型号说明

Model description

ES28 34 07 C - 7R 0802 - 100 - E1 - B

規格
28步進/34步進
42步進/57步進

Specifications
28 Stepping Motor
34 Stepping Motor
42 Stepping Motor
57 Stepping Motor

機身長度(mm)
Body Length(mm)

額定工作電流(A)
Rated Working Electric Current(A)

出線方式
缺省:散線500mm
C:散線加連接器(可選配)

Outlet Way of Wire
None:wire length 500mm
C:wire with connector (Optional)

絲杆精度等級
Ball Screw Precision

7R：C7 級輥軋絲杆	7R: C7 Rolled ball screw
5G：C5 級研磨絲杆	5G: C5 Grinding ball screw
T：T 型絲杆	T: T type ball screw

刹車
缺省:無刹車
B:帶刹車

Brake
None:no brake
B:with brake

編碼器
缺省:無編碼器
E1:含1000線編碼器

Encoder
None: No Encoder
E1:with 1000 resolution encoder

絲杆長度(mm)
Ball Screw Length(mm)

絲杆型號
Ball Screw Model

ES57 series 滚珠螺母外驅式綫性步進電機
ES57 series ball nut external drive linear stepping motor

訂購代碼
Code

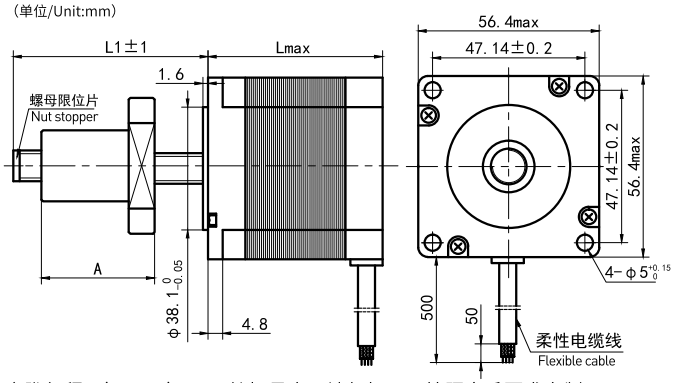
E	S	57	45	28	-	7R	1205	-	100

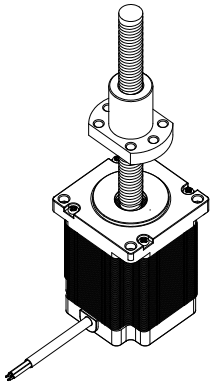
長度:75-300mm,間隔:25
Length: 75-100mm, Interval: 25mm

標準參數
Standard parameters

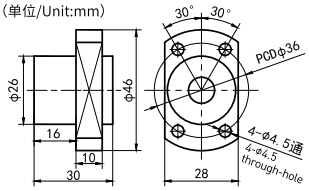
電機型號 Motor model	引綫數量 Number of leads	相電阻 Phase resistance	相電感 Phase inductance	額定電流 Rated current	保持轉矩 Holding torque	電機長度L(max) Motor length	電機重量 Motor weight	轉動慣量 Moment of inertia
		ohm±10%	mH±20%	A	N·m	mm	kg	g·cm²
ES574520	4	1.5	4.5	2.0	0.7	45	0.5	155
ES575628	4	1.2	3.5	2.8	1.3	56	0.62	280
ES577640	4	0.5	1.8	4.0	1.9	76	1	400

外形尺寸
Overall dimension
（单位/Unit:mm）

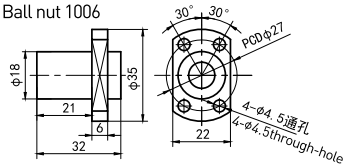




滚珠螺母1004
Ball nut 1004
（单位/Unit:mm）

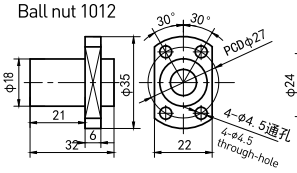


滚珠螺母1006
Ball nut 1006

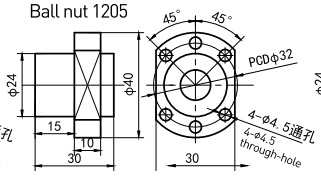


實際行程:（L1-2-A）mm,絲杆長度及端部加工可按照客戶要求定制。
Actual stroke: (L1-2-A) mm, screw length and end processing can be customized according to customer requirements.

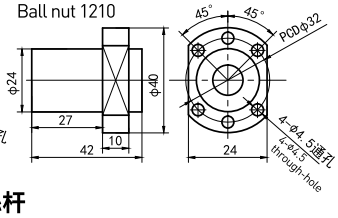
滚珠螺母1012
Ball nut 1012



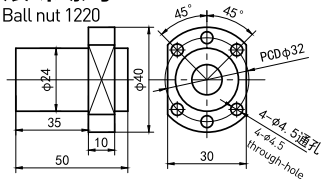
滚珠螺母1205
Ball nut 1205



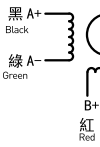
滚珠螺母1210
Ball nut 1210



滚珠螺母1220
Ball nut 1220



接線圖
Wiring diagram



励磁顺序
Excitation sequence

STEP	A+	B+	A-	B-
1	+	+	−	−
2	−	+	+	−
3	−	−	+	+
4	+	−	−	+

CW ↓ / CCW ↑

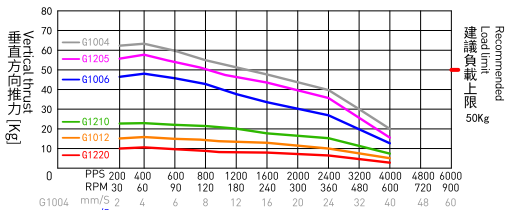
從安裝面看為順時針方向
Clockwise from the mounting surface

可配滚珠絲杆
Ball screw

螺杆代碼 Screw code	直徑mm diameter	導程mm Lead	步長mm step length
G1004	φ10	4	0.02
G1006	φ10	6	0.03
G1012	φ10	12	0.06
G1205	φ12	5	0.025
G1210	φ12	10	0.05
G1220	φ12	20	1

力速特性曲線
Force velocity characteristic curve
ES574502

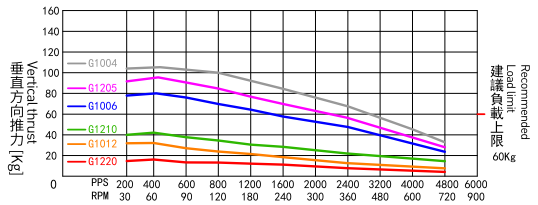
驅動電壓：36VDC恒流驅動　工作模式:半步運行　驅動電流:2.0 A
Driving voltage: 36VDC constant current driving　Working mode: half step operation　Driving current: 2.0 A



G1004 mm/S	2	4	6	8	12	16	20	24	32	40	48	60
G1006 mm/S	3	6	9	12	18	24	30	36	48	60	72	90
G1205 mm/S	2.5	5	7.5	10	15	20	25	30	40	50	60	75
G1210 mm/S	5	10	15	20	30	40	50	60	80	100	120	150
G1012 mm/S	6	12	18	24	36	48	60	72	96	120	144	180
G1220 mm/S	10	20	15	40	60	80	100	120	160	200	240	300

力速特性曲線
Force velocity characteristic curve
ES575628

驅動電壓：36VDC恒流驅動　工作模式:半步運行　驅動電流:4.0 A
Driving voltage: 36VDC constant current driving　Working mode: half step operation　Driving current: 4.0 A

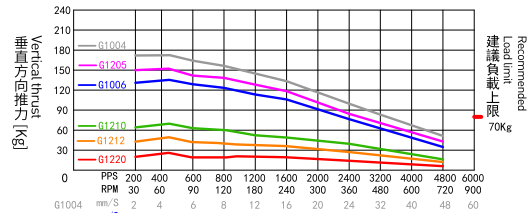


G1004 mm/S	2	4	6	8	12	16	20	24	32	40	48	60
G1006 mm/S	3	6	9	12	18	24	30	36	48	60	72	90
G1205 mm/S	2.5	5	7.5	10	15	20	25	30	40	50	60	75
G1210 mm/S	5	10	15	20	30	40	50	60	80	100	120	150
G1012 mm/S	6	12	18	24	36	48	60	72	96	120	144	180
G1220 mm/S	10	20	15	40	60	80	100	120	160	200	240	300

注：此曲線只是在實驗室理想狀態下測得，僅供選型參考。
Note: this curve is only measured in the ideal state of the laboratory and is only for model selection reference.

力速特性曲線
Force velocity characteristic curve
ES577604

驅動電壓：36VDC恒流驅動　工作模式:半步運行　驅動電流:4.0 A
Driving voltage: 36 VDC constant current driving　Working mode: half step operation　Driving current: 4.0 A



G1004 mm/S	2	4	6	8	12	16	20	24	32	40	48	60
G1006 mm/S	3	6	9	12	18	24	30	36	48	60	72	90
G1205 mm/S	2.5	5	7.5	10	15	20	25	30	40	50	60	75
G1210 mm/S	5	10	15	20	30	40	50	60	80	100	120	150
G1012 mm/S	6	12	18	24	36	48	60	72	96	120	144	180
G1220 mm/S	10	20	15	40	60	80	100	120	160	200	240	300