

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

YSO 170

訂購型號代碼 Code

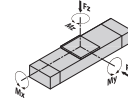
YSO170	L10	500	4P	MS	DB <small>注</small>	M40	P3	A001
本體型號 Item NO.	螺桿導程 Ball Screw Lead	行程 Stroke	直線導軌滑塊數量 Block Quantity	馬達方向 Motor Mounting Position	輔助滑塊 Auxiliary Block	馬達廠牌、功率 Motor Brand, Power Output	隔位傳感器數量 Photoelectric Sensor	特方式樣 Special Order No.
	05 10 20	150-150, 月周0±50	4P	MS: 馬達直線安裝 Straight 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	輔助滑塊 未填數量滑塊 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 750W 1K -	P1: 1只 1PC P2: 2只 2PCS P3: 3只 3PCS 未標記: 无 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)	7463
■ F(z) (N)	7463
■ M(x) (N·m)	339
■ M(y) (N·m)	178
■ M(z) (N·m)	742

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 馬達直線安裝 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

YSO170		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	20	40	
	最高速度 Maximum Speed (mm/s)	250	500	1000	2000	
	最大可搬重量 Maximum Payload	水平使用/Horizontal (kg)	120	100	85	60
		垂直使用/Vertical (kg)	60	50	35	20
	定額推力 Rated Thrust (N)	2563	1281	640	320	
	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)	100-1250 mm/ 50 Pitch				
	AC伺服馬達容量 AC Servo Motor Output (W)	400 / 750				
	滾珠螺桿外徑 Ball Screw Diameter (mm)	ø20 / ø25				
	高剛性直線導軌 Linear Guide (mm)	20#×2 PCS				
	主軌截面最大外形 Max Outline of Main Engine's Cross Section (mm)	170×97				
原點感應器 Home Sensor	EE-SX672(NPN)					

#注1: 行程超過950mm時，可能會產生嚴重的共振現象，此時應參考圖紙下面表格所對應的速度。

#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。

#註明 2: Data changes relevantly according to different torque and accelerated speed. Please refer to the LIMON calculate software.



選型軟件: LimonCalculate

www.limonrobot.com

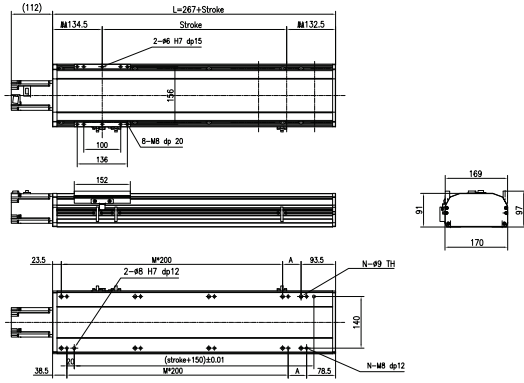
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ITO Series
HTO Series
ITC Series
HTC Series
ITZ Series
TSC Series
TWG Series
SSG Series
SWG Series
YSO Series
YSC Series
YTO Series
YTC Series
Mikulus system

YSO 170 亞標半密式螺桿驅動型

Ball Screw Driven Linear Actuator

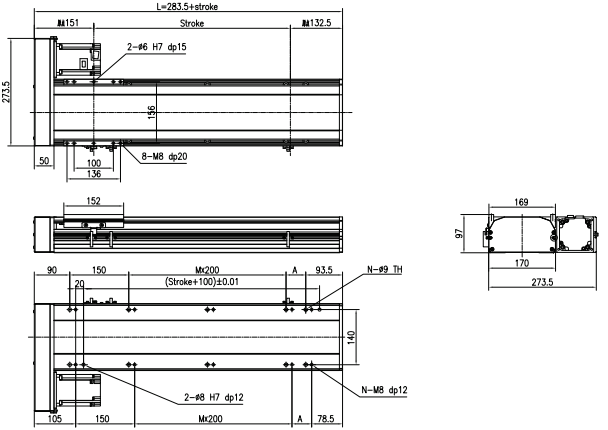
YSO170-4P-MS 馬達直接安裝 Straight Motor Mounting



行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
重量 Weight (kg)	11.8	12.6	13.4	14.2	15	15.7	16.5	17.3	18.2	19	19.8	20.6	21.4	22.2	23	23.8	24.6	25.4	26.2	27	27.8	28.6	29.4	30.2
最高速度 Max speed (mm/sec)	Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05	
	2000		1000		500		250		1600		800		400		200		1500		750		375		187.5	

#注1: 行程超過850mm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。
 #Note 1: When the stroke is more than 850mm, the resonance phenomenon could come into being. So please refer to speed sheet on the drawing.

YSO170-4P-ML 馬達左折安裝 Left Motor Mounting



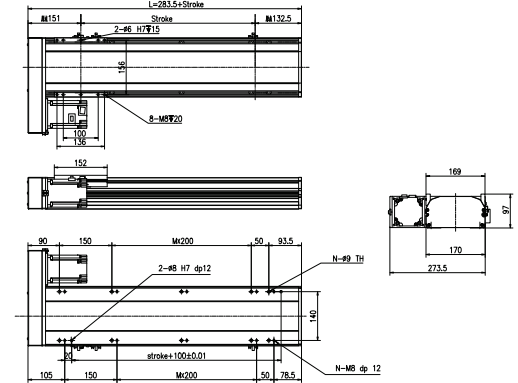
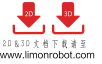
行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
重量 Weight (kg)	11.8	12.6	13.4	14.2	14.9	15.7	16.5	17.3	18.0	18.8	19.6	20.4	21.1	21.9	22.7	23.5	24.2	25.0	25.8	26.6	27.4	28.2	29.0	29.8
最高速度 Max speed (mm/sec)	Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05	
	2000		1000		500		250		1600		800		400		200		1500		750		375		187.5	

#注1: 行程超過850mm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。
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Ball Screw Driven Linear Actuator

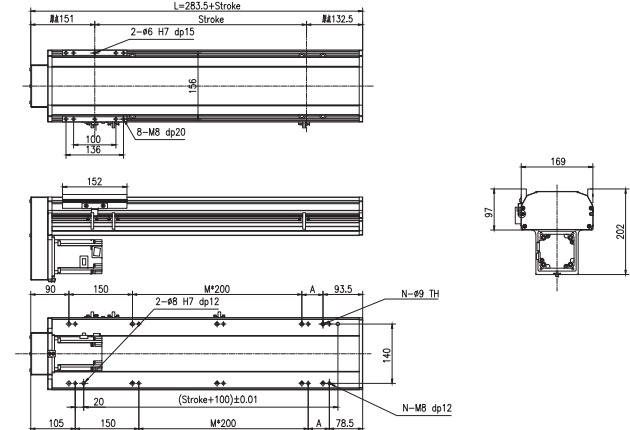
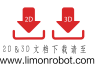
YSO170-4P-MR 馬達右折安裝 Right Motor Mounting



行程 Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
重量 Weight (kg)	11.8	12.6	13.4	14.2	14.9	15.7	16.5	17.3	18.0	18.8	19.6	20.4	21.1	21.9	22.7	23.5	24.2	25.0	25.8	26.6	27.4	28.2	29.0	29.8
最高速度 Max speed (mm/sec)	Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05	
	2000		1000		500		250		1600		800		400		200		1500		750		375		187.5	

#注1: 行程超過850mm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。
 #Note 1: When the stroke is more than 850mm, the resonance phenomenon could come into being. So please refer to speed sheet on the drawing.

YSO170-4P-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	1100	1150	1200	1250
L	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
重量 Weight (kg)	11.8	12.6	13.4	14.2	14.9	15.7	16.5	17.3	18.0	18.8	19.6	20.4	21.1	21.9	22.7	23.5	24.2	25.0	25.8	26.6	27.4	28.2	29.0	29.8
最高速度 Max speed (mm/sec)	Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05		Pitch 40		Pitch 20		Pitch 10		Pitch 05	
	2000		1000		500		250		1600		800		400		200		1500		750		375		187.5	

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