

More Value for Motor



Stepper Drives & Motors

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DISTRIBUTORS

Since
2005

(一) 步进电机产品简介 Stepping motor introduction

系列特征/Characteristics

高转矩, 低发热, 低噪声, 运行平稳
High Torque, low heat, low noise, smooth operation

系列概述/Introduction

妮采经过多年研究和总结工业自动化各个行业领域对运动控制的普遍需求, 精心规划了步进电机产品线。
妮采混合式步进电机全部采用优质冷轧硅钢片和耐高温永磁体材料制造, 采用独创业界领先的磁路设计方案, 具有运行转矩大、温升小、可靠性高等特点, 且内部阻尼特性良好, 无明显振荡区, 运行平稳。
After years of research and summary for the universal demand of the motion control in various areas of the industrial automation, NIETZ motor carefully planned the stepping motor production line.
NIETZ hybrid stepper motor use the high quality cold rolled silicon steel sheet and high temperature resistant permanent magnet materials. We adopt the unique leading magnetic circuit design proposal in the industrial area. Our motor has the characteristic of high running torque, low temperature rising, high reliability and so on. It has good internal damping characteristics, no obvious vibration area and operate smooth.

系列应用领域/Application area

目前, 妮采步进电机产品已广泛应用于雕刻机、激光机、数控机床、医疗设备、电子加工设备、纺织服装机械等自动化设备上。
At present, the NIETZ products are widely used in the automation equipment, such as engraving machine, laser machine, CNC machine, Medical Equipment, the electronic processing equipment and textile & garment machinery.

命名规则/Name rule

NZ X1 BH X2 X3 - X4 X5 - X6

NZ: 妮采电气有限公司

NZ: NIETZ ELECTRIC CO., LTD

X1: 电机机座号

X1: Motor frame size

BH: 混合式步进电机

BH: Hybrid stepper motor

X2: 1、如果缺省, 表示二相(四相)普通力矩电机, 步距角为1.8°

1、If lack, it means it is two phase(four phase)regular torque motor. The Step Angle is 1.8°

2、M表示二相(四相)步进电机, 步距角0.9°

2、M means two phase(four phase) stepper motor The step angle is 0.9°

3、H表示两相(四相)大力矩电机, 步距角1.8°

3、H means two phase (four phase) big torque stepper motor. The step angle is 1.8°

4、P表示三相步进电机, 步距角为1.2°

4、P means three phase stepper motor. The step angle is 1.2°

X3: 电机机身长度

X3: Body length of the motor

X4: 电机电流, 三位数

X4: Motor current, three digits

X5: 电机绕线及接线方式

X5: Motor winding and connection mode

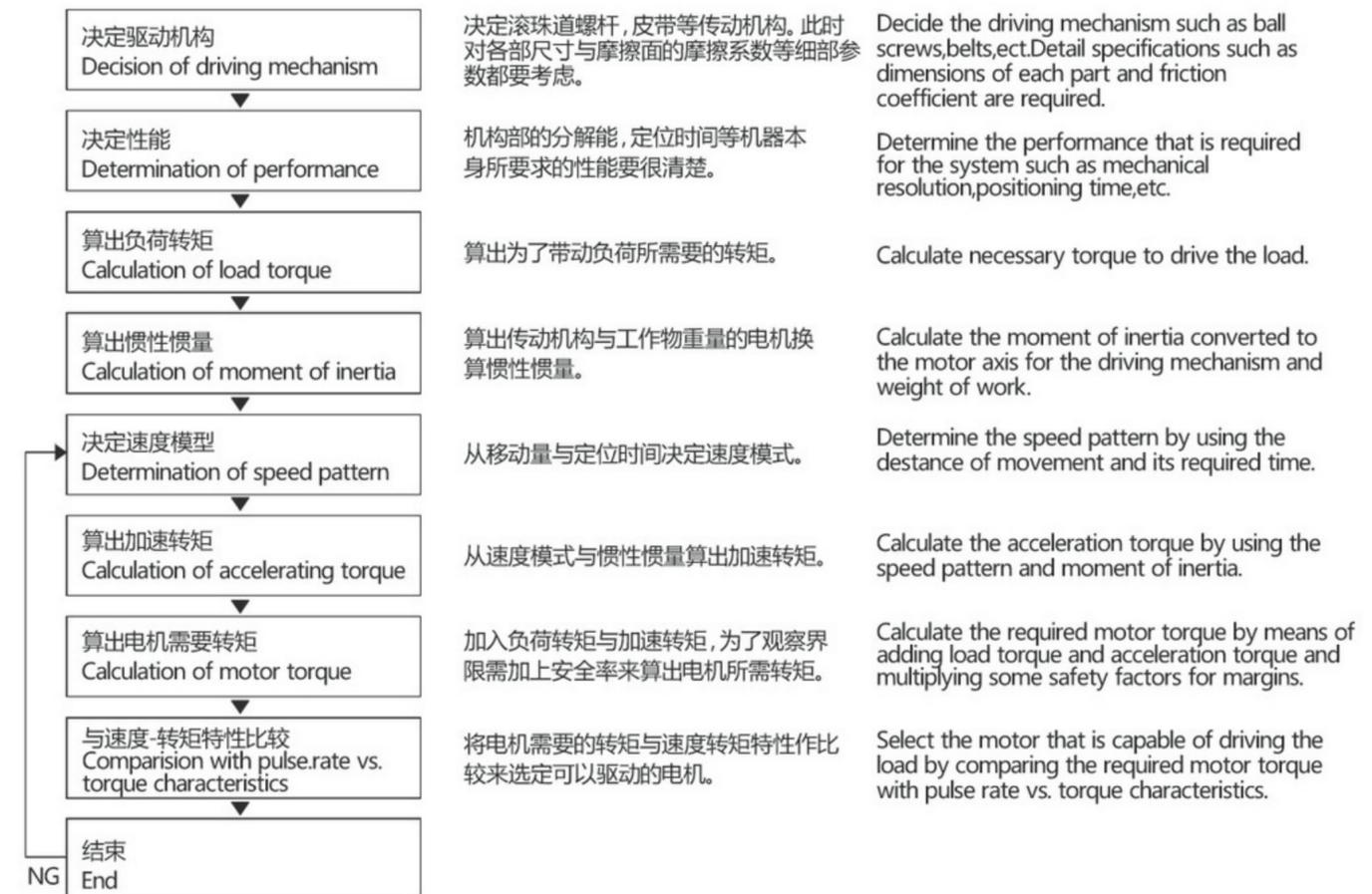
X6: 生产厂家序列号

X6: The manufacturer serial number

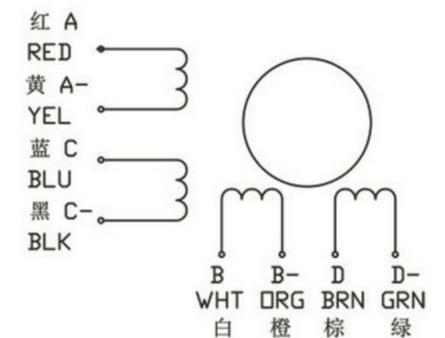
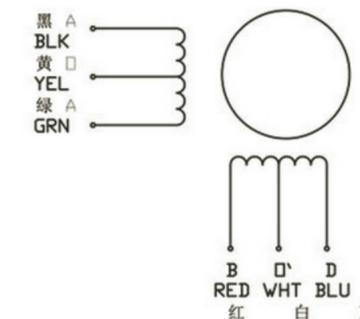
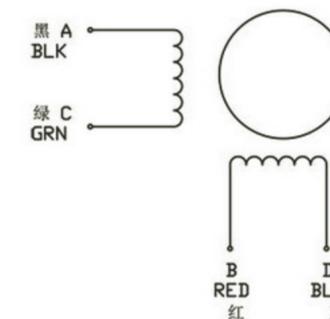
注: 4线电机表示为A, 6线电机表示为B, 8线电机表示为C, 5线电机表示为D, 3线电机表示为E。

Note: 4 lead wire indicates A, 6 lead wire indicates B, 8 lead wire indicates C, 5 lead wire indicates D, 3 lead wire indicates E.

(二) 步进电机选型方法 Stepping motor selection method



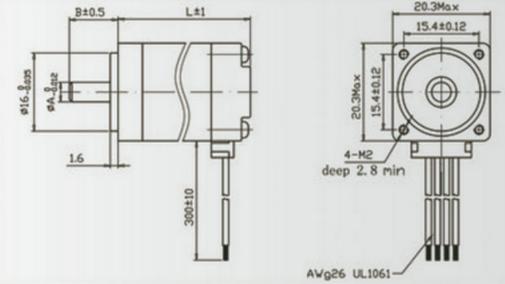
接线图 Wiring Diagram



(三)步进电机外形图及选型表 Stepping motor shape diagram and selection table



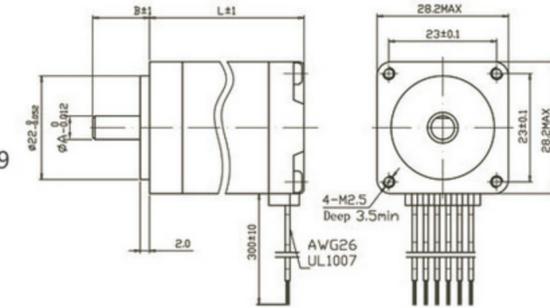
电流Current(A): 0.2-0.8
力矩Holding Troque(kg.cm): 0.1-0.4
机身长度Body Length(mm): 23-42



20BH系列



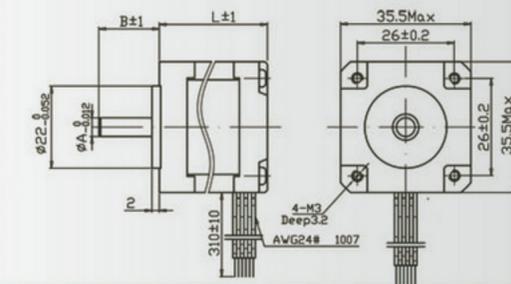
电流Current(A): 0.8-1
力矩Holding Troque(kg.cm): 0.45-0.9
机身长度Body Length(mm): 28-51



28BH系列



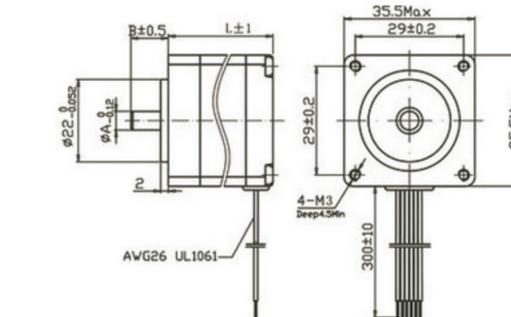
电流Current(A): 0.2-1.5
力矩Holding Troque(kg.cm): 0.25-4
机身长度Body Length(mm): 25-52



35BH系列



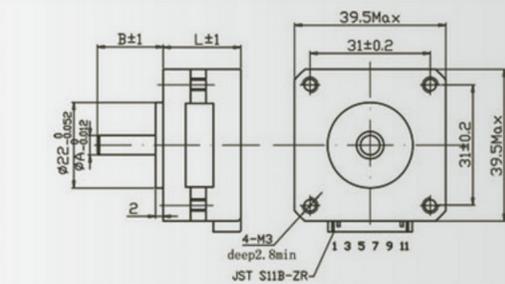
电流Current(A): 0.2-1.5
力矩Holding Troque(kg.cm): 0.25-4
机身长度Body Length(mm): 25-52



35BH(N)系列



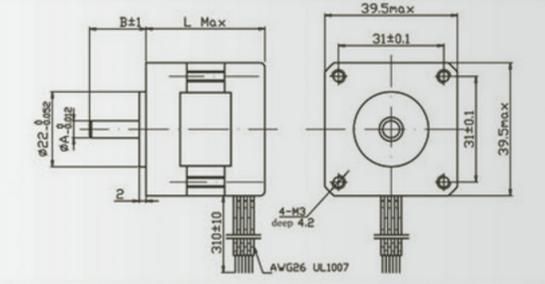
电流Current(A): 0.16-0.6
力矩Holding Troque(kg.cm): 0.25-4
机身长度Body Length(mm): 24-47



39BH(J)系列



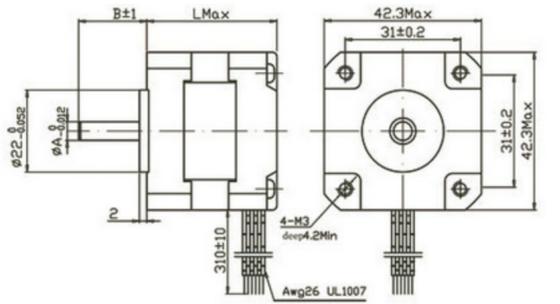
电流Current(A): 0.16-0.6
力矩Holding Troque(kg.cm): 0.25-4
机身长度Body Length(mm): 24-47



39BH系列



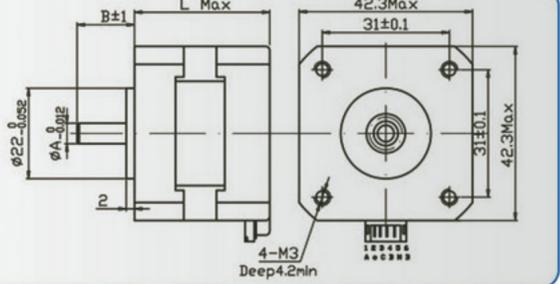
电流Current(A): 0.3-1.68
力矩Holding Troque(kg.cm): 1.7-6.8
机身长度Body Length(mm): 29-58



42BH系列



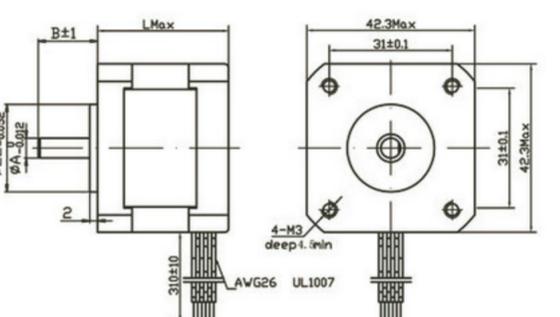
电流Current(A): 0.3-1.68
力矩Holding Troque(kg.cm): 1.7-6.8
机身长度Body Length(mm): 29-58



42BHH(X)系列



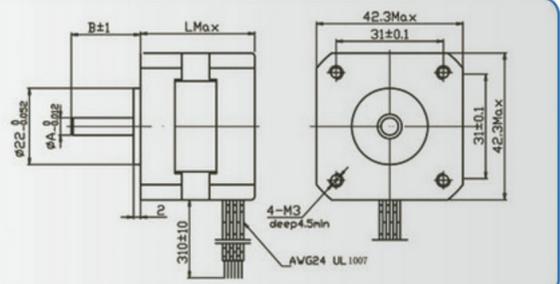
电流Current(A): 0.3-1.68
力矩Holding Troque(kg.cm): 1.7-6.8
机身长度Body Length(mm): 29-58



42BHH(N)系列



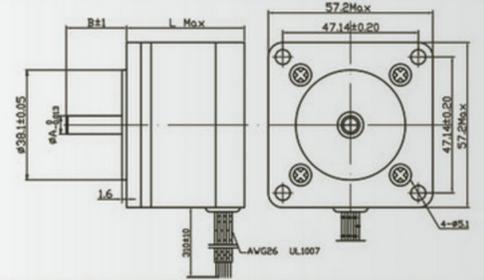
电流Current(A): 0.3-1.68
力矩Holding Troque(kg.cm): 1.7-6.8
机身长度Body Length(mm): 29-58



42BHH(W)系列



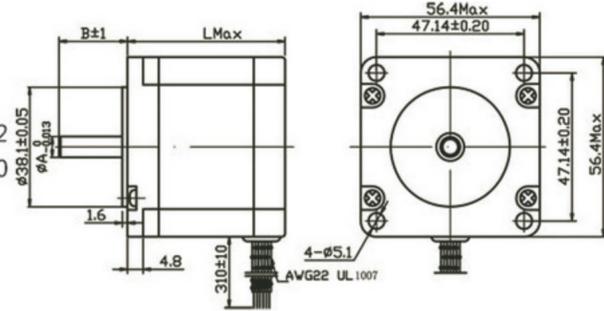
电流Current(A): 0.3-4.2
力矩Holding Troque(kg.cm): 3.8-32
机身长度Body Length(mm): 41-110



57BH系列



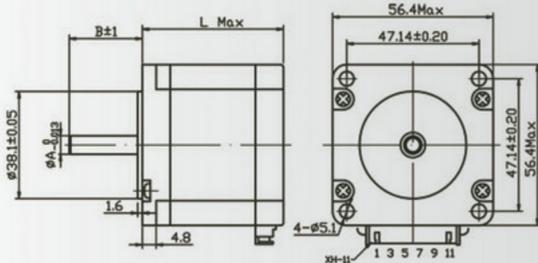
电流Current(A): 0.3-4.2
力矩Holding Troque(kg.cm): 3.8-32
机身长度Body Length(mm): 41-110



57BHH系列



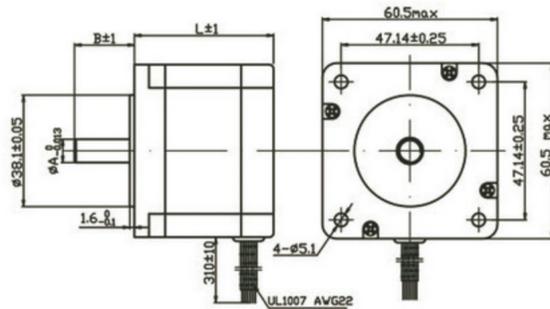
电流Current(A): 0.3-4.2
力矩Holding Troque(kg.cm): 3.8-32
机身长度Body Length(mm): 41-110



57BHH(J)系列



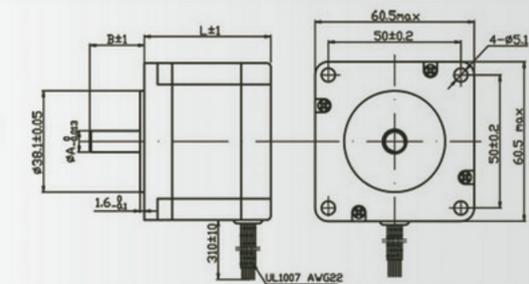
电流Current(A): 0.79-3.5
力矩Holding Troque(kg.cm): 6.2-35
机身长度Body Length(mm): 45-117



60BHH系列



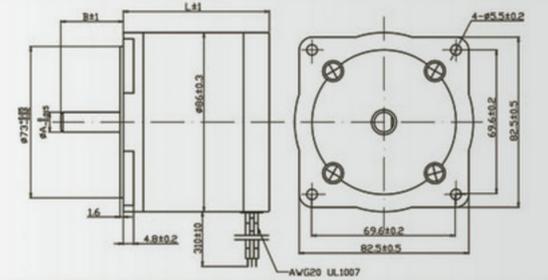
电流Current(A): 0.79-3.5
力矩Holding Troque(kg.cm): 6.2-35
机身长度Body Length(mm): 45-117



60BHH系列



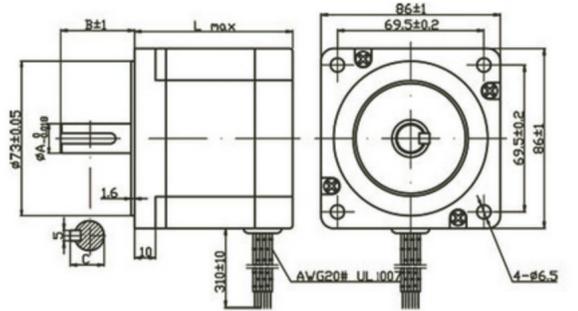
电流Current(A): 1.25-6
力矩Holding Troque(kg.cm): 13-134
机身长度Body Length(mm): 65-159



86BH系列



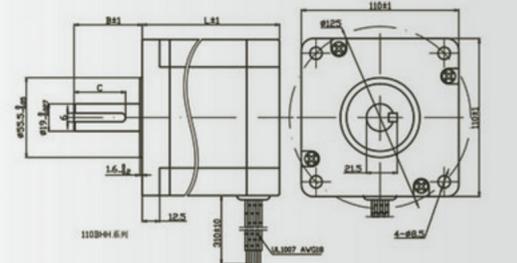
电流Current(A): 1.25-6
力矩Holding Troque(kg.cm): 13-134
机身长度Body Length(mm): 65-159



86BHH系列



电流Current(A): 3-6
力矩Holding Troque(kg.cm): 120-220
机身长度Body Length(mm): 115-199



110BHH系列

步进电机选型表 Stepping motor selection table
20系列 20 series

型号(Model)	相数 No. of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductan- ce)± 20% mH	电压 (Voltage)V	力矩 (Holding Troque)kg.c m	重量 (Weigh t)kg	机身长度 (Length) mm
20BH23-030-08D	2	1.8°	0.3	21.5	4	6.45	0.1	0.06	23
20BH28-020A-10A	2	1.8°	0.2	24	6	4.8	0.14	0.08	28
20BH30-050A-10	2	1.8°	0.5	11.5	1.7	5.75	0.176	0.1	30
20BH33-060D-15	2	1.8°	0.6	6.5	1.7	3.9	0.18	0.12	33
20BH38-061A-10	2	1.8°	0.6	17	5.5	6	0.4	0.16	38
20BH42-080A-15	2	1.8°	0.8	5.4	1.5	3.9	0.3	0.2	42

28系列 28 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
28BH28-080A-25D	2	1.8°	0.8	2.5	1.6	3.3	0.45	0.095	28
28BH32-067A-20	2	1.8°	0.67	5.6	4.2	3.8	0.6	0.11	32
28BH45-067A-10B	2	1.8°	0.67	6.8	4.9	4.6	0.95	0.15	45
28BH51-100B-20	2	1.8°	1	2.3	1.8	2.3	0.9	0.18	51

35系列 35 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
35BHM25-032J-15	2	0.9°	0.32	27	46	8.64	1.2	0.12	25
35BHM28-050A-20	4	0.9°	0.5	16.8	15	8.4	1	0.13	28
35BHM33-020d-24E	2	0.9°	0.2	60	90	12	1.2	0.2	33
35BHM37-050A-24	2	0.9°	0.5	15	28	7.5	1.9	0.2	37
35BH20-020-16	2	1.8°	0.2	15	10	3	0.25	0.12	20
35BH26-025-20B	4	1.8°	0.25	45	13	12	0.35	0.12	26
35BH28-020Q-14B	2	1.8°	0.2	60	48	12	0.8	0.14	28
35BH33-080B-19	2	1.8°	0.8	7	10	7.2	2.2	0.22	34
35BH45-080A-20A	2	1.8°	0.8	3.7	4.5	3.04	2.5	0.28	45
35BHH34-023S-20BM	2	1.8°	0.23	84	64	19.32	1.6	0.2	34
35BHH37W-099A-21	2	1.8°	1	2.7	3.8	2.7	2	0.3	37
35BHH40-150-16B	2	1.8°	1.5	1.4	2	2.1	2.6	0.4	40
35BHH52W-150K-24B	2	1.8°	1.5	2.8	3.8	4.2	4	0.5	52

39系列 39 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
39BHM24-060A-15A	2	0.9	0.6	9	14	5.4	1.2	0.25	24
39BHM26-02A-17	2	0.9	0.2	35	22	7	0.7	0.3	26
39BH20W-040B-24D	2	1.8	0.4	6.5	7.5	2.6	0.65	0.23	20
39BH25-027A-21	4	1.8	0.27	45	20	12	1	0.3	25
39BH34-02-11	4	1.8	0.16	75	50	12	1.1	0.4	34
39BH44-031A-24	2	1.8	0.3	40	65	12	2.8	0.5	44
39BH47-041-20	2	1.8	0.4	20	30	8	2	0.6	47

42系列 42 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
42BHM29-050C-24	2	0.9	0.5	30	32	15	1.7	0.24	29
42BHM48-168A-24	2	0.9	1.68	1.6	4.1	12	4.4	0.6	48
42BHP37W-060-24	3	1.2	0.6	15	15	9	2.6	0.3	37
42BHH25-040A-24D	2	1.8	0.4	24	32	6	1.7	0.22	25
42BHH29W-080C-24B	2	1.8	0.8	4.2	7.8	3.36	2.6	0.24	30
42BHH34-030Q-16C	4	1.8	0.3	40	22	12	1.9	0.25	34
42BHH39-08E-24BI	2	1.8	0.8	7.6	15	6.3	4.2	0.4	39
42BHH48-08A-24	2	1.8	0.8	7.5	6.3	6	3.2	0.6	48
42BHH52-150B-20B	2	1.8	1.5	3.5	6	4.5	6.8	0.8	52
42BHH58-030A-21A	2	1.8	0.3	45	110	4.4	6	0.9	58

57系列 57 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
57BHM41-030A-27G	4	0.9	0.3	50	70	15	3.8	0.42	41
57BHM56-070A-28B	2	0.9	0.7	17.5	70	12.25	12	0.68	56
57BHM65-150A-21A	2	0.9	1.5	1.8	10	2.7	9	0.72	65
57BHM76-060A-21BB	2	0.9	0.6	10	34	6	11.5	1.1	76
57BHM82-300-32E	4	0.9	3	1.2	2.8	3.6	16.8	1.2	82
57BHM110-300B-32	4	0.9	3	1.7	4.2	5.1	26	1.4	110
57BHP41-501B-21	3	1.2	5	0.45	0.45	2.25	5.3	0.55	41
57BHP51-100-21	3	1.2	1	3.2	4	3.2	4.5	0.6	51
57BHP56-350A-21A	3	1.2	3.5	1	1.7	3.5	9	0.65	56
57BHP79-500A-29	3	1.2	5	0.5	1.3	2.5	14.5	1.2	79
57BH41-147W-21WF	2	1.8	1.5	1.5	3.2	2.25	3.8	0.52	41
57BH51-100A-21-14	2	1.8	1	4.2	12	4.2	6.9	0.62	51
57BH56-110A-21-2	2	1.8	1.1	4.6	12	5.1	7.5	0.72	56
57BH76-120A-21B	2	1.8	1.2	4.1	14	4.92	12	0.8	76
57BHH41-099A-12K	2	1.8	1	10	9	10	10	0.46	41
57BHH48-16-21B	2	1.8	1.6	2.8	5.5	4.48	9	0.65	48
57BHH51-10-21DA	4	1.8	1	8.2	6.6	6.6	7.3	0.65	51
57BHH56-280B-21DC	2	1.8	2.8	0.9	2.5	2.5	11.1	0.65	56
57BHH65-300D-34KB	2	1.8	3	1.3	2	3.9	12	0.75	65
57BHH76-209B-21B	2	1.8	2.1	1.3	5.2	2.73	19.2	1.1	76
57BHH76-300C-21G	2	1.8	3	1	4.6	3	18.6	1.1	76
57BHH82-400A-21BG	4	1.8	4	1	2	4	22	1.5	82
57BHH94-430B-21	2	1.8	4.2	0.58	2.5	2.5	26	1.6	94
57BHH100-420A-21B	4	1.8	2.97	2	7	5.94	28	2	100
57BHH110-422A-30D	2	1.8	4.2	0.76	2.8	2.94	32	2.2	110

60系列 60 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
60BHP45-121E-28A	3	1.2	1.21	7	11	XXV	6.2	0.5	45
60BHP54-152A-25	3	1.2	1.52	5.6	11	XXV	8.6	0.6	54
60BHP60-259B-25	3	1.2	2.6	2	3.5	XXV	12	0.7	60
60BHH56-079-25	2	1.8	0.79	20	32	15.8	13	0.6	56
60BHH65-280C-24B	2	1.8	2.8	1.2	4.2	3.36	22	1.05	65
60BHH78-350A-24D	4	1.8	3.5	0.8	1.65	2.66	20.8	1.4	78
60BHH86-300H-24A	2	1.8	3	1.6	8.4	4.8	35	1.4	86
60BHH100-300A-21A	2	1.8	3	1	4	3	30	1.63	100

86系列 86 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
86BHM65-180-35W	2	0.9	1.8	1.4	14	2.34	22.4	1.95	65
86BH62-125B-N30	2	1.8	1.25	4.4	14.5	5.5	13	1.1	62
86BH91-400L-30B	4	1.8	4	0.75	3	3	26	2.4	91
86BH128-300A-55D	2	1.8	3	1.1	8.5	3.3	50	3.6	128
86BHH60-300A-37D	2	1.8	3	1.01	5.8	2.55	30	1.7	60
86BHH65-400A-32C	2	1.8	4	0.48	3.5	1.92	34	1.2	65
86BHH76-400B-25A	2	1.8	4	0.4	2.3	2	21	2.2	76
86BHH80-420E-32J	4	1.8	4.5	0.8	3.5	3.36	45	2.4	80
86BHH94-481A-26Df(Y)	4	1.8	3.5	0.78	2.8	2.73	42	2.8	94
86BHH97-500B-30	2	1.8	5	0.59	3.85	1.75	66	3.2	97
86BHH114-500A-32E	2	1.8	5	0.65	3.6	3.25	68	3.5	114
86BHH118-600E-15CF	2	1.8	6	0.5	3.8	3	85	4	118
86BHH150-419D-32	2	1.8	4.2	1.1	12.8	3.57	120	5.1	150
86BHH156-600E-32B	2	1.8	3	2.72	35	8	134	5.3	156

110系列 110 series

型号(Model)	相数 No.of phase	步距角 (Step angle) ±5°	电流 (Current) A	电阻 (Resistance) ±10% Ω	电感 (Inductance) ±20% mH	电压 (Voltage)V	力矩 (Holding Torque)kg.c m	重量 (Weight) kg	机身长度 (Length) mm
110BHP169-600A-25	3	1.2	6	1	18	110	180	10	169
110BHH115-60A-55JA	2	1.8	3	0.48	7	2.88	120	6	115
110BHH154-600Z-55	2	1.8	6	1.2	16.5	7.2	200	9	154
110BHH169-600A-55C	2	1.8	6	0.8	16	4.8	220	9.8	169
110BHH199-560E-55	4	1.8	5.6	1.3	12.7	7.28	200	12	199

模拟驱动器 Analog Driver

(一)模拟步进电机驱动器产品简介 Analog stepping motor driver introduction

系列特征/Characteristics

运行平稳, 噪音低, 振动低, 电机温升低。

Smooth operating, low noise, low vibration, low temperature rising.

系列概述/Introduction

模拟驱动器采用新型专用技术的细分型高性能步进电机驱动器。由于采用新型的双极性恒流斩波驱动技术, 驱动同样的电机时比其他驱动方式更加平稳, 高速性能更佳。其微步细分有16种, 最大细分1/256(步数512000步/转), 具有自动半流、过压、欠压和过流保护等功能。

The Analog driver is based on advanced control technology. Due to the adoption of the advanced bipolar constant-current chopper driver technology, it shows features stable operation, provides excellent high speed torque when driver the same motor. It has 16 kind of microstep. The maximum number of microstep is 1/256 (steps number is 512000step/rev). It has automatic semi-flow, over-voltage, under-voltage and over-current protection functions.

应用领域/Application fields

适合各种自动化设备和仪器。例如: 贴标机、切割机、包装机、绘图仪、雕刻机、数控机床等。在用户期望低成本、低振动、小噪音、高精度、高速度的设备中效果更佳。

It is suitable for variety of automation equipment and instruments, such as labeling machine, cutting machine, packing machine, plotter, engraving machine, CNC machine and so on. It always performs well when applied for equipment which requires for low-vibration, low-noise, high-precision and high-velocity.

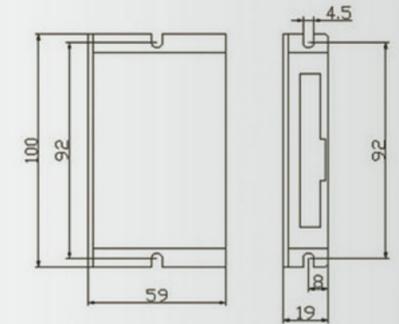
(二)模拟步进电机驱动器外形图及表选型表

Analog stepper motor driver shape diagram and selection table



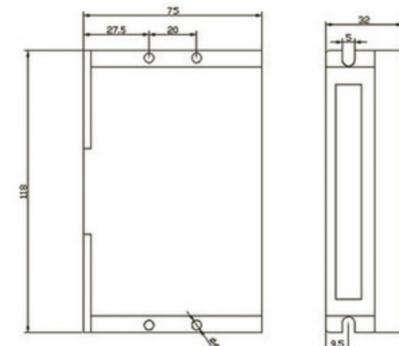
NC215

电流Current(A): 0.2-1.5
电压 Voltage(VDC): 18-40
适配电机Adapter motor:
1.5A以下两相混合式步进电机
Two-phase hybrid stepper motors
under 1.5A



NC542

电流Current(A): 1.2-5
电压 Voltage(VDC): 20-50
适配电机Adapter motor:
5.0A以下各种型号的二相混合式步进电机
Two-phase, four-phase hybrid stepper
motors under 5.0A



模拟驱动器选型表 Analog driver selection table

型号 Model	相数 No. of phase	电流 Current(A)	电压 Voltage(V)	细分数 Microstep	重量 Weight (kg)	外形尺寸 Outline and installation size(mm)	控制信号 Signal control	适配电机Adapter motor
NC215	2	0.2-1.5	18VDC-40VDC	51200步/转 51200steps /rev	0.25	100×59×19	脉冲/方向 Pulse / direction	1.5A以下两相、四相混合式步进电机 Two-phase, four-phase hybrid stepper motors under 1.5A
NC542	2	1.2-5	20VDC-50VDC	51200步/转 51200steps /rev	0.35	118×75×34	脉冲/方向 Pulse / direction	5.0A以下二相混合式步进电机 Two-phase, four-phase hybrid stepper motors under 1.5A
NC1108	2	0.5-8	80VAC-240VAC	51200步/转 51200steps /rev	1.2	195×107×81	脉冲/方向 Pulse / direction	8A以下两相、四相混合式步进电机 Two-phase, four-phase hybrid stepper motors under 8.0A
NC2283	2	0.5-8.3	130VAC-240VAC	51200步/转 51200steps /rev	1.25	195×108×84	脉冲/方向 Pulse / direction	8.3A以下两相、四相混合式步进电机 Two-phase, four-phase hybrid stepper motors under 8.3A
3NC2283	3	2.0-8.3	150VAC-220VAC	51200步/转 51200steps /rev	1.3	195×108×84	脉冲/方向 Pulse / direction	8.0A以下三相步进电机 Three-phase hybrid stepping motors under 8.0A
NC3M583	3	2.1-8.3	20VDC-50VDC	51200步/转 51200steps /rev	1.3	118×75.5×34	脉冲/方向 Pulse / direction	8.0A以下三相步进电机 Three-phase hybrid stepping motors under 8.3A

数字驱动器 Digital Driver

(一)数字步进电机驱动器产品简介 Digital stepper motor driver introduction

系列特征/Characteristics

1、高性能、低价格 2、脉冲响应频率可高达200KHz 3、内置微步细分 4、低温升、低振动 5、停止时自动半流 6、在线自适应PID技术 7、光电隔离信号输入/输出。

1.High performance, low price. 2 Max response frequency up to 200KHz. 3. Microstep. 4.Low temperature rise, smooth motion.5.Automatic idle-current reduction.6.Online adaptive PID technology.7.Optical isolating signal I/O.

系列概述/Introduction

新一代高性能数字式步进电机驱动器,采用32位的DSP处理器,内部集成了抗共振、低噪音、微步细分、低温升技术大幅度提高步进电机的性能,具有噪音低、振动小、温升低和高速力矩大等特点。驱动器内部采用在线自适应PID技术,无需人工调整就能自动针对不同电机生成最优参数,使电机运行性能达到最佳。

The new generation digital stepper motor driver based on a 32-bit DSP processor, combination of the anti-resonance, low noise, micro-step and low temperature rise technology significantly improve the performance of the stepper motor, has low noise, small vibration, low temperature rise and high-speed torque. The driver use online adaptive PID technology, without manual adjustment can be automatically generated optimal parameters for different motors, and achieve the best performance.

系列应用领域/Application fields

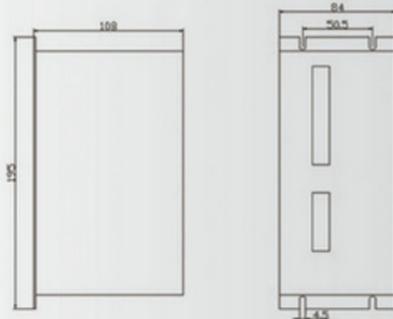
适合各种中小型自动化设备和仪器,例如:激光加工设备、雕刻设备、医疗设备、测量设备、电子加工设备、纺织服装设备等。在用户期望低振动、低噪声的设备中应用,效果更佳。

It is suitable for a variety of small-scale automation equipment and instruments, such as laser process equipment, engraving machine, medical equipment, measuring equipment, the electronic processing equipment, textile and garment equipment and so on. It always performs well when applied for equipment which requires for low-vibration, low-noise, high-precision and high-velocity.



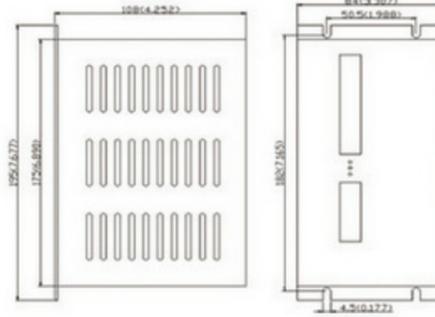
NC1108

电流Current(A): 0.5-8
电压 Voltage(VAC): 80-240
适配电机Adapter motor:
8A以下两相、四相混合式步进电机
Two-phase, four-phase hybrid stepping motors under 8.0A



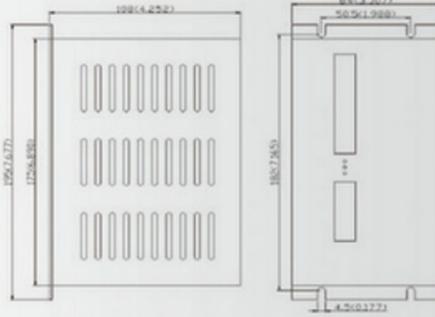
NC2283

电流Current(A): 0.5-8.3
电压 Voltage(VAC): 130-240
适配电机Adapter motor:
8.3A以下两相、四相混合式步进电机
Two-phase, four-phase hybrid stepping motors under 8.3A



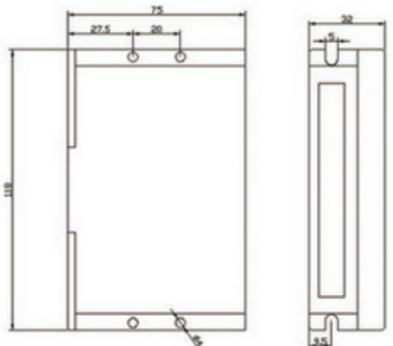
3NC2283

电流Current(A): 2.0-8.3
电压 Voltage(VAC): 150-220
适配电机Adapter motor:
8.0A以下三相步进电机
Three-phase hybrid stepping motors under 8.0A



NC3M583

电流Current(A): 2.1-8.3
电压 Voltage(VDC): 20-50
适配电机Adapter motor:
8.0A以下三相步进电机
Three-phase hybrid stepping motors under 8.0A

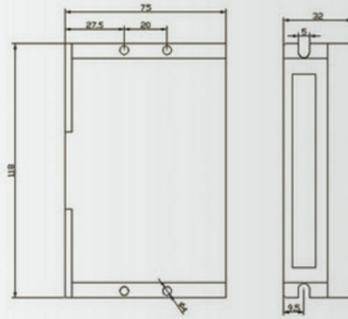


(二)数字步进电机驱动器外形图及选型表

Digital stepping motor driver shape diagram and selection table



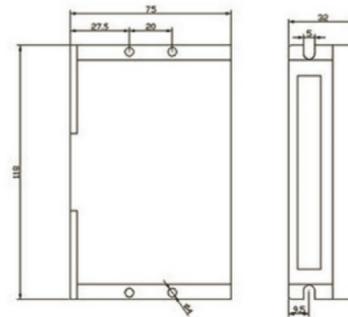
电流Current(A): 2.1-5.6
电压 Voltage(VDC): 20-50
适配电机Adapter motor:
5.6A以下各种型号的二相混合式步进电机
Two-phase hybrid stepping motors
under 5.6A



NCD556



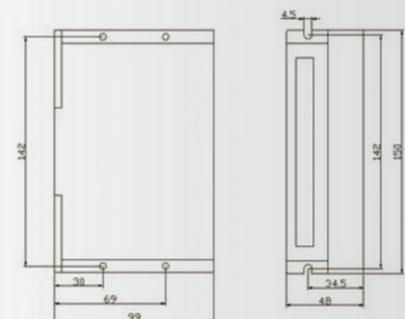
电流Current(A): 2.1-5.6
电压 Voltage(VDC): 20-80
适配电机Adapter motor:
5.6A以下各种型号的二相混合式步进电机
Two-phase hybrid stepping motors
under 5.6A



NCD856



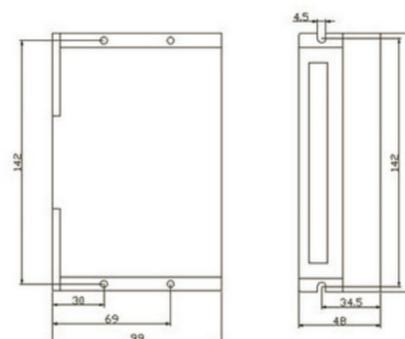
电流Current(A): 2.4-7.2
电压 Voltage: 20-60VAC 24-90VDC
适配电机Adapter motor:
7.2A以下各种型号的二相混合式步进电机
Two-phase hybrid stepping motors
under 7.2A



NCD860



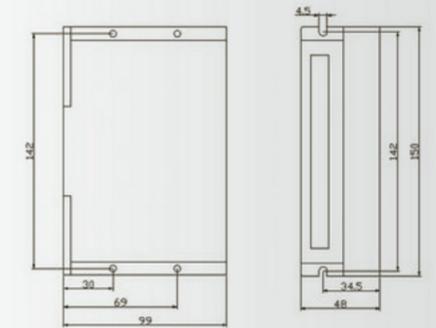
电流Current(A): 2.4-7.2
电压 Voltage: 20-80VAC 24-110VDC
适配电机Adapter motor:
7.2A以下各种型号的二相混合式步进电机
Two-phase hybrid stepping motors
under 7.2A



NCD860H



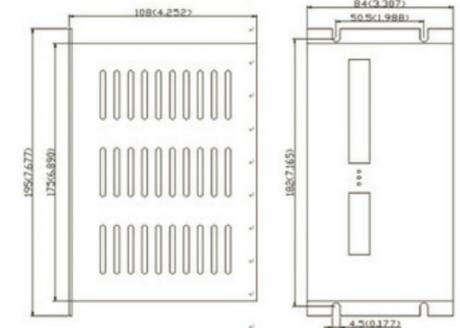
电流Current(A): 1.8-8.2
电压 Voltage(VDC): 24-90
适配电机Adapter motor:
8.2A以下各种型号的二相混合式步进电机
Two-phase hybrid stepping motors
under 8.2A



NCD882



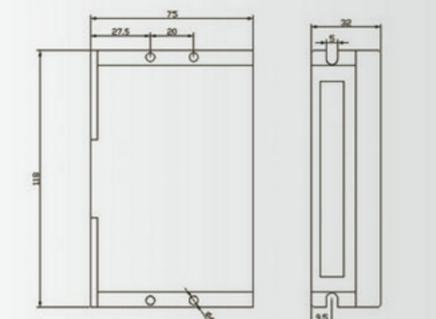
电流Current(A): 2.2-8.2
电压 Voltage(VAC): 80-150
适配电机Adapter motor:
8.2A以下各种型号的二相混合式步进电机
Two-phase hybrid stepping motors
under 8.2A



NCD1182



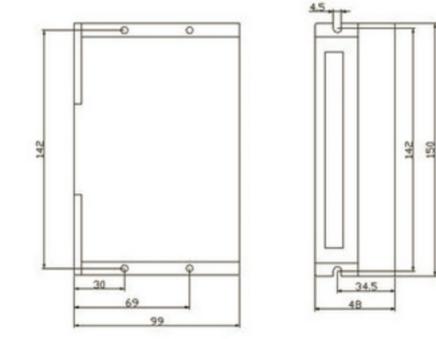
电流Current(A): 3.2-8.3
电压 Voltage(VDC): 20-60
适配电机Adapter motor:
8.3A以下各种型号的三相混合式步进电机
Three-phase hybrid stepping motors
under 8.3A



NCD3M683



电流Current(A): 2.4-7.2
电压 Voltage: 20-60VAC 24-90VDC
适配电机Adapter motor:
7.2A以下各种型号的三相混合式步进电机
Three-phase hybrid stepping motors
under 7.2A

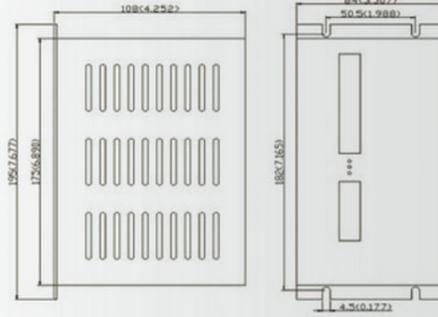


NCD3M860



NCD3M2208

电流Current(A): 2.2-8.2
电压 Voltage(VAC): 110-220
适配电机Adapter motor:
8.2A以下各种型号的三相混合式步进电机
Three-phase hybrid stepper motors
under 8.2A



数字驱动器选型表 Digital driver selection table

型号 Model	相数 No. of phase	电流 Current(A)	电压 Voltage(V)	细分数 Microstep	重量 Weight (kg)	外形尺寸 Outline and installation size(mm)	控制信号 Signal control	适配电机Adapter motor
NCD556	2	2.1-5.6	20VDC-50VDC	51200步/转 51200steps/rev	0.26	118×75×34	脉冲/方向 Pulse / direction	5.6A以下二相混合式步进电机 Two-phase hybrid stepping motors under 5.6A
NCD856	2	2.1-5.6	20VDC-80VDC	51200步/转 51200steps/rev	0.575	118×75×34	脉冲/方向 Pulse / direction	5.6A以下二相混合式步进电机 Two-phase hybrid stepping motors under 5.6A
NCD860	2	2.4-7.2	20VAC-60VAC OR 24-90VDC	51200步/转 51200steps/rev	0.575	150×99×48	脉冲/方向 Pulse / direction	7.2A以下二相混合式步进电机 Two-phase hybrid stepping motors under 7.2A
NCD860H	2	2.4-7.2	20VAC-80VAC OR 24-110VDC	51200步/转 51200steps/rev	0.73	158×100×60	脉冲/方向 Pulse / direction	7.2A以下二相混合式步进电机 Two-phase hybrid stepping motors under 7.2A
NCD882	2	1.8-8.2	24VDC-90VDC	51200步/转 51200steps/rev	0.8	118×75×34	脉冲/方向 Pulse / direction	8.2A以下二相混合式步进电机 Two-phase hybrid stepping motors under 8.2A
NCD1182	2	2.2-8.2	80VAC-150VAC	51200步/转 51200steps/rev	1.1	195×108×84	脉冲/方向 Pulse / direction	8.2A以下二相混合式步进电机 Two-phase hybrid stepping motors under 8.2A
NCD2208	2	2.2-8.2	110VAC-220VAC	51200步/转 51200steps/rev	1.3	195×108×84	脉冲/方向 Pulse / direction	8.2A以下二相混合式步进电机 Two-phase hybrid stepping motors under 8.2A
NCD3M683	3	3.2-8.3	20VDC-60VDC	51200步/转 51200steps/rev	0.25	118×75×34	脉冲/方向 Pulse / direction	8.3A以下三相混合式步进电机 Three-phase hybrid stepping motors under 8.3A
NCD3M860	3	2.4-7.2	20VAC-60VAC OR 24-90VDC	51200步/转 51200steps/rev	1.3	150×99×48	脉冲/方向 Pulse / direction	7.2A以下三相混合式步进电机 Three-phase hybrid stepping motors under 7.2A
NCD3M2208	3	2.2-8.2	110VAC-220VAC	51200步/转 51200steps/rev	1.3	195×108×84	脉冲/方向 Pulse / direction	8.2A以下三相混合式步进电机 Three-phase hybrid stepping motors under 8.2A

闭环步进伺服系统概述 Overview of closed loop stepping motor system

闭环步进伺服系列产品优点 Closed loop stepping motor advantages

- 闭环步进伺服与传统步进产品相比,不会发生丢步现象,能够保证电机精确定位,高速性能提升约30%,提高设备工作速度,电机正常工作时发热下降20%,缓解电机扭矩下降,电机振动明显减小,运行更平稳,采用变电流控制技术,节省电能消耗
1, Compared with the traditional stepping motor, the closed loop stepping motor will not lose step. And it ensures the precise position. What's more, the operating speed of the equipment will be improved because of the 30 percent promotion in speed performance. Also, the heating of the motor will be declined by 20 percent when the motor functions normally.
- 闭环步进伺服与传统交流伺服产品相比,无需复杂参数调整,使用更加方便,高速停止时不抖动,零速停止稳定,位置响应极快,尤其适合应用于短距离快速启停场合,成本降低50%以上,转矩更大,安装尺寸更小
2, Compared with the traditional AC servo motor, the closed loop stepping motor is more convenient to use without complex parameter. It can stop without shaking in high speed, so it is very suitable for the occasion where the equipment starts and stops rapidly in a short distance. The other advantages of the motor are its low cost and strong torque.

闭环伺服系统的特点 Characteristics of closed loop stepping motor system

- 闭环控制技术,与交流伺服系统一样不丢步。安装位置编码器,使电机具有伺服电机的闭环特性,从根本上解决了传统步进电机丢步的问题
- 较大提升电机的高速性能。可以将电机有效转矩提升30%以上
- 有效降低电机发热量。驱动器输出电流随负载和速度变大而变大,变小而变小
- 缩短电机加减速相应时间。位置响应输出与输入指令几乎是实时同步的,因此非常适合应用于短距离快速启停和零速稳停的场合
- 电机刹车时无振荡。闭环步进伺服驱动系统拥有步进电机独有的保持转矩特性,能够稳定到达设定位置而避免振荡
- 电机运行更平稳,精度更高。采用最先进的专用电机控制DSP芯片,应用矢量控制和平滑滤波等技术实现步进电机的平滑运动控制
- 无需增益调整,使用非常方便。闭环步进伺服系统兼具步进马达使用的便利性和伺服系统的可靠性双重优点,可以很方便的使用,无需进行繁琐的参数调试
1. As same as AC servo system, the closed-loop control technology do not lose step. Installing position encoder will make stepping motor have the characteristic of closed-loop of servo motor. Obviously, the problem of losing step can be fundamentally resolved.
2. High-speed performance of the motor can be greatly enhanced. And the effective torque can be promoted above 30%.
3. Heat generating of the motor can be decreased dramatically. The output current of driver increases with the increase meant of load and speed.
4. Shorting the motor's acceleration time.As the output instruction and the input instruction of the position response, it is suitable for the occasion where the equipment starts and stops rapidly in a short distance.
5. The motor has no vibration during braking. Closed loop servo system has characteristic of keeping torque which is unique to stepping motor. It can avoid vibration to arrive its position stably.

闭环电机选型表 Closed loop motor selection table

型号(Model)	相数 No. of phase	步距角 (Step angle) ±5%°	电流 (Current) A	电阻 (Resistance) ±10%Ω	电感 (Inductance) ±20% mH	电压 (Voltage) V	力矩 (Holding Troque) kg.cm	重量 (Weight) kg	机身长度 (Length) mm
57BHH76-420P-25MP	2	1.8	4.2	0.4	1.6	3.3	16.5	1.1	76
57BHP80-580A-30MP	3	1.2	5.8	0.6	1.3	3.48	15	1.2	80
60BHH86-452-35MP	2	1.8	4.5	0.45	2	2.03	25	1.2	86
86BHH76-380P-40MP	2	1.8	3.8	0.4	0.34	1.52	35	2.3	76
86BHH114-450P-40MP	2	1.8	4.5	0.46	3.8	2.07	62	3.5	114
86BHH150-600P-40MP	2	1.8	6	0.4	3.2	2.4	90	5.8	150
86BHP159-520E-40MP	3	1.2	5.2	1.2	8	6.2	85	5.6	159
86BHP126-300A-40MP	3	1.2	3	3.9	26	XX	70	4	126
86BHP159-300E-40MP	3	1.2	3	2.4	18	7.2	80	5.6	159
110BHH116-600-55MP	2	1.8	6	0.48	6.5	2.88	120	9.5	116
110BHH154-600P-55MP	2	1.8	6	0.56	8.6	3.36	160	10	154
110BHP154-420A-55MP	3	1.2	4.2	1.2	15	XX	120	9.5	154

(二)闭环驱动器 Closed loop motor driver

1. 闭环驱动器概述 Overview of closed loop drives

系列特征/Characteristics

工作电压范围涵盖20VDC~70VDC, 20VAC~220VAC; 支持脉冲/方向或双脉冲控制模式, 可接收差分单端式信号指令, 光耦隔离信号输入, 抗干扰能力强; 闭环控制防止失步; 运行速度和运行力矩更大; 响应速度更快; 大幅降低温升, 提高运行效率; 停止时无振动; 高平顺性能, 超低噪音; 无需增益调整; 低成本

The range of operating voltage is 20VDC~70VDC, 20VAC~220VAC. Support pulse/direction or double pulse control mode. Can receive difference and single-ended signal instructions, optical isolating input, strong anti-interference ability; closed loop control to prevent losing steps. Operating speed and operating torque will be much bigger. Response frequency much faster. Greatly reducing temperature rise. enhancing operation efficiency, stop without vibration, smooth motion, sup- low noise, without manual adjustment, low cost.

系列概述/Introduction

NCDS系列是创新型混合伺服驱动产品。采用最新专用电机控制DSP芯片和矢量闭环控制技术, 彻底克服开环步进电机丢步的问题, 同时明显提升电机高速性能、降低电机发热和减小电机振动, 提升机器加工速度和精度, 降低机器能耗。在电机连续过载时, 驱动器会及时输出报警信号, 具有与交流伺服系统同样的可靠性。NCDS系列适配电机安装尺寸完全兼容42/57/60/86/110系列步进电机, 方便传统步进驱动方案升级, 成本仅相当于交流伺服系统的一半。

NCDS series is an innovative hybrid servo drive. Adopt the latest motor control chips and vector closed-loop control technology to overcome the problems of losing steps for the open loop motor. Meanwhile, enhance the motor's high-speed performance, reduce the heat and decrease the vibration of the motor. Improve machine processing speed and accuracy. Reduce energy consumption of the machine. When the motor continuously overload, the driver will output the alerting signal in time. It has the same reliability as the ac servo systems. NCDS series can fit the size 42/57/60/86/110 series stepper motors completely. It can upgrade the traditional stepper driver's conveniently and the cost will be the half of the ac servo system.

系列应用领域/Application

适合激光加工设备、雕刻设备、医疗设备、测量设备、电子加工设备、纺织服装设备等, 特别适用于短距离、短时间的和快速启停零速稳停应用场合。

It is suitable for the laser process equipment, engraving machine, medical equipment, measuring equipment, the electronic processing equipment, textile and garment equipment and so on. Suitable for the situation that need short distance and time to quick start up and shut down and zero speed stabilizing stop.

闭环电机驱动器命名规则 Closed loop motor Driver's naming rule.

NC D S X1 X2

NC: 妮采电气有限公司

Nietz Electric Co., Ltd

D: 数字驱动器(在非数字驱动器名称中不标注)

Digital driver(Don't label on the non-digital driver)

S: 闭环驱动器(在非闭环驱动器名称中不标注)

Closed loop driver (Don't label on the non-closed loop driver)

X1: 驱动器最大电压

The Maximum voltage of the driver

X2: 驱动器最大电流

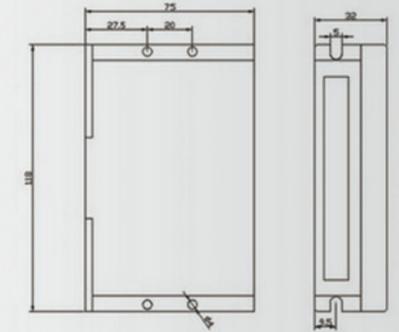
The Maximum current of the driver

2 闭环驱动器外形图及表选型表 Closed loop driver shape diagram and selection table



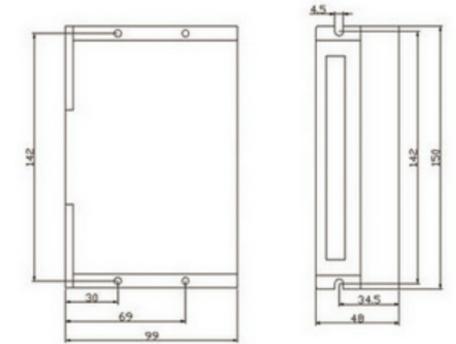
NCDS660

电流Current(A): 6.0
电压 Voltage(VDC): 20-60
适配电机Adapter motor:
6.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 6.0A



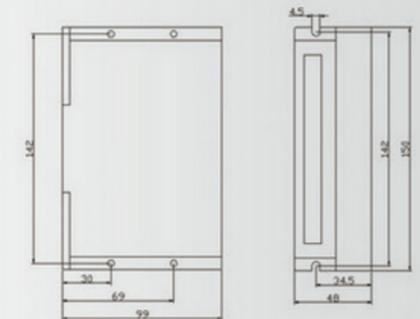
NCDS860

电流Current(A): 8.0
电压 Voltage: 20-60VAC 24-90VDC
适配电机Adapter motor:
8.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 8.0A



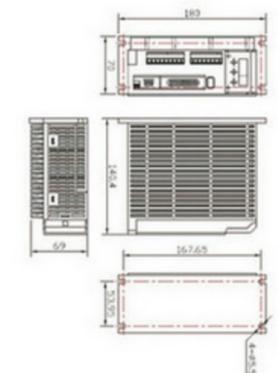
NCDS860H

电流Current(A): 8.0
电压 Voltage: 20-90VAC 24-110VDC
适配电机Adapter motor:
8.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 8.0A



NCDS880L

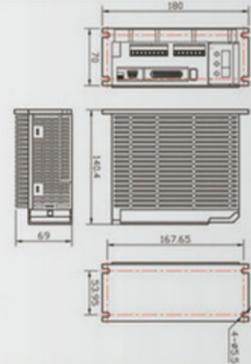
电流Current(A): 8.0
电压 Voltage: 20-90VAC 24-110VDC
适配电机Adapter motor:
8.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 8.0A





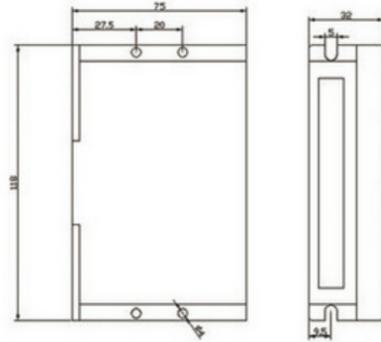
NCDS1108

电流Current(A): 8.0
电压 Voltage(VAC): 70-130
适配电机Adapter motor:
8.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 8.0A



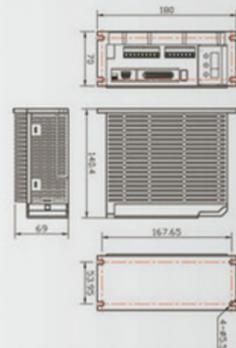
NCDS556

电流Current(A): 5.6
电压 Voltage(VDC): 20-50
适配电机Adapter motor:
5.6A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 5.6A



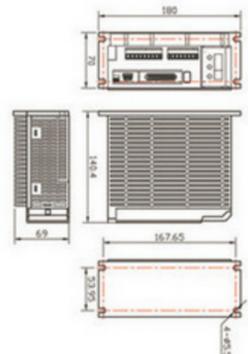
NCDS1106

电流Current(A): 6.0
电压 Voltage(VAC): 70-130
适配电机Adapter motor:
6.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 6.0A



NCDS2206

电流Current(A): 6.0
电压 Voltage(VAC): 110-230
适配电机Adapter motor:
6.0A以下各种型号的二相闭环步进电机
Two-phase closed loop motor under 6.0A



闭环驱动器选型表 Closed loop driver selection table

型号 Model	相数 No. of phase	电流 Current (A)	电压 Voltage(V)	细分数 Microstep	重量 Weight (kg)	外形尺寸 Outline and installation size(mm)	控制信号 Signal control	适配电机Adapter motor
NCDS660	2	6.0A	20VDC-60VDC	51200步/转 51200steps /rev	0.255	118×75×34	脉冲/方向 Pulse / direction	6.0A以下各种型号的二相闭环步进电机 Two-phase closed loop motor under 6.0A
NCDS860	2	8.0A	20VAC-60VAC OR 24VDC-90VDC	51200步/转 51200steps /rev	0.575	150×99×48	脉冲/方向 Pulse / direction	8.0A以下各种型号的二相闭环步进电机 Two-phase closed loop motor under 8.0A
NCDS860H	2	8.0A	20VAC-90VAC OR 24VDC-110VDC	51200步/转 51200steps /rev	0.73	158×100×60	脉冲/方向 Pulse / direction	8.0A以下各种型号的二相闭环步进电机 Two-phase closed loop motor under 8.0A
NCDS880L	2	8.0A	20VAC-90VAC OR 24VDC-110VDC	51200步/转 51200steps /rev	1.12	180×140×70	脉冲/方向 Pulse / direction	8.0A以下各种型号的二相闭环步进电机 Two-phase closed loop motor under 8.0A
NCDS1108	2	8.0A	70VAC-130VAC	51200步/转 51200steps /rev	1.395	180×140×70	脉冲/方向 Pulse / direction	8.0A以下各种型号的二相闭环步进电机 Two-phase closed loop motor under 8.0A
NCDS1556	3	5.6A	20VDC-50VDC	51200步/转 51200steps /rev	0.255	118×75×34	脉冲/方向 Pulse / direction	5.6A以下各种型号的三相闭环步进电机 Three-phase closed loop motor under 5.6A
NCDS1106	3	6.0A	70VAC-130VAC	51200步/转 51200steps /rev	1.395	180×140×70	脉冲/方向 Pulse / direction	5.6A以下各种型号的三相闭环步进电机 Three-phase closed loop motor under 5.6A
NCDS2206	3	6.0A	110VAC-230VAC	51200步/转 51200steps /rev	1.395	180×140×70	脉冲/方向 Pulse / direction	5.6A以下各种型号的三相闭环步进电机 Three-phase closed loop motor under 5.6A

标准型的命名规则/the standard naming rules

电机编码: NC 57 BL60 - 25 L1 30 - 00

Motor code: NC 57 BL60 - 25 L1 30 - 00

NC: 表示妮采电机;

NC motor;

57: 表示电机截面长度;

Indicates the length of the motor section;

BL: 表示硅钢片为方形截面的无刷电机;

Steel sheet for the square section of the brushless motor;

BLR: 表示硅钢片截面为圆的无刷电机;

Indicates that the steel sheet section is a circle of brushless motor;

BLW: 表示外转子的无刷电机;

Brushless motor for external rotor

BLM: 表示圆身方端盖无刷电机;

The round body side cover brushless motor;

BLT: 表示电机截面为非常规尺寸, 如82BLT, 表示横截面为82mm附近的无刷电机;

BLT indicates that the motor cross section is a non conventional size, such as 82BLT, which indicates

That the cross section is 82mm near the brushless motor;

BLC: 表示电机为闭环控制的无刷电机

Brushless motor with BLC indicating motor as closed loop control

BLCD: 表示电机为闭环控制的集成驱动器无刷电机

BLCD represents an integrated drive brushless motor for closed loop control

DC有刷电机

DC brush motor

60: 表示电机的机身长度, 非整数的长度, 补成整数;

Indicates the length of the body of the motor, the length of the non integer, and the integer;

25: 表示电机的额定功率, 单位W;

Represents the rated power of the motor, unit W;

L1: 表示电机的电源等级, 直流部分L1表示12VDC; L2表示24VDC; L3表示36VDC;

L4表示48V; L5表示60V; L6表示96V。以此类推。如果是交流电则使用H1表示220VAC; H2表示310VAC;

L1: The power level of the motor, the DC part of the 12VDC said L1; L2 said 24VDC; L3 said 36VDC;

L4 represents 48V; L5 represents 60V; L6 represents 96V. and so on. If it is alternating current, the H1 is used.220VAC; H2 representation 310VAC;

30: 表示电机的额定转速, 30表示30x100=3000RPM,如果非100的倍数, 那么就取整。

The rated speed of the motor 30, said 30x100=3000RPM, if not a multiple of 100, then rounded.

00: 本系列电机的其他型号, 00为基本型, 第一个版本就为01版。

This series of other models of the motor, 00 for the basic type, the first version of the 01 edition.

衍生型号的命名规则/derived models of naming rules

由于引出线、出轴等微小变化, 导致电机在部分零部件有微小变化的, 请按以下规则命名: 将版本号由00改为最小的为命名的版本号。

同时在基础型号的电机文件图纸中, 添加一个衍生型号的文件夹, 其中包含需要变更的图纸, 在BOM中标出于基础性不同的零部件目录, 以及该型号的规格书。

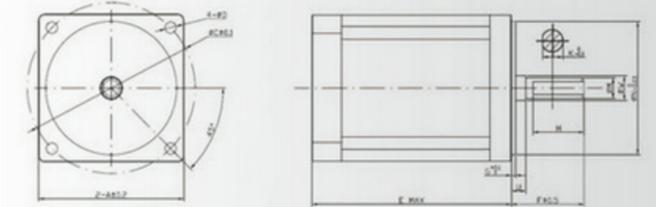
When some parts of the motor are changed by the changes of lead wire, shaft or others, please name it by the following rule: change the version number 00 to the smallest version number.

Also in the basic types of motor documents and drawing, add a derived type of folder, which contains the updated drawings, Mark the basic different parts catalog, and the types of specifications in BOM.

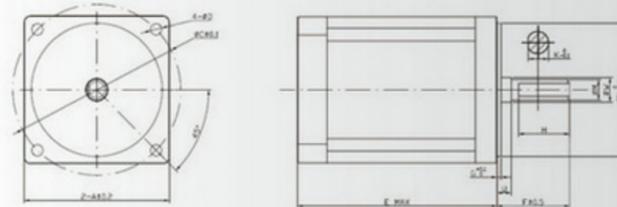
概述/summary

本系列无刷电机最大功率150W,最大额定力矩1.2NM;速度范围:0-3000RPM;霍尔元件在电机内部,无需调整,电机采用高性能钕铁硼永磁材料,外观美,体积紧凑,具有小型化,全密闭,寿命长、噪声低、精度高、温升小、机械振动小等特点。产品可以广泛应用于工厂自动化、金融等设备。

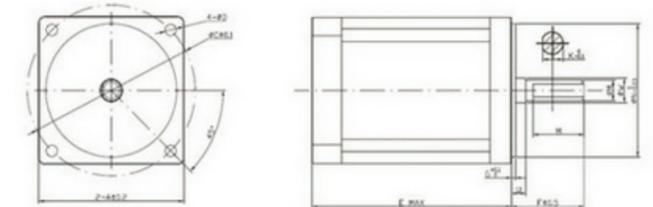
This series BLDC motor maximum power 150W, maximum rated torque 1.2NM.Speed range: 0-3000RPM; Holzer components in the motor, no need to adjust.The whole, the motor uses high performance neodymium iron boron permanent magnet material, the appearance is beautiful, the volume is compact,With miniaturization, fully closed, long life, low noise, high precision, low temperature.Small mechanical vibration characteristics. Products can be widely used in factory automation financial and other equipment.



70方截面无刷 70 section of BLDC motor



60方截面无刷 60 section of BLDC motor



92方截面无刷 92 section of BLDC motor

方型截面无刷电机 section of the brushless motor

电机技术规格表Motor technical specifications

电机外型尺寸Motor size

型号Model	相数 No. of phase	额定电压 Rated voltage (V)	额定功率 Rated power (W)	额定转速 Rated speed (rpm)	额定扭矩 Rated torque (N.M)	极数 Poles	机身宽度 A(mm)	安装孔圆 周直径 C(mm)	安装孔径 D(mm)		机身长度 E(mm)	出轴长度 F(mm)	外止口高度 G(mm)	扁位长度 H(mm)	扁位高度 K(mm)	轴径M(mm)		外止口直径 N(mm)	伸出端轴径 W(mm)	伸出端轴长 U(mm)	重量 Weight (Kg)
NC60BL79-45L223-00	3	24	45	2300	0.2	10	60	66.5	5.5		79	28	2	23	9	10	-0.02 -0.011	38	0	0	0.8
NC70BL45-90L230-00	3	24	90	3000	0.28	4	70	59	5.5		46.2	29	1.5	22	7.5	8	0 -0.012	34	9	7	0.8
NC70BL99-120L218-00	3	24	120	1800	0.6	10	70	82	5.5		99	35.5	2	25	9	10	-0.02 -0.011	64	0	0	1.7
NC92BL115-150L212-00	3	24	150	1200	1.2	10	92	102	6.8		115	40.5	3	34	13	14	0 -0.025	83	0	0	3.4

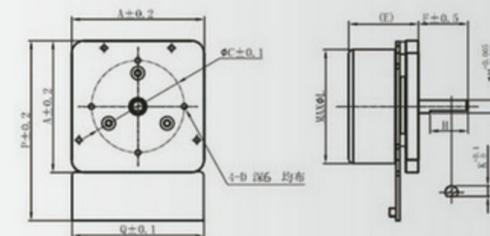
概述/summary

本系列无刷电机最大功率60W,最大额定转矩0.28Nm,采用24VDC供电,内置驱动电路,采用PLL控制的方式实现电机的高精度转速控制,产品可以广泛应用于金融设备、复印机、激光打印机等设备。

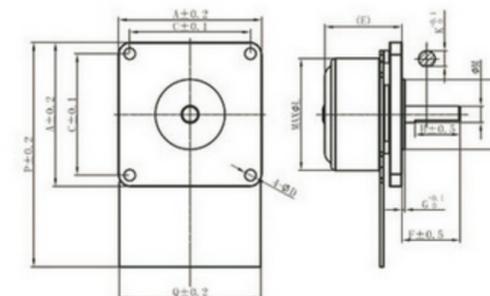
This series BLDC motor has the maximum power 60W,the maximum rated torque 0.28Nm.Using 24VDC power supply,built-in drive circuit,using the way of PLL control to achieve the high precision speed control of the motor.It can be widely used in financial equipment, duplocator, laserprinter and so on.



63无刷 63 exterior rotor BLDC motor



70无刷 70 exterior rotor BLDC motor



外转子无刷电机产品系列 Exterior rotor BLDC motor product series

电机技术规格表Motor technical specifications							电机外型尺寸Motor size													
型号Model	相数 No. of phase	额定电压 Rated voltage (V)	额定功率 Rated power (W)	额定转速 Rated speed (rpm)	额定转矩 Rated torque (N.M)	极数 Poles	机身宽度 A(mm)	安装孔圆周直径C(mm)		安装孔大小 D(mm)	机身长度 E(mm)	出轴长度 F(mm)	扁位长度 H(mm)	扁位高度 K(mm)	机壳外径 L(mm)	轴径M(mm)	线路板长度 P(mm)	线路板宽度 Q(mm)	重量 (Kg)	
NC63BLW33-40L220-00	3	24	40	2000	0.2	16	63	44		M3	33.1	23.5	18	5	54.8	6	-0.005 -0.015	86	62.5	0.31

电机技术规格表Motor technical specifications							电机外型尺寸Motor size															
型号Model	相数 No. of phase	额定电压 Rated voltage (V)	额定功率 Rated power (W)	额定转速 Rated speed (rpm)	额定转矩 Rated torque (N.M)	极数 Poles	机身宽度 A(mm)	安装孔孔距C(mm)	安装孔径 D(mm)		机身长度 E(mm)	出轴长度 F(mm)	扁位长度 H(mm)	扁位高度 K(mm)	机壳外径 L(mm)	轴径M(mm)	线路板长度 P(mm)	线路板宽度 Q(mm)	外止口高度 G(mm)	外止口直径 N(mm)	重量 (Kg)	
NC70BLW38-60L230-00	3	24	60	3000	0.29	16	70	59	5.5		37.6	28.5	22	7.5	55	8	-0.005 -0.015	109	69	1.5	34	0.41