

亞標半密式螺桿驅動型 Ball Screw Driven Linear Actuator

YSO 110

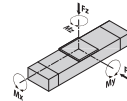
訂購型號代碼 Code

YSO110	L10	500	4P	MS	DB <small>注</small>	M40	P3	A001
本體型號 Item NO.	螺桿導程 Ball Screw Lead	行程 Stroke	直線導軌滑塊數量 Block Quantity	馬達方向 Motor Mounting Position	輔助滑塊 Auxiliary Block	馬達廠牌、功率 Motor Brand, Power-Output	限位傳感器數量 Photoelectric Sensor	特注式樣 Special Order No.
	05 10 16 20	100-1050 (別買 0.1/0.5)	4P	MS: 馬達直接安裝 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	未填寫: 單滑塊 DB: 輔助滑塊	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只 1PCS P2: 2只 2PCS P3: 3只 3PCS * 無標記: 否 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(y) (N)	3427
■ F(z) (N)	3427
■ M(x) (N·m)	98
■ M(y) (N·m)	40
■ M(z) (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 馬達直接安裝 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

YSO110		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	
	最大可搬重量 Maximum Payload	水平使用/Horizontal (kg)	50	30	22	18
		垂直使用/Vertical (kg)	18	16	14	6
	定格推力 Rated Thrust (N)	341	170	106	85	
	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		
基本規格 Basic Specification	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				
	高剛性直線滑軌 Linear Guide (mm)	12# × 2 PCS				
	主軸截面最大外形 Max Outline of Main Engine's Cross Section (mm)	105 × 70				
原點感應器 Home Sensor	EE-SX672(NPN)					

#注1: 行程超過700mm時, 可能會產生嚴重的共振現象, 此時應參考圖紙下側表格所對應的速度。

#注2: 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3: Date changes relevantly according to different torque and accelerated speed, please refer to the LIMON calculate software.

選型軟件: LimonCalculate

DOWNLOAD www.limonrobot.com

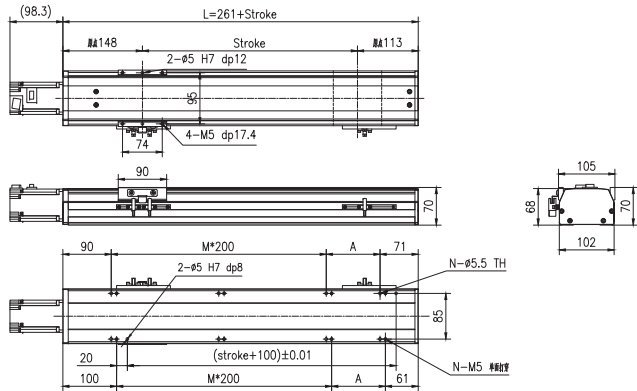
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ITO Series
HTO Series
ITC Series
HTC Series
ITZ Series
TSC Series
TWG Series
SSG Series
SWG Series
YSO Series
YSC Series
YTO Series
YTC Series
Mikulus system

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Ball Screw Driven Linear Actuator

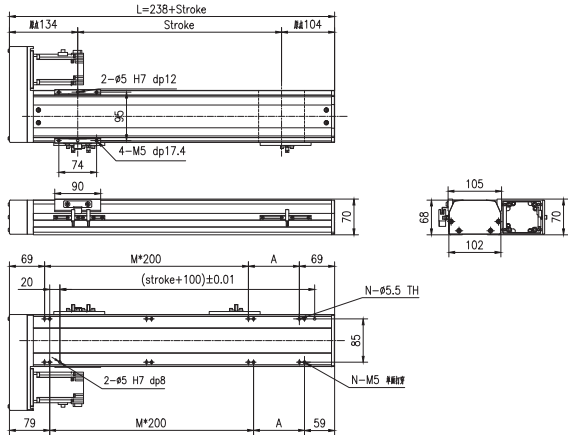
YSO110-4P-MS 馬達直裝安裝 Straight Motor Mounting



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	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061	1111	1161	1211	1261	1311
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	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
重量 Weight (kg)	4	4.4	4.8	5.2	5.6	6	6.4	6.8	7.2	7.6	8	8.4	8.8	9.1	9.5	9.9	10.3	10.7	11.1	11.5
最高速度 Max speed (mm/sec)	螺桿 Pitch 20: 800 螺桿 Pitch 16: 640 螺桿 Pitch 10: 500 螺桿 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.

YSO110-4P-ML 馬達左安裝 Left Motor Mounting



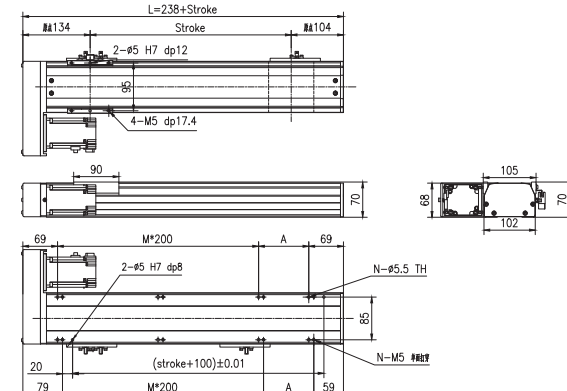
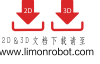
行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
重量 Weight (kg)	4.3	4.7	5.1	5.5	5.9	6.3	6.6	7	7.4	7.8	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8
最高速度 Max speed (mm/sec)	螺桿 Pitch 20: 800 螺桿 Pitch 16: 640 螺桿 Pitch 10: 500 螺桿 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。
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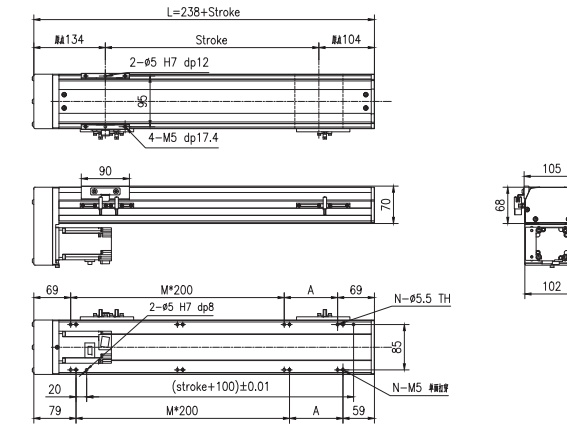
YSO110-4P-MR 馬達右安裝 Right Motor Mounting



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	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288
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	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
重量 Weight (kg)	4.3	4.7	5.1	5.5	5.9	6.3	6.6	7	7.4	7.8	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8
最高速度 Max speed (mm/sec)	螺桿 Pitch 20: 800 螺桿 Pitch 16: 640 螺桿 Pitch 10: 500 螺桿 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.

YSO110-4P-MD 馬達下安裝 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	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288
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	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
重量 Weight (kg)	4.3	4.7	5.1	5.5	5.9	6.3	6.6	7	7.4	7.8	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8
最高速度 Max speed (mm/sec)	螺桿 Pitch 20: 800 螺桿 Pitch 16: 640 螺桿 Pitch 10: 500 螺桿 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.