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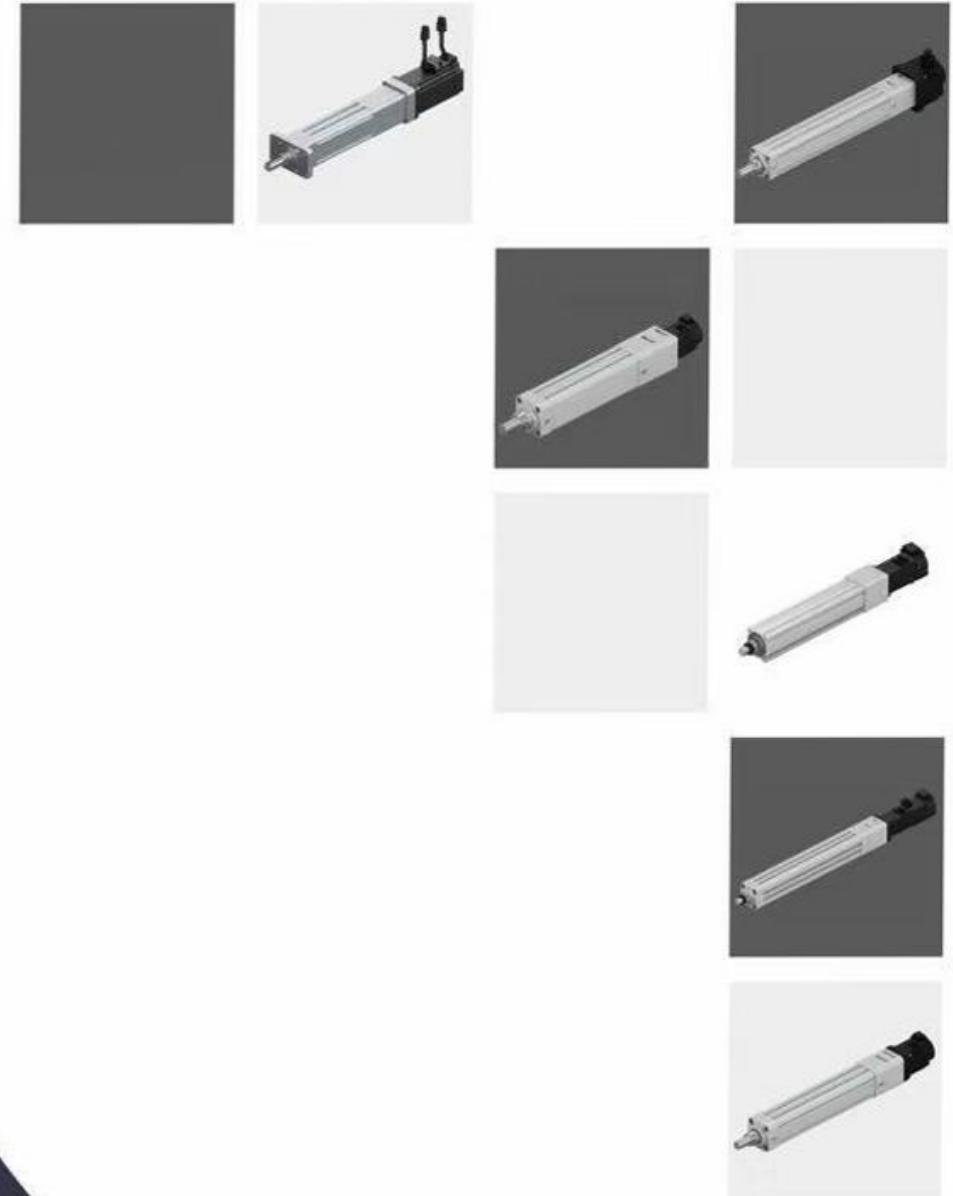
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电动缸样本

Electric cylinder sample

CAT F.2501

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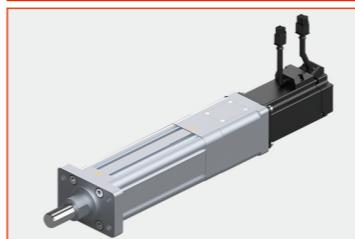
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Operation Description

电动缸是将电机的旋转运动转换为推杆的直线运动。利用伺服电机的闭环控制特性，可以很方便地实现对推力、速度和位置的精密控制，利用现代运动控制技术、数控技术及总线（网络）技术，实现程序化、总线(网络)化控制。由于其控制、使用的方便性，将实现气缸和液压缸传动所不能实现的精密运动控制。

The electric cylinder converts the rotating motion of the motor into the linear motion of the push rod. With the closed-loop control characteristic of servo motor, the precise control of thrust, speed and position can be realized easily. Using modern motion control technology, numerical control technology and bus (network) technology, the program and bus (network) control is realized. Because of its easy control and use, it will realize the precision motion control that the cylinder and hydraulic cylinder drive can not achieve.

LMC 系列电动缸采用先进的模块化设计方法，具有：

LMC series electric cylinder adopts advanced modular design method, with:

- 结构紧凑、外形尺寸小
- Compact structure and small size
- 高性能、低惯量、低噪音、高响应
- High performance, low inertia, low noise, high response
- 高可靠性、长工作寿命
- High reliability and long working life
- 同时拥有滚珠丝杆和滚柱丝杆及T型丝杆的应用技术
- At the same time, it has the application technology of ball screw and roller screw and T-screw
- 安装、使用方便、省能源、简维护
- Installation, easy to use, energy saving, simple maintenance

直连型电动缸 Direct connected electric cylinder

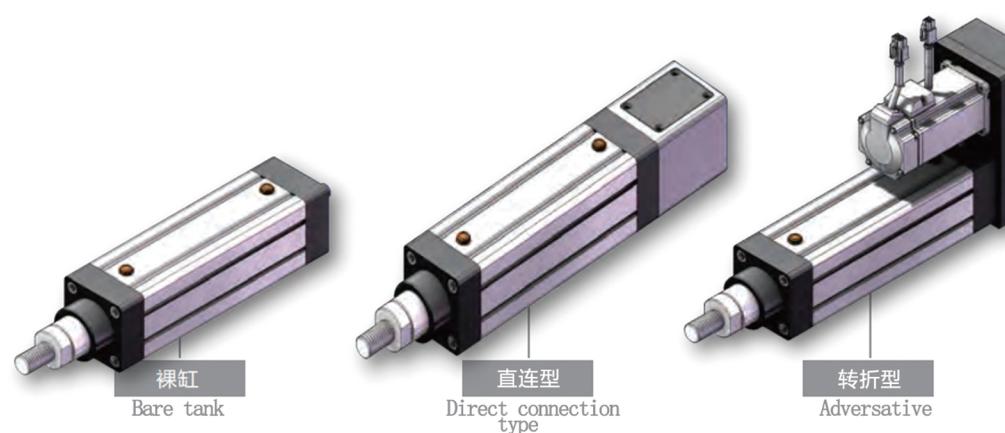
本系列电动缸集成了交流伺服电机、伺服驱动器、高精度滚珠丝杆、模块化设计等技术，整个电动缸具有结构紧凑、惯量小、响应快、低噪音和长寿命等特点。伺服电机与电动缸的传动丝杆直接相连接，使伺服电机的编码器直接反馈电动缸移动活塞的位移量，减少了中间环节的惯量和间隙，提高了控制性和控制精度。伺服电机与电动缸整体相连，安装容易、设定简单、使用方便。

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转折型电动缸 Turning point electric cylinder

转折型电动缸由于整体长度短，适用于安装位置比较小的场合。同时本方案选用的同步带，具有强度高、间隙小、寿命长的特点，使整个电动缸具有较高的控制性和控制精度。伺服电机与电动缸配合灵活，安装容易，设定简单，使用方便。

Due to the short overall length, the turning point electric cylinder is suitable for the installation position is relatively small. At the same time, the synchronous belt selected in this scheme has the characteristics of high strength, small gap and long life, so that the whole electric cylinder has high control and control accuracy. Servo motor and electric cylinder cooperate flexibly, easy installation, simple setting, convenient use.



1	节能干净、超长寿命、操作维护简单，具有很强的环境适应能力。伺服电动缸不容易受到周围环境温度的影响，可在低、高温，雨雪等恶劣环境下无故障正常工作，防护等级可以定制IP65。 <i>Energy saving and clean, long life, simple operation and maintenance, with strong environmental adaptability. The servo electric cylinder is not easy to be affected by the ambient temperature, and can work normally without fault in low, high temperature, rain and snow and other harsh environments. Protection level can be customized IP65.</i>
2	传动效率高。采用精密滚珠丝杠或行星滚柱丝杠等精密传动元件的电动缸，传动效率可以达到90%以上。 <i>High transmission efficiency. Using precision ball screw or planetary roller screw and other precision transmission components of the electric cylinder, transmission efficiency can reach more than 90%.</i>
3	定位精度高。通过伺服控制可以实现±0.01mm的精确定位，具有很高的定位精度，适合应用在对精度要求比较高的场合。 <i>High positioning accuracy. The servo control can achieve the precise positioning of ±0.005mm, with high positioning accuracy, suitable for application in the case of high precision requirements.</i>
4	结构简单，占用空间小，维护方便。 <i>Simple structure, small space, easy maintenance.</i>
5	可靠性和安全性高。电动缸可以配合各类传感器系统，以及各种行程控制装置，对电动缸的工作状态进行检测和反馈，形成全闭环控制。 <i>High reliability and security. The electric cylinder can be combined with various sensor systems and various stroke control devices to detect and feedback the working state of the electric cylinder to form a full closed-loop control.</i>
6	电动缸采用滚珠丝杠或行星滚柱丝杠，传动部分的摩擦较小，提高运行稳定性，延长使用寿命。 <i>The electric cylinder adopts ball screw or planetary roller screw, and the friction of the transmission part is small, improving the operation stability and extending the service life.</i>
7	直线工作速度可以达到1000 mm/s，速度优势非常明显。 <i>Linear working speed can reach 2000 mm/s, the speed advantage is very obvious.</i>

电机输出扭矩与电动缸输出力的关系

The relation between the output torque of motor and the output force of electric cylinder

$$F = T \times \eta \times 2\pi \times R/L$$

F	电动缸输出力, 单位: kN Electric cylinder output force, unit: kN
T	电机输出扭矩, 单位: Nm Motor output torque, unit: Nm
R	减速比 Reduction ratio
L	丝杆导程, 单位: mm Lead of lead screw, unit: mm
η	效率(一般选择电动缸的总效率为85%, 但是效率根据实际使用工况会有变化, 请注意) Efficiency (The total efficiency of the electric cylinder is generally 85%, but the efficiency will change according to the actual working conditions, please note)

电动缸的寿命计算

Life calculation of electric cylinder

电动缸的寿命一般指电动缸内部使用的丝杆寿命, 可分为两个部分, 一是丝杆的疲劳寿命, 它可以通过计算得出; 另一个是使用寿命, 取决于使用条件(如温度、灰尘、使用润滑的种类和定期添加的频率等), 使用寿命往往通过经验得出。以下是疲劳寿命的计算方法:

The life of the electric cylinder generally refers to the life of the lead screw used inside the electric cylinder, which can be divided into two parts, one is the fatigue life of the lead screw, which can be calculated out; The other is the service life, depending on the conditions of use (such as temperature, dust, the type of lubrication used and the frequency of regular additions, etc.). Service life is often learned by experience. The following is the calculation method of fatigue life:

$$L_{10} = (C_a/F_m) 3 \times L$$

- L10: 电动缸的寿命, 单位: Km
- Fm: 电动缸承受的平均负载, 单位: kN
- Ca: 丝杆螺母的基本额定动负载, 单位kN (可通过丝杆样本查出)
- L: 丝杆导程, 单位: mm

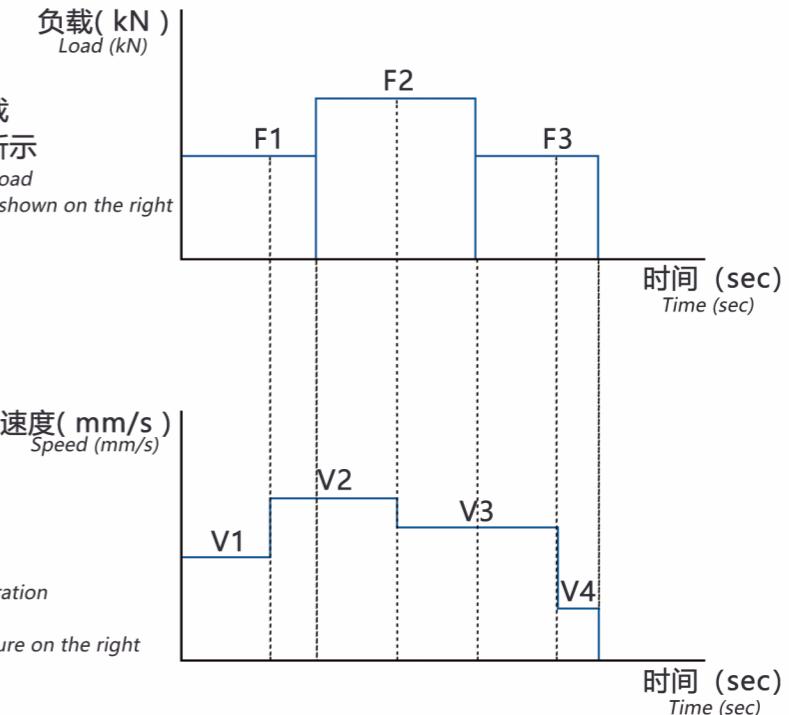
- L10: life of electric cylinder, unit: Km
- Fm: The average load of the electric cylinder, unit: kN
- Ca: The basic rated dynamic load of the screw nut, in kN (can be found by screw sample)
- L: lead of the lead screw, unit: mm

平均负载的计算

Calculation of average load

平均负载是指电动缸在一个工作循环中, 综合在各个不同工作区间的力、速度和时间后得出的立方平均值。

The average load refers to the cubic average value of the electric cylinder in a working cycle, which is obtained after synthesizing the force, speed and time in different working intervals



电动缸平均负载的计算公式如下:

The average load of the electric cylinder is calculated as follows:

$$F_m = 3 \sqrt{\frac{F_1^3 \times V_1 \times t_1 + F_2^3 \times V_2 \times t_2 + F_3^3 \times V_3 \times t_3 + F_4^3 \times V_4 \times t_4}{V_1 \times t_1 + V_2 \times t_2 + V_3 \times t_3 + V_4 \times t_4}}$$

型号订购码 Code

LMC 32	-	1205	-	50	-	S	-	<input type="checkbox"/>	-	M40	-	<input type="checkbox"/>	-	S1
本体型号 Item No.		丝杆规格 Lead Screw Specifications		行程(mm) Stroke range		安装方式 Mounting mode		轴端安装方式 Shaft end mounting mode		本体品牌及功率 Motor brand & power		减速比 Reduction ratio		磁性开关数量 Number of magnetic Reed switches
1205		1210		50-700, 间隔50		S: 马达直连型 S: Motor Direct mounting		缺省: 外螺纹 Default: External thread		前盖 Front Cover		G3: 3比减速 G3: 3 ratio reduction		S1: 1个 S1: 1PC
1210		1220				PJ: 转折加强型 PJ: Indirect enhance mounting		B: 内螺纹 B: Internal thread		DX: 导向架 DX: Guide Frame		G3: 3比减速 G3: 3 ratio reduction		S2: 2个 S2: 2PC
						G: 杆端关节轴承 G: Rod end joint		TC: 底面耳轴 TC: Bottom Trunion		LB: 侧法兰 LB: Side Flange		G5: 5比减速 G5: 5 ratio reduction		S3: 3个 S3: 3PC
						Y: U型叉铰 Y: Rod clevis U		CA: 单片尾铰 CA: Single tail hinge		P40: 松下400W P40: Panasonic 400W		G10: 10比减速 G10: 10 ratio reduction		
						I: I型叉铰 I: Rod clevis I								
						CB: 双片尾铰 CB: Double tail hinge								

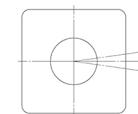
注1: P型为钣金罩壳, 不可用于电缸尾部安装。PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度
Anti-rotating Accuracy of Rod



防止回转精度 Anti-rotating accuracy

± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加作动阻抗。

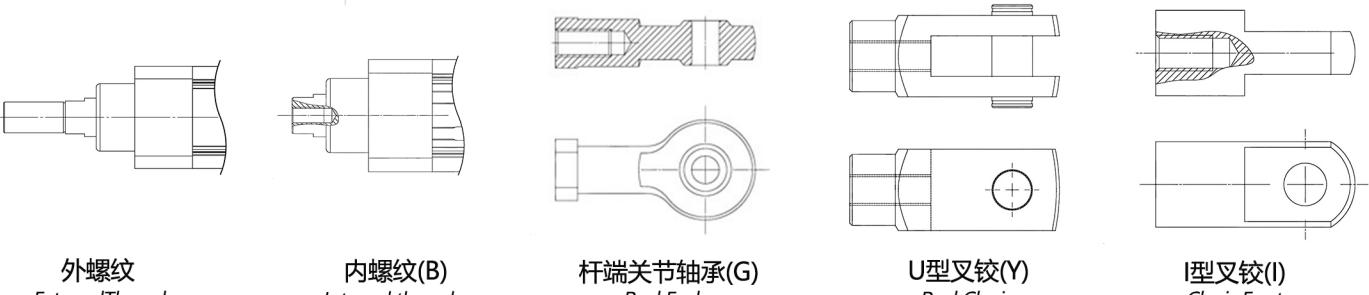
※Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod

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.

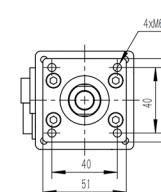
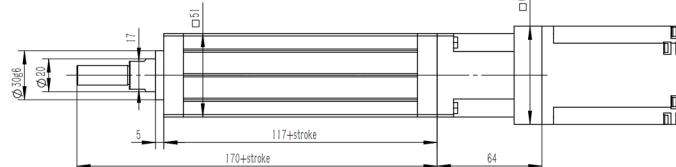
基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter	12		
	丝杆等级Screw accuracy class	C7		
	丝杆导程(mm)Screw lead	5	10	20
	行程范围(mm)Stroke range	50-700, 间隔50	50-700, 间隔50	50-700, 间隔50
马达输入 The Motor Input	重复定位精度(mm)Repetitive Accuracy	±0.01, (300mm以上) ±0.02	±0.01, (300mm以上) ±0.02	±0.01, (300mm以上) ±0.02
	马达额定功率(W)Motor rated power	400	400	400
	马达额定转矩(N·M)Motor rated torque	1.27	1.27	1.27
	马达额定转速(rpm)Motor rated rating	3000	3000	3000
电推缸 Pusher cylinder	减速比Reduction ratio	无	无	无
	额定推力(kN)Rated thrust	1.28	0.64	0.32
	额定速度(mm/s)Rated speed	250	500	1000

轴端安装方式 Shaft End Mounting Direction



马达直连型(-S)



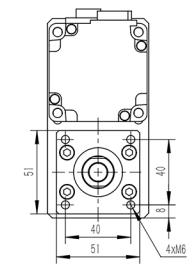
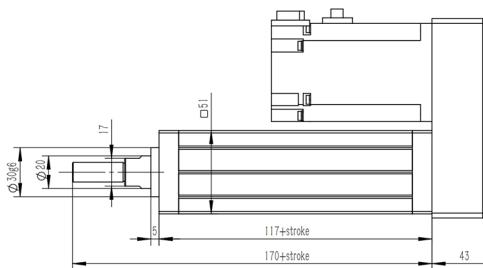
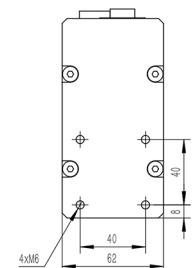
2D & 3D
2D & 3D

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行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700
重量(kg)Weight	1.5	2.2	2.8	3.5	4.1	4.8	5.4	6.1	6.7	7.4	8.0	8.7	9.3	10.0

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

转折加强型(-PJ)
(可用于电缸尾部安装)



2D & 3D
2D & 3D

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行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700
重量(kg)Weight	1.8	2.4	3.1	3.7	4.4	5.0	5.7	6.3	7.0	7.6	8.3	8.9	9.6	10.2

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

型号订购码 Code

LMC 40	-	1205	-	50	-	S	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	M40	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	S1
本体型号 Item No.		丝杆规格 Lead Screw Specifications		行程(mm) Stroke range														
1205		1210		1220		50-1000, 间隔50	50-1000, gap 50	S: 马达直连型 Motor Direct mounting	S: Motor Direct mounting	P: 马达转折型 Motor Indirect mounting	P: Motor Indirect mounting	PJ: 转折加强型 PJ: Indirect enhancement mounting	PJ: Indirect enhancement mounting	G: 杆端关节轴承 Rod End Joint	Y: U型叉绞 Rod Clevis	I: I型叉绞 Rod Clevis	CB: 双片尾铰 Double Tail Hinge	CA: 单片尾铰 Single Tail Hinge
1205		1210		1220				A: 外螺纹 External thread	B: 内螺纹 Internal thread	C: 导向架 Guide rail	D: 前盖 Front Cover	E: 后盖 Rear Cover	F: 侧法兰 Side Flange	T: 底面轴 Bottom Trunion	T: Bottom Trunion	T: 底面轴 Bottom Trunion	T: Bottom Trunion	
								G40: 三菱400W Mitsubishi 400W	M40: 三菱400W Mitsubishi 400W	P40: 松下400W Panasonic 400W	P40: Panasonic 400W							
								缺省: 外螺纹 Default: External thread	缺省: 内螺纹 Default: Internal thread	缺省: 导向架 Default: Guide rail	缺省: 前盖 Default: Front Cover	缺省: 后盖 Default: Rear Cover	缺省: 侧法兰 Default: Side Flange	缺省: 底面轴 Default: Bottom Trunion	缺省: U型叉绞 Default: U-type rod clevis	缺省: I型叉绞 Default: I-type rod clevis	缺省: 双片尾铰 Default: Double tail hinge	缺省: 单片尾铰 Default: Single tail hinge

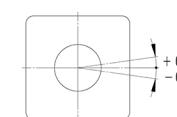
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防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度 Anti-rotating accuracy of the output rod



防止回转精度
Anti-rotating accuracy

± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加作动阻抗。

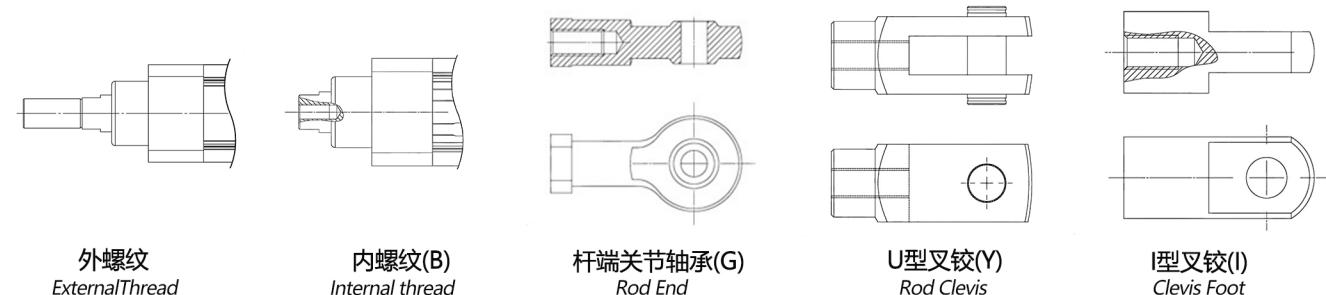
※Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod

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.

基本规格 Basic Specification

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	行程范围(mm)Stroke range	50-1000, 间隔50	50-1000, 间隔50	50-1000, 间隔50
	重复定位精度(mm)Repetitive Accuracy	± 0.01、(300mm以上) ± 0.02	± 0.01、(300mm以上) ± 0.02	± 0.01、(300mm以上) ± 0.02
马达输入 The Motor Input	马达额定功率(W)Motor rated power	400	400	400
	马达额定转矩(N·M)Motor rated torque	1.27	1.27	1.27
	马达额定转速(rpm)Motor rated rating	3000	3000	3000
	减速比Reduction ratio	无	无	无
电推缸 Thrust Output	额定推力(KN)Rated thrust	1.28	0.64	0.32
	推力输出Thrust Outpu	250	500	1000
额定速度(mm/s)Rated speed				

轴端安装方式 Shaft End Mounting Direction



外螺纹
External Thread

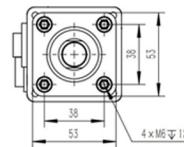
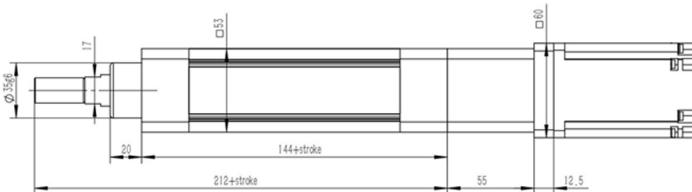
内螺纹(B)
Internal thread

杆端关节轴承(G)
Rod End

U型叉绞(Y)
Rod Clevis

I型叉绞(I)
Clevis Foot

马达直连型(-S)

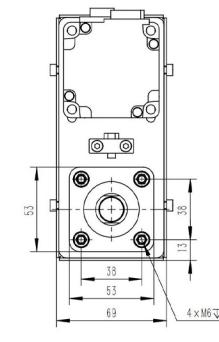
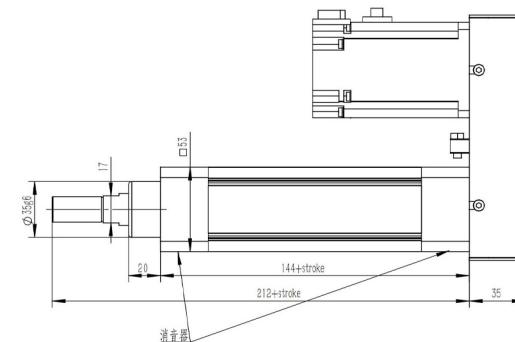


使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
			Mitsubishi(M40)	M5
	400W	松下(P40) Panasonic(P40)	φ70	M4

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达转折型(-P)

(不可用于电缸尾部安装)

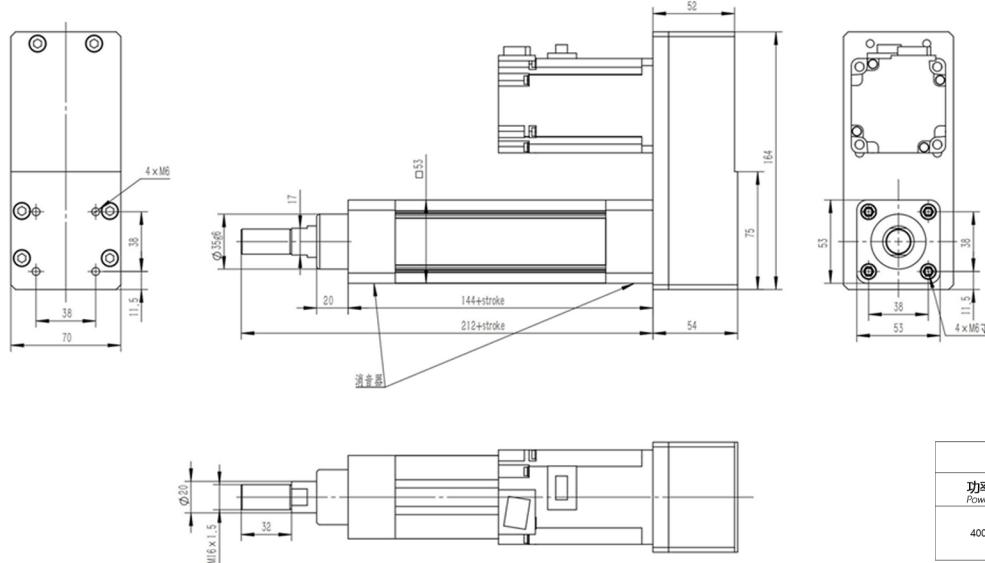


使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
			Mitsubishi(M40)	M5
	400W	松下(P40) Panasonic(P40)	φ70	M4

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

转折加强型(-PJ)

(可用于电缸尾部安装)



行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500
重量(kg)Weight	2.6	2.8	3.1	3.3	3.5	3.8	4.0	4.2	4.5	4.7
行程(mm)Stroke	550	600	650	700	750	800	850	900	950	1000
重量(kg)Weight	4.9	5.2	5.4	5.6	5.9	6.1	6.3	6.6	6.8	7.1

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！



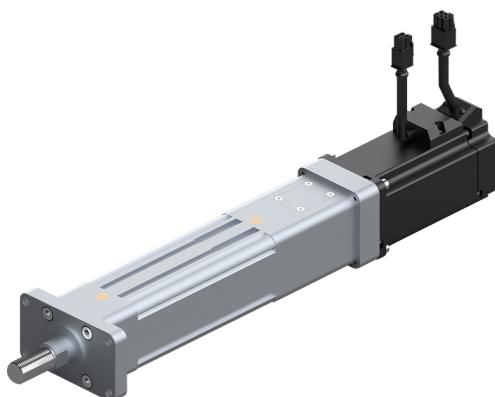
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型号订购码 Code

LMC 40S - 1205 - 50 - S - □ - □ - M40 - □ - S1	丝杆规格 Lead Screw Specifications	安装方式 Mounting mode	本体安装方式 Body Mounting Method	减速比 Reduction ratio
本体型号 Item No.	1205 1210 1220	行程(mm) Stroke range 50-1000, 间隔50	S: 马达直连型 P: 马达转折型 PJ: 转折加强型	丝杆: 外螺纹 缺省: 外螺纹 Default: External thread
			P: 马达直连型 B: 内螺纹 G: 杆端关节轴承 Y: U型叉铰 I: I型叉铰	P: 马达直连 Default: Direct motor connection
			DX: 导向架 LB: 侧法兰 TC: 底面耳轴 CA: 单片尾铰 CB: 双片尾铰	P: 松下400W P40: Panasonic 400W
				G3: 3比减速 G5: 5比减速 G10: 10比减速
				S1: 1个 S2: 2个 S3: 3个

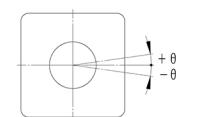
注1: P型为钣金罩壳, 不可用于电缸尾部安装。PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度
Anti-rotating Accuracy of Rod



防止回转精度
Anti-rotating accuracy

± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加作动阻抗。

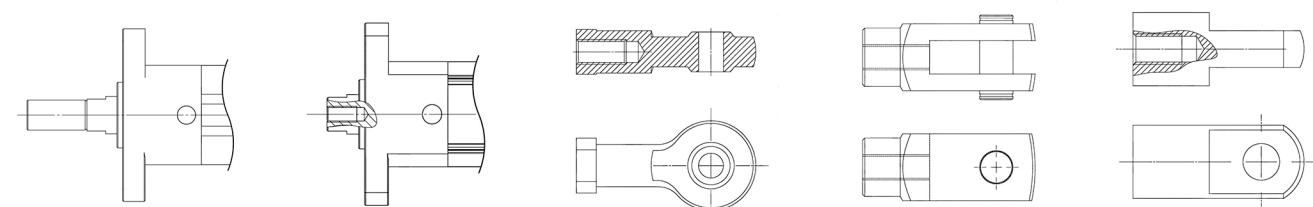
※Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod

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.

基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter	12		
	丝杆等级Screw accuracy class	C7		
	丝杆导程(mm)Screw lead	5	10	20
	行程范围(mm)Stroke range	50-1000, 间隔50	50-1000, 间隔50	50-1000, 间隔50
马达输入 The Motor Input	重复定位精度(mm)Repetitive Accuracy ±0.01, (300mm以上) ±0.02	±0.01, (300mm以上) ±0.02	±0.01, (300mm以上) ±0.02	±0.01, (300mm以上) ±0.02
	马达额定功率(W)Motor rated power	400	400	400
	马达额定扭矩(N·M)Motor rated torque	1.27	1.27	1.27
	马达额定转速(rpm)Motor rated rating	3000	3000	3000
	减速比Reduction ratio	无	无	无
电推缸 Thrust Output	额定推力(KN)Rated thrust	1.28	0.64	0.32
	额定速度(mm/s)Rated speed	250	500	1000

轴端安装方式 Shaft End Mounting Direction



外螺纹
External Thread

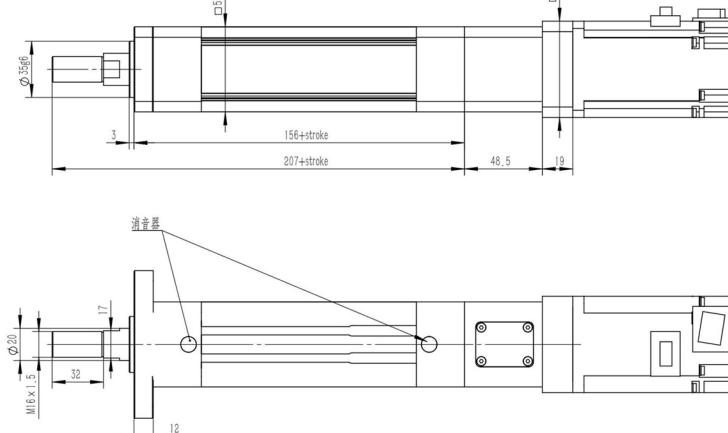
内螺纹(B)
Internal thread

杆端关节轴承(G)
Rod End

U型叉铰(Y)
Rod Clevis

I型叉铰(I)
Clevis Foot

马达直连型(-S)

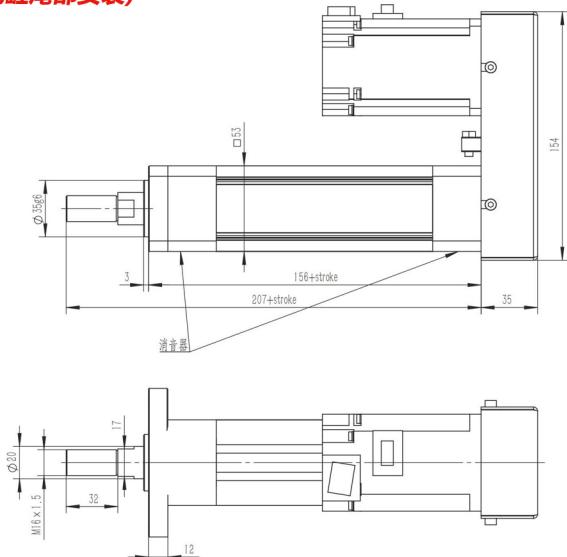


行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500
重量(kg)Weight	2.0	2.2	2.5	2.7	2.9	3.2	3.4	3.6	3.9	4.1
行程(mm)Stroke	550	600	650	700	750	800	850	900	950	1000
重量(kg)Weight	4.3	4.6	4.8	5.0	5.3	5.5	5.7	6.0	6.2	6.5

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

马达转折型(-P)

(不可用于电缸尾部安装)

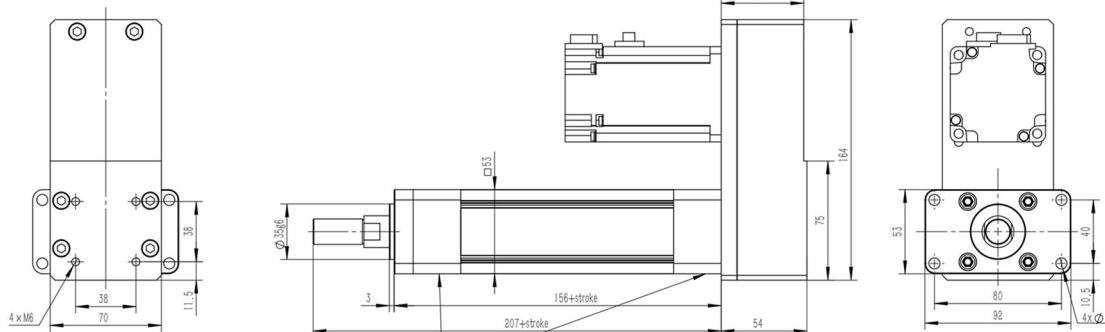


行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500
重量(kg)Weight	2.2	2.4	2.6	2.9	3.1	3.4	3.6	3.8	4.1	4.3
行程(mm)Stroke	550	600	650	700	750	800	850	900	950	1000
重量(kg)Weight	4.5	4.8	5.0	5.2	5.5	5.7	5.9	6.2	6.4	6.6

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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转折加强型(-PJ)
(可用于电缸尾部安装)



使用马达 Use Motor	PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand	
400W	三菱(M40) 松下(P40) Panasonic(P40)	φ70 M5 M4

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500
重量(kg)Weight	2.7	2.9	3.2	3.4	3.6	3.9	4.1	4.3	4.6	4.8
行程(mm)Stroke	550	600	650	700	750	800	850	900	950	1000
重量(kg)Weight	5.0	5.3	5.5	5.7	6.0	6.2	6.4	6.7	6.9	7.2

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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型号订购码 Code

LMC 50	-	1605	-	50	-	S	-	<input type="checkbox"/>	-	M40	-	<input type="checkbox"/>	-	S1
本体型号 Item No.														
丝杆规格 Lead Screw Specifications		行程(mm) Stroke range												
1605		50-1200, 间隔50												
1610														
1620														

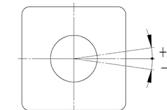
注1: P型为钣金罩壳, 不可用于电缸尾部安装。PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度 Anti-rotating Accuracy of Rod



防止回转精度
Anti-rotating accuracy

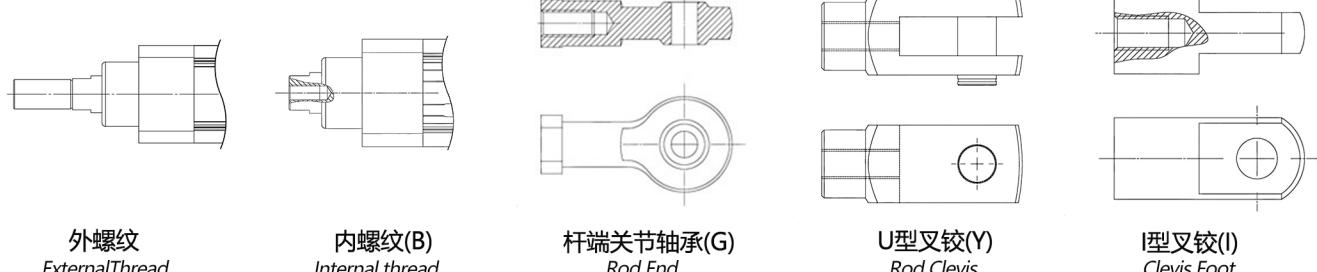
± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加动作阻抗。
※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.

基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter	16																
	丝杆等级Screw accuracy class	C7																
	丝杆导程(mm)Screw lead	05		10		20												
行程范围(mm)Stroke range		50-1200, 间隔50			50-1200, 间隔50			50-1200, 间隔50										
重复定位精度(mm)Repetitive Accuracy		±0.01, (400mm以上) ±0.02			±0.01, (400mm以上) ±0.02			±0.01, (400mm以上) ±0.02										
马达输入 The Motor Input	马达额定功率(W)Motor rated power	400	750	400	750	400	750											
	马达额定转矩(N·M)Motor rated torque	1.27	2.4	1.27	2.4	1.27	2.4											
	马达额定转速(rpm)Motor rated rating	3000			3000			3000										
减速比Reduction ratio		无	3	5	10	无	3	5	10	无	3	5	10					
电推缸推力输出Thrust Output	额定推力(KN)Rated thrust	1.28	3.84	6.4	12.8	2.56	7.68	12.8	25.6	0.64	1.92	3.2	6.4	1.28	3.84	6.4	12.8	25.6
	额定速度(mm/s)Rated speed	250			500			1000										

轴端安装方式 Shaft End Mounting Direction



外螺纹
External Thread

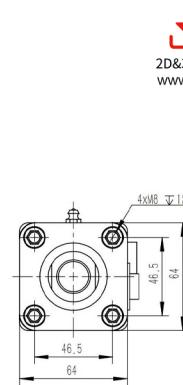
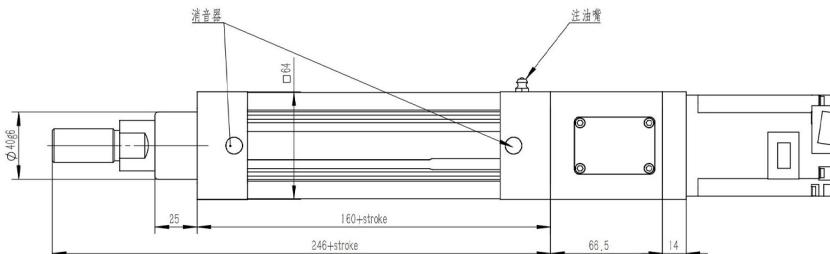
内螺纹(B)
Internal thread

杆端关节轴承(G)
Rod End

U型叉绞(Y)
Rod Clevis

I型叉绞(I)
Clevis Foot

马达直连型(-S)

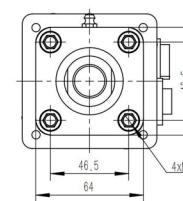
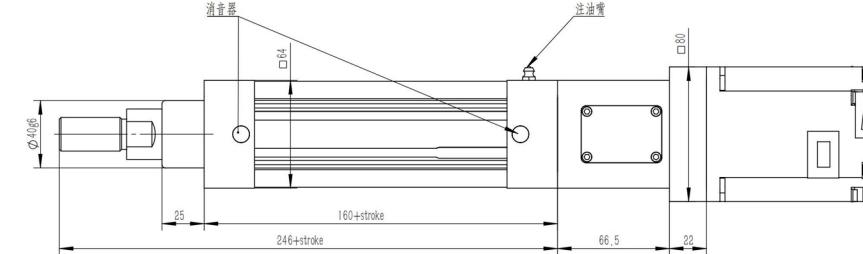


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注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达直连型(-S)



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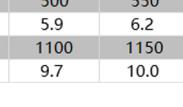
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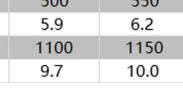
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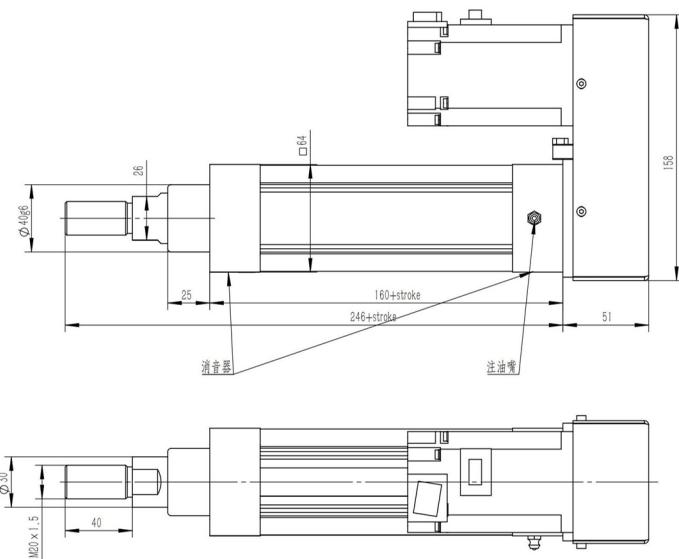
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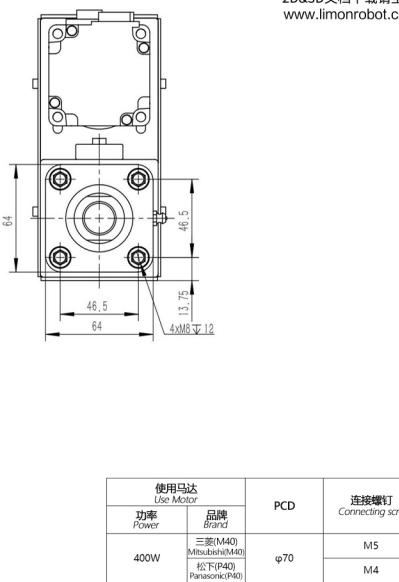
马达转折型(-P)
(不可用于电缸尾部安装)



	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.0	3.3	3.6	3.9	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	6.7	7.0	7.4	7.7	8.0	8.3	8.6	8.9	9.2	9.5	9.8	10.1

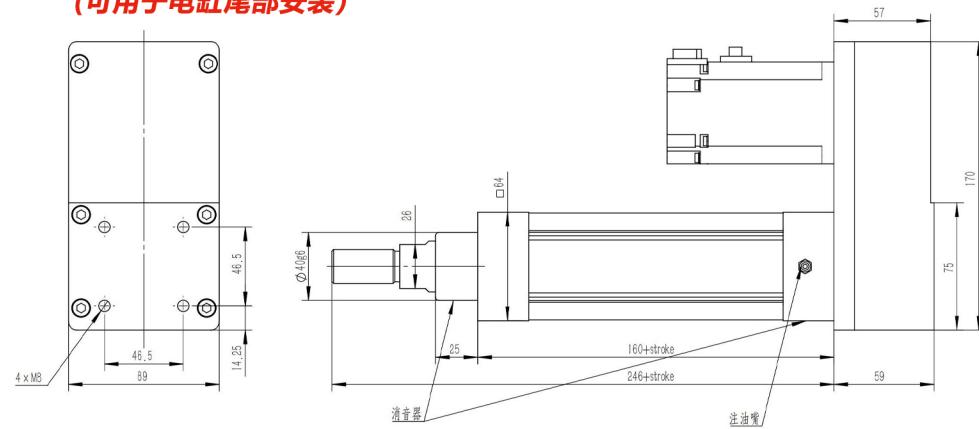
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使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
三菱(M40) Mitsubishi(M40)	400W	松下(P40) Panasonic(P40)	φ70	M5

转折加强型(-PJ)
(可用于电缸尾部安装)

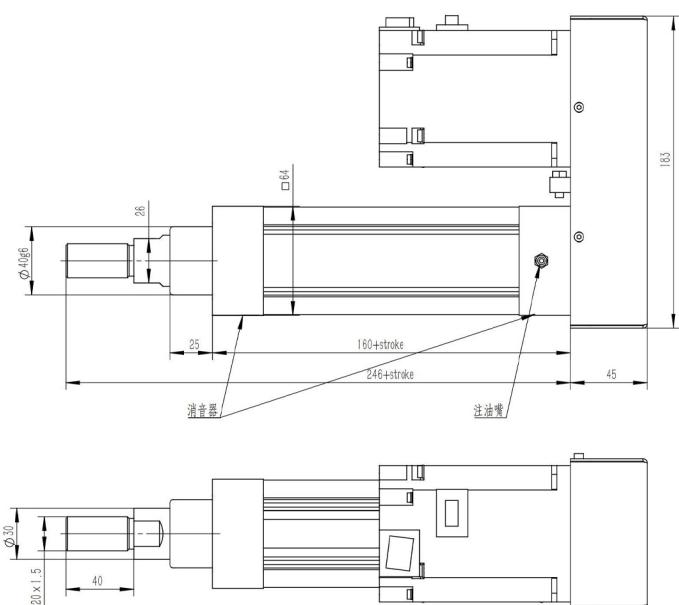


	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.7	7.0	7.3
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	7.6	7.9	8.2	8.5	8.8	9.1	9.4	9.8	10.1	10.4	10.7	11.0

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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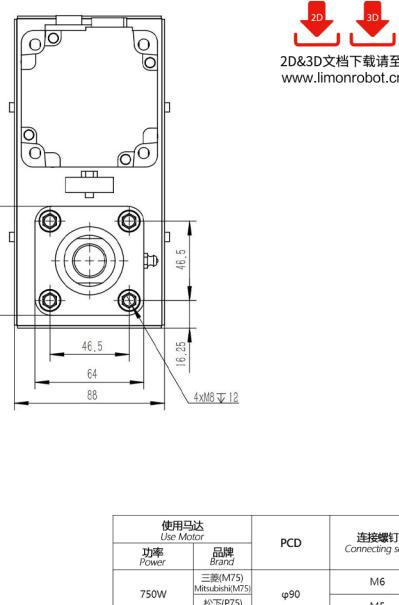
马达转折型(-P)
(不可用于电缸尾部安装)



	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.2	3.5	3.8	4.1	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0

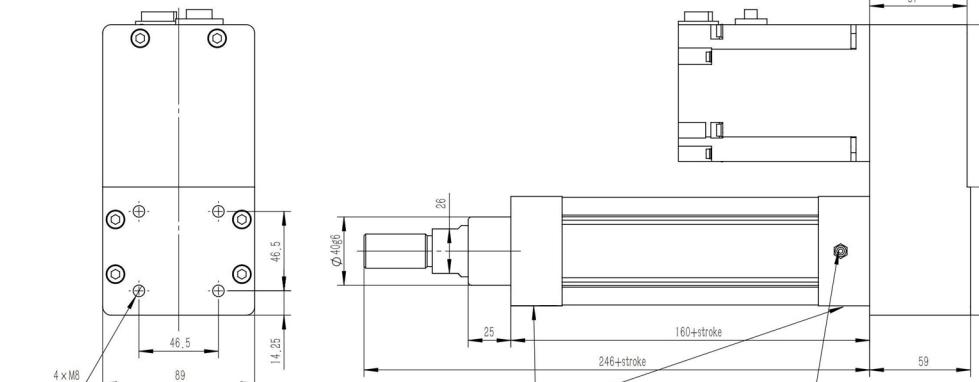
注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
三菱(M75) Mitsubishi(M75)	750W	松下(P75) Panasonic(P75)	φ90	M6

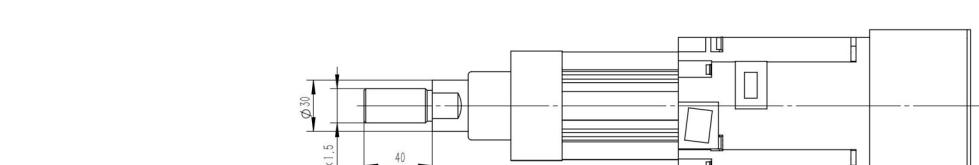
转折加强型(-PJ)
(可用于电缸尾部安装)



	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.7	7.0	7.3
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	7.6	7.9	8.2	8.5	8.8	9.1	9.4	9.8	10.1	10.4	10.7	11.0

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.2	3.5	3.8	4.1	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0

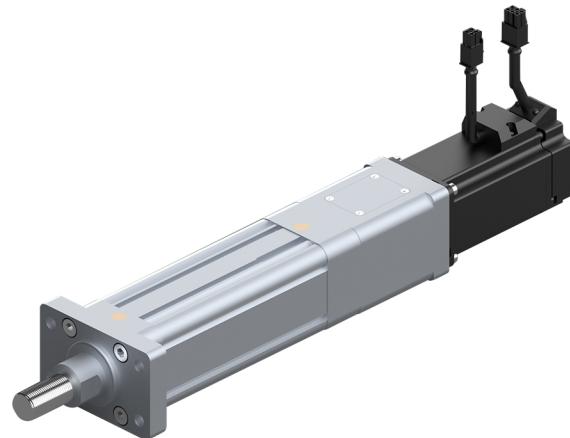
注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

型号订购码 Code

LMC 50S	-	1605	-	50	-	S	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	M40	-	<input type="checkbox"/>	-	S1
本体型号 Item No.	丝杆规格 Lead Screw Specifications	行程(mm) Stroke range	安装方式 Mounting mode	轴端安装方式 Shaft end mounting mode	本体品牌及功率 Motor brand/power	减速比 Reduction ratio	磁性开关数量 Number of magnetic Reed Switches									
1605	1610	50-1200, 间隔50	S: 马达直连型 S: Motor direct mounting	前盖 Front Cover	M40: 三菱400W M40: Mitsubishi 400W	G3: 3比减速 G3: 3-ratio reduction	S1: 1个 S1: 1PCS									
1620			P: 马达转接型 P: Motor indirect mounting	B: 内螺纹 B: Internal thread	M75: 三菱750W M75: Mitsubishi 750W	G5: 5比减速 G5: 5-ratio reduction	S2: 2个 S2: 2PCS									
			PJ: 转折加强型 PJ: Indirect enhance mounting	DX: 导向架 DX: Guide frame	P40: 松下400W P40: Panasonic 400W	G10: 10比减速 G10: 10-ratio reduction	S3: 3个 S3: 3PCS									
				LB: 侧法兰 LB: Side flange	P75: 松下750W P75: Panasonic 750W											
				TC: 底面耳轴 TC: Bottom Trunion												
				CA: 单片尾铰 CA: Single tail hinge												
				CB: 双片尾铰 CB: Double tail hinge												

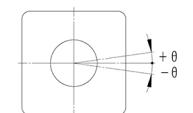
注1: P型为钣金罩壳, 不可用于电缸尾部安装。PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度
Anti-rotating Accuracy of Rod



防止回转精度
Anti-rotating accuracy

± 0.01°

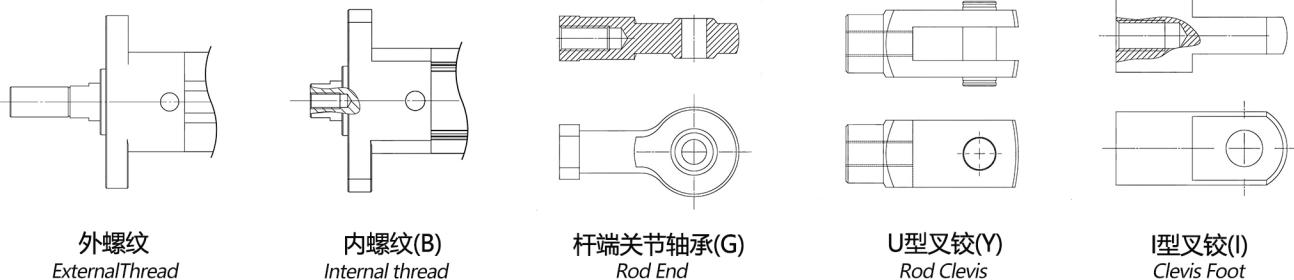
※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加作动阻抗。

※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.

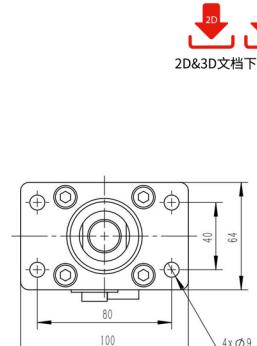
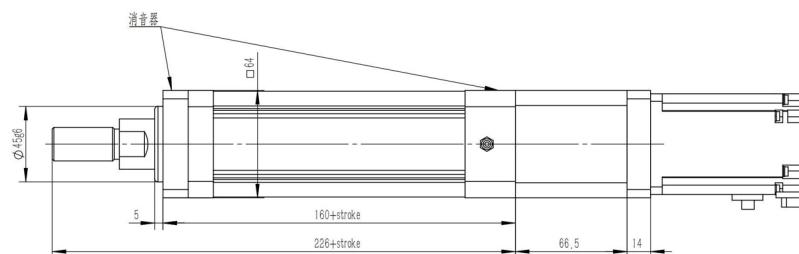
基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter	16																							
	丝杆等级Screw accuracy class	C7																							
丝杆导程(mm)Screw lead	05		10		20																				
行程范围(mm)Stroke range	50-1200, 间隔50			50-1200, 间隔50			50-1200, 间隔50																		
重复定位精度(mm)Repetitive Accuracy	±0.01, (400mm以上) ±0.02		±0.01, (400mm以上) ±0.02		±0.01, (400mm以上) ±0.02																				
马达输入 The Motor Input	马达额定功率(W)Motor rated power	400	750	400	750	400	750	400	750	400	750	400	750												
	马达额定转矩(N·M)Motor rated torque	1.27	2.4	1.27	2.4	1.27	2.4	1.27	2.4	1.27	2.4	1.27	2.4												
	马达额定转速(rpm)Motor rated rating	3000		3000		3000																			
	减速比Reduction ratio	无	3	5	10	无	3	5	10	无	3	5	10												
电推缸推力输出Thrust Output	额定推力(KN)Rated thrust	1.28	3.84	6.4	12.8	2.56	7.68	12.8	25.6	0.64	1.92	3.2	6.4	1.28	3.84	6.4	12.8	0.32	0.96	1.6	3.2	0.64	1.92	3.2	6.4
	额定速度(mm/s)Rated speed	250		500		1000																			

轴端安装方式 Shaft End Mounting Direction



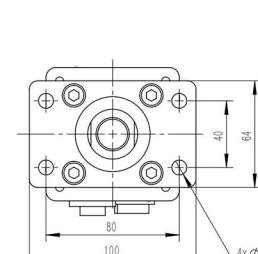
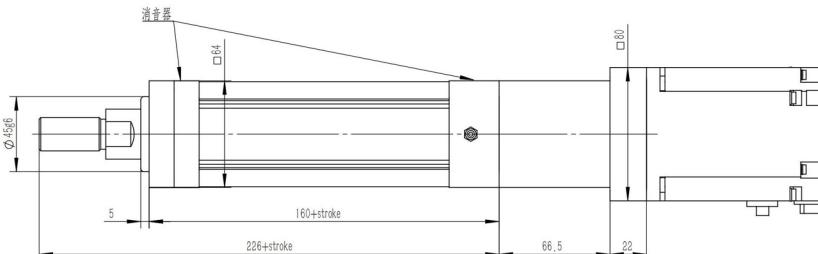
马达直连型(-S)



使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
三菱(M40)	400W	Mitsubishi(M40)	φ70	M5
松下(P40)		Panasonic(P40)		M4

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

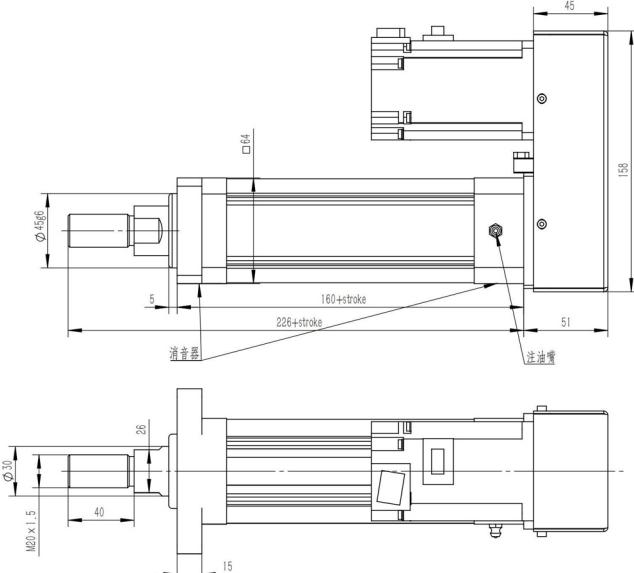
马达直连型(-S)



使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
三菱(M75)	750W	Mitsubishi(M75)	φ90	M6
松下(P75)		Panasonic(P75)		M5

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

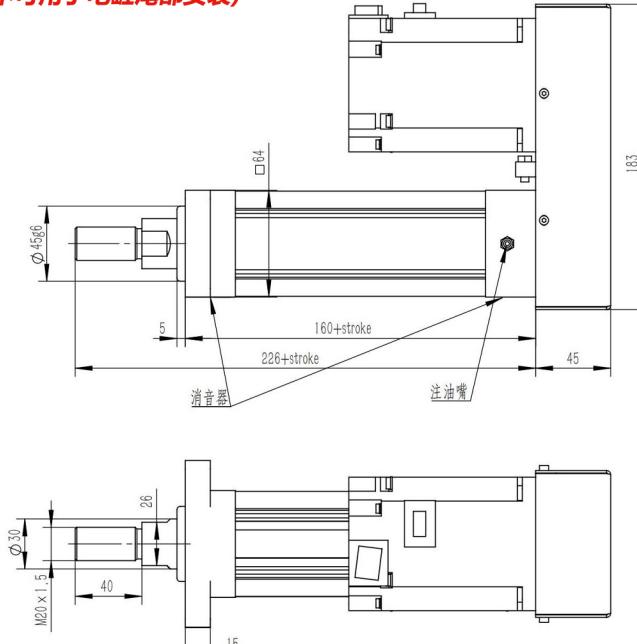
马达转折型(-P)
(不可用于电缸尾部安装)



行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.1	3.4	3.7	4.0	4.3	4.6	5.0	5.3	5.6	5.9	6.2	6.5
行程(mm)Stroke	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
重量(kg)Weight	6.8	7.1	7.4	7.7	8.1	8.4	8.7	9.0	9.3	9.6	9.9	10.2

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

马达转折型(-P)
(不可用于电缸尾部安装)



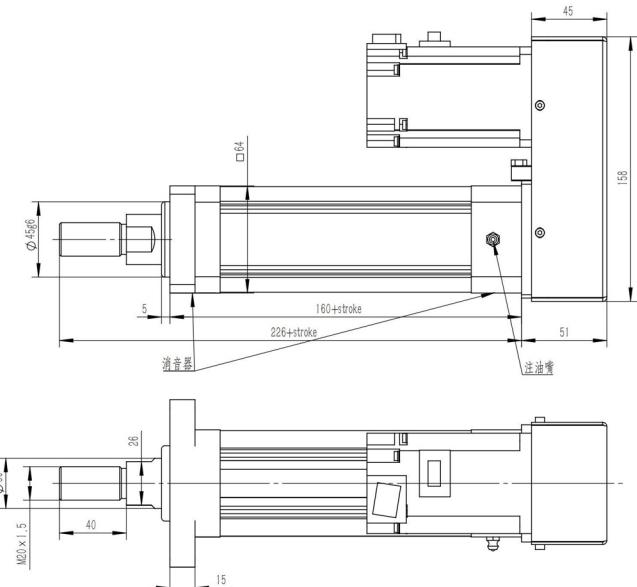
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.3	3.6	3.9	4.2	4.5	4.8	5.2	5.5	5.8	6.1	6.4	6.7
行程(mm)Stroke	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
重量(kg)Weight	7.0	7.3	7.6	7.9	8.3	8.6	8.9	9.2	9.5	9.8	10.1	10.4

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

LMC50S(短型)系列
LMC50S (Short form) series

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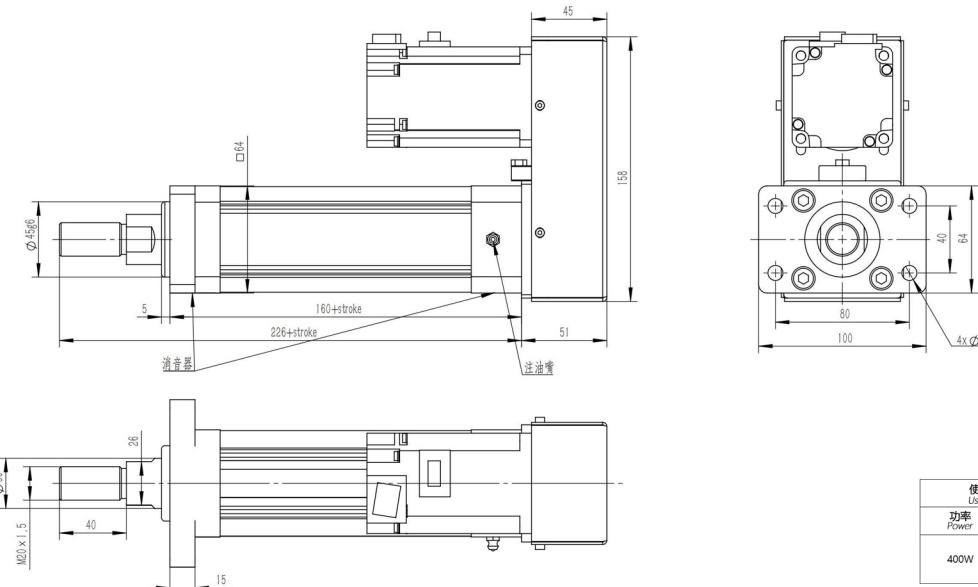
转折加强型(-PJ)
(可用于电缸尾部安装)



行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.9	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7.0	7.4
行程(mm)Stroke	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
重量(kg)Weight	7.7	8.0	8.3	8.6	8.9	9.2	9.5	9.8	10.1	10.5	10.8	11.1

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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使用马达 Use Motor	功率 Power	品牌 Brand	PCD	连接螺钉 Connecting screw
400W		Mitsubishi(M40) 松下(P40) Panasonic(P40)	φ70	M5 M4

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600
重量(kg)Weight	3.9	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7.0	7.4
行程(mm)Stroke	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
重量(kg)Weight	7.7	8.0	8.3	8.6	8.9	9.2	9.5	9.8	10.1	10.5	10.8	11.1

型号订购码 Code

LMC 63	-	2005	-	50	-	S	-	<input type="checkbox"/>	-	M75	-	<input type="checkbox"/>	-	S1
本体型号 Item No.		丝杆规格 Lead Screw Specifications		行程(mm) Stroke range		安装方式 Mounting mode		轴端安装方式 Shaft end mounting mode		本体安装方式 Body Mounting Method		马达品牌及功率 Motor brand/power		减速比 Reduction ratio
2005		50-1500, 间隔50		S: 马达直连型 S: Motor direct mounting		缺省: 外螺纹 Default: External thread		DX: 导向架 DX: Guide frame		前盖 Front Cover		M75: 三菱750W M75: Mitsubishi 750W		S1: 1个 S1: 1PCS
2010				P: 马达转接型 P: Motor indirect mounting		B: 内螺纹 B: Internal thread		LB: 滑导法兰 LB: Slide flange		后盖 Rear Cover		P75: 松下750W P75: Panasonic 750W		G3: 3比减速 G3: 3-ratio reduction
2020				PJ: 转折加强型 PJ: Indirect enhance mounting		G: 杆端关节轴承 G: Rod end joint		TC: 底面耳轴 TC: Bottom ear軸		缺省: 马达直连 Default: Direct motor connection		G5: 5比减速 G5: 5-ratio reduction		G10: 10比减速 G10: 10-ratio reduction
				Y: U型叉饺 Y: Rod clevis U		CA: 单片尾饺 CA: Single tail hinge		TC: 底面耳軸 TC: Bottom ear軸						S2: 2个 S2: 2PCS
				I: I型叉饺 I: Rod clevis I		CB: 双片尾饺 CB: Double tail hinge		CA: 单片尾铰 CA: Single tail hinge						S3: 3个 S3: 3PCS

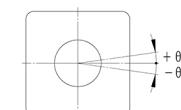
注1: P型为钣金罩壳, 不可用于电缸尾部安装。PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度
Anti-rotating accuracy of rod



防止回转精度
Anti-rotating accuracy

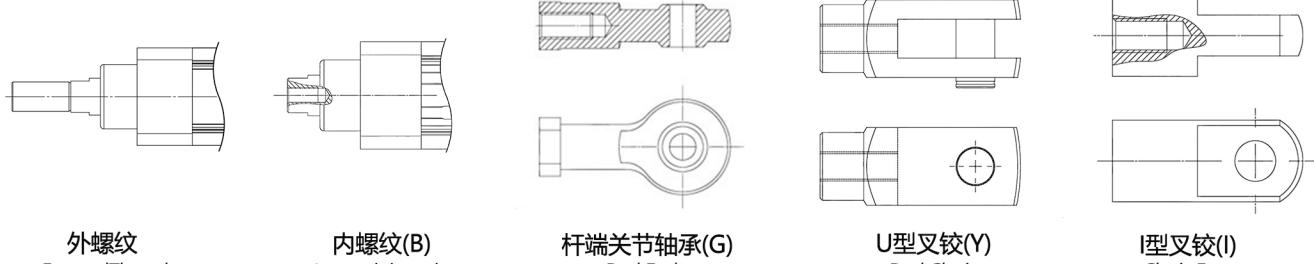
± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关异常, 内部滑轨变形, 进而造成增加作动阻抗。
※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.

基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter									
	20				100					
丝杆等级Screw accuracy class	C7									
	5				10					
丝杆导程(mm)Screw lead	5		10		20					
行程范围(mm)Stroke range	50-1500, 间隔50				50-1500, 间隔50					
重复定位精度(mm)Repetitive Accuracy	±0.01、(300mm以上) ±0.02				±0.01、(300mm以上) ±0.02					
马达额定功率(W)Motor rated power	750				750					
马达额定转矩(N·M)Motor rated torque	2.4				2.4					
马达额定转速(rpm)Motor rated rating	3000				3000					
减速比Reduction ratio	无	3	5	10	无	3	5	10		
电推缸推力输出Thrust Output	2.56	7.68	12.8	25.6	1.28	3.84	6.4	12.8		
额定速度(mm/s)Rated speed	250	83.3	50	25	500	166.7	100	50		

轴端安装方式 Shaft End Mounting Direction



外螺纹
External Thread

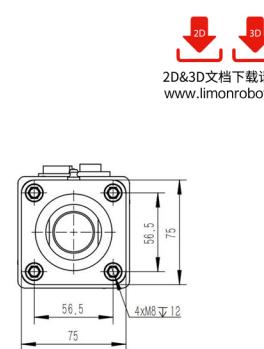
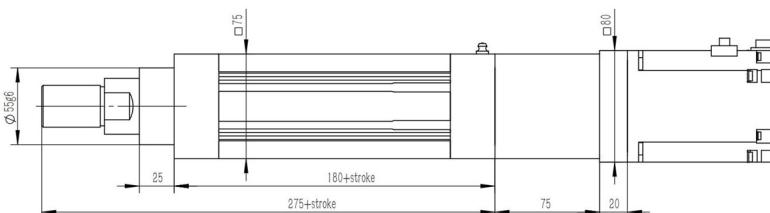
内螺纹(B)
Internal thread

杆端关节轴承(G)
Rod End

U型叉饺(Y)
Rod Clevis

I型叉饺(I)
Clevis Foot

马达直连型(-S)

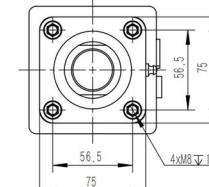
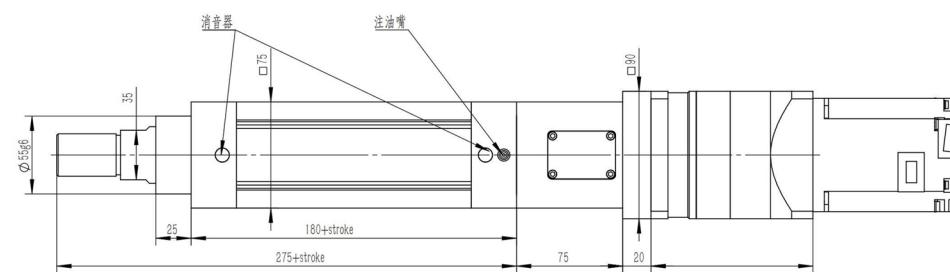


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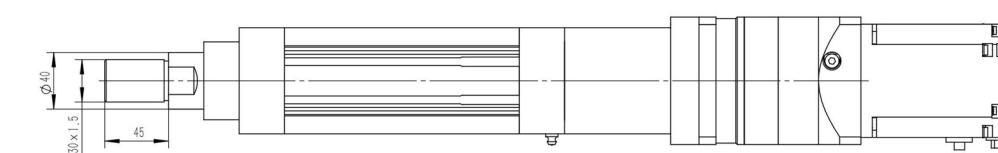
注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达直连型(-S)



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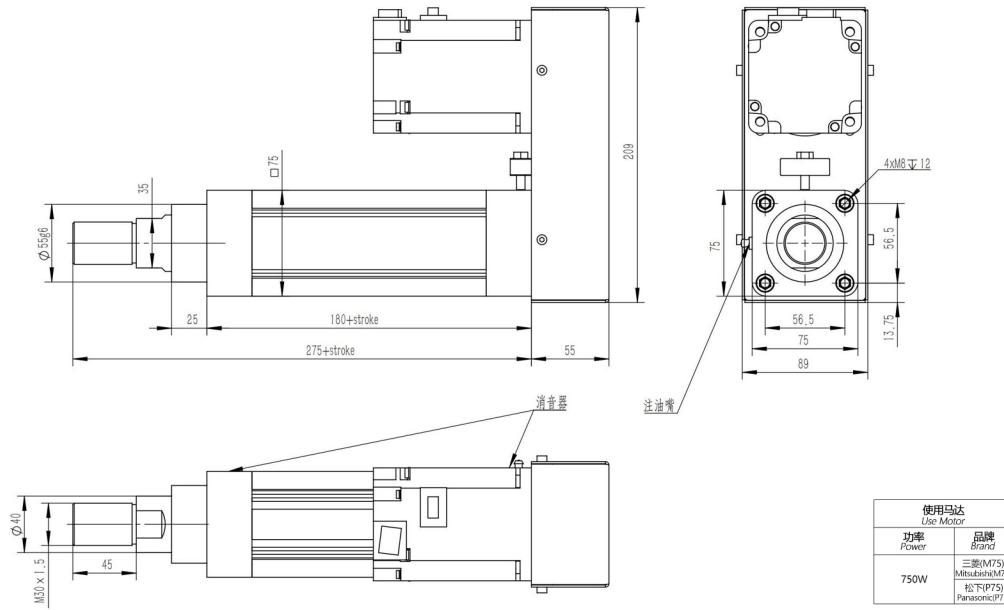
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行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.2	4.6	5.0	5.5	5.9	6.3	6.7	7.1	7.5	7.9	8.3	8.7	9.1	9.6	10.0
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	10.4	10.8	11.2	11.6	12.0	12.4	12.8	13.2	13.7	14.1	14.5	14.9	15.3	15.7	16.1

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达转折型(-P)
(不可用于电缸尾部安装)



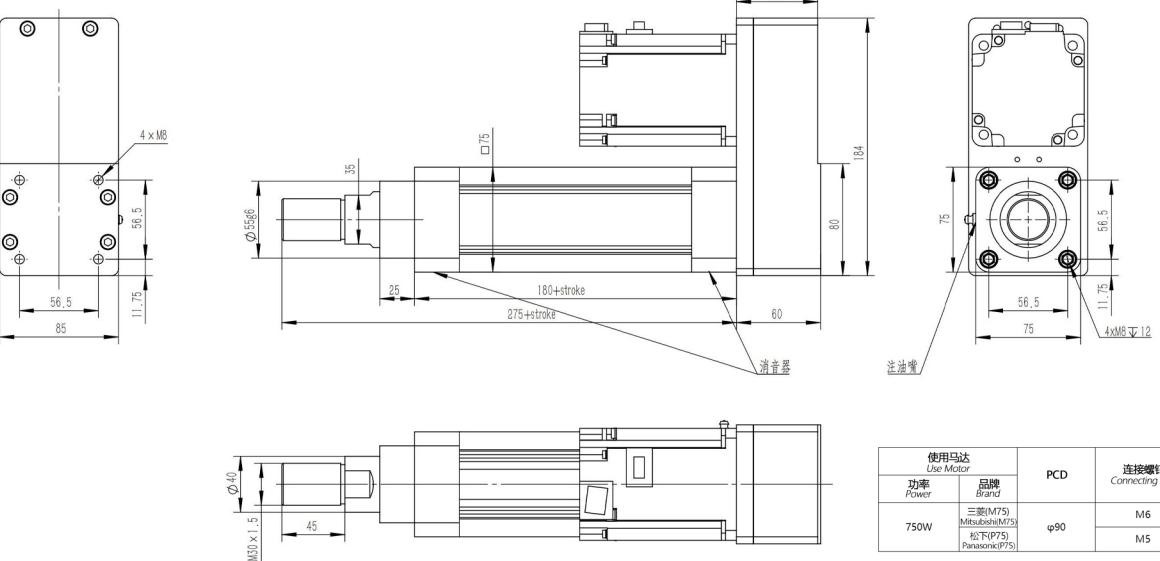
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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
750W	三菱(M75) Mitsubishi(M75) 松下(P75) Panasonic(P75)	φ90	M6 M5

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.5	4.9	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.2	8.6	9.0	9.4	9.8	10.2
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	10.6	11.0	11.4	11.8	12.3	12.7	13.1	13.5	13.9	14.3	14.7	15.1	15.5	15.9	16.4

注：所有对应重量均为裸缸重量（不含减速机、电机的重量）！

转折加强型(-PJ)
(可用于电缸尾部安装)



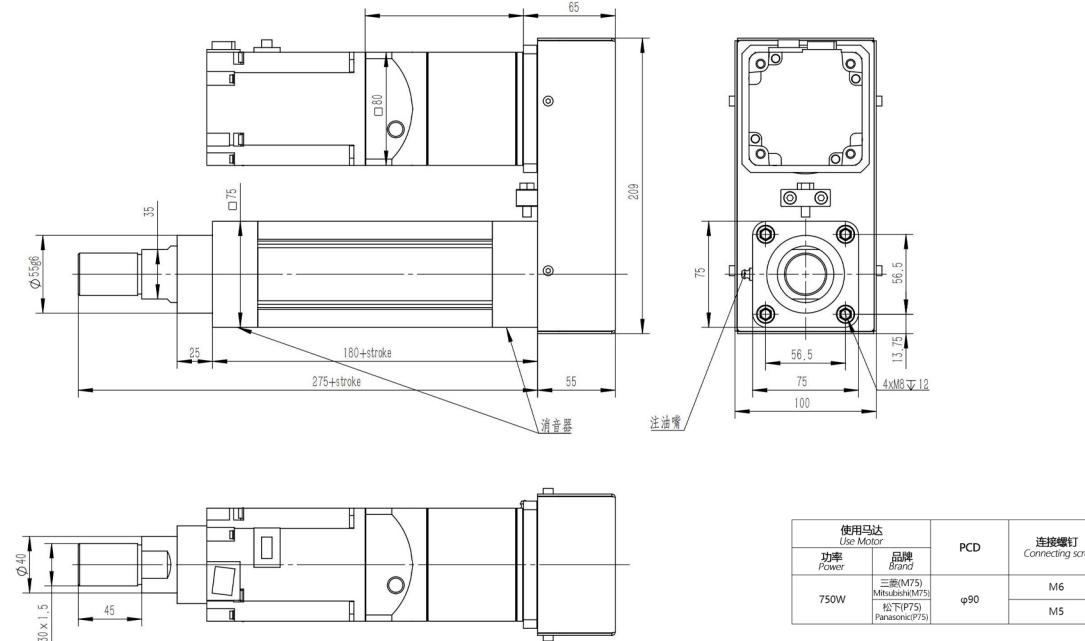
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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
750W	三菱(M75) Mitsubishi(M75) 松下(P75) Panasonic(P75)	φ90	M6 M5

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.9	5.3	5.7	6.2	6.6	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.3	10.7
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.3	14.7	15.1	15.5	15.9	16.4	16.8

注：所有对应重量均为裸缸重量（不含减速机、电机的重量）！

马达转折型(-P)
(不可用于电缸尾部安装)



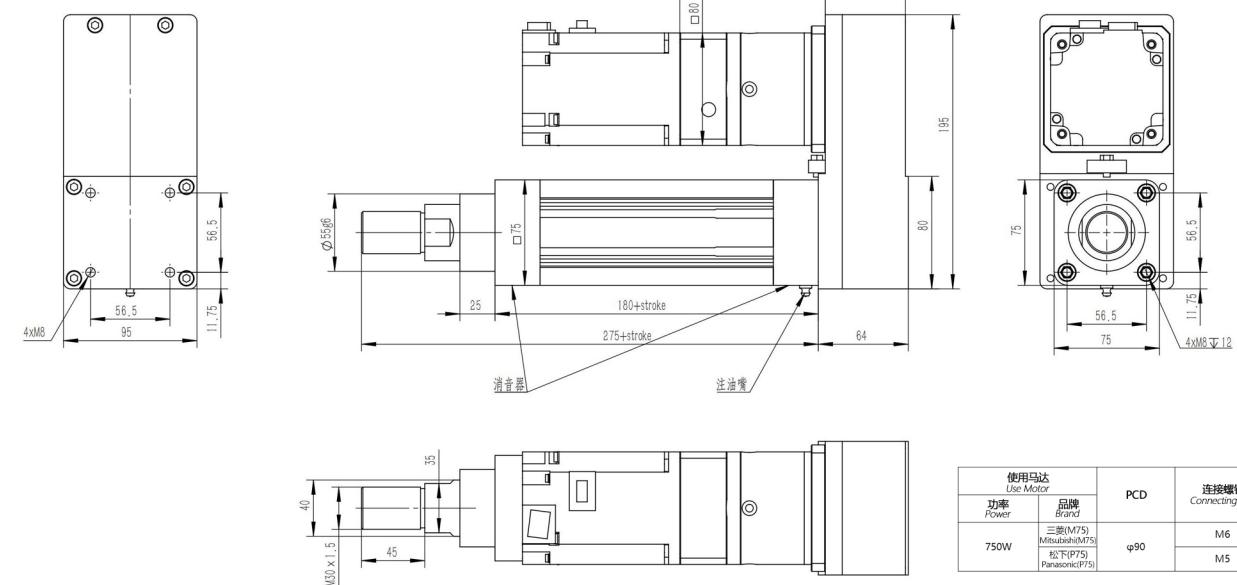
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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
750W	三菱(M75) Mitsubishi(M75) 松下(P75) Panasonic(P75)	φ90	M6 M5

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.5	4.9	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.2	8.6	9.0	9.4	9.8	10.2
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	10.6	11.0	11.4	11.8	12.3	12.7	13.1	13.5	13.9	14.3	14.7	15.1	15.5	15.9	16.4

注：所有对应重量均为裸缸重量（不含减速机、电机的重量）！

转折加强型(-PJ)
(可用于电缸尾部安装)



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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
750W	三菱(M75) Mitsubishi(M75) 松下(P75) Panasonic(P75)	φ90	M6 M5

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.9	5.3	5.7	6.2	6.6	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.3	10.7
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.3	14.7	15.1	15.5	15.9	16.4	16.8

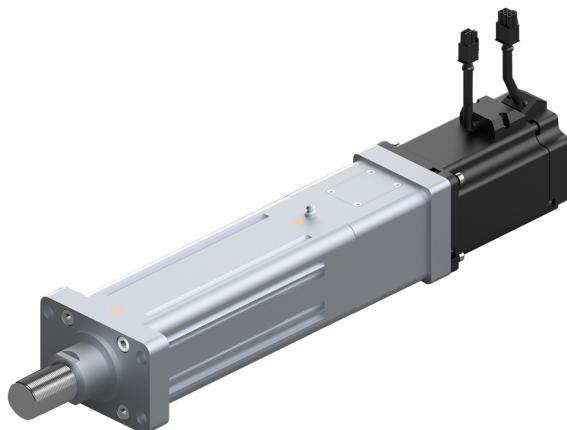
注：所有对应重量均为裸缸重量（不含减速机、电机的重量）！

型号订购码 Code

LMC 63S	-	2005	-	50	-	S	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	M75	-	<input type="checkbox"/>	-	S1
本体型号 Item No.		丝杆规格 Lead Screw Specifications		行程(mm) Stroke range		安装方式 Mounting mode		轴端安装方式 Shaft end mounting mode		本体安装方式 Body Mounting Method		马达品牌&功率 Motor brand/power		减速比 Reduction ratio		磁性开关数量 Number of magnetic Reed Switches
		2005		50-1500, 间隔50		S: 马达直连型 S: Motor direct mounting		缺省: 外螺纹 Default: External thread		Front Cover Front Cover		M75: 三菱750W M75: Mitsubishi 750W		G3: 3比减速 G3: 3 ratio reduction		S1: 1个 S1: 1PC
		2010				P: 马达转接型 P: Motor speed reducing		B: 内螺纹 B: Internal thread		DX: 导向架 DX: Guide rail		P75: 松下750W P75: Panasonic 750W		G5: 5比减速 G5: 5 ratio reduction		S2: 2个 S2: 2PC
		2020				PJ: 转折加强型 PJ: Elbow reinforcement		LB: 侧法兰 LB: Side Flange		TC: 底面耳轴 TC: Bottom ear shaft				G10: 10比减速 G10: 10 ratio reduction		S3: 3个 S3: 3PC
						Y: U型叉较 Y: Rod Clevis U		CA: 单片尾铰 CA: Single tail hinge		CA: 单片尾铰 CA: Single tail hinge						
						I: I型叉较 I: Rod Clevis I		CB: 双片尾铰 CB: Double tail hinge		CB: 双片尾铰 CB: Double tail hinge						

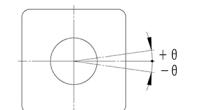
注1: P型为钣金罩壳, 不可用于电缸尾部安装。 PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度
Anti-rotating Accuracy of Rod



防止回转精度
Anti-rotating accuracy
± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加作动阻抗。

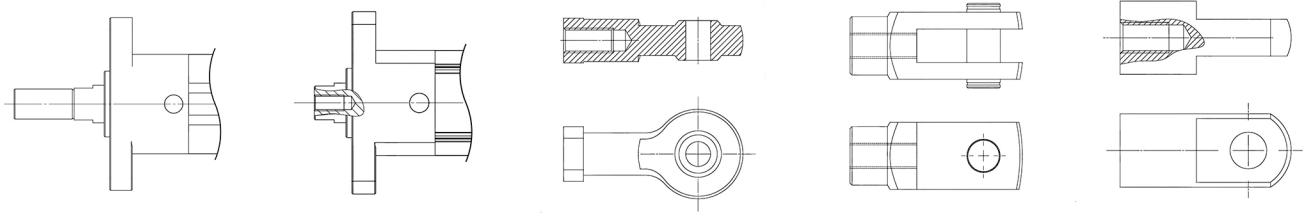
※Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod

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.

基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter	20											
	丝杆等级Screw accuracy class	C7											
	丝杆导程(mm)Screw lead	5		10				20					
	行程范围(mm)Stroke range	50-1500, 间隔50				50-1500, 间隔50				50-1500, 间隔50			
马达输入 The Motor Input	重复定位精度(mm)Repetitive Accuracy	±0.01、(300mm以上) ±0.02			±0.01、(300mm以上) ±0.02			±0.01、(300mm以上) ±0.02			750		
	马达额定功率(W)Motor rated power	750			750			750			750		
	马达额定转矩(N·M)Motor rated torque	2.4			2.4			2.4			2.4		
	马达额定转速(rpm)Motor rated rating	3000			3000			3000			3000		
电推缸 Pusher cylinder	减速比Reduction ratio	无	3	5	10	无	3	5	10	无	3	5	10
	额定推力(KN)Rated thrust	2.56	7.68	12.8	25.6	1.28	3.84	6.4	12.8	0.64	1.92	3.2	6.4
	推力输出Thrust Output	250	83.3	50	25	500	166.7	100	50	1000	333.3	200	100
	额定速度(mm/s)Rated speed	250	83.3	50	25	500	166.7	100	50	1000	333.3	200	100

轴端安装方式



外螺纹
External Thread

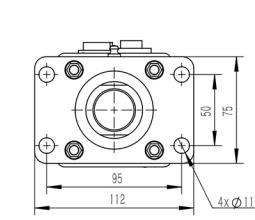
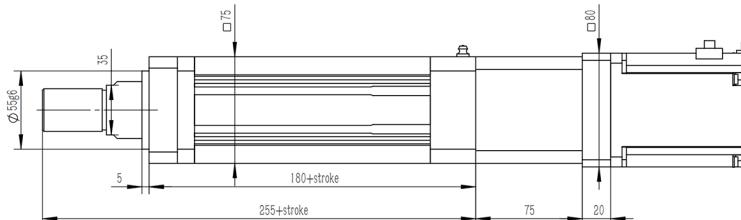
内螺纹(B)
Internal thread

杆端关节轴承(G)
Rod End Joint Bearing

U型叉较(Y)
Rod Clevis U

I型叉较(I)
Rod Clevis I

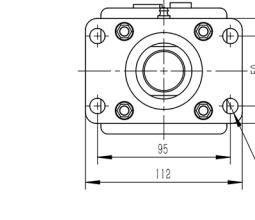
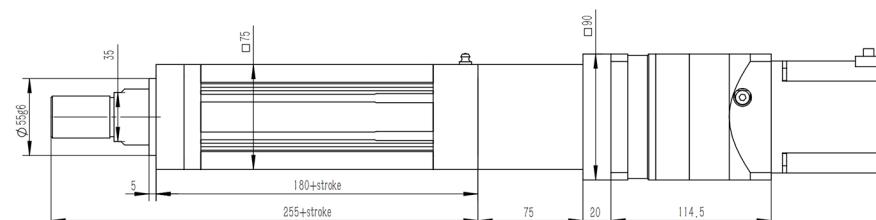
马达直连型(-S)



行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.3	4.7	5.1	5.5	5.9	6.3	6.7	7.1	7.6	8.0	8.4	8.8	9.2	9.6	10.0
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	10.4	10.8	11.2	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.5	14.9	15.3	15.8	16.2

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

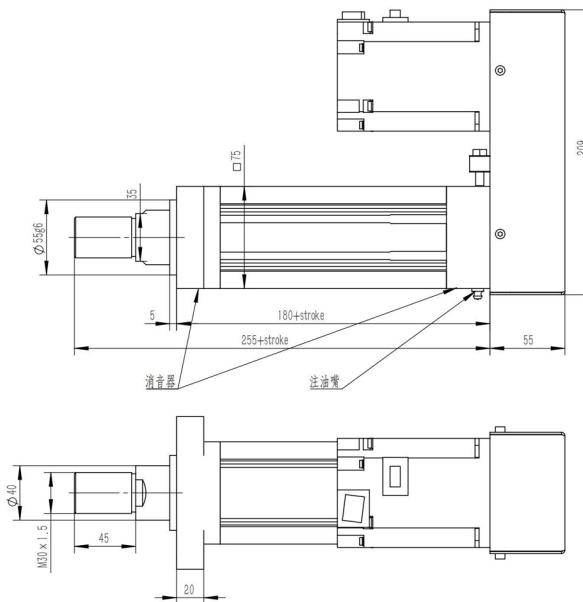
马达直连型(-S)



行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.3	4.7	5.1	5.5	5.9	6.3	6.7	7.1	7.6	8.0	8.4	8.8	9.2	9.6	10.0
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	10.4	10.8	11.2	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.5	14.9	15.3	15.8	16.2

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达转折型(-P)
(不可用于电缸尾部安装)



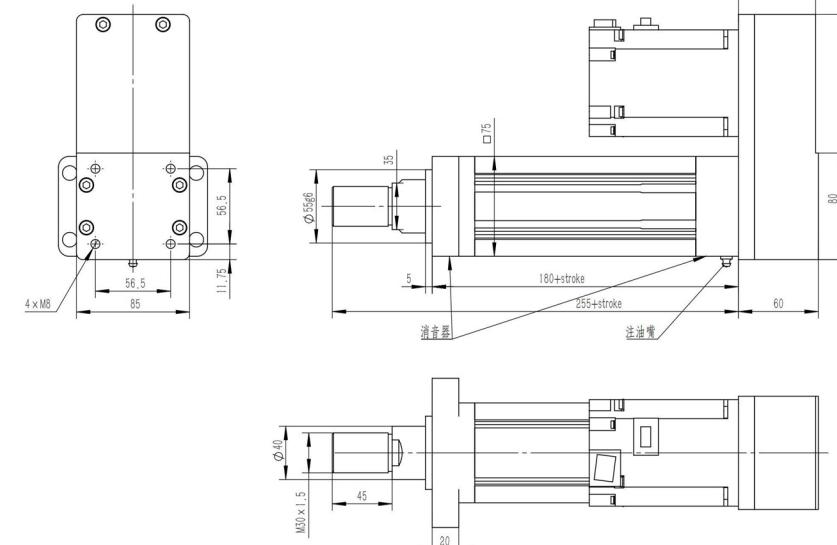
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.5	4.9	5.3	5.7	6.2	6.6	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.3
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
行程(mm)Stroke	10.7	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4
重量(kg)Weight	10.7	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
750W	三菱(M75) Mitsubishi(M75) 松下(P75) Panasonic(P75)	φ90	M6
			M5

转折加强型(-PJ)
(可用于电缸尾部安装)

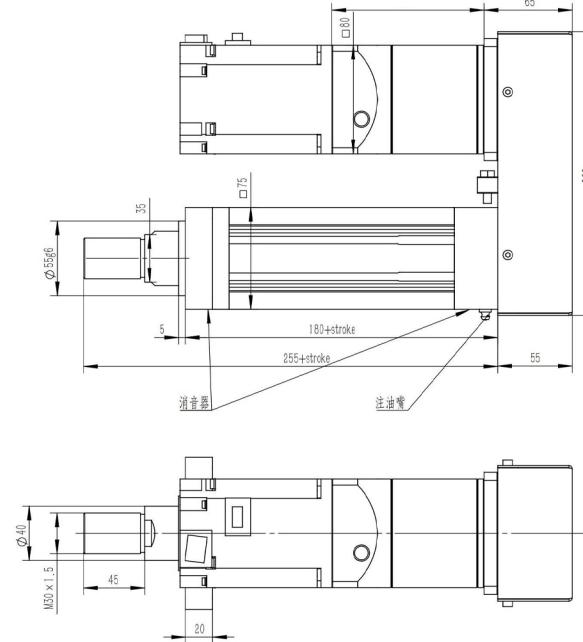


	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	5.0	5.4	5.8	6.2	6.6	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.3	10.7
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
行程(mm)Stroke	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4	16.9
重量(kg)Weight	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4	16.9

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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马达转折型(-P)
(不可用于电缸尾部安装)



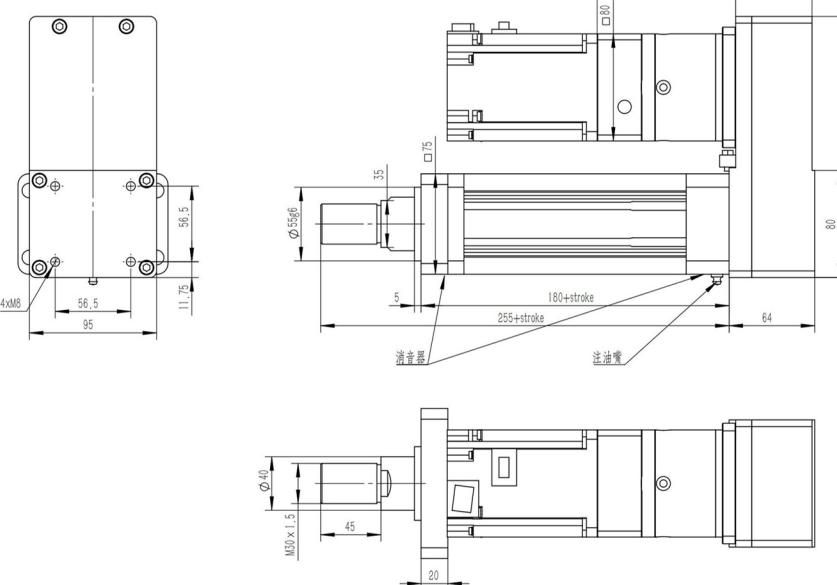
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	4.5	4.9	5.3	5.7	6.2	6.6	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.3
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
行程(mm)Stroke	10.7	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4
重量(kg)Weight	10.7	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
750W	三菱(M75) Mitsubishi(M75) 松下(P75) Panasonic(P75)	φ90	M6
			M5

转折加强型(-PJ)
(可用于电缸尾部安装)



	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	5.0	5.4	5.8	6.2	6.6	7.0	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.3	10.7
行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
行程(mm)Stroke	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4	16.9
重量(kg)Weight	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.4	14.8	15.2	15.6	16.0	16.4	16.9

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

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型号订购码 Code

LMC 80 -	3210	-	50	-	S	-	□	-	M1KH	-	□	-	S1
本体型号 Item No.	丝杆规格 Lead Screw Specifications		行程(mm) Stroke range		安装方式 Mounting mode		轴端安装方式 Shaft end mounting mode		本体安装方式 Body Mounting Method	马达品牌及功率 Motor brand/power		减速比 Reduction ratio	磁性开关数量 Number of magnetic Reed Switches
	3210		50-1500, 间隔50		S: 马达直连型		缺省: 外螺纹 Default: External thread		M1KH: 三菱1000W	缺省: 马达直连 Default: Direct motor connection		S1: 1个 S1: 1PC	
	3220				P: 马达转折型		B: 内螺纹		M1KH: Mitsubishi 1000W	G3: 3比减速		S2: 2个 S2: 2PC	
					PJ: 转折加强型		DX: 导向架		P1KH: 松下1000W	G5: 5比减速		S3: 3个 S3: 3PC	
					PJ: Indirect enhance mounting		LB: 侧法兰		P1KH: Panasonic 1000W	G10: 10比减速			
							TC: 底面耳轴						
							CA: 单片尾销						
							CB: 双片尾销						
							CB: Double tail pin						

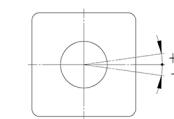
注1: P型为钣金罩壳, 不可用于电缸尾部安装。PJ型为高强度铝合金罩壳, 可用于电缸尾部安装。

Note 1: Type P is a sheet metal cover and cannot be used for installation at the rear of the electric cylinder. PJ type is a high-strength aluminum alloy housing, which can be used for the electric cylinder tail installation.



防止回转精度 Anti-rotating Accuracy

出力杆的防止回转精度 Anti-rotating Accuracy of Rod



防止回转精度 Anti-rotating accuracy
± 0.01°

※使用时请避免活塞杆承受回转扭力, 因为有可能会造成防转块变形, 导致自动开关反应异常, 内部滑轨变形, 进而造成增加作动阻抗。

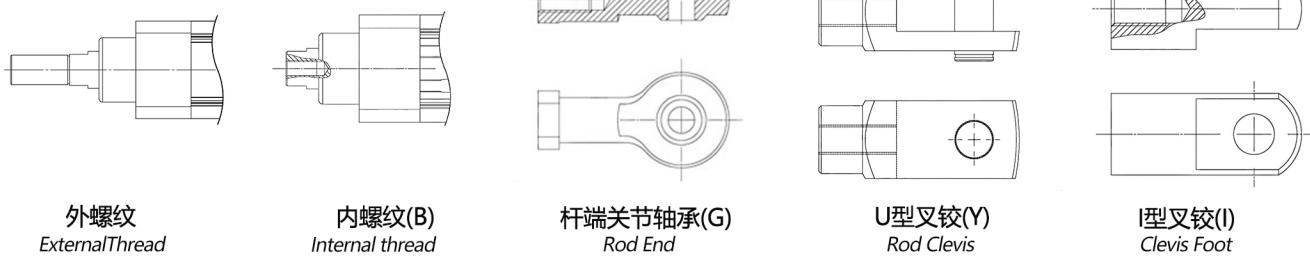
※Avoid using the electric actuator in such a way that rotational torque would be applied to the piston rod

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.

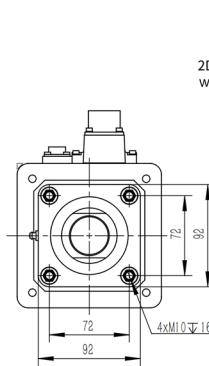
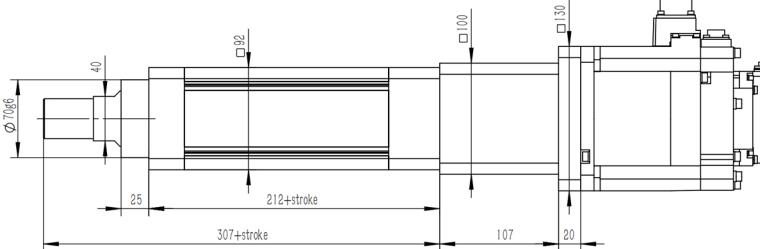
基本规格 Basic Specification

基本规格 Basic Specification	丝杆直径(mm)Screw Diameter	32																			
	丝杆等级Screw accuracy class	C7																			
	丝杆导程(mm)Screw lead	5				10				20											
	行程范围(mm)Stroke range	50-1500, 间隔50				50-1500, 间隔50				50-1500, 间隔50											
	重复定位精度(mm)Repetitive Accuracy	±0.01、(300mm以上) ±0.02				±0.01、(300mm以上) ±0.02				±0.01、(300mm以上) ±0.02											
马达输入 The Motor Input	马达额定功率(W)Motor rated power	1000																			
	马达额定转矩(N·M)Motor rated torque	4.78																			
	马达额定转速(rpm)Motor rated rating	2000																			
电推缸 Thrust Output	减速比Reduction ratio	无	3	5	10	无	3	5	10	无	3	5	10								
	额定推力(KN)Rated thrust	4.8	14.5	24.2	48.5	2.55	7.65	12.7	25.5	1.27	3.82	6.37	12.7								
	额定速度(mm/s)Rated speed	166.6	55.5	33.3	16.6	333.3	111.1	66.6	33.3	666.6	222.2	133.3	66.6								

轴端安装方式 Shaft End Mounting Direction

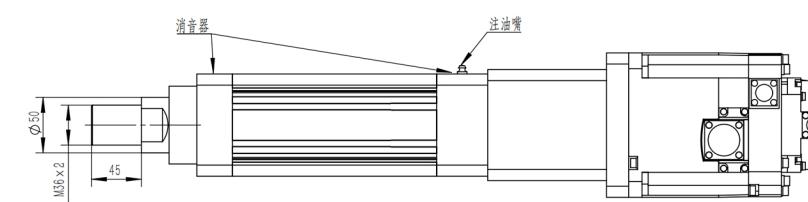


马达直连型(-S)



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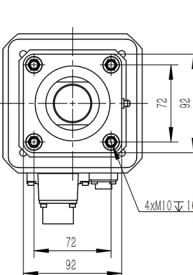
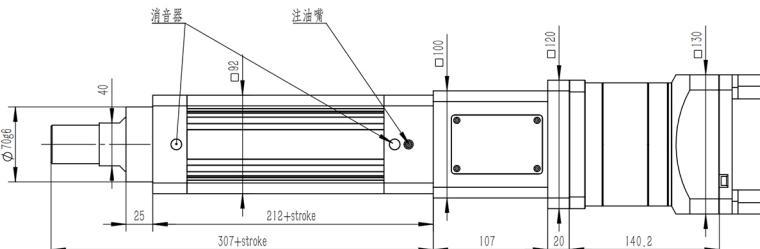


使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand	Φ145	M8

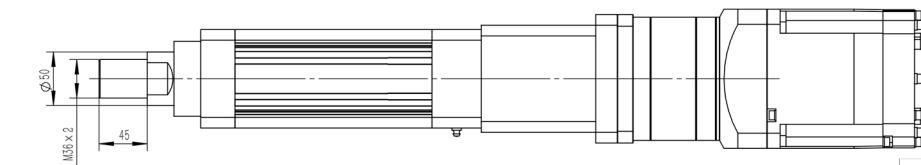
三菱(M1KH)
Mitsubishi(M1KH)
松下(P1KH)
Panasonic(P1KH)

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达直连型



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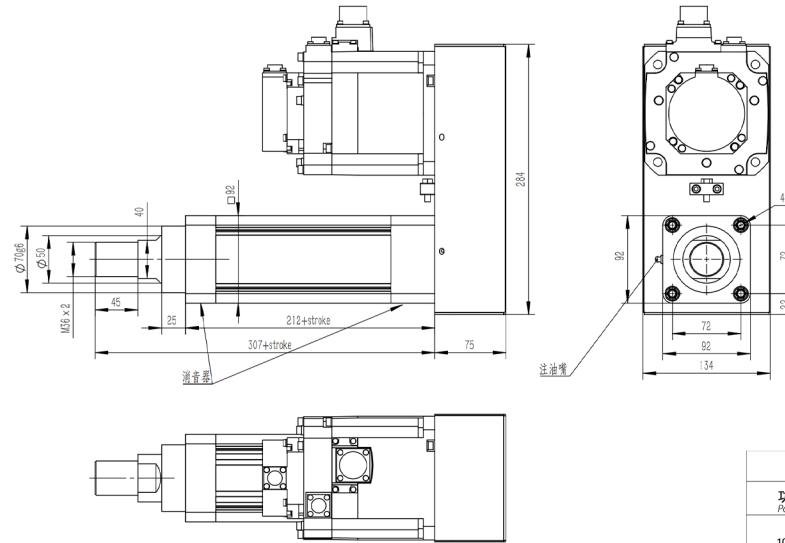


使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand	Φ145	M8

三菱(M1KH)
Mitsubishi(M1KH)
松下(P1KH)
Panasonic(P1KH)

注: 所有对应重量均为裸缸重量(不含减速机、电机的重量)!

马达转折型(-P)
(不可用于电缸尾部安装)



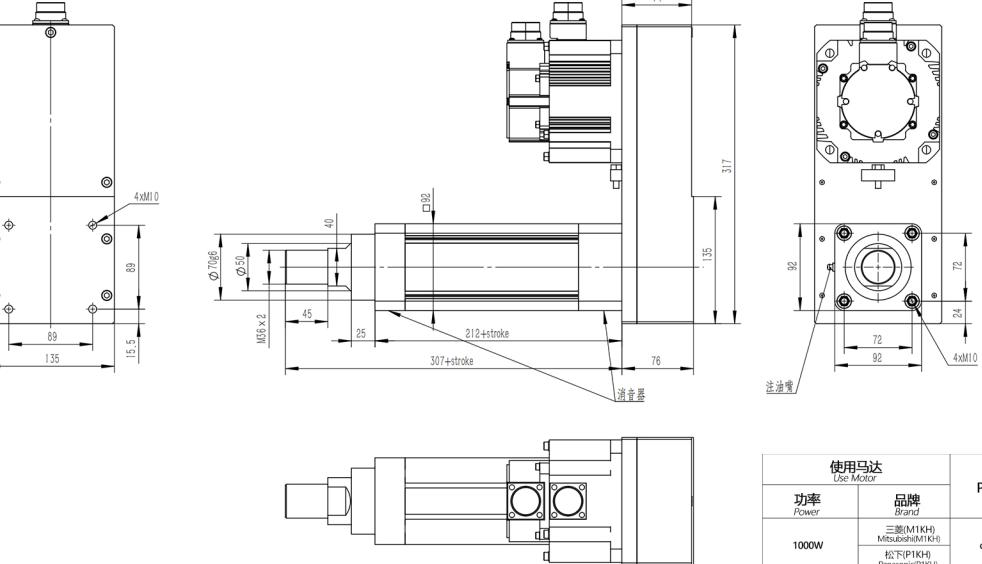
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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
1000W	三菱(M1KH) 松下(P1KH) Panasonic(P1KH)	φ145	M8

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	10.5	11.2	12.0	12.7	13.5	14.2	15.0	15.7	16.5	17.2	18.0	18.7	19.5	20.2	21.0
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	21.7	22.5	23.2	24.0	24.7	25.5	26.2	27.0	27.7	28.5	29.2	30.0	30.7	31.5	32.2

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

转折加强型(-PJ)
(可用于电缸尾部安装)

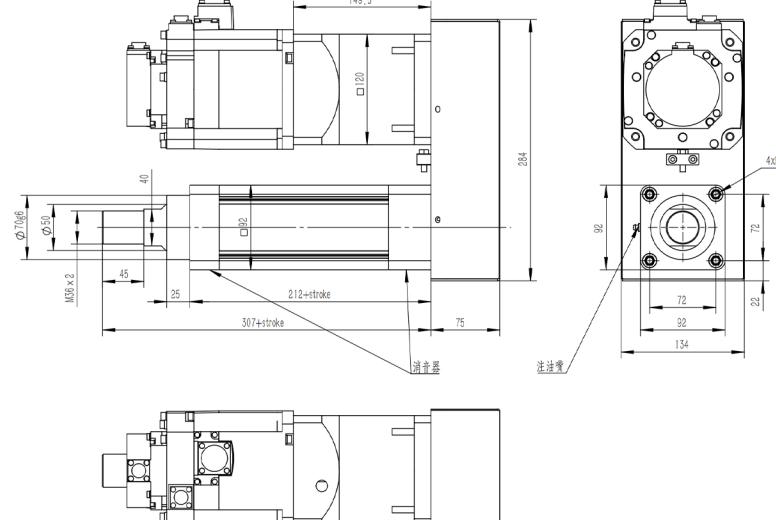


使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
1000W	三菱(M1KH) 松下(P1KH) Panasonic(P1KH)	φ145	M8

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	12.7	13.4	14.2	14.9	15.7	16.4	17.2	17.9	18.7	19.4	20.2	20.9	21.7	22.4	23.2
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	23.9	24.7	25.4	26.2	26.9	27.7	28.4	29.2	29.9	30.7	31.4	32.2	32.9	33.7	34.4

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

马达转折型(-P)
(不可用于电缸尾部安装)



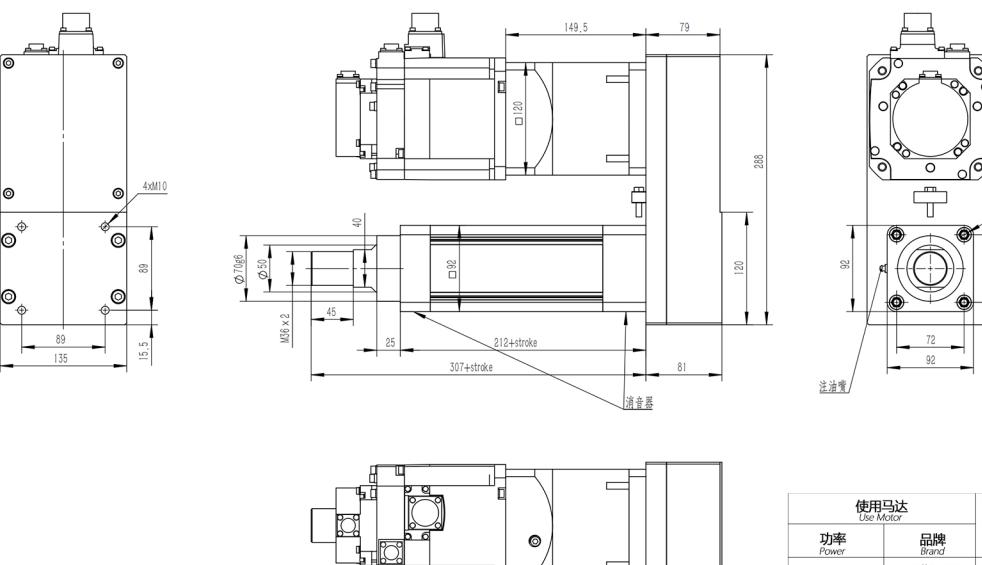
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使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
1000W	三菱(M1KH) 松下(P1KH) Panasonic(P1KH)	φ145	M8

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	10.5	11.2	12.0	12.7	13.5	14.2	15.0	15.7	16.5	17.2	18.0	18.7	19.5	20.2	21.0
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	21.7	22.5	23.2	24.0	24.7	25.5	26.2	27.0	27.7	28.5	29.2	30.0	30.7	31.5	32.2

注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

转折加强型(-PJ)
(可用于电缸尾部安装)



使用马达 Use Motor		PCD	连接螺钉 Connecting screw
功率 Power	品牌 Brand		
1000W	三菱(M1KH) 松下(P1KH) Panasonic(P1KH)	φ145	M8

行程(mm)Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
重量(kg)Weight	12.7	13.4	14.2	14.9	15.7	16.4	17.2	17.9	18.7	19.4	20.2	20.9	21.7	22.4	23.2
行程(mm)Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
重量(kg)Weight	23.9	24.7	25.4	26.2	26.9	27.7	28.4	29.2	29.9	30.7	31.4	32.2	32.9	33.7	34.4

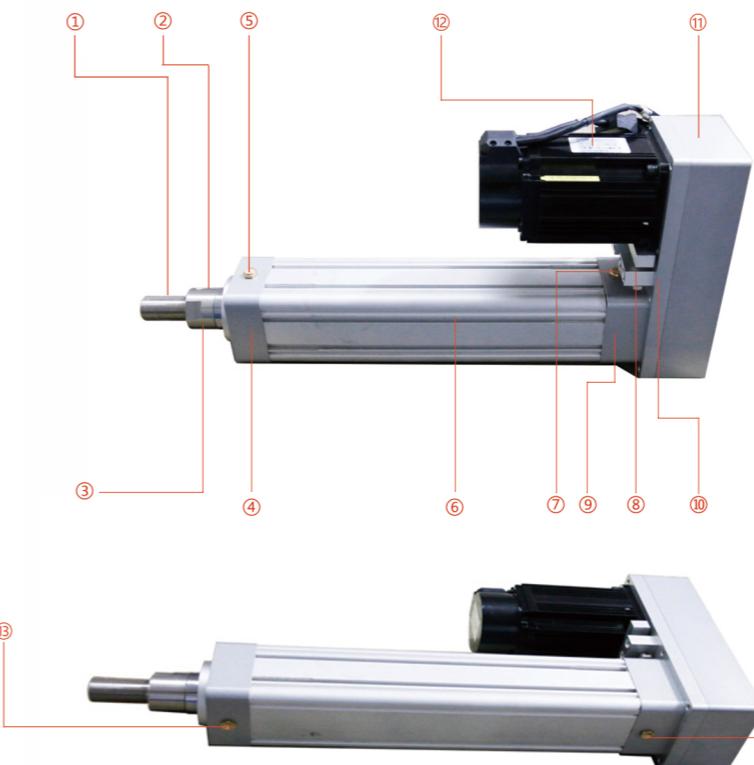
注：所有对应重量均为裸缸重量(不含减速机、电机的重量)！

直连型电缸结构图 Structural diagram of direct connected electric cylinder



1. 活塞杆连接头 Piston Rod Connector
2. 丝杠注油孔 Screw Oil Hole
3. 前端盖 Front End Cap
4. 活塞杆导杆注油孔 Piston Rod Guide Oil hole
5. 排气孔 Went Hole
6. 缸桶 Cylinder Barrel
7. 后端盖 Back End cap
8. 轴承注油孔 Bearing Oil Hole
9. 马达安装座 Motor Mounting Base
10. 连轴器调节孔 Coupling Regulation Hole
11. 连轴器 Coupling
12. 电机 Motor

转折型电缸结构图 Structural diagram of turning type electric cylinder



1. 活塞杆连接头 Piston Rod Connector
2. 丝杠注油孔 Screw Oil Hole
3. 活塞杆 Piston Rod
4. 前端盖 Front End Cap
5. 前排气孔 Front Vent Hole
6. 缸桶 Cylinder Barrel
7. 后排气孔 Back Vent Hole
8. 同步带张紧机构 Synchronous BeltTensioner
9. 后端盖 Back EndCap
10. 电机安装板 Motor Mounting Plate
11. 加强型底座 Reinforced Base
12. 电机 Motor
13. 活塞杆导杆注油孔 Piston Rod Guide Oilhole
14. 轴承注油孔 Bearing Oil Hole

直接连接电钢电机装配注意事项 Notice of the Indirect electric steel motor assembly

一、连轴器的装配 Coupling Assembly

1. 连轴器顶紧装置对准电机的键槽(如图所示)
Coupling tightening device aligns with the keyway of the motor(as the picture shows)



2. 连轴器和电机轴连接好以后应先锁附顶紧螺丝然后再锁连轴器的锁紧螺丝(如图所示)
After the coupling and motor shaft are connected, lock the top screw and then lock the coupling's locking screw.



3. 连轴器上下部分应有1mm的间隔空隙，主要防止
连轴器在运动的过程中因挤压，扭曲所产生的异响(如图所示)
The upper and lower parts of the coupling should have a gap of 1 mm, which mainly prevents the coupling from being squeezed and distorted to cause the noise during the movement.



间接连接电钢电机装配注意事项 Notice of the Indirect electric steel motor assembly

我司所有间接连接的产品全系采用国外先进的张紧套技术与目前国内所探用的键槽技术有所不同，因此我们在装配间连接的产品电机时应该注意以下几个方面：

LIMON's indirect connecting products are all applied with oversea advanced tensioning technology and different from the domestic keyway technology; so when assembling the indirect connecting motor, please notice as below:

1. 先固定电钢端的同步带轮(如图所示):
Timing pulley with fixed electric steel end(as the picture):



张紧套螺丝
一定要锁紧
Tighten the tension screw and make sure it is locked.

2. 其次再固定电机端的同步带轮(如图所示):
Fix the timing pulley in the motor end(as the picture):



张紧套螺丝一定要锁紧，
两个皮带轮应使皮带保持平衡一定要锁紧
The tension screw must be locked up and the two pulley should balance the belt and locked up.

3. 最后调整张紧机构(如图所示):
Adjusting the tensioning device:



注:在调节张紧机构时应使张力测试仪参照相对应的
参数标准进行调节。

Note: When adjusting the tensloning device, the tenslon tester should be adjusted according to the corresponding parameter standard.

电缸注油 Oiling of The Electric cylinder

电缸在每行走100km(转换成时间为半个月注油一次，按照每天8小时的工作时间计算)需注油一次。

When walking 100km, the cylinder needs to be added the oil adding the oil once in half month ,according to the time 8 working hours in one day

注油工具:高压黄油枪

Oiling tool:high-pressure grease gun



第一步:丝杆注油(如图所示)

First,add the oil in ball screw(see the pic)

手持装满润滑脂的黄油枪，插入活塞前端注油孔，用力下压7-8次即可。

Hold the oil gun (full with oil and grease) ,and push into the front pistonoil hole ,press down hardly for 7 -8 times.



第二步:活塞杆, 导轨注油(如图所示)

Second,add the oil in piston rod quide(see the pic)

手持装满润滑脂的黄油枪，插入电缸前端盖的注油孔，用力下压7-8次即可。

Hold the oil gun (full with oil and grease) ,and push into the front end capoil hole ,press down hardly for 7 -8 times.



第三步:轴承注油(如图所示) Third,add the oil in the bearing(see the pic)

手持装满润滑脂的黄油枪，插入电缸后端盖的注油孔，用力下压7-8次即可。

Hold the oil gun (full with oil and grease) , and push into the back end cap oil hole,press down hardly for 7 -8 times.

