1.42	1.60	1.78	1.96	2.14	2.32

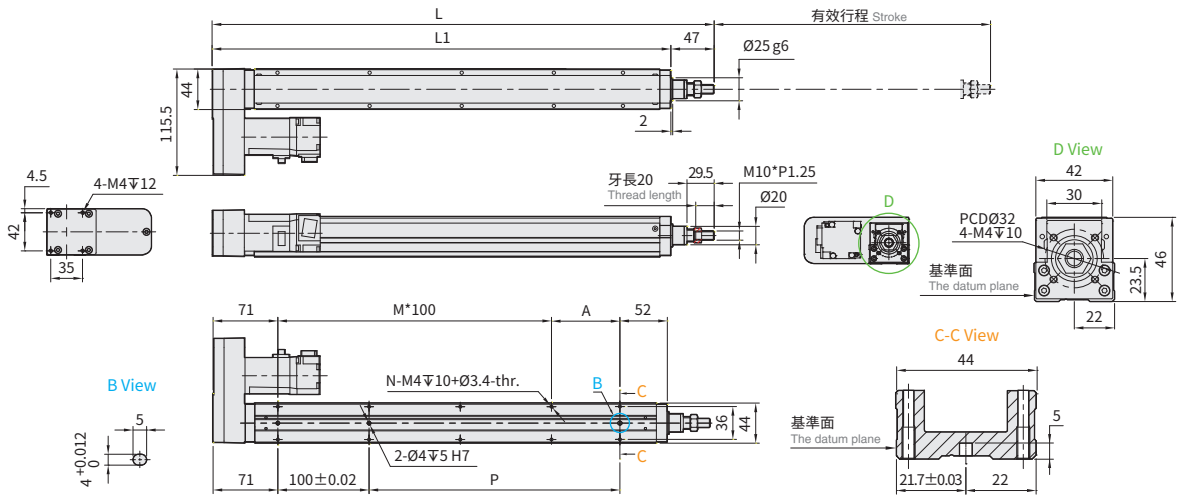
※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準 PIN 孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



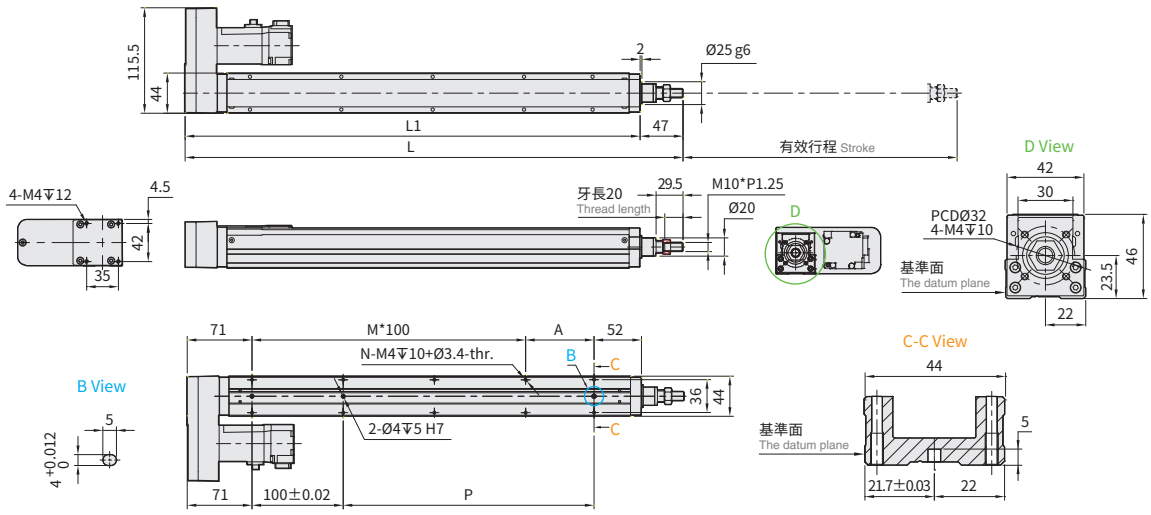
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.88	1.06	1.24	1.42	1.60	1.78	1.96	2.14	2.32

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
KG	0.70	0.88	1.06	1.24	1.42	1.60	1.78	1.96	2.14	2.32

GTY5

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke	600mm
最高速度 Maximum Speed	1000mm/s
馬達容量 Motor Output	100W
滾珠螺桿 Ball Screw	⌀12mm

型號表示方式 Ordering Method

GTY5 - L5 - 100 - BC - M10B - C4 - 0001

- GTY5: 本體型號 Model
- 0001: 特注式樣 Customization Order No.

行程 Stroke

50-600mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

2	2mm
5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

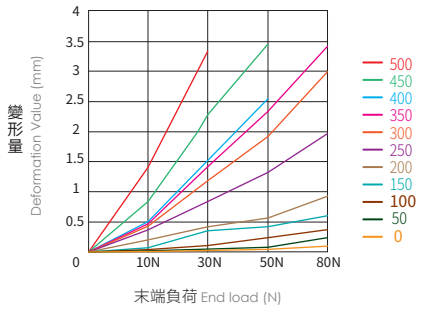
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01			
	螺桿導程 Ball Screw Lead (mm)		2	5	10	20
	最高速度 Maximum Speed (mm/s)※1		100	250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg) (註1)	30	30	15	10
		垂直使用 Vertical (kg)	10	10	5	2.5
	定格推力 Rated Thrust (N)		854	341	170	85
	標準行程 Stroke / Pitch (mm)		50-600mm/50 間隔 50 mm Pitch			
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100			
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø12			
	連軸器 Coupling (mm)		7X8			
	原點感應器 Home Sensor	外掛 Outside	CS-6T (NPN)			

出力軸變形量 Shaft Output Deformation Value



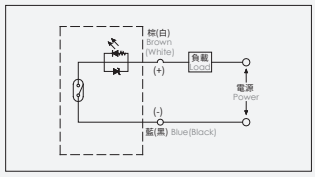
※此圖表為參考值。
This form is only reference values.

※1 馬達加減速設定 0.2 秒。
Acceleration and deacceleration value is set 0.2 second.

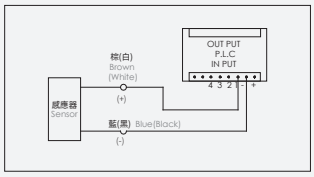
註1: 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

感應器接線圖<原點極端點> Sensor Layout

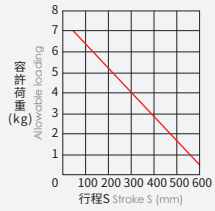
一般性負載：如繼電器或其它之電阻性負載
General load : Such as relay or other resistive load

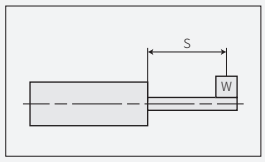


可程式控制器接線圖
Programmable controller connection diagram



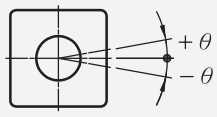
允許安裝負載 Allowable installation load





※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

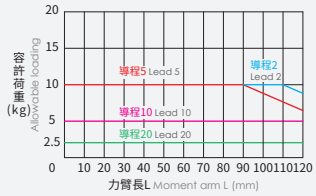
出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod

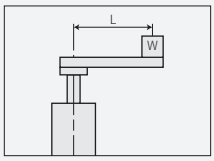


防止迴轉精度 θ Anti-rotating accuracy
±0°

※使用時請避免活塞桿承受迴轉扭力，因為有可能會造成防轉塊變形，導致自動開關反應異常，內部滑軌變形，進而造成增加作動阻抗。
Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod. This may cause deformation of the Anti-rotating guide, abnormal responses of the auto switch, play in the internal guide or an increase in the sliding resistance.

垂直安裝負載 Load in vertical installation





※計算條件:3000rpm/min , 加減速0.2s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.2s.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

GTY5

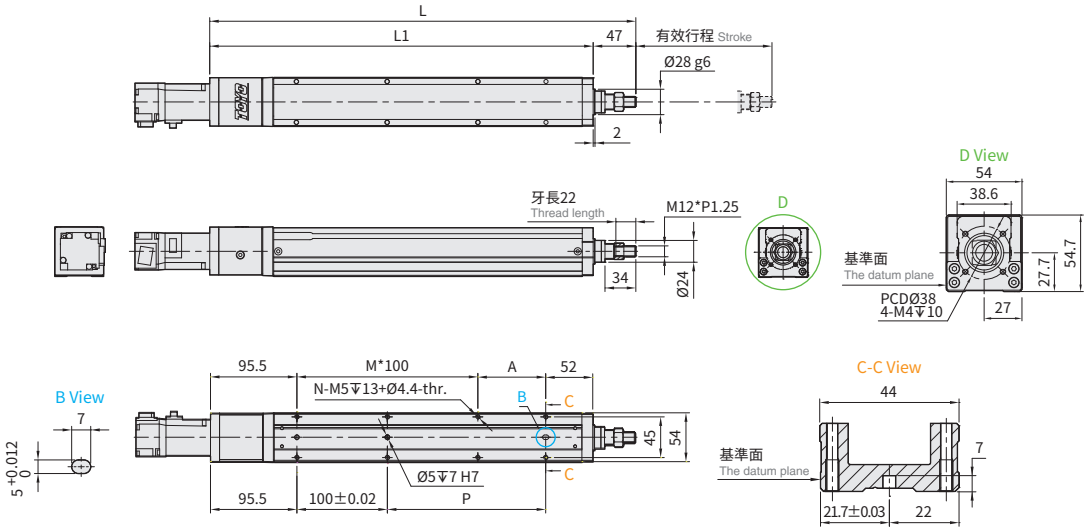
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



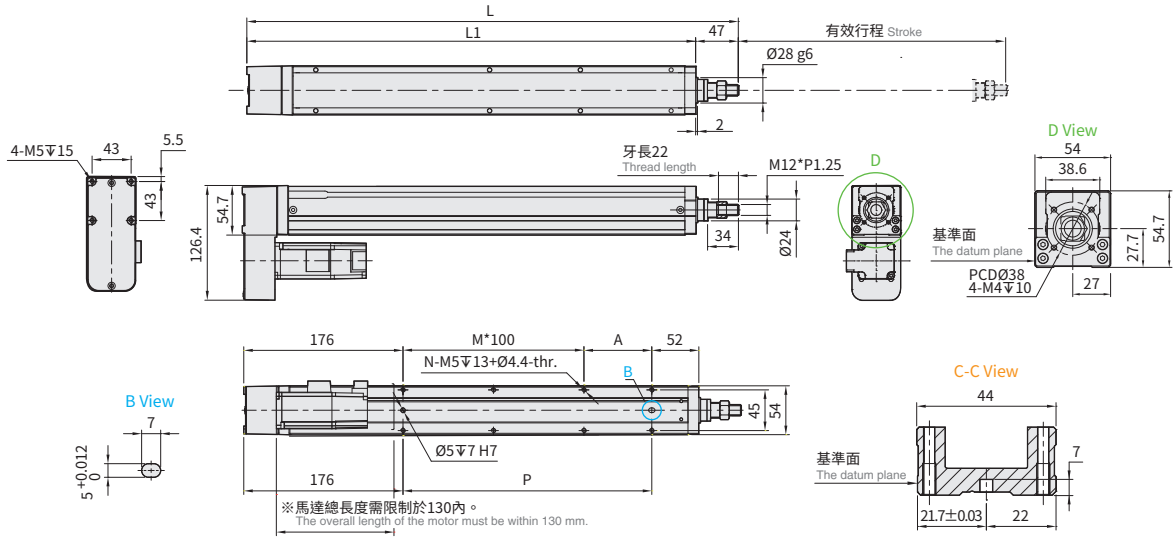
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	319.5	369.5	419.5	469.5	519.5	569.5	619.5	669.5	719.5	769.5	819.5	869.5
L1	272.5	322.5	372.5	422.5	472.5	522.5	572.5	622.5	672.5	722.5	772.5	822.5
A	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6
N	6	6	8	8	10	10	12	12	14	14	16	16
P	25	75	125	175	225	275	325	375	425	475	525	575
KG	2.08	2.22	2.35	2.54	2.82	2.93	2.95	3.18	3.29	3.38	3.58	3.71

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	300	350	400	450	500	550	600	650	700	750	800	850
L1	253	303	353	403	453	503	553	603	653	703	753	803
A	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5
N	4	4	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475	525	575
KG	2.00	2.12	2.35	2.46	2.74	2.85	2.90	3.10	3.21	3.30	3.50	3.63

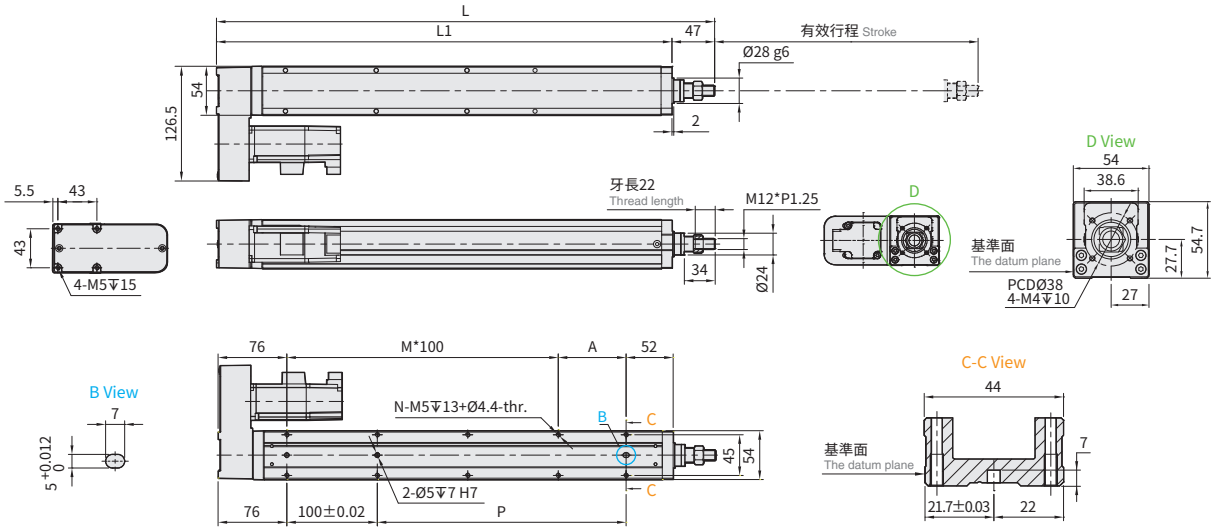
※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準 PIN 孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



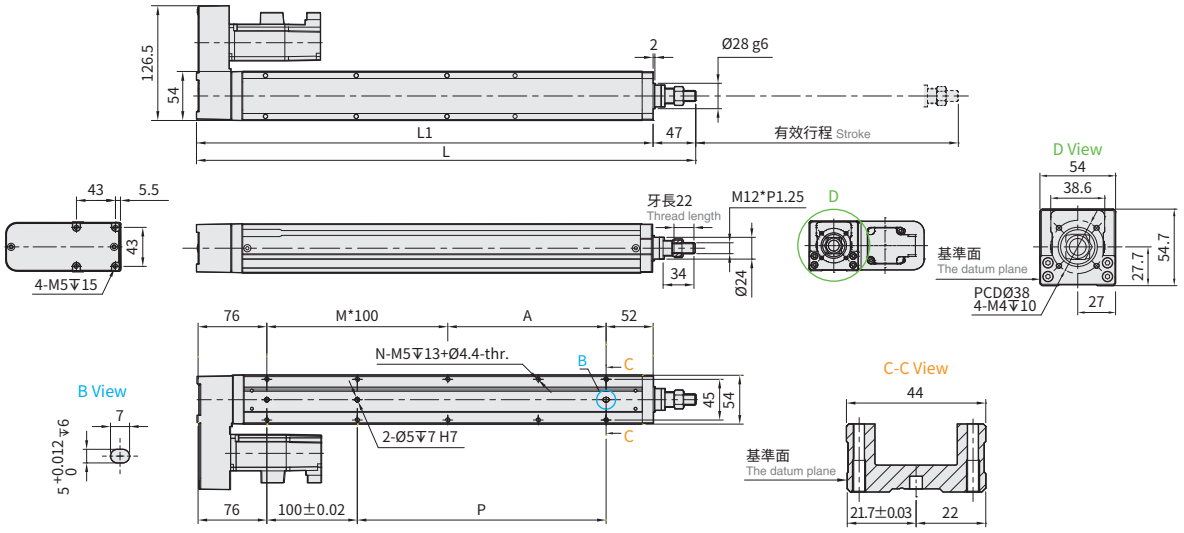
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	300	350	400	450	500	550	600	650	700	750	800	850
L1	253	303	353	403	453	503	553	603	653	703	753	803
A	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6
N	6	6	8	8	10	10	12	12	14	14	16	16
P	25	75	125	175	225	275	325	375	425	475	525	575
KG	2.00	2.12	2.35	2.46	2.74	2.85	2.90	3.10	3.21	3.30	3.50	3.63

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	300	350	400	450	500	550	600	650	700	750	800	850
L1	253	303	353	403	453	503	553	603	653	703	753	803
A	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6
N	6	6	8	8	10	10	12	12	14	14	16	16
P	25	75	125	175	225	275	325	375	425	475	525	575
KG	2.00	2.12	2.35	2.46	2.74	2.85	2.90	3.10	3.21	3.30	3.50	3.63

GTY8

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
800mm	1000mm/s	200W	⌀16mm

型號表示方式 Ordering Method

GTY8 - L10 - 100 - BC - M20B - C4 - 0001

本體型號 Model

特注式樣 Customization Order No.

行程 Stroke

50-800mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	200W	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

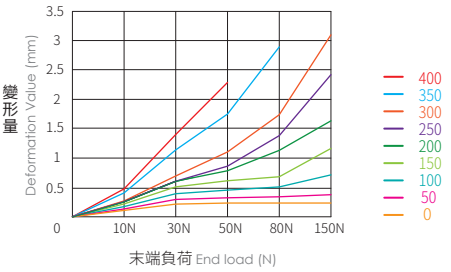
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		5	10	20
	最高速度 Maximum Speed (mm/s)※1		250	500	1000
	最大可搬重量 Maximum Payload (註1)	水平使用 Horizontal (kg)	50	30	18
		垂直使用 Vertical (kg)	15	8	3
	定格推力 Rated Thrust (N)		683	341	174
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		200		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16		
	連軸器 Coupling (mm)		10X14/11(註2)		
	原點感應器 Home Sensor	外掛 Outside	CS-6T (NPN)		

出力軸變形量 Shaft Output Deformation Value

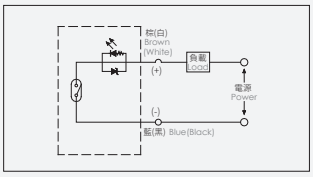


※此圖表為參考值。
This form is only reference values.

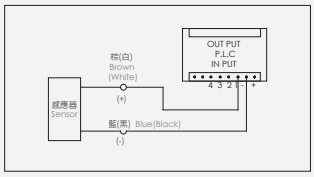
※1 馬達加減速設定 0.2 秒。
Acceleration and deacceleration value is set 0.2 second.
※2 行程超過 750 時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考 P69 頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P69 for details.
註1: 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.
註2:使用Panasonic200W馬達時,馬達軸心為Ø11;其他廠牌,馬達軸心為Ø14。
Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

感應器接線圖<原點極端點> Sensor Layout

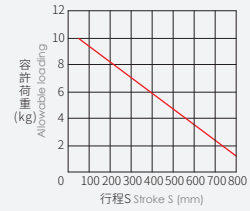
一般性負載：如繼電器或其它之電阻性負載
General load : Such as relay or other resistive load

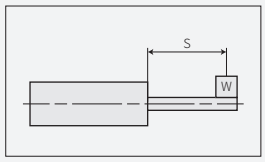


可程式控制器接線圖
Programmable controller connection diagram



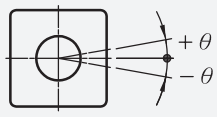
允許安裝負載 Allowable installation load





※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

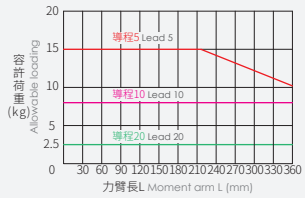
出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod

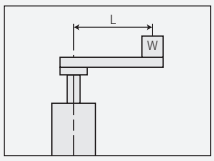


防止迴轉精度 θ Anti-rotating accuracy
±0°

※使用時請避免活塞桿承受迴轉扭力，因為有可能會造成防轉塊變形，導致自動開關反應異常，內部滑軌變形，進而造成增加作動阻抗。
Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod. This may cause deformation of the Anti-rotating guide, abnormal responses of the auto switch, play in the internal guide or an increase in the sliding resistance.

垂直安裝負載 Load in vertical installation





※計算條件:3000rpm/min , 加減速0.2s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.2s.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	HG-KR23	MR-J4-20A
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	HG-KR23B	MR-J4-20A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	MHMD022G1U	MADHT1507
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	MHMD022G1V	MADHT1507
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	ECMA-C20602ES	ASD-B20221-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	ECMA-C20602FS	ASD-B20221-B

GTY8

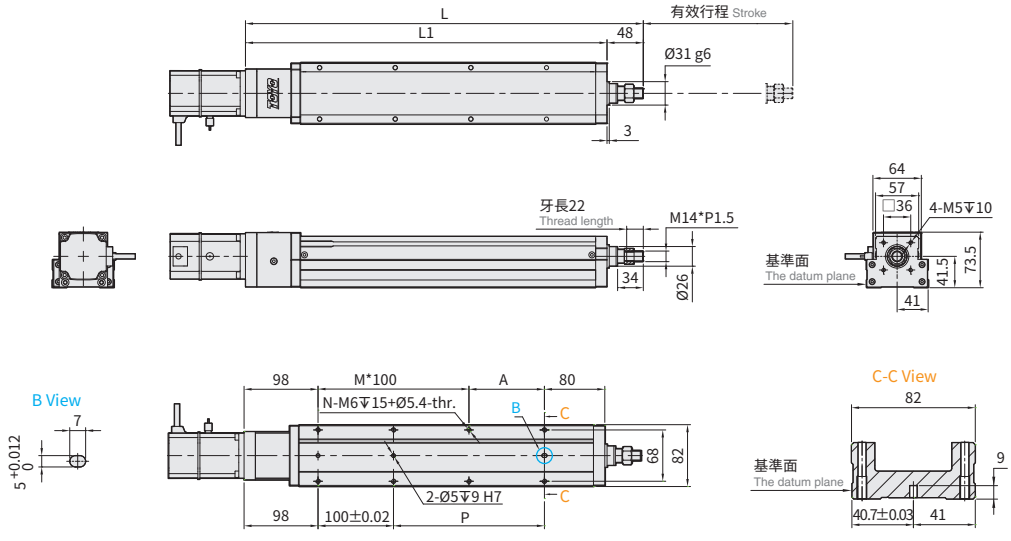
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



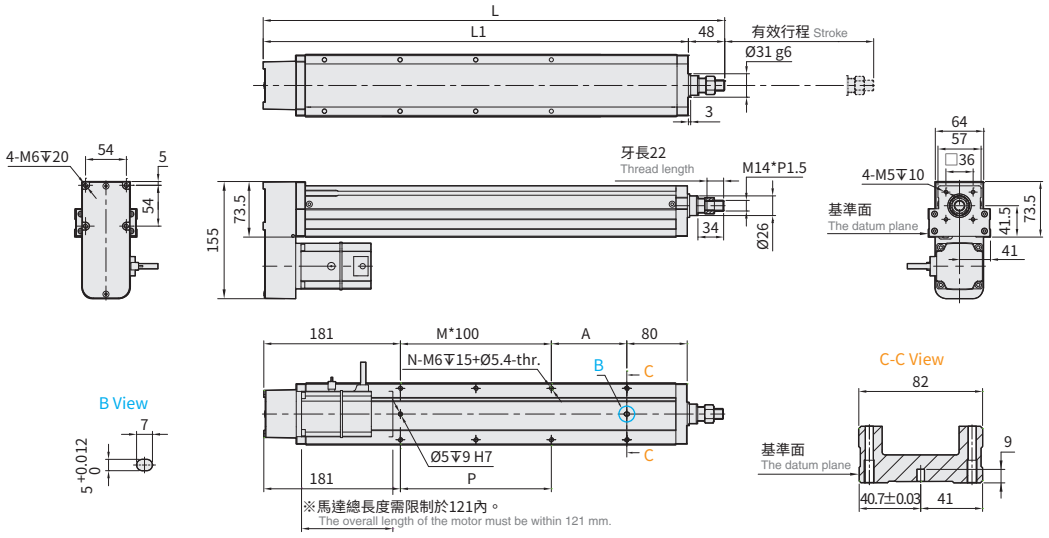
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	376	426	476	526	576	626	676	726	776	826	876	926	976	1026	1076	1126
L1	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.06	4.44	4.85	5.15	5.50	5.83	6.15	6.50	6.79	7.12	7.56	7.86	8.27	8.56	8.80	9.11

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



※馬達總長度需限制於121內。
The overall length of the motor must be within 121 mm.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	359	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109
L1	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.16	4.54	4.95	5.30	5.60	5.93	6.25	6.60	6.89	7.22	7.66	7.96	8.37	8.66	8.90	9.21

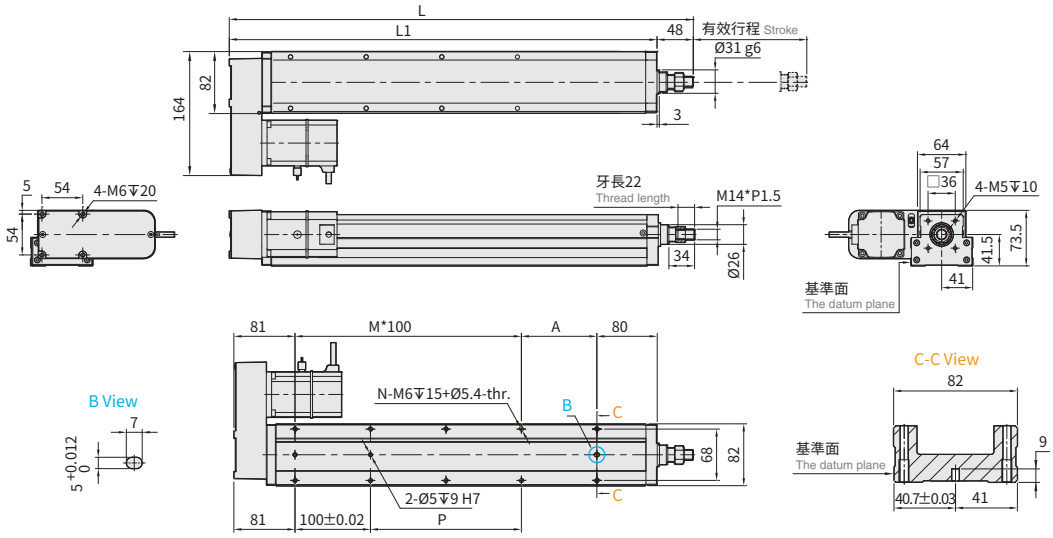
※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準 PIN 孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



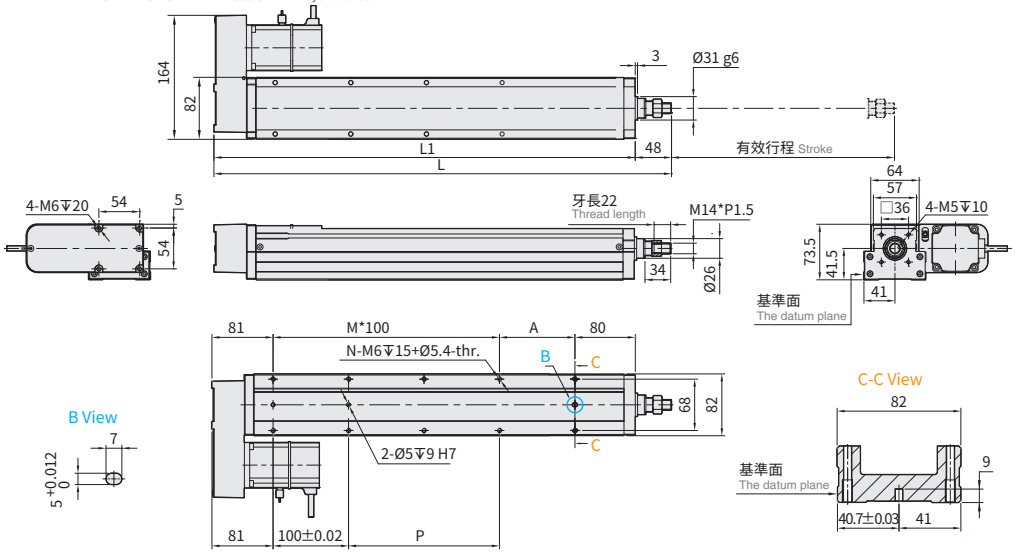
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	359	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109
L1	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.16	4.54	4.95	5.30	5.60	5.93	6.25	6.60	6.89	7.22	7.66	7.96	8.37	8.66	8.90	9.21

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	359	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109
L1	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.16	4.54	4.95	5.30	5.60	5.93	6.25	6.60	6.89	7.22	7.66	7.96	8.37	8.66	8.90	9.21

GTY8

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke	800mm
最高速度 Maximum Speed	1000mm/s
馬達容量 Motor Output	400W
滾珠螺桿 Ball Screw	⌀16mm

型號表示方式 Ordering Method

GTY8 - L10 - 100 - BC - M40B - C4 - 0001

本體型號 Model

特注式樣 Customization Order No.

行程 Stroke

50-800mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

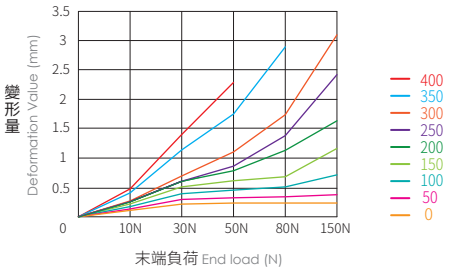
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		5	10	20
	最高速度 Maximum Speed (mm/s)※1		250	500	1000
	最大可搬重量 Maximum Payload (註1)	水平使用 Horizontal (kg)	50	30	18
		垂直使用 Vertical (kg)	15	8	3
	定格推力 Rated Thrust (N)		1388	694	347
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16		
	連軸器 Coupling (mm)		10X14(註2)		
	原點感應器 Home Sensor	外掛 Outside	CS-6T (NPN)		

出力軸變形量 Shaft Output Deformation Value

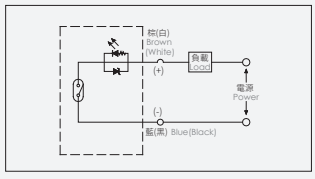


※此圖表為參考值。
This form is only reference values.

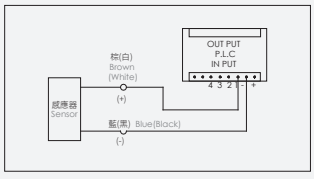
※1 馬達加減速設定 0.2 秒。
Acceleration and deacceleration value is set 0.2 second.
※2 行程超過 750 時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考 P69 頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P69 for details.
註1: 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.
註2:使用Panasonic200W馬達時,馬達軸心為Ø11;其他廠牌,馬達軸心為Ø14。
Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

感應器接線圖<原點極端點> Sensor Layout

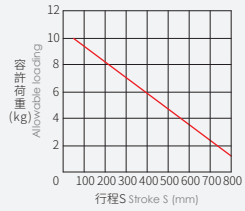
一般性負載：如繼電器或其它之電阻性負載
General load : Such as relay or other resistive load

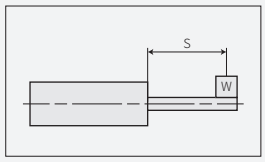


可程式控制器接線圖
Programmable controller connection diagram



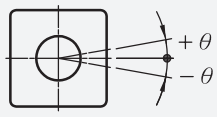
允許安裝負載 Allowable installation load





※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

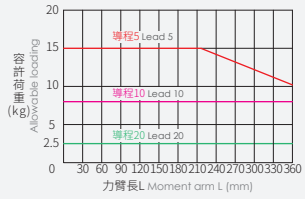
出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod

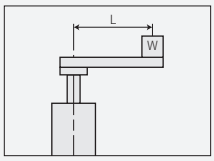


防止迴轉精度 θ Anti-rotating accuracy
±0°

※使用時請避免活塞桿承受迴轉扭力，因為有可能會造成防轉塊變形，導致自動開關反應異常，內部滑軌變形，進而造成增加作動阻抗。
Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod. This may cause deformation of the Anti-rotating guide, abnormal responses of the auto switch, play in the internal guide or an increase in the sliding resistance.

垂直安裝負載 Load in vertical installation





※計算條件:3000rpm/min , 加減速0.2s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.2s.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	HG-KR43	MR-J4-40A
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MHMD042G1U	MBDHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MHMD042G1V	MBDHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GTY8

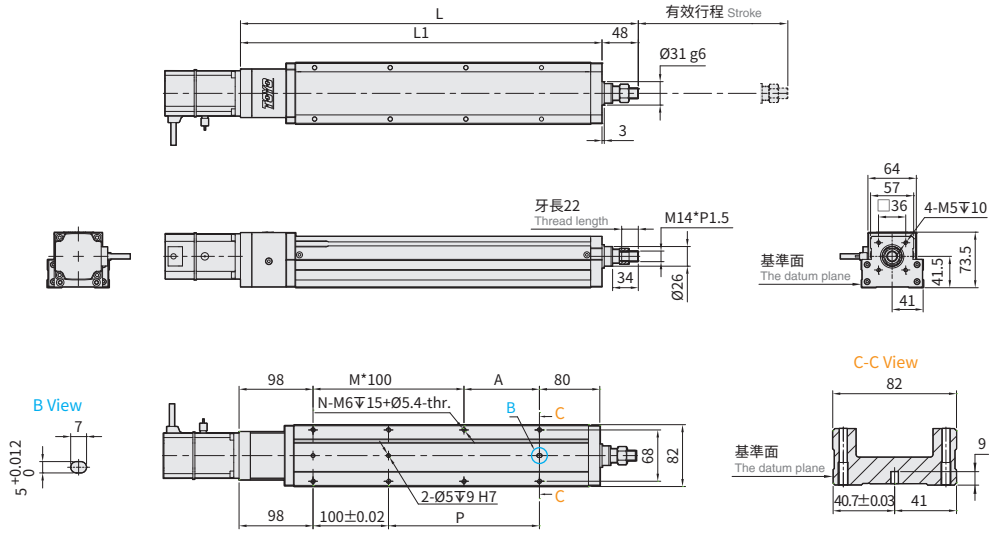
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



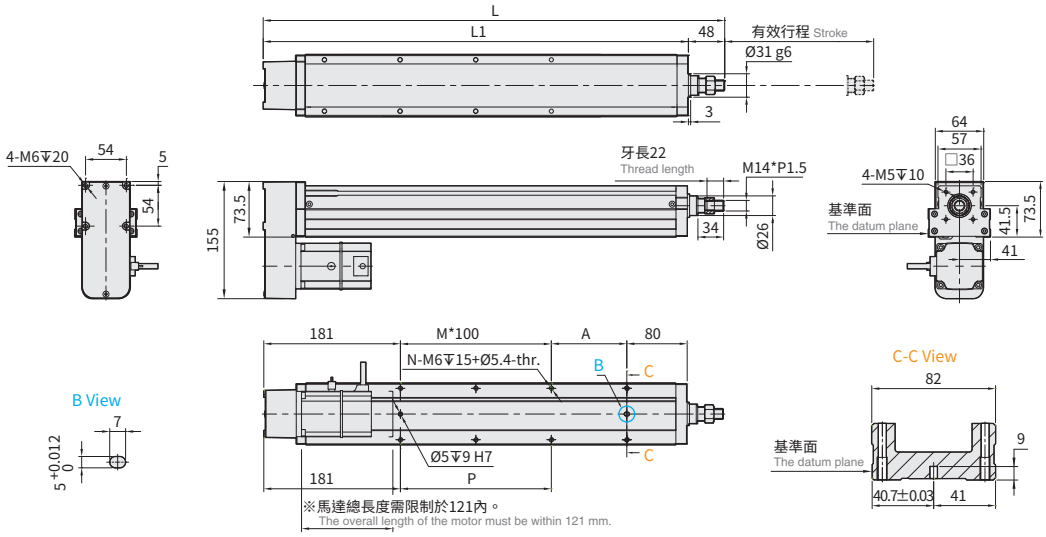
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	376	426	476	526	576	626	676	726	776	826	876	926	976	1026	1076	1126
L1	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.06	4.44	4.85	5.15	5.50	5.83	6.15	6.50	6.79	7.12	7.56	7.86	8.27	8.56	8.80	9.11

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



※馬達總長度需限制於121內。
The overall length of the motor must be within 121 mm.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	359	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109
L1	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.16	4.54	4.95	5.30	5.60	5.93	6.25	6.60	6.89	7.22	7.66	7.96	8.37	8.66	8.90	9.21

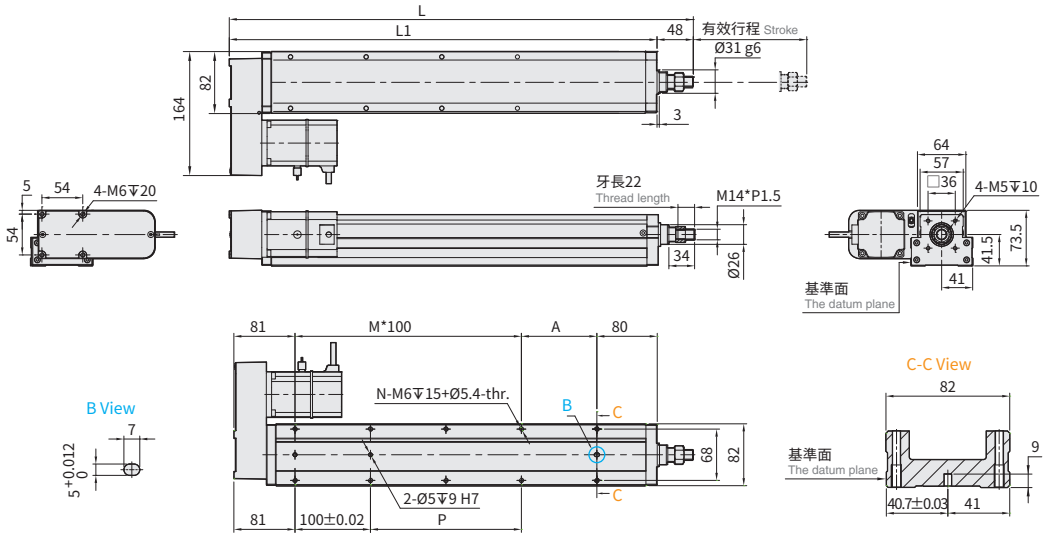
※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準 PIN 孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



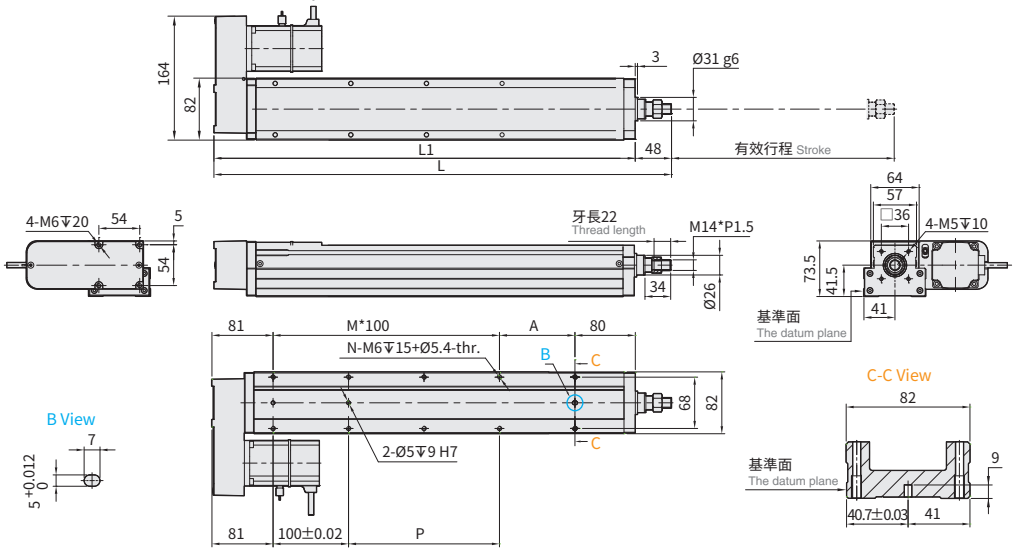
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	359	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109
L1	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.16	4.54	4.95	5.30	5.60	5.93	6.25	6.60	6.89	7.22	7.66	7.96	8.37	8.66	8.90	9.21

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	359	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109
L1	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
KG	4.16	4.54	4.95	5.30	5.60	5.93	6.25	6.60	6.89	7.22	7.66	7.96	8.37	8.66	8.90	9.21

GTY12

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
800mm	1600mm/s	400W	⌀16mm

型號表示方式 Ordering Method

GTY12 - L5 - 100 - BC - M40B - C4 - 0001

本體型號 Model

特注式樣 Customization Order No.

行程 Stroke

50-800mm
間隔50 50 mm Pitch

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm
32	32mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BL	馬達左折 Motor Left Side
BR	馬達右折 Motor Right Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	松下 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

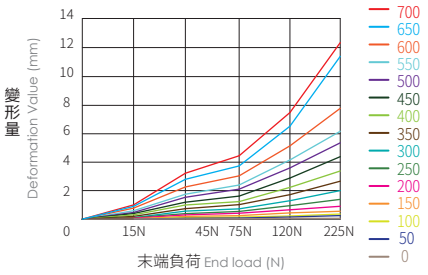
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01			
	螺桿導程 Ball Screw Lead (mm)		5	10	20	32
	最高速度 Maximum Speed (mm/s)※1		250	500	1000	1600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg) (註1)	110	88	40	30
		垂直使用 Vertical (kg)	33	22	10	8
	定格推力 Rated Thrust (N)		1388	694	347	218
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch			
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400			
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16			
	連軸器 Coupling (mm)		10X14(註2)			
	原點感應器 Home Sensor	外掛 Outside	CS-6T (NPN)			

出力軸變形量 Shaft Output Deformation Value



※此圖表為參考值。
This form is only reference values.

※1 馬達加減速設定 0.2 秒。
Acceleration and deacceleration value is set 0.2 second.

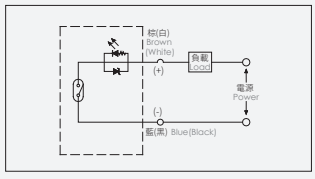
※2 行程超過 750 時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考 P69 頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P69 for details.

註1: 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

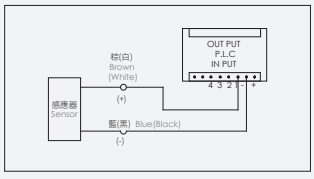
註2:使用Panasonic200W馬達時,馬達軸心為Ø11;其他廠牌,馬達軸心為Ø14。
Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

感應器接線圖<原點極端點> Sensor Layout

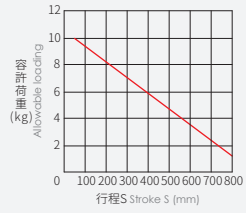
一般性負載：如繼電器或其它之電阻性負載
General load : Such as relay or other resistive load

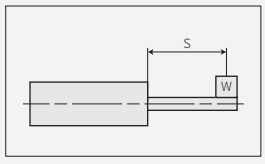


可程式控制器接線圖
Programmable controller connection diagram



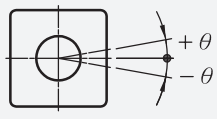
允許安裝負載 Allowable installation load





※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

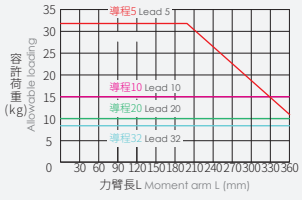
出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod

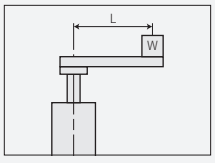


防止迴轉精度 θ Anti-rotating accuracy
±0°

※使用時請避免活塞桿承受迴轉扭力，因為有可能會造成防轉塊變形，導致自動開關反應異常，內部滑軌變形，進而造成增加作動阻抗。
Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod. This may cause deformation of the Anti-rotating guide, abnormal responses of the auto switch, play in the internal guide or an increase in the sliding resistance.

垂直安裝負載 Load in vertical installation





※計算條件:3000rpm/min , 加速0.2s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.2s.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	HG-KR43	MR-J4-40A
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MSMD042G1U	MBDHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MSMD042G1V	MBDHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GTY12

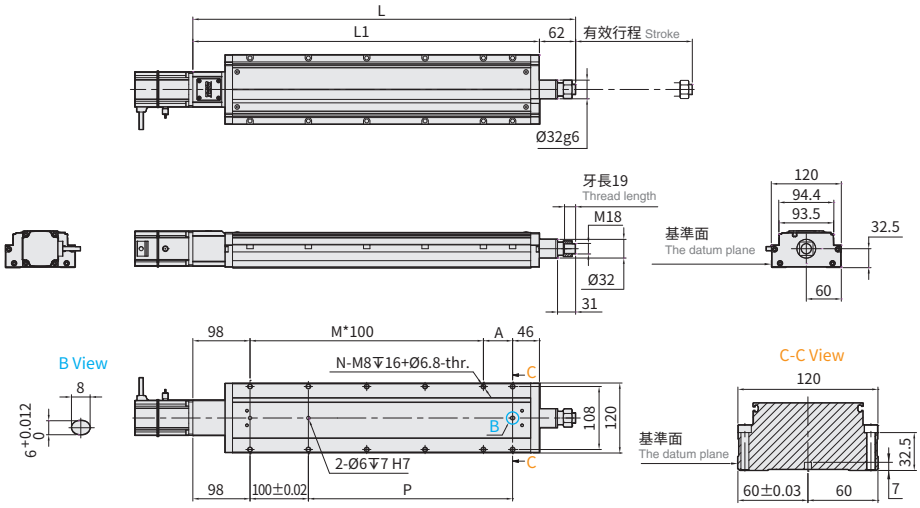
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit : mm)



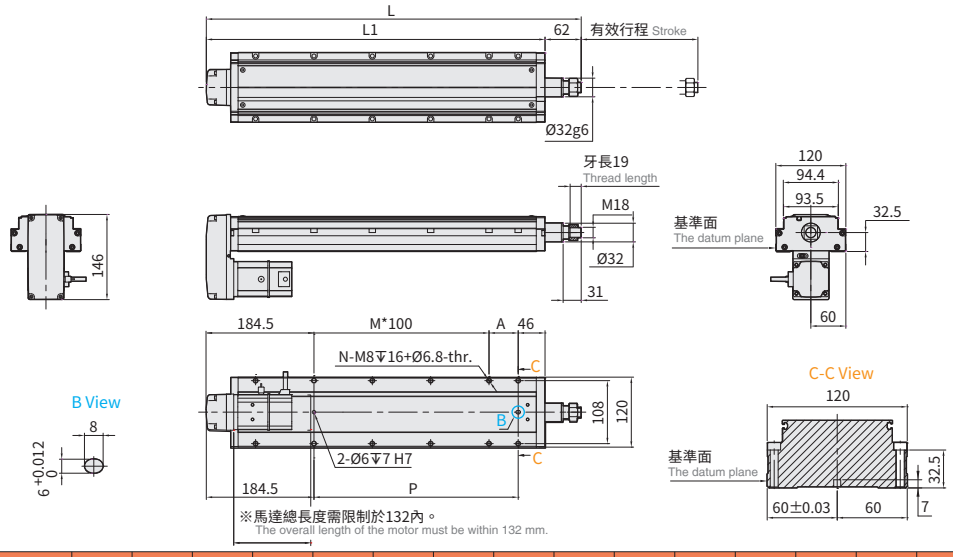
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	406	456	506	556	606	656	706	756	806	856	906	956	1006	1056	1106	1156
L1	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
KG	4.86	5.36	5.86	6.36	6.86	7.36	7.86	8.36	8.86	9.36	9.86	10.36	10.86	11.36	11.86	12.36

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit : mm)



※馬達總長度需限制於132內。
The overall length of the motor must be within 132 mm.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	392.5	442.5	492.5	542.5	592.5	642.5	692.5	742.5	792.5	842.5	892.5	942.5	992.5	1042.5	1092.5	1142.5
L1	330.5	380.5	430.5	480.5	530.5	580.5	630.5	680.5	730.5	780.5	830.5	880.5	930.5	980.5	1030.5	1080.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
N	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
KG	5.32	5.8	6.29	6.77	7.26	7.74	8.23	8.71	9.2	9.68	10.17	10.65	11.14	11.62	12.11	12.59

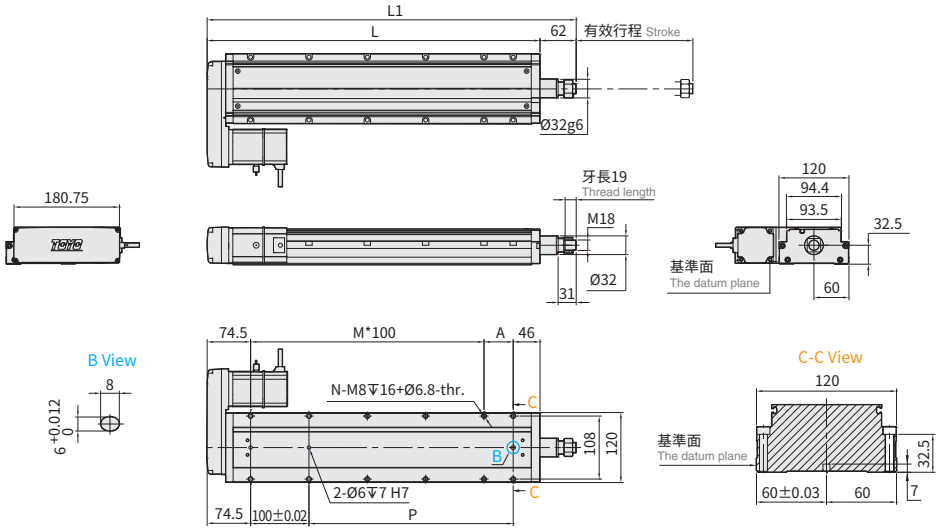
※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準 PIN 孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



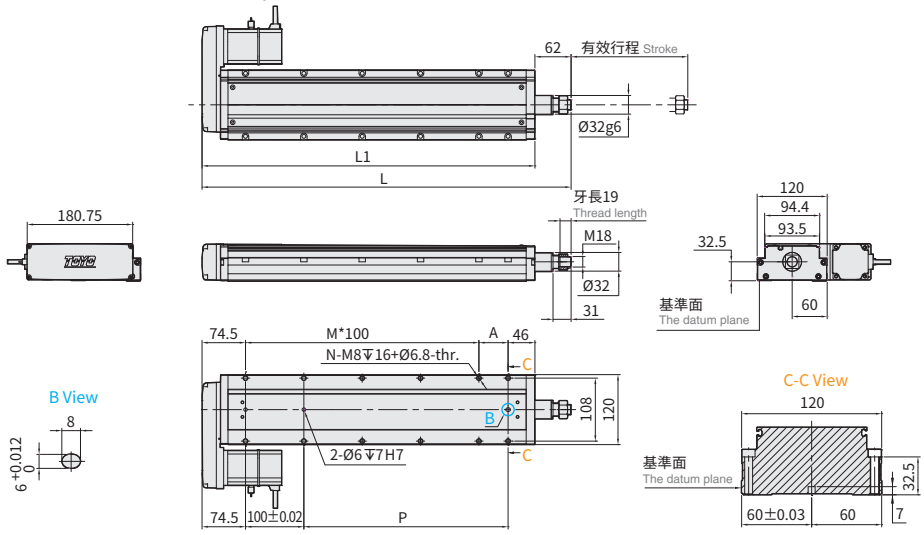
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	382.5	432.5	482.5	532.5	582.5	632.5	682.5	732.5	782.5	832.5	882.5	932.5	982.5	1032.5	1082.5	1132.5
L1	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
KG	5.32	5.8	6.29	6.77	7.26	7.74	8.23	8.71	9.2	9.68	10.17	10.65	11.14	11.62	12.11	12.59

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	382.5	432.5	482.5	532.5	582.5	632.5	682.5	732.5	782.5	832.5	882.5	932.5	982.5	1032.5	1082.5	1132.5
L1	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
KG	5.32	5.8	6.29	6.77	7.26	7.74	8.23	8.71	9.2	9.68	10.17	10.65	11.14	11.62	12.11	12.59

Memo

GCH

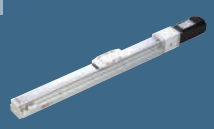
軌道內嵌式滑台模組-無塵室專用

GCH built-in linear motion guide Electric Actuator-Clean room Type

Contents

小型 SMALL

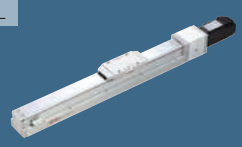
GCH4



本體寬幅 44mm
Width
最大行程 800mm 099
Max. stroke
最大荷重 25kg
Max. payload

小型 SMALL

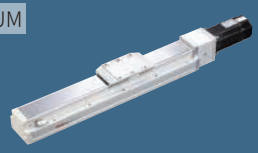
GCH5



本體寬幅 54mm
Width
最大行程 800mm 107
Max. stroke
最大荷重 30kg
Max. payload

中型 MEDIUM

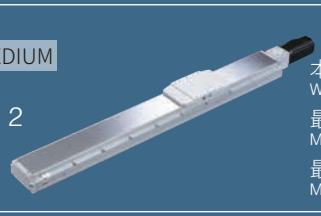
GCH8



本體寬幅 82mm
Width
最大行程 1100mm 111
Max. stroke
最大荷重 50kg
Max. payload

中型 MEDIUM

GCH12



本體寬幅 120mm
Width
最大行程 1250mm 119
Max. stroke
最大荷重 110kg
Max. payload

規格索引

Spec Index

GCH 軌道內嵌式滑台模組-無塵室專用

GCH built-in linear motion guide Electric Actuator-Clean Room Type

使用環境 Environment	傳動方式 Driven Mode	仕樣 Specification	馬達容量 Motor Output (w)	本體寬幅 Width(mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball Screw Spec		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum Speed (mm/s)
						外徑 Outer Diameter(mm)	導程 Lead(mm)	水平使用 Horizontal	垂直使用 Vertical	
無塵環境 Clean room	滾珠螺桿 Ball screw	GCH4	50W	44	±0.005	10	2	25	8	100
							6	20	5	300
							12	12	2	600
			100W				2	25	8	100
							6	20	8	300
							12	12	3.5	600
		GCH5	100W	54	±0.005	12	2	30	10	100
							5	30	10	250
							10	15	5	500
							20	10	2.5	1000
		GCH8	200W	82	±0.005	16	5	50	15	250
							10	30	8	500
			400W				20	18	3	1000
		GCH12	400W	120	±0.005	16	5	110	33	250
							10	88	22	500
							20	40	10	1000
							32	30	8	1600

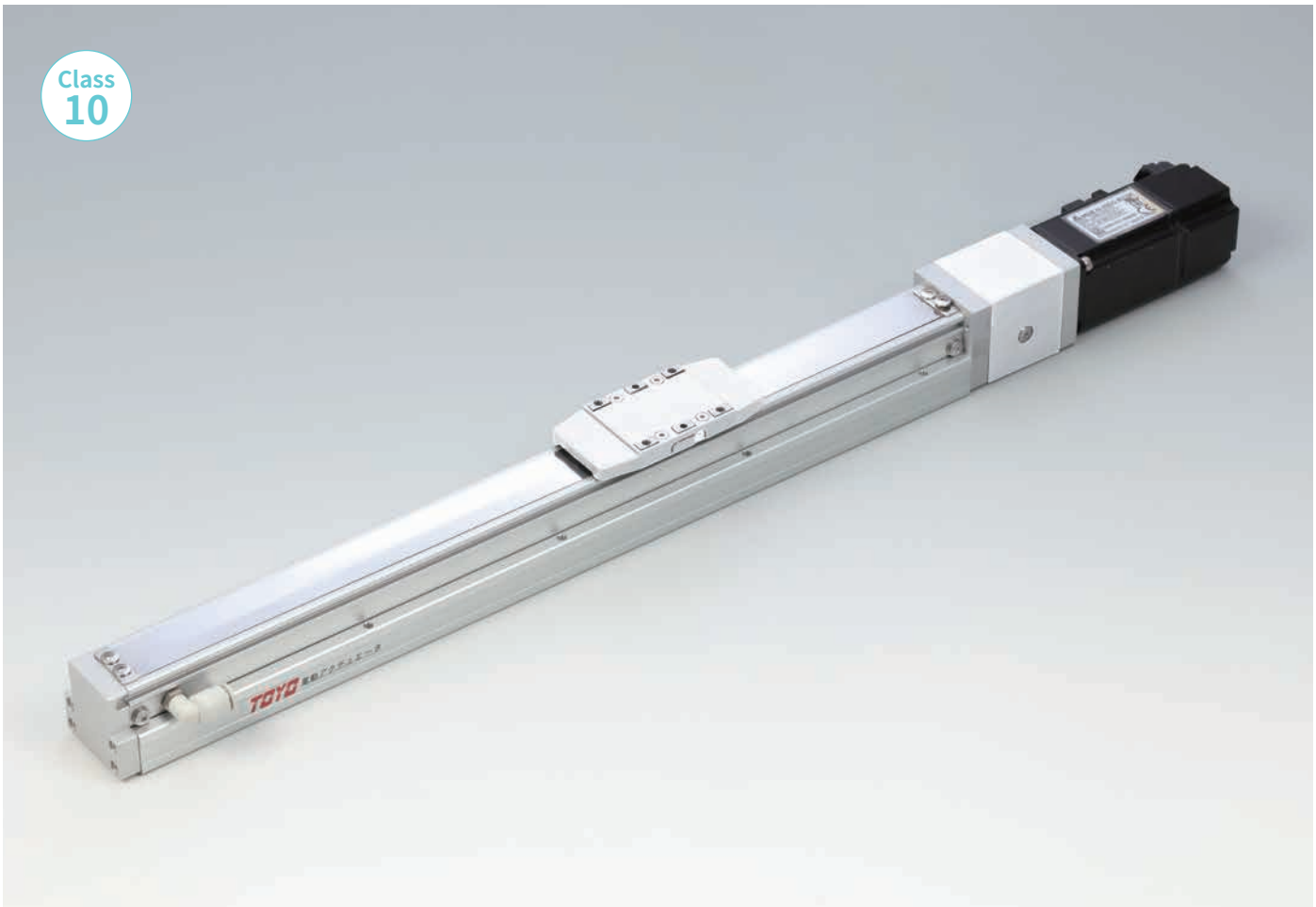
*1:最高速度(MM/S)是以伺服馬達最高轉速3000RPM為基準。
The highest speed is based on the maximum servo motor's rpm (3000).

	標準行程及最高使用速度*2 Stroke(mm) & Maximum Speed(mm/s) 代表速度 Speed																											頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	
				100								90	80	70	60	50												099
				300								270	240	210	180	150												
				600								540	480	420	360	300												
				100								90	80	70	60	50												
				300								270	240	210	180	150												
				600								540	480	420	360	300												
					100								90	80	70	60												107
					250								270	200	175	150												
					500								450	400	350	300												
					1000								900	800	700	600												
						250										225	200	175	150	125	100	75						111
						500										450	400	350	300	250	200	150						
						1000										900	800	700	600	500	400	300						
							250										225	200	175	167	158	150	133	125	117			119
							500										450	400	350	333	317	300	267	250	233			
							1000										900	800	700	667	633	600	533	500	467			
							1600										1440	1280	1120	1067	1013	900	853	800	747			

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，滑台可能會有嚴重共振產生。
Written here is the standard storke's maximum safe speed. If over this speed, it may casue serious virbration.

GCH4

螺桿驅動
Ball Screw Drive



最大行程 Maximum Stroke 800mm

最高速度 Maximum Speed 600mm/s

馬達容量 Motor Output 50W

滾珠螺桿 Ball Screw ⌀10mm

型號表示方式 Ordering Method

GCH4 - L2 - 100 - BC - M05B - C4 - 0001

本體型號 Model

行程 Stroke

50-800mm
間隔50 Pitch 50 mm

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	50W	B
P	國際 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

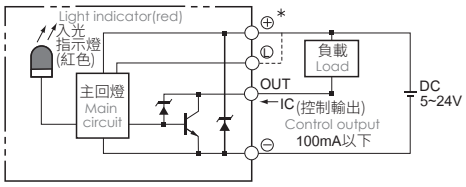
外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

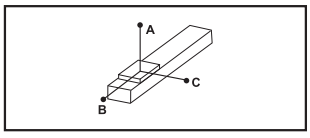
規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1		100	300	600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	25	20	12
		垂直使用 Vertical (kg)	8	5	2
	定格推力 Rated Thrust (N)		424	141	71
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		50		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø10		
	連軸器 Coupling (mm)		7X8		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.
※ 2 行程超過550時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P97頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P97 for details.

感應器接線圖<原點及端點> Sensor Layout

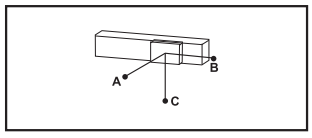


容許負載力距表 Allowable Moment



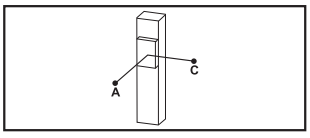
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	12kg	1000	55	80
	18kg	750	35	50
	25kg	500	23	32
導程 6 Lead	10kg	550	53	70
	15kg	350	32	45
	20kg	250	22	31
導程 12 Lead	8kg	305	59	75
	10kg	240	45	57
	12kg	195	37	47



(單位 Unit:mm)

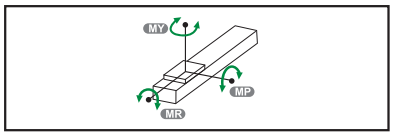
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	12kg	80	55	1000
	18kg	50	35	750
	25kg	32	23	500
導程 6 Lead	10kg	72	52	550
	15kg	45	32	345
	20kg	31	22	250
導程 12 Lead	8kg	75	59	300
	10kg	58	45	240
	12kg	47	37	190



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	4kg	200	200
	8kg	100	100
	-	-	-
導程 6 Lead	3kg	200	200
	5kg	120	120
	-	-	-
導程 12 Lead	1.5kg	350	350
	2kg	260	260
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	79
MP	79
MR	116

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.
※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
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搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	HG-KR053	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	HG-KR053B	MR-J4-10A
國際 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	MSMD5A2G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	MSMD5A2G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	50	220	ECMA-C2040FES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	50	220	ECMA-C2040FFS	ASD-B20121-B

GCH4

螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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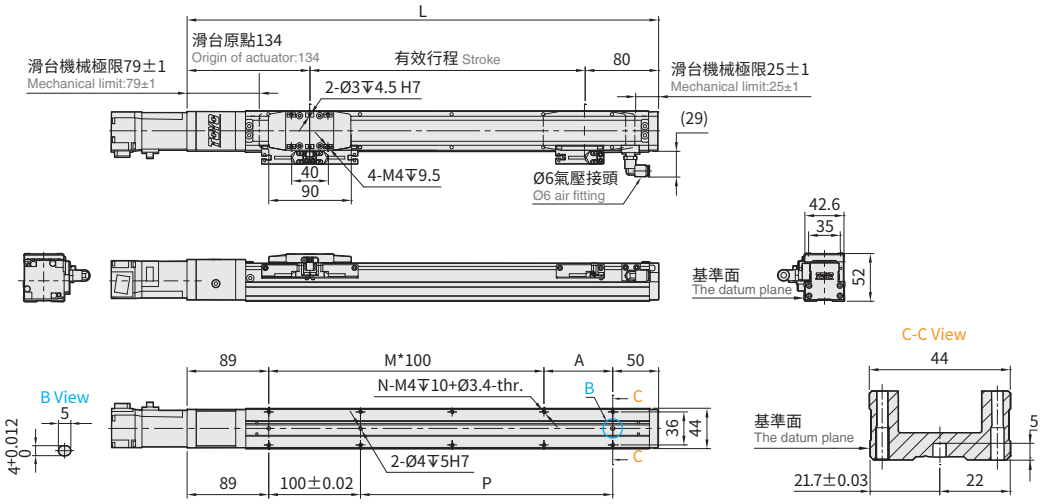
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.23	1.41	1.59	1.77	1.95	2.13	2.31	2.49	2.67	2.85	3.03	3.21	3.39	3.57	3.75	3.93

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

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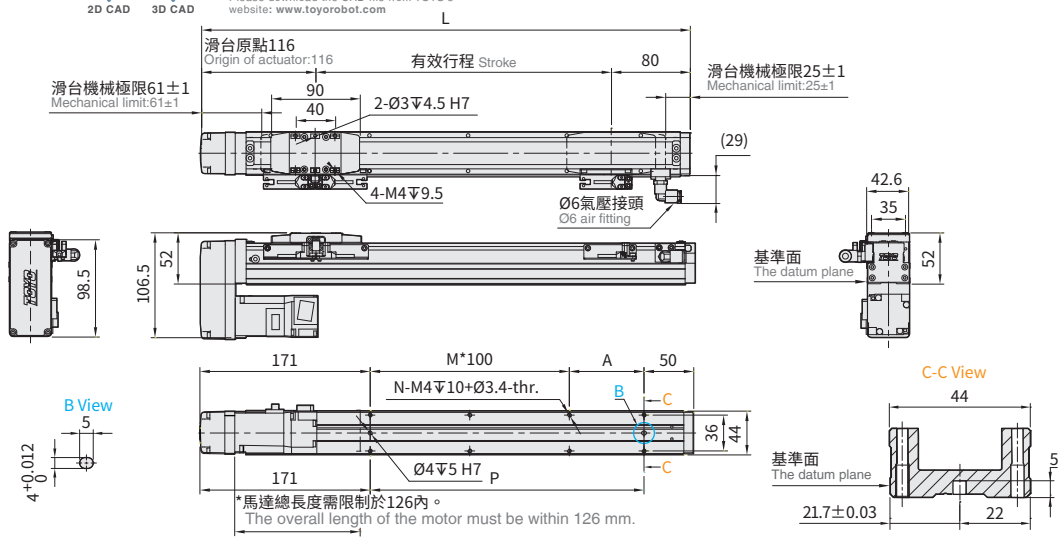

有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
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KG	1.34	1.52	1.70	1.88	2.06	2.24	2.42	2.60	2.78	2.96	3.14	3.32	3.50	3.68	3.86	4.04

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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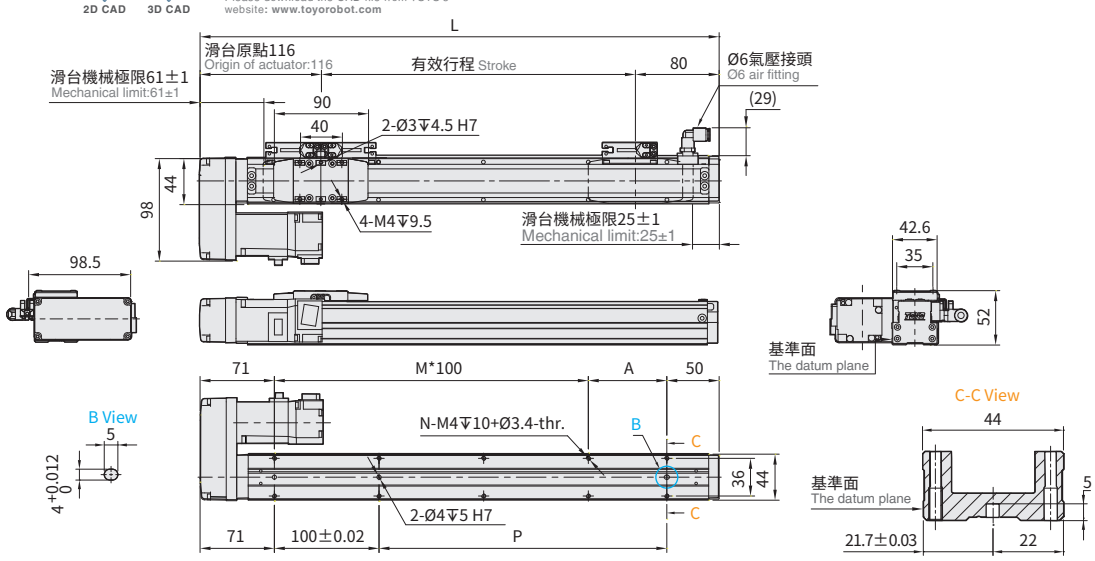
(單位 Unit：mm)



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M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.34	1.52	1.70	1.88	2.06	2.24	2.42	2.60	2.78	2.96	3.14	3.32	3.50	3.68	3.86	4.04

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BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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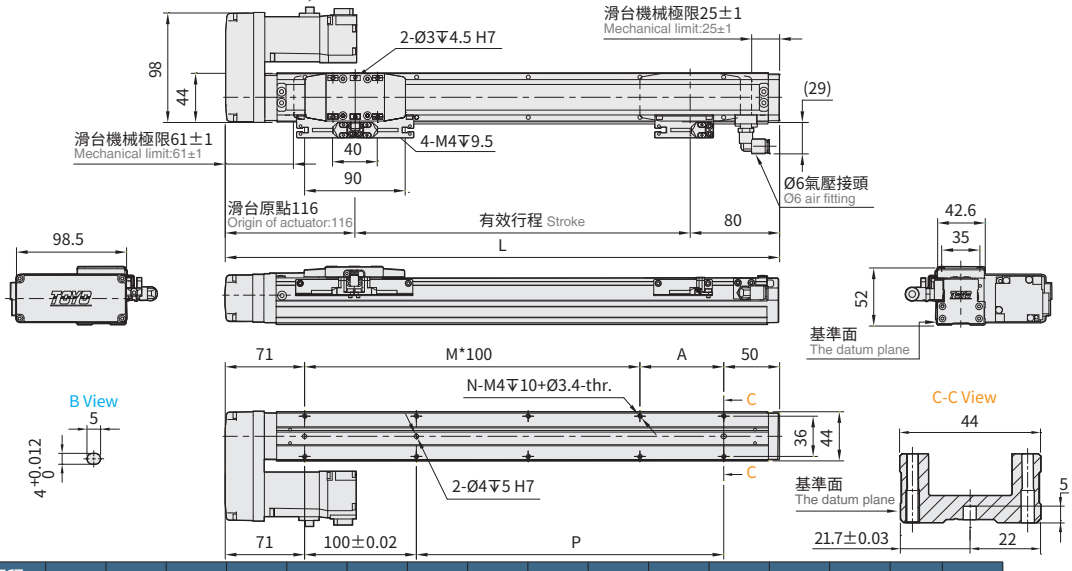
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
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KG	1.34	1.52	1.70	1.88	2.06	2.24	2.42	2.60	2.78	2.96	3.14	3.32	3.50	3.68	3.86	4.04

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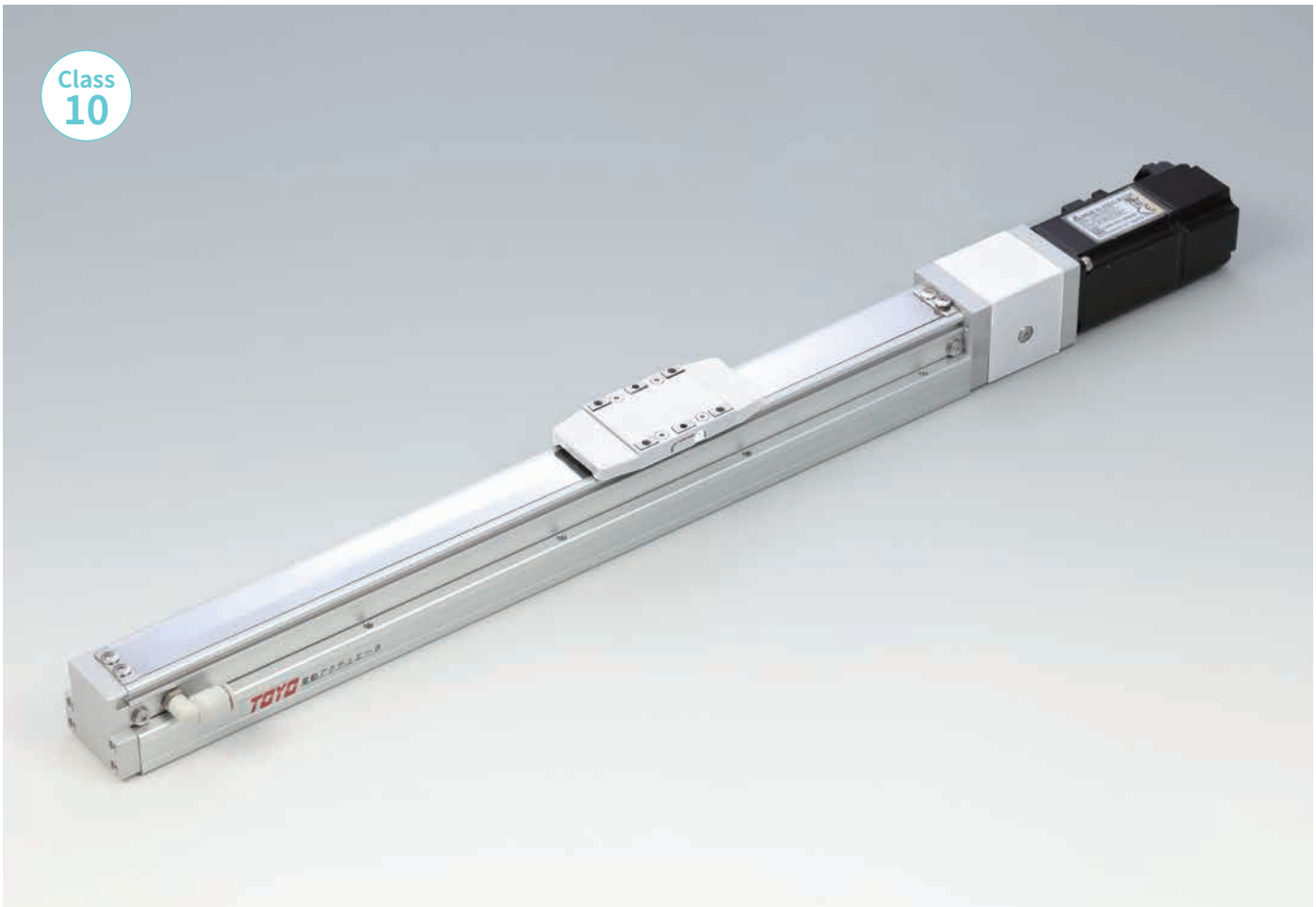
GCH4

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
800mm	600mm/s	100W	∅10mm

型號表示方式 Ordering Method

GCH4 - L2 - 100 - BC - M10B - C4 - 0001

本體型號 Model

行程 Stroke

50-800mm
間隔50 Pitch 50 mm

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	國際 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

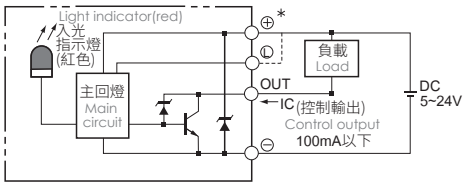
外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

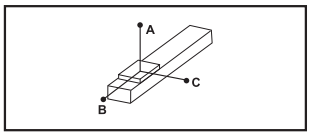
規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1		100	300	600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	25	20	12
		垂直使用 Vertical (kg)	8	8	3.5
	定格推力 Rated Thrust (N)		424	141	71
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø10		
	連軸器 Coupling (mm)		7X8		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.
※ 2 行程超過550時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P97頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P97 for details.

感應器接線圖<原點及端點> Sensor Layout

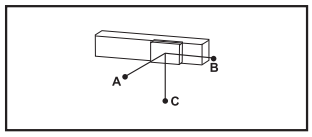


容許負載力距表 Allowable Moment



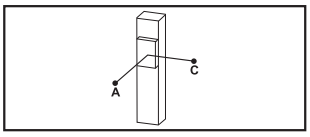
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	12kg	1000	55	80
	18kg	750	35	50
	25kg	500	23	32
導程 6 Lead	10kg	550	53	70
	15kg	350	32	45
	20kg	250	22	31
導程 12 Lead	8kg	305	59	75
	10kg	240	45	57
	12kg	195	37	47



(單位 Unit:mm)

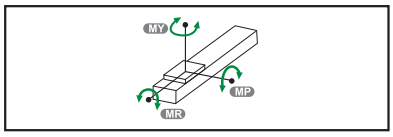
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	12kg	80	55	1000
	18kg	50	35	750
	25kg	32	23	500
導程 6 Lead	10kg	72	52	550
	15kg	45	32	345
	20kg	31	22	250
導程 12 Lead	8kg	75	59	300
	10kg	58	45	240
	12kg	47	37	190



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	4kg	195	195
	8kg	100	100
	-	-	-
導程 6 Lead	4kg	150	150
	8kg	75	75
	-	-	-
導程 12 Lead	2kg	260	260
	3.5kg	150	150
	-	-	-

靜態容許負載慣量 Static Loading Moment



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GCH4

螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

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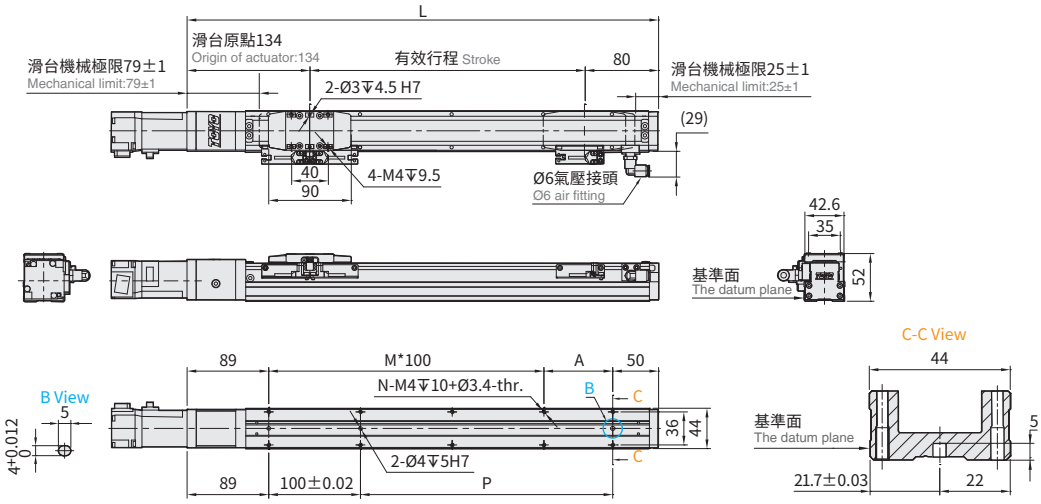

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BM 馬達下折 Motor Bottom Side

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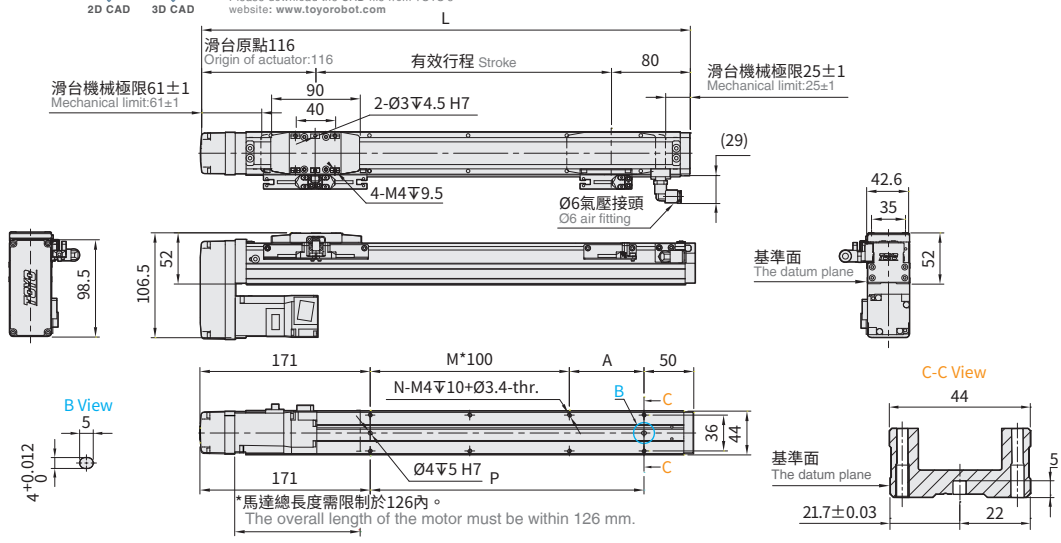

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BL 馬達左折 Motor Left Side

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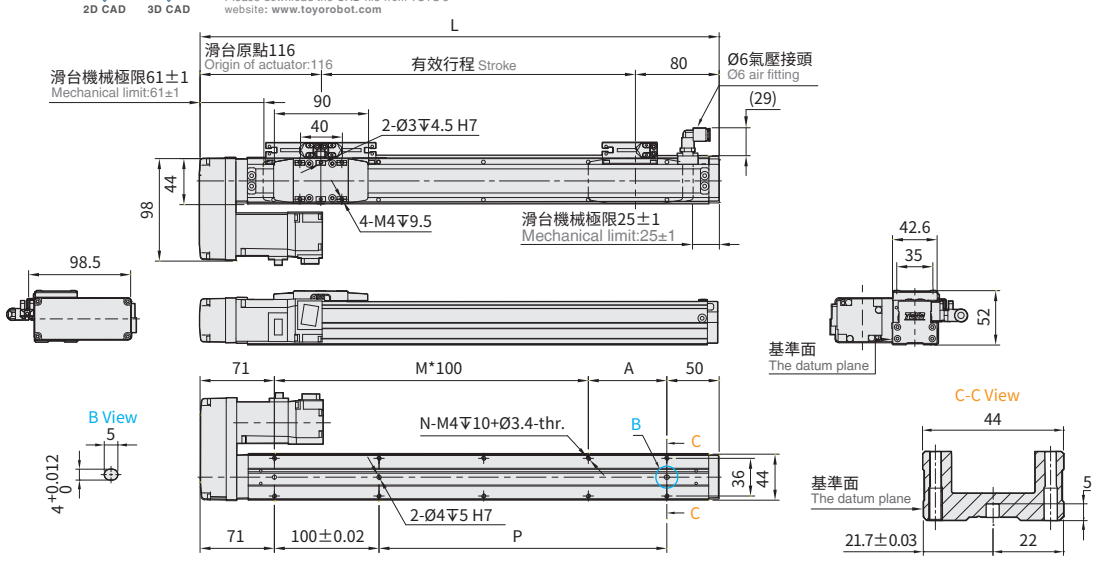

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P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.34	1.52	1.70	1.88	2.06	2.24	2.42	2.60	2.78	2.96	3.14	3.32	3.50	3.68	3.86	4.04

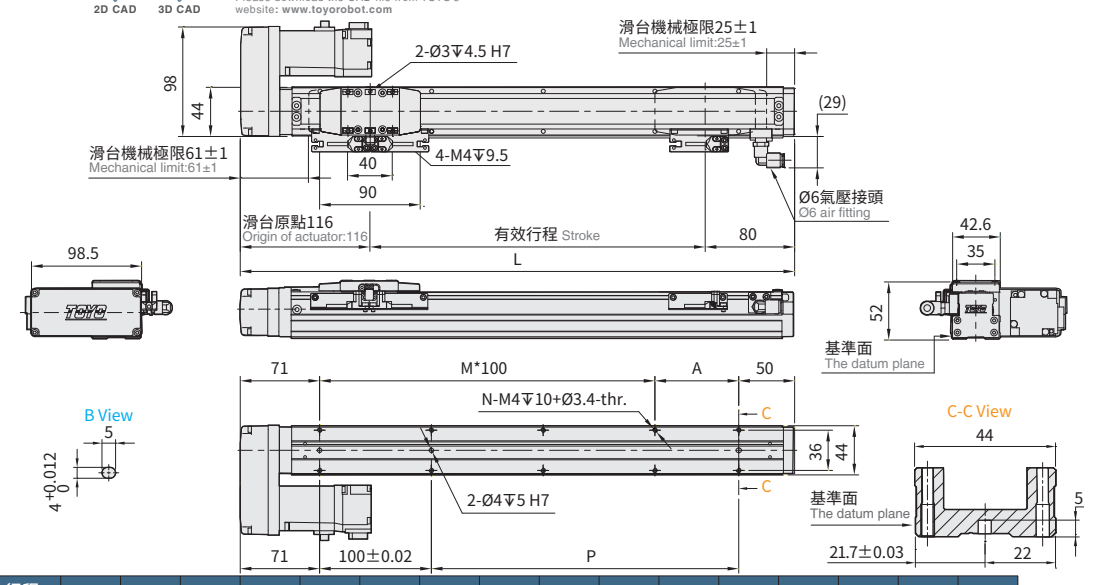
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)

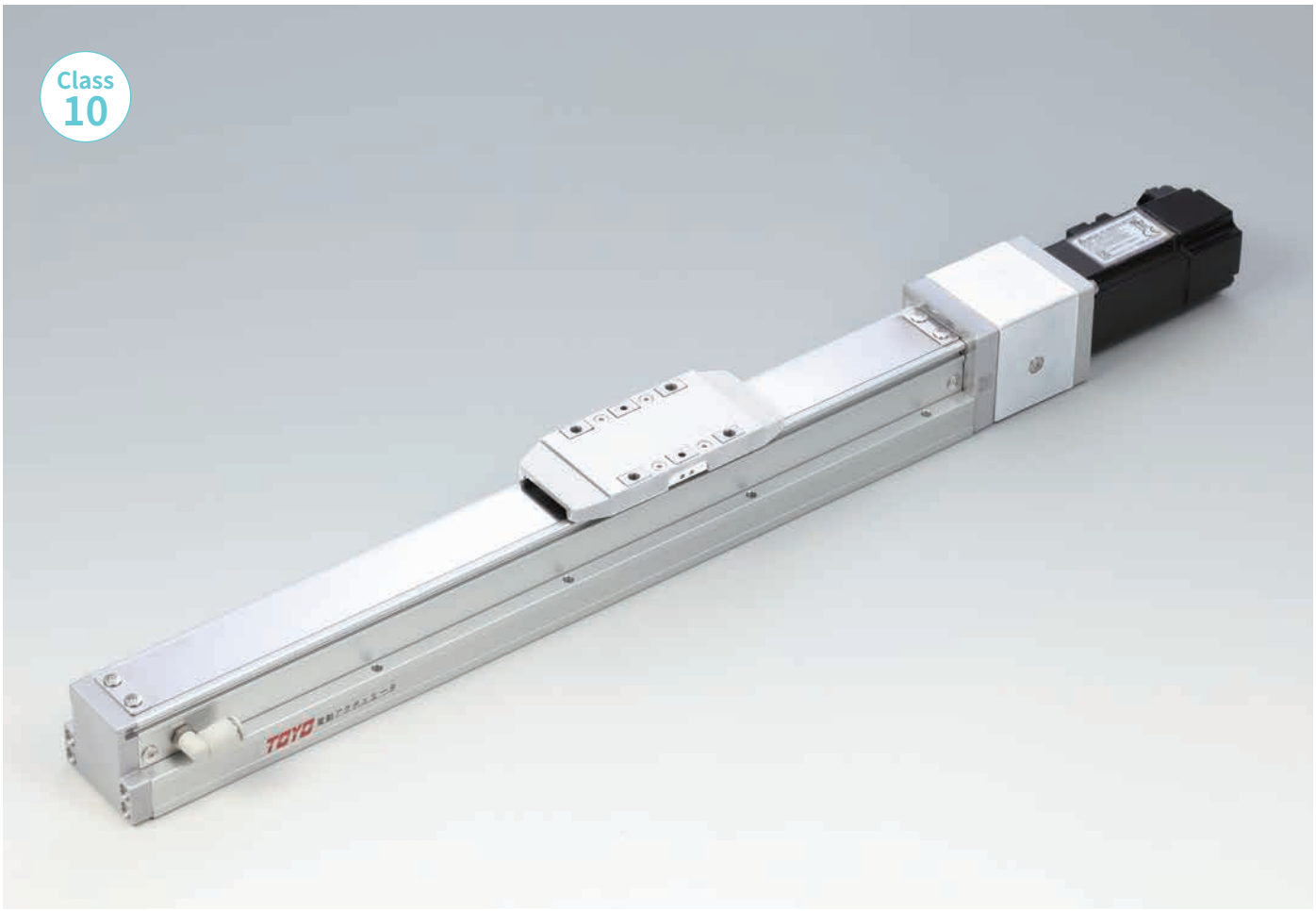


有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.34	1.52	1.70	1.88	2.06	2.24	2.42	2.60	2.78	2.96	3.14	3.32	3.50	3.68	3.86	4.04

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GCH5

螺桿驅動
Ball Screw Drive



最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
800mm	1000mm/s	100W	⌀12mm

型號表示方式 Ordering Method

GCH5 - L5 - 100 - BC - M10B - C4 - 0001

本體型號 Model

行程 Stroke

50-800mm
間隔50 Pitch 50 mm

螺桿導程 Ball Screw Lead

2	2mm
5	5mm
10	10mm
20	20mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	國際 Panasonic	10	100W	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:
1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

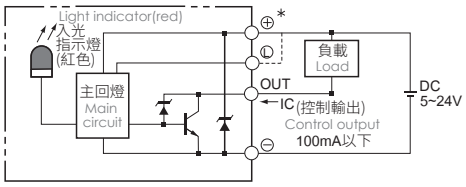
外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

特注式樣 Customization Order No.

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005			
	螺桿導程 Ball Screw Lead (mm)		2	5	10	20
	最高速度 Maximum Speed (mm/s)※1		100	250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	30	30	15	10
		垂直使用 Vertical (kg)	10	10	5	2.5
	定格推力 Rated Thrust (N)		854	341	170	85
	標準行程 Stroke / Pitch (mm)※2		50-800mm/50 間隔 50 mm Pitch			
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		100			
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø12			
	連軸器 Coupling (mm)		7X8			
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)			

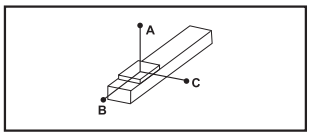
感應器接線圖<原點及端點> Sensor Layout



※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

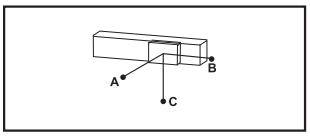
※ 2 行程超過600時，會產生螺桿偏擺震動，此時請將速度調降。
詳細請參考P97頁說明。
When the stroke is over 600mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P97 for details.

容許負載力距表 Allowable Moment



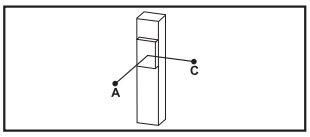
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	10kg	900	100	135
	20kg	700	45	60
	30kg	550	25	35
導程 5 Lead	10kg	650	75	100
	20kg	440	32	45
	30kg	270	19	25
導程 10 Lead	5kg	600	145	185
	10kg	370	70	85
	15kg	250	42	52
導程 20 Lead	5kg	320	120	130
	8kg	220	70	80
	10kg	175	55	60



(單位 Unit:mm)

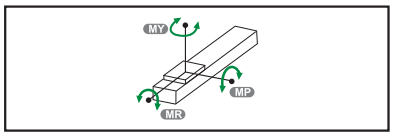
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	10kg	135	100	900
	20kg	60	45	700
	30kg	37	27	550
導程 5 Lead	10kg	100	75	650
	20kg	45	32	420
	30kg	25	19	260
導程 10 Lead	5kg	180	145	600
	10kg	85	68	370
	15kg	52	42	250
導程 20 Lead	5kg	130	120	320
	8kg	75	70	220
	10kg	60	55	170



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	6kg	180	180
	8kg	135	135
	10kg	110	110
導程 5 Lead	6kg	145	145
	8kg	110	110
	10kg	90	90
導程 10 Lead	1kg	800	800
	3kg	260	260
	5kg	155	155
導程 20 Lead	1kg	600	600
	2kg	300	300
	2.5kg	250	250

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	103
MP	103
MR	144

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.
※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
國際 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

GCH5

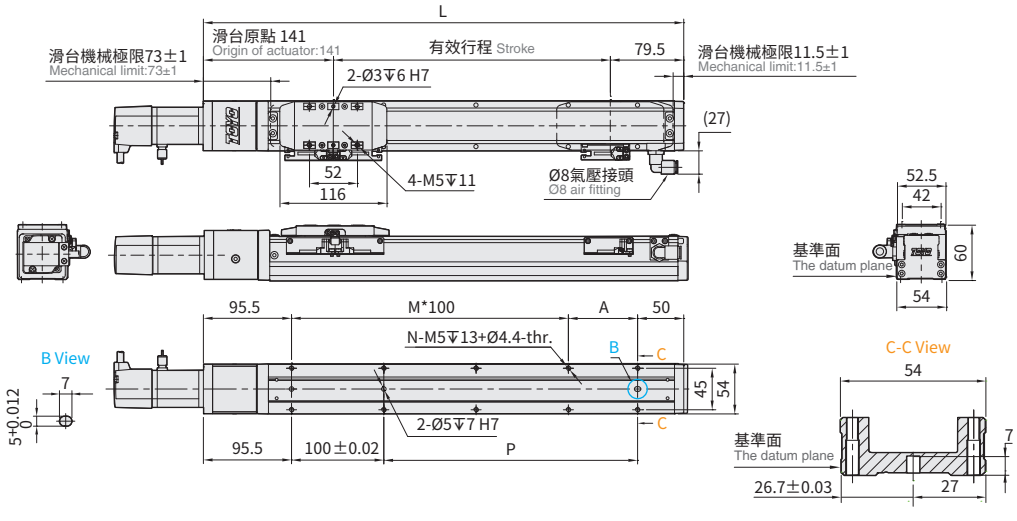
螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.95	2.09	2.22	2.41	2.69	2.80	2.82	3.05	3.16	3.25	3.45	3.58	3.74	3.88	4.01	4.39

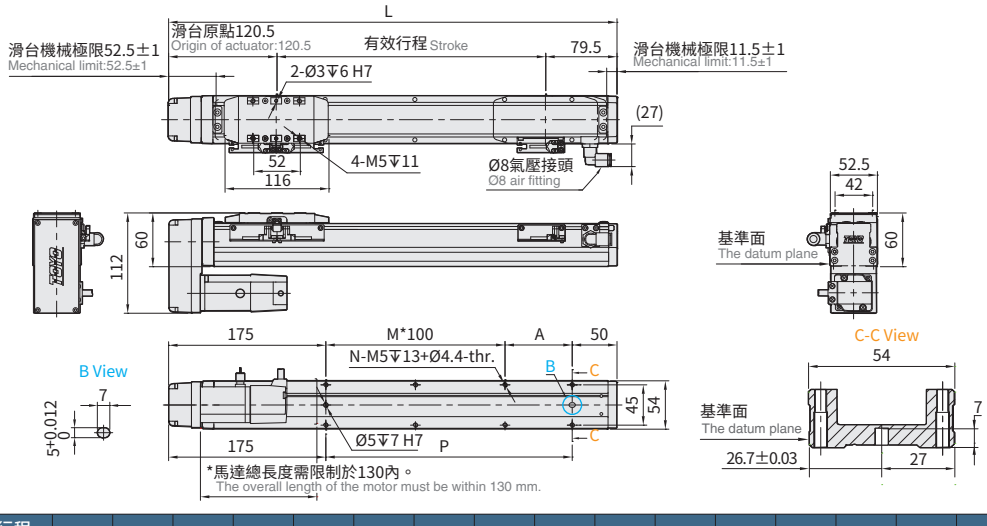
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.98	2.01	2.33	2.44	2.72	2.83	2.88	3.08	3.19	3.28	3.48	3.61	3.77	3.90	4.04	4.42

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

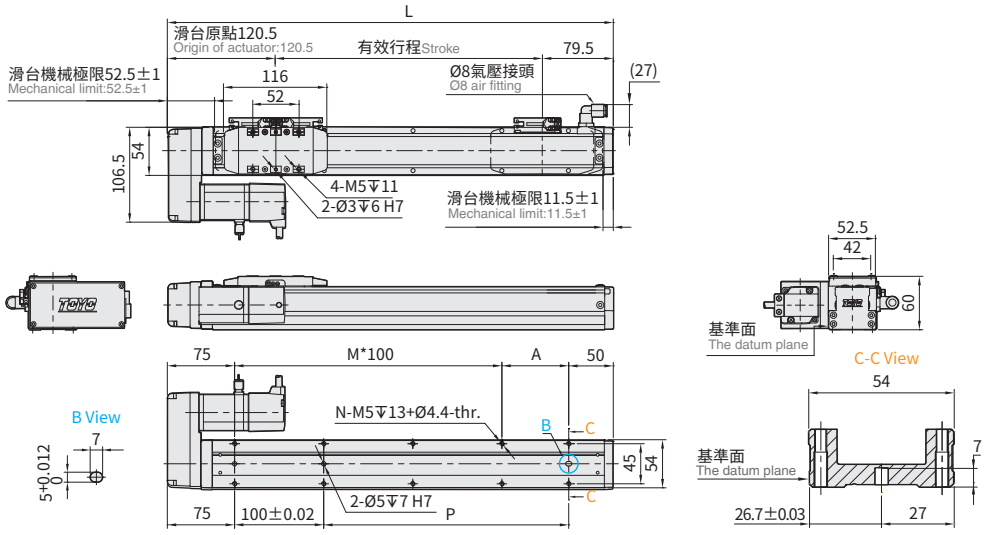
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.98	2.01	2.33	2.44	2.72	2.83	2.88	3.08	3.19	3.28	3.48	3.61	3.77	3.90	4.04	4.42

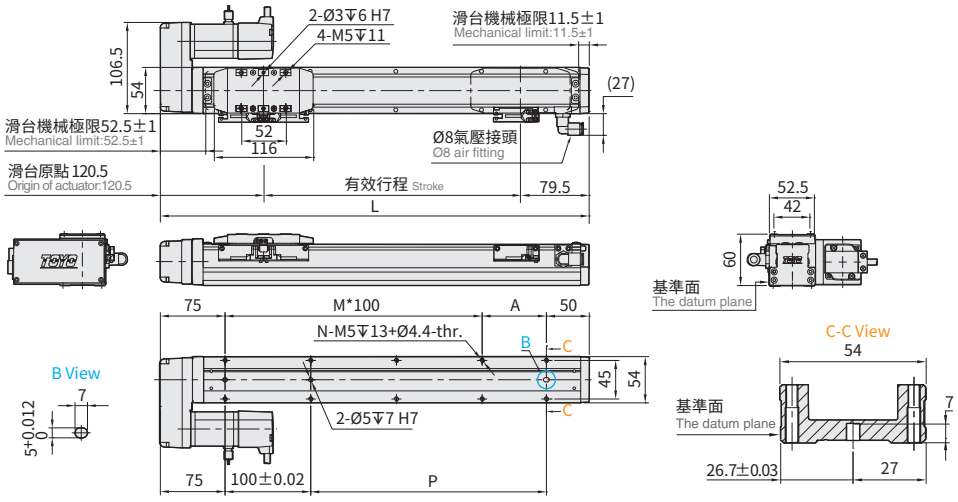
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.98	2.01	2.33	2.44	2.72	2.83	2.88	3.08	3.19	3.28	3.48	3.61	3.77	3.90	4.04	4.42

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GCH8

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
1100mm	1000mm/s	200W	⌀16mm

型號表示方式 Ordering Method

GCH8 - L10 - 100 - BC - M20B - C4 - 0001

- GCH8: 本體型號 Model
- L10: 螺桿導程 Ball Screw Lead
- 100: 行程 Stroke
- BC: 馬達位置 Motor Position
- M20B: 馬達廠牌、功率 Motor Brand、Power Output
- C4: 原點感應器 Home Sensor
- 0001: 特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm

行程 Stroke

50-1100mm
間隔50 Pitch 50 mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	國際 Panasonic	10	-	
Y	安川 Yaskawa	20	200W	
T	台達 Delta	40	-	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

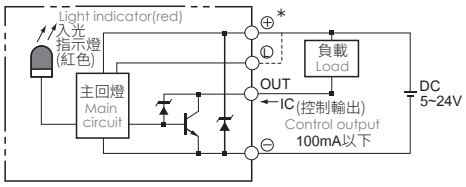
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		5	10	20
	最高速度 Maximum Speed (mm/s)※1		250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	50	30	18
		垂直使用 Vertical (kg)	15	8	3
	定格推力 Rated Thrust (N)		683	341	174
	標準行程 Stroke / Pitch (mm)※2		50-1100mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		200		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16		
	連軸器 Coupling (mm)		10X14/11(註1)		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

感應器接線圖<原點及端點> Sensor Layout

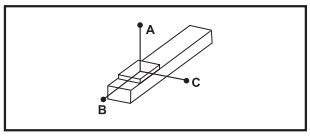


※ 1 行程超過750時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P97頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P97 for details.

※ 2 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

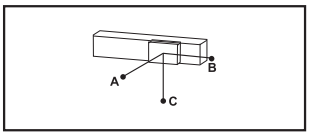
註1:使用Panasonic 200W馬達時，馬達軸心為Ø11；其他廠牌，馬達軸心為Ø14。
Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

容許負載力距表 Allowable Moment



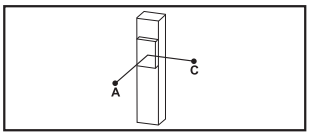
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 5 Lead	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82
導程 10 Lead	10kg	1730	286	412
	20kg	839	136	196
	30kg	541	86	124
導程 20 Lead	6kg	1213	403	493
	9kg	800	264	323
	18kg	592	194	238



(單位 Unit:mm)

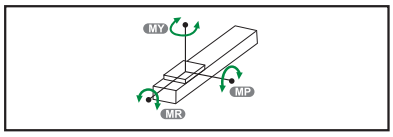
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	20kg	214	153	1435
	35kg	113	81	845
	50kg	74	53	506
導程 10 Lead	10kg	370	286	1400
	20kg	176	136	800
	30kg	112	86	495
導程 20 Lead	6kg	444	403	760
	9kg	292	264	277
	18kg	214	194	544



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	10kg	331	331
	15kg	220	220
	-	-	-
導程 10 Lead	5kg	589	589
	8kg	368	368
	-	-	-
導程 20 Lead	3kg	935	935
	-	-	-
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	318
MP	318
MR	626

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

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搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	HG-KR23	MR-J4-20A
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	HG-KR23B	MR-J4-20A
國際 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	MHMD022G1U	MADHT1507
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	MHMD022G1V	MADHT1507
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	200	220	ECMA-C20602ES	ASD-B20221-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	200	220	ECMA-C20602FS	ASD-B20221-B

GCH8

螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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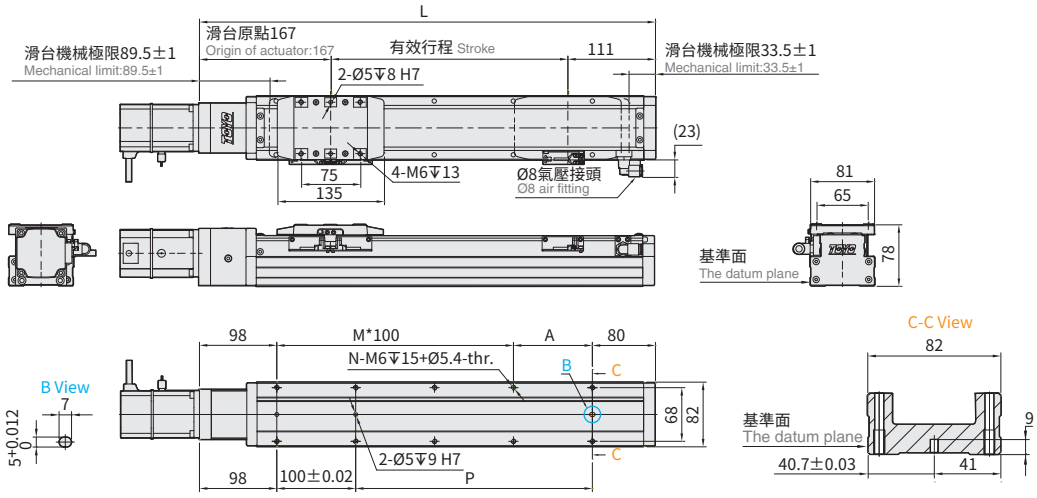
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.21	4.59	5.00	5.30	5.65	5.98	6.30	6.65	6.94	7.27	7.71	8.01	8.42	8.71	8.95	9.26	9.67	9.92	10.31	10.58	11.00	11.42

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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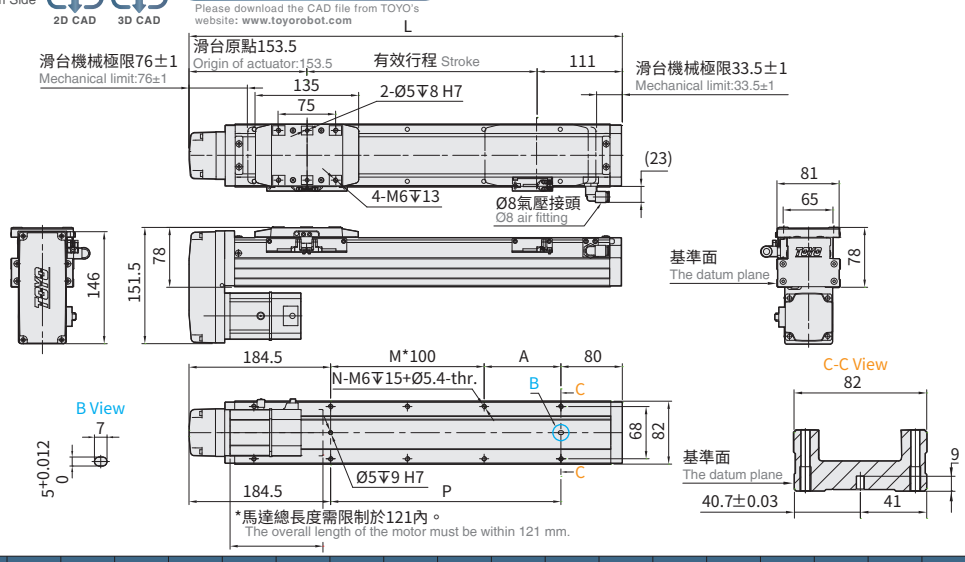
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.30	9.71	9.96	10.38	10.62	11.04	11.46

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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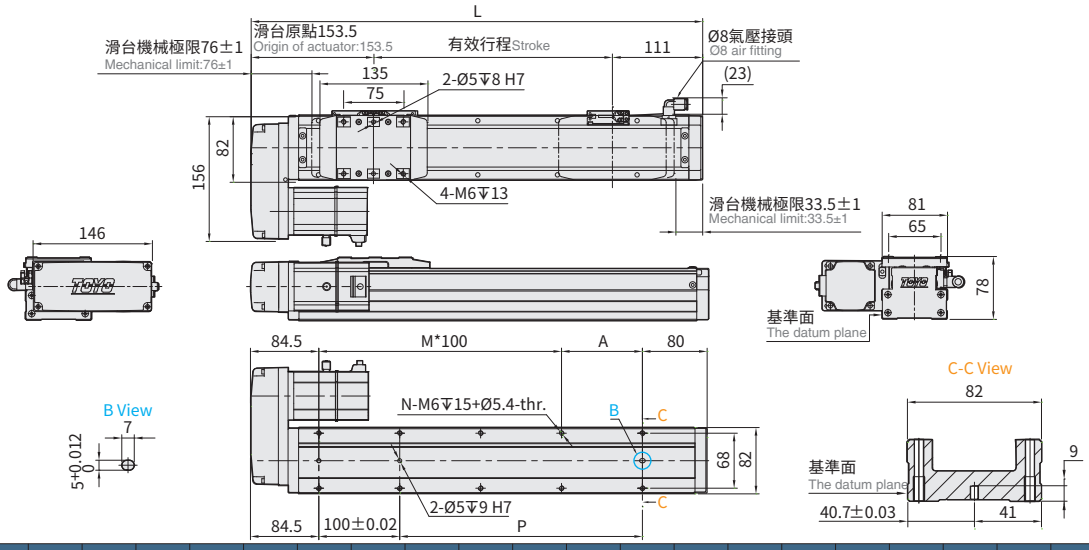
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.30	9.71	9.96	10.38	10.62	11.04	11.46

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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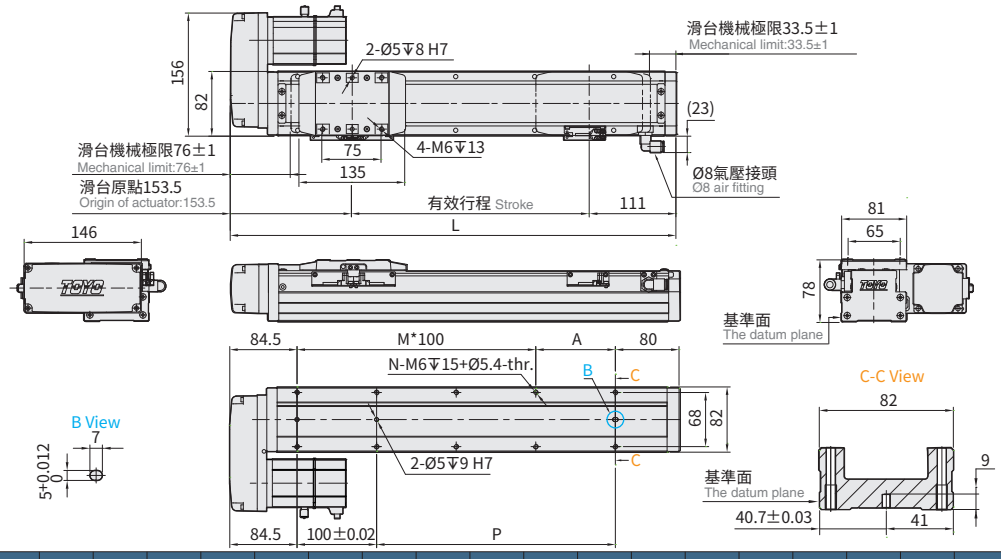
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.30	9.71	9.96	10.38	10.62	11.04	11.46

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
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GCH8

螺桿驅動
Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
1100mm	1000mm/s	400W	⌀16mm

型號表示方式 Ordering Method

GCH8 - L10 - 100 - BC - M40B - C4 - 0001

- GCH8: 本體型號 Model
- L10: 螺桿導程 Ball Screw Lead
- 100: 行程 Stroke
- BC: 馬達位置 Motor Position
- M40B: 馬達廠牌、功率 Motor Brand、Power Output
- C4: 原點感應器 Home Sensor
- 0001: 特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm

行程 Stroke

50-1100mm
間隔50 Pitch 50 mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	國際 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

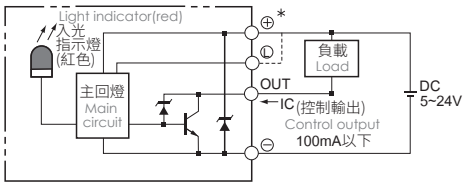
端點極限感應器 Limit Sensor

外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

基本仕樣 Specification

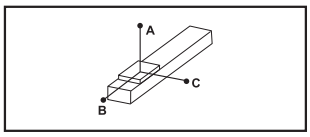
規格 Spec	位置重複精度 Repeatability (mm)		±0.005		
	螺桿導程 Ball Screw Lead (mm)		5	10	20
	最高速度 Maximum Speed (mm/s)※1		250	500	1000
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	50	30	18
		垂直使用 Vertical (kg)	15	8	3
	定格推力 Rated Thrust (N)		683	341	174
	標準行程 Stroke / Pitch (mm)※2		50-1100mm/50 間隔 50 mm Pitch		
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400		
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16		
	連軸器 Coupling (mm)		10X14		
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)		

感應器接線圖<原點及端點> Sensor Layout



※ 1 行程超過750時，會產生螺桿偏擺震動，此時請將速度調降。
詳細請參考P97頁說明。
When the stroke is over 750mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.
Please refer to P97 for details.
※ 2 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

容許負載力距表 Allowable Moment



(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 5 Lead	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82
導程 10 Lead	10kg	1730	286	412
	20kg	839	136	196
	30kg	541	86	124
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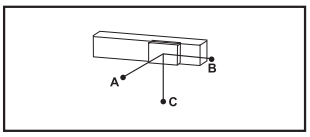

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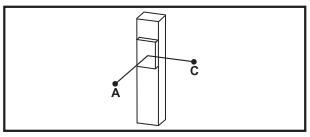
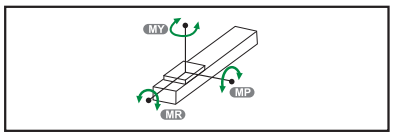


(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	10kg	331	331
	15kg	220	220
	-	-	-
導程 10 Lead	5kg	589	589
	8kg	368	368
	-	-	-
導程 20 Lead	3kg	935	935
	-	-	-
	-	-	-

靜態容許負載慣量 Static Loading Moment



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		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
國際 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MHMD042G1U	MADHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MHMD042G1V	MADHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GCH8

螺桿驅動
Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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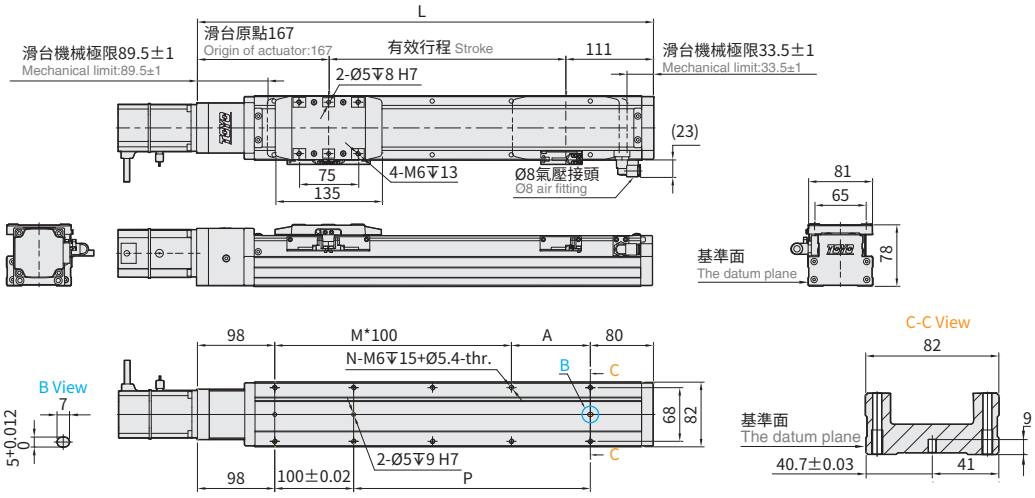
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.21	4.59	5.00	5.30	5.65	5.98	6.30	6.65	6.94	7.27	7.71	8.01	8.42	8.71	8.95	9.26	9.67	9.92	10.31	10.58	11.00	11.42

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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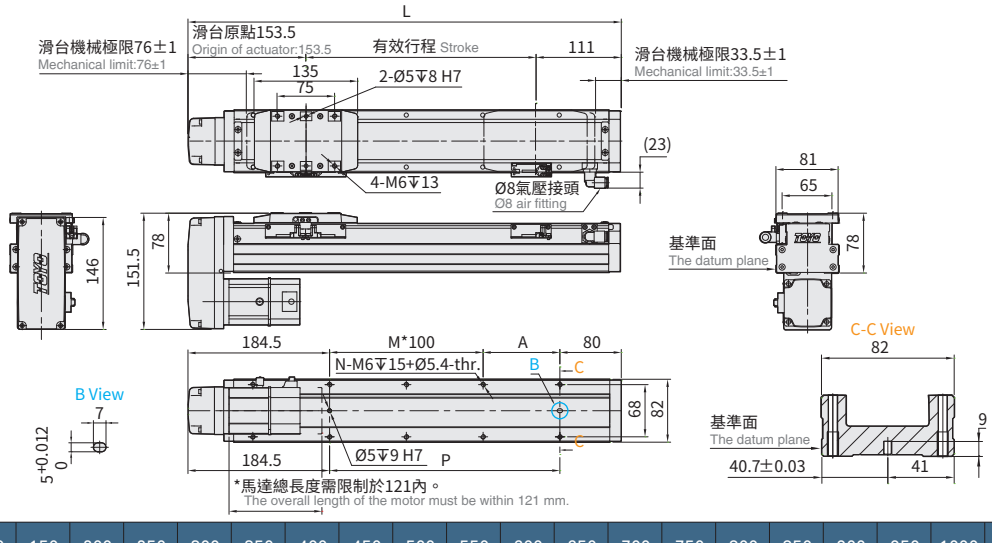
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit：mm)



*馬達總長度需限制於121內。
The overall length of the motor must be within 121 mm.

有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.30	9.71	9.96	10.38	10.62	11.04	11.46

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

● CAD圖面可至www.toyorobot.com下載 ●
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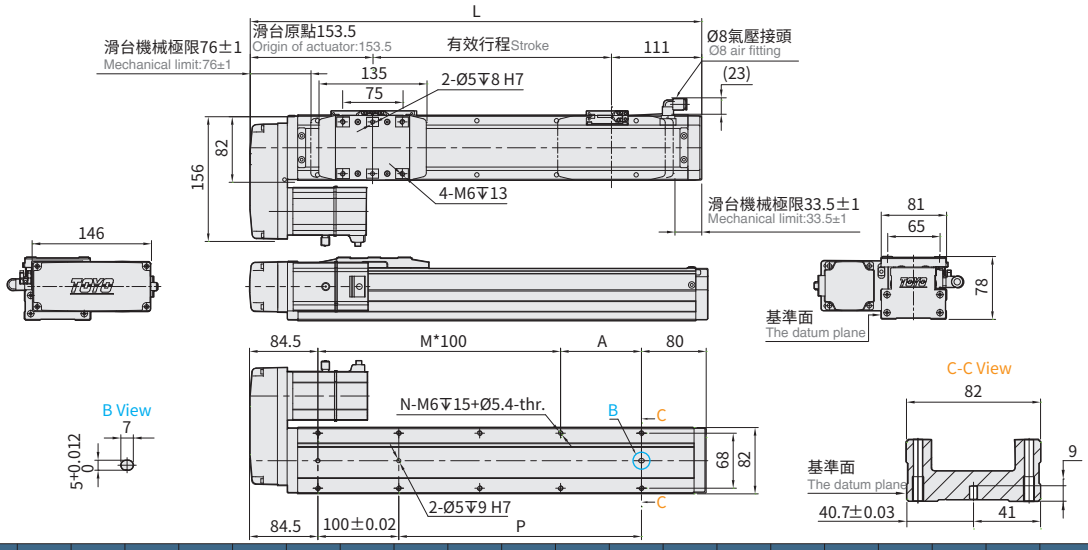
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.30	9.71	9.96	10.38	10.62	11.04	11.46

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BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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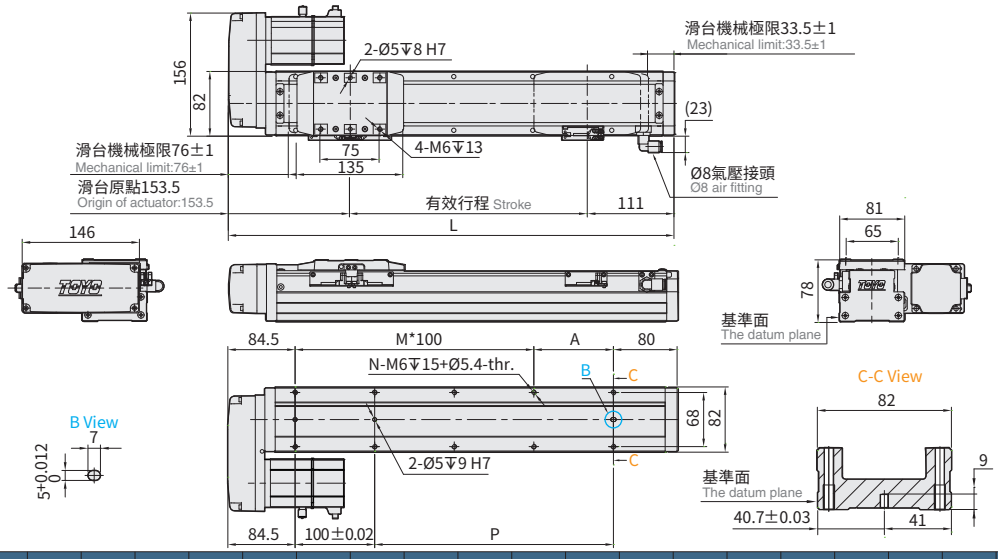
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.30	9.71	9.96	10.38	10.62	11.04	11.46

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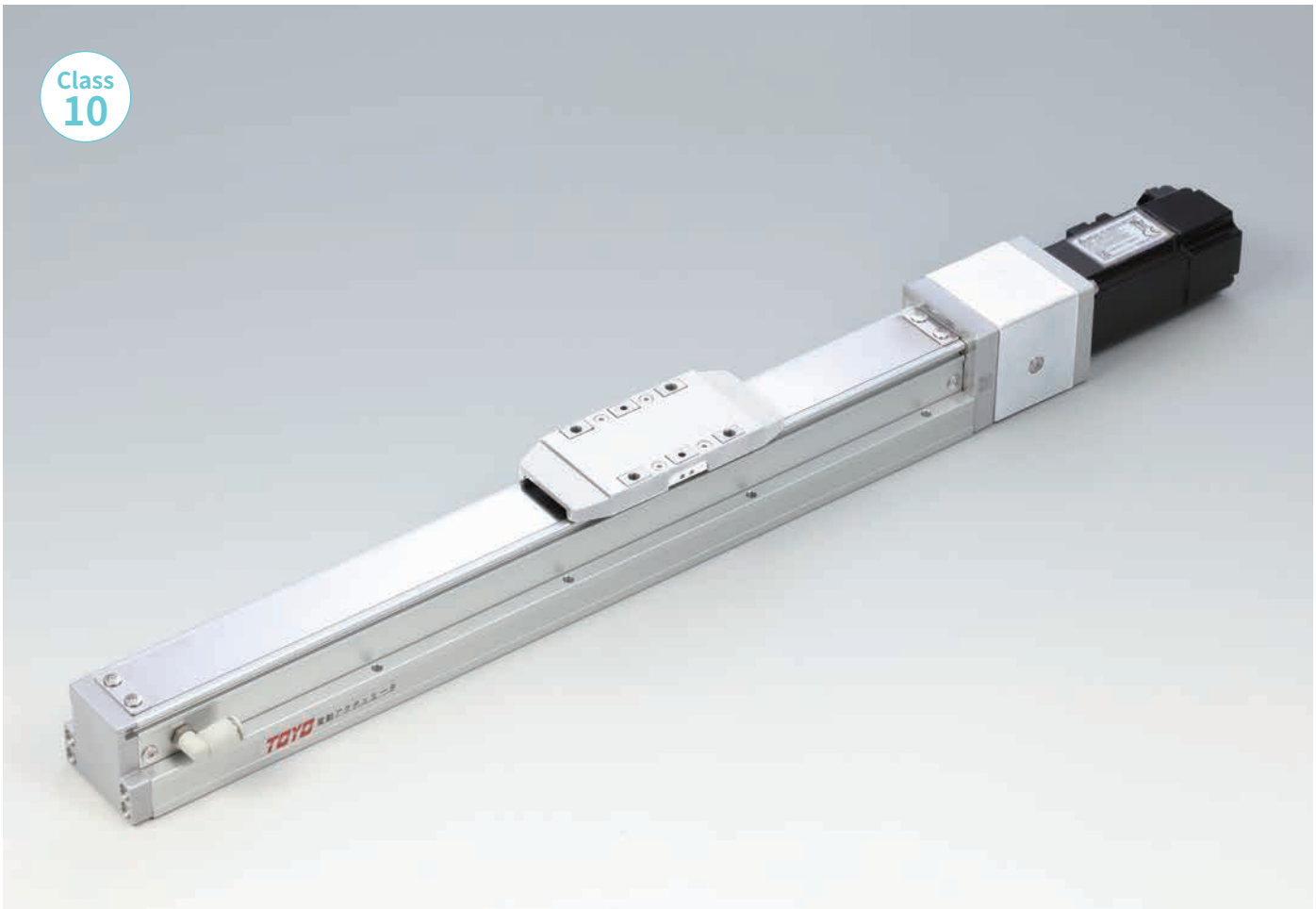
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

GCH12

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達容量 Motor Output	滾珠螺桿 Ball Screw
1250mm	1600mm/s	400W	⌀16mm

型號表示方式 Ordering Method

GCH12 - L5 - 100 - BC - M40B - C4 - 0001

本體型號 Model

行程 Stroke

50-1250mm
間隔50 Pitch 50 mm

螺桿導程 Ball Screw Lead

5	5mm
10	10mm
20	20mm
30	30mm

馬達位置 Motor Position

BC	馬達外露 Motor Exposed
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

馬達廠牌、功率 Motor Brand、Power Output

M	三菱 Mitsubishi	05	-	B
P	國際 Panasonic	10	-	
Y	安川 Yaskawa	20	-	
T	台達 Delta	40	400W	

*若無煞車則不表示。
If No Brake,No Description.

原點感應器 Home Sensor

外掛型 Outside	
C	馬達側 Motor Side
D	反馬達側 Opposite Motor Side
無 SENSOR No Sensor	
E	無 SENSOR No Sensor

* 選擇行程 50 時，有以下限制：
When the stroke is 50mm, the sensor installation has the following restrictions:

1. 原點與極限需放置於不同側。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右兩側皆需安裝感應片。
Both sides of slider need to install the sensor trigger device.

端點極限感應器 Limit Sensor

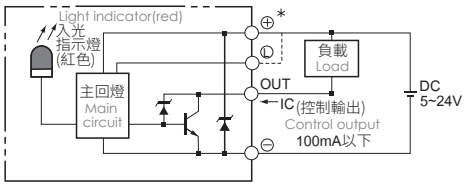
外掛型 Outside	
3	1只 1 Pc
4	2只 2 Pc
無 SENSOR No Sensor	
5	無 SENSOR No Sensor

特注式樣 Customization Order No.

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.005			
	螺桿導程 Ball Screw Lead (mm)		5	10	20	32
	最高速度 Maximum Speed (mm/s)※1		250	500	1000	1600
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg)	110	88	40	30
		垂直使用 Vertical (kg)	33	22	10	8
	定格推力 Rated Thrust (N)		1388	694	347	218
	標準行程 Stroke / Pitch (mm)※2		50-1250mm/50 間隔 50 mm Pitch			
部品 Parts	AC伺服馬達容量 AC Servo Motor Output (W)		400			
	滾珠螺桿外徑 Ball Screw Ø (mm)		C7Ø16			
	連軸器 Coupling (mm)		10X14			
	原點感應器 Home Sensor	外掛 Outside	T74N2(NPN)			

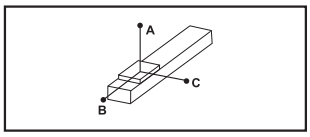
感應器接線圖<原點及端點> Sensor Layout



※ 1 馬達加減速設定0.2秒。
Acceleration and deacceleration value is set 0.2 second.

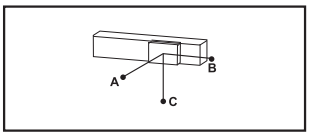
※ 2 行程超過800時，會產生螺桿偏擺震動，此時請將速度調降。
詳細請參考P97頁說明。
When the stroke is over 800mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances. Please refer to P97 for details.

容許負載力距表 Allowable Moment



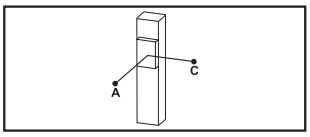
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 5 Lead	60kg	2850	250	340
	80kg	2100	180	250
	110kg	1500	120	170
導程 10 Lead	30kg	2850	490	600
	50kg	1700	280	350
	88kg	950	140	190
導程 20 Lead	10kg	3400	1250	1400
	22kg	1650	550	620
	40kg	900	290	330
導程 32 Lead	15kg	1100	570	550
	25kg	620	330	320
	30kg	520	270	260



(單位 Unit:mm)

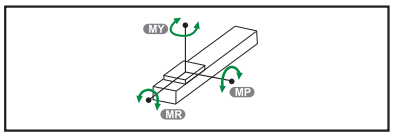
壁掛安裝 Wall Installation		A	B	C
導程 5 Lead	55kg	280	280	3300
	75kg	200	195	2400
	110kg	130	125	1550
導程 10 Lead	35kg	400	410	2500
	55kg	245	250	1550
	88kg	150	150	950
導程 20 Lead	12kg	900	1070	3000
	20kg	550	630	1800
	40kg	260	300	900
導程 32 Lead	15kg	440	570	1050
	30kg	210	270	520
	-	-	-	-



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 5 Lead	15kg	1200	1200
	22kg	820	820
	33kg	550	550
導程 10 Lead	10kg	1600	1600
	14kg	1150	1150
	22kg	730	730
導程 20 Lead	7kg	1800	1800
	10kg	1250	1250
	-	-	-
導程 32 Lead	5kg	1600	1600
	8kg	1000	1000
	-	-	-

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	606
MP	606
MR	1168

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.
※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服馬達一覽表 Suitable Motor Brand

廠牌 Brand	馬達記號 Mark	煞車有無 Brake	馬達容量 Watt	電源電壓 AC-Voltage	伺服馬達型號 Motor Model	驅動器型號 Driver Model
三菱 Mitsubishi	M	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	HG-KR43	MR-J4-40A
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
國際 Panasonic	P	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	MSMD042G1U	MBDHT2510
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	MSMD042G1V	MBDHT2510
台達 Delta	T	無煞車(水平仕樣) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有煞車(垂直仕樣) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

GCH12

螺桿驅動 Ball Screw Drive

BC 馬達外露 Motor Exposed

2D CAD 3D CAD

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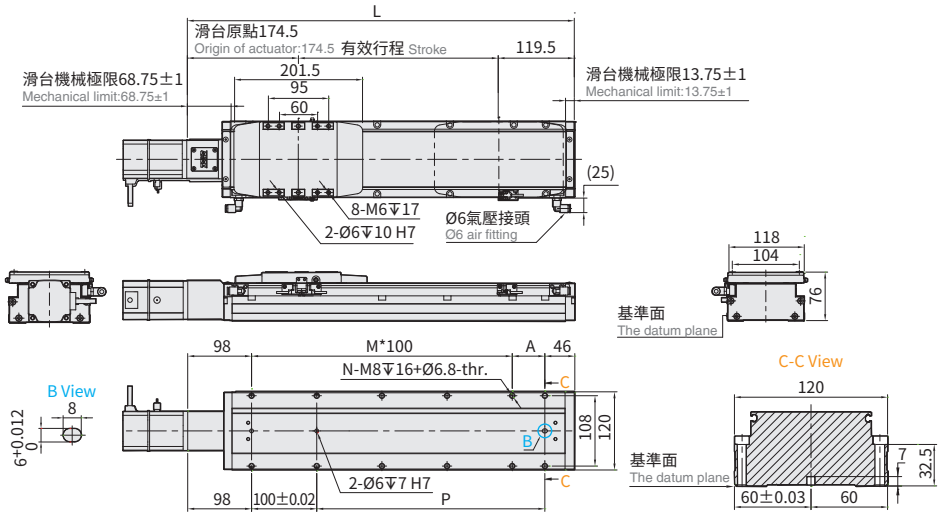
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.05	5.4	5.75	6.1	6.45	6.8	7.15	7.5	7.85	8.2	8.55	8.9	9.25	9.6	9.95	10.3	10.65	11	11.35	11.7	12.05	12.4	12.75	13.1	13.45

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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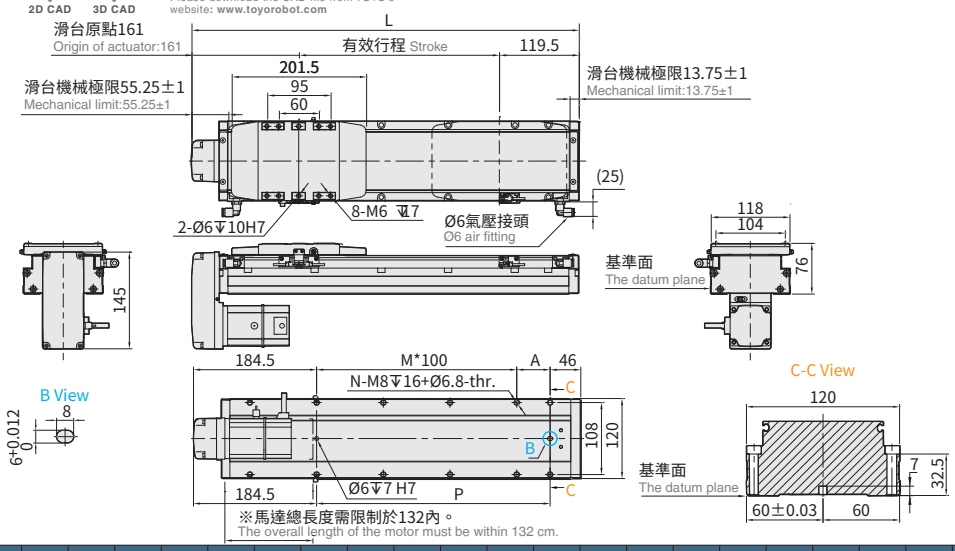
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	330.5	380.5	430.5	480.5	530.5	580.5	630.5	680.5	730.5	780.5	830.5	880.5	930.5	980.5	1030.5	1080.5	1130.5	1180.5	1230.5	1280.5	1330.5	1380.5	1430.5	1480.5	1530.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.21	5.56	5.91	6.26	6.61	6.96	7.31	7.66	8.01	8.36	8.71	9.06	9.41	9.76	10.11	10.46	10.81	11.16	11.51	11.86	12.21	12.56	12.91	13.26	13.61

※馬達下折時，若選用煞車馬達，或是超出馬達總長度限制時無法套用標準PIN孔，如有需求請洽我司業務。
When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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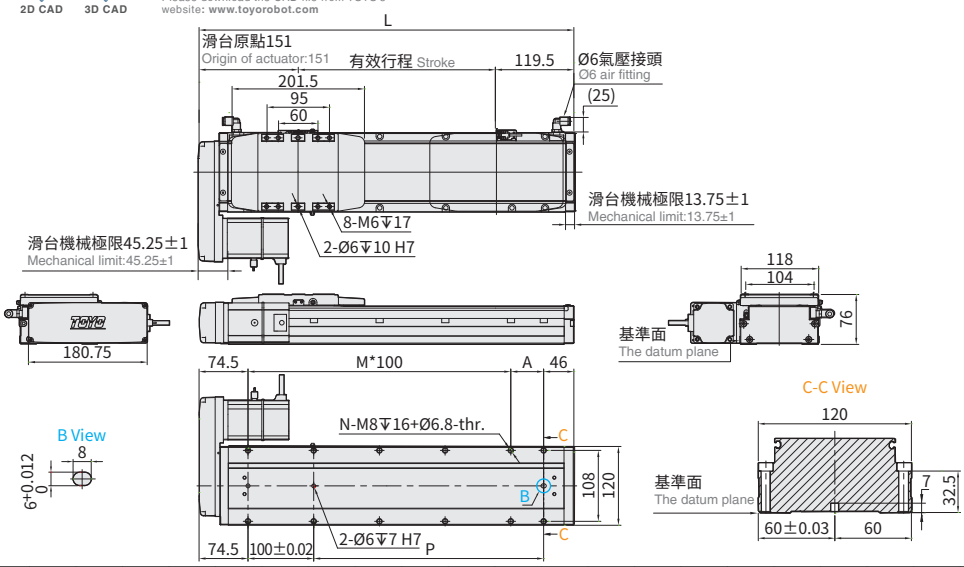
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
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BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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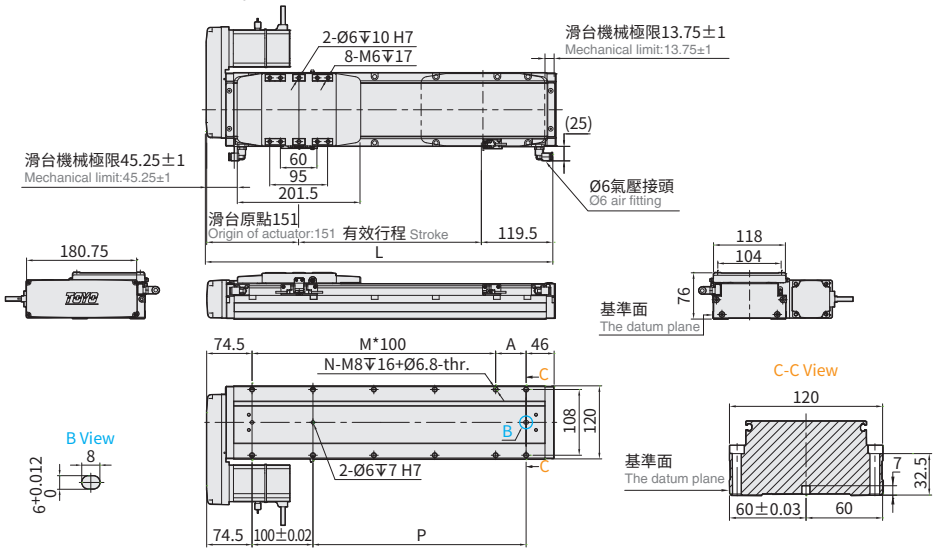
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

Memo

XYGT

軌道內嵌式螺桿式直交機械手

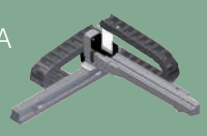
XYGT built-in linear motion guide Multi Axis -Ball Screw Type

Contents

懸臂型 A-Type

中負載 Medium payload

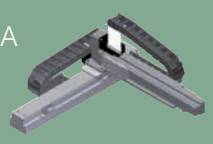
XYGT210-A



X軸最大行程 800mm
Max. stroke of X axis
Y軸最大行程 300mm 127
Max. stroke of Y axis
最大荷重 4.5kg
Max. payload

重負載 High payload

XYGT320-A



X軸最大行程 1100mm
Max. stroke of X axis
Y軸最大行程 500mm 137
Max. stroke of Y axis
最大荷重 8.12kg
Max. payload

中負載 Medium payload

XYGT430-A

X軸最大行程 1250mm
Max. stroke of X axis
Y軸最大行程 600mm 147
Max. stroke of Y axis
最大荷重 24kg
Max. payload

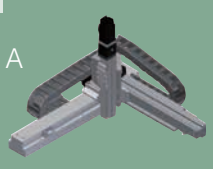
重負載 High payload

XYGT440-A

X軸最大行程 1250mm
Max. stroke of X axis
Y軸最大行程 600mm 157
Max. stroke of Y axis
最大荷重 57kg
Max. payload

中負載 Medium payload

XYGT321-A



X軸最大行程 1100mm
Max. stroke of X axis
Y軸最大行程 500mm 167
Max. stroke of Y axis
Z軸最大行程 100mm
Max. stroke of Z axis
最大荷重 3.3kg
Max. payload

中負載 Medium payload

XYGT432-A

X軸最大行程 1250mm
Max. stroke of X axis
Y軸最大行程 550mm 177
Max. stroke of Y axis
Z軸最大行程 350mm
Max. stroke of Z axis
最大荷重 10kg
Max. payload

規格索引

Spec Index

XYGT 軌道內嵌式直交機械手-螺桿式

XYGT built-in linear motion guide Multi Axis -Ball Screw Type

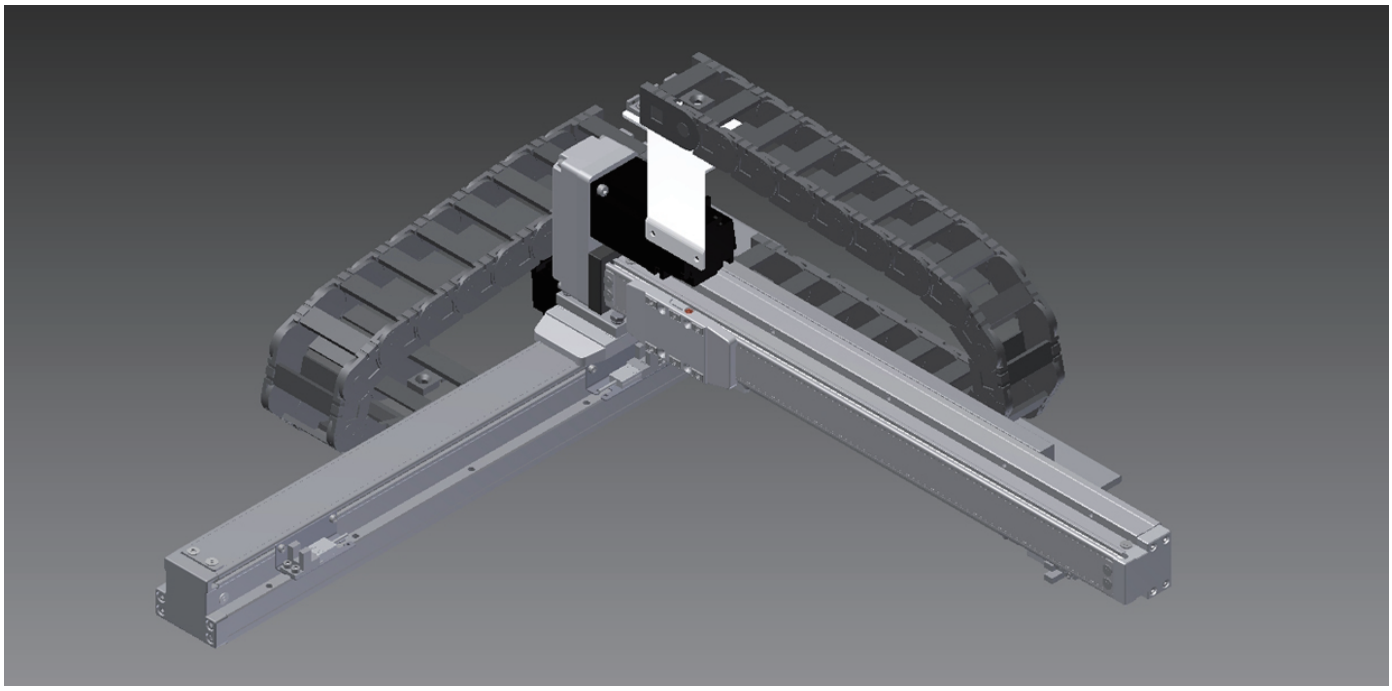
使用環境 Use Where	傳動方式 Driven Mode	仕樣 Specification	連結型式 Combination	連結軸數 Axis Numbers	各軸導程 Lead			各軸最高速度 Maximum Speed(mm/s)			各軸行程範圍 Stroke(mm)		
					X軸 X axis	Y軸 Y axis	Z軸 Z axis	X軸 X axis	Y軸 Y axis	Z軸 Z axis	X軸 X axis	Y軸 Y axis	Z軸 Z axis
一般環境 Standard	滾珠螺桿 Ball screw	XYGT210-A	懸臂型(A) Arm Type	2軸 2-axis	L20	L2	-	1000	100	-	50~800	100~300	-
		XYGT320-A			L20	L10	-	1000	500	-	50~1100	100~500	-
		XYGT430-A			L20	L10	-	1000	500	-	50~1250	100~600	-
					L20	L20	-	1000	1000	-	50~1250	100~600	-
		XYGT440-A			L20	L20	-	1000	1000	-	50~1250	100~500	-
					L10	L10	-	500	500	-	50~1250	100~600	-
		XYGT321-A		3軸 3-axis	L20	L10	L2	1000	500	100	50~1100	100~500	50~100
		XYGT432-A			L20	L10	L5	1000	500	250	50~1250	100~550	50~350

	Y軸行程及負荷軸 (Y軸或Z軸) 最大可搬重量 Y-axis Stroke (mm) and payload axis' (Y-axis or Z-axis) maximum payload (kg) 代表重量 Payload												頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	
	-	4.5	3.9	3.6	3	2.8	-	-	-	-	-	-	127
	-	8.12	7.74	7.36	6.98	6.6	6.22	5.84	5.46	5	-	-	137
	-	24	24	24	24	21	18	13	10	7	4	2	147
	-	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	7	4	2	
	-	26	26	24	19	15	11	7	4	2	-	-	157
	-	57	56	39	31	26	20	16	12	9	5	3	
	-	3.3	2.6	2.4	1.7	1.5	0.8	0.6	0.5	0.5	-	-	167
	-	10	10	10	10	10	10	10	7.77	4.77	1.77	-	177

XYGT210-A

2軸 2-axis

螺桿驅動 Ball Screw Drive



此圖僅供參考，出貨規格詳見尺寸圖面
The picture is just for the reference. Please check the the actual dimensions on the drawing.

※標準連結滑台不提供同動精度
Assembly accuracy is not guaranteed for the standard multi-axis system.

最大行程 Maximum Stroke

X軸 X axis 800mm | Y軸 Y axis 300mm

最高速度 Maximum Speed

X軸 X axis 1000mm/s | Y軸 Y axis 100mm/s

AC伺服馬達容量 AC Servo Motor Output

X軸 X axis 100W | Y軸 Y axis 50W

基本仕樣 Specification

項目 Item	X軸 X axis	Y軸 Y axis
軸型式 Model Type	GTH5	GTH4
位置重複精度 Repeatability (mm)	±0.005	±0.005
螺桿導程 Ball screw lead (mm)	20	2
最高速度 Maximum Speed (mm/s)※1	1000	100
標準行程 (50間隔) Stroke 50 mm Pitch (mm)	50~800	100~300
AC伺服馬達容量 AC Servo Motor Output (w)	100	50
使用環境 Environment	0~40°C , 85%RH Below	

※1：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。 Maximum speed is based on the AC servo motor's 3000rpm.

最大可搬重量 Maximum Payload

Y軸行程 Y Stroke (mm)	100	150	200	250	300
Y軸荷重 Y Payload (kg)	4.5	3.9	3.6	3	2.8

※限定水平安裝。
Only for horizontal installation.

型號表示方式 Ordering Method

XYGT210 - A1 - 300 - 300 - M - C - 0001

本體型號 Model

特注式樣 Special Order No.

連結方式 Combination

A	懸臂型 Arm Type

組合方向 Combination Direction

1
2
3
4

X軸行程 X Stroke

50~800mm
50間隔 50 mm Pitch

Y軸行程 Y Stroke

100~300mm
50間隔 50 mm Pitch

馬達廠牌 Motor Brand

M	三菱 Mitsubishi
P	國際 Panasonic
Y	安川 Yaskawa
T	台達 Delta

出貨方式 Delivery Methode

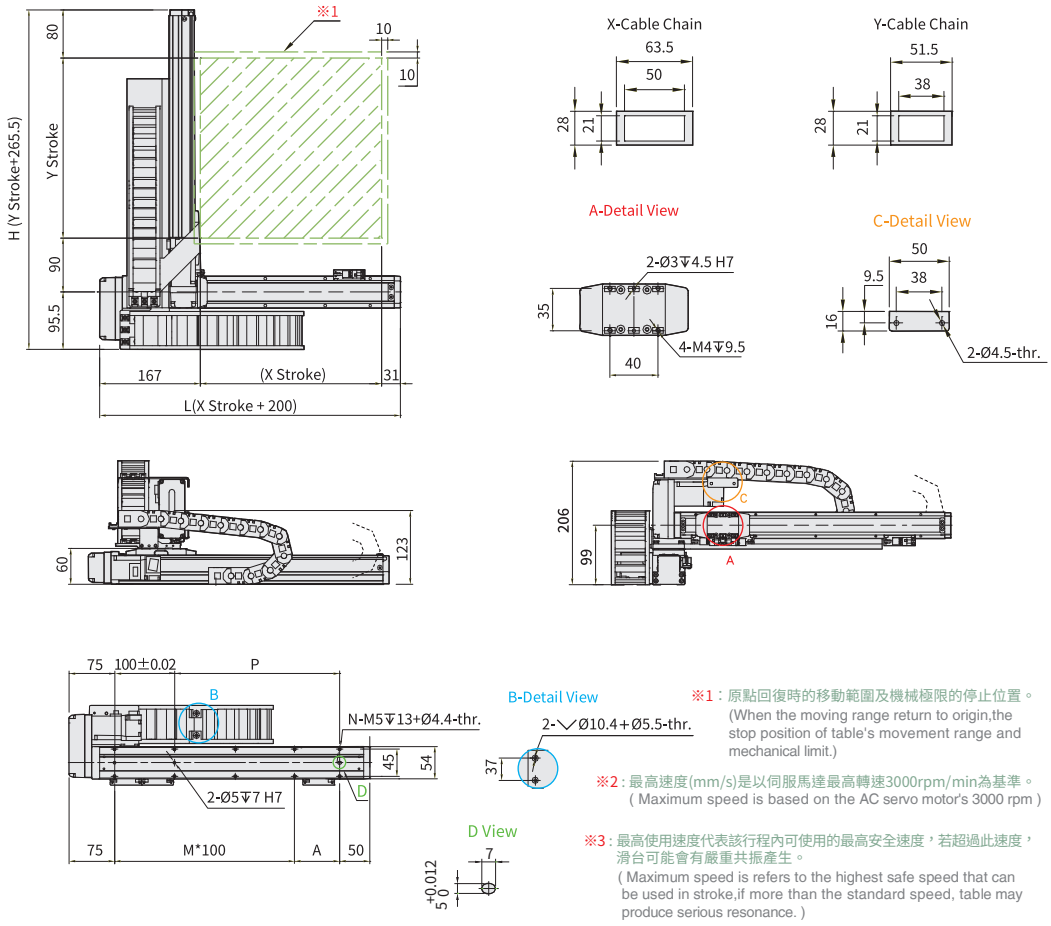
C	連結出貨 By Set
K	單軸出貨 By Kit

XYGT210-A1 尺寸圖 Size

A1 2D CAD 3D CAD

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

單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

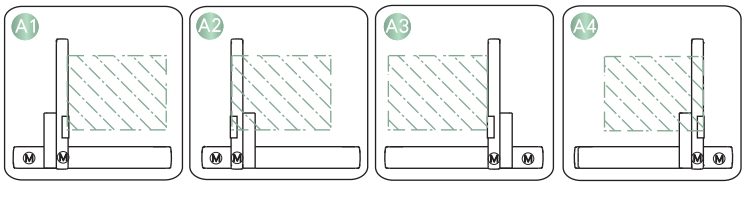
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
最高使用速度※2※3 Max. speed (mm/s)	1000												900	800	700	600

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
H	365.5	415.5	465.5	515.5	565.5
最高使用速度 Max. speed (mm/s)	100				

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P039
Y軸詳細規格 Y-axis Detail Spec. →P031

XYGT210-A1 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT210-A1 配件規格 Accessories Specification

A1 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000345	IGUS-1500.050.035.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

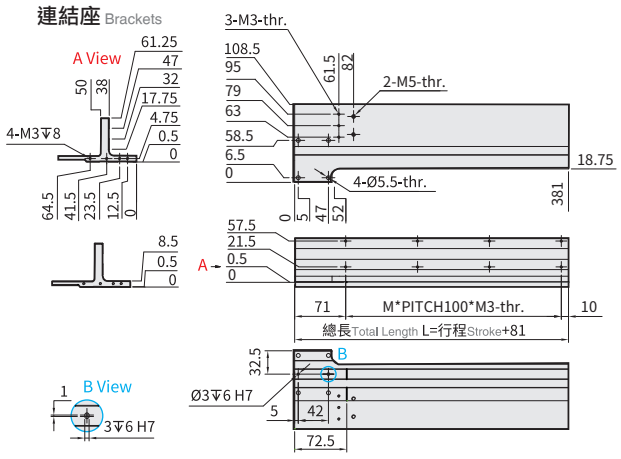
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
X軸使用節數 Number For Pitch of X Axis	7	8	9	10	10	11	12	13	13	14	15	16	16	17	18	19
Y軸使用節數 Number For Pitch of Y Axis		13	14	14	15	16										

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
L	181	281	381		
M	1	2	3		

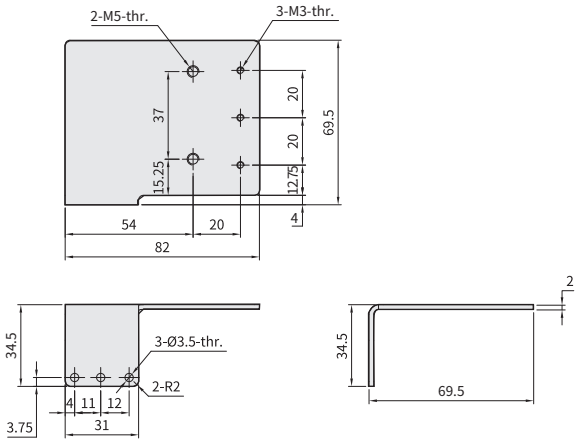
連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000040	100	XYGT210-A1/A4-行程100-長181 XYGT210-A1/A4-Stroke 100-Length 181
11033-000041	150~200	XYGT210-A1/A4-行程150(200)-長281 XYGT210-A1/A4-Stroke 150(200)-Length 281
11033-000042	250~300	XYGT210-A1/A4-行程250(300)-長381 XYGT210-A1/A4-Stroke 250(300)-Length 381

X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000478

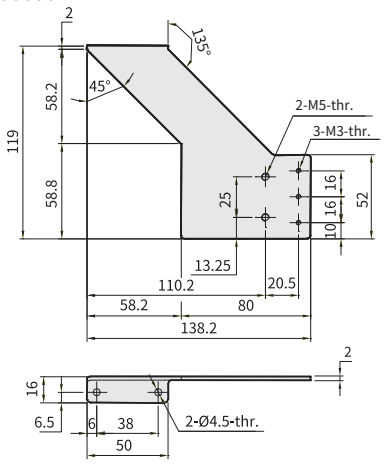
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000480

材質 Material：SUS304

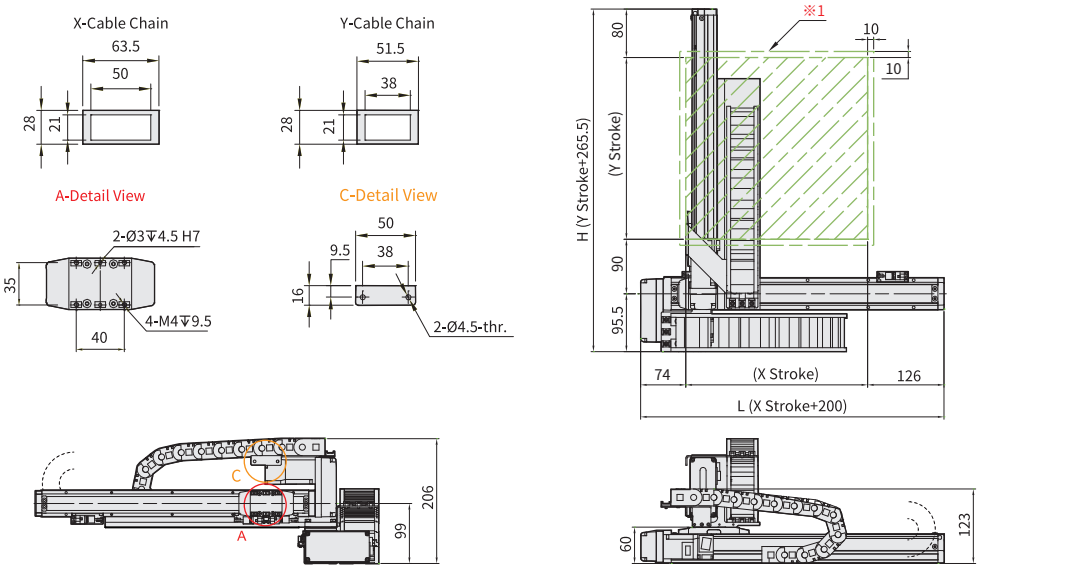


XYGT210-A2 尺寸圖 Size

A2 2D CAD 3D CAD

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

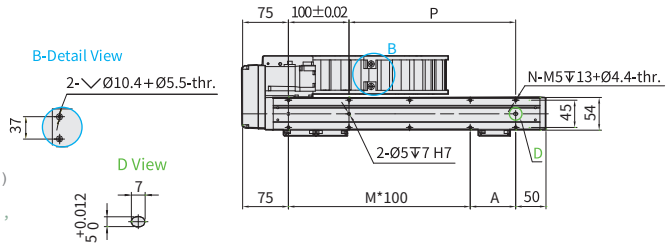
單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

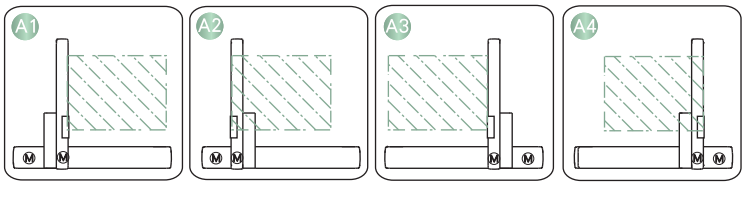
※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
最高使用速度※2※3 Max. speed (mm/s)	1000												900	800	700	600

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
H	365.5	415.5	465.5	515.5	565.5
最高使用速度 Max. speed (mm/s)	100				

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P039
Y軸詳細規格 Y-axis Detail Spec. →P031

XYGT210-A2 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT210-A2 配件規格 Accessories Specification

A2 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000345	IGUS-1500.050.035.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

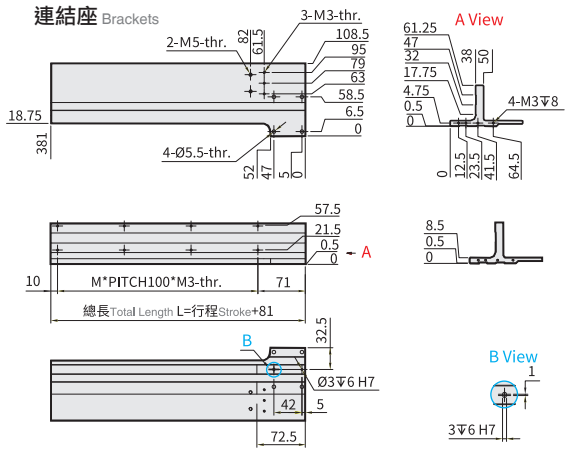
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
X軸使用節數 Number For Pitch of X Axis	7	8	9	10	10	11	12	13	13	14	15	16	16	17	18	19
Y軸使用節數 Number For Pitch of Y Axis		13	14	14	15	16										

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



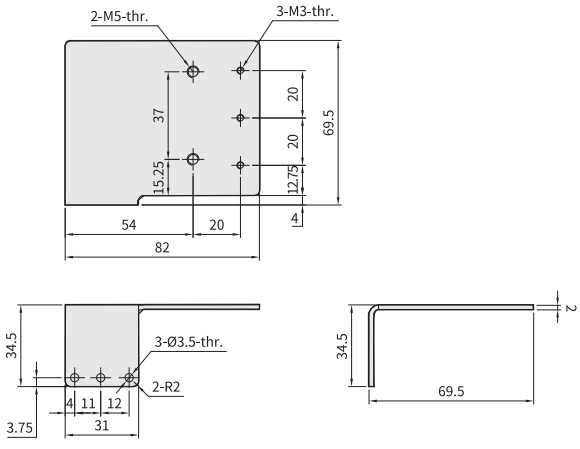
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
L	181	281	381		
M	1	2	3		

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000043	100	XYGT210-A2/A3-行程100-長181 XYGT210-A2/A3-Stroke 100-Length 181
11033-000044	150~200	XYGT210-A2/A3-行程150(200)-長281 XYGT210-A2/A3-Stroke 150(200)-Length 281
11033-000045	250~300	XYGT210-A2/A3-行程250(300)-長381 XYGT210-A2/A3-Stroke 250(300)-Length 381

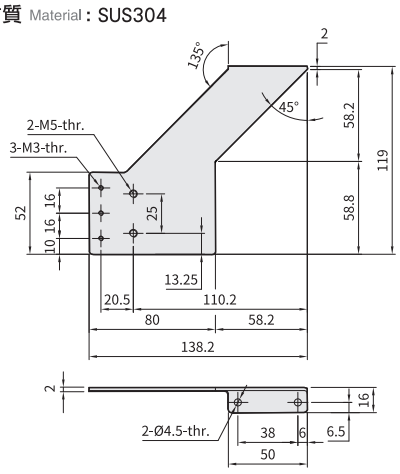
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000478
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000481
材質 Material：SUS304

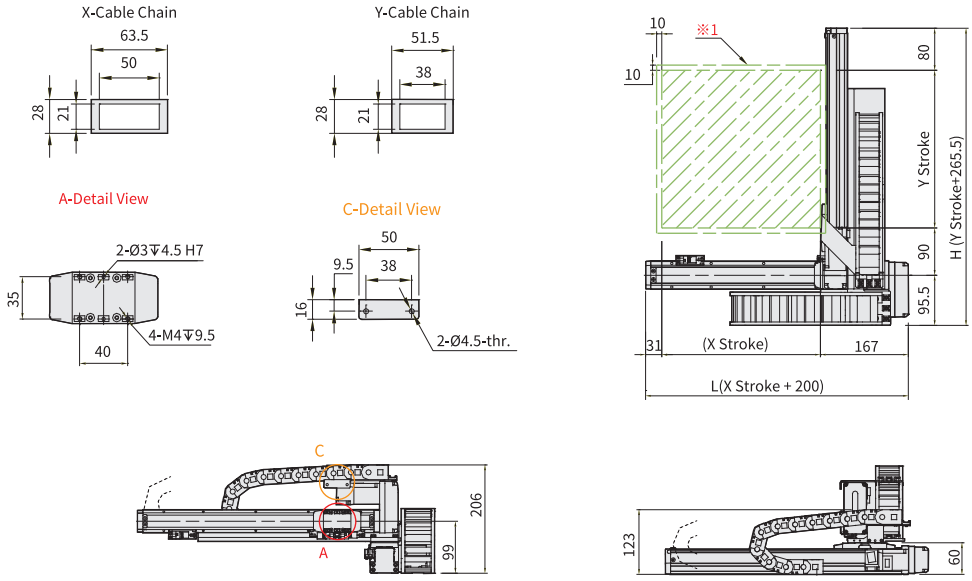


XYGT210-A3 尺寸圖 Size

A3 2D CAD 3D CAD

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

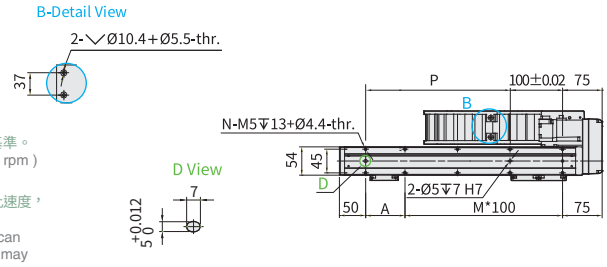
單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

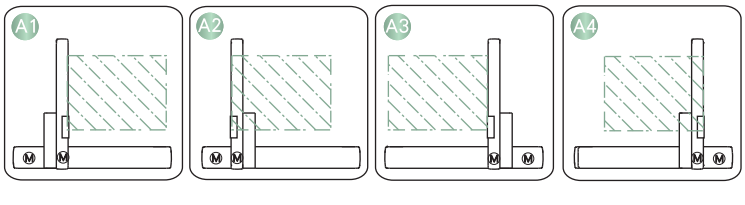
※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
最高使用速度※2※3 Max. speed (mm/s)	1000												900	800	700	600

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
H	365.5	415.5	465.5	515.5	565.5
最高使用速度 Max. speed (mm/s)	100				

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P039
Y軸詳細規格 Y-axis Detail Spec. →P031

XYGT210-A3 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT210-A3 配件規格 Accessories Specification

A3 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000345	IGUS-1500.050.035.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

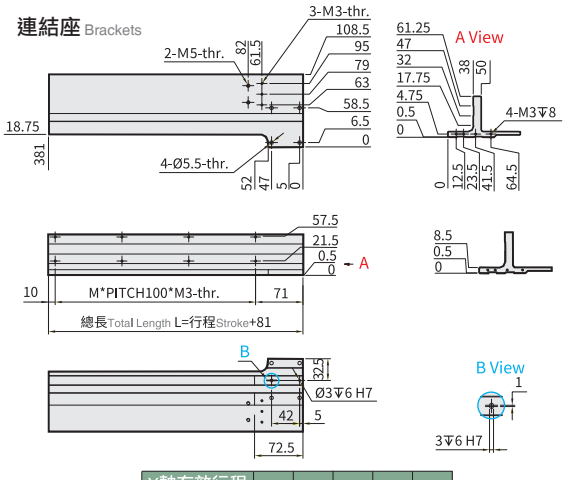
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
X軸使用節數 Number For Pitch of X Axis	7	8	9	10	10	11	12	13	13	14	15	16	16	17	18	19
Y軸使用節數 Number For Pitch of Y Axis		13	14	14	15	16										

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



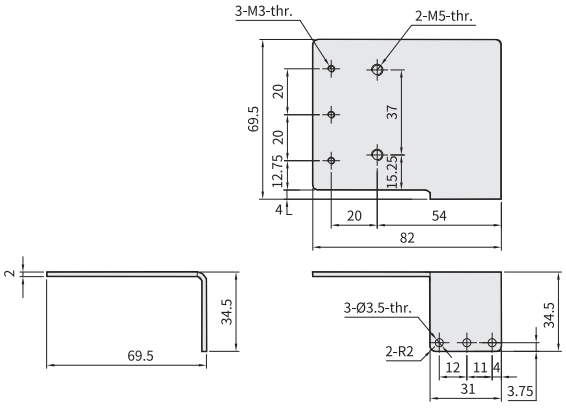
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
L	181	281	381		
M	1	2	3		

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000043	100	XYGT210-A2/A3-行程100-長181 XYGT210-A2/A3-Stroke 100-Length 181
11033-000044	150~200	XYGT210-A2/A3-行程150(200)-長281 XYGT210-A2/A3-Stroke 150(200)-Length 281
11033-000045	250~300	XYGT210-A2/A3-行程250(300)-長381 XYGT210-A2/A3-Stroke 250(300)-Length 381

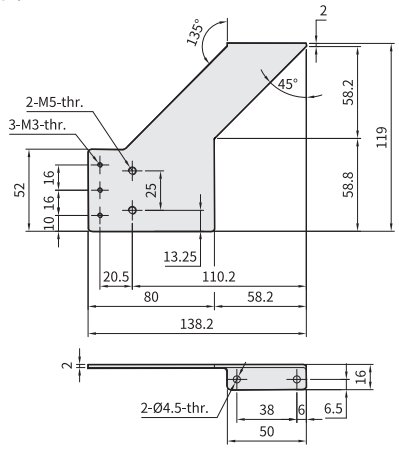
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000479
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000481
材質 Material：SUS304

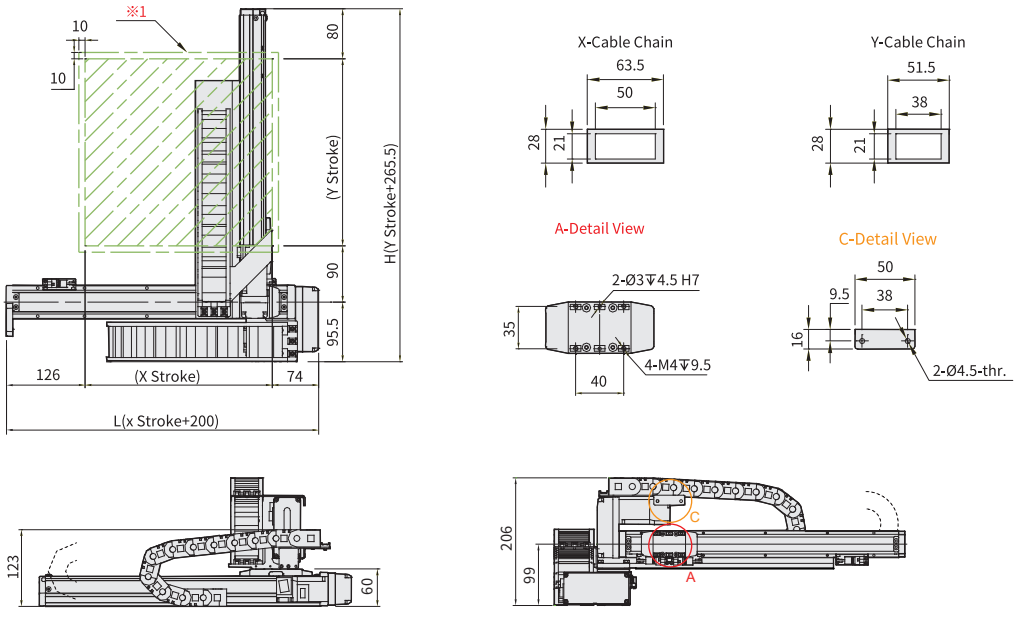


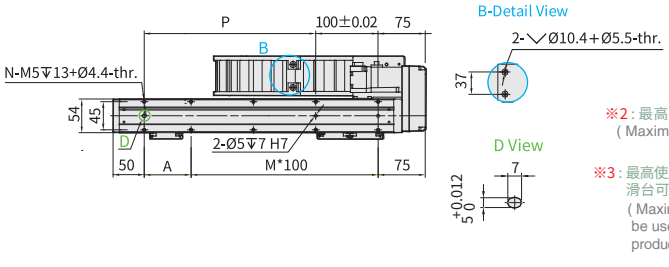
XYGT210-A4 尺寸圖 Size

A4 2D CAD 3D CAD

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

單位 Unit : mm





※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

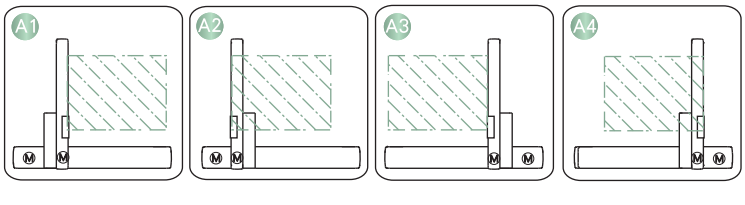
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
最高使用速度※2※3 Max. speed (mm/s)	1000												900	800	700	600

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
H	365.5	415.5	465.5	515.5	565.5
最高使用速度 Max. speed (mm/s)	100				

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P039
Y軸詳細規格 Y-axis Detail Spec. →P031

XYGT210-A4 2軸 2-axis

螺桿驅動 Ball Screw Drive

XYGT210-A4 配件規格 Accessories Specification

A4 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000345	IGUS-1500.050.035.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

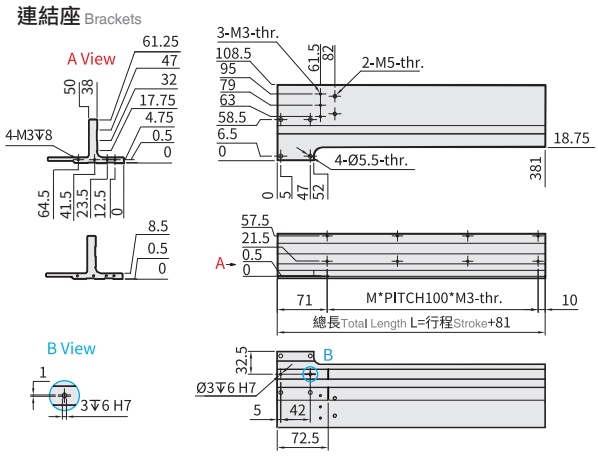
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
X軸使用節數 Number For Pitch of X Axis	7	8	9	10	10	11	12	13	13	14	15	16	16	17	18	19
Y軸使用節數 Number For Pitch of Y Axis		13	14	14	15	16										

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



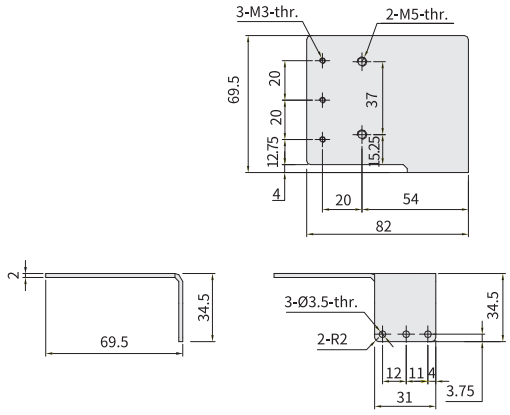
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300
L	181	281	381		
M	1	2	3		

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000040	100	XYGT210-A1/A4-行程100-長181 XYGT210-A1/A4-Stroke 100-Length 181
11033-000041	150~200	XYGT210-A1/A4-行程150(200)-長281 XYGT210-A1/A4-Stroke 150(200)-Length 281
11033-000042	250~300	XYGT210-A1/A4-行程250(300)-長381 XYGT210-A1/A4-Stroke 250(300)-Length 381

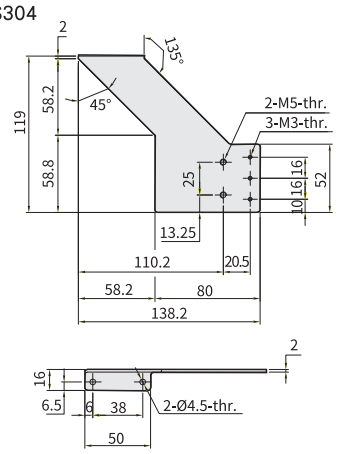
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000479
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000480
材質 Material：SUS304

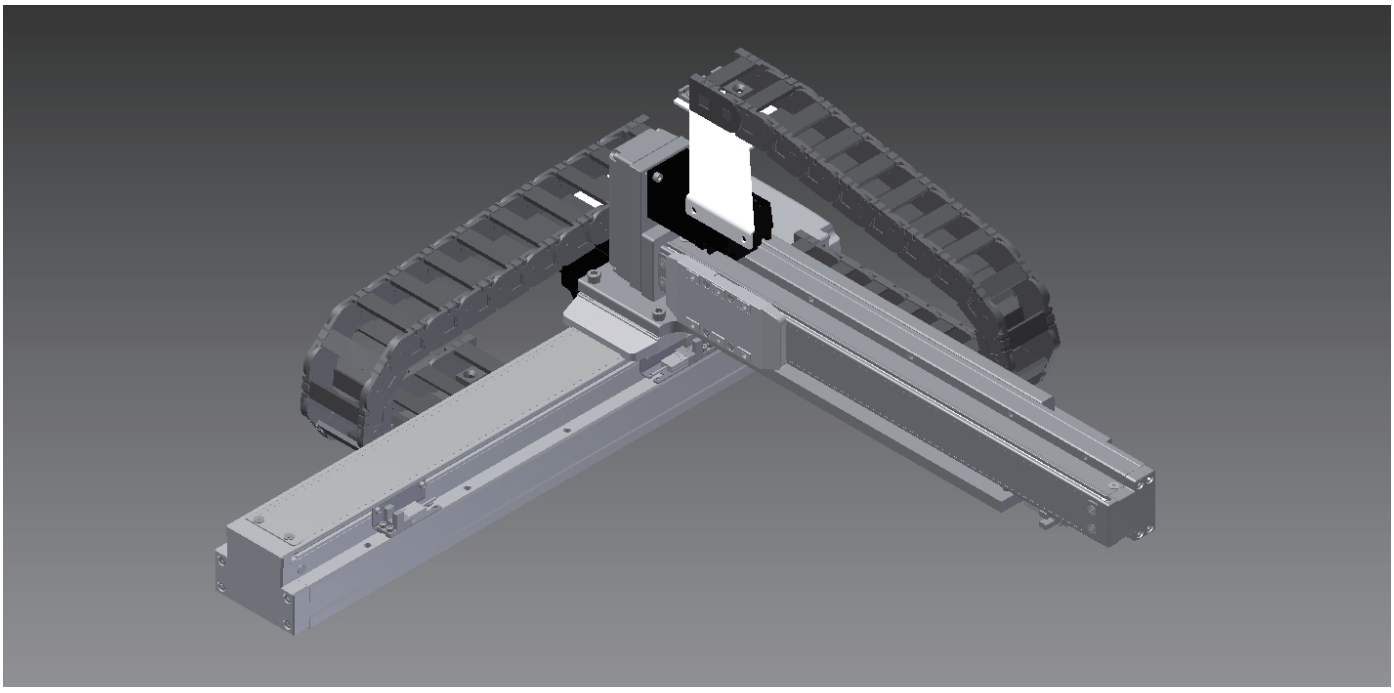


Memo

XYGT320-A

2軸 2-axis

螺桿驅動 Ball Screw Drive



此圖僅供參考，出貨規格詳見尺寸圖面
The picture is just for the reference. Please check the the actual dimensions on the drawing.

※標準連結滑台不提供同動精度
Assembly accuracy is not guaranteed for the standard multi-axis system.

最大行程 Maximum Stroke

X軸 X axis 1100mm | Y軸 Y axis 500mm

最高速度 Maximum Speed

X軸 X axis 1000mm/s | Y軸 Y axis 500mm

AC伺服馬達容量 AC Servo Motor Output

X軸 X axis 200W | Y軸 Y axis 100W

基本仕樣 Specification

項目 Item	X軸 X axis	Y軸 Y axis
軸型式 Model Type	GTH8	GTH5
位置重複精度 Repeatability (mm)	±0.005	±0.005
螺桿導程 Ball screw lead (mm)	20	10
最高速度 Maximum Speed (mm/s)※1	1000	500
標準行程 (50間隔) Stroke 50 mm Pitch (mm)	50~1100	100~500
AC伺服馬達容量 AC Servo Motor Output (w)	200	100
使用環境 Environment	0~40°C , 85%RH Below	

※1：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。 Maximum speed is based on the AC servo motor's 3000rpm.

最大可搬重量 Maximum Payload

Y軸行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
Y軸荷重 Y Payload (kg)	8.12	7.74	7.36	6.98	6.6	6.22	5.84	5.46	5

※限定水平安裝。
Only for horizontal installation.

型號表示方式 Ordering Method

XYGT320 - A1 - 300 - 300 - M - C - 0001

本體型號 Model

特注式樣 Special Order No.

連結方式 Combination

A	懸臂型 Arm Type

組合方向 Combination Direction

1
2
3
4

X軸行程 X Stroke

50~1100mm
50間隔 50 mm Pitch

Y軸行程 Y Stroke

100~500mm
50間隔 50 mm Pitch

馬達廠牌 Motor Brand

M	三菱 Mitsubishi
P	國際 Panasonic
Y	安川 Yaskawa
T	台達 Delta

出貨方式 Delivery Methode

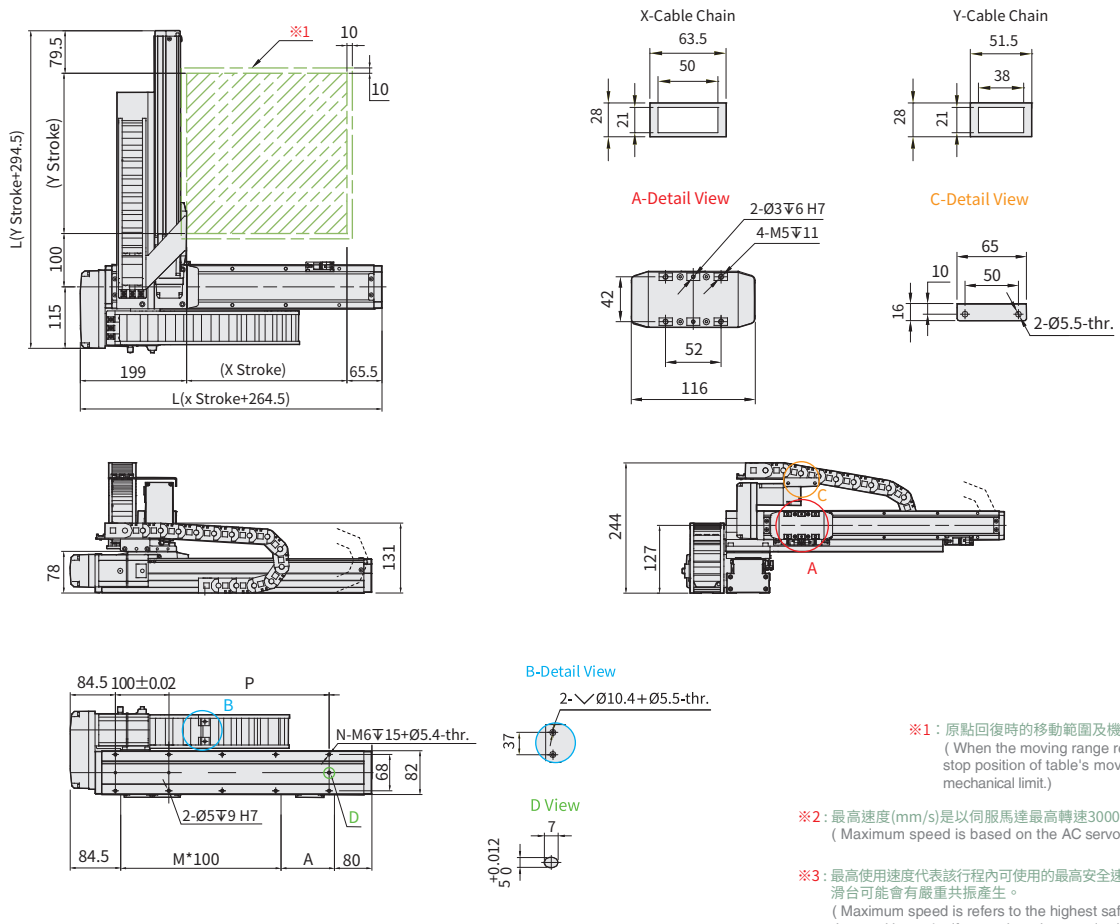
C	連結出貨 By Set
K	單軸出貨 By Kit

XYGT320-A1 尺寸圖 Size

A1 2D CAD 3D CAD

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

單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

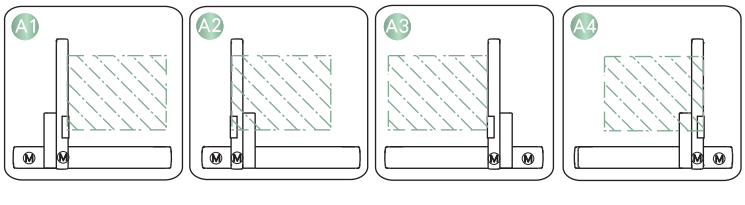
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※2※3 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039

XYGT320-A1 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT320-A1 配件規格 Accessories Specification

A1 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

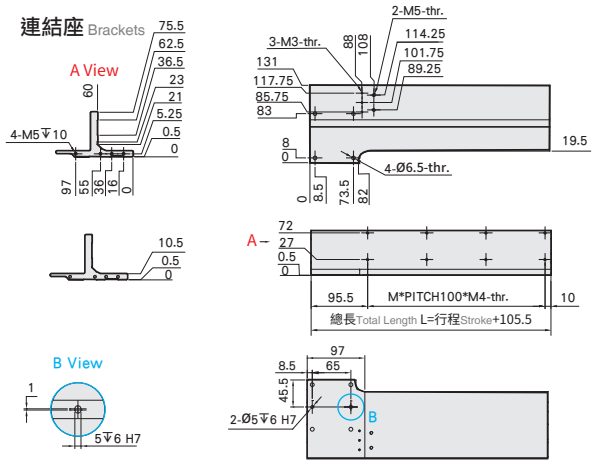
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



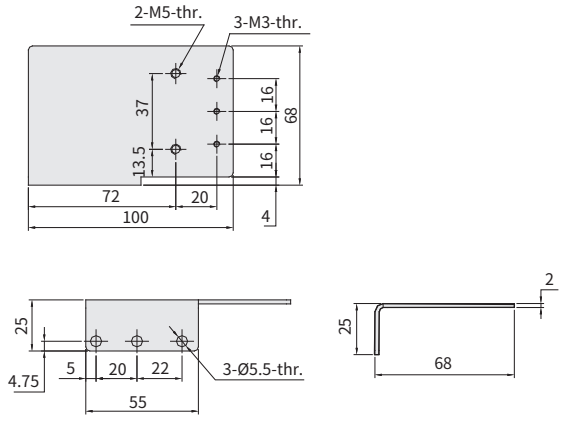
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000046	100	XYGT320-A1/A4-行程100-長205.5 XYGT320-A1/A4-Stroke 100-Length 205.5
11033-000047	150~200	XYGT320-A1/A4-行程150(200)-長305.5 XYGT320-A1/A4-Stroke 150(200)-Length 305.5
11033-000048	250~300	XYGT320-A1/A4-行程250(300)-長405.5 XYGT320-A1/A4-Stroke 250(300)-Length 405.5
11033-000049	350~400	XYGT320-A1/A4-行程350(400)-長505.5 XYGT320-A1/A4-Stroke 350(400)-Length 505.5
11033-000050	450~500	XYGT320-A1/A4-行程450(500)-長605.5 XYGT320-A1/A4-Stroke 450(500)-Length 605.5

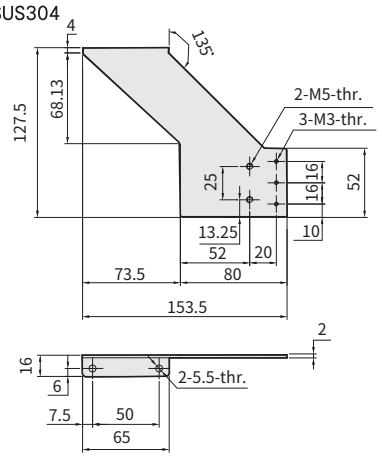
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000482
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000484
材質 Material：SUS304

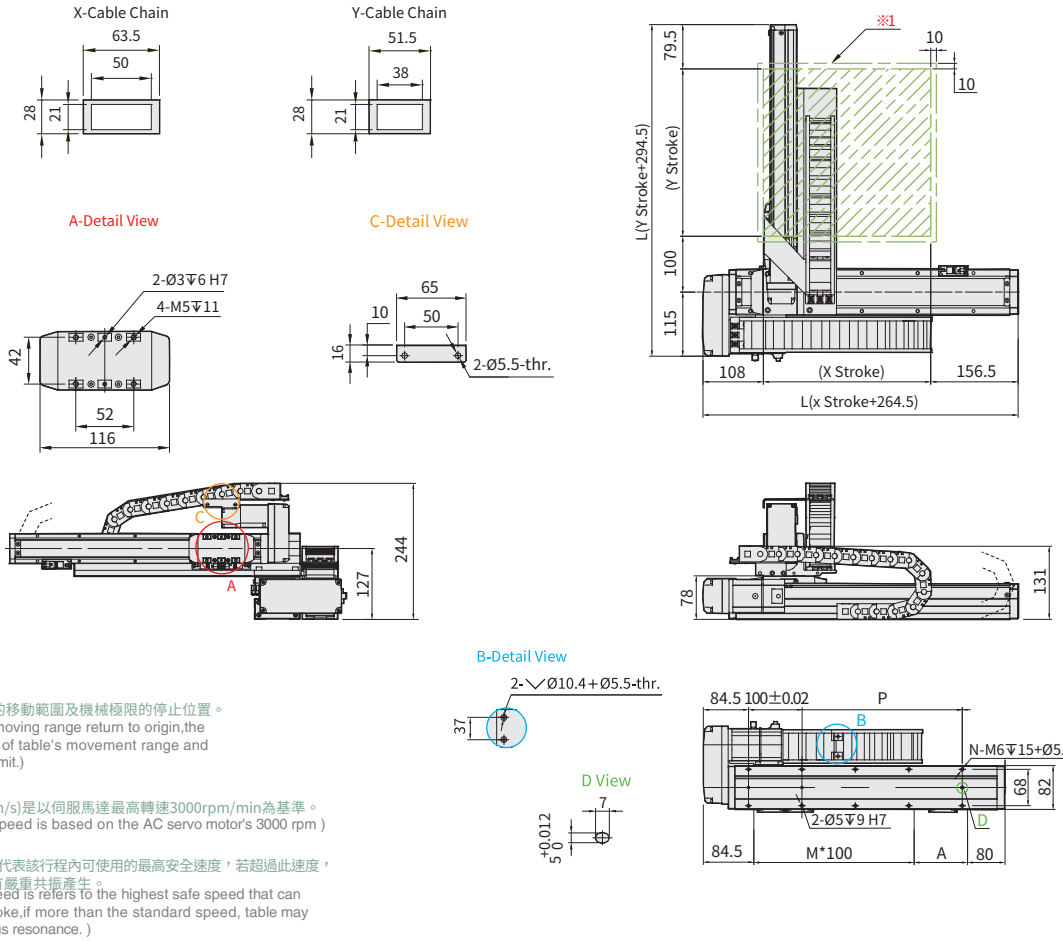


XYGT320-A2 尺寸圖 Size

A2 2D CAD 3D CAD

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

單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

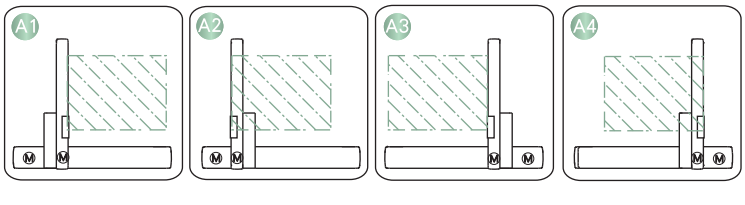
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※2※3 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039

XYGT320-A2 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT320-A2 配件規格 Accessories Specification

A2 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

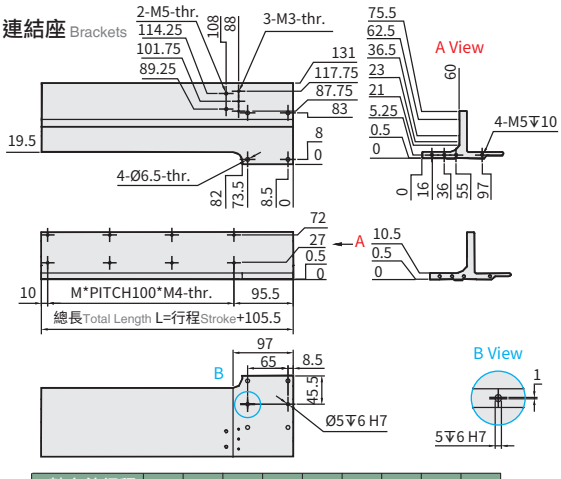
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



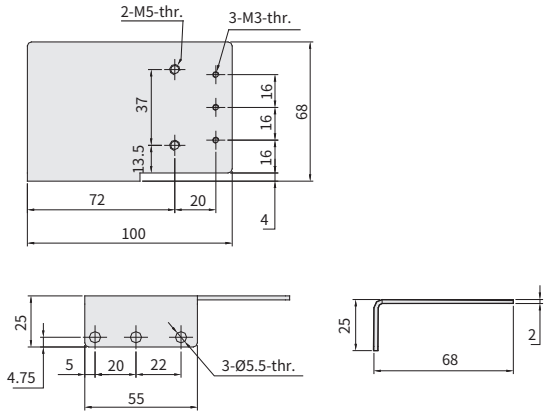
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000051	100	XYGT320-A2/A3-行程100-長205.5 XYGT320-A2/A3-Stroke 100-Length 205.5
11033-000052	150~200	XYGT320-A2/A3-行程150(200)-長305.5 XYGT320-A2/A3-Stroke 150(200)-Length 305.5
11033-000053	250~300	XYGT320-A2/A3-行程250(300)-長405.5 XYGT320-A2/A3-Stroke 250(300)-Length 405.5
11033-000054	350~400	XYGT320-A2/A3-行程350(400)-長505.5 XYGT320-A2/A3-Stroke 350(400)-Length 505.5
11033-000055	450~500	XYGT320-A2/A3-行程450(500)-長605.5 XYGT320-A2/A3-Stroke 450(500)-Length 605.5

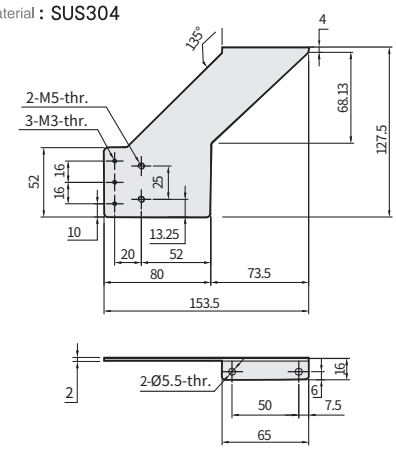
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000482
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000485
材質 Material：SUS304

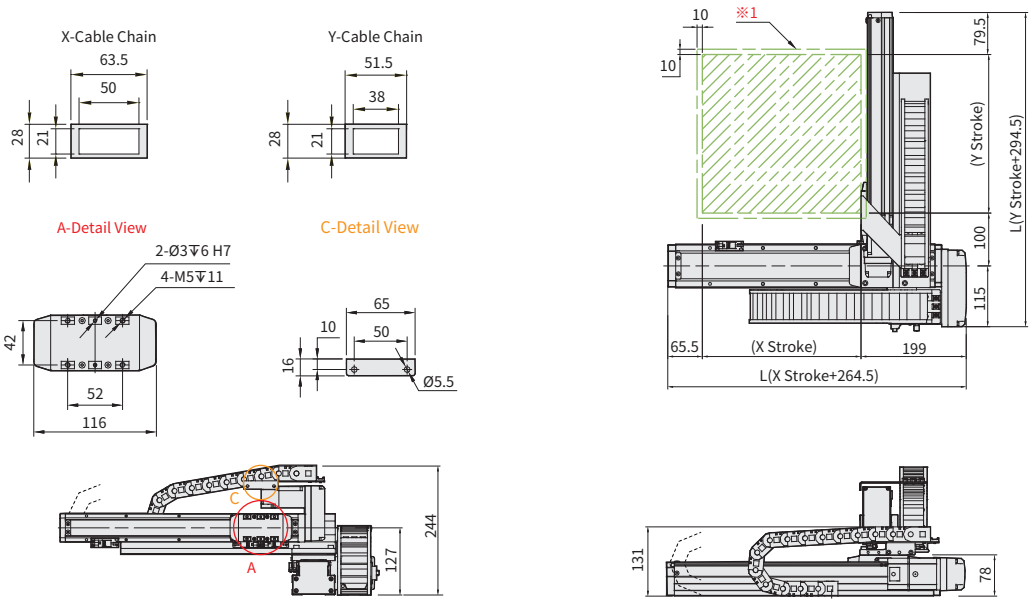


XYGT320-A3 尺寸圖 Size

A3 2D CAD 3D CAD

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

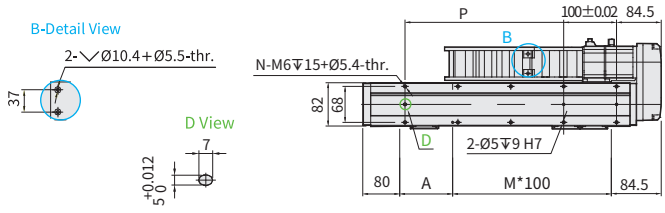
單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

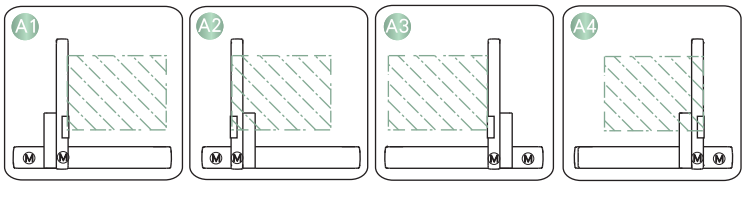
※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※2※3 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039

XYGT320-A3 2軸 2-axis

螺桿驅動 Ball Screw Drive

XYGT320-A3 配件規格 Accessories Specification

A3 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

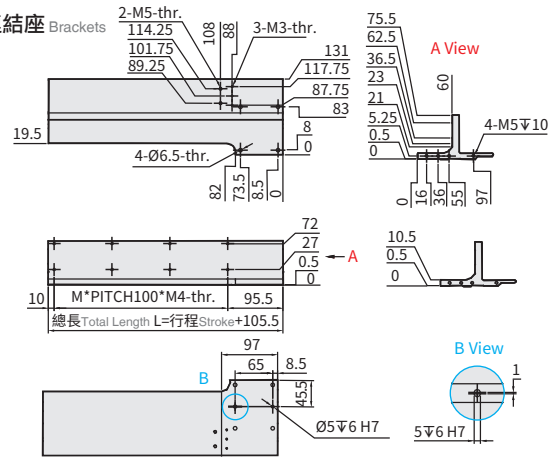
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



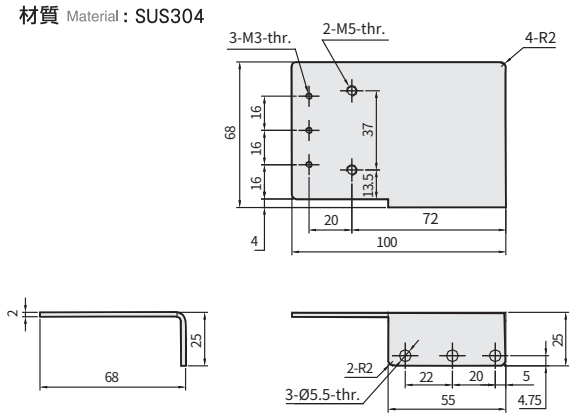
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000051	100	XYGT320-A2/A3-行程100-長205.5 XYGT320-A2/A3-Stroke 100-Length 205.5
11033-000052	150~200	XYGT320-A2/A3-行程150(200)-長305.5 XYGT320-A2/A3-Stroke 150(200)-Length 305.5
11033-000053	250~300	XYGT320-A2/A3-行程250(300)-長405.5 XYGT320-A2/A3-Stroke 250(300)-Length 405.5
11033-000054	350~400	XYGT320-A2/A3-行程350(400)-長505.5 XYGT320-A2/A3-Stroke 350(400)-Length 505.5
11033-000055	450~500	XYGT320-A2/A3-行程450(500)-長605.5 XYGT320-A2/A3-Stroke 450(500)-Length 605.5

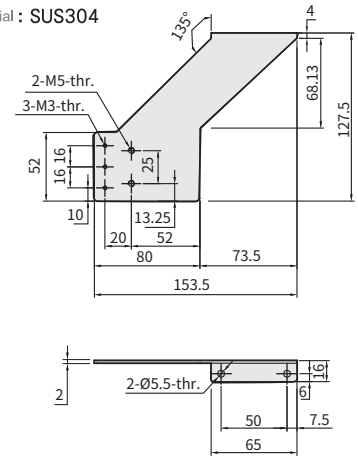
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000483
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000485
材質 Material：SUS304

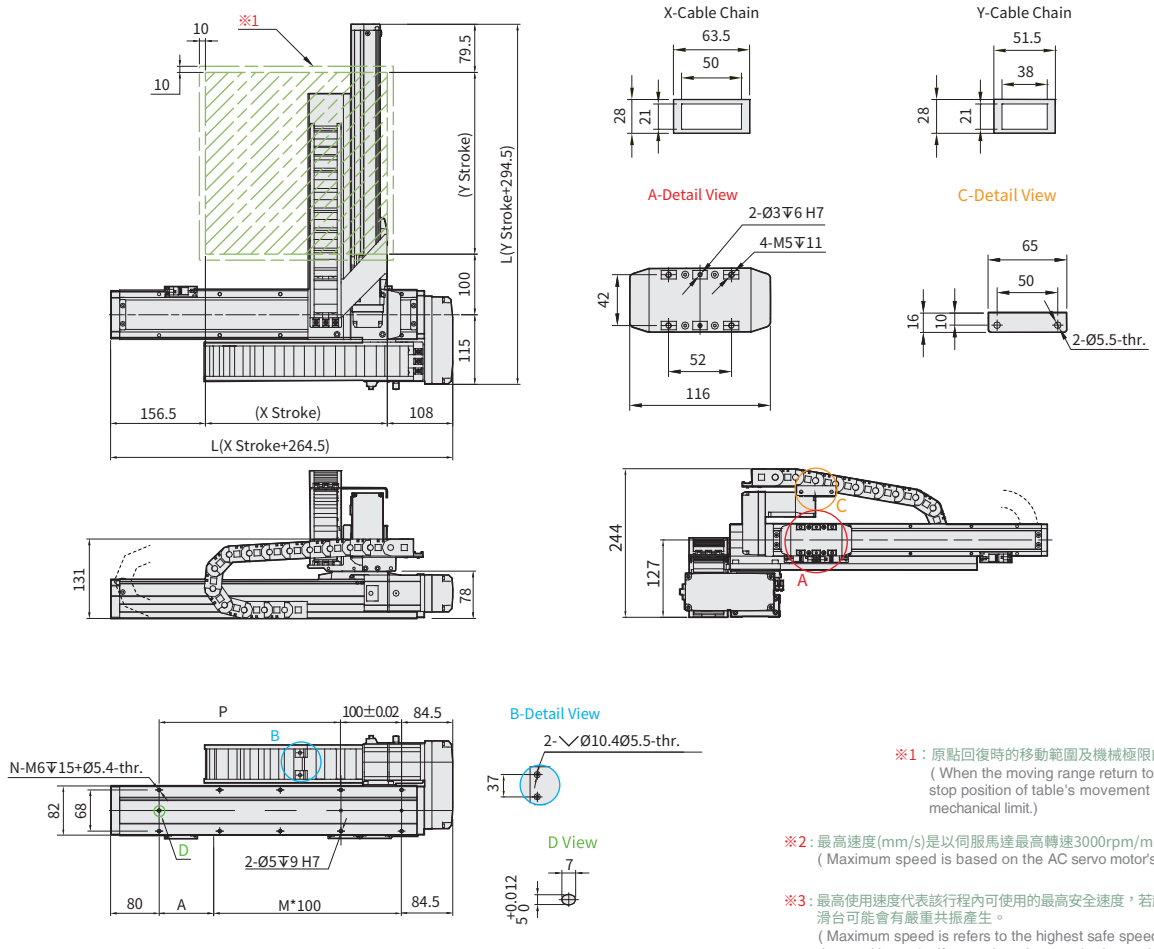


XYGT320-A4 尺寸圖 Size

A4 2D CAD 3D CAD

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

單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

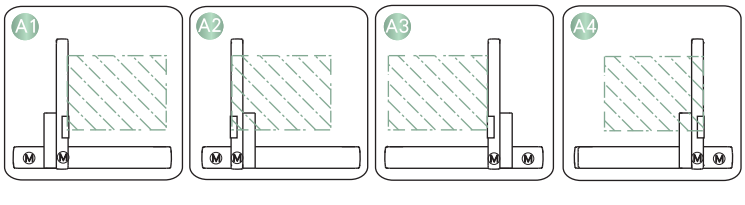
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※2※3 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039

XYGT320-A4 2軸 2-axis

螺桿驅動 Ball Screw Drive

XYGT320-A4 配件規格 Accessories Specification

A4 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

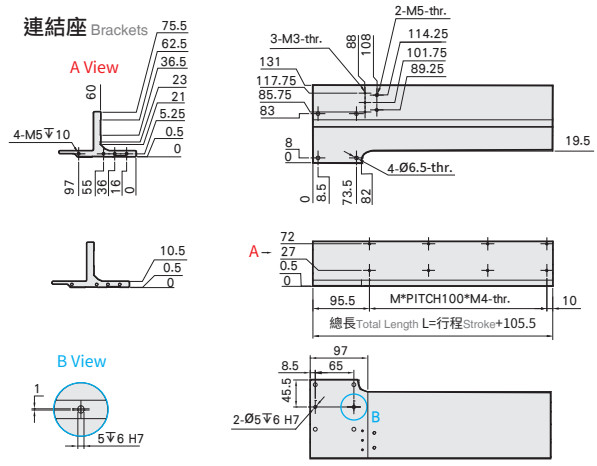
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



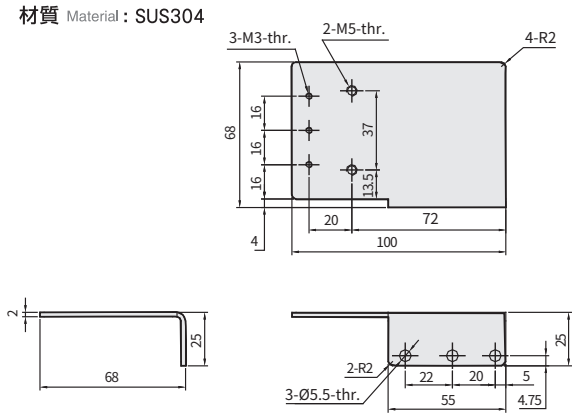
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000046	100	XYGT320-A1/A4-行程100-長205.5 XYGT320-A1/A4-Stroke 100-Length 205.5
11033-000047	150~200	XYGT320-A1/A4-行程150(200)-長305.5 XYGT320-A1/A4-Stroke 150(200)-Length 305.5
11033-000048	250~300	XYGT320-A1/A4-行程250(300)-長405.5 XYGT320-A1/A4-Stroke 250(300)-Length 405.5
11033-000049	350~400	XYGT320-A1/A4-行程350(400)-長505.5 XYGT320-A1/A4-Stroke 350(400)-Length 505.5
11033-000050	450~500	XYGT320-A1/A4-行程450(500)-長605.5 XYGT320-A1/A4-Stroke 450(500)-Length 605.5

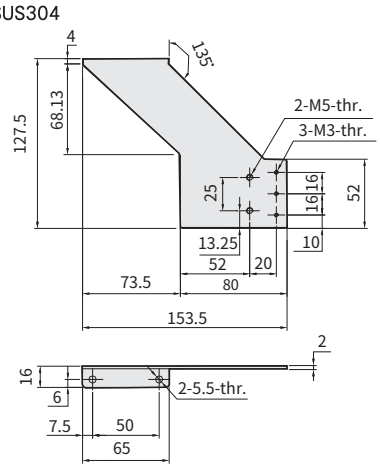
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000483
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000484
材質 Material：SUS304

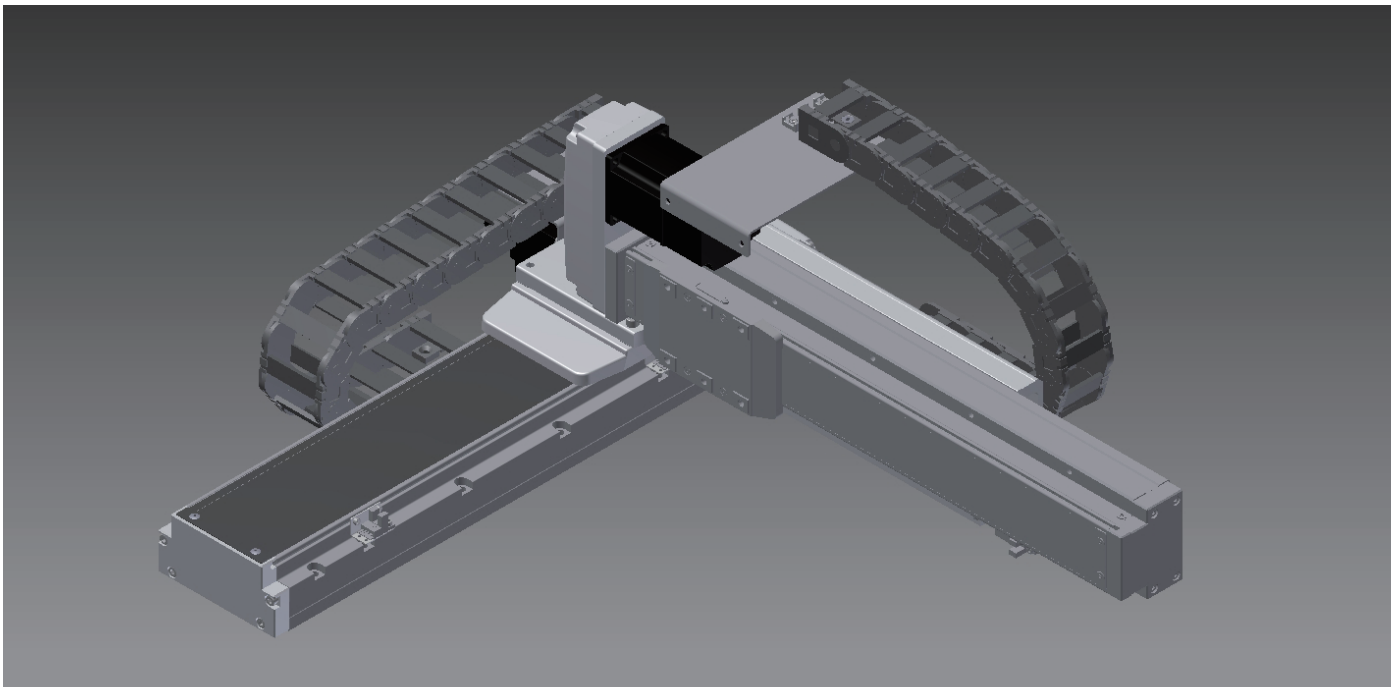


Memo

XYGT430-A

2軸 2-axis

螺桿驅動 Ball Screw Drive



此圖僅供參考，出貨規格詳見尺寸圖面
The picture is just for the reference. Please check the the actual dimensions on the drawing.

※標準連結滑台不提供同動精度
Assembly accuracy is not guaranteed for the standard multi-axis system.

最大行程 Maximum Stroke

X軸 X axis 1250mm

Y軸 Y axis 600mm

最高速度 Maximum Speed

X軸 X axis 1000mm/s

Y軸 Y axis 導程20:1000 mm/s

Y軸 Y axis 導程10:500 mm/s

AC伺服馬達容量 AC Servo Motor Output

X軸 X axis 400W

Y軸 Y axis 200W

基本仕樣 Specification

項目 Item	導程組合A Lead Composition A		導程組合B Lead Composition B	
	X軸 X axis	Y軸 Y axis	X軸 X axis	Y軸 Y axis
軸型式 Model Type	GTH12	GTH8	GTH12	GTH8
位置重複精度 Repeatability (mm)	±0.005	±0.005	±0.005	±0.005
螺桿導程 Ball screw lead (mm)	20	20	20	10
最高速度 Maximum Speed (mm/s) ※1	1000	1000	1000	500
標準行程 (50間隔) Stroke 50 mm Pitch (mm)	50~1250	100~600	50~1250	100~600
AC伺服馬達容量 AC Servo Motor Output (w)	400	200	400	200
使用環境 Environment	0~40°C , 85%RH Below			

※1：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。Maximum speed is based on the AC servo motor's 3000rpm.

最大可搬重量 Maximum Payload

導程組合A Lead Composition	Y軸行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
X軸 X axis :L20 Y軸 Y axis :L20	Y軸荷重 Y Payload (kg)	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	7	4	2

導程組合B Lead Composition	Y軸行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
X軸 X axis :L20 Y軸 Y axis :L10	Y軸荷重 Y Payload (kg)	24	24	24	24	21	18	13	10	7	4	2

型號表示方式 Ordering Method

XYGT430 - A 1 - B - 300 - 300 - M - C - 0001

本體型號 Model

特注式樣 Special Order No.

連結方式 Combination

A	懸臂型 Arm Type

組合方向 Combination Direction

1
2
3
4

導程組合 Lead combinations

A	X軸 X axis	:L20
	Y軸 Y axis	:L20
B	X軸 X axis	:L20
	Y軸 Y axis	:L10

*若非以上組合時此欄位不表示(特注處理)。
If it's not the above combination, this field does not indicate(special note processing.)

X軸行程 X Stroke

50~1250mm
50間隔 50 mm Pitch

Y軸行程 Y Stroke

100~600mm
50間隔 50 mm Pitch

馬達廠牌 Motor Brand

M	三菱 Mitsubishi
P	國際 Panasonic
Y	安川 Yaskawa
T	台達 Delta

出貨方式 Delivery Methode

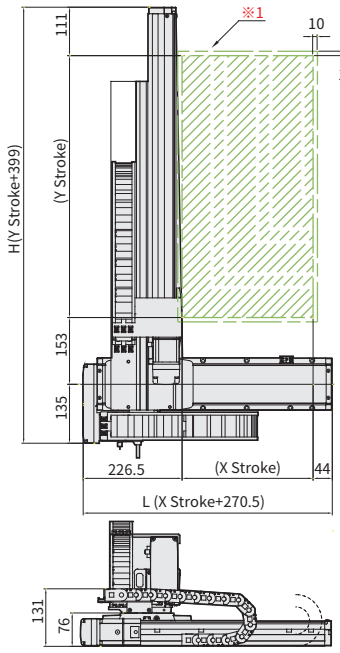
C	連結出貨 By Set
K	單軸出貨 By Kit

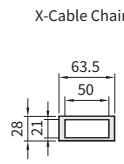
XYGT430-A1 尺寸圖 Size

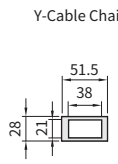
A1 2D CAD 3D CAD

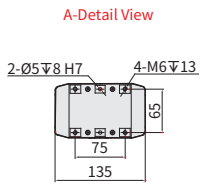
● CAD圖面可至www.toyorobot.com下載 ●
Please download the CAD file from TOYO's website: www.toyorobot.com

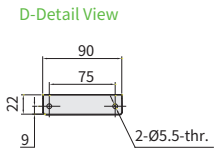
單位 Unit : mm

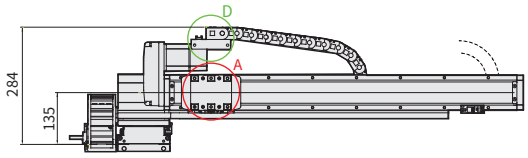


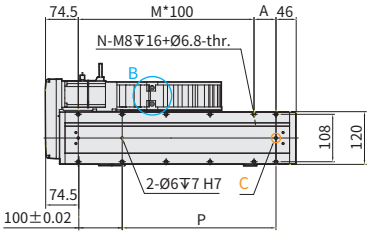


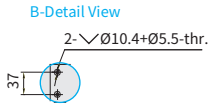


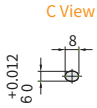












※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

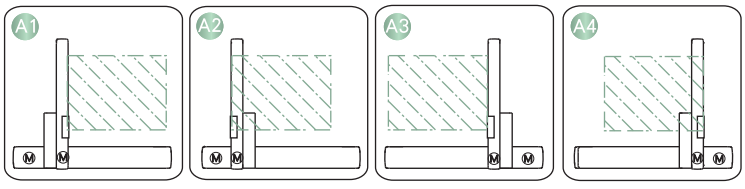
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※2※3 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合B 最高使用速度 Lead Composition B Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043

XYGT430-A1 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT430-A1 配件規格 Accessories Specification

A1 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

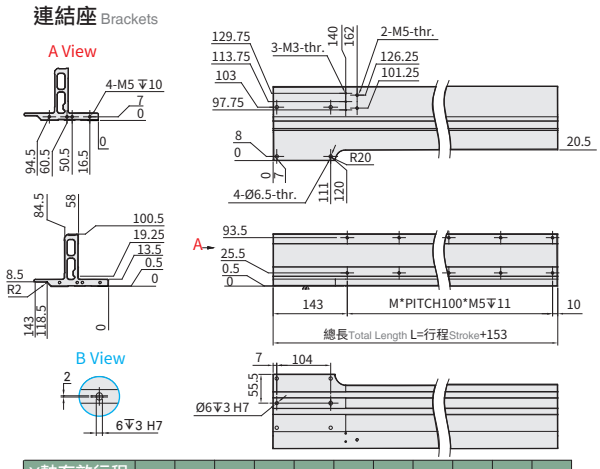
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



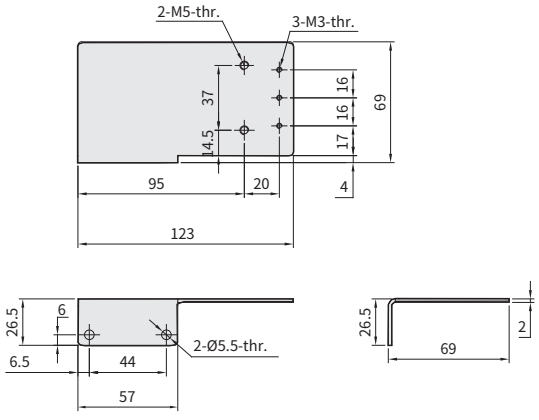
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000072	100	XYGT430-A1/A4-行程100-長253 XYGT430-A1/A4-Stroke 100-Length 253
11033-000073	150~200	XYGT430-A1/A4-行程150(200)-長353 XYGT430-A1/A4-Stroke 150(200)-Length 353
11033-000074	250~300	XYGT430-A1/A4-行程250(300)-長453 XYGT430-A1/A4-Stroke 250(300)-Length 453
11033-000075	350~400	XYGT430-A1/A4-行程350(400)-長553 XYGT430-A1/A4-Stroke 350(400)-Length 553
11033-000076	450~500	XYGT430-A1/A4-行程450(500)-長653 XYGT430-A1/A4-Stroke 450(500)-Length 653
11033-000077	550~600	XYGT430-A1/A4-行程550(600)-長753 XYGT430-A1/A4-Stroke 550(600)-Length 753

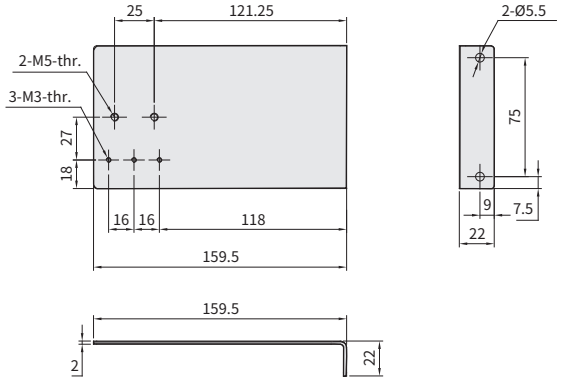
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000629
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000631
材質 Material：SUS304



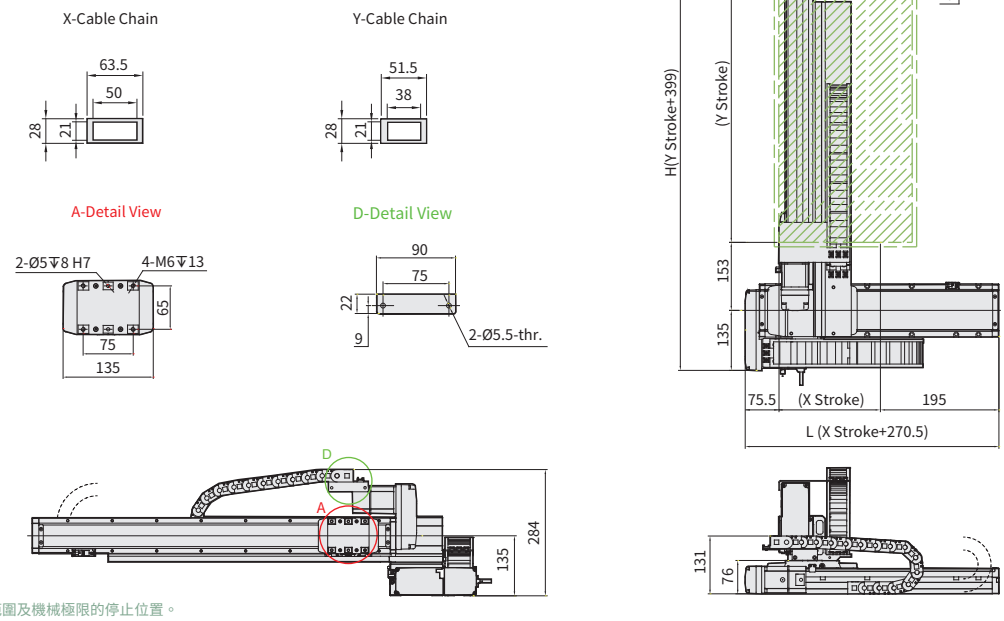
XYGT430-A2 尺寸圖 Size

A2

2D CAD 3D CAD

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

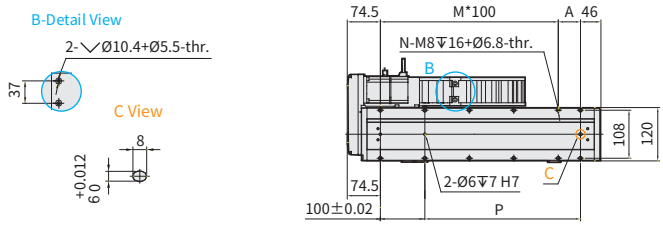
單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

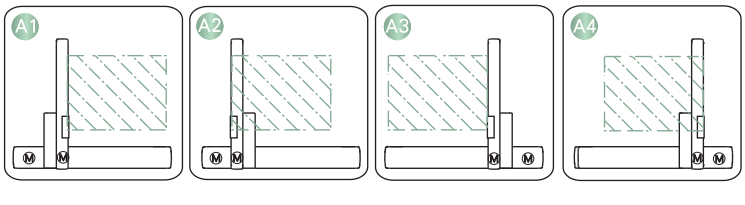
※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※2※3 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合B 最高使用速度 Lead Composition B Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043

XYGT430-A2 2軸 2-axis

螺桿驅動 Ball Screw Drive

XYGT430-A2 配件規格 Accessories Specification

A2 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

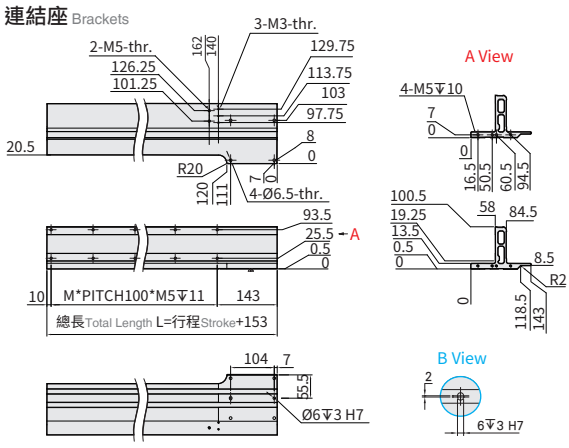
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



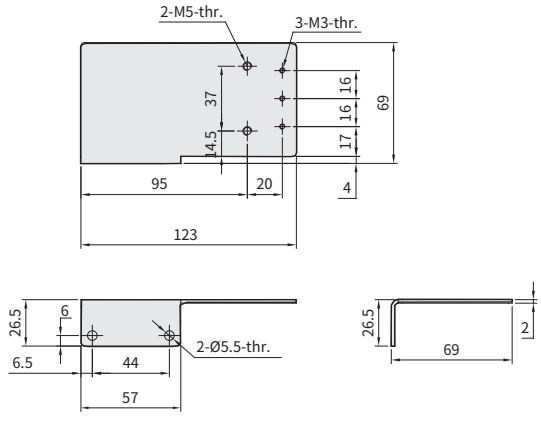
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000078	100	XYGT430-A2/A3-行程100-長253 XYGT430-A2/A3-Stroke 100-Length 253
11033-000079	150~200	XYGT430-A2/A3-行程150(200)-長353 XYGT430-A2/A3-Stroke 150(200)-Length 353
11033-000080	250~300	XYGT430-A2/A3-行程250(300)-長453 XYGT430-A2/A3-Stroke 250(300)-Length 453
11033-000081	350~400	XYGT430-A2/A3-行程350(400)-長553 XYGT430-A2/A3-Stroke 350(400)-Length 553
11033-000082	450~500	XYGT430-A2/A3-行程450(500)-長653 XYGT430-A2/A3-Stroke 450(500)-Length 653
11033-000083	550~600	XYGT430-A2/A3-行程550(600)-長753 XYGT430-A2/A3-Stroke 550(600)-Length 753

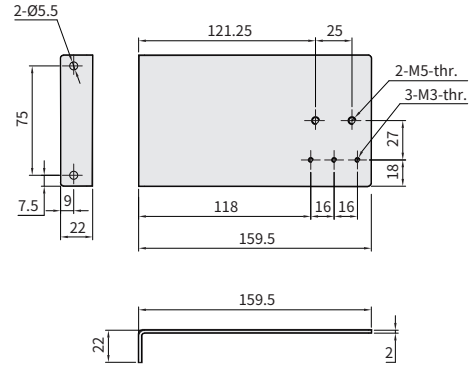
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000629
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000634
材質 Material：SUS304

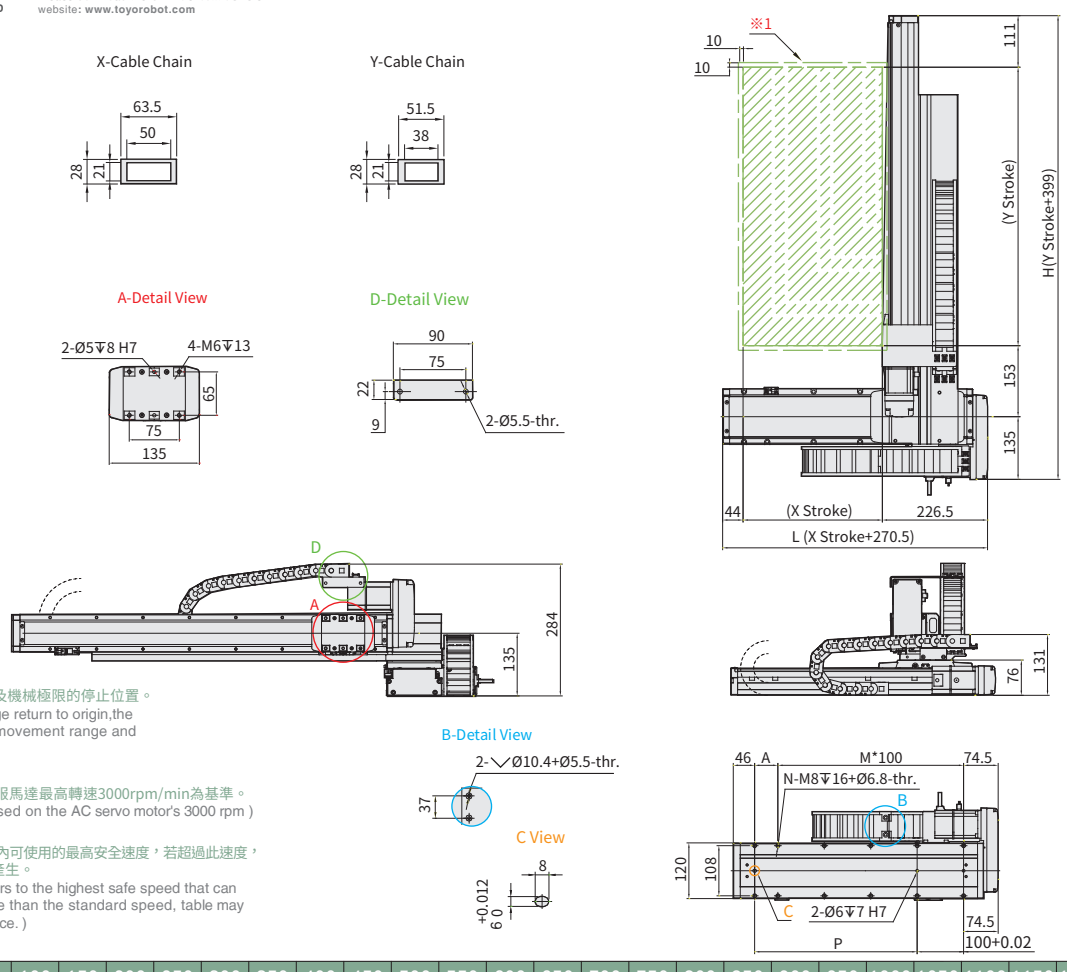


XYGT430-A3 尺寸圖 Size

A3 2D CAD 3D CAD

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

單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

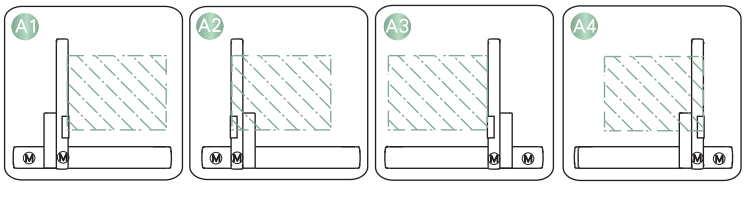
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※2※3 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合B 最高使用速度 Lead Composition B Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043

XYGT430-A3 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT430-A3 配件規格 Accessories Specification

A3 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

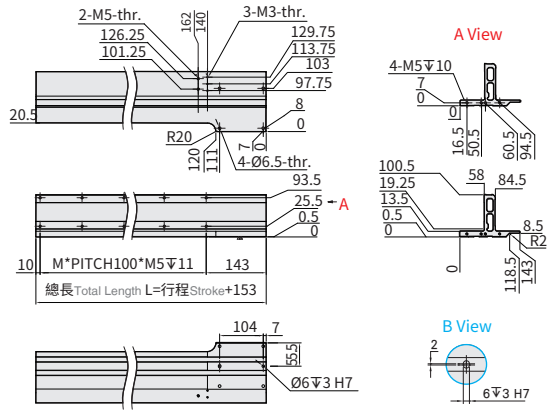
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



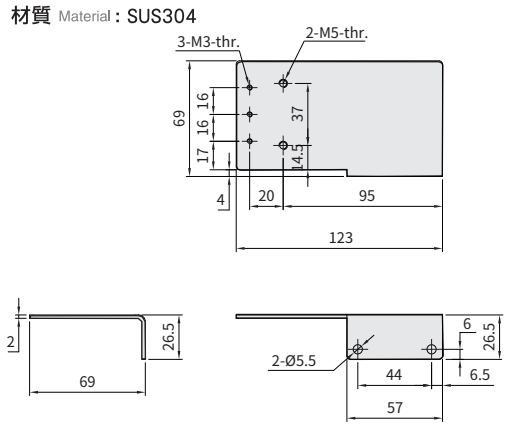
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000078	100	XYGT430-A2/A3-行程100-長253 XYGT430-A2/A3-Stroke 100-Length 253
11033-000079	150~200	XYGT430-A2/A3-行程150(200)-長353 XYGT430-A2/A3-Stroke 150(200)-Length 353
11033-000080	250~300	XYGT430-A2/A3-行程250(300)-長453 XYGT430-A2/A3-Stroke 250(300)-Length 453
11033-000081	350~400	XYGT430-A2/A3-行程350(400)-長553 XYGT430-A2/A3-Stroke 350(400)-Length 553
11033-000082	450~500	XYGT430-A2/A3-行程450(500)-長653 XYGT430-A2/A3-Stroke 450(500)-Length 653
11033-000083	550~600	XYGT430-A2/A3-行程550(600)-長753 XYGT430-A2/A3-Stroke 550(600)-Length 753

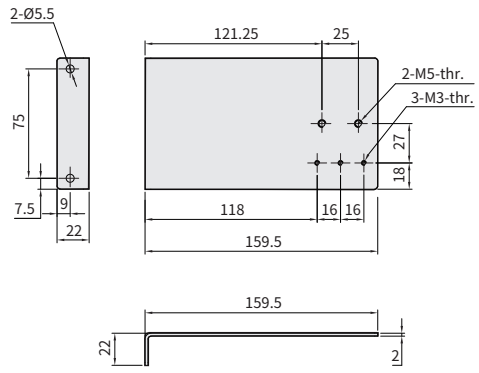
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000630
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000634
材質 Material：SUS304

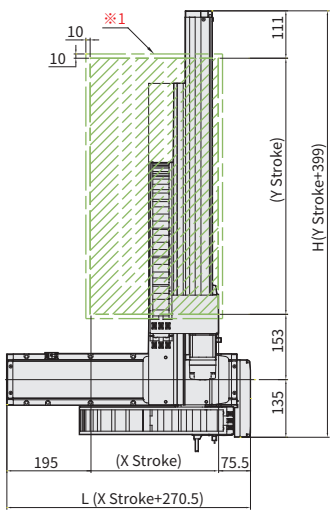


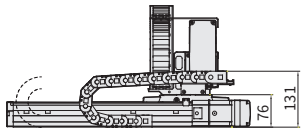
XYGT430-A4 尺寸圖 Size

A4 2D CAD 3D CAD

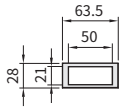
● CAD圖面可至www.toyorobot.com下載 ●
Please download the CAD file from TOYO's website: www.toyorobot.com

單位 Unit : mm





X-Cable Chain



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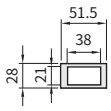
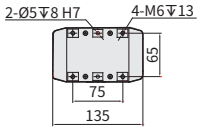
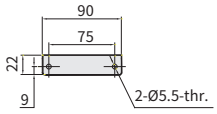
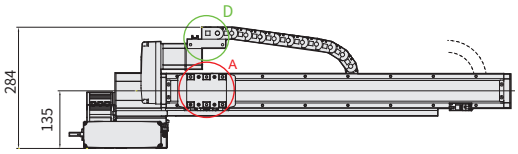


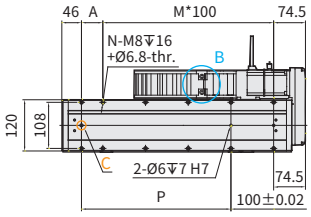
A-Detail View



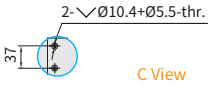
D-Detail View







B-Detail View



C View

※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

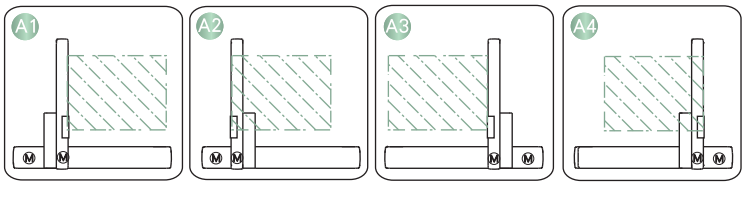
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※2※3 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合B 最高使用速度 Lead Composition B Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043

XYGT430-A4 2軸 2-axis

螺桿驅動 Ball Screw Drive

XYGT430-A4 配件規格 Accessories Specification

A4 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

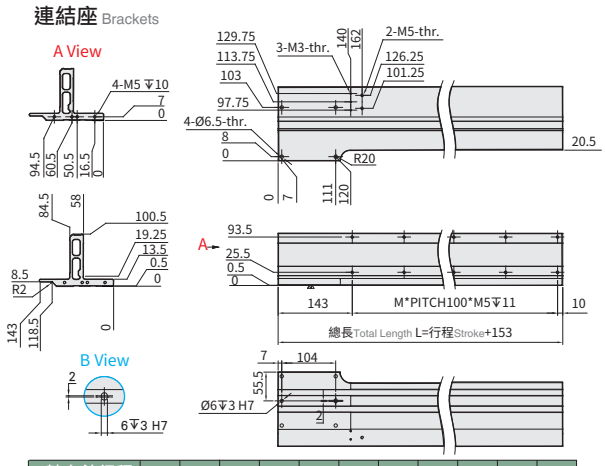
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



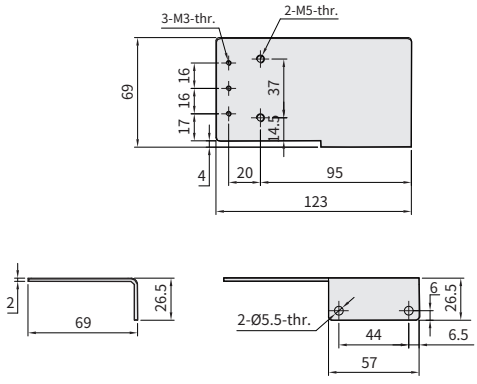
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000072	100	XYGT430-A1/A4-行程100-長253 XYGT430-A1/A4-Stroke 100-Length 253
11033-000073	150~200	XYGT430-A1/A4-行程150(200)-長353 XYGT430-A1/A4-Stroke 150(200)-Length 353
11033-000074	250~300	XYGT430-A1/A4-行程250(300)-長453 XYGT430-A1/A4-Stroke 250(300)-Length 453
11033-000075	350~400	XYGT430-A1/A4-行程350(400)-長553 XYGT430-A1/A4-Stroke 350(400)-Length 553
11033-000076	450~500	XYGT430-A1/A4-行程450(500)-長653 XYGT430-A1/A4-Stroke 450(500)-Length 653
11033-000077	550~600	XYGT430-A1/A4-行程550(600)-長753 XYGT430-A1/A4-Stroke 550(600)-Length 753

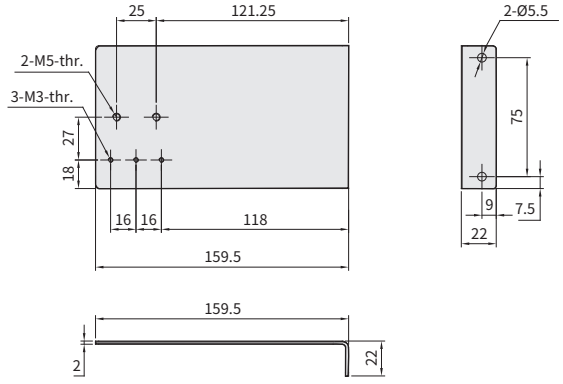
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000630
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000631
材質 Material：SUS304

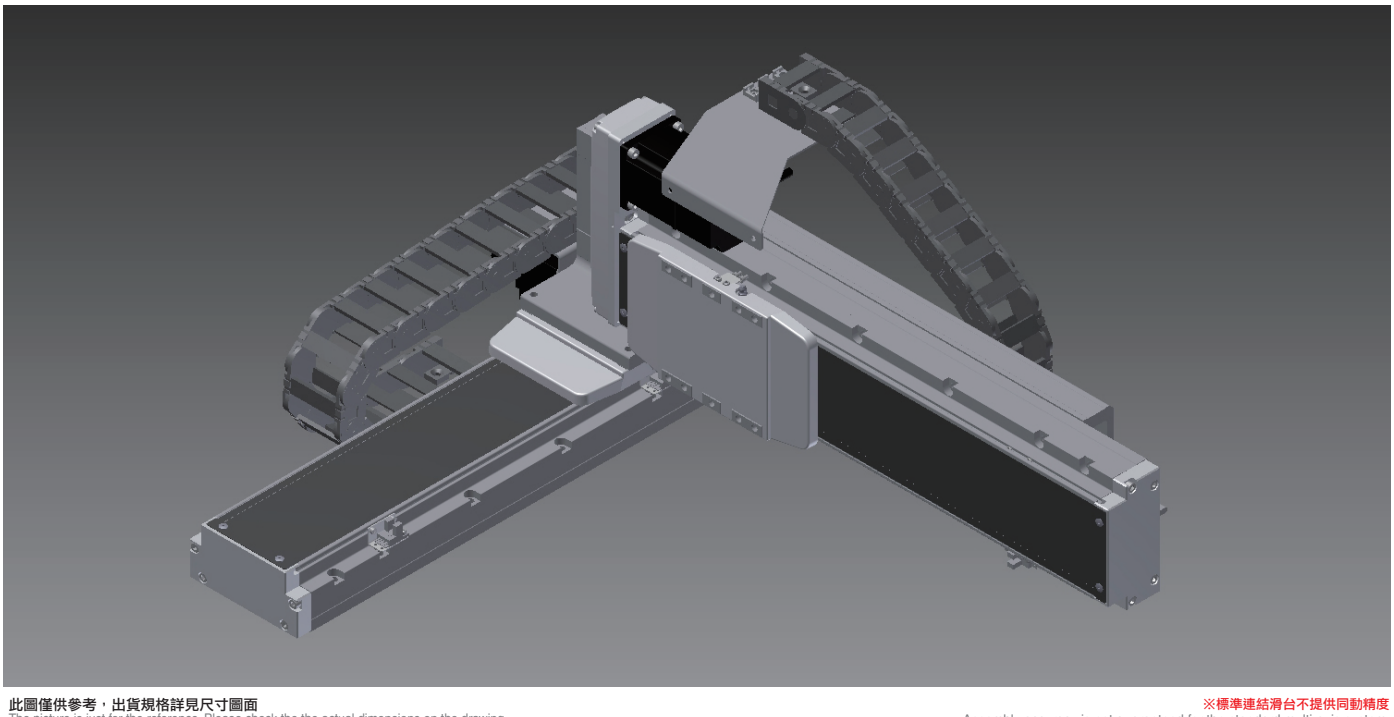


Memo

XYGT440-A

2軸 2-axis

螺桿驅動 Ball Screw Drive



此圖僅供參考，出貨規格詳見尺寸圖面
The picture is just for the reference. Please check the the actual dimensions on the drawing.

※標準連結滑台不提供同動精度
Assembly accuracy is not guaranteed for the standard multi-axis system.

最大行程 Maximum Stroke

X軸 X axis 1250W

Y軸 Y axis 導程20:500 mm

Y軸 Y axis 導程10:600 mm

最高速度 Maximum Speed

X軸 X axis 導程20:1000 mm/s

Y軸 Y axis 導程20:1000 mm/s

X軸 X axis 導程10:500 mm/s

Y軸 Y axis 導程10:500 mm/s

AC伺服馬達容量 AC Servo Motor Output

X軸 X axis 400W

Y軸 Y axis 400W

基本仕樣 Specification

項目 Item	導程組合A Lead Composition A		導程組合C Lead Composition C	
	X軸 X axis	Y軸 Y axis	X軸 X axis	Y軸 Y axis
軸型式 Model Type	GTH12	GTH12	GTH12	GTH12
位置重複精度 Repeatability (mm)	±0.005	±0.005	±0.005	±0.005
螺桿導程 Ball screw lead (mm)	20	20	10	10
最高速度 Maximum Speed (mm/s)※1	1000	1000	500	500
標準行程 (50間隔) Stroke 50 mm Pitch (mm)	50~1250	100~500	50~1250	100~600
AC伺服馬達容量 AC Servo Motor Output (w)	400	400	400	400
使用環境 Environment	0~40°C , 85%RH Below			

※1：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。Maximum speed is based on the AC servo motor's 3000rpm.

最大可搬重量 Maximum Payload

導程組合A Lead Composition	Y軸行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
X軸 X axis :L20 Y軸 Y axis :L20	Y軸荷重 Y Payload (kg)	26	26	24	19	15	11	7	4	2

導程組合B Lead Composition	Y軸行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
X軸 X axis :L20 Y軸 Y axis :L10	Y軸荷重 Y Payload (kg)	57	56	39	31	26	20	16	12	9	5	3

型號表示方式 Ordering Method

XYGT440 - A 1 - C - 500 - 300 - M - C - 0001

本體型號 Model

特注式樣 Special Order No.

連結方式 Combination

A	懸臂型 Arm Type

組合方向 Combination Direction

1
2
3
4

導程組合 Lead combinations

A	X軸 X axis	:L20
	Y軸 Y axis	:L20
C	X軸 X axis	:L10
	Y軸 Y axis	:L10

*若非以上組合時此欄位不表示(特注處理)。
If it's not the above combination, this field does not indicate(special note processing)

X軸行程 X Stroke

50~1250mm
50間隔 50 mm Pitch

Y軸行程 Y Stroke

導程組合 Lead Composition		
	A	100~500mm
	C	100~600mm
		50間隔 50 mm Pitch

馬達廠牌 Motor Brand

M	三菱 Mitsubishi
P	國際 Panasonic
Y	安川 Yaskawa
T	台達 Delta

出貨方式 Delivery Methode

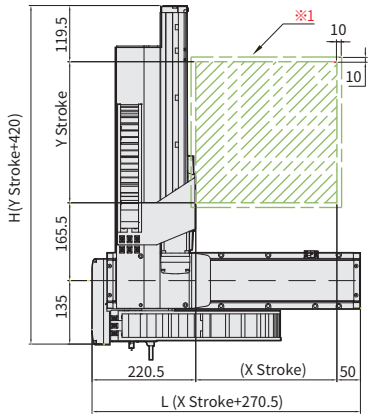
C	連結出貨 By Set
K	單軸出貨 By Kit

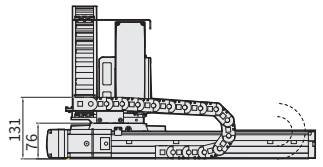
XYGT440-A1 尺寸圖 Size

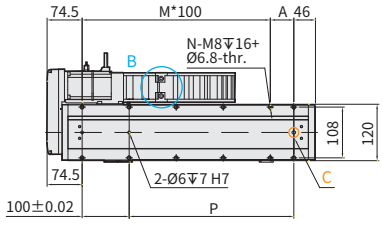
A1 2D CAD 3D CAD

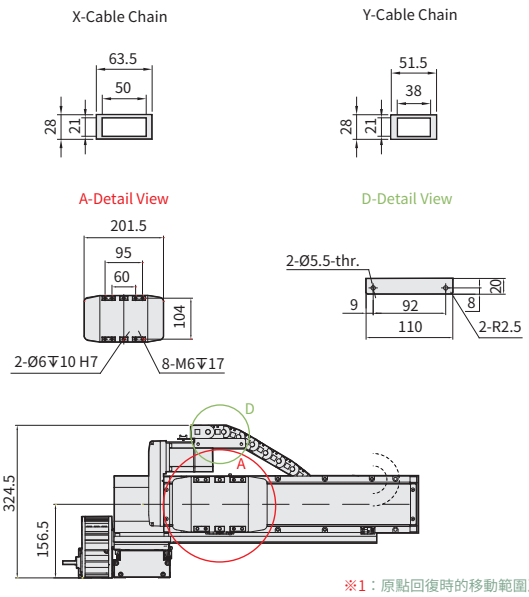
● CAD圖面可至www.toyorobot.com下載 ●
Please download the CAD file from TOYO's website: www.toyorobot.com

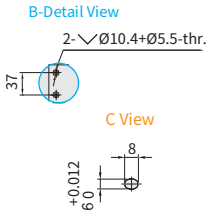
單位 Unit : mm











※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

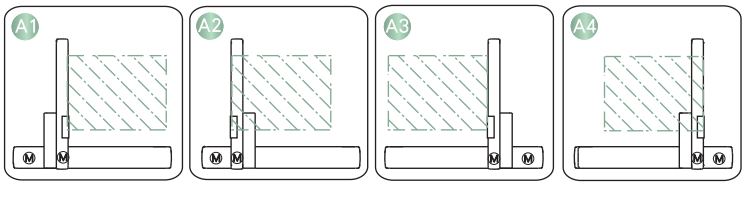
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
導程組合A※2※3 最高使用速度 Lead Composition A Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467
導程組合C※2※3 最高使用速度 Lead Composition C Max. speed (mm/s)	500																450	400	350	333	317	300	267	250	233

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	520	570	620	670	720	770	820	870	920	970	1020
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合C 最高使用速度 Lead Composition C Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P051

XYGT440-A1 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT440-A1 配件規格 Accessories Specification

A1 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

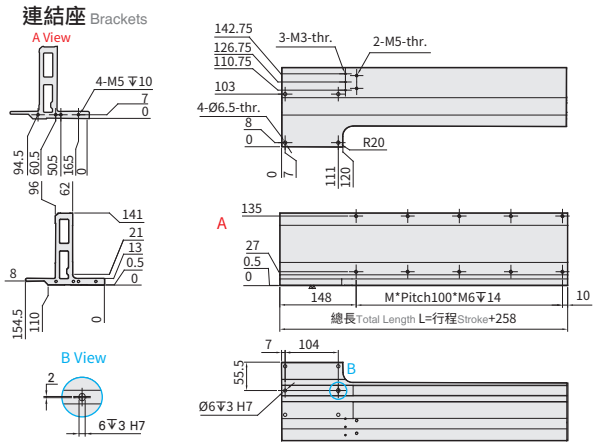
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		14	16	16	17	17	18	20	22	22	24	24											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1
L	358	458	558	658	758	858					
M	2	3	4	5	6	7					

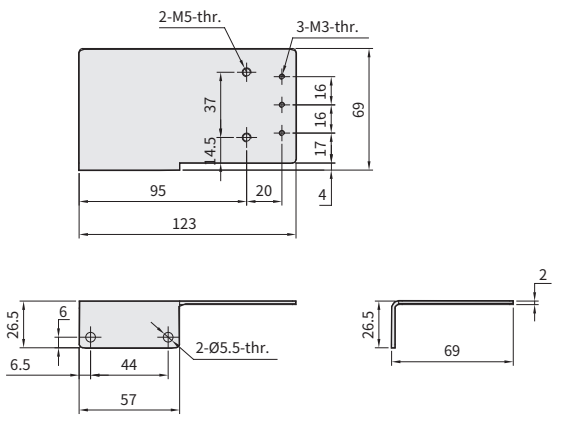
連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000060	100	XYGT440-A1/A4-行程100-長358 XYGT440-A1/A4-Stroke 100-Length 358
11033-000061	150~200	XYGT440-A1/A4-行程150(200)-長458 XYGT440-A1/A4-Stroke 150(200)-Length 458
11033-000062	250~300	XYGT440-A1/A4-行程250(300)-長558 XYGT440-A1/A4-Stroke 250(300)-Length 558
11033-000063	350~400	XYGT440-A1/A4-行程350(400)-長658 XYGT440-A1/A4-Stroke 350(400)-Length 658
11033-000064	450~500	XYGT440-A1/A4-行程450(500)-長758 XYGT440-A1/A4-Stroke 450(500)-Length 758
11033-000065 ※1	550~600	XYGT440-A1/A4-行程550(600)-長858 XYGT440-A1/A4-Stroke 550(600)-Length 858

※1 導程組合C時才可選用。
Only for Lead Composition C.

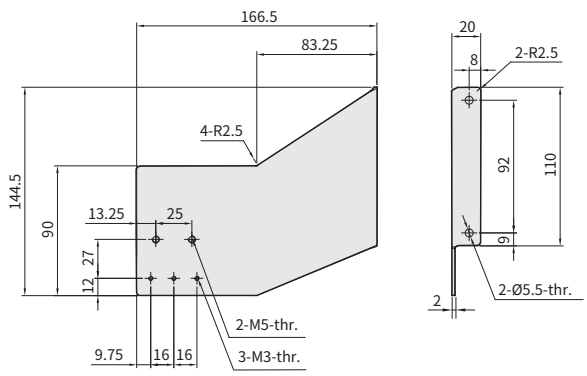
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000629
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000633
材質 Material：SUS304

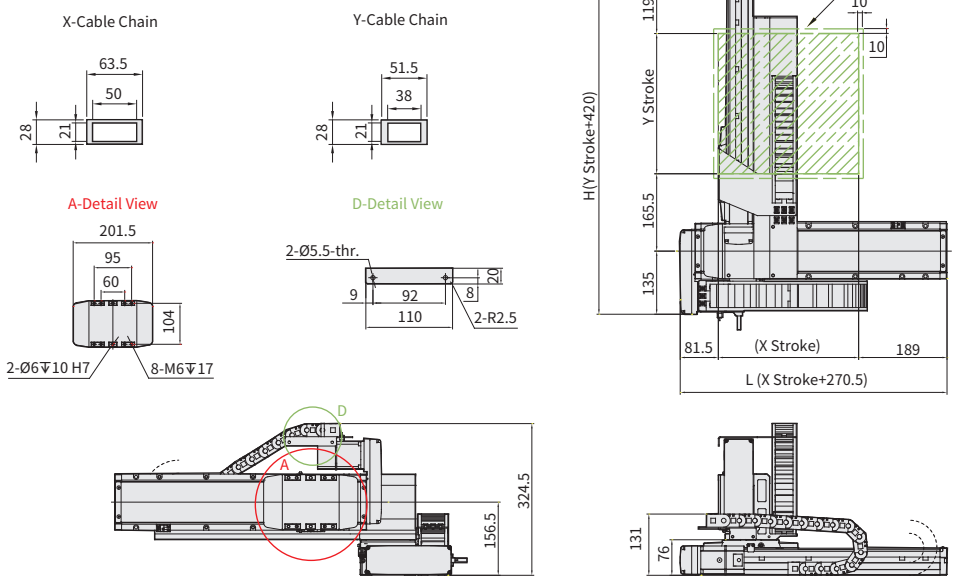


XYGT440-A2 尺寸圖 Size

A2 2D CAD 3D CAD

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

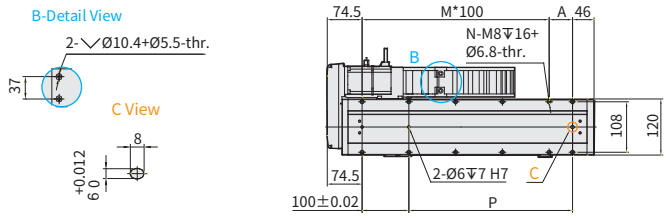
單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

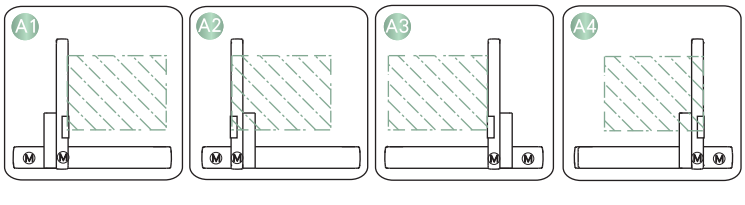
※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
導程組合A※2※3 最高使用速度 Lead Composition A Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467
導程組合C※2※3 最高使用速度 Lead Composition C Max. speed (mm/s)	500																450	400	350	333	317	300	267	250	233

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	520	570	620	670	720	770	820	870	920	970	1020
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合C 最高使用速度 Lead Composition C Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P051

XYGT440-A2 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT440-A2 配件規格 Accessories Specification

A2 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

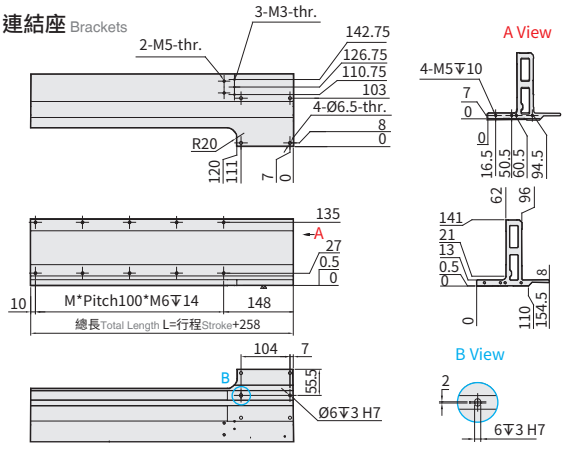
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		14	16	16	17	17	18	20	22	22	24	24											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1
L	358	458	558	658	758	858					
M	2	3	4	5	6	7					

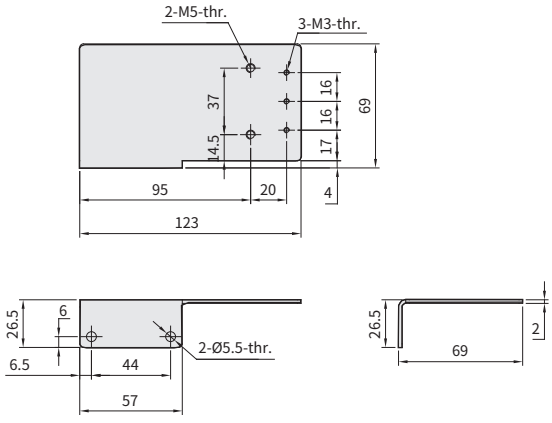
連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000066	100	XYGT440-A2/A3-行程100-長358 XYGT440-A2/A3-Stroke 100-Length 358
11033-000067	150~200	XYGT440-A2/A3-行程150(200)-長458 XYGT440-A2/A3-Stroke 150(200)-Length 458
11033-000068	250~300	XYGT440-A2/A3-行程250(300)-長558 XYGT440-A2/A3-Stroke 250(300)-Length 558
11033-000069	350~400	XYGT440-A2/A3-行程350(400)-長658 XYGT440-A2/A3-Stroke 350(400)-Length 658
11033-000070	450~500	XYGT440-A2/A3-行程450(500)-長758 XYGT440-A2/A3-Stroke 450(500)-Length 758
11033-000071 ※1	550~600	XYGT440-A2/A3-行程550(600)-長858 XYGT440-A2/A3-Stroke 550(600)-Length 858

※1 導程組合C時才可選用。
Only for Lead Composition C.

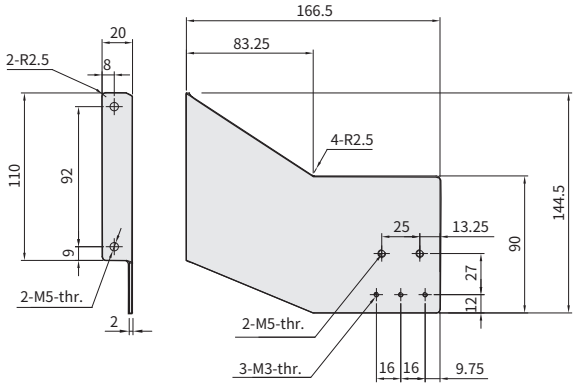
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000629
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000632
材質 Material：SUS304

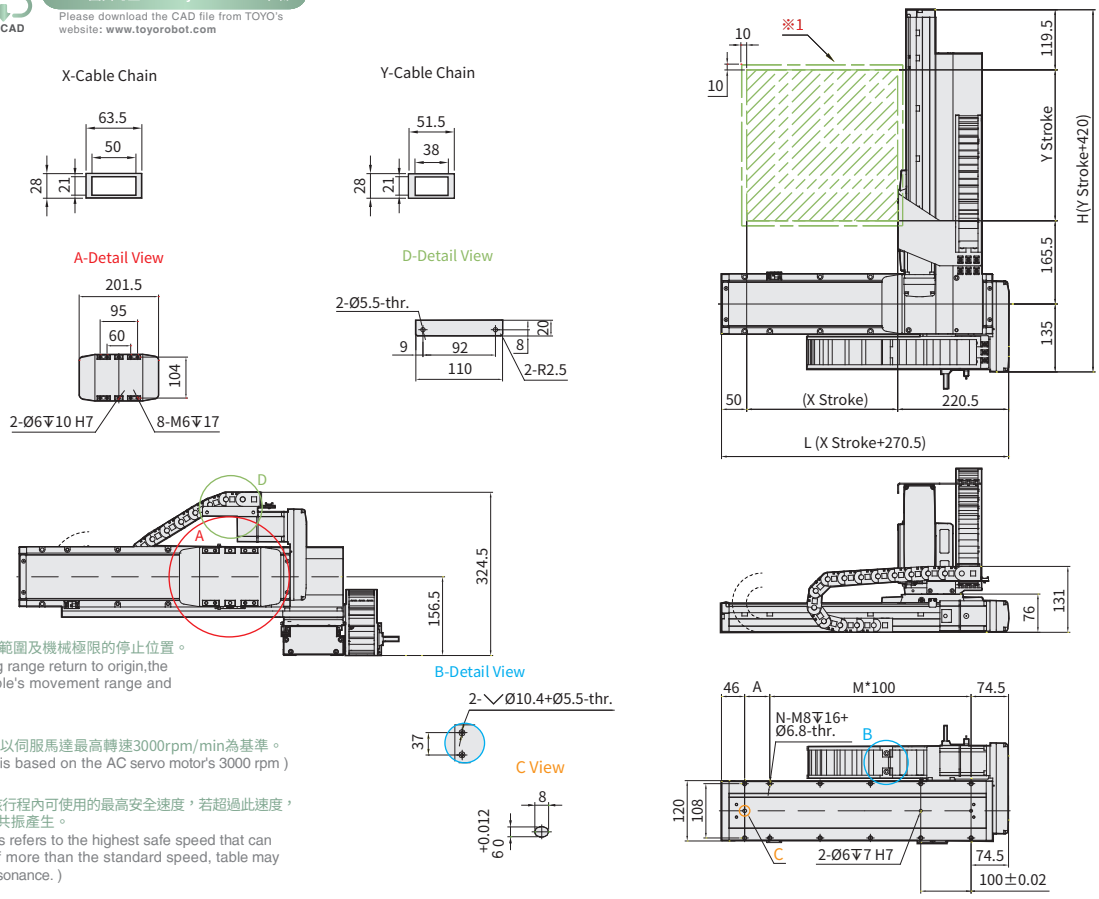


XYGT440-A3 尺寸圖 Size

A3 2D CAD 3D CAD

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

單位 Unit : mm



※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

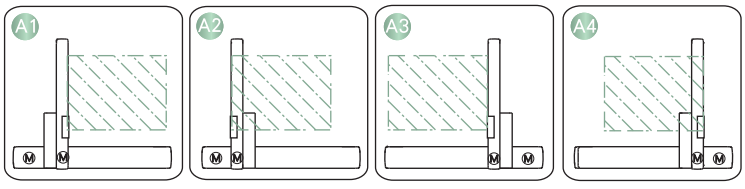
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
導程組合A※2※3 最高使用速度 Lead Composition A Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467
導程組合C※2※3 最高使用速度 Lead Composition C Max. speed (mm/s)	500																450	400	350	333	317	300	267	250	233

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	520	570	620	670	720	770	820	870	920	970	1020
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合C 最高使用速度 Lead Composition C Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P051

XYGT440-A3 2軸 2-axis 螺桿驅動 Ball Screw Drive

XYGT440-A3 配件規格 Accessories Specification

A3 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

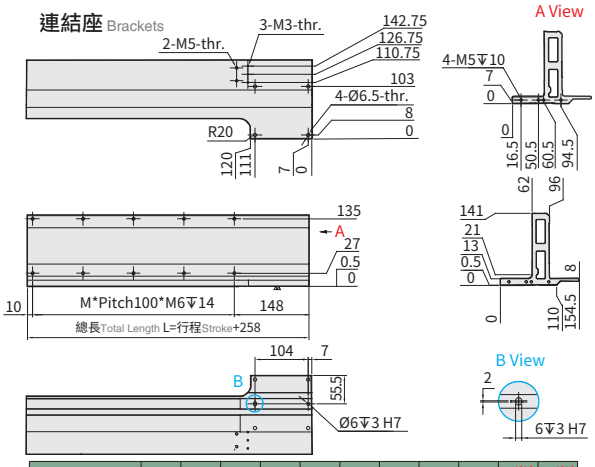
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		14	16	16	17	17	18	20	22	22	24	24											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1
L	358	458	558	658	758	858					
M	2	3	4	5	6	7					

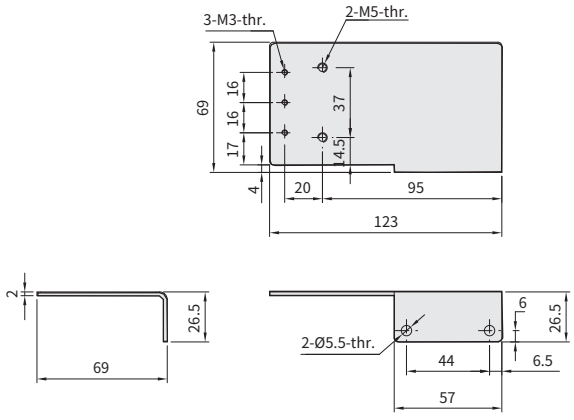
連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000066	100	XYGT440-A2/A3-行程100-長358 XYGT440-A2/A3-Stroke 100-Length 358
11033-000067	150~200	XYGT440-A2/A3-行程150(200)-長458 XYGT440-A2/A3-Stroke 150(200)-Length 458
11033-000068	250~300	XYGT440-A2/A3-行程250(300)-長558 XYGT440-A2/A3-Stroke 250(300)-Length 558
11033-000069	350~400	XYGT440-A2/A3-行程350(400)-長658 XYGT440-A2/A3-Stroke 350(400)-Length 658
11033-000070	450~500	XYGT440-A2/A3-行程450(500)-長758 XYGT440-A2/A3-Stroke 450(500)-Length 758
11033-000071 ※1	550~600	XYGT440-A2/A3-行程550(600)-長858 XYGT440-A2/A3-Stroke 550(600)-Length 858

※1 導程組合C時才可選用。
Only for Lead Composition C.

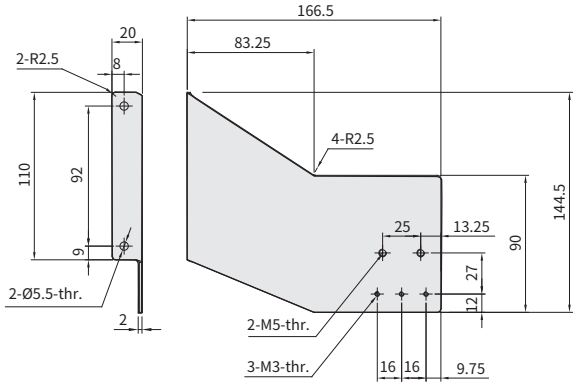
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000630
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000632
材質 Material：SUS304

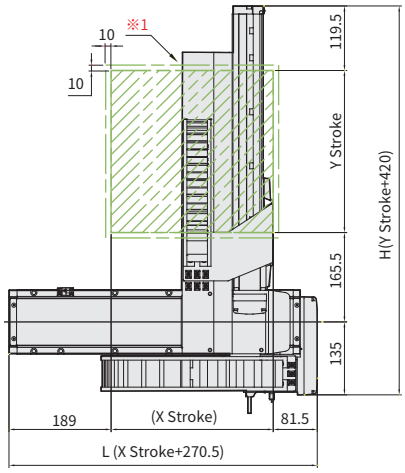


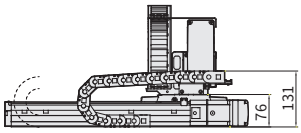
XYGT440-A4 尺寸圖 Size

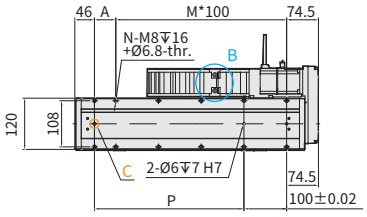
A4 2D CAD 3D CAD

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

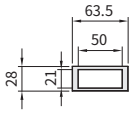
單位 Unit : mm



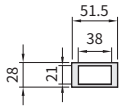




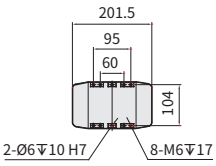
X-Cable Chain



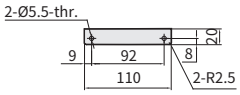
Y-Cable Chain

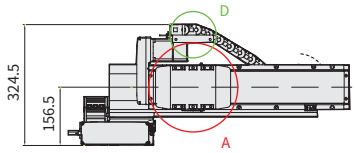


A-Detail View

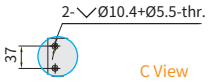


D-Detail View





B-Detail View



C View

※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

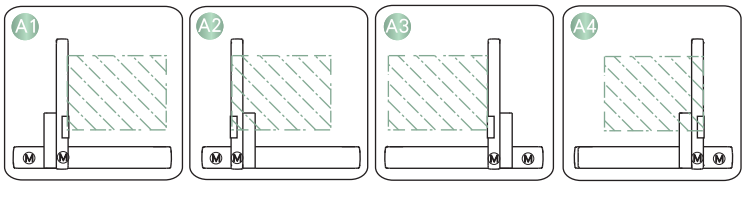
※2：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※3：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
導程組合A※2※3 最高使用速度 Lead Composition A Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467
導程組合C※2※3 最高使用速度 Lead Composition C Max. speed (mm/s)	500																450	400	350	333	317	300	267	250	233

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	520	570	620	670	720	770	820	870	920	970	1020
導程組合A 最高使用速度 Lead Composition A Max. speed (mm/s)	1000										
導程組合C 最高使用速度 Lead Composition C Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P051

XYGT440-A4 2軸 2-axis

螺桿驅動 Ball Screw Drive

XYGT440-A4 配件規格 Accessories Specification

A4 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

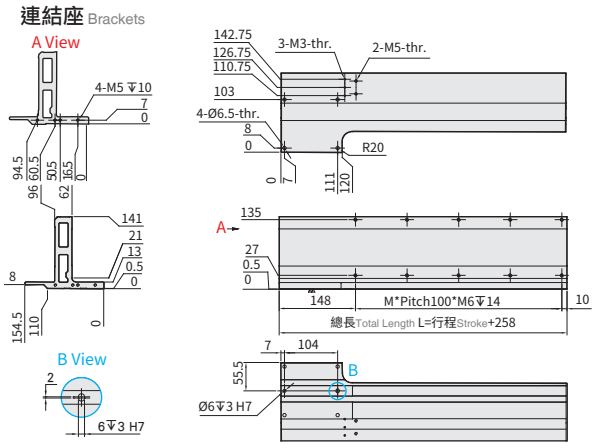
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		14	16	16	17	17	18	20	22	22	24	24											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550 ※1	600 ※1
L	358	458	558	658	758	858					
M	2	3	4	5	6	7					

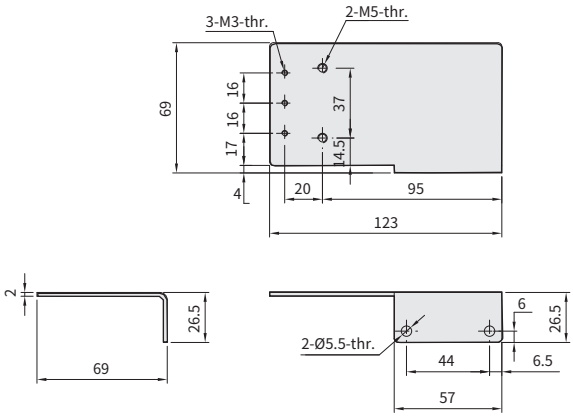
連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000060	100	XYGT440-A1/A4-行程100-長358 XYGT440-A1/A4-Stroke 100-Length 358
11033-000061	150~200	XYGT440-A1/A4-行程150(200)-長458 XYGT440-A1/A4-Stroke 150(200)-Length 458
11033-000062	250~300	XYGT440-A1/A4-行程250(300)-長558 XYGT440-A1/A4-Stroke 250(300)-Length 558
11033-000063	350~400	XYGT440-A1/A4-行程350(400)-長658 XYGT440-A1/A4-Stroke 350(400)-Length 658
11033-000064	450~500	XYGT440-A1/A4-行程450(500)-長758 XYGT440-A1/A4-Stroke 450(500)-Length 758
11033-000065 ※1	550~600	XYGT440-A1/A4-行程550(600)-長858 XYGT440-A1/A4-Stroke 550(600)-Length 858

※1 導程組合C時才可選用。
Only for Lead Composition C.

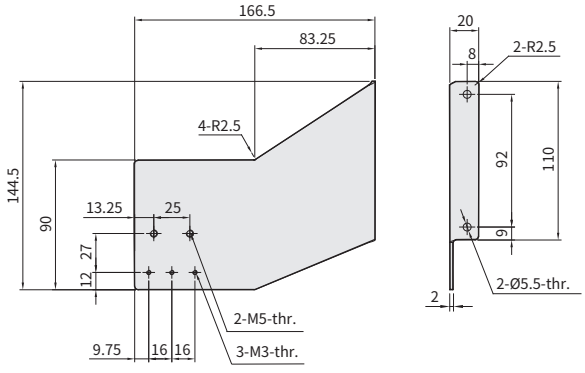
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000630
材質 Material：SUS304



Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000633
材質 Material：SUS304

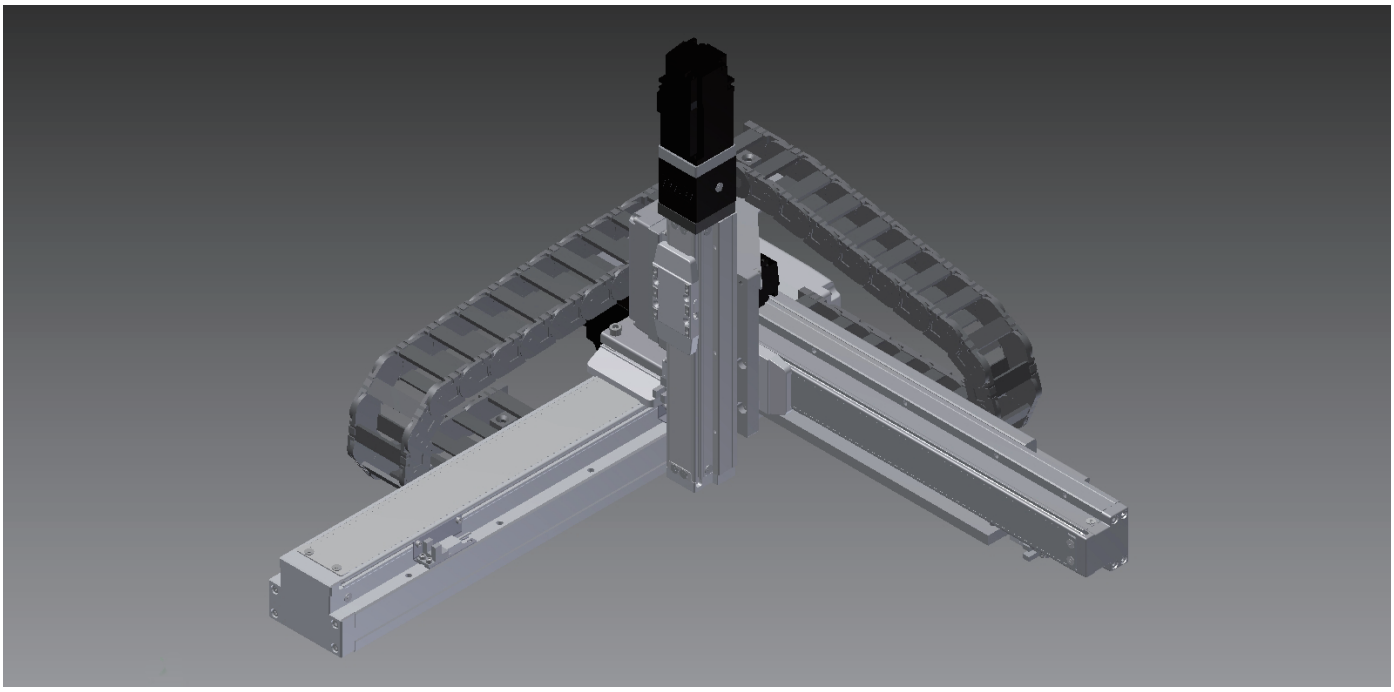


Memo

XYGT321-A

2軸 2-axis

螺桿驅動 Ball Screw Drive



此圖僅供參考，出貨規格詳見尺寸圖面
The picture is just for the reference. Please check the the actual dimensions on the drawing.

※標準連結滑台不提供同動精度
Assembly accuracy is not guaranteed for the standard multi-axis system.

最大行程 Maximum Stroke

X軸 X axis 1100mm | Y軸 Y axis 500mm | Z軸 Z axis 100mm

最高速度 Maximum Speed

X軸 X axis 1000mm/s | Y軸 Y axis 500mm/s | Z軸 Z axis 100mm/s

AC伺服馬達容量 AC Servo Motor Output

X軸 X axis 200W | Y軸 Y axis 100W | Z軸 Z axis 50W+煞車

基本仕樣 Specification

項目 Item	X軸 X axis	Y軸 Y axis	Z軸 Z axis
軸型式 Model Type	GTH8	GTH5	GTH4
位置重複精度 Repeatability (mm)	±0.005	±0.005	±0.005
螺桿導程 Ball screw lead (mm)	20	10	2
最高速度 Maximum Speed (mm/s)※1	1000	500	100
標準行程 (50間隔) Stroke 50 mm Pitch (mm)	50~1100	100~500	50~100
AC伺服馬達容量 AC Servo Motor Output (w)	200	100	50+剎車Brake
使用環境 Environment	0~40°C , 85%RH Below		

※1：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
Maximum speed is based on the AC servo motor's 3000rpm.

最大可搬重量 Maximum Payload

Z軸行程 Z Stroke (mm) \ Y軸行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
50	3.3	2.6	2.4	1.7	1.5	0.8	0.6	0.5	0.5
100	3.1	2.4	2.2	1.5	1.3	0.6	0.5	0.5	0.5

型號表示方式 Ordering Method

XYGT321 - A 1 - 300 - 300 - 100 - M - C - 0001

本體型號 Model

特注式樣 Special Order No.

連結方式 Combination

A	懸臂型 Arm Type

組合方向 Combination Direction

1
2
3
4

X軸行程 X Stroke

50~1100mm
50間隔 50 mm Pitch

Y軸行程 Y Stroke

100~500mm
50間隔 50 mm Pitch

Z軸行程 Z Stroke

50~100mm
50間隔 50 mm Pitch

馬達廠牌 Motor Brand

M	三菱 Mitsubishi
P	國際 Panasonic
Y	安川 Yaskawa
T	台達 Delta

出貨方式 Delivery Methode

C	連結出貨 By Set
K	單軸出貨 By Kit

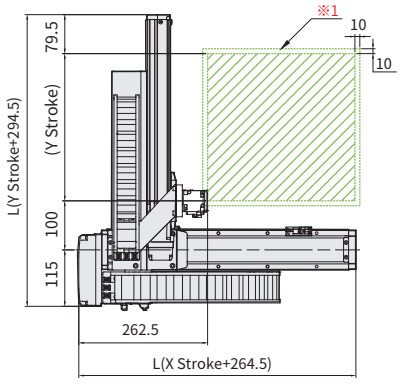
XYGT321-A1 尺寸圖 Size

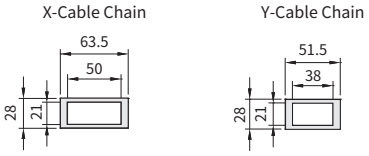
A1

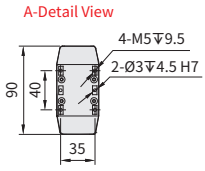
2D CAD 3D CAD

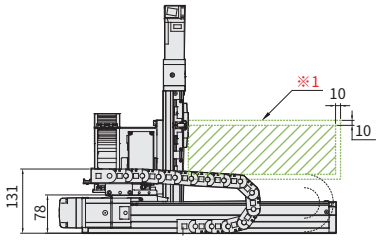
● CAD圖面可至www.toyorobot.com下載 ●
Please download the CAD file from TOYO's website: www.toyorobot.com

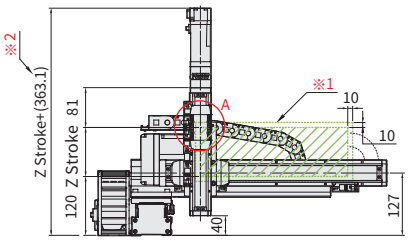
單位 Unit : mm

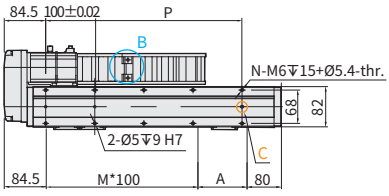


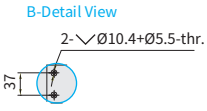












※1 : 原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2 : L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

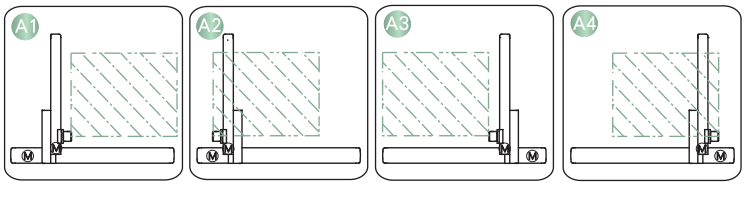
※3 : 最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※4 : 最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※3※4 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039
Z軸詳細規格 Z-axis Detail Spec. →P031

XYGT321-A1 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT321-A1 配件規格 Accessories Specification

A1 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

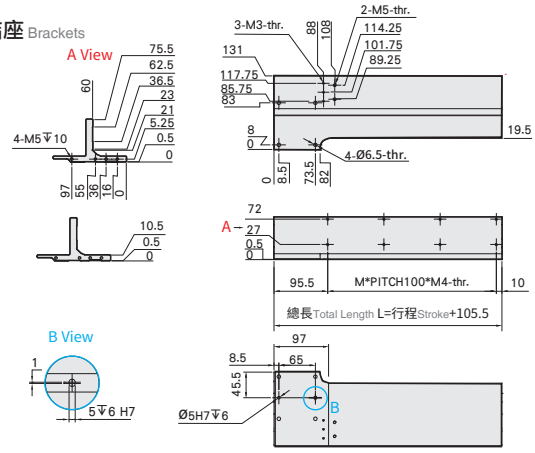
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



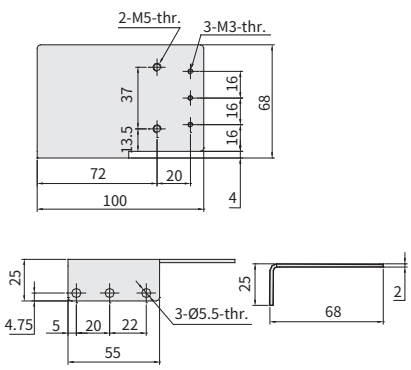
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000046	100	XYGT320-A1/A4-行程100-長205.5 XYGT320-A1/A4-Stroke 100-Length 205.5
11033-000047	150~200	XYGT320-A1/A4-行程150(200)-長305.5 XYGT320-A1/A4-Stroke 150(200)-Length 305.5
11033-000048	250~300	XYGT320-A1/A4-行程250(300)-長405.5 XYGT320-A1/A4-Stroke 250(300)-Length 405.5
11033-000049	350~400	XYGT320-A1/A4-行程350(400)-長505.5 XYGT320-A1/A4-Stroke 350(400)-Length 505.5
11033-000050	450~500	XYGT320-A1/A4-行程450(500)-長605.5 XYGT320-A1/A4-Stroke 450(500)-Length 605.5

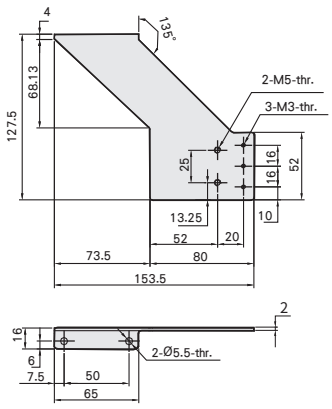
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000482
材質 Material：SUS304



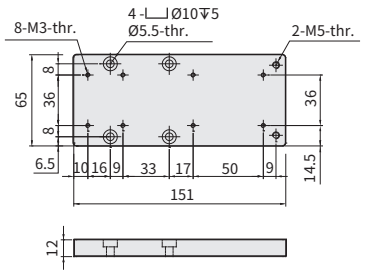
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000484
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001060
材質 Material：AL6061

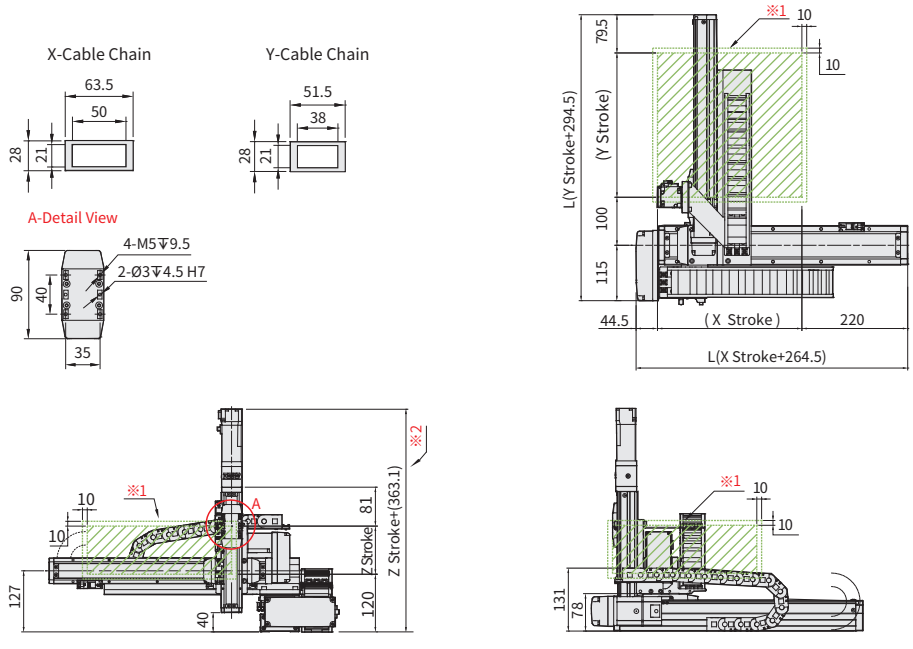


XYGT321-A2 尺寸圖 Size

A2 2D CAD 3D CAD

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

單位 Unit : mm

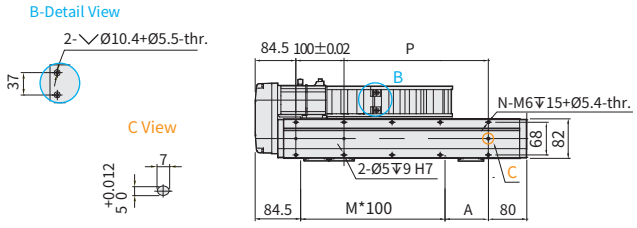


※1 : 原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2 : L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

※3 : 最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

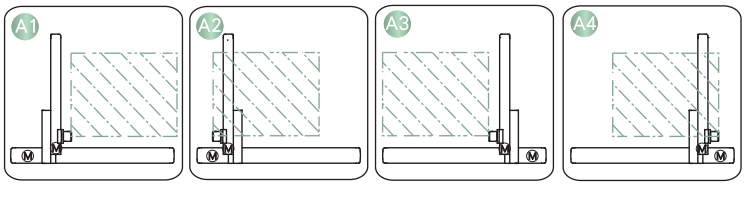
※4 : 最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※3※4 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039
Z軸詳細規格 Z-axis Detail Spec. →P031

XYGT321-A2 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT321-A2 配件規格 Accessories Specification

A2 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

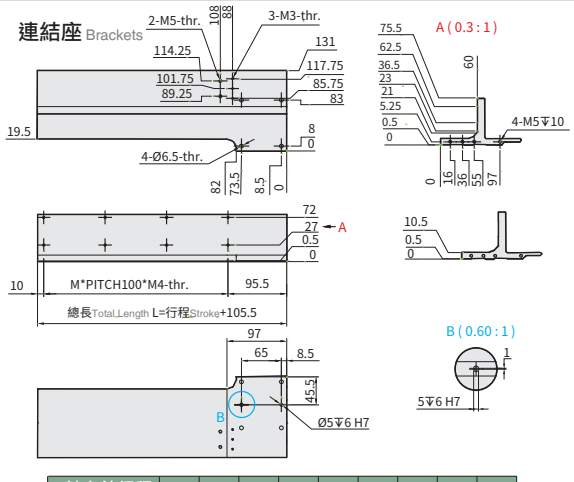
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



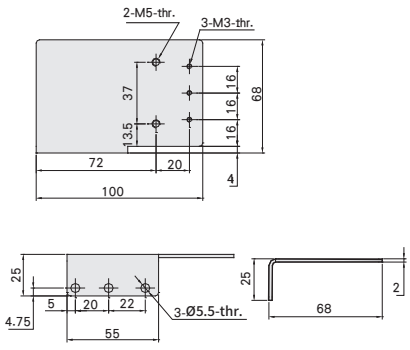
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000051	100	XYGT320-A2/A3-行程100-長205.5 XYGT320-A2/A3-Stroke 100-Length 205.5
11033-000052	150~200	XYGT320-A2/A3-行程150(200)-長305.5 XYGT320-A2/A3-Stroke 150(200)-Length 305.5
11033-000053	250~300	XYGT320-A2/A3-行程250(300)-長405.5 XYGT320-A2/A3-Stroke 250(300)-Length 405.5
11033-000054	350~400	XYGT320-A2/A3-行程350(400)-長505.5 XYGT320-A2/A3-Stroke 350(400)-Length 505.5
11033-000055	450~500	XYGT320-A2/A3-行程450(500)-長605.5 XYGT320-A2/A3-Stroke 450(500)-Length 605.5

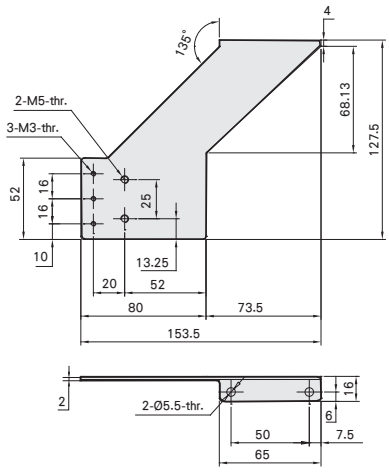
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000482
材質 Material：SUS304



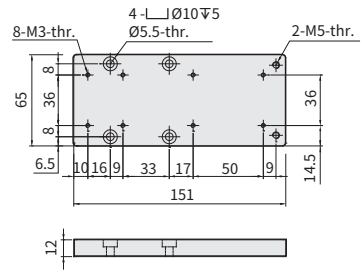
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000485
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001060
材質 Material：AL6061

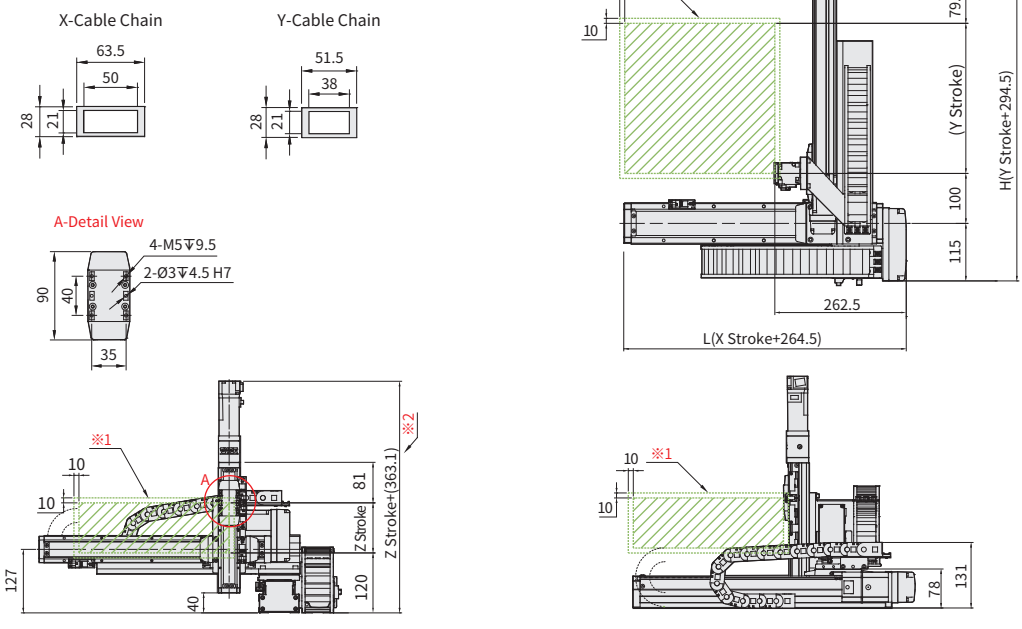


XYGT321-A3 尺寸圖 Size

A3 2D CAD 3D CAD

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

單位 Unit : mm

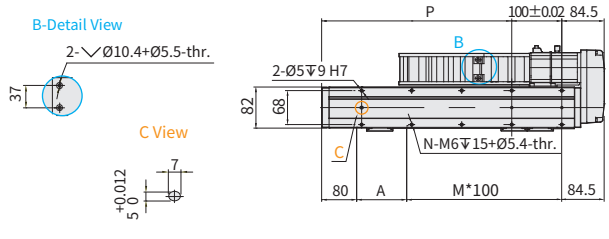


※1 : 原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2 : L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

※3 : 最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

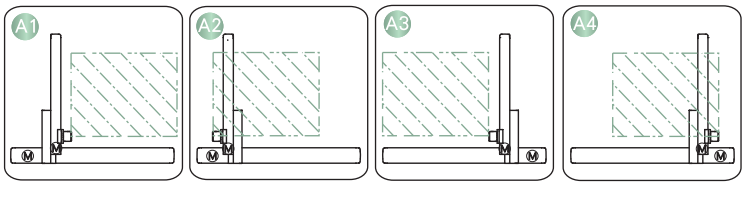
※4 : 最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※3※4 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039
Z軸詳細規格 Z-axis Detail Spec. →P031

XYGT321-A3 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT321-A3 配件規格 Accessories Specification

A3 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

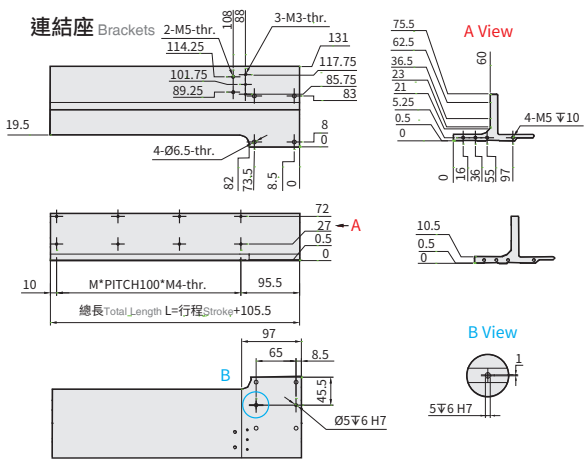
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



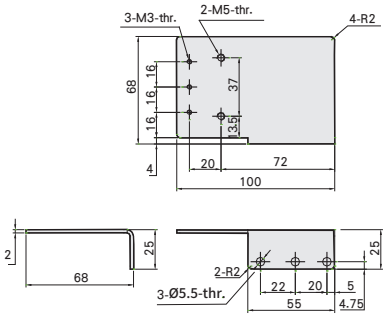
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000051	100	XYGT320-A2/A3-行程100-長205.5 XYGT320-A2/A3-Stroke 100-Length 205.5
11033-000052	150~200	XYGT320-A2/A3-行程150(200)-長305.5 XYGT320-A2/A3-Stroke 150(200)-Length 305.5
11033-000053	250~300	XYGT320-A2/A3-行程250(300)-長405.5 XYGT320-A2/A3-Stroke 250(300)-Length 405.5
11033-000054	350~400	XYGT320-A2/A3-行程350(400)-長505.5 XYGT320-A2/A3-Stroke 350(400)-Length 505.5
11033-000055	450~500	XYGT320-A2/A3-行程450(500)-長605.5 XYGT320-A2/A3-Stroke 450(500)-Length 605.5

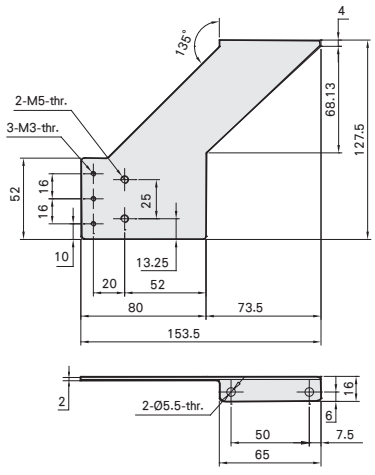
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000483
材質 Material：SUS304



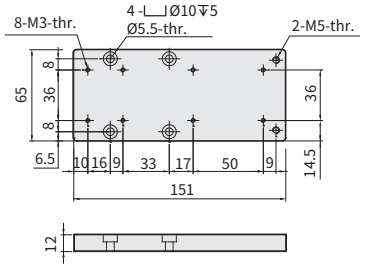
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000485
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001060
材質 Material：AL6061

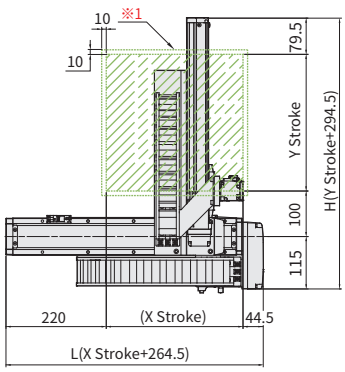


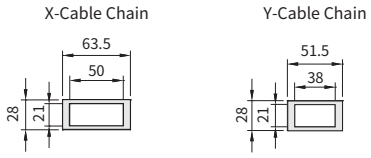
XYGT321-A4 尺寸圖 Size

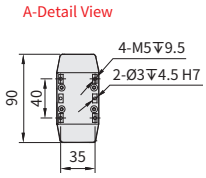
A4 2D CAD 3D CAD

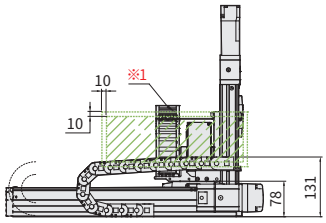
● CAD圖面可至www.toyorobot.com下載 ●
Please download the CAD file from TOYO's website: www.toyorobot.com

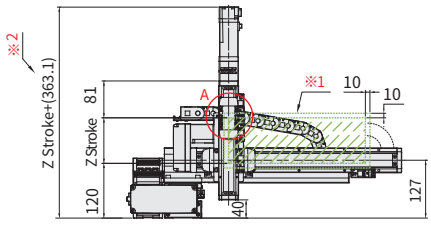
單位 Unit : mm

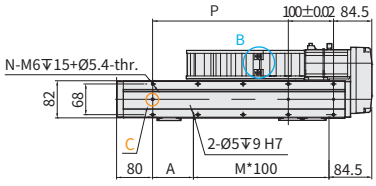


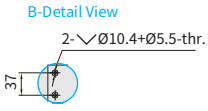












※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2 ： L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

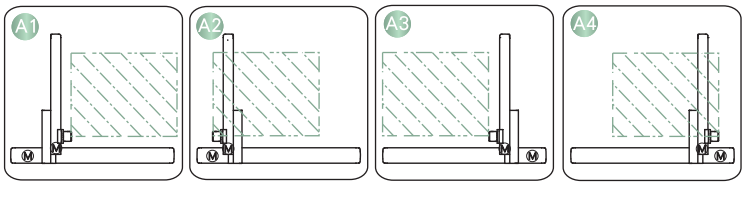
※3：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※4：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
最高使用速度※3※4 Max. speed (mm/s)	1000															900	800	700	600	500	400	300

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
H	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5
最高使用速度 Max. speed (mm/s)	500								

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P043
Y軸詳細規格 Y-axis Detail Spec. →P039
Z軸詳細規格 Z-axis Detail Spec. →P031

XYGT321-A4 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT321-A4 配件規格 Accessories Specification

A4 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000321	IGUS-1500.038.048.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

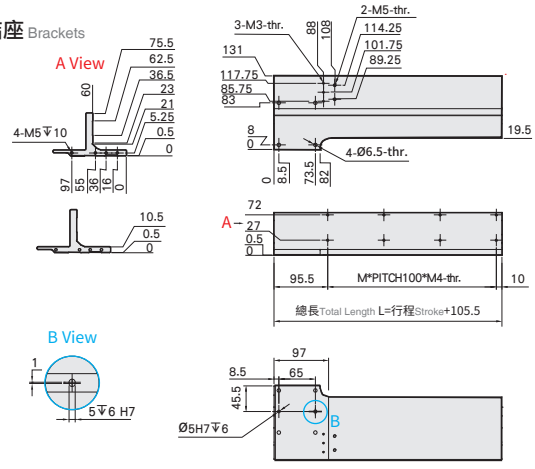
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26
Y軸使用節數 Number For Pitch of Y Axis		13	13	14	15	16	16	17	18	19												

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



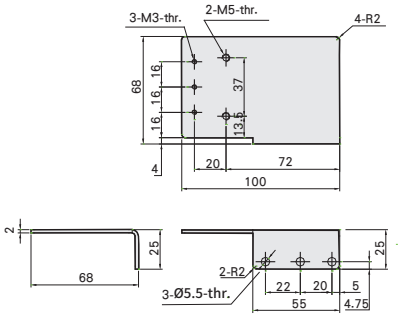
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500
L	205.5	305.5		405.5		505.5		605.5	
M	1	2		3		4		5	

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000046	100	XYGT320-A1/A4-行程100-長205.5 XYGT320-A1/A4-Stroke 100-Length 205.5
11033-000047	150~200	XYGT320-A1/A4-行程150(200)-長305.5 XYGT320-A1/A4-Stroke 150(200)-Length 305.5
11033-000048	250~300	XYGT320-A1/A4-行程250(300)-長405.5 XYGT320-A1/A4-Stroke 250(300)-Length 405.5
11033-000049	350~400	XYGT320-A1/A4-行程350(400)-長505.5 XYGT320-A1/A4-Stroke 350(400)-Length 505.5
11033-000050	450~500	XYGT320-A1/A4-行程450(500)-長605.5 XYGT320-A1/A4-Stroke 450(500)-Length 605.5

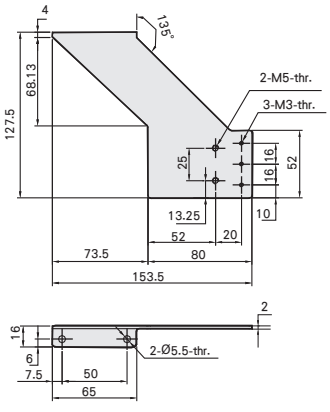
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000483
材質 Material：SUS304



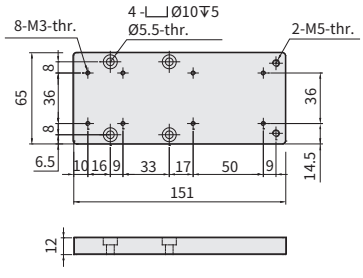
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000484
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001060
材質 Material：AL6061

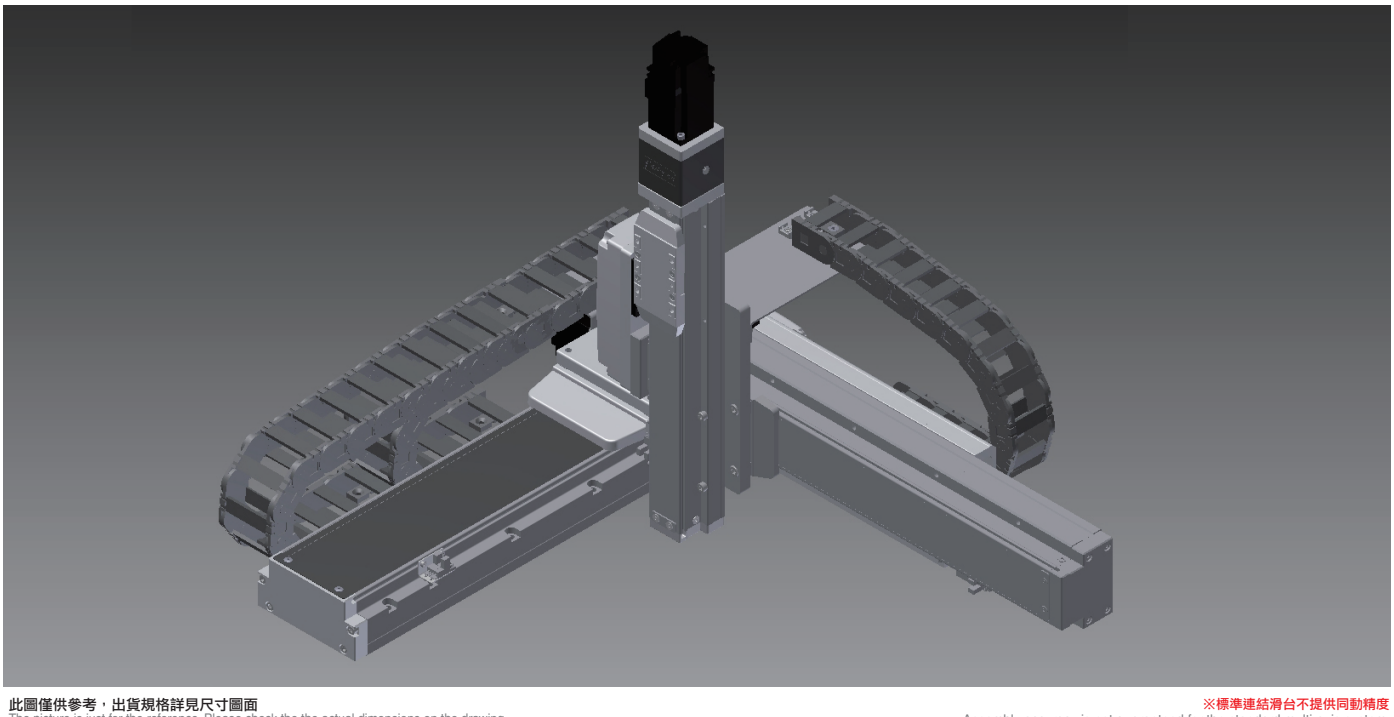


Memo

XYGT432-A

2軸 2-axis

螺桿驅動 Ball Screw Drive



此圖僅供參考，出貨規格詳見尺寸圖面
The picture is just for the reference. Please check the the actual dimensions on the drawing.

※標準連結滑台不提供同動精度
Assembly accuracy is not guaranteed for the standard multi-axis system.

最大行程 Maximum Stroke

- X軸 X axis 1250mm
- Y軸 Y axis 550mm
- Z軸 Z axis 350mm

最高速度 Maximum Speed

- X軸 X axis 1000mm/s
- Y軸 Y axis 500mm/s
- Z軸 Z axis 250mm/s

AC伺服馬達容量 AC Servo Motor Output

- X軸 X axis 400W
- Y軸 Y axis 200W
- Z軸 Z axis 100W+煞車

基本仕樣 Specification

項目 Item	X軸 X axis	Y軸 Y axis	Z軸 Z axis
軸型式 Model Type	GTH12	GTH8	GTH5
位置重複精度 Repeatability (mm)	±0.005	±0.005	±0.005
螺桿導程 Ball screw lead (mm)	20	10	5
最高速度 Maximum Speed (mm/s)※1	1000	500	250
標準行程 (50間隔) Stroke 50 mm Pitch (mm)	50~1250	100~550	50~350
AC伺服馬達容量 AC Servo Motor Output (w)	400	200	100+剎車 Brake
使用環境 Environment	0~40°C , 85%RH Below		

※1：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
Maximum speed is based on the AC servo motor's 3000rpm.

最大可搬重量 Maximum Payload

Z軸行程 Z Stroke (mm) \ Y軸行程 Y Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550
50	10								7.77	4.77	1.77
100	10								7.58	4.58	1.58
150	10								7.38	4.38	1.38
200	10								7.18	4.18	1.18
250	10								6.99	3.99	0.99
300	10								6.79	3.79	0.79
350	10								6.59	3.59	0.59

型號表示方式 Ordering Method

XYGT432 - A 1 - 300 - 300 - 100 - M - C - 0001

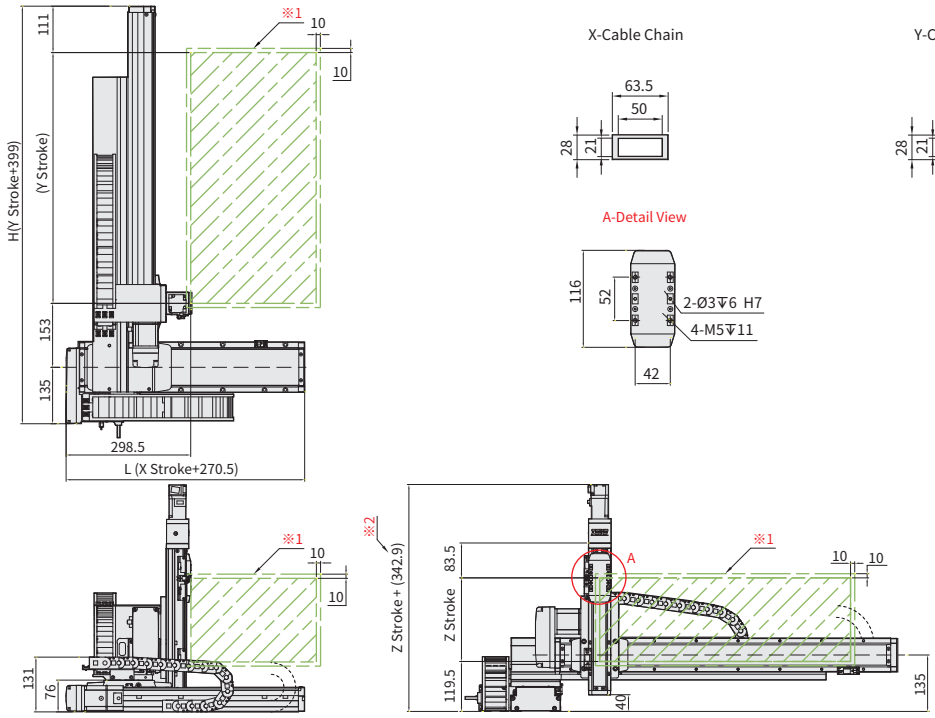
- 本體型號 Model
- 特注式樣 Special Order No.
- 連結方式 Combination
  - A 懸臂型 Arm Type
- 組合方向 Combination Direction
  - 1
  - 2
  - 3
  - 4
- X軸行程 X Stroke
  - 50~1250mm
  - 50間隔 50 mm Pitch
- Y軸行程 Y Stroke
  - 100~550mm
  - 50間隔 50 mm Pitch
- Z軸行程 Z Stroke
  - 50~350mm
  - 50間隔 50 mm Pitch
- 馬達廠牌 Motor Brand
  - M 三菱 Mitsubishi
  - P 國際 Panasonic
  - Y 安川 Yaskawa
  - T 台達 Delta
- 出貨方式 Delivery Methode
  - C 連結出貨 By Set
  - K 單軸出貨 By Kit

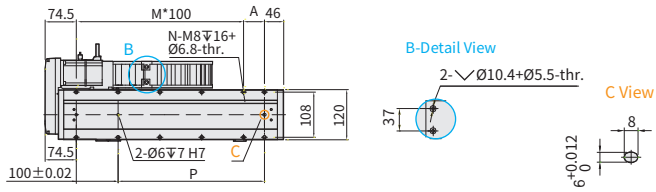
XYGT432-A1 尺寸圖 Size

A1 2D CAD 3D CAD

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

單位 Unit : mm





※1 : 原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2 : L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

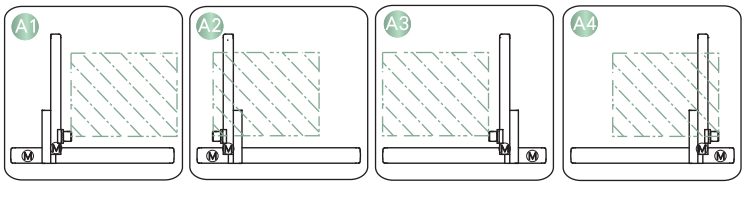
※3 : 最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※4 : 最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※3※4 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
最高使用速度 Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043
Z軸詳細規格 Z-axis Detail Spec. →P039

XYGT432-A1 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT432-A1 配件規格 Accessories Specification

A1 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

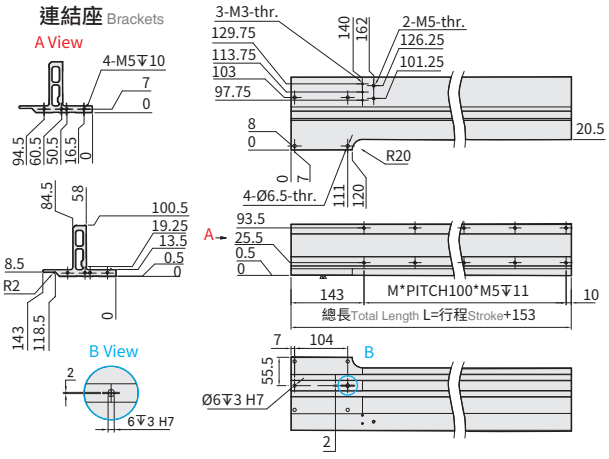
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



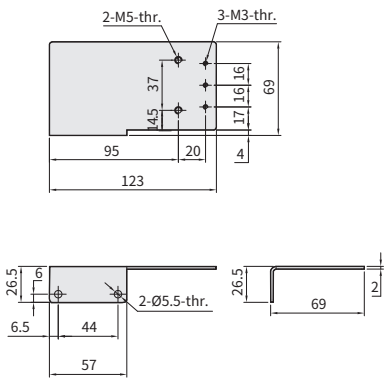
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000072	100	XYGT430-A1/A4-行程100-長253 XYGT430-A1/A4-Stroke 100-Length 253
11033-000073	150~200	XYGT430-A1/A4-行程150(200)-長353 XYGT430-A1/A4-Stroke 150(200)-Length 353
11033-000074	250~300	XYGT430-A1/A4-行程250(300)-長453 XYGT430-A1/A4-Stroke 250(300)-Length 453
11033-000075	350~400	XYGT430-A1/A4-行程350(400)-長553 XYGT430-A1/A4-Stroke 350(400)-Length 553
11033-000076	450~500	XYGT430-A1/A4-行程450(500)-長653 XYGT430-A1/A4-Stroke 450(500)-Length 653
11033-000077	550~600	XYGT430-A1/A4-行程550(600)-長753 XYGT430-A1/A4-Stroke 550(600)-Length 753

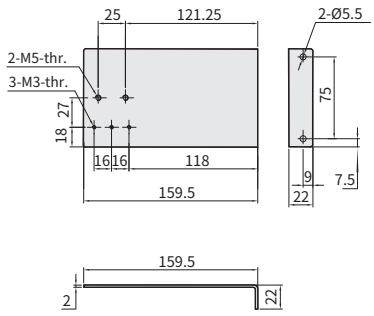
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000629
材質 Material：SUS304



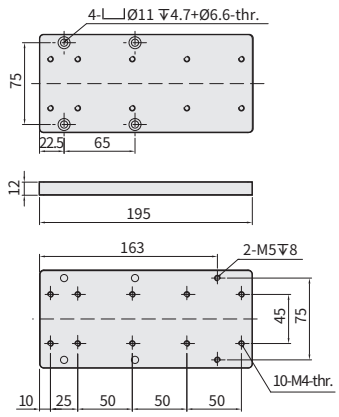
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000631
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001166
材質 Material：AL6061

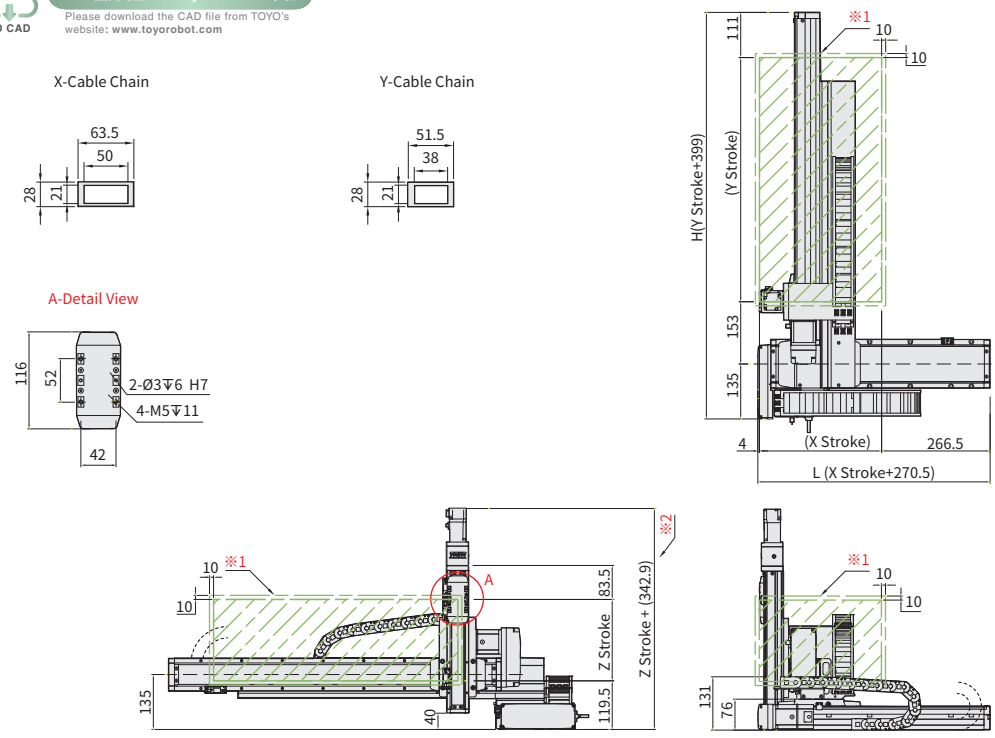


XYGT432-A2 尺寸圖 Size

A2 2D CAD 3D CAD

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

單位 Unit : mm

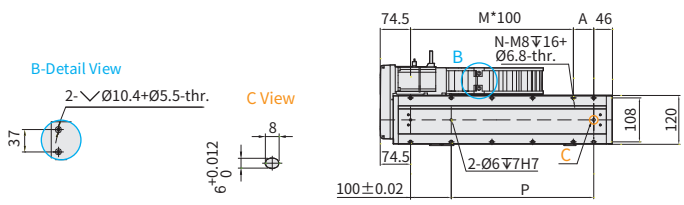


※1 : 原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2 : L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

※3 : 最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

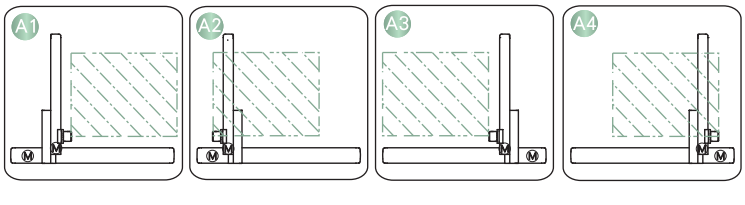
※4 : 最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※3※4 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
最高使用速度 Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043
Z軸詳細規格 Z-axis Detail Spec. →P039

XYGT432-A2 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT432-A2 配件規格 Accessories Specification

A2 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

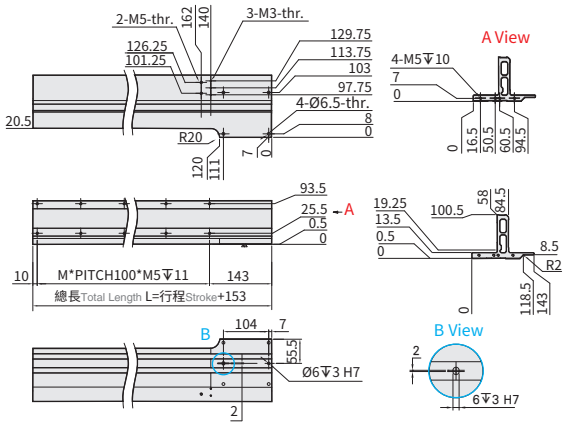
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



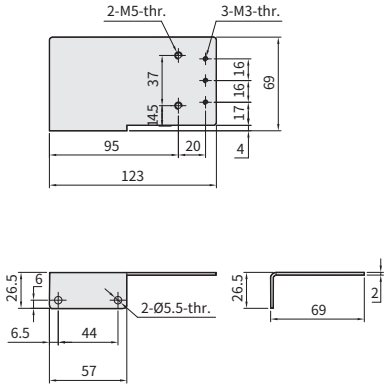
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000078	100	XYGT430-A2/A3-行程100-長253 XYGT430-A2/A3-Stroke 100-Length 253
11033-000079	150~200	XYGT430-A2/A3-行程150(200)-長353 XYGT430-A2/A3-Stroke 150(200)-Length 353
11033-000080	250~300	XYGT430-A2/A3-行程250(300)-長453 XYGT430-A2/A3-Stroke 250(300)-Length 453
11033-000081	350~400	XYGT430-A2/A3-行程350(400)-長553 XYGT430-A2/A3-Stroke 350(400)-Length 553
11033-000082	450~500	XYGT430-A2/A3-行程450(500)-長653 XYGT430-A2/A3-Stroke 450(500)-Length 653
11033-000083	550~600	XYGT430-A2/A3-行程550(600)-長753 XYGT430-A2/A3-Stroke 550(600)-Length 753

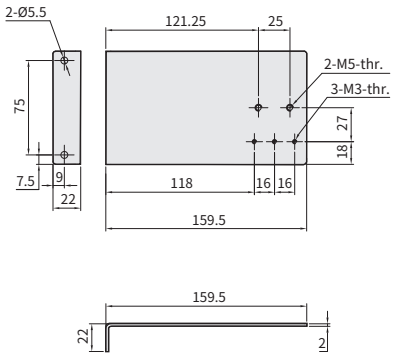
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000629
材質 Material：SUS304



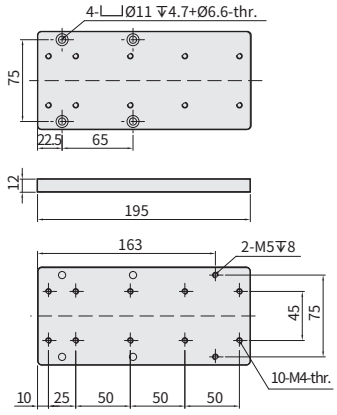
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000634
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001166
材質 Material：AL6061

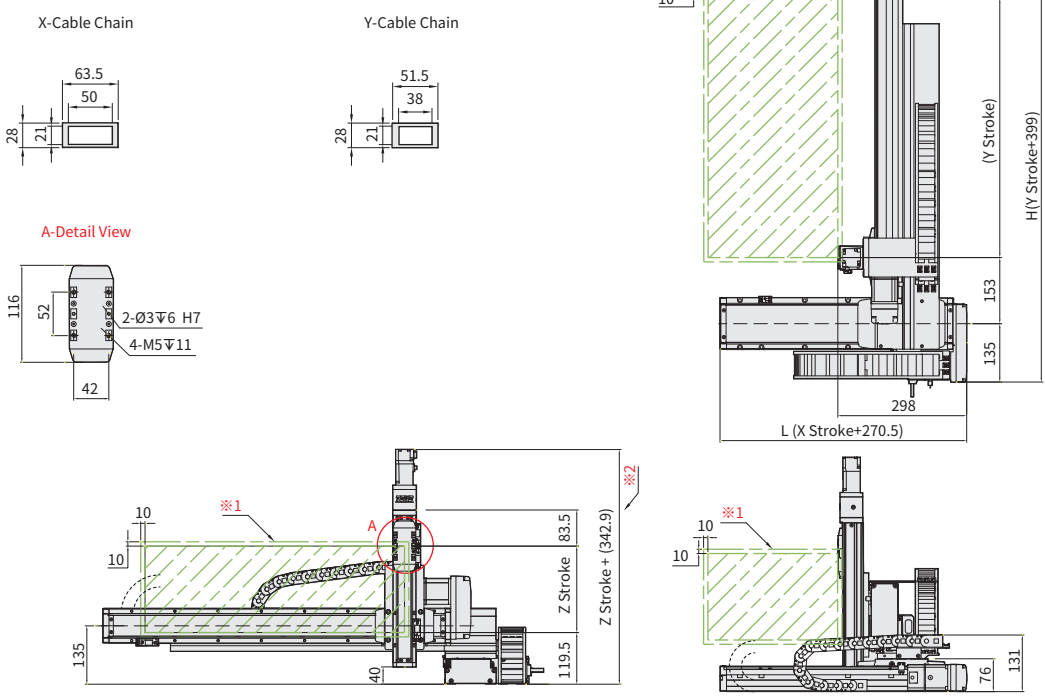


XYGT432-A3 尺寸圖 Size

A3 2D CAD 3D CAD

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

單位 Unit : mm

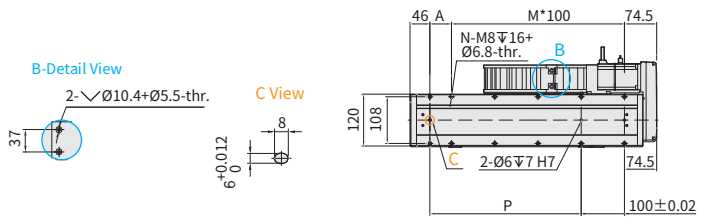


※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

※3：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

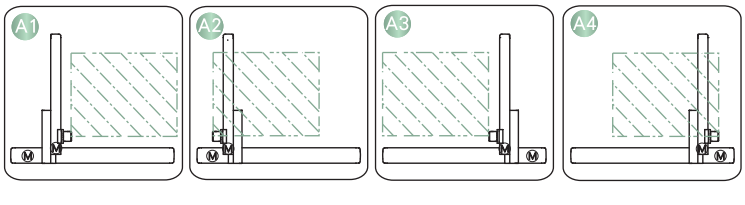
※4：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)



X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※3※4 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
最高使用速度 Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043
Z軸詳細規格 Z-axis Detail Spec. →P039

XYGT432-A3 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT432-A3 配件規格 Accessories Specification

A3 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

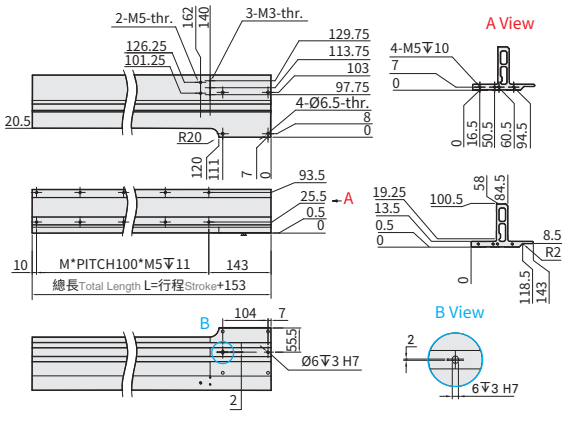
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購 Outsource	數量 Quantity	9

連結座 Brackets



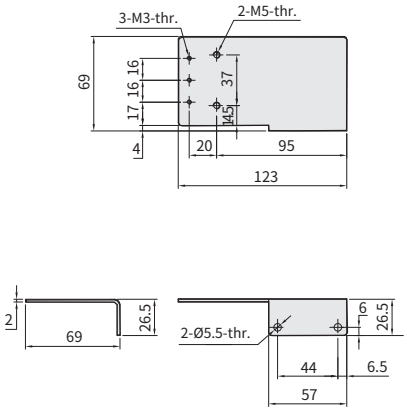
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000078	100	XYGT430-A2/A3-行程100-長253 XYGT430-A2/A3-Stroke 100-Length 253
11033-000079	150~200	XYGT430-A2/A3-行程150(200)-長353 XYGT430-A2/A3-Stroke 150(200)-Length 353
11033-000080	250~300	XYGT430-A2/A3-行程250(300)-長453 XYGT430-A2/A3-Stroke 250(300)-Length 453
11033-000081	350~400	XYGT430-A2/A3-行程350(400)-長553 XYGT430-A2/A3-Stroke 350(400)-Length 553
11033-000082	450~500	XYGT430-A2/A3-行程450(500)-長653 XYGT430-A2/A3-Stroke 450(500)-Length 653
11033-000083	550~600	XYGT430-A2/A3-行程550(600)-長753 XYGT430-A2/A3-Stroke 550(600)-Length 753

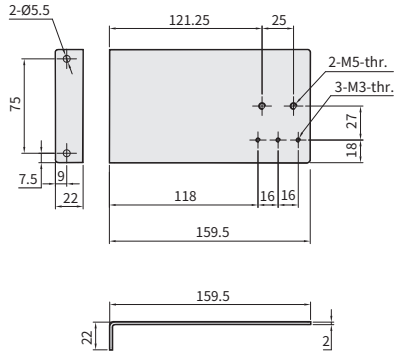
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000630
材質 Material：SUS304



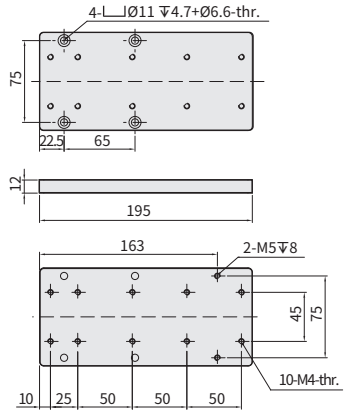
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000634
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001166
材質 Material：AL6061

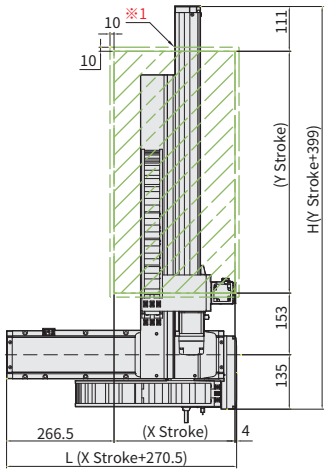


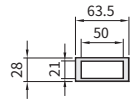
XYGT432-A4 尺寸圖 Size

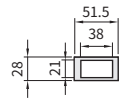
A4 2D CAD 3D CAD

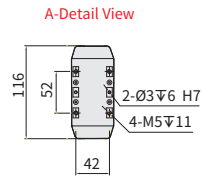
● CAD圖面可至www.toyorobot.com下載 ●
Please download the CAD file from TOYO's website: www.toyorobot.com

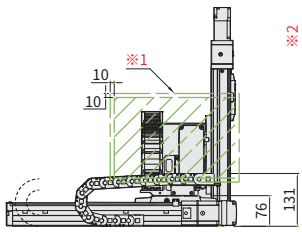
單位 Unit : mm

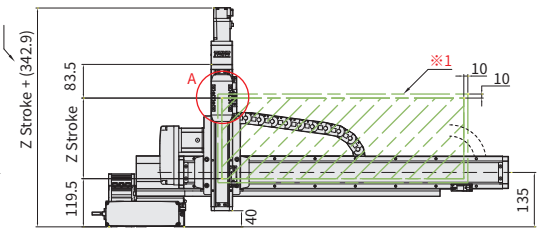


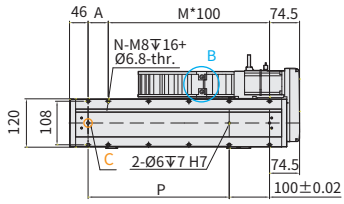


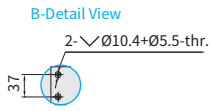


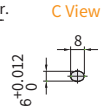












※1：原點回復時的移動範圍及機械極限的停止位置。
(When the moving range return to origin,the stop position of table's movement range and mechanical limit.)

※2：L軸總長度會依搭配的馬達廠牌而變動。
(The total length of X-axis is depends on different motor's brands.)

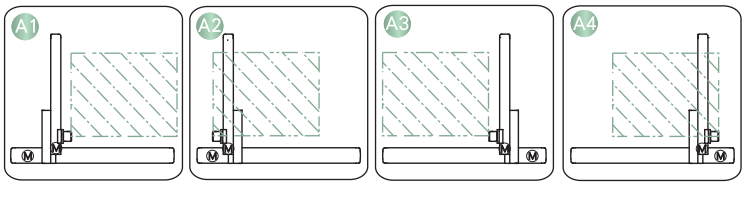
※3：最高速度(mm/s)是以伺服馬達最高轉速3000rpm/min為基準。
(Maximum speed is based on the AC servo motor's 3000 rpm)

※4：最高使用速度代表該行程內可使用的最高安全速度，若超過此速度，滑台可能會有嚴重共振產生。
(Maximum speed is refers to the highest safe speed that can be used in stroke,if more than the standard speed, table may produce serious resonance.)

X軸有效行程 X Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1050	1100	1150	1200	1250	1300	1350
最高使用速度※3※4 Max. speed (mm/s)	1000																900	800	700	667	633	600	533	500	467

Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
H	499	549	599	649	699	749	799	849	899	949	999
最高使用速度 Max. speed (mm/s)	500										

連結方向 Combination Direction



配件規格 Spec. Details

X軸詳細規格 X-axis Detail Spec. →P051
Y軸詳細規格 Y-axis Detail Spec. →P043
Z軸詳細規格 Z-axis Detail Spec. →P039

XYGT432-A4 3軸 3-axis

螺桿驅動 Ball Screw Drive

XYGT432-A4 配件規格 Accessories Specification

A4 履帶及履帶固定板 Cable Track And Fixing Plate For Track

	履帶料號 Part No of Cable Track	履帶使用規格 Specification of Cable Track	固定座料號 Part No of Fix Plate	固定座使用規格 Specification of Fixing Plate	固定座使用數量 Uantity of Fixing Plate
X軸 X Axis	22021-000324	IGUS-1500.050.048.0-節距33.3 Pitch	22021-000322	15000.050.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2
Y軸 Y Axis	22021-000399	IGUS-1500.038.075.0-節距33.3 Pitch	22021-000323	15000.038.34PZ-A2(含活動端+固定端) Include moving end+fixing end	2

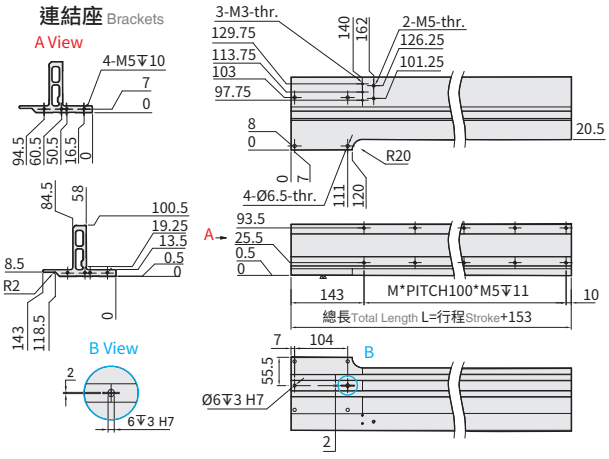
履帶使用節數數量 Quantity of Pitch Number For Cable Track

軸向 Axis \ 行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1200	1250
X軸使用節數 Number For Pitch of X Axis	10	11	11	12	13	14	14	15	16	17	17	18	19	20	20	21	22	23	23	24	25	26	27
Y軸使用節數 Number For Pitch of Y Axis		12	13	14	16	17	18	19	20	22	23	23											

束線固定鈕規格 Fix Cable Button Specification

料號 Part No	22200-000024	規格 Specification	15*10*7-市購Outsource	數量 Quantity	9

連結座 Brackets



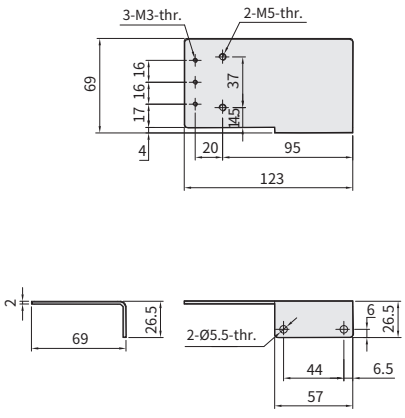
Y軸有效行程 Y Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
L	253	353	453	553	653	753					
M	1	2	3	4	5	6					

連結座 Brackets

料號 Part NO	Y軸行程 Stroke of Y axis	規格 Specification
11033-000072	100	XYGT430-A1/A4-行程100-長253 XYGT430-A1/A4-Stroke 100-Length 253
11033-000073	150~200	XYGT430-A1/A4-行程150(200)-長353 XYGT430-A1/A4-Stroke 150(200)-Length 353
11033-000074	250~300	XYGT430-A1/A4-行程250(300)-長453 XYGT430-A1/A4-Stroke 250(300)-Length 453
11033-000075	350~400	XYGT430-A1/A4-行程350(400)-長553 XYGT430-A1/A4-Stroke 350(400)-Length 553
11033-000076	450~500	XYGT430-A1/A4-行程450(500)-長653 XYGT430-A1/A4-Stroke 450(500)-Length 653
11033-000077	550~600	XYGT430-A1/A4-行程550(600)-長753 XYGT430-A1/A4-Stroke 550(600)-Length 753

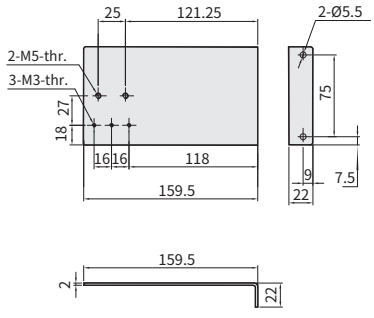
X軸板金 Sheet Metal of X Axis

料號 Part NO：22041-000630
材質 Material：SUS304



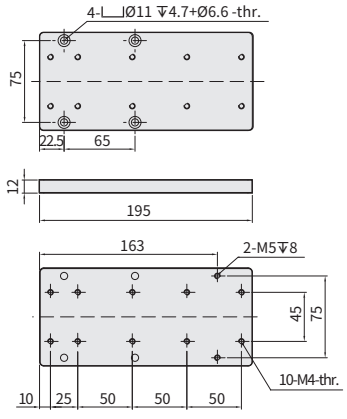
Y軸板金 Sheet Metal of Y Axis

料號 Part NO：22041-000631
材質 Material：SUS304



Z軸固定板 Z axis fixing plate

料號 Part NO：11011-001166
材質 Material：AL6061



Memo

Memo

CGTH

軌道內嵌式小型電動缸- 滑台式

CGTH built-in linear motion guide Servo Cylinder-Slider Type

Contents

小型 SMALL

CGTH4

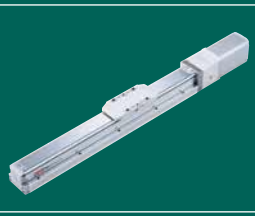
本體寬幅 44mm
Width

最大行程 800mm 191
Max. stroke

最大荷重 25kg
Max. payload

小型 SMALL

CGTH5



本體寬幅 54mm
Width

最大行程 800mm 195
Max. stroke

最大荷重 30kg
Max. payload

規格索引

Spec Index

CGTH 軌道內嵌式小型電動缸-滑台式

CGTH built-in linear motion guide Servo Cylinder-Slider Type

使用環境 Environment	傳動方式 Drive mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width of profile (mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball screw spec (Accuracy C7)		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum speed (mm/s)
						外徑 Outer dia.(mm)	導程 Lead(mm)	水平使用 Horizontal	垂直使用 Vertical	
一般環境 Standard	滾珠螺桿 Ball screw	CGTH4	35□	44	±0.01	10	2	25	8	110
							6	20	8	331
							12	12	3.5	661
		CGTH5	42□	54	±0.01	12	2	30	10	109
							5	30	10	273
							10	15	5	538
							20	10	2.5	1102

*1:最高速度的使用條件有限制，請參閱各仕樣內頁的速度-荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

	標準行程及最高使用速度*2 Stroke(mm) & Maximum speed(mm/s) 代表速度 Speed																							頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		
	110											100	90	80	70	60								191
	331											300	270	240	210	180								
	661											600	540	480	420	360								
	109												90	80	70	60								195
	273												225	200	175	150								
	538												450	400	350	300								
	1102												900	800	700	600								

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

The number written in the column means the highest safe speed within stroke.
If the speed is over the value shown in the chart , the vibration will be caused on the actuator.

CGTH4

Step TC

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達尺寸 Motor Dimension	滾珠螺桿 Ball Screw
800mm	661mm/s	35□mm	⌀10mm

型號表示方式 Ordering Method

CGTH4 - L2 - 100 - M B - TC100 - 03 - N1 - 0001

本體型號 Model

特注式樣 Customization Order No.

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

行程 Stroke

50-800mm
間隔50 50 mm Pitch

馬達位置 Motor Position

M	馬達直結 Motor Hidden In
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

是否煞車 Brake (Optional)

垂直使用時追加內藏式煞車器 Built-in brake is added when vertically used

*若無煞車則不表示。
If No Brake,No Description.

對應控制器 Corresponding Controller

TC100

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

-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

*標配1.5m
Standard:1.5m

基本仕樣 Specification

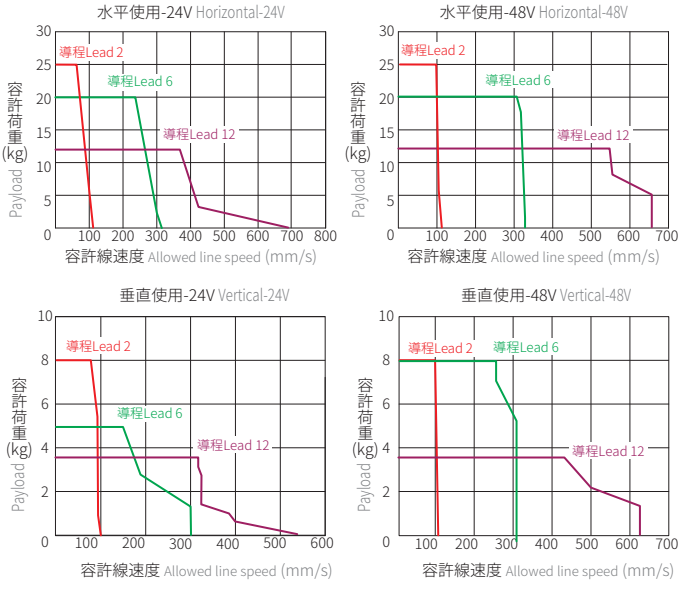
規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1※2	水平使用 Horizontal	≦110	≦ 331	≦ 661
		垂直使用 Vertical	≦108	≦ 314	≦ 646
	最大可搬重量 Maximum Payload※2	水平使用 Horizontal (kg)	≦ 25	≦ 20	≦ 12
		垂直使用 Vertical (kg)	≦ 8	≦ 8	≦ 3.5
	定格推力 Rated Thrust (N)		1094	365	182
	標準行程 Stroke / Pitch (mm)※3		50-800mm/50 間隔 50 mm Pitch		
部品 Parts	馬達尺寸 Motor Dimension (mm)		35□		
	滾珠螺桿規格 Ball Screw Spec		C7Ø10mm		

※1 此處最高速度為軟體移動速度設定為100%時。
The maximum speed shown here is when software speed setting is 100%.

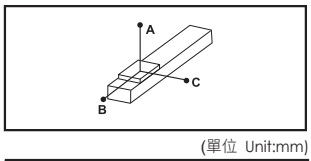
※2 最高速度及最大荷重無法同時存在，選用前請詳見速度-荷重曲線圖。
The maximum speed and maximum payload cannot exist at the same time.
Please refer to diagram of Speed and payload curve before using.

※3 行程超過550時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P189頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P189 for details.

速度-荷重曲線圖 Speed-Payload Curve Diagram

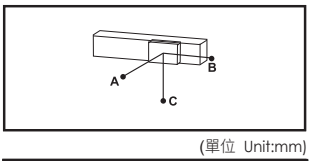


容許負載力距表 Allowable Moment



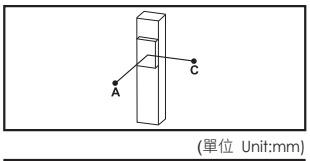
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	12kg	640	64	94
	18kg	400	40	59
	25kg	280	28	42
導程 6 Lead	8kg	770	77	107
	12kg	480	48	68
	20kg	280	28	39
導程 12 Lead	6kg	990	99	135
	9kg	610	61	77
	12kg	440	44	55



(單位 Unit:mm)

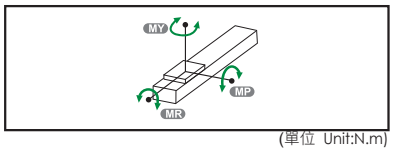
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	12kg	93	64	640
	18kg	58	40	400
	25kg	41	28	280
導程 6 Lead	8kg	107	77	770
	12kg	68	48	480
	20kg	39	28	280
導程 12 Lead	6kg	135	99	990
	9kg	88	61	610
	12kg	63	44	440



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	3.6kg	246	246
	5.4kg	165	165
	8kg	116	116
導程 6 Lead	3.2kg	215	215
	5.4kg	140	140
	8kg	99	99
導程 12 Lead	1kg	646	646
	2.3kg	288	288
	3.5kg	190	190

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	79
MP	79
MR	116

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use.
Contact us for the details if you want to apply ceiling-mount inverse usage.

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 Featrues	電氣規格 Electrical Spec.	詳細參閱 Reference Page
	TC100	**Pulse控制** Pulse Control Mode	Line driver 200k Hz Open collector 60k Hz 同時間只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz.	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。 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.	P.223
		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.		
		通訊控制 Communication Control Mode	採Modbus的RS485通訊介面(最大並接16台)及一組mini USB (TOYO-Single專用)。 Use Modbus as the interface of RS485 (connect max. 16 controllers) and 1 set mini USB. (special for TOYO-single)		

CGTH4

Step TC

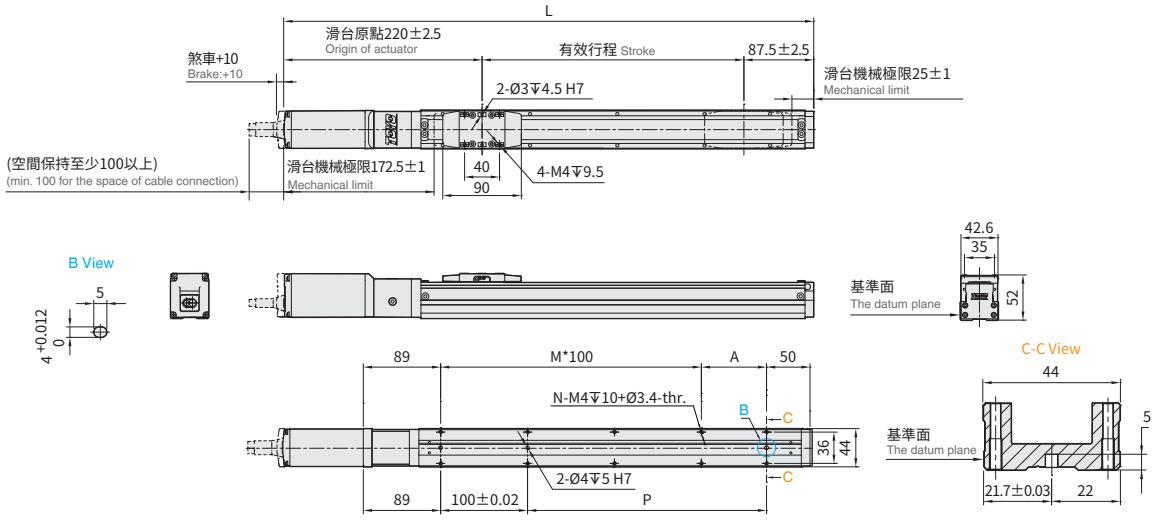
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	357.5	407.5	457.5	507.5	557.5	607.5	657.5	707.5	757.5	807.5	857.5	907.5	957.5	1007.5	1057.5	1107.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.2	1.45	1.7	1.95	2.19	2.44	2.69	2.94	3.18	3.43	3.68	3.93	4.18	4.43	4.68	4.93

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

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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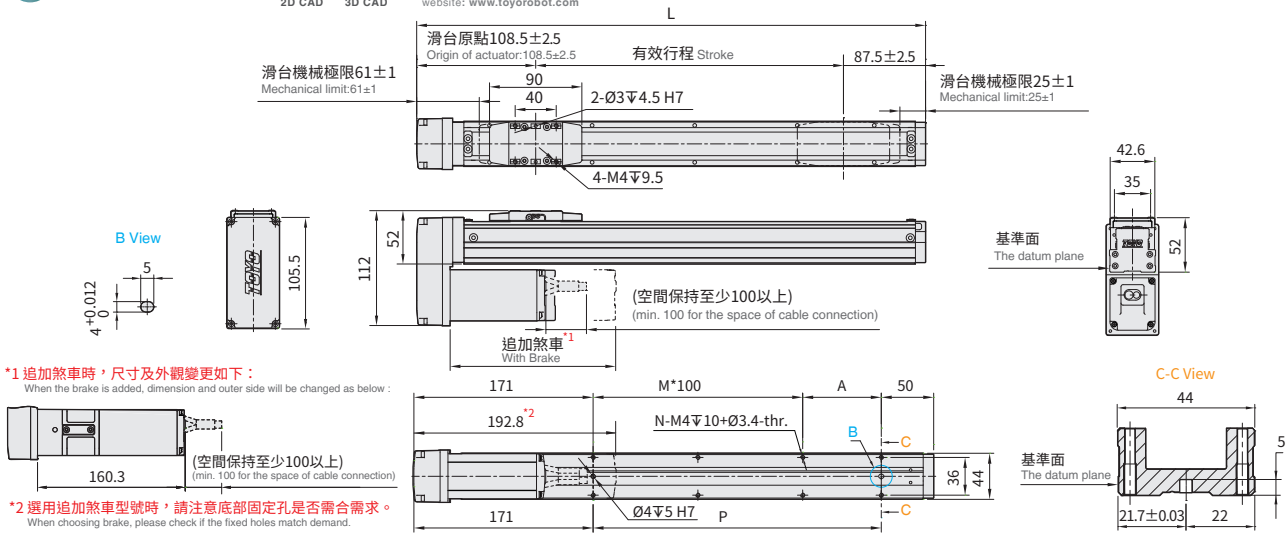
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.46	1.71	1.96	2.2	2.45	2.7	2.95	3.19	3.44	3.69	3.94	4.19	4.44	4.69	4.94	5.19

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

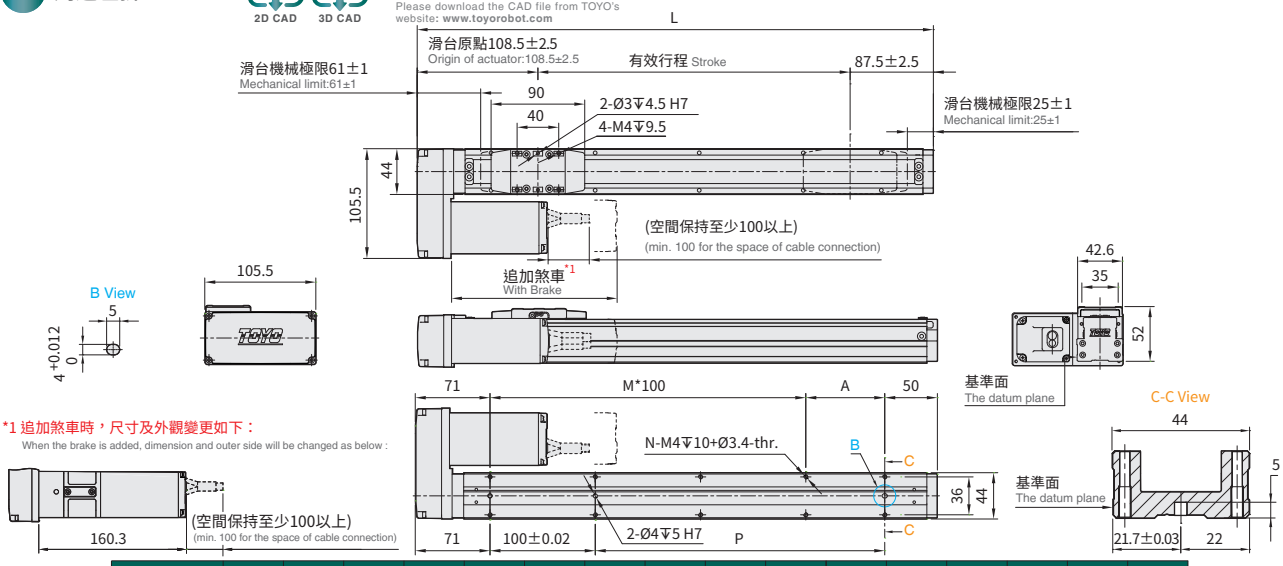
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.46	1.71	1.96	2.2	2.45	2.7	2.95	3.19	3.44	3.69	3.94	4.19	4.44	4.69	4.94	5.19

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

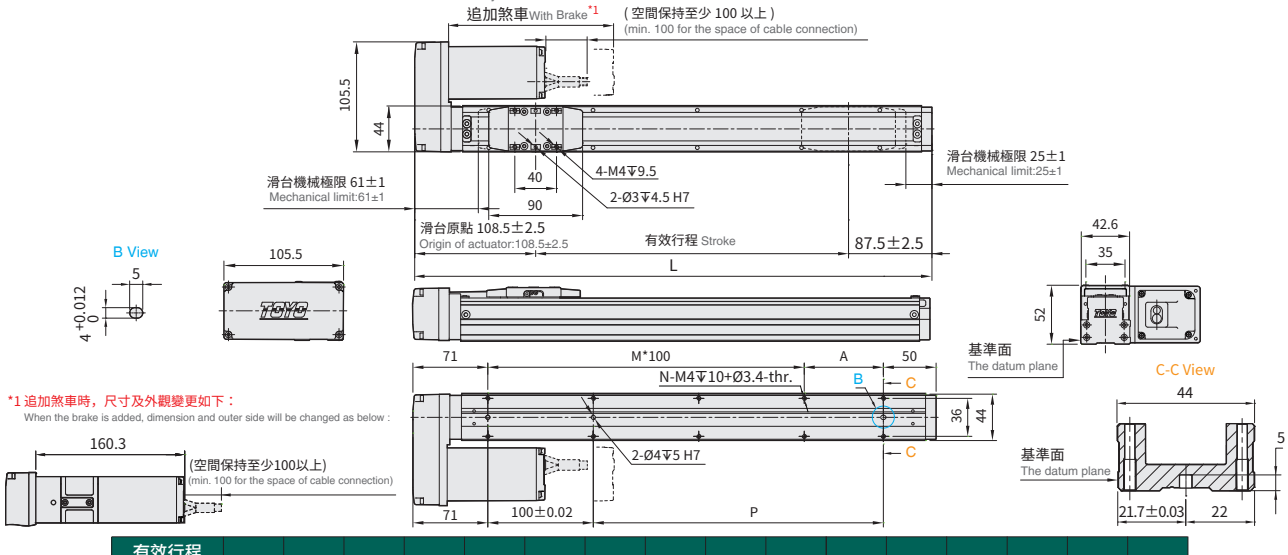
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.46	1.71	1.96	2.2	2.45	2.7	2.95	3.19	3.44	3.69	3.94	4.19	4.44	4.69	4.94	5.19

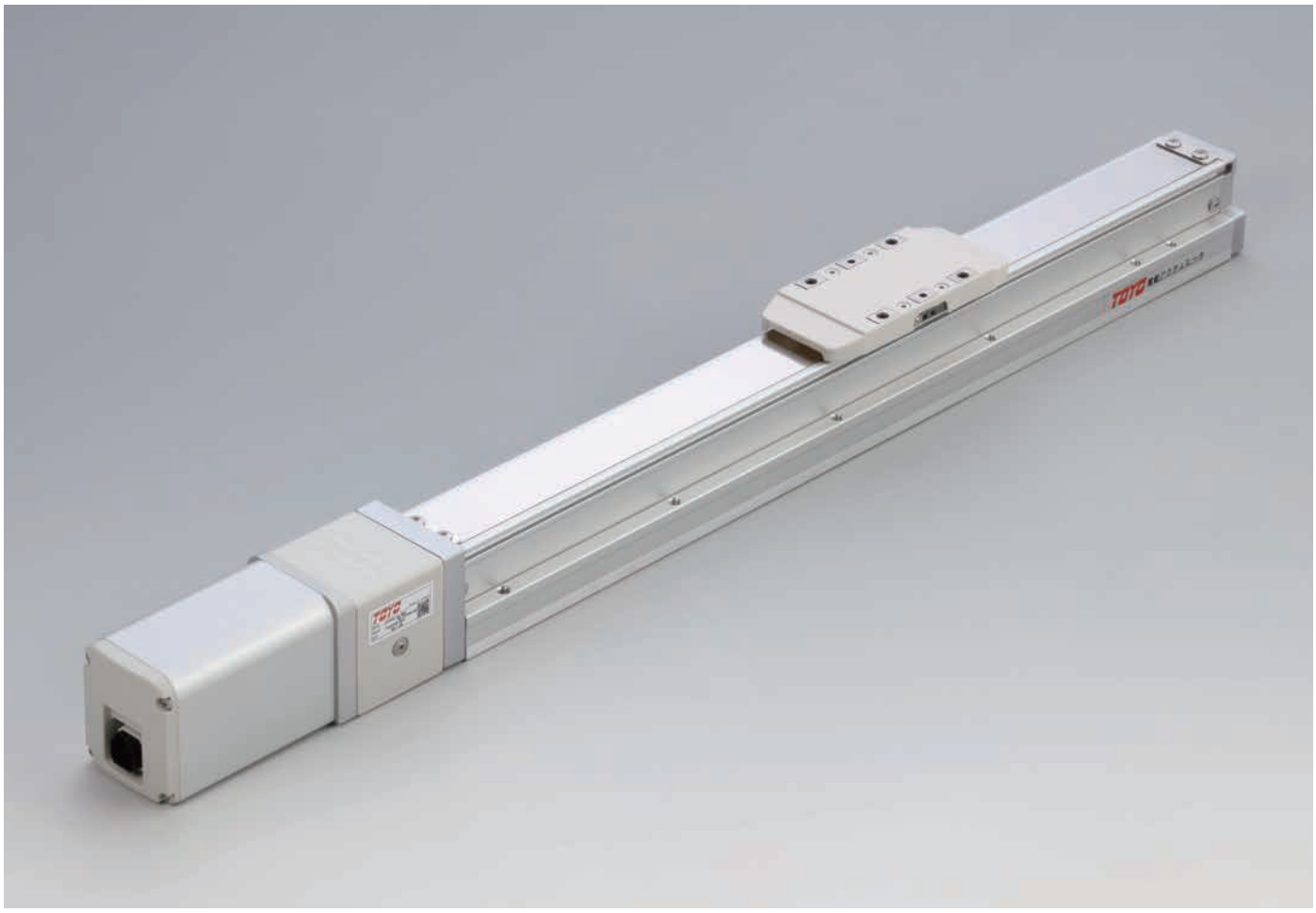
*重量包含本體與馬達。 Weight of model with motor.

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

CGTH5

Step TC

螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達尺寸 Motor Dimension	滾珠螺桿 Ball Screw
800mm	1102mm/s	42□mm	⌀12mm

型號表示方式 Ordering Method

CGTH5 - L5 - 100 - M B - TC100 - 03 - N1 - 0001

本體型號 Model

螺桿導程 Ball Screw Lead

2	2mm
5	5mm
10	10mm
20	20mm

行程 Stroke

50-800mm

間隔50 50 mm Pitch

馬達位置 Motor Position

M	馬達直結 Motor Hidden In
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

是否煞車 Brake (Optional)

垂直使用時追加內藏式煞車器
Built-in brake is added when vertically used

*若無煞車則不表示。
If No Brake,No Description.

對應控制器 Corresponding Controller

TC100

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

-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

*標配1.5m
Standard:1.5m

特注式樣 Customization Order No.

基本仕樣 Specification

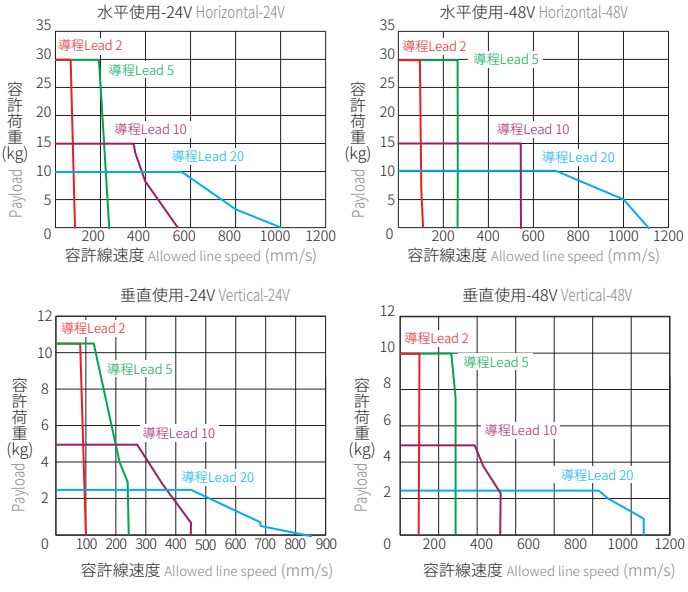
規格 Spec	位置重複精度 Repeatability (mm)		±0.01			
	螺桿導程 Ball Screw Lead (mm)		2	5	10	20
	最高速度 Maximum Speed (mm/s)※1※2	水平使用 Horizontal	≦109	≦273	≦538	≦1102
		垂直使用 Vertical	≦108	≦269	≦538	≦1093
	最大可搬重量 Maximum Payload※2	水平使用 Horizontal (kg)	≦30	≦30	≦15	≦10
		垂直使用 Vertical (kg)	≦10	≦10	≦5	≦2.5
	定格推力 Rated Thrust (N)		1147	459	229	115
	標準行程 Stroke / Pitch (mm)※3		50-800mm/50 間隔 50 mm Pitch			
部品 Parts	馬達尺寸 Motor Dimension (mm)		42□			
	滾珠螺桿規格 Ball Screw Spec		C7Ø12mm			

※1 此處最高速度為軟體移動速度設定為100%時。
The maximum speed shown here is when software speed setting is 100%.

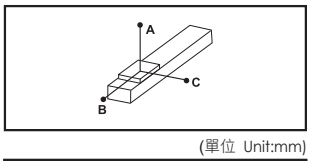
※2 最高速度及最大荷重無法同時存在，選用前請詳見速度-荷重曲線圖。
The maximum speed and maximum payload cannot exist at the same time.
Please refer to diagram of Speed and payload curve before using.

※3 行程超過600時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P189頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P189 for details.

速度-荷重曲線圖 Speed-Payload Curve Diagram

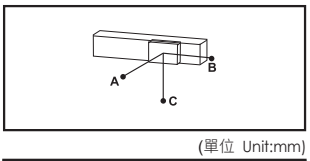


容許負載力距表 Allowable Moment



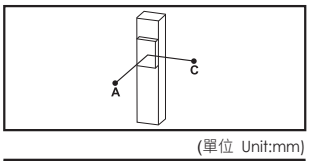
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	10kg	1290	129	180
	18kg	680	68	95
	30kg	380	38	53
導程 5 Lead	9kg	1140	114	155
	18kg	540	54	74
	30kg	290	29	41
導程 10 Lead	6kg	1414	59	204
	9g	1060	106	139
	15kg	610	61	81
導程 20 Lead	5kg	1660	166	198
	7kg	1200	120	145
	10kg	700	88	112



(單位 Unit:mm)

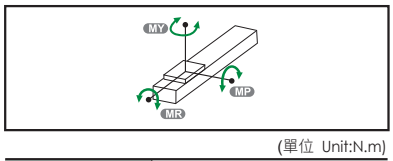
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	10kg	180	129	1290
	18kg	95	68	680
	30kg	53	38	380
導程 5 Lead	9kg	155	114	1140
	18kg	74	54	540
	30kg	41	29	290
導程 10 Lead	6kg	204	159	1414
	9g	139	106	1060
	15kg	81	61	610
導程 20 Lead	5kg	198	166	829
	7kg	145	120	660
	10kg	112	88	700



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	5.4kg	257	257
	8.1kg	175	175
	10kg	143	143
導程 5 Lead	4.5kg	277	277
	8.1kg	161	161
	10kg	123	123
導程 10 Lead	0.9kg	1120	1120
	2.7kg	392	392
	5kg	217	217
導程 20 Lead	0.9kg	1023	1023
	1.4kg	677	677
	2.5kg	396	396

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	103
MP	103
MR	144

※力距表所表示的數據，代表重心。
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※符合型錄規範的正常使用下，保證壽命為10000公里。
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		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.		
		通訊控制 Communication Control Mode	採Modbus的RS485通訊介面(最大並接16台)及一組mini USB (TOYO-Single專用)。 Use Modbus as the interface of RS485 (connect max. 16 controllers) and 1 set mini USB. (special for TOYO-single)		

CGTH
CGTH4
CGTH5

CGTH5

Step TC

螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

2D CAD 3D CAD

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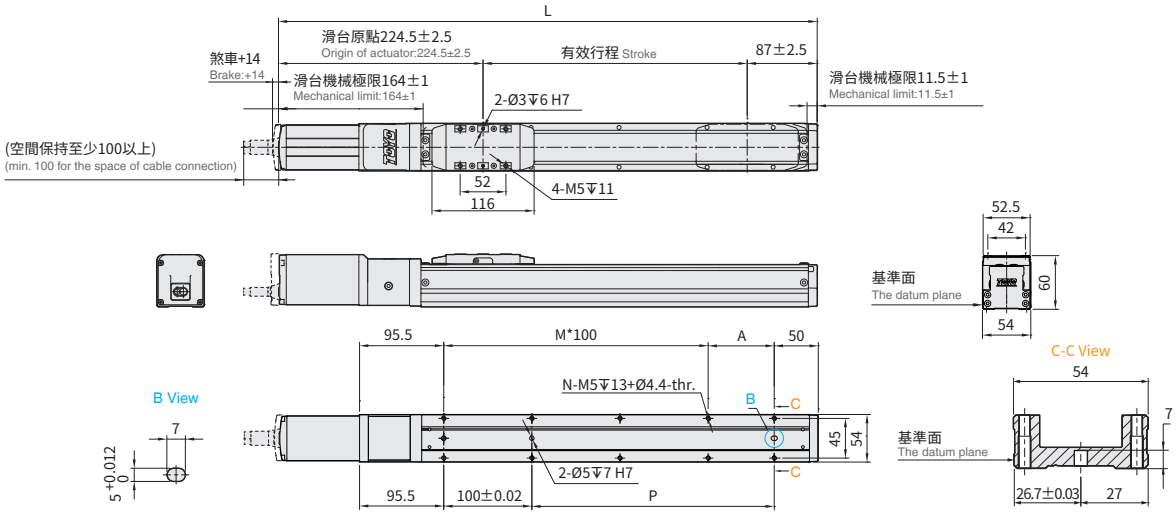
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	361.5	411.5	461.5	511.5	561.5	611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5	1011.5	1061.5	1111.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.97	2.18	2.4	2.62	2.83	3.05	3.27	3.48	3.7	3.92	4.13	4.35	4.57	4.78	5	5.22

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

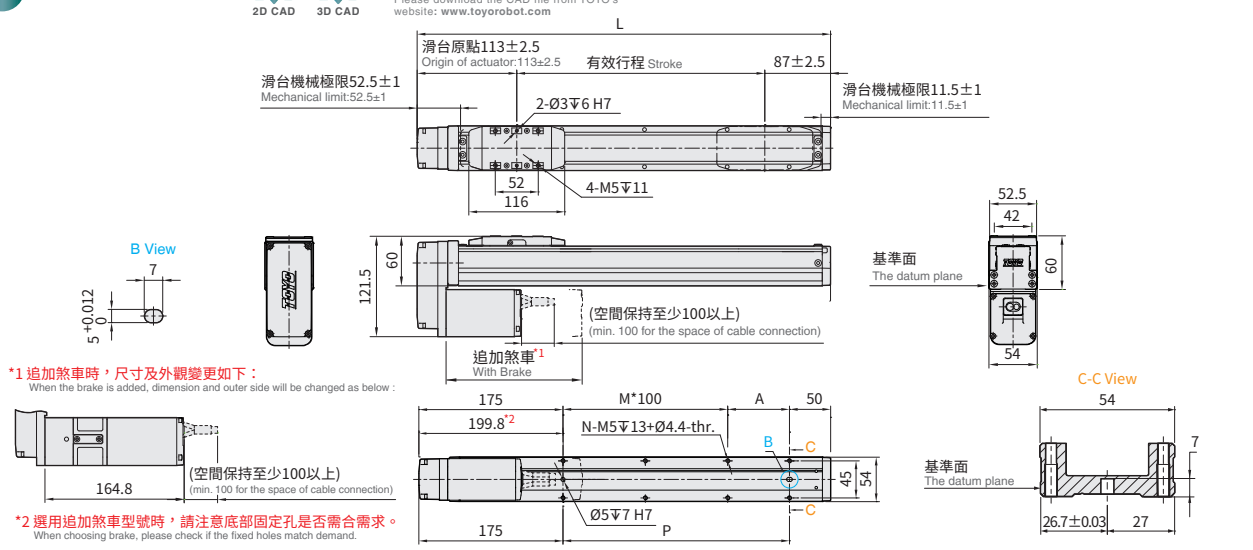
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	2.34	2.54	2.73	2.93	3.13	3.32	3.52	3.72	3.91	4.11	4.31	4.5	4.7	4.9	5.09	5.29

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

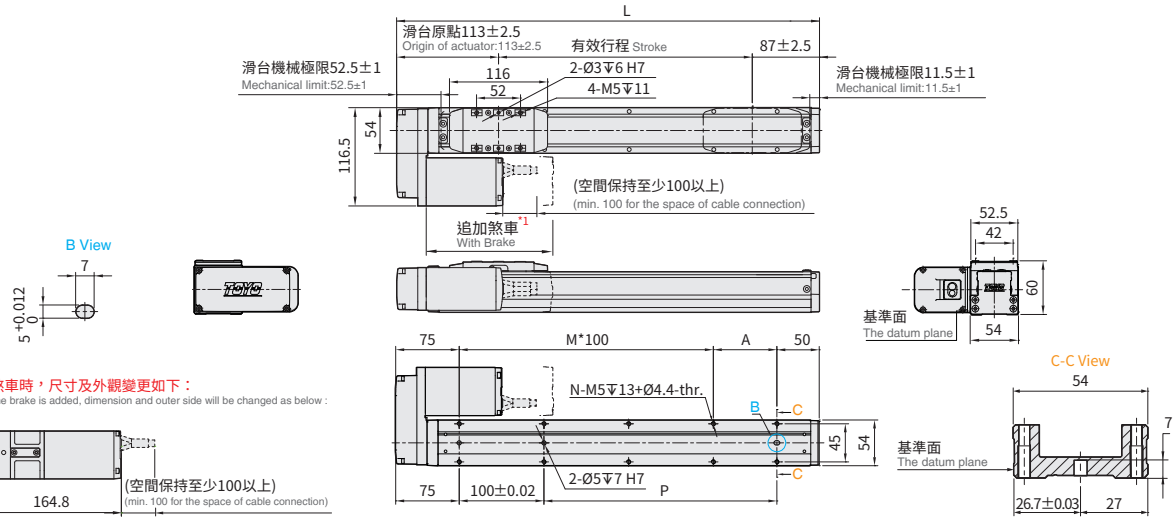
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	2.34	2.54	2.73	2.93	3.13	3.32	3.52	3.72	3.91	4.11	4.31	4.5	4.7	4.9	5.09	5.29

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

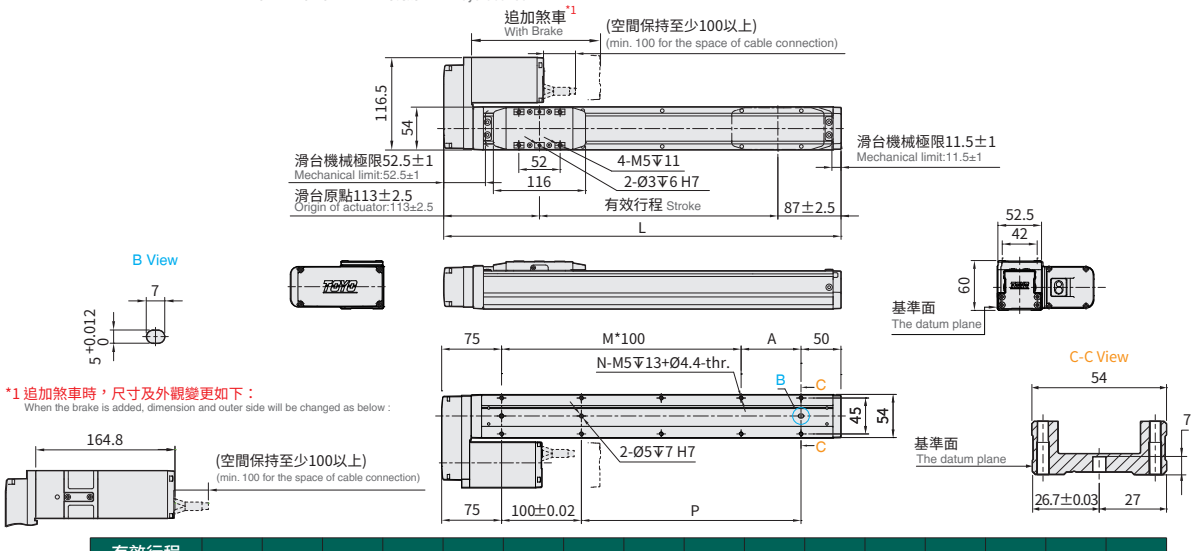
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	2.34	2.54	2.73	2.93	3.13	3.32	3.52	3.72	3.91	4.11	4.31	4.5	4.7	4.9	5.09	5.29

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

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

Memo

CGTY

軌道內嵌式小型電動缸-推桿式

CGTY built-in linear motion guide Servo Cylinder-Rod Type

Contents

小型 SMALL

CGTY4

本體寬幅 44mm
Width
最大行程 500mm 203
Max. stroke
最大荷重 25kg
Max. payload

小型 SMALL

CGTY5

本體寬幅 54mm
Width
最大行程 600mm 207
Max. stroke
最大荷重 30kg
Max. payload

規格索引

Spec Index

CGTY 軌道內嵌式小型電動缸-推桿式

CGTY built-in linear motion guide Servo Cylinder-Rod Type

使用環境 Environment	傳動方式 Drive mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width of profile (mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball screw spec (Accuracy C7)		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum speed (mm/s)
						外徑 Outer dia.(mm)	導程 Lead(mm)	水平使用 Horizontal	垂直使用 Vertical	
一般環境 Standard	滾珠螺桿 Ball screw	CGTY4	35□	44	±0.01	10	2	25	8	110
							6	20	8	331
							12	12	3.5	661
		CGTY5	42□	54	±0.01	12	2	30	10	109
							5	30	10	273
							10	15	5	538
							20	10	2.5	1102

*1:最高速度的使用條件有限制，請參閱各仕樣內頁的速度-荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

	標準行程及最高使用速度*2 Stroke(mm) & Maximum speed(mm/s) 代表速度 Speed																					頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	
	110																					203
	331																					
	661																					
	109																					207
	273																					
	538																					
	1102																					

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

The number written in the column means the highest safe speed within stroke.
If the speed is over the value shown in the chart , the vibration will be caused on the actuator.

CGTY4

Step TC

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達尺寸 Motor Dimension	滾珠螺桿 Ball Screw
500mm	696mm/s	35□mm	⌀10mm

型號表示方式 Ordering Method

CGTY4 - L2 - 100 - M B - TC100 - 03 - N1 - 0001

本體型號 Model

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

行程 Stroke

50-500mm

間隔50 50 mm Pitch

馬達位置 Motor Position

M	馬達直結 Motor Hidden In
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

是否煞車 Brake (Optional)

垂直使用時追加內藏式煞車器
Built-in brake is added when vertically used

*若無煞車則不表示。
If No Brake,No Description.

對應控制器 Corresponding Controller

TC100

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

-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

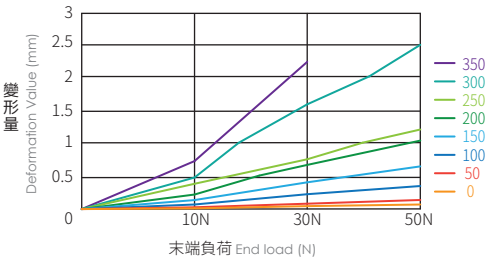
*標配1.5m
Standard:1.5m

特注式樣 Customization Order No.

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1	水平使用 Horizontal	≦110	≦ 331	≦ 661
		垂直使用 Vertical	≦108	≦ 314	≦ 646
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg) ※2	≦ 25	≦ 20	≦ 12
		垂直使用 Vertical (kg)	≦ 8	≦ 8	≦ 3.5
	定格推力 Rated Thrust (N)		1094	365	182
	標準行程 Stroke / Pitch (mm)		50-500mm/50 間隔 50 mm Pitch		
部品 Parts	馬達尺寸 Motor Dimension (mm)		35□		
	滾珠螺桿規格 Ball Screw Spec		C7Ø10mm		

出力軸變形量 Shaft Output Deformation Value

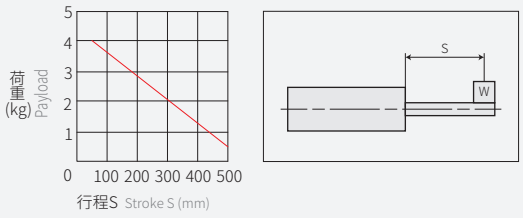


※此圖表為參考值。
This form is only reference values.

※ 1 此處最高速度為軟體移動速度設定為 100% 時。
The maximum speed shown here is when software speed setting is 100%.

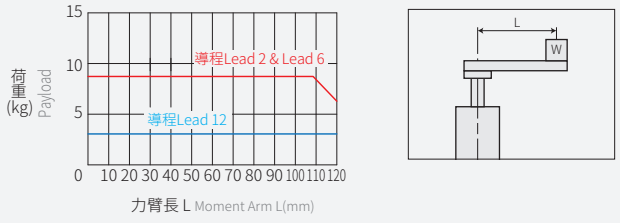
※2 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

水平安裝荷重 Load In Horizontal Installation



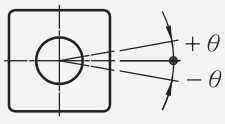
※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

垂直安裝負載 Load In Vertical Installation



※計算條件:3000rpm/min , 加減速0.3s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.3s.

出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod



防止迴轉精度 θ Anti-rotating accuracy
±0°

※內附滾珠滑軌機構 , 所以推桿軸心不迴轉。
With built-in circular guideway, so the rod shaft of actuator does not rotate.

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 Featrues	電氣規格 Electrical Spec.	詳細參閱 Reference Page
	TC100	**Pulse控制** Pulse Control Mode	Line driver 200k Hz Open collector 60k Hz 同時間只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz.	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。 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.	P.223
		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.		
		通訊控制 Communication Control Mode	採Modbus的RS485通訊介面(最大並接16台)及一組mini USB (TOYO-Single專用)。 Use Modbus as the interface of RS485 (connect max. 16 controllers) and 1 set mini USB. (special for TOYO-single)		

CGTY4

Step TC

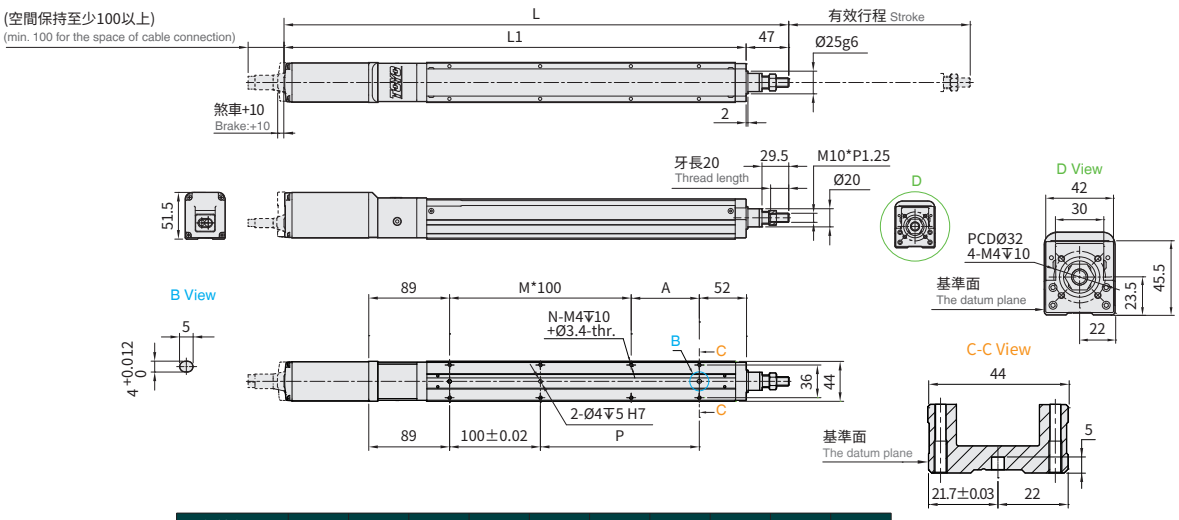
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	406.5	456.5	506.5	556.5	606.5	656.5	706.5	756.5	806.5	856.5
L1	359.5	409.5	459.5	509.5	559.5	609.5	659.5	709.5	759.5	809.5
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
*Weight(kg)	1.33	1.58	1.83	2.08	2.32	2.57	2.82	3.07	3.31	3.56

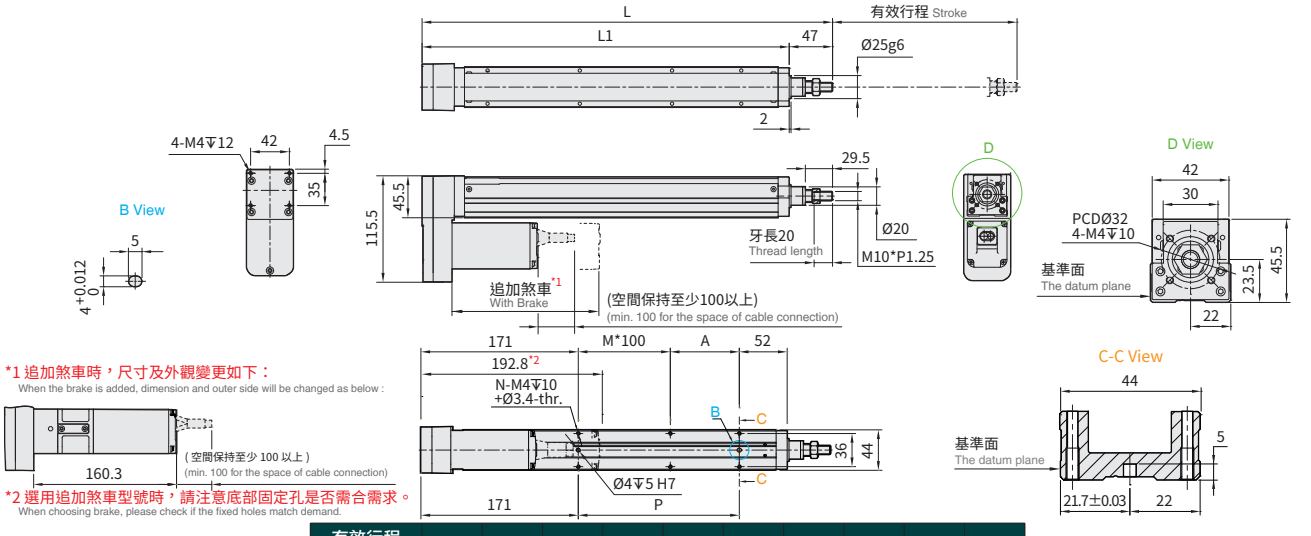
*重量包含本體與馬達。 Weight of model with motor.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4
N	4	4	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375	425	475
*Weight(kg)	1.63	1.88	2.13	2.38	2.62	2.87	3.12	3.37	3.61	3.86

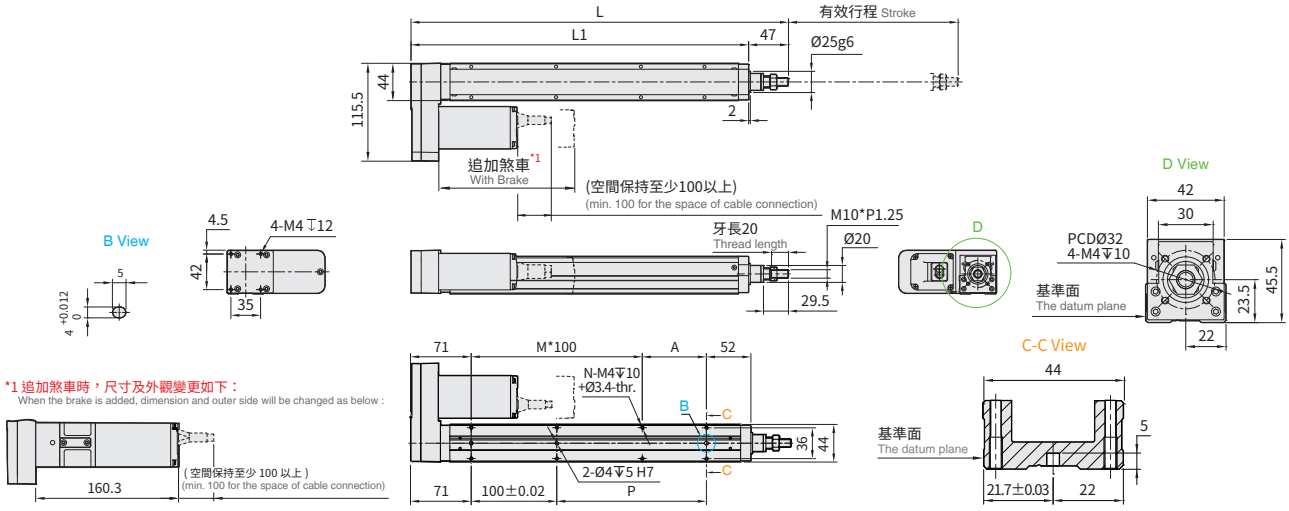
*重量包含本體與馬達。 Weight of model with motor.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
*Weight(kg)	1.63	1.88	2.13	2.38	2.62	2.87	3.12	3.37	3.61	3.86

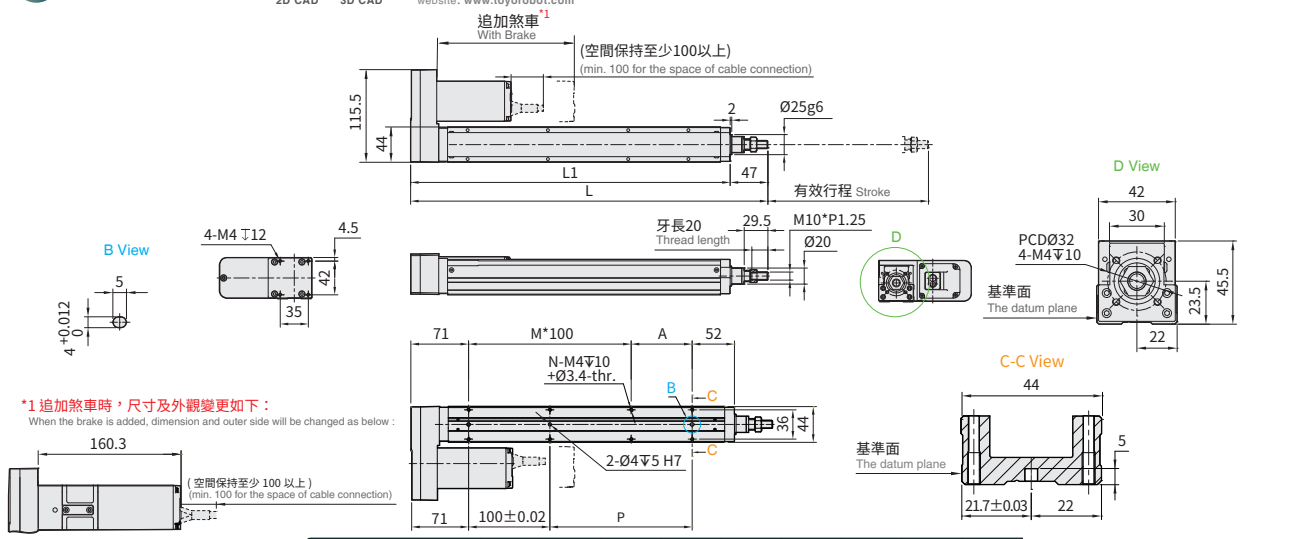
*重量包含本體與馬達。 Weight of model with motor.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500
L	295	345	395	445	495	545	595	645	695	745
L1	248	298	348	398	448	498	548	598	648	698
A	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5
N	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475
*Weight(kg)	1.63	1.88	2.13	2.38	2.62	2.87	3.12	3.37	3.61	3.86

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

CGTY5

Step TC

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達尺寸 Motor Dimension	滾珠螺桿 Ball Screw
600mm	1160mm/s	42□mm	⌀12mm

型號表示方式 Ordering Method

CGTY5 - L5 - 100 - M B - TC100 - 03 - N1 - 0001

本體型號 Model

螺桿導程 Ball Screw Lead

2	2mm
5	5mm
10	10mm
20	20mm

行程 Stroke

50-600mm

間隔50 Pitch 50 mm

馬達位置 Motor Position

M	馬達直結 Motor Hidden In
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

是否煞車 Brake (Optional)

垂直使用時追加內藏式煞車器 Built-in brake is added when vertically used

*若無煞車則不表示。 If No Brake,No Description.

對應控制器 Corresponding Controller

TC100

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

-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

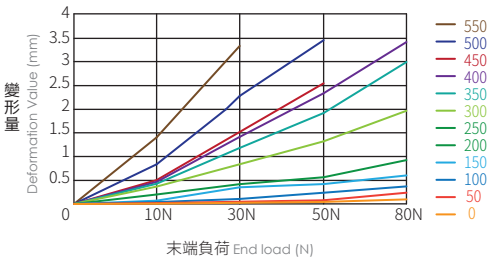
*標配1.5m Standard:1.5m

特注式樣 Customization Order No.

基本仕樣 Specification

規格 Spec	位置重複精度 Repeatability (mm)		±0.01			
	螺桿導程 Ball Screw Lead (mm)		2	5	10	20
	最高速度 Maximum Speed (mm/s)※1	水平使用 Horizontal	≦109	≦273	≦538	≦1102
		垂直使用 Vertical	≦108	≦269	≦538	≦1093
	最大可搬重量 Maximum Payload	水平使用 Horizontal (kg) ※2	≦30	≦30	≦15	≦10
		垂直使用 Vertical (kg)	≦10	≦10	≦5	≦2.5
	定格推力 Rated Thrust (N)		1147	459	229	115
	標準行程 Stroke / Pitch (mm)		50-600mm/50 間隔 50 mm Pitch			
部品 Parts	馬達尺寸 Motor Dimension (mm)		42□			
	滾珠螺桿規格 Ball Screw Spec		C7Ø12mm			

出力軸變形量 Shaft Output Deformation Value

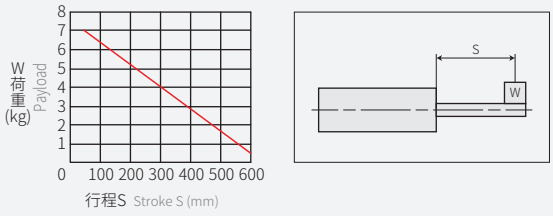


※此圖表為參考值。
This form is only reference values.

※ 1 此處最高速度為軟體移動速度設定為 100% 時。
The maximum speed shown here is when software speed setting is 100%.

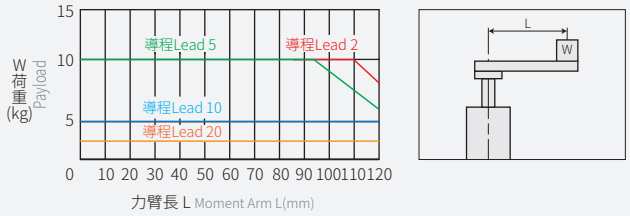
※2 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

水平安裝荷重 Load In Horizontal Installation



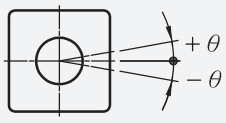
※無外部輔助機構,負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

垂直安裝負載 Load In Vertical Installation



※計算條件:3000rpm/min , 加減速0.3s 。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.3s.

出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod



防止迴轉精度 θ Anti-rotating accuracy
±0°

※內附滾珠滑軌機構 , 所以推桿軸心不迴轉。
With built-in circular guideway, so the rod shaft of actuator does not rotate.

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 Featrues	電氣規格 Electrical Spec.	詳細參閱 Reference Page
	TC100	**Pulse控制** Pulse Control Mode	Line driver 200k Hz Open collector 60k Hz 同時間只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz.	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。 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.	P.223
		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.		
		通訊控制 Communication Control Mode	採Modbus的RS485通訊介面(最大並接16台)及一組mini USB (TOYO-Single專用)。 Use Modbus as the interface of RS485 (connect max. 16 controllers) and 1 set mini USB. (special for TOYO-single)		

CGTY5

Step TC

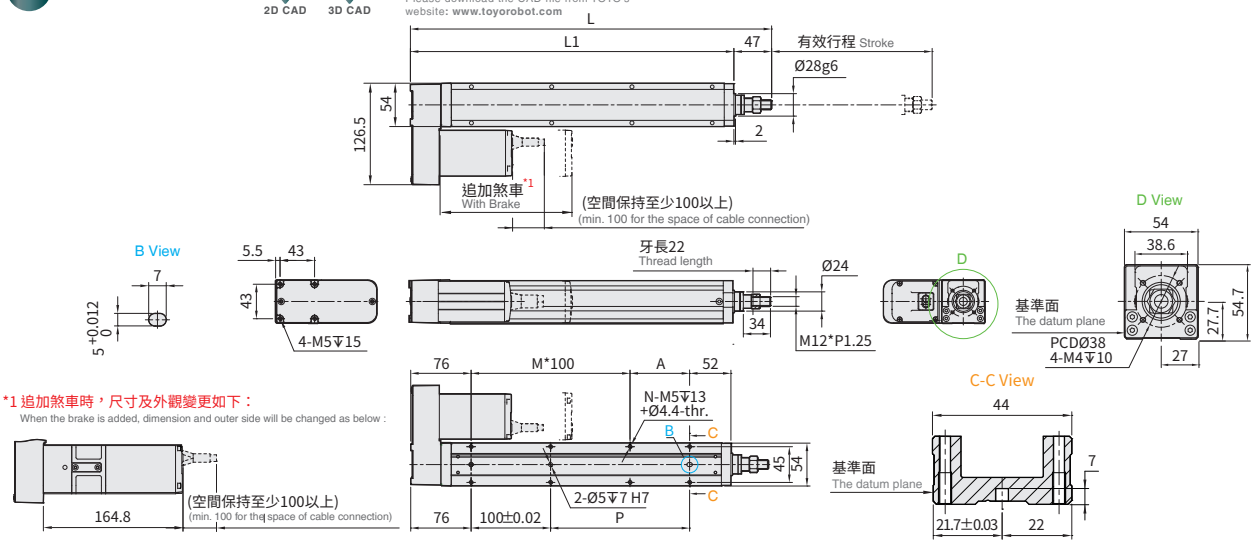
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

2D CAD 3D CAD

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

(單位 Unit : mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	300	350	400	450	500	550	600	650	700	750	800	850
L1	253	303	353	403	453	503	553	603	653	703	753	803
A	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6
N	6	6	8	8	10	10	12	12	14	14	16	16
P	25	75	125	175	225	275	325	375	425	475	525	575
*Weight(kg)	2.3	2.49	2.69	2.89	3.08	3.28	3.48	3.67	3.87	4.07	4.26	4.46

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

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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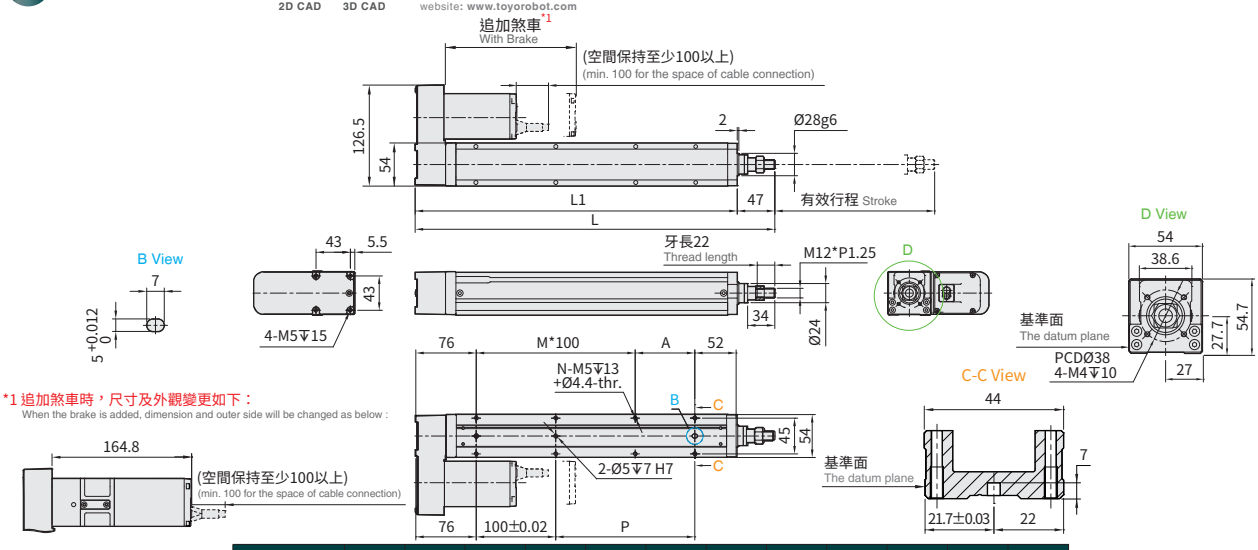
Please download the CAD file from TOYO's website: www.toyorobot.com

(單位 Unit : mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	300	350	400	450	500	550	600	650	700	750	800	850
L1	253	303	353	403	453	503	553	603	653	703	753	803
A	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6
N	6	6	8	8	10	10	12	12	14	14	16	16
P	25	75	125	175	225	275	325	375	425	475	525	575
*Weight(kg)	2.3	2.49	2.69	2.89	3.08	3.28	3.48	3.67	3.87	4.07	4.26	4.46

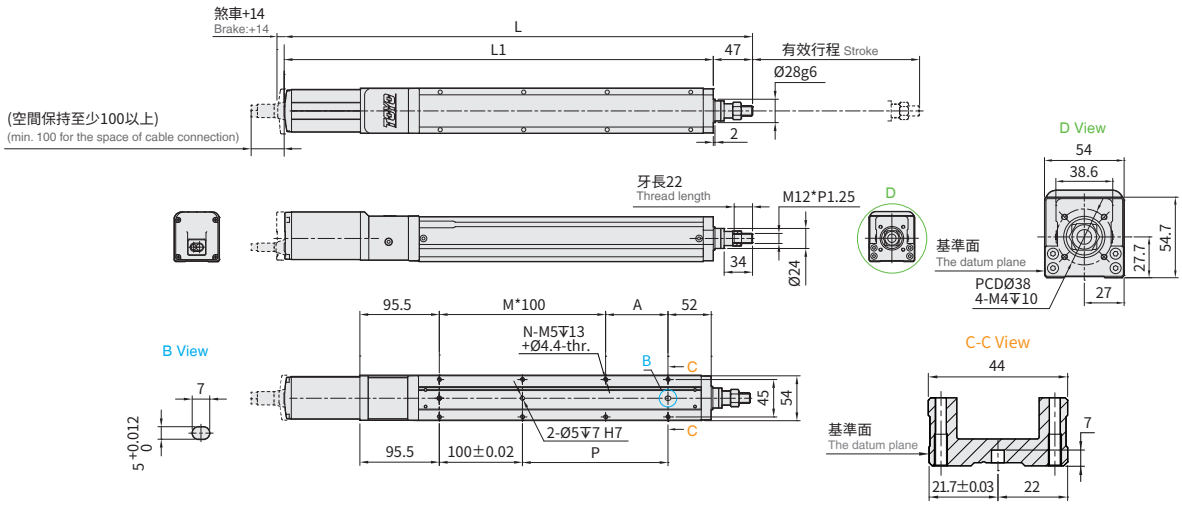
*重量包含本體與馬達。 Weight of model with motor.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	411	461	511	561	611	661	711	761	811	861	911	961
L1	364	414	464	514	564	614	664	714	764	814	864	914
A	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6
N	6	6	8	8	10	10	12	12	14	14	16	16
P	25	75	125	175	225	275	325	375	425	475	525	575
*Weight(kg)	1.91	2.12	2.34	2.56	2.77	2.99	3.21	3.42	3.64	3.86	4.07	4.29

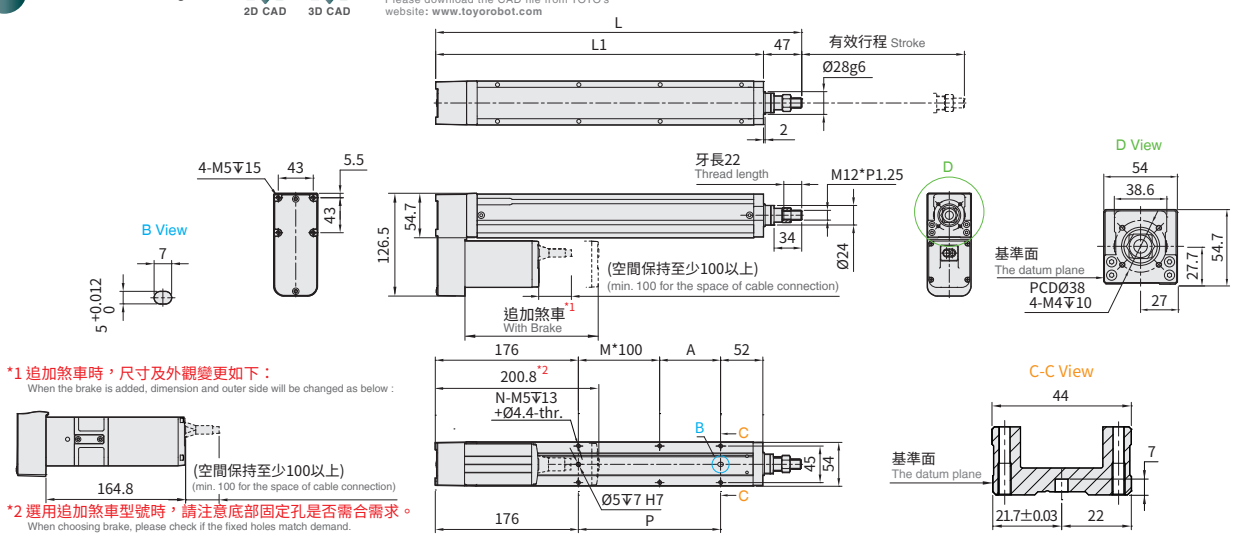
*重量包含本體與馬達。 Weight of model with motor.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



*1 追加煞車時，尺寸及外觀變更如下：
When the brake is added, dimension and outer side will be changed as below :

*2 選用追加煞車型號時，請注意底部固定孔是否需合需求。
When choosing brake, please check if the fixed holes match demand.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	300	350	400	450	500	550	600	650	700	750	800	850
L1	253	303	353	403	453	503	553	603	653	703	753	803
A	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5
N	4	4	6	6	8	8	10	10	12	12	14	14
P	25	75	125	175	225	275	325	375	425	475	525	575
*Weight(kg)	2.3	2.49	2.69	2.89	3.08	3.28	3.48	3.67	3.87	4.07	4.26	4.46

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

Memo

CGCH

CGCH軌道內嵌式小型電動缸-無塵室專用

CGCH built-in linear motion guide Servo Cylinder-Clean Room Type

Contents

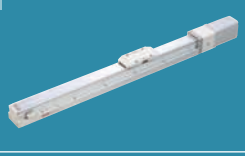
小型 SMALL

CGCH4

本體寬幅 44mm
Width
最大行程 800mm 215
Max. stroke
最大荷重 25kg
Max. payload

小型 SMALL

CGCH5



本體寬幅 54mm
Width
最大行程 800mm 219
Max. stroke
最大荷重 30kg
Max. payload

規格索引

Spec Index

CGCH 軌道內嵌式小型電動缸-無塵室專用

CGCH built-in linear motion guide Servo Cylinder-Clean Room Type

使用環境 Environment	傳動方式 Drive mode	仕樣 Specification	馬達尺寸 Motor dimension (mm)	本體寬幅 Width of profile (mm)	位置重複精度 Repeatability(mm)	螺桿規格(C7級) Ball screw spec (Accuracy C7)		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum speed (mm/s)
						外徑 Outer dia.(mm)	導程 Lead(mm)	水平使用 Horizontal	垂直使用 Vertical	
無塵環境 Clean room	滾珠螺桿 Ball screw	CGCH4	35□	44	±0.01	10	2	25	8	110
							6	20	8	331
							12	12	3.5	661
		CGCH5	42□	54	±0.01	12	2	30	10	109
							5	30	10	273
							10	15	5	538
							20	10	2.5	1102

*1:最高速度的使用條件有限制，請參閱各仕樣內頁的速度-荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

標準行程及最高使用速度*2 Stroke(mm) & Maximum speed(mm/s) 代表速度 Speed																							頁數 Page
行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
110												100	90	80	70	60							215
331												300	270	240	210	180							
661												600	540	480	420	360							
109													90	80	70	60							219
273													225	200	175	150							
538													450	400	350	300							
1102													900	800	700	600							

*2:標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

The number written in the column means the highest safe speed within stroke.
If the speed is over the value shown in the chart , the vibration will be caused on the actuator.

CGCH4

Step TC

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達尺寸 Motor Dimension	滾珠螺桿 Ball Screw
800mm	661mm/s	35□mm	⌀10mm

型號表示方式 Ordering Method

CGCH4 - L2 - 100 - M B - TC100 - 03 - N1 - 0001

本體型號 Model

螺桿導程 Ball Screw Lead

2	2mm
6	6mm
12	12mm

行程 Stroke

50-800mm
間隔50 50 mm Pitch

馬達位置 Motor Position

M	馬達直結 Motor Hidden In
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

是否煞車 Brake (Optional)

垂直使用時追加內藏式煞車器 Built-in brake is added when vertically used

*若無煞車則不表示。
If No Brake,No Description.

對應控制器 Corresponding Controller

TC100

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

-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

*標配1.5m
Standard:1.5m

特注式樣 Customization Order No.

基本仕樣 Specification

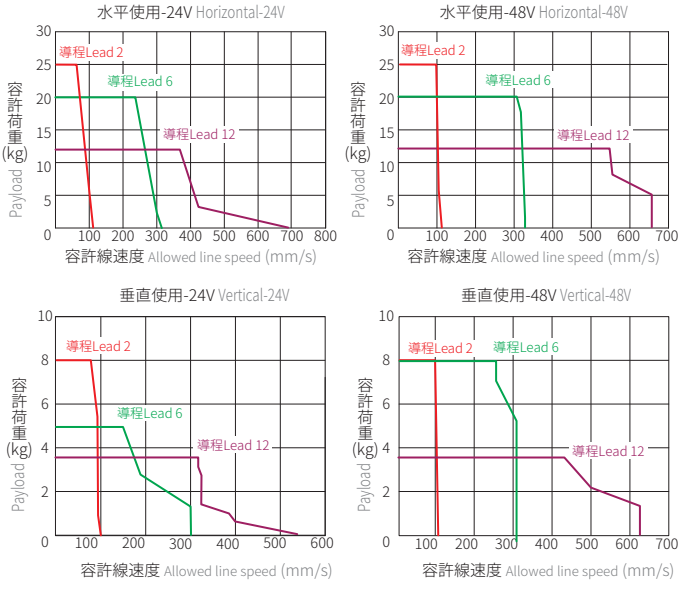
規格 Spec	位置重複精度 Repeatability (mm)		±0.01		
	螺桿導程 Ball Screw Lead (mm)		2	6	12
	最高速度 Maximum Speed (mm/s)※1※2	水平使用 Horizontal	≦110	≦ 331	≦ 661
		垂直使用 Vertical	≦108	≦ 314	≦ 646
	最大可搬重量 Maximum Payload※2	水平使用 Horizontal (kg)	≦ 25	≦ 20	≦ 12
		垂直使用 Vertical (kg)	≦ 8	≦ 8	≦ 3.5
	定格推力 Rated Thrust (N)		1094	365	182
	標準行程 Stroke / Pitch (mm)※3		50-800mm/50 間隔 50 mm Pitch		
部品 Parts	馬達尺寸 Motor Dimension (mm)		35□		
	滾珠螺桿規格 Ball Screw Spec		C7Ø10mm		

※1 此處最高速度為軟體移動速度設定為100%時。
The maximum speed shown here is when software speed setting is 100%.

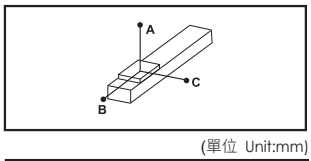
※2 最高速度及最大荷重無法同時存在，選用前請詳見速度-荷重曲線圖。
The maximum speed and maximum payload cannot exist at the same time.
Please refer to diagram of Speed and payload curve before using.

※3 行程超過550時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P213頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P213 for details.

速度-荷重曲線圖 Speed-Payload Curve Diagram

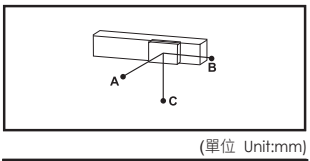


容許負載力距表 Allowable Moment



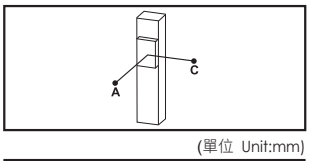
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	12kg	640	64	94
	18kg	400	40	59
	25kg	280	28	42
導程 6 Lead	8kg	770	77	107
	12kg	480	48	68
	20kg	280	28	39
導程 12 Lead	6kg	990	99	135
	9kg	610	61	77
	12kg	440	44	55



(單位 Unit:mm)

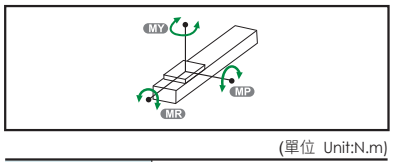
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	12kg	93	64	640
	18kg	58	40	400
	25kg	41	28	280
導程 6 Lead	8kg	107	77	770
	12kg	68	48	480
	20kg	39	28	280
導程 12 Lead	6kg	135	99	990
	9kg	88	61	610
	12kg	63	44	440



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	3.6kg	246	246
	5.4kg	165	165
	8kg	116	116
導程 6 Lead	3.2kg	215	215
	5.4kg	140	140
	8kg	99	99
導程 12 Lead	1kg	646	646
	2.3kg	288	288
	3.5kg	190	190

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	79
MP	79
MR	116

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use.
Contact us for the details if you want to apply ceiling-mount inverse usage.

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 Featrues	電氣規格 Electrical Spec.	詳細參閱 Reference Page
	TC100	**Pulse控制** Pulse Control Mode	Line driver 200k Hz Open collector 60k Hz 同時間只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz.	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。 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.	P.223
		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.		
		通訊控制 Communication Control Mode	採Modbus的RS485通訊介面(最大並接16台)及一組mini USB (TOYO-Single專用)。 Use Modbus as the interface of RS485 (connect max. 16 controllers) and 1 set mini USB. (special for TOYO-single)		

CGCH4

Step TC

螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

2D CAD 3D CAD

● CAD圖面可至www.toyorobot.com下載 ●
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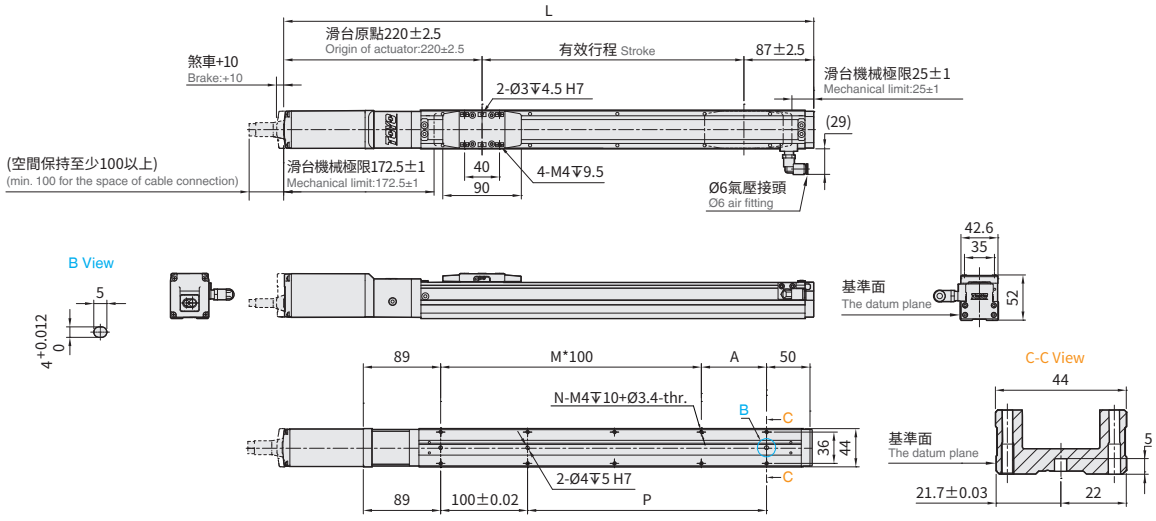
(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	357.5	407.5	457.5	507.5	557.5	607.5	657.5	707.5	757.5	807.5	857.5	907.5	957.5	1007.5	1057.5	1107.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.2	1.45	1.7	1.95	2.19	2.44	2.69	2.94	3.18	3.43	3.68	3.93	4.18	4.43	4.68	4.93

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

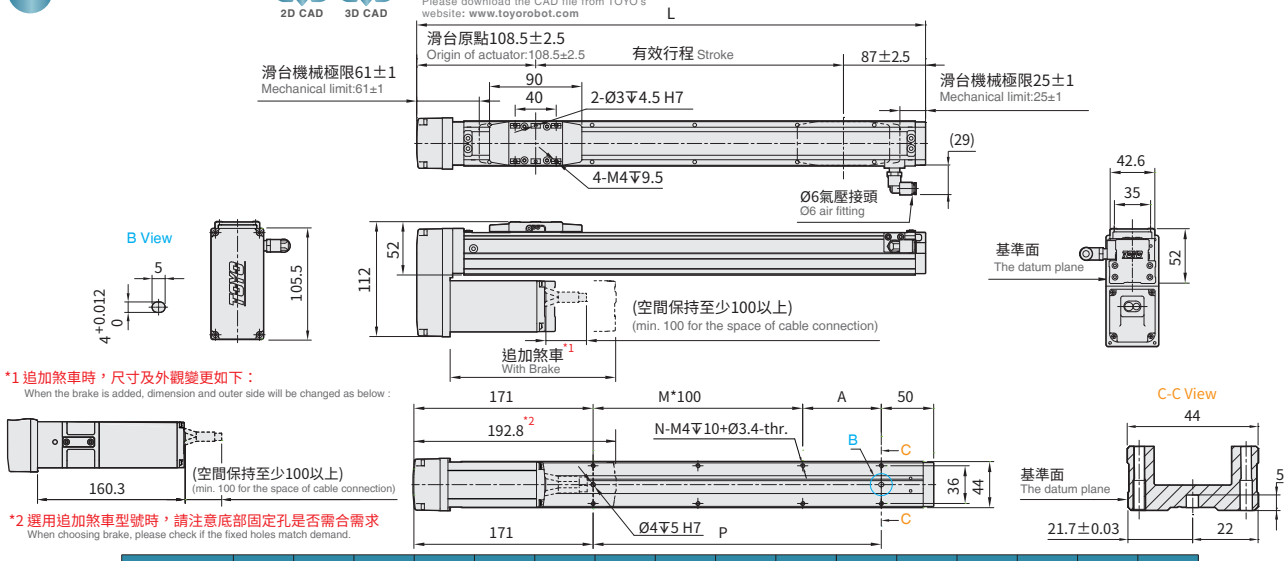
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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

(單位 Unit：mm)



*1 追加煞車時，尺寸及外觀變更如下：
When the brake is added, dimension and outer side will be changed as below :

*2 選用追加煞車型號時，請注意底部固定孔是否需合需求
When choosing brake, please check if the fixed holes match demand.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.46	1.71	1.96	2.2	2.45	2.7	2.95	3.19	3.44	3.69	3.94	4.19	4.44	4.69	4.94	5.19

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

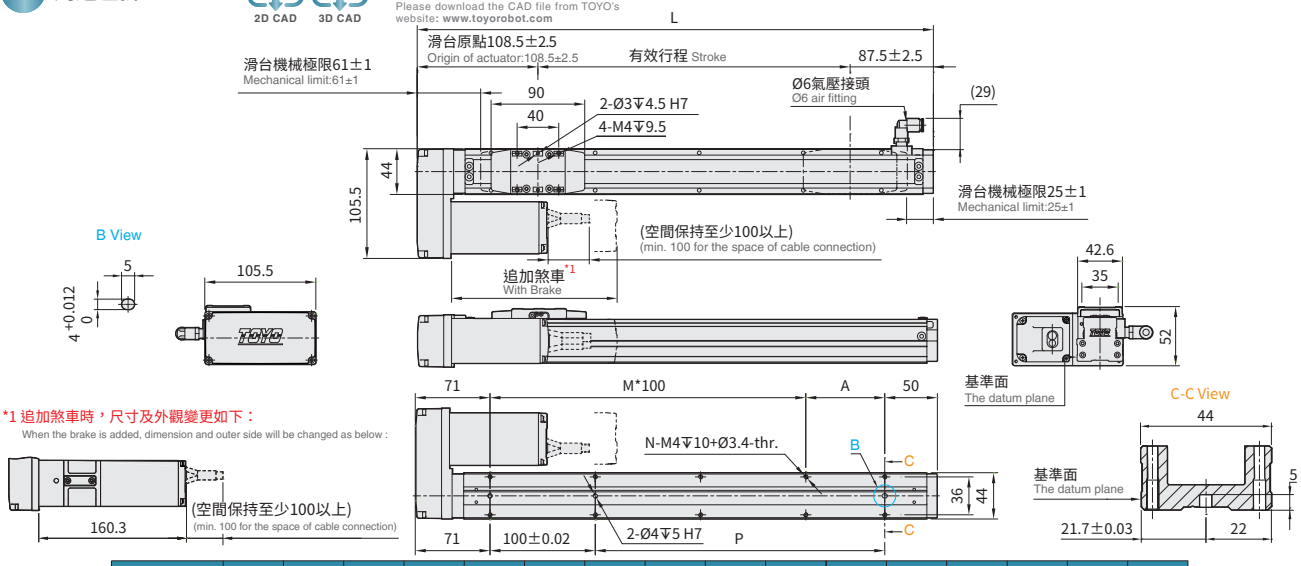
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.46	1.71	1.96	2.2	2.45	2.7	2.95	3.19	3.44	3.69	3.94	4.19	4.44	4.69	4.94	5.19

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

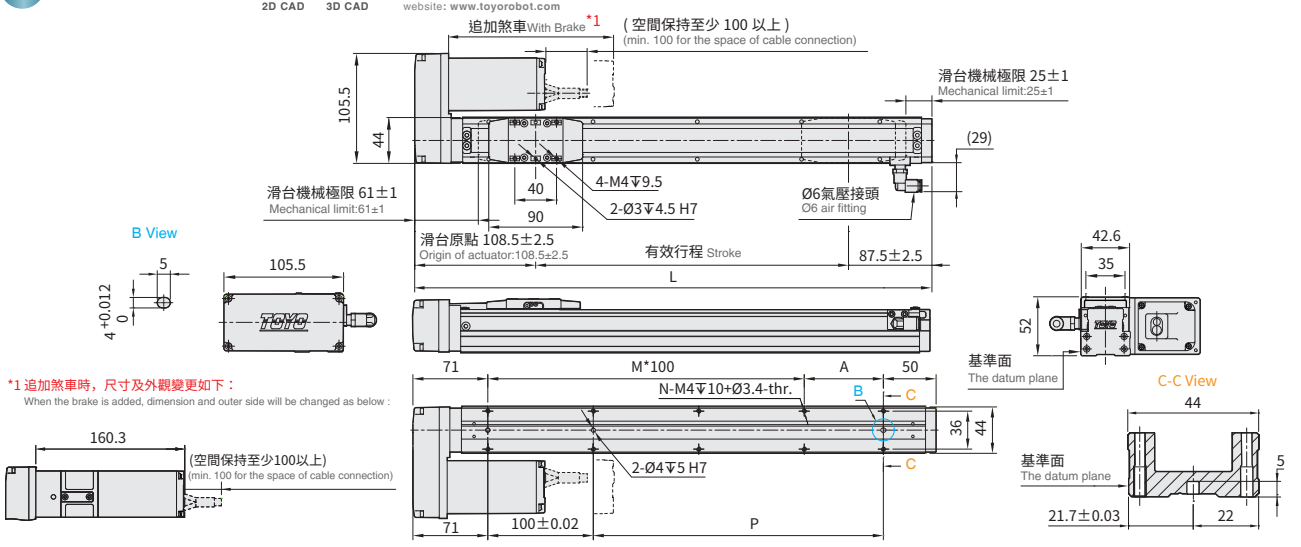
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.46	1.71	1.96	2.2	2.45	2.7	2.95	3.19	3.44	3.69	3.94	4.19	4.44	4.69	4.94	5.19

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

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

CGCH5

Step TC

螺桿驅動 Ball Screw Drive

最大行程 Maximum Stroke	最高速度 Maximum Speed	馬達尺寸 Motor Dimension	滾珠螺桿 Ball Screw
800mm	1102mm/s	42□mm	⌀12mm

型號表示方式 Ordering Method

CGCH5 - L5 - 100 - M B - TC100 - 03 - N1 - 0001

本體型號 Model

螺桿導程 Ball Screw Lead

2	2mm
5	5mm
10	10mm
20	20mm

行程 Stroke

50-800mm
間隔50 50 mm Pitch

馬達位置 Motor Position

M	馬達直結 Motor Hidden In
BM	馬達下折 Motor Bottom Side
BR	馬達右折 Motor Right Side
BL	馬達左折 Motor Left Side

是否煞車 Brake (Optional)

垂直使用時追加內藏式煞車器
Built-in brake is added when vertically used

*若無煞車則不表示。
If No Brake,No Description.

對應控制器 Corresponding Controller

TC100

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

-	標準I/O彩虹排線 I/O Cable
N1	隔離I/O線 Shielded I/O Cable

*標配1.5m
Standard:1.5m

特注式樣 Customization Order No.

基本仕樣 Specification

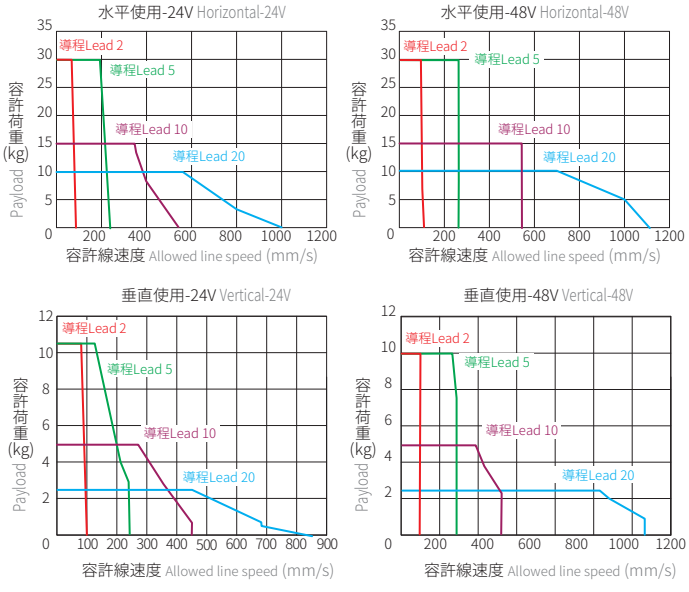
規格 Spec	位置重複精度 Repeatability (mm)		±0.01			
	螺桿導程 Ball Screw Lead (mm)		2	5	10	20
	最高速度 Maximum Speed (mm/s)※1※2	水平使用 Horizontal	≦109	≦273	≦538	≦1102
		垂直使用 Vertical	≦108	≦269	≦538	≦1093
	最大可搬重量 Maximum Payload※2	水平使用 Horizontal (kg)	≦30	≦30	≦15	≦10
		垂直使用 Vertical (kg)	≦10	≦10	≦5	≦2.5
	定格推力 Rated Thrust (N)		1147	459	229	115
	標準行程 Stroke / Pitch (mm)※3		50-800mm/50 間隔 50 mm Pitch			
部品 Parts	馬達尺寸 Motor Dimension (mm)		42□			
	滾珠螺桿規格 Ball Screw Spec		C7Ø12mm			

※1 此處最高速度為軟體移動速度設定為100%時。
The maximum speed shown here is when software speed setting is 100%.

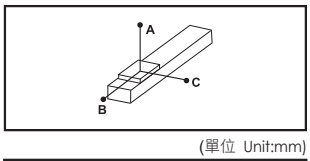
※2 最高速度及最大荷重無法同時存在，選用前請詳見速度-荷重曲線圖。
The maximum speed and maximum payload cannot exist at the same time.
Please refer to diagram of Speed and payload curve before using.

※3 行程超過600時，會產生螺桿偏擺震動，此時請將速度調降。詳細請參考P213頁說明。
When the stroke is over 550mm, the run-out of the ballscrew will occur.
We recommend to low down the working speed under this circumstances.Please refer to P213 for details.

速度-荷重曲線圖 Speed-Payload Curve Diagram

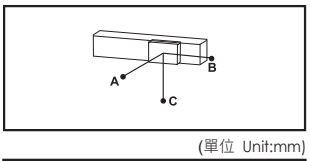


容許負載力距表 Allowable Moment



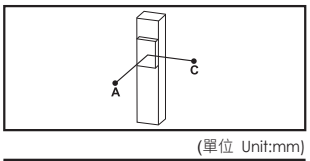
(單位 Unit:mm)

水平安裝 Horizontal Installation		A	B	C
導程 2 Lead	10kg	1290	129	180
	18kg	680	68	95
	30kg	380	38	53
導程 5 Lead	9kg	1140	114	155
	18kg	540	54	74
	30kg	290	29	41
導程 10 Lead	6kg	1414	59	204
	9g	1060	106	139
	15kg	610	61	81
導程 20 Lead	5kg	1660	166	198
	7kg	1200	120	145
	10kg	700	88	112



(單位 Unit:mm)

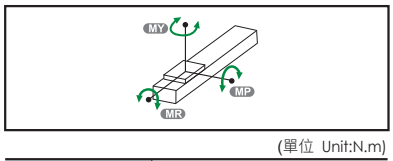
壁掛安裝 Wall Installation		A	B	C
導程 2 Lead	10kg	180	129	1290
	18kg	95	68	680
	30kg	53	38	380
導程 5 Lead	9kg	155	114	1140
	18kg	74	54	540
	30kg	41	29	290
導程 10 Lead	6kg	204	159	1414
	9g	139	106	1060
	15kg	81	61	610
導程 20 Lead	5kg	198	166	829
	7kg	145	120	660
	10kg	112	88	700



(單位 Unit:mm)

垂直安裝 Vertical Installation		A	C
導程 2 Lead	5.4kg	257	257
	8.1kg	175	175
	10kg	143	143
導程 5 Lead	4.5kg	277	277
	8.1kg	161	161
	10kg	123	123
導程 10 Lead	0.9kg	1120	1120
	2.7kg	392	392
	5kg	217	217
導程 20 Lead	0.9kg	1023	1023
	1.4kg	677	677
	2.5kg	396	396

靜態容許負載慣量 Static Loading Moment



(單位 Unit:N.m)

MY	103
MP	103
MR	144

※力距表所表示的數據，代表重心。
The torque value in the chart indicate the center of gravity.

※符合型錄規範的正常使用下，保證壽命為10000公里。
Operation life is 10,000km when the product is using under the specified conditions.

※倒吊使用無法套用標準規範，如有需求請洽詢我司業務。
Data information is not for ceiling-mount inverse use.
Contact us for the details if you want to apply ceiling-mount inverse usage.

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 Featrues	電氣規格 Electrical Spec.	詳細參閱 Reference Page
	TC100	**Pulse控制** Pulse Control Mode	Line driver 200k Hz Open collector 60k Hz 同時間只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz.	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。 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.	P.223
		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.		
		通訊控制 Communication Control Mode	採Modbus的RS485通訊介面(最大並接16台)及一組mini USB (TOYO-Single專用)。 Use Modbus as the interface of RS485 (connect max. 16 controllers) and 1 set mini USB. (special for TOYO-single)		

CGCH
CGCH4
CGCH5

CGCH5

Step TC

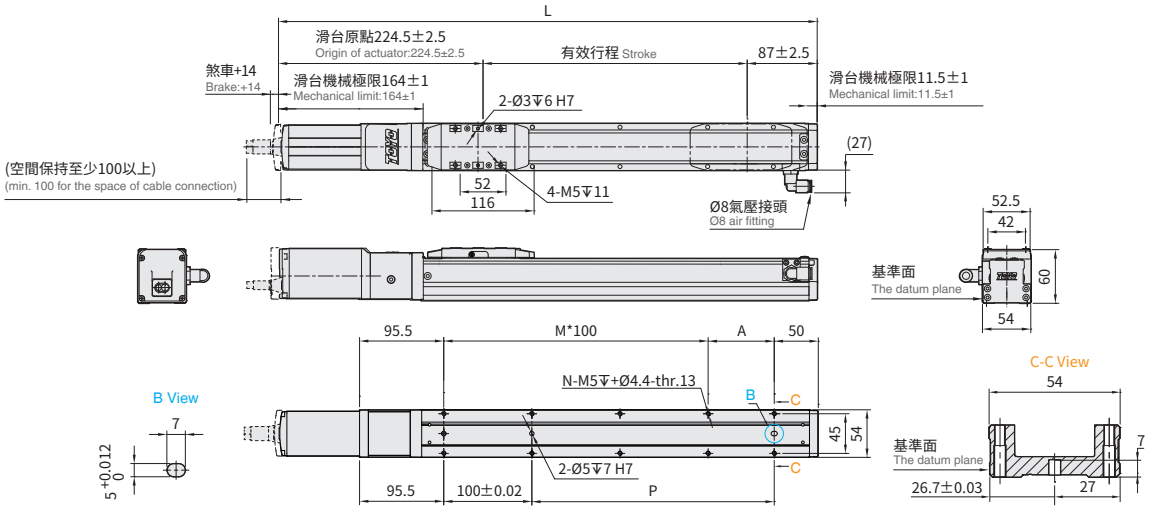
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	361.5	411.5	461.5	511.5	561.5	611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5	1011.5	1061.5	1111.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	1.97	2.18	2.4	2.62	2.83	3.05	3.27	3.48	3.7	3.92	4.13	4.35	4.57	4.78	5	5.22

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

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BM 馬達下折 Motor Bottom Side

2D CAD 3D CAD

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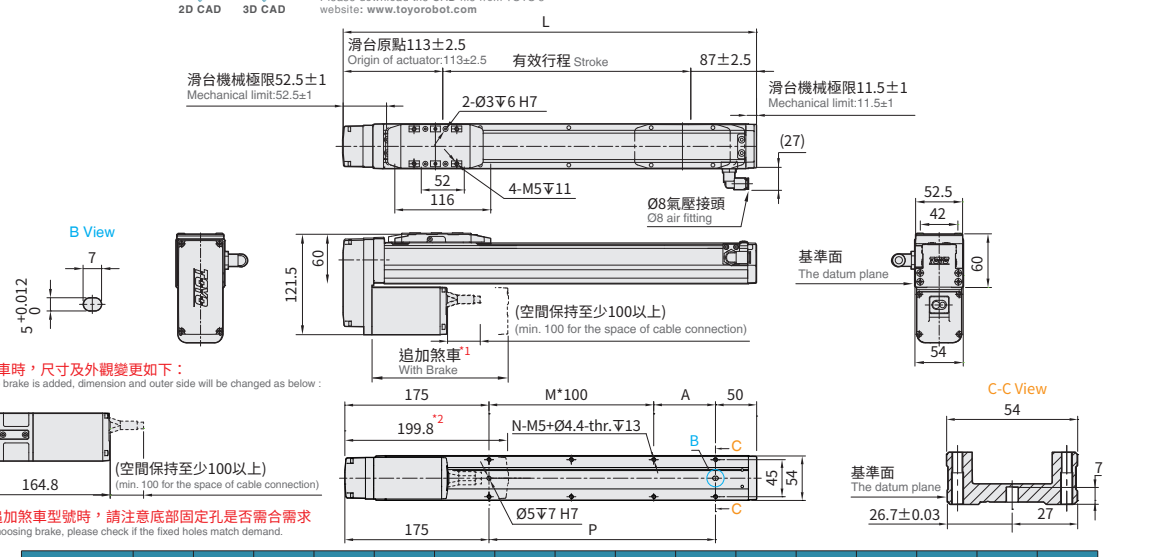
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	2.34	2.54	2.73	2.93	3.13	3.32	3.52	3.72	3.91	4.11	4.31	4.5	4.7	4.9	5.09	5.29

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

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BL 馬達左折 Motor Left Side

2D CAD 3D CAD

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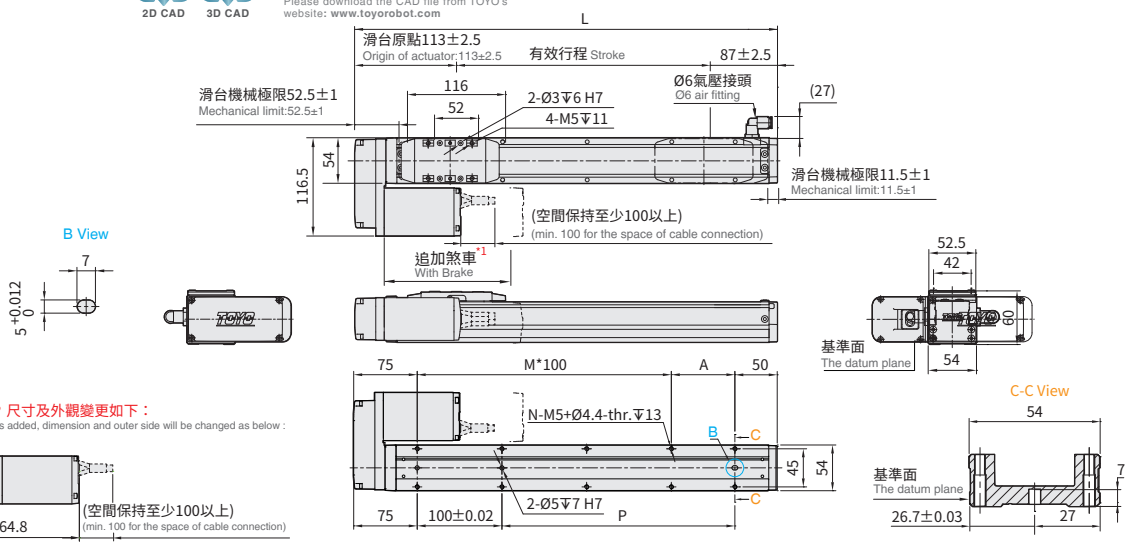
(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	2.34	2.54	2.73	2.93	3.13	3.32	3.52	3.72	3.91	4.11	4.31	4.5	4.7	4.9	5.09	5.29

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

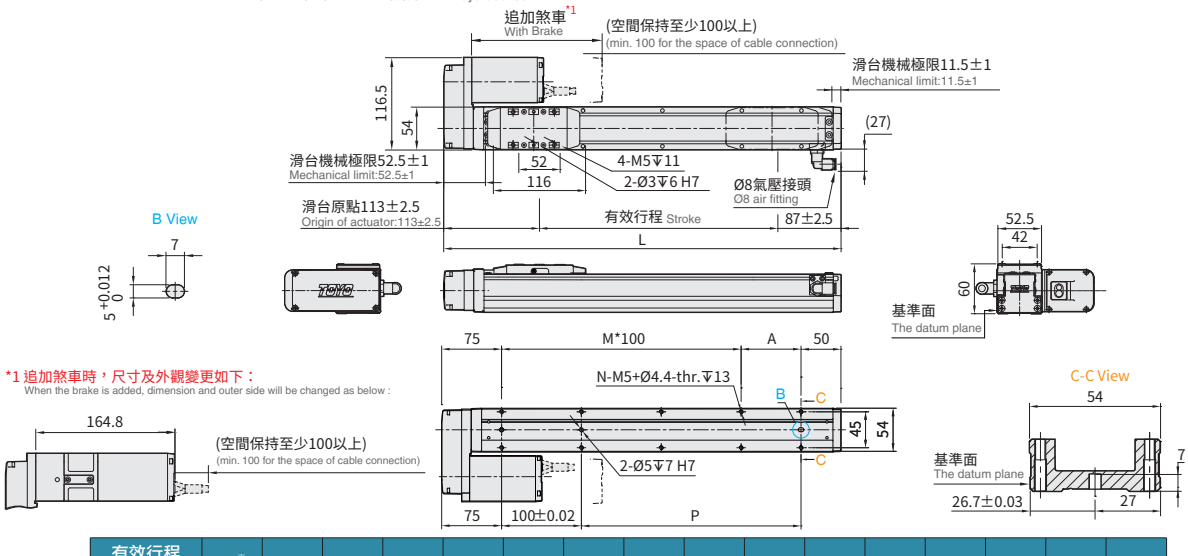
※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

BR 馬達右折 Motor Right Side

2D CAD 3D CAD

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

(單位 Unit：mm)



有效行程 Stroke	50※	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
*Weight(kg)	2.34	2.54	2.73	2.93	3.13	3.32	3.52	3.72	3.91	4.11	4.31	4.5	4.7	4.9	5.09	5.29

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

※行程50時,因本體上鎖式固定孔會被滑座遮住，僅能使用4支螺絲固定，建議客戶本體使用下鎖式固定孔鎖附。
When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

TC100 控制器

全系列的電動缸皆可使用

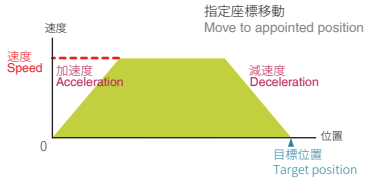
TC100, compatible to all series of module

TC100
Robot Controller

台灣精品 2018

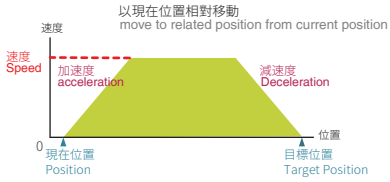
主要運轉模式 Main operation modes

ABS運行
ABS mode



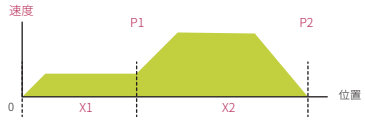
以原點為基準，設定目標位置的移動。
use ORG as origin, move to the appointed position.

INC運行
INC mode



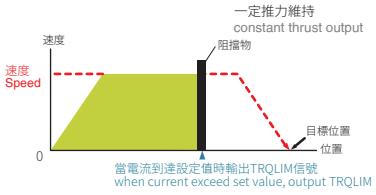
以現在位置為基準，移動一個相對位置量。
Use current postion as origin, move to the relative position.

連續運轉功能（支援ABS-R/INC-R）
Continuous operation function
(support ABS-R / INC-R mode simultaneously)



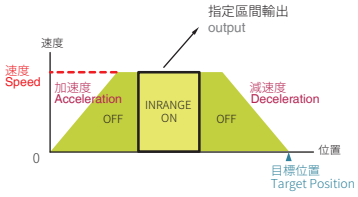
在不停止的狀態下改變速度，可連續運行多個座標點。
Change speed under non-stop status, the continuous operation function allow actuator moving among multiple coordinate points.

+/- TSL推力運行
TSL thrust mode



設定一個電流值,當運行時,電流達到設定值時將不再前進,維持在設定值。
Set a max. current value, when the current reach the value, it will not proceed further.

指定區間輸出信號
output signal in specified range



設定一個區間,移動到區間內時 INRANGE 信號會輸出,區間外則為 OFF。
Set up a special range. The "INRANGE" signal will be output when moving in the range.The "OFF" signal will be output when it is outside of the range.

設定點資料 Adjustable data settings

設定項目	內容
運轉模式	設置位置運行時的類型，共有7種模式。如INC、ABS...等。
移動座標	設置運行時的目標位置或移動量。
移動速度	設置運行的速度（%）。
扭力極限	設置運行的電流限制值。
區間下限	設置輸出"單一個區域輸出"的上下限範圍。
區間上限	
加速時間*	加速至設置速度之時間
減速時間*	從設置速度到停止之時間
等待	移動結束後的等待延遲時間。
下一步編號	移動結束後的下個執行編號。

Setting	Content
Operation mode	Position setting mode, total 7 types including INC and ABS...etc.
Moving position	Set absolute position or moving amount.
Moving speed	Set speed of movement(%)
Torque limit	Set operational current limit
Minimum value of trigger range	Set the max and min value of the trigger range
Maximum value of trigger range	
Acc time(msec)	The time from accelerate speed to the setting speed
Dec time(msec)	The time from setting speed to stop
Dowel time	Set dowel time after movement.
Next item number	Jump to the next operational item after current one has ended.

運轉電流自動設定 Operational current auto setting

運轉電流是機械手壽命及效率決定的重要因素。
如果轉電流設定太高的話，會造成太多效能浪費，最差的狀況、可能會導致馬達在短時間就燒毀。
TC系列控制器、可針對搬送重量、考量過馬達的出力與導軌的壽命, 自動調整馬達最適當的電流。
可以放心使用。

Operational current is the main factor determining the efficiency and lifetime of the robot.If the operational current is set too high, the extra performance will be wasted, or even the motor might be burnt .TC series controller can adjust operational current automatically based on the moving load, motor output and lifetime of the rail.

彈性的控制介面 Flexible control interface

一台同時支援三種控制介面

- Pulse控制：Line Driver 200k Hz/Open Collector 60k Hz 同時間只能使用一種。
- I/O控制：利用I/O變化最多可以執行127個位置控制。
- 通訊控制：採Modbus的RS485通訊介面(最大並接16台)及一組mini USB（TOYO Single專用）

One single unit can support 3 different control interfaces.

- Pulse control: Support Line Driver and Open collector Max. pulse receiving speed: 200k/60k Hz.
- I/O control: By I/O control, max. 127 positioning points can be executed.
- Communication control:use Modbus as the interface of RS485(connect max.16 controllers) and 1 set mini USB(special for TOYO-single)

多樣化的控制模式 Various control mode

控制模式可任意組合使用,可達到最佳化的運動控制

- 位置控制
- 速度控制
- 夾持力控制 (電動夾爪Only)
- 量測控制 (電動夾爪Only)
- 推力控制

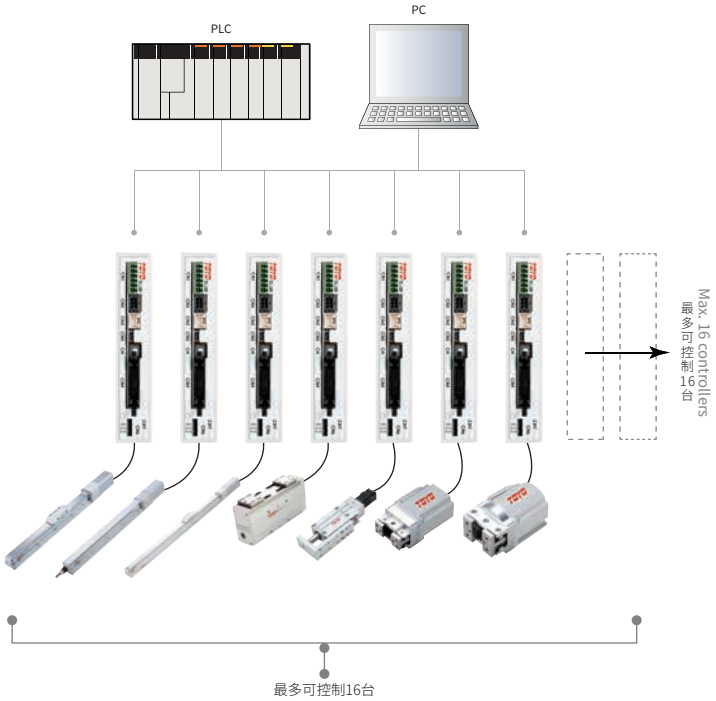
Following control modes can be combined randomly to maximize the action mode.

- Position control
- Speed control
- Gripping force control (Electric gripper only)
- Measure control (Electric gripper only)
- Pushing force control

透過RS-485 最大可連接16台 Possible to connect 16 stations via RS-485

使用者可由PC、PLC或其他可使用RS-485傳輸資料的週邊，經由RS-485來串接TC100控制器。
可以作到設定、控制及監測，最大可串接16台TC100控制器，相當便利。

The user can connect PC, PLC or other devices which can transfer datas via RS-485 to TC100 controller.It is very convenient to do thesetting, controlling and monitoring upto 16 units of TC100 at once.



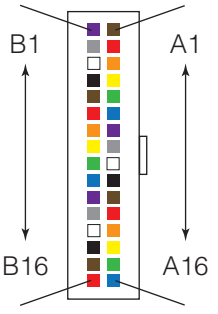
TC100式樣表

TC100 specification and connectors

基本規格 Specification

項目 Item		內容說明 Specification
輸入電源 Input power	控制電源 Control power	DC 24V (±10%)
	動力電源 power supply	DC 24V (±10%) / DC 48V (±10%)
控制軸數 Number of controlled axis		1軸 Single axis
馬達 Motor	適用馬達 Appropriate motor	兩相微步進馬達 Two phrase stepping motor
	尺寸 Dimension	56、42、35、25、20角 56、42、35、25、20□
	額定輸出 Rated output	2Ao-p (正弦波電流的波峰值) 2Ao-p Peak value of sine wave current
	瞬間最大輸出 Instant maximum output	3Ao-p (正弦波電流的波峰值) 3Ao-p Peak value of sine wave current
動作控制模式 Motion control mode		ABS運行 ABS Mode
		INC運行 INC Mode
		INC-R 連續運行 INC-R Continuous Mode
		ABS-R 連續運行 ABS-R Continuous Mode
		推力運行 TSL Thrust Mode
位置 Position	點位總數 Total number of points	1~127 點(個別動作) 1~127 points
	點位設定方法 Points setting method	通訊設定點位置 Communication setting point position
		IO 點位置教導 I/O point position teaching
編碼器 Encoder	位置管理 Position management	增量型 Incremental
	位置檢出 Position checking	光學旋轉編碼器 Incremental
	解析度 Resolution	16000ppr (56、42 角) / 12800ppr(35角)/9600ppr(25角)/1600ppr(20角) 1600ppr(56、42)□/12800ppr(35□)/9600ppr(25□)/1600ppr(20□)
泛用 DI/DO 信號 General DI/DO signal		DI(14點) / DO(10 點)NPN可透過參數修改定義 DI(14 points)/DO(10 points)NPN Modify definition through parameter
剎車 Brake		選配 (購買前需先告知) Optional(Please inform before buying)
錯誤履歷 Error history		最大可存50組錯誤代碼 Maximum storage for 50 error code
安全回路 Safety circuit		緊停壓入後 (伺服 OFF) Emergency stop switch (servo OFF)
通訊 Communication		USB(虛擬 COM 埠)：mini USB / RS485(半雙工)：RJ-45 USB(virtual COM port):Mini USB/RS485(half duplex):RJ-45
LED 狀態表示 LED status display		PWR:電源 (綠)：驅動 + 控制電源投入時恆亮;當驅動電源被關閉時，綠點閃爍。 PWR power supply(green):permanent radiating when drive + control power supply input, green flashing when the drive power supply was turned off.
		SON:伺服 (綠)：伺服 ON 時恆亮;錯誤出現時熄滅。 SON servo(green):permanent radiating when servo ON,extinguished when the error shows.
		ERR:異常 (紅)：依閃爍次數來決定錯誤訊息。 ERR error: (red); use the times of flashing to decide the error messages.
站號設定 Station number setting		旋轉 DIP 開關 (0~F)，16 站 Rotating DIP switch (0-F),16 station

IO接頭 IO plug



TC100 外觀尺寸、接口及端子說明

TC100 dimension and terminal

訂購型號 Ordering model

■ 控制器單體 Controller　■ 控制器＋電纜線長 Controller+Cables

TC100※ — 控制器 Controller

TC100 — [ ] — N1 — 控制器 Controller；電纜長度 Cable length

電纜長度 Cable length
01 : 1M
03 : 3M
05 : 5M
10 : 10M

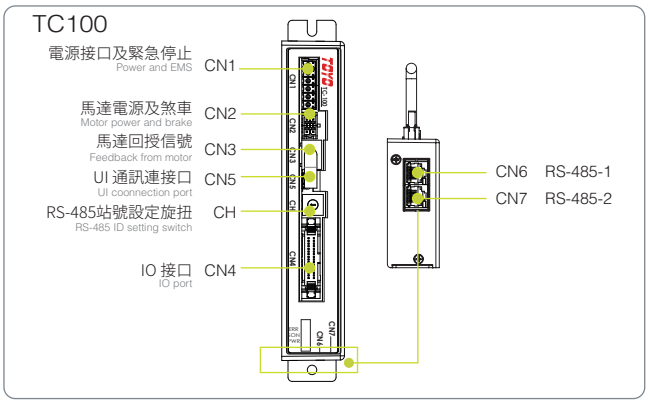
*標配3m
Standard:3m

控制器單體含以下：
The controller unit contains the following :

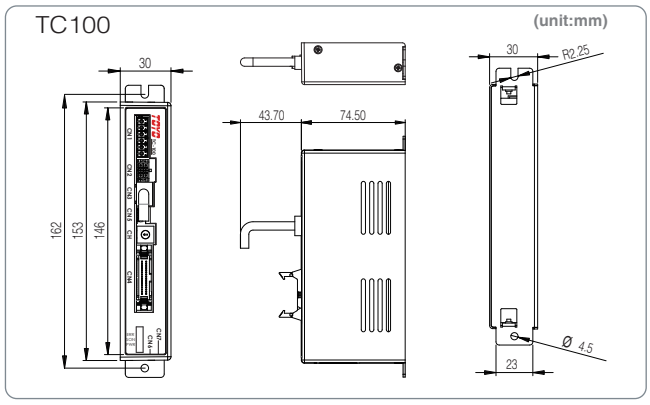
※ TC100 含I/O彩虹排線標準長度為1.5米。
TC100 include rainbow marking line standard length 1.5 meter.

※ TC100-N1 含I/O隔離線1.5米。
TC100-N1 include I/O separation line 1.5 meter.

各部接口說明 Port explanation



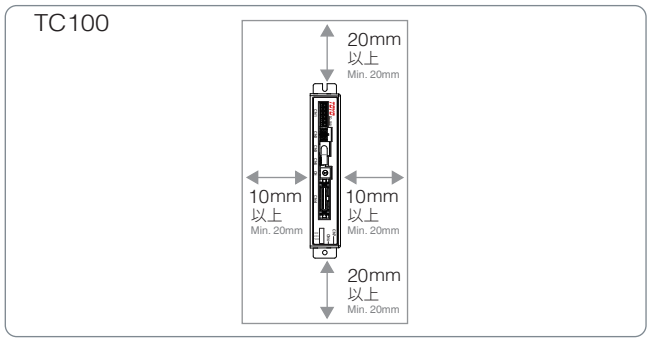
控制器外觀尺寸 Controller dimension



不可設置之環境條件 Restricted setting condition

- 含有硫酸、鹽酸、高酸鹼度等腐蝕性氣體、可燃氣體或易燃液體的環境。
  Environment with corrosive, explosive and flammable gas and combustible liquids.
- 粉塵較多的地方。
  Environment with heavy dust.
- 會被其他設備的切屑、油、水等濺到的地方。
  Locations where can be polluted by other equipments' coolant.
- 受到較強振動(0.5G以上)影響的地方。
  Locations with high vibrations(0.5G or above).
- 為確保控制器可以正常作動，請參考右圖安裝控制器。
  Please locate the controller as shown on the right for correct installation position.

建議安裝方式 Recommanded assembly method



IO信號(出廠預設值) IO signal(Factory defaulty)

NO	信號名 Signal name	內容說明 Content description	備註 Note	NO	信號名 Signal name	內容說明 Content description	備註 Note
A1	COM+	I/O 電源 +24V Power	+24V ±10%	B1	OUT1	ORG-S	未設參數：Unset parameter ALARM MOVE PRGSEL6-S TRQLIM ERR0 : ERR3 INRANGE NEAR SOFTLMT
A2	COM-	I/O 電源 0V Power	未設參數：Unset parameter ORG_SIG MANUAL JOG+ JOG- TEACH BK_OFF CONT_MODE FULL_COUNT	B2	OUT2	INP	
A3	IN 1	ORG		B3	OUT3	READY	
A4	IN 2	SERVO		B4	OUT4	SERVO-S	
A5	IN 3	ALM_RESET		B5	OUT5	PRGSEL0-S	
A6	IN 4	START		B6	OUT6	PRGSEL1-S	
A7	IN 5	PRGSEL0		B7	OUT7	PRGSEL2-S	
A8	IN 6	PRGSEL1		B8	OUT8	PRGSEL3-S	
A9	IN 7	PRGSEL2		B9	OUT9	PRGSEL4-S	
A10	IN 8	PRGSEL3		B10	OUT10	PRGSEL5-S	
A11	IN 9	PRGSEL4		B11	P1+	CW、B相、PULSE B Phrase	
A12	IN 10	PRGSEL5		B12	P1-		
A13	IN 11	PRGSEL6		B13	P2+	CCW、A相、DIR A Phrase	
A14	IN 12	LOCK		B14	P2-		
A15	IN 13	-		B15	保留 Reserved	-	
A16	IN 14	-		B16	FG	隔離網/接地 Shielded web/ground	

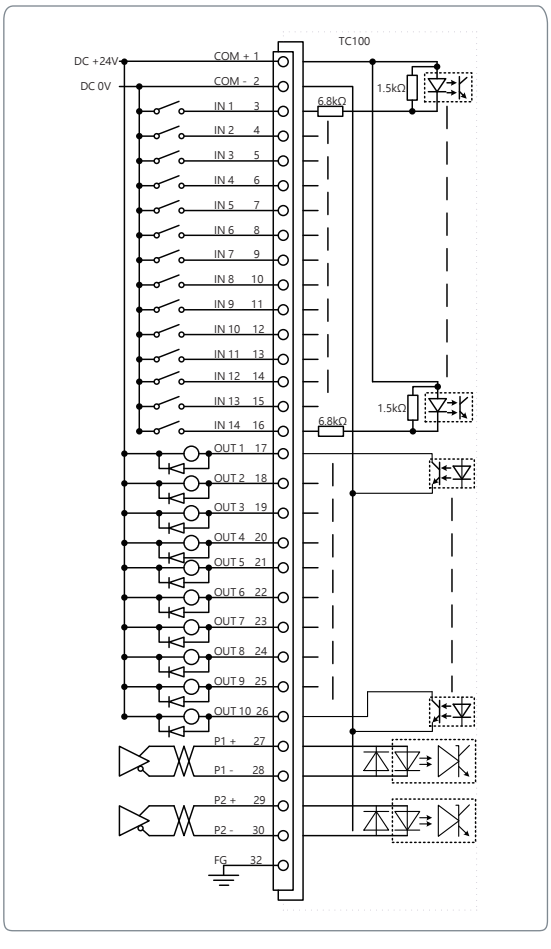
TC100入出力各端子的接線圖

TC100 wiring diagram (Power / IO /EMS)

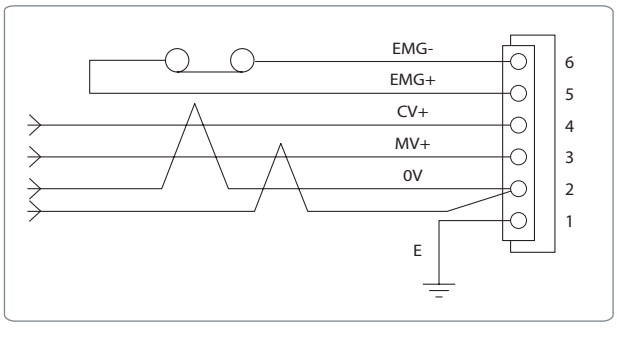
電源接腳定義 Pin Designation

編號 NO.	信號名稱 Signal name	說明 Explanation
1	E	外殼接地（為防止雜訊，干擾產生誤動作，請確實接地） Grounding (Ensure to connect to ground to avoid disturbance)
2	0 V	GND
3	MV +	主電源：DC24V ±10%；DC48 ±10% Main power supply
4	CV +	控制電源：DC24V ±10% Controlling power
5	EMG +	緊急停止，請使用常閉接點（RELAY） EMS (please use Normal Close connection)
6	EMG -	

IN/OUT 接線(NPN) IO wiring (NPN)

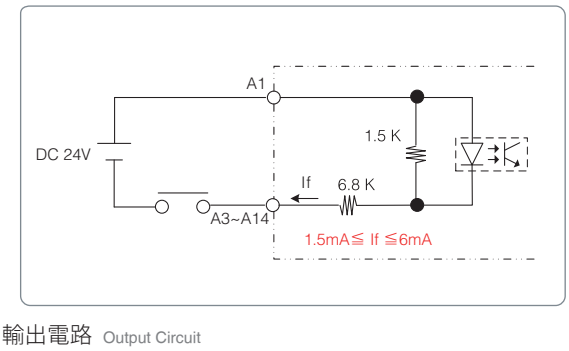


急停及電源接線圖 EMS and Power wiring

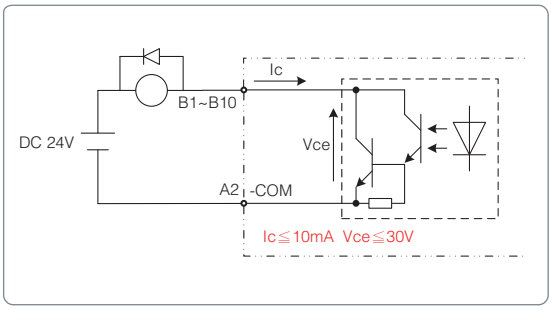


繼電器接點接線 Relay wiring

輸入電路 Input Circuit

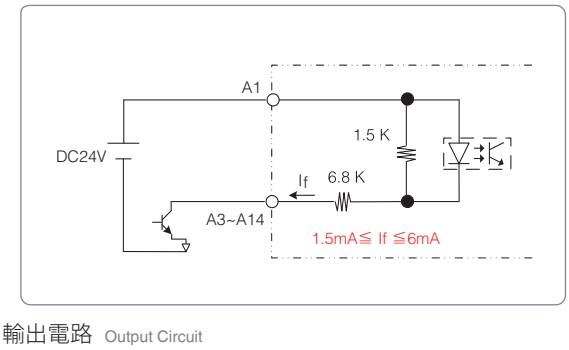


輸出電路 Output Circuit

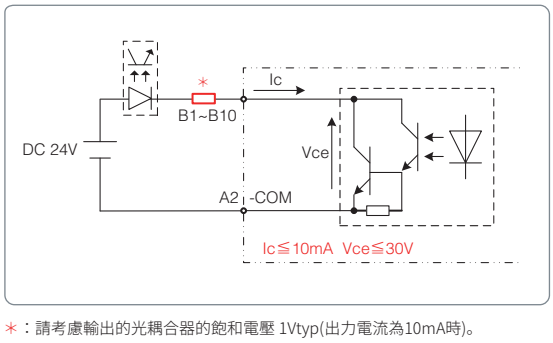


電晶體接點接線 Transistor wiring

輸入電路 Input Circuit



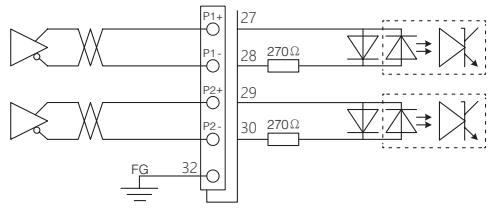
輸出電路 Output Circuit



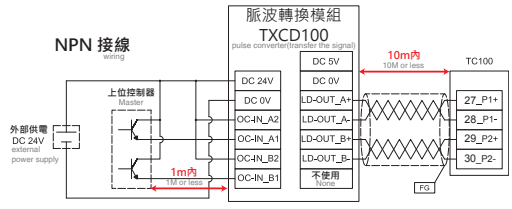
＊：請考慮輸出的光耦合器的飽和電壓 1Vtyp(出力電流為10mA時)。
Note: Please consider the output saturation voltage of optocoupler 1Vtyp (when output current is1 0mA).

脈波輸出接線 Pulse output wiring

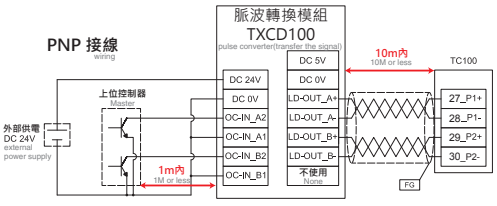
LINE DRIVE：



OPEN COLLECTOR：



OPEN COLLECTOR：



＊：在外部PULSE模式下，原點復歸結束後，指令現在位置和目前位置，皆無法清除成0，是正常現象，不會影響到送PULSE的過程。

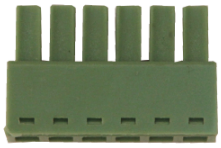
At the external Pulse mode, after homing completed, assigned current position and current position cannot be clear to 0. It is normal situation, it will not affect the process of pulse sending.

配件一覽表

Accessories list

標準配件 Standard accessories

電源接頭 Power supply connector	
型號 Model	TC100-CON-POW-00

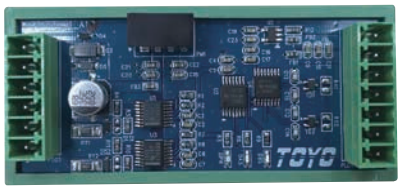


脈衝用IO隔離線含磁環(1.5m) IO Isolation lineCable	
型號 Model	TC100-SHIELD IO CAB-1.5

馬達電纜線＋編碼器線 Standard Cable (Motot Power+Encoder)	
型號 Model	TC100-CAB-STA-□
□	線長 Cable Length
01	1m
03	3m
05	5m
10	10m

選購品 Optional accessories

脈波輸入轉換模組（開集極轉差動） Pulse Transfer Module	
型號 Model	TC100-OPEN TO LINE



UI通訊用mini UBS通訊線 Mini USB cable for supporting software	
型號 Model	TC100-CAB-PCL-01

RS - 485通訊用RJ- 45 網路線(平行線) RJ-45 cable for RS-485 connections	
型號 Model	TC100-CAB-485-□
□	線長 Cable Length
01	1m
03	3m
05	5m
10	10m

TOYO SINGLE 操作介面說明

TOYO-Single user interface description

運行環境 Basic Specification

基本規格 spec	動作環境 O/S
OS	Microsoft Windows 2000/XP/Vista/7/8.1/10
CPU	使用的OS所推薦的環境以上 Meet the requirement of the O/S
記憶體 Memory	使用的OS所推薦的環境以上 Meet the requirement of the O/S
硬碟空間 Free HD space	20MB以上可驅動的空間 20MB or above free space
通訊埠 Communication ports	RS-485 , USB
使用控制器 Compatible controller	TC100

點位置-主頁 Main Page-Position Points

基本狀態列:
Basic status bar

顯示目前系統基本狀態，由左至右依序為[軟體名稱]、[產品名稱]、[COM]、[SW_ID]、[Firmware版本]、[軟體版本]、[連線狀態]

Display current system status, from left to right, product name, software name, communication port, station ID, firmware version, software version and connection status.

工具列:
Toolbar

本區域提供基本的系統功能；“新增連線“、“新增資料“、“開啓檔案“、“儲存“、“複製“、“貼上“、“點讀取“、“參數讀取“、“點回寫“、“參數回寫“、“全部回寫“、“單位轉換“、“連線中止“、“Language“等。

The toolbar contains: new connection, new data file, open data file, save, copy, paste, read position point list, read parameters, overwrite position point list, overwrite parameter, overwrite all, display unit change and disconnect.

功能頁面選擇:
Function page selection

本區為選擇主要設定區；“點位置“、“監測“、“參數“等。
To select the setting of position points, monitoring and parameters.

輸出監控區:
Output monitoring

主要顯示控制器目前的輸出接點及錯誤狀態。
Display current output from controller and alarm status.

型號及控制器狀態:
Model and controller status.

顯示目前控制器連接電動缸的型號及目前控制器的使用狀態。
Display current robot model and controller status.

目前位置:
Current position

顯示目前滑座的所在位置。
Display the current position.

模擬顯示:
Simulation display

模擬目前連接電動缸的動作。
Simulate the movement of current hardware.

伺服/原點操作:
SERVO/ORG control

控制伺服(ON/OFF)、原點復歸、減速停止及警報重置。
Control servo ON or OFF, returning to the ORG, deceleration, stop and alarm reset.

點位設定表單:
Position point list

設定點位的移動模式、速度、扭力、等待時間、下一步序。
Set position point moving mode, speed, torque, dowel time and next step.

自動運轉:
Automatic operation

執行已選定的點位置作動。
Proceed with the selected position points automatically.

手動運轉:
Manual operation

執行已選定的點位置及速度，適合教點時確認用。
Proceed with the selected position points automatically.(suggest to use when

手動操作模式:
Manual Operation

執行Inching 或 Jog移動
Proceed with JOGGING and INCHING.

執行點位:
Operating point

顯示目前執行的點位置。
Display current position point. confirming the teaching).

可監看馬達轉速:
Motor RPM Monitor

可監看馬達電流值:
Motor Current Monitor

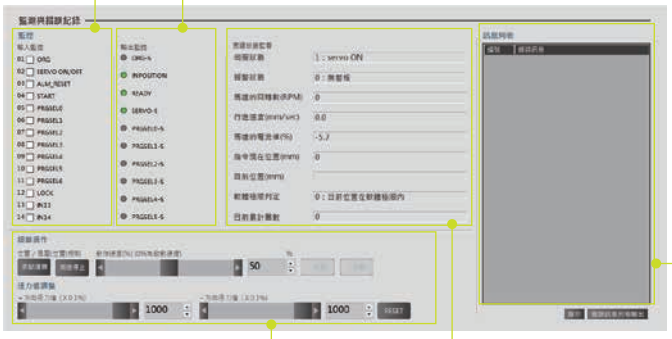
監測頁 Monitoring Page

輸入監控:
Input monitoring

對所有輸入信號做監看及強制輸出。
Monitoring all input signal and all signal is forced to output.

輸出監控:
Output monitoring

對所有輸出信號做監看，但無法強制輸出。
Monitoring all output signal but cannot be forced to output to other device.



錯誤訊息列表:
Alarm log

顯示已發生過的警報訊息最後50筆，
最近一筆在最上方。
Display the last 50 alarm, the latest one is on top.

位置/推壓位置控制:
position and pushing position control

扭力極限移動控制。
Torque limit movement control

馬達狀態監看:
Motor status monitoring

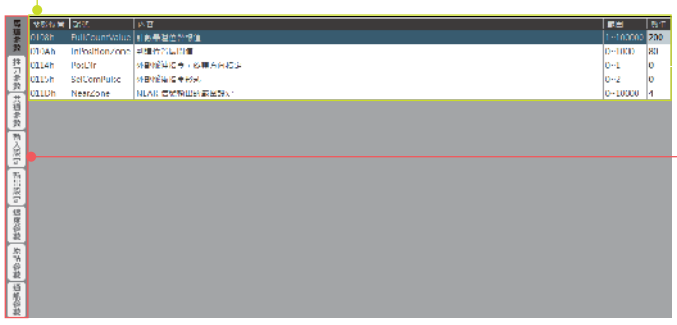
監看馬達目前狀態;如電流、轉速、目前位置、報警狀態...等。
Monitoring the motor status, such as current, rotation speed, current position and alarm status...etc.

參數頁 Parameter Page

主要顯示八大項參數列表:
List of eight main demonstrated parameters

參數內容:
Parameter content

內容包含參數名稱、說明及設定值。
The content is inclduing the name, description and the of parameters, description and setting value of parameters.



- **馬達參數** Parameters of Motor
- **推力參數** Parameters of Thrust
- **共通參數** Common Parameters
- **輸入設定** Setting of Input
- **輸出設定** Setting of Output
- **速度參數** Speed Parameters
- **原點參數** Parameters of homing
- **通訊參數** Parameters of communication setting

Memo

Memo

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24 China: 400-875-0009

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