

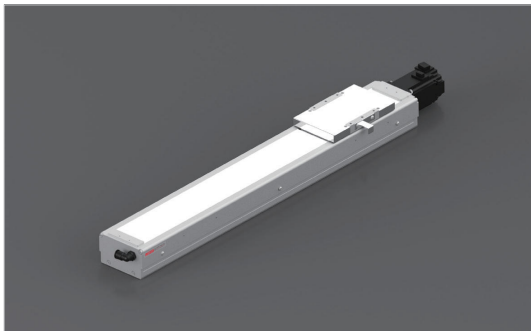
# 亞標全密式螺桿驅動型 Ball Screw Driven Linear Actuator

# YSC 110

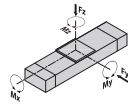
## □ 訂購型號代碼 Code

<b>YSC110</b>	<b>L10</b>	<b>500</b>	<b>MS</b>	<b>DB</b> <small>注</small>	<b>4P</b>	<b>M40</b>	<b>P3</b>	<b>A001</b>
<b>機種型號 Item NO.</b>	<b>螺桿導程 Ball Screw Lead</b>	<b>行程 Stroke</b>	<b>馬達方向 Motor Mounting Position</b>	<b>輔助滑塊 Auxiliary Block</b>	<b>直線導軌滑塊數量 Block Quantity</b>	<b>馬達廠牌、功率 Motor Brand、Power Output</b>	<b>限位傳感器數量 Photoelectric Sensor</b>	<b>特注代碼 Special Order No.</b>
	05 10 16 20	100-1050 間隔 5±0.5	MS: 馬達直裝安裝 Straight Motor Mounting ML: 馬達左折安裝 Left Motor Mounting MR: 馬達右折安裝 Right Motor Mounting MD: 馬達下折安裝 Down Motor Mounting	未填裝: 單滑塊 2PCS 輔助滑塊	4	M 三菱 Mitsubishi 10 - P 松下 Panasonic 20 200W Y 安川 Yaskawa 40 400W D 台達 Delta 75 - 1K -	P1: 1片 1PC P2: 2片 2PCS P3: 3片 3PCS NoMark/NoSensor	

注: 輔助滑塊選項相關參數參見樣本P122.



### 最大動態力和力矩 Max Permissible Forces And Torques



Type	4P
■ F <sub>x</sub> (y) (N)	3427
■ F <sub>z</sub> (y) (N)	3427
■ M <sub>x</sub> (y) (N·m)	98
■ M <sub>y</sub> (y) (N·m)	40
■ M <sub>z</sub> (y) (N·m)	176

除了滿足最大負載和力矩外，還必須滿足以下公式：  
All forces and torques relate to the following:

$$\frac{F_y}{F_y \max.} + \frac{F_z}{F_z \max.} + \frac{M_x}{M_x \max.} + \frac{M_y}{M_y \max.} + \frac{M_z}{M_z \max.} \leq 1$$

### 馬達安裝方向 Motor Mounting Position Version

MS Type 馬達直裝安裝 Straight Motor Mounting	ML Type 馬達左折安裝 Left Motor Mounting	MR Type 馬達右折安裝 Right Motor Mounting	MD Type 馬達下折安裝 Down Motor Mounting

### 基本規格 Basic Specification

YSC		4P (導軌滑塊數量) Block Quantity				
技術參數 Technical Parameters	位置重複精度 Repetitive Accuracy (mm)	±0.01				
	螺桿導程 Ball Screw Lead (mm)	5	10	16	20	
	最高速度 Maximum Speed (mm/s)	250	500	800	1000	
	最大可搬運量 <sup>注1</sup> Maximum Payload	水平使用 Horizontal (kg)	50	30	22	18
		垂直使用 Vertical (kg)	18	16	14	6
	定額推力 Rated Thrust (N)	341	170	106	85	
基本規格 Basic Specification	最大空載扭矩 Max.no-load driving torque (N·m)	0.1	0.12	0.16	0.2	
	最大扭矩 Max.driving torque (N·m)	10.9	12.5	14	16	
	標準行程 Stroke (mm)	100-1050 mm/ 50 Pitch				
	AC伺服馬達容量 AC Servo Motor Output (W)	200/400				
	滾珠螺桿外徑 Ball Screw Diameter (mm)	Ø16				
	高剛性直線導軌 Linear Guide (mm)	12#x2PCS				
主視截圖最大外形 Max Outline of Main Engine Cross Section (mm)	109x82.5					
原點感應器 Home Sensor	EE-5X672(NPN)					

#注: 測定條件為無力矩的理論數據, 根據力矩和加速度數據會相應改變, 具體請參考選型軟件。

#注1: Max. change relevantly according to different torque and accelerate speed, please refer to the LIMON calculate software.



選型軟件: LimonCalculate

[www.limonrobot.com](http://www.limonrobot.com)

# 50

ITO Series

HTO Series

ITC Series

HTC Series

ITZ Series

TSC Series

TWG Series

SSG Series

SWG Series

Y50 Series

YSC Series

YTO Series

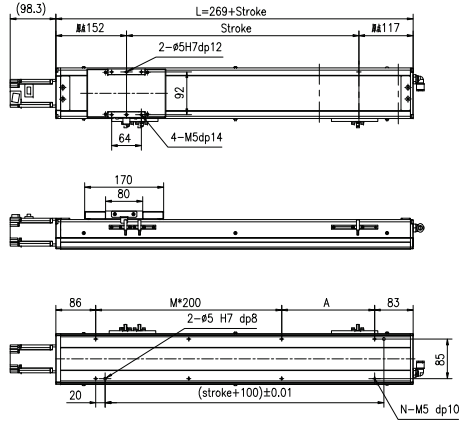
YTC Series

Milvus system

# YSC 110 亞標全密式螺桿驅動型

## Ball Screw Driven Linear Actuator

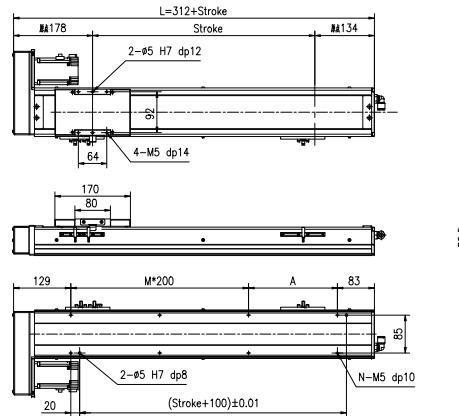
### YSC110-MS 馬達直接安裝 Straight Motor Mounting



行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	369	419	469	519	569	619	669	719	769	819	869	919	969	1019	1069	1119	1169	1219	1269	1319
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
重量 Weight (kg)	6.77	7.2	7.63	8.06	8.49	8.92	9.35	9.78	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.7	14.1	14.5	14.9
最高速度 Max speed (mm/sec)	導程 Pitch 20: 1000 導程 Pitch 16: 800 導程 Pitch 10: 500 導程 Pitch 05: 250																			

注：行程超過700mm時，根據動作區域不同，可能會出現滾珠絲杆的共振情況，應參考上表所示的最高速度。  
Note: When the stroke is more than 700mm, the resonance phenomenon could come into being. So please refer to speed sheet on the drawing.

### YSC110-ML 馬達左折安裝 Left Motor Mounting



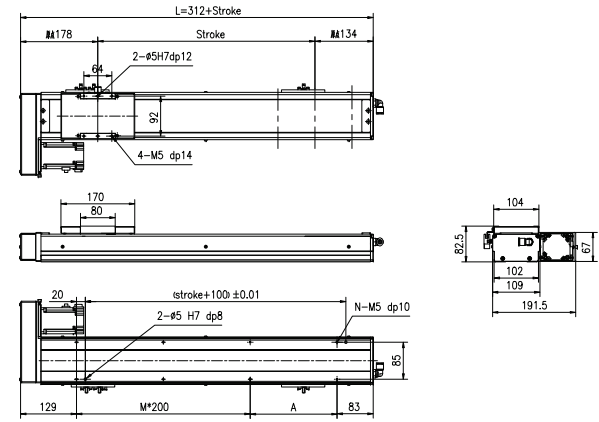
行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
重量 Weight (kg)	6.77	7.2	7.63	8.06	8.49	8.92	9.35	9.78	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.7	14.1	14.5	14.9
最高速度 Max speed (mm/sec)	導程 Pitch 20: 1000 導程 Pitch 16: 800 導程 Pitch 10: 500 導程 Pitch 05: 250																			

注：行程超過700mm時，根據動作區域不同，可能會出現滾珠絲杆的共振情況，應參考上表所示的最高速度。  
Note: When the stroke is more than 700mm, the resonance phenomenon could come into being. So please refer to speed sheet on the drawing.

# YSC 110 亞標全密式螺桿驅動型

## Ball Screw Driven Linear Actuator

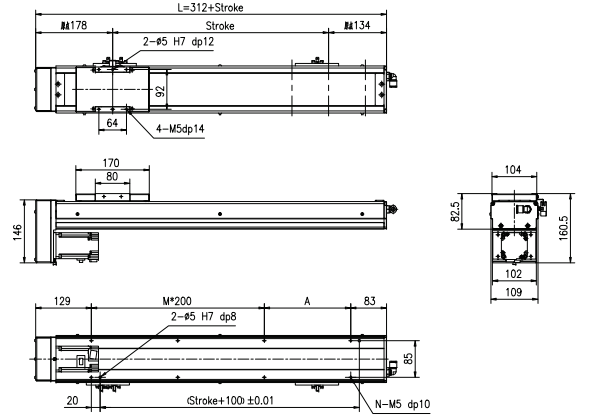
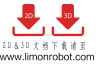
### YSC110-MR 馬達右折安裝 Right Motor Mounting



行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
重量 Weight (kg)	6.77	7.2	7.63	8.06	8.49	8.92	9.35	9.78	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.7	14.1	14.5	14.9
最高速度 Max speed (mm/sec)	導程 Pitch 20: 1000 導程 Pitch 16: 800 導程 Pitch 10: 500 導程 Pitch 05: 250																			

注：行程超過700mm時，根據動作區域不同，可能會出現滾珠絲杆的共振情況，應參考上表所示的最高速度。  
Note: When the stroke is more than 700mm, the resonance phenomenon could come into being. So please refer to speed sheet on the drawing.

### YSC110-MD 馬達下折安裝 Down Motor Mounting



行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
重量 Weight (kg)	6.77	7.2	7.63	8.06	8.49	8.92	9.35	9.78	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.7	14.1	14.5	14.9
最高速度 Max speed (mm/sec)	導程 Pitch 20: 1000 導程 Pitch 16: 800 導程 Pitch 10: 500 導程 Pitch 05: 250																			

注：行程超過700mm時，根據動作區域不同，可能會出現滾珠絲杆的共振情況，應參考上表所示的最高速度。  
Note: When the stroke is more than 700mm, the resonance phenomenon could come into being. So please refer to speed sheet on the drawing.