

PN-MN行星通用齿轮伺服马达&AN伺服驱动器

PN-MN Planetary Current Servo Gearmotor & AN Servo Drives

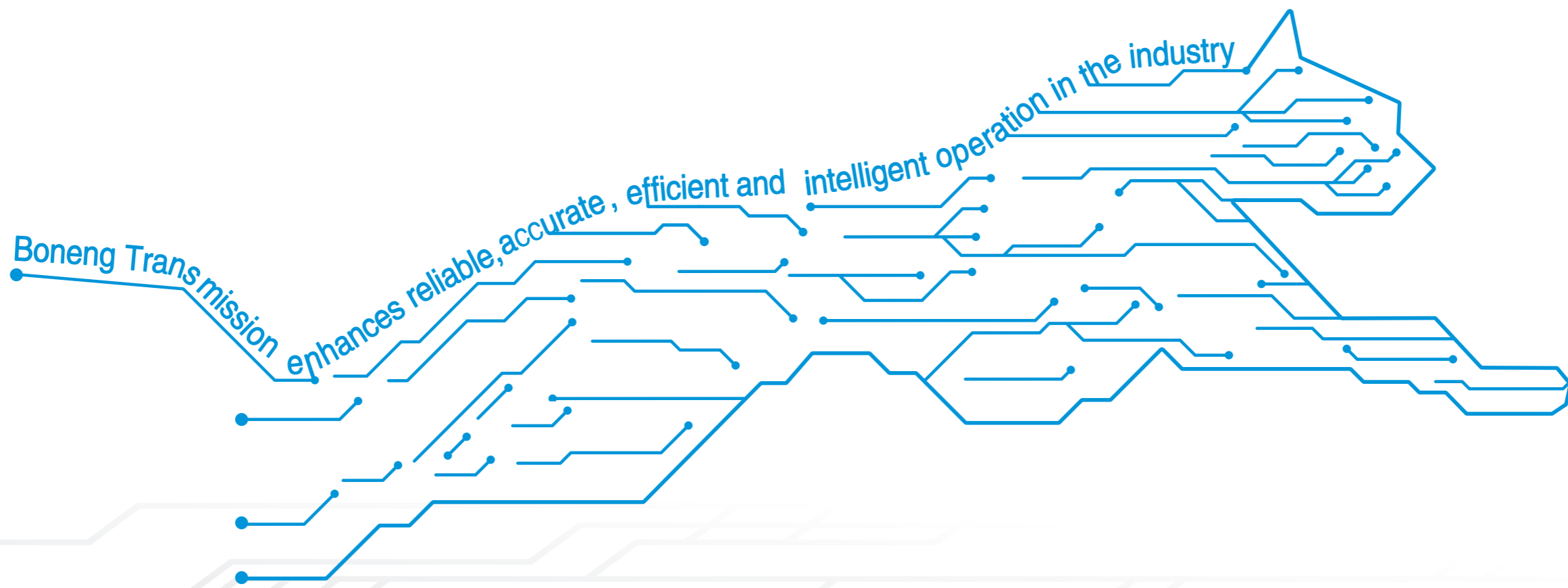


PN-MN行星通用  
齿轮伺服马达&AN  
伺服驱动器

PN-MN Planetary  
Current Servo  
Gearmotor & AN  
Servo Drives

(0.28kW~3.98kW)

Edit date 05/2025  
Selection Catalogue: C05.0056



控制器/驱动器/马达/  
齿轮马达/齿轮箱

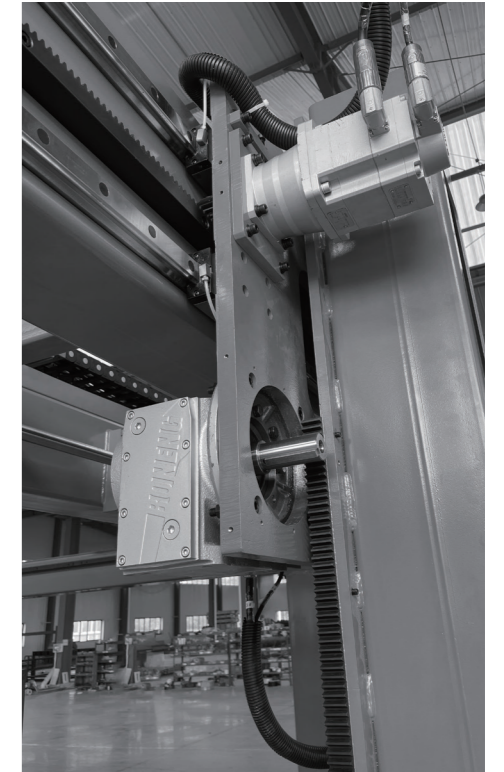
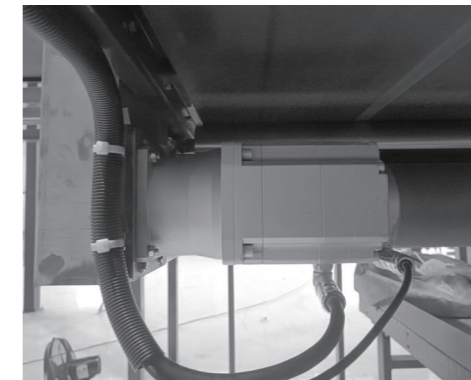
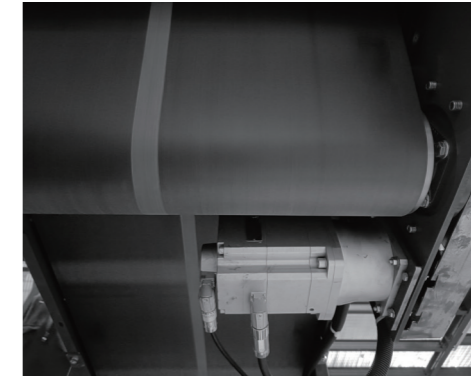
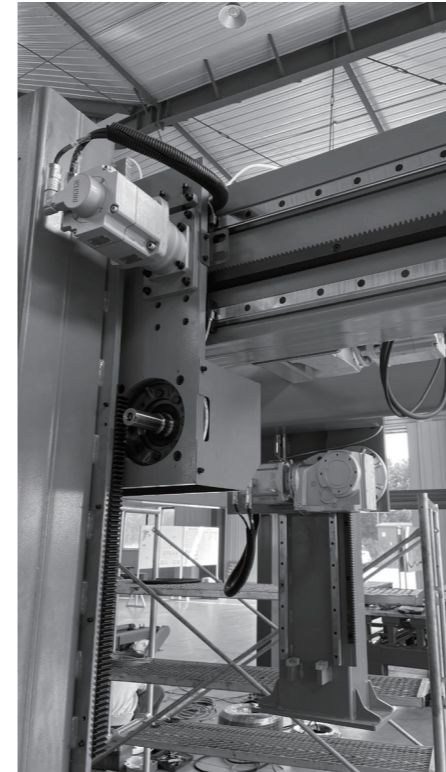
Controller/ Drive/ Motor/  
Gearmotor/ Gearbox

## PN-MN行星通用齿 轮伺服马达&AN伺 服驱动器

- ◆ 高精度、低噪音、低回程间隙；
- ◆ 直连伺服马达，结构紧凑，功率密度高；
- ◆ 高度的模块化设计，可实现更加快捷的生产和物流周期；
- ◆ 高可靠性和长设计寿命可有效降低您的使用成本及维护成本；
- ◆ 伺服马达不仅拥有坚固紧凑的结构及高防护等级，而且具有高效率、高过载承载能力等特点；其优良的径向跳动质量和细微的转矩波动，可实现高质量的工件表面加工；
- ◆ 支持高精度23位绝对值编码器，控制精度高；
- ◆ 支持STO安全转矩关断功能，设备更安全；
- ◆ 380VAC电压等级设计，省去变压器等额外配置；
- ◆ 支持博能DriveSoft上位机软件，调试更方便。

## PN-MN Planetary Current Servo Gearmotor & AN Servo Drives

- ◆ High precision, low noise, low return clearance.
- ◆ Direct servo motor, compact structure, high power density.
- ◆ The highly modular design enables faster production and logistics cycles.
- ◆ High reliability and long design life can effectively reduce your use and maintenance costs.
- ◆ Servo motor not only has a strong compact structure and high protection grade, but also has characteristics such as high efficiency, high overload carrying capacity ;Its excellent radial runout quality and subtle torque fluctuation can realize high quality workpiece surface machining.
- ◆ Support high precision 23-bit absolute encoder, high control accuracy.
- ◆ Support STO safe torque turn-off function, more secure equipment. 380VAC voltage class design eliminates additional configuration such as transformers.
- ◆ Support Boneng DriveSoft upper computer software, debugging more convenient.



产品广泛应用于机床、机器人、印刷机械、包装机械、纺织机械、自动化设备等各个领域。

博能传动公司总部和各大区域的技术专家以及各区域办事处的应用工程师、售后服务技师竭诚为您提供全面的技术咨询和完善的服务。

Products are widely used in machine tool, robots, printing machines, packaging machines, textile machinery, automation equipment and other fields.

Boneng Transmission company headquarters and major regional technical experts and regional offices of the application engineers, after-sales service technicians dedicated to provide you with comprehensive technical advice and perfect service.

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## 造型注意事项

- ◆ 结构示意图、外形图及其它附图只属范例，无严格比例要求。(未注尺寸单位：mm)
- ◆ 所注重量仅为平均值，并不具有约束力。

## ⚠使用注意事项

- ◆ 为防止意外事故发生，所有旋转部件均按照使用者所在国家和地区的安全规范由购置方加罩保护。
- ◆ 试运行之前必须认真阅读使用说明书。
- ◆ 行星齿轮马达应由熟悉相关安全要求的专业人员安装；安装时必须有安全装置以防止事故发生，安装位置必须符合规定。

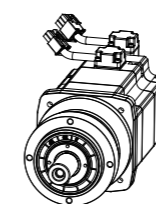
## Selection precautions

- ◆ The structural schematic diagram, exterior diagram, and other accompanying drawings are only examples and do not have strict scale requirements. (Size units not specified:mm).
- ◆ The weight indicated is only the average value and does not have any binding force.

## ⚠Precautions for use

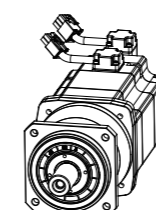
- ◆ To prevent accidents, all rotating parts are covered and protected by the purchaser in accordance with the safety regulations of the user's country and regio.
- ◆ Before trial operation, it is necessary to carefully read the user manual.
- ◆ Planetary gear motors should be installed by professionals familiar with relevant safety requirements; Safety devices must be installed to prevent accidents, ensuring safetyThe installation position must comply with regulations.

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**PN...L-MN行星通用齿轮伺服马达**  
1 型号表示方法

**PN...L-MN Planetary Current Servo Gearmotor**  
1 Model representation method

**产品分类代号**

PN=通用型

**行星齿轮级数**

1=1级  
2=2级

**机座号**

01/02/03/04/05

**产品系列代号**

L=圆法兰

**输出轴形式代号**

A=光滑实心轴  
B=平键实心轴  
C=外花键实心轴

**公称速比代号**

B5/V1/V3/S1

**回程间隙**

S=标准间隙

**输出轴轴承配置**

1=深沟球轴承+深沟球轴承  
(输出轴承配置1典型应用场合: 联轴器、径向力较小的直齿轮等)

**润滑油代号**

1=合成润滑油

**Product classification code**

PN=Current type

**Planetary gear series**

1=1stage  
2=2stage

**Frame size**

01/02/03/04/05

**Product series code**

L=Round flange

**Output shaft form code**

A=Smooth solid shaft  
B=Flat key solid shaft  
C=External spline solid shaft

**Nominal speed ratio code**

B5/V1/V3/S1

**Return clearance**

S=Standard clearance

**Output shaft bearing configuration**

1=Deep groove ball bearing+Deep groove ball bearing  
(Output bearing configuration 1 Typical application scenarios: Couplings, spur gears with small radial force, etc.)

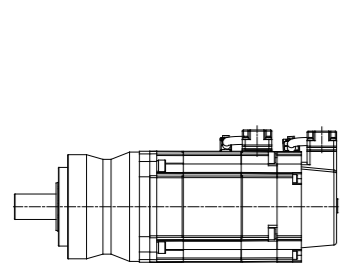
**Lubricating oil code**

1=Synthetic lubricating oil

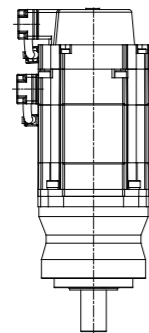
PN 2 03 L A - C20 - B5 S 1 1 -

**2 PN...L-MN安装方位**

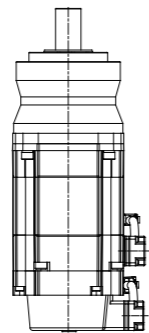
**2 PN...L-MN Installation orientation**



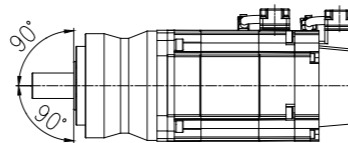
B5-水平 B5 level



V1-垂直 (输出轴向下) V1-Vertical (output axis down)



V3-垂直 (输出轴向上) V3-Vertical (output axis up)



S1-可以从水平到翻转±90° S1-can flip from horizontal to ±90°

MN 048S 1 E30 F P 1 - N 3 A 0 5 - 1 2 1

**连接器位置**

**Connector location**

**连接器类型**

2=规格2

**Connector type**

2=specifications2

**连接器方位**

**Connector orientation**

**防护等级**

5=IP65

**Protection class**

5=IP65

**热保护**

0=无绕组保护

**Thermal protection**

0=Without thermal protection

**制动器**

N=无制动器  
A=永磁制动器

**Brake**

N=Without brake  
A=With brake

**编码器**

3=编码器

**Encoder**

3=Encoder

**冷却方式**

N=自然冷却

**Cooling method**

N=Natural cooling

**轴孔径代号**

1、2、3...

**Axis aperture code**

1、2、3...

**轴伸形式P**

**Axis extension form P**

**法兰形式F/L**

**Flange form F/L**

**额定转速代号**

E20=2000r/min  
E30=3000r/min

**Rated speed code**

E20=2000r/min  
E30=3000r/min

**结构形式**

1=紧凑型

**Structure type**

1=Compact

**机座号**

**Frame size**

**三相交流同步伺服马达**

**Three Phase AC Synchronous Servomotor**

3 PN...L-MN传动能力表  
和外形尺寸图

3 PN...L-MN Transmission  
capacity table and external  
dimension diagram

伺服马达: 0.28kW 0.9N.m  
0.9A 3000r/min

Servo motor: 0.28kW 0.9N.m  
0.9A 3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	2.6	B30	3	3/1	7	15	19	35	0.18	5		2.67
750	3.5	B40	4	4/1	11	22	28	40	0.16	5		3.15
600	4.4	B50	5	5/1	11	22	28	40	0.16	5		2.52
429	6.1	B70	7	7/1	11	22	28	40	0.155	5		1.80
429	6.1	B70	7	7/1	28	52	70	110	0.18	4		4.58
300	8.7	C10	10	10/1	28	40	55	105	0.17	4		3.21
250	10.3	C12	12	12/1	32	40	50	100	0.17	4		3.12
188	13.7	C16	16	16/1	42	52	60	110	0.17	4		3.07
150	17.1	C20	20	20/1	42	52	60	110	0.16	4		2.46
120	21.4	C25	25	25/1	42	52	70	110	0.16	4		1.96
107	23.9	C28	28	28/1	42	52	60	110	0.16	4		1.75
100	25.7	C30	30	30/1	32	40	50	100	0.15	4		1.25
86	29.9	C35	35	35/1	42	52	70	110	0.16	4		1.40
75	34.2	C40	40	40/1	42	52	60	110	0.15	4		1.23
107	23.9	C28	28	28/1	105	132	132	255	0.19	4		4.39
100	25.7	C30	30	30/1	88	110	110	200	0.17	4		3.43
86	29.9	C35	35	35/1	110	138	165	255	0.19	4		3.68
75	34.2	C40	40	40/1	105	132	132	255	0.16	4		3.07
60	42.8	C50	50	50/1	110	138	165	255	0.16	4		2.57
43	59.9	C70	70	70/1	95	118	118	255	0.16	4		1.59

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID			Servo motor cable configuration order number	
Order number of planetary precision gear servo motor	Without brake	With brake	Servo driver order number	Servo motor power line	Servo motor signal line
PN101L□-B30-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B40-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B50-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B70-□□□□-MN028S1E30FP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B70-□□□□-MN028S1E30LP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-C10-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C12-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C16-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C20-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C25-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C28-□□□□-MN028S1E30FP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C30-□□□□-MN028S1E30FP3	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C35-□□□□-MN028S1E30FP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C40-□□□□-MN028S1E30FP3	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C28-□□□□-MN028S1E30LP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C30-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C35-□□□□-MN028S1E30LP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C40-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C50-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C70-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 0.42kW 1.3N.m  
1A 3000r/min

Servo motor: 0.42kW 1.3N.m  
1A 3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	3.8	B30	3	3/1	7	15	19	35	0.28	5		1.85
750	5.0	B40	4	4/1	11	22	28	40	0.26	5		2.18
600	6.3	B50	5	5/1	11	22	28	40	0.26	5		1.74
429	8.8	B70	7	7/1	28	52	70	110	0.28	4		3.17
300	12.6	C10	10	10/1	28	40	55	105	0.27	4		2.22
250	14.8	C12	12	12/1	32	40	50	100	0.27	4		2.16
188	19.8	C16	16	16/1	42	52	60	110	0.27	4		2.13
150	24.7	C20	20	20/1	42	52	60	110	0.26	4		1.70
120	30.9	C25	25	25/1	42	52	70	110	0.26	4		1.36
107	34.6	C28	28	28/1	105	132	132	255	0.29	4		3.04
100	37.1	C30	30	30/1	88	110	110	200	0.27	4		2.38
86	43.2	C35	35	35/1	110	138	165	255	0.29	4		2.54
75	49.4	C40	40	40/1	105	132	132	255	0.26	4		2.13
60	61.8	C50	50	50/1	110	138	165	255	0.26	4		1.78
43	86.5	C70	70	70/1	95	118	118	255	0.26	4		1.10

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN101L□-B30-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B40-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B50-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B70-□□□□-MN028M1E30LP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-C10-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C12-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C16-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C20-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C25-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C28-□□□□-MN028M1E30LP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C30-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C35-□□□□-MN028M1E30LP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C40-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C50-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C70-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 0.47kW 1.5N.m  
1.15A 3000r/min

Servo motor: 0.47kW 1.5N.m  
1.15A 3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	4.4	B30	3	3/1	7	15	19	35	0.77	5		1.60
750	5.8	B40	4	4/1	11	22	28	40	0.75	5		1.89
600	7.3	B50	5	5/1	11	22	28	40	0.75	5		1.51
1000	4.4	B30	3	3/1	22	40	55	100	0.92	4		5.04
750	5.8	B40	4	4/1	28	52	70	110	0.84	4		4.81
600	7.3	B50	5	5/1	28	52	70	110	0.8	4		3.85
429	10.2	B70	7	7/1	28	52	70	110	0.77	4		2.75
300	14.6	C10	10	10/1	28	40	55	105	0.76	4		1.92
250	17.1	C12	12	12/1	32	40	50	100	0.76	4		1.87
188	22.8	C16	16	16/1	42	52	60	110	0.76	4		1.84
150	28.5	C20	20	20/1	42	52	60	110	0.75	4		1.47
120	35.6	C25	25	25/1	42	52	70	110	0.75	4		1.18
300	14.6	C10	10	10/1	85	120	160	200	0.81	3		5.84
250	17.1	C12	12	12/1	88	110	110	200	0.87	4		5.15
188	22.8	C16	16	16/1	105	132	132	255	0.84	4		4.61
150	28.5	C20	20	20/1	105	132	132	255	0.82	4		3.68
120	35.6	C25	25	25/1	110	138	165	255	0.81	4		3.09
107	39.9	C28	28	28/1	105	132	132	255	0.78	4		2.63
100	42.8	C30	30	30/1	88	110	110	200	0.76	4		2.06
86	49.9	C35	35	35/1	110	138	165	255	0.78	4		2.21
75	57.0	C40	40	40/1	105	132	132	255	0.75	4		1.84
60	71.3	C50	50	50/1	110	138	165	255	0.75	4		1.54
100	42.8	C30	30	30/1	215	270	270	515	0.83	3		5.03
75	57.0	C40	40	40/1	285	360	360	630	0.81	3		5.00
60	71.3	C50	50	50/1	285	360	360	630	0.81	3		4.00
43	99.8	C70	70	70/1	285	360	360	630	0.81	3		2.86
30	142.5	D10	100	100/1	215	270	270	630	0.80	3		1.51

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN101L□-B30-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B40-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101L□-B50-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B30-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B40-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B50-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B70-□□□□-MNO36S1E30FP3	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-C10-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C12-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C16-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C20-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202L□-C25-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-C10-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C12-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C16-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C20-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C25-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C28-□□□□-MNO36S1E30FP3	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C30-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C35-□□□□-MNO36S1E30FP3	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C40-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C50-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C30-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C40-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C50-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C70-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-D10-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



伺服马达: 0.75kW 2.4N.m  
1.6A 3000r/min

Servo motor: 0.75kW 2.4N.m  
1.6A 3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	7.0	B30	3	3/1	22	40	55	100	1.59	4		3.15
750	9.3	B40	4	4/1	28	52	70	110	1.51	4		3.01
600	11.6	B50	5	5/1	28	52	70	110	1.47	4		2.41
429	16.3	B70	7	7/1	28	52	70	110	1.44	4		1.72
300	23.3	C10	10	10/1	28	40	55	105	1.43	4		1.20
429	16.3	B70	7	7/1	85	140	185	255	1.54	3		5.22
300	23.3	C10	10	10/1	85	120	160	200	1.48	3		3.65
250	27.4	C12	12	12/1	88	110	110	200	1.54	4		3.22
188	36.5	C16	16	16/1	105	132	132	255	1.51	4		2.88
150	45.6	C20	20	20/1	105	132	132	255	1.49	4		2.30
120	57.0	C25	25	25/1	110	138	165	255	1.48	4		1.93
107	63.8	C28	28	28/1	105	132	132	255	1.45	4		1.64
100	68.4	C30	30	30/1	88	110	110	200	1.43	4		1.29
86	79.8	C35	35	35/1	110	138	165	255	1.45	4		1.38
75	91.2	C40	40	40/1	105	132	132	255	1.42	4		1.15
107	63.8	C28	28	28/1	285	360	360	630	1.56	3		4.46
100	68.4	C30	30	30/1	215	270	270	515	1.50	3		3.14
86	79.8	C35	35	35/1	285	360	360	630	1.55	3		3.57
75	91.2	C40	40	40/1	285	360	360	630	1.48	3		3.13
60	114.0	C50	50	50/1	285	360	360	630	1.48	3		2.50
43	159.6	C70	70	70/1	285	360	360	630	1.48	3		1.79

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN102L□-B30-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B40-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B50-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B70-□□□□-MN036M1E30FP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-C10-□□□□-MN036M1E30FP3	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B70-□□□□-MN036M1E30LP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-C10-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C12-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C16-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C20-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C25-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C28-□□□□-MN036M1E30FP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C30-□□□□-MN036M1E30FP3	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C35-□□□□-MN036M1E30FP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C40-□□□□-MN036M1E30FP3	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C28-□□□□-MN036M1E30LP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C30-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C35-□□□□-MN036M1E30LP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C40-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C50-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C70-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 1kW 3.2N.m 2.2A  
3000r/min

Servo motor: 1kW 3.2N.m 2.2A  
3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	9.3	B30	3	3/1	22	40	55	100	2.71	4		2.36
750	12.4	B40	4	4/1	28	52	70	110	2.63	4		2.26
600	15.5	B50	5	5/1	28	52	70	110	2.59	4		1.80
1000	9.3	B30	3	3/1	66	108	142	200	3.28	3		7.09
750	12.4	B40	4	4/1	85	140	185	255	2.92	3		6.85
600	15.5	B50	5	5/1	85	140	185	255	2.79	3		5.48
429	21.7	B70	7	7/1	85	140	185	255	2.66	3		3.91
300	31.0	C10	10	10/1	85	120	160	200	2.60	3		2.74
250	36.5	C12	12	12/1	88	110	110	200	2.66	4		2.41
188	48.6	C16	16	16/1	105	132	132	255	2.63	4		2.16
150	60.8	C20	20	20/1	105	132	132	255	2.61	4		1.73
120	76.0	C25	25	25/1	110	138	165	255	2.60	4		1.45
300	31.0	C10	10	10/1	185	290	390	630	2.78	2		5.96
250	36.5	C12	12	12/1	215	270	270	515	3.07	3		5.89
188	48.6	C16	16	16/1	250	360	360	630	2.98	3		5.14
150	60.8	C20	20	20/1	265	360	360	630	2.82	3		4.36
120	76.0	C25	25	25/1	265	360	360	630	2.80	3		3.49
107	85.1	C28	28	28/1	285	360	360	630	2.68	3		3.35
100	91.2	C30	30	30/1	215	270	270	515	2.62	3		2.36
86	106.4	C35	35	35/1	285	360	360	630	2.67	3		2.68
75	121.6	C40	40	40/1	285	360	360	630	2.60	3		2.34
60	152.0	C50	50	50/1	285	360	360	630	2.60	3		1.88
43	212.8	C70	70	70/1	285	360	360	630	2.60	3		1.34
107	85.1	C28	28	28/1	570	760	760	1350	3.07	2		6.70
100	91.2	C30	30	30/1	300	530	530	1250	2.85	2		3.29
86	106.4	C35	35	35/1	560	700	700	1350	3.04	2		5.26
75	121.6	C40	40	40/1	610	760	760	1350	2.80	2		5.02
60	152.0	C50	50	50/1	560	700	700	1350	2.78	2		3.68
43	212.8	C70	70	70/1	610	725	725	1350	2.77	2		2.87
30	304.0	D10	100	100/1	490	590	590	1250	2.76	2		1.61

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID			Servo motor cable configuration order number	
Order number of planetary precision gear servo motor	Without brake	With brake	Servo driver order number	Servo motor power line	Servo motor signal line
PN102L□-B30-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B40-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B50-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B30-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B40-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B50-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B70-□□□□-MNO48S1E30FP3	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-C10-□□□□-MNO48S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C12-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C16-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C20-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C25-□□□□-MNO48S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-C10-□□□□-MNO48S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C12-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C16-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C20-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C25-□□□□-MNO48S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C28-□□□□-MNO48S1E30FP3	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C30-□□□□-MNO48S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C35-□□□□-MNO48S1E30FP3	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C40-□□□□-MNO48S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C50-□□□□-MNO48S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C70-□□□□-MNO48S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C28-□□□□-MNO48S1E30LP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C30-□□□□-MNO48S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C35-□□□□-MNO48S1E30LP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C40-□□□□-MNO48S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C50-□□□□-MNO48S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C70-□□□□-MNO48S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-D10-□□□□-MNO48S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 1.5kW 4.8N.m 3A  
3000r/min

Servo motor: 1.5kW 4.8N.m 3A  
3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	14.0	B30	3	3/1	22	40	55	100	5.03	4		1.58
750	18.6	B40	4	4/1	28	52	70	110	4.95	4		1.50
600	23.3	B50	5	5/1	28	52	70	110	4.91	4		1.20
1000	14.0	B30	3	3/1	66	108	142	200	5.60	3		4.73
750	18.6	B40	4	4/1	85	140	185	255	5.24	3		4.56
600	23.3	B50	5	5/1	85	140	185	255	5.11	3		3.65
429	32.6	B70	7	7/1	85	140	185	255	4.98	3		2.61
300	46.6	C10	10	10/1	85	120	160	200	4.92	3		1.83
250	54.7	C12	12	12/1	88	110	110	200	4.98	4		1.61
188	73.0	C16	16	16/1	105	132	132	255	4.95	4		1.44
150	91.2	C20	20	20/1	105	132	132	255	4.93	4		1.15
429	31.9	B70	7	7/1	185	390	445	630	5.35	2		5.80
300	46.6	C10	10	10/1	185	290	390	630	5.10	2		3.97
250	54.7	C12	12	12/1	215	270	270	515	5.39	3		3.93
188	73.0	C16	16	16/1	250	360	360	630	5.30	3		3.43
150	91.2	C20	20	20/1	265	360	360	630	5.14	3		2.91
120	114.0	C25	25	25/1	265	360	360	630	5.12	3		2.32
107	127.7	C28	28	28/1	285	360	360	630	5.00	3		2.23
100	136.8	C30	30	30/1	215	270	270	515	4.94	3		1.57
86	159.6	C35	35	35/1	285	360	360	630	4.99	3		1.79
75	182.4	C40	40	40/1	285	360	360	630	4.92	3		1.56
60	228.0	C50	50	50/1	285	360	360	630	4.92	3		1.25
107	127.7	C28	28	28/1	570	760	760	1350	5.39	2		4.46
100	136.8	C30	30	30/1	300	530	530	1250	5.17	2		2.19
86	159.6	C35	35	35/1	560	700	700	1350	5.36	2		3.51
75	182.4	C40	40	40/1	610	760	760	1350	5.12	2		3.34
60	228.0	C50	50	50/1	560	700	700	1350	5.10	2		2.46
43	319.2	C70	70	70/1	610	725	725	1350	5.09	2		1.91
30	456.0	D10	100	100/1	490	590	590	1250	5.08	2		1.07

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN102L□-B30-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B40-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102L□-B50-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B30-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B40-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B50-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B70-□□□□-MNO48M1E30FP3	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-C10-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C12-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C16-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203L□-C20-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B70-□□□□-MNO48M1E30LP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-C10-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C12-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C16-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C20-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C25-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C28-□□□□-MNO48M1E30FP3	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C30-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C35-□□□□-MNO48M1E30FP3	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C40-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C50-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C28-□□□□-MNO48M1E30LP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C30-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C35-□□□□-MNO48M1E30LP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C40-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C50-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C70-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-D10-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 1.2kW 5.7N.m  
2.8A 2000r/min

Servo motor: 1.2kW 5.7N.m  
2.8A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	16.6	B30	3	3/1	66	108	142	200	8.11	3		3.98
500	22.1	B40	4	4/1	85	140	185	255	7.75	3		3.84
400	27.6	B50	5	5/1	85	140	185	255	7.62	3		3.07
286	38.7	B70	7	7/1	85	140	185	255	7.49	3		2.20
200	55.3	C10	10	10/1	85	120	160	200	7.43	3		1.54
667	16.6	B30	3	3/1	138	290	390	515	10.19	2		8.32
500	22.1	B40	4	4/1	185	390	515	630	8.83	2		8.36
400	27.6	B50	5	5/1	185	390	515	630	8.32	2		6.69
286	38.7	B70	7	7/1	185	390	445	630	7.86	2		4.78
200	55.3	C10	10	10/1	185	290	390	630	7.61	2		3.35
167	65.0	C12	12	12/1	215	270	270	515	7.90	3		3.31
125	86.6	C16	16	16/1	250	360	360	630	7.81	3		2.89
100	108.3	C20	20	20/1	265	360	360	630	7.65	3		2.45
80	135.4	C25	25	25/1	265	360	360	630	7.63	3		1.96
71	151.6	C28	28	28/1	285	360	360	630	7.51	3		1.88
67	162.5	C30	30	30/1	215	270	270	515	7.45	3		1.32
57	189.5	C35	35	35/1	285	360	360	630	7.50	3		1.50
50	216.6	C40	40	40/1	285	360	360	630	7.43	3		1.32
200	55.3	C10	10	10/1	345	665	750	1250	8.21	2		6.24
167	65.0	C12	12	12/1	300	530	530	1250	9.06	2		4.62
125	86.6	C16	16	16/1	480	760	760	1350	8.77	2		5.54
100	108.3	C20	20	20/1	515	760	760	1350	8.40	2		4.76
80	135.4	C25	25	25/1	515	700	700	1350	8.33	2		3.80
71	151.6	C28	28	28/1	570	760	760	1350	7.90	2		3.76
67	162.5	C30	30	30/1	300	530	530	1250	7.68	2		1.85
57	189.5	C35	35	35/1	560	700	700	1350	7.87	2		2.95
50	216.6	C40	40	40/1	610	760	760	1350	7.63	2		2.82
40	270.8	C50	50	50/1	560	700	700	1350	7.61	2		2.07
29	379.1	C70	70	70/1	610	725	725	1350	7.60	2		1.61

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN103L□-B30-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B40-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B50-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B70-□□□□-MN063S1E20FP2	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-C10-□□□□-MN063S1E20FP3	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B30-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B40-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B50-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B70-□□□□-MN063S1E20FP5	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-C10-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C12-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C16-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C20-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C25-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C28-□□□□-MN063S1E20FP2	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C30-□□□□-MN063S1E20FP3	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C35-□□□□-MN063S1E20FP2	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C40-□□□□-MN063S1E20FP3	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN105L□-C10-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C12-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C16-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C20-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C25-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C28-□□□□-MN063S1E20FP5	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C30-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C35-□□□□-MN063S1E20FP5	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C40-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C50-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C70-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



伺服马达: 2.05kW 9.8N.m  
4.6A 2000r/min

Servo motor: 2.05kW 9.8N.m  
4.6A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	28.5	B30	3	3/1	66	108	142	200	14.84	3		2.31
500	38.0	B40	4	4/1	85	140	185	255	14.48	3		2.24
400	47.5	B50	5	5/1	85	140	185	255	14.35	3		1.79
667	28.5	B30	3	3/1	138	290	390	515	16.92	2		4.84
500	38.0	B40	4	4/1	185	390	515	630	15.56	2		4.87
400	47.5	B50	5	5/1	185	390	515	630	15.05	2		3.89
286	66.5	B70	7	7/1	185	390	445	630	14.59	2		2.78
200	95.1	C10	10	10/1	185	290	390	630	14.34	2		1.95
167	111.7	C12	12	12/1	215	270	270	515	14.63	3		1.92
125	149.0	C16	16	16/1	250	360	360	630	14.54	3		1.68
100	186.2	C20	20	20/1	265	360	360	630	14.38	3		1.42
80	232.8	C25	25	25/1	265	360	360	630	14.36	3		1.14
286	66.5	B70	7	7/1	345	830	865	1350	15.77	2		5.18
200	95.1	C10	10	10/1	345	665	750	1250	14.94	2		3.63
167	111.7	C12	12	12/1	300	530	530	1250	15.79	2		2.69
125	149.0	C16	16	16/1	480	760	760	1350	15.50	2		3.22
100	186.2	C20	20	20/1	515	760	760	1350	15.13	2		2.77
80	232.8	C25	25	25/1	515	700	700	1350	15.06	2		2.21
71	260.7	C28	28	28/1	570	760	760	1350	14.63	2		2.19
67	279.3	C30	30	30/1	300	530	530	1250	14.41	2		1.07
57	325.9	C35	35	35/1	560	700	700	1350	14.60	2		1.72
50	372.4	C40	40	40/1	610	760	760	1350	14.36	2		1.64
40	465.5	C50	50	50/1	560	700	700	1350	14.34	2		1.20

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN103L□-B30-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B40-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103L□-B50-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B30-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B40-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B50-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-B70-□□□□-MN063M1E20FP3	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104L□-C10-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C12-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C16-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C20-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204L□-C25-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN105L□-B70-□□□□-MN063M1E20LP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN105L□-C10-□□□□-MN063M1E20LP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C12-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C16-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C20-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C25-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C28-□□□□-MN063M1E20FP3	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C30-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C35-□□□□-MN063M1E20FP3	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C40-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205L□-C50-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 2.39kW 11.4N.m  
5A 2000r/min

Servo motor: 2.39kW 11.4N.m  
5A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	33.2	B30	3	3/1	138	290	390	515	28.32	2		4.16
500	44.2	B40	4	4/1	185	390	515	630	26.96	2		4.18
400	55.3	B50	5	5/1	185	390	515	630	26.45	2		3.35
286	77.4	B70	7	7/1	185	390	445	630	25.99	2		2.39
200	110.6	C10	10	10/1	185	290	390	630	25.74	2		1.67
667	33.2	B30	3	3/1	220	500	650	1250	35.07	2		6.63
500	44.2	B40	4	4/1	355	830	1100	1350	30.46	2		8.03
400	55.3	B50	5	5/1	355	830	1100	1350	28.72	2		6.42
286	77.4	B70	7	7/1	345	830	865	1350	27.17	2		4.46
200	110.6	C10	10	10/1	345	665	750	1250	26.34	2		3.12
167	130.0	C12	12	12/1	300	530	530	1250	27.19	2		2.31
125	173.3	C16	16	16/1	480	760	760	1350	26.90	2		2.77
100	216.6	C20	20	20/1	515	760	760	1350	26.53	2		2.38
80	270.8	C25	25	25/1	515	700	700	1350	26.46	2		1.90
71	303.2	C28	28	28/1	570	760	760	1350	26.03	2		1.88
57	379.1	C35	35	35/1	560	700	700	1350	26.00	2		1.48
50	433.2	C40	40	40/1	610	760	760	1350	25.76	2		1.41

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN104L□-B30-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-B40-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-B50-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-B70-□□□□-MN080S1E20FP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-C10-□□□□-MN080S1E20FP3	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B30-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B40-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B50-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B70-□□□□-MN080S1E20FP5	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-C10-□□□□-MN080S1E20FP6	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C12-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C16-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C20-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C25-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C28-□□□□-MN080S1E20FP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C35-□□□□-MN080S1E20FP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C40-□□□□-MN080S1E20FP3	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 3.98kW 19N.m  
8.1A 2000r/min

Servo motor: 3.98kW 19N.m  
8.1A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	55.3	B30	3	3/1	138	290	390	515	51.72	2		2.50
500	73.7	B40	4	4/1	185	390	515	630	50.36	2		2.51
400	92.2	B50	5	5/1	185	390	515	630	49.85	2		2.01
286	129.0	B70	7	7/1	185	390	445	630	49.39	2		1.43
667	55.3	B30	3	3/1	220	500	650	1250	58.47	2		3.98
500	73.7	B40	4	4/1	355	830	1100	1350	53.86	2		4.82
400	92.2	B50	5	5/1	355	830	1100	1350	52.12	2		3.85
286	129.0	B70	7	7/1	345	830	865	1350	50.57	2		2.67
200	184.3	C10	10	10/1	345	665	750	1250	49.74	2		1.87
167	216.6	C12	12	12/1	300	530	530	1250	50.59	2		1.39
125	288.8	C16	16	16/1	480	760	760	1350	50.30	2		1.66
100	361.0	C20	20	20/1	515	760	760	1350	49.93	2		1.43
80	451.3	C25	25	25/1	515	700	700	1350	49.86	2		1.14
71	505.4	C28	28	28/1	570	760	760	1350	49.43	2		1.13

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
Order number of planetary precision gear servo motor	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
	Without brake	With brake		Servo motor power line	Servo motor signal line
PN104L□-B30-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-B40-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-B50-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104L□-B70-□□□□-MN080M1E20FP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B30-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B40-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B50-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-B70-□□□□-MN080M1E20FP4	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105L□-C10-□□□□-MN080M1E20FP5	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C12-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C16-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C20-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C25-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205L□-C28-□□□□-MN080M1E20FP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



**4 输出轴允许的轴向力和径向力**

**4 Permissible axial and radial forces on the output shaft**

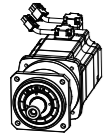
输出轴 载荷	Output shaft load	代号 Code	单位 Unit	PN101L	PN102L	PN103L	PN104L	PN105L
					PN202L	PN203L	PN204L	PN205L
20000h 的径向力	Radial force for 20000h	Fr20000h	N	600	1300	2050	2500	3500
20000h 的轴向力	Axial force for 20000h	Fa20000h		250	500	750	1050	1750
30000h 的径向力	Radial force for 30000h	Fr30000h		500	1150	1750	2200	3050
30000h 的轴向力	Axial force for 20000h	Fa30000h		200	400	650	900	1550
20000h 的侧倾力矩	Tilting moment for 20000h	Mk20000h	Nm	30	93	173	266	464
30000h 的侧倾力矩	Tilting moment for 30000h	Mk30000h		26	81	151	232	405

**5 重量表**

**5 Weight table**

PN(L)行星齿轮箱重量表 (Kg)		PN(L)Current Planetary Weight table (kg)				
机座号	Frame size	PN101L	PN102L	PN103L	PN104L	PN105L
重量	Weight	1.1	1.8	3.5	7.5	14.6
机座号	Frame size	PN202L		PN203L	PN204L	PN205L
重量	Weight	2.1		4.2	8.9	17.9

直连MN伺服马达重量表 (Kg)		Directly connected MN servo motor weight table (Kg)									
机座号	Frame size	MN028S1	MN028M1	MN036S1	MN036M1	MN048S1	MN048M1	MN063S1	MN063M1	MN080S1	MN080M1
额定功率 (KW)	Rated power (KW)	0.28	0.42	0.47	0.75	1	1.5	1.2	2.05	2.39	3.98
不带制动	Without brake	1.8	2.4	2.7	3.9	4.5	7	7.1	10.9	13.6	21.9
带制动	With brake	2	2.7	3.1	4.3	5.2	7.7	8	11.8	14.3	23.9



**PN...B-MN行星通用齿轮伺服马达 6 型号表示方法**

**PN...B-MN Planetary Current Servo Gearmotor 6 Model representation method**

**产品分类代号**

PN=通用型

**行星齿轮级数**

1=1级  
2=2级

**机座号**

01/02/03/04/05/06/07

**产品系列代号**

B=方法兰

**输出轴形式代号**

A=光滑实心轴  
B=平键实心轴  
C=外花键实心轴

**公称速比代号**

安装方位  
B5/V1/V3/S1

**回程间隙**

S=标准间隙

**输出轴轴承配置**

1=深沟球轴承+深沟球轴承 (输出轴承配置1典型应用场合: 联轴器、径向力较小的直齿轮等)  
2=角接触球轴承+圆锥滚子轴承 (输出轴承配置2典型应用场合: 有径向力, 有轴向力的斜齿轮等)

**润滑油代号**

1=合成润滑油

**Product classification code**

PN=Current type

**Planetary gear series**

1=1stage  
2=2stage

**Frame size**

01/02/03/04/05/06/07

**Product series code**

B=Square flange

**Output shaft form code**

A=Smooth solid shaft  
B=Flat key solid shaft  
C=External spline solid shaft

**Nominal speed ratio code**

**Installation orientation**  
B5/V1/V3/S1

**Return clearance**

S=Standard clearance

**Output shaft bearing configuration**

1=Deep groove ball bearing+Deep groove ball bearing (Output bearing configuration 1 Typical application scenarios: Couplings, spur gears with small radial force, etc.)  
2= Angular contact ball bearing + tapered roller bearing (Output bearing configuration 2 Typical application scenarios: helical gear with radial force, axial force, etc..)

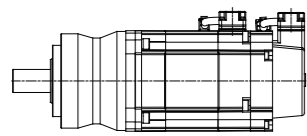
**Lubricating oil code**

1=Synthetic lubricating oil

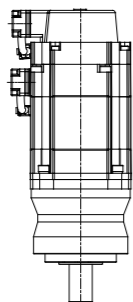
PN 2 03 B A - C20 - B5 S 1 1 -

**7 PN...B-MN安装方位**

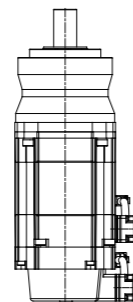
**7 PN...B-MN Installation orientation**



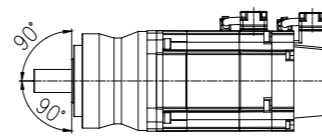
B5-水平 B5 level



V1-垂直 (输出轴向下) V1-Vertical (output axis down)



V3-垂直 (输出轴向上) V3-Vertical (output axis up)



S1-可以从水平到翻转±90° S1-can flip from horizontal to ±90°

MN 048S 1 E30 F P 1 - N 3 A 0 5 - 1 2 1

**连接器位置**

**Connector location**

**连接器类型**

2=规格2

**Connector type**

2=specifications2

**连接器方位**

**Connector orientation**

**防护等级**

5=IP65

**Protection class**

5=IP65

**热保护**

0=无绕组保护

**Thermal protection**

0=Without thermal protection

**制动器**

N=无制动器  
A=永磁制动器

**Brake**

N=Without brake  
A=With brake

**编码器**

3=编码器

**Encoder**

3=Encoder

**冷却方式**

N=自然冷却

**Cooling method**

N=Natural cooling

**轴孔径代号**

1、2、3...

**Axis aperture code**

1、2、3...

**轴伸形式P**

**Axis extension form P**

**法兰形式F/L**

**Flange form F/L**

**额定转速代号**

E20=2000r/min  
E30=3000r/min

**Rated speed code**

E20=2000r/min  
E30=3000r/min

**结构形式**

1=紧凑型

**Structure type**

1=Compact

**机座号**

**Frame size**

**三相交流同步伺服马达**

**Three Phase AC Synchronous Servomotor**

8 PN...B-MN传动能力  
表和外形尺寸图

伺服马达: 0.28kW 0.9N.m  
0.9A 3000r/min

8 PN..B-MN Transmission  
capacity table and external  
dimension diagram

Servo motor: 0.28kW 0.9N.m  
0.9A 3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	2.6	B30	3	3/1	7	15	19	35	0.18	5		2.67
750	3.5	B40	4	4/1	11	22	28	40	0.16	5		3.15
600	4.4	B50	5	5/1	11	22	28	40	0.16	5		2.52
429	6.1	B70	7	7/1	11	22	28	40	0.155	5		1.80
429	6.1	B70	7	7/1	28	52	70	110	0.18	4		4.58
300	8.7	C10	10	10/1	28	40	55	105	0.17	4		3.21
250	10.3	C12	12	12/1	32	40	50	100	0.17	4		3.12
188	13.7	C16	16	16/1	42	52	60	110	0.17	4		3.07
150	17.1	C20	20	20/1	42	52	60	110	0.16	4		2.46
120	21.4	C25	25	25/1	42	52	70	110	0.16	4		1.96
107	23.9	C28	28	28/1	42	52	60	110	0.16	4		1.75
100	25.7	C30	30	30/1	32	40	50	100	0.15	4		1.25
86	29.9	C35	35	35/1	42	52	70	110	0.16	4		1.40
75	34.2	C40	40	40/1	42	52	60	110	0.15	4		1.23
107	23.9	C28	28	28/1	105	132	132	255	0.19	4		4.39
100	25.7	C30	30	30/1	88	110	110	200	0.17	4		3.43
86	29.9	C35	35	35/1	110	138	165	255	0.19	4		3.68
75	34.2	C40	40	40/1	105	132	132	255	0.16	4		3.07
60	42.8	C50	50	50/1	110	138	165	255	0.16	4		2.57
43	59.9	C70	70	70/1	95	118	118	255	0.16	4		1.59

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
Order number of planetary precision gear servo motor	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
	Without brake	With brake		Servo motor power line	Servo motor signal line
PN101B□-B30-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B40-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B50-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B70-□□□□-MN028S1E30FP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B70-□□□□-MN028S1E30LP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-C10-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C12-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C16-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C20-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C25-□□□□-MN028S1E30FP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C28-□□□□-MN028S1E30FP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C30-□□□□-MN028S1E30FP3	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C35-□□□□-MN028S1E30FP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C40-□□□□-MN028S1E30FP3	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C28-□□□□-MN028S1E30LP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C30-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C35-□□□□-MN028S1E30LP1	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C40-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C50-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C70-□□□□-MN028S1E30LP2	10010	20010	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



伺服马达: 0.42kW 1.3N.m  
1A 3000r/min

Servo motor: 0.42kW 1.3N.m  
1A 3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	3.8	B30	3	3/1	7	15	19	35	0.28	5		1.85
750	5.0	B40	4	4/1	11	22	28	40	0.26	5		2.18
600	6.3	B50	5	5/1	11	22	28	40	0.26	5		1.74
429	8.8	B70	7	7/1	28	52	70	110	0.28	4		3.17
300	12.6	C10	10	10/1	28	40	55	105	0.27	4		2.22
250	14.8	C12	12	12/1	32	40	50	100	0.27	4		2.16
188	19.8	C16	16	16/1	42	52	60	110	0.27	4		2.13
150	24.7	C20	20	20/1	42	52	60	110	0.26	4		1.70
120	30.9	C25	25	25/1	42	52	70	110	0.26	4		1.36
107	34.6	C28	28	28/1	105	132	132	255	0.29	4		3.04
100	37.1	C30	30	30/1	88	110	110	200	0.27	4		2.38
86	43.2	C35	35	35/1	110	138	165	255	0.29	4		2.54
75	49.4	C40	40	40/1	105	132	132	255	0.26	4		2.13
60	61.8	C50	50	50/1	110	138	165	255	0.26	4		1.78
43	86.5	C70	70	70/1	95	118	118	255	0.26	4		1.10

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN101B□-B30-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B40-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B50-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B70-□□□□-MN028M1E30LP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-C10-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C12-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C16-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C20-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C25-□□□□-MN028M1E30FP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C28-□□□□-MN028M1E30LP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C30-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C35-□□□□-MN028M1E30LP1	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C40-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C50-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C70-□□□□-MN028M1E30LP2	10012	20012	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 0.47kW 1.5N.m  
1.15A 3000r/min

Servo motor: 0.47kW 1.5N.m  
1.15A 3000r/min

齿轮箱输出转速	齿轮箱输出扭矩	齿轮箱速比代号	齿轮箱公称速比	齿轮箱精确速比	齿轮箱额定扭矩	齿轮箱最大加速扭矩	齿轮箱最大扭矩	齿轮箱急停扭矩	齿轮箱转动惯量	齿轮箱最大回程间隙	齿轮箱扭转刚度	齿轮箱服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	4.4	B30	3	3/1	7	15	19	35	0.77	5		1.60
750	5.8	B40	4	4/1	11	22	28	40	0.75	5		1.89
600	7.3	B50	5	5/1	11	22	28	40	0.75	5		1.51
1000	4.4	B30	3	3/1	22	40	55	100	0.92	4		5.04
750	5.8	B40	4	4/1	28	52	70	110	0.84	4		4.81
600	7.3	B50	5	5/1	28	52	70	110	0.8	4		3.85
429	10.2	B70	7	7/1	28	52	70	110	0.77	4		2.75
300	14.6	C10	10	10/1	28	40	55	105	0.76	4		1.92
250	17.1	C12	12	12/1	32	40	50	100	0.76	4		1.87
188	22.8	C16	16	16/1	42	52	60	110	0.76	4		1.84
150	28.5	C20	20	20/1	42	52	60	110	0.75	4		1.47
120	35.6	C25	25	25/1	42	52	70	110	0.75	4		1.18
300	14.3	C10	10	10/1	85	120	160	200	0.81	3		5.96
250	17.1	C12	12	12/1	88	110	110	200	0.87	4		5.15
188	22.8	C16	16	16/1	105	132	132	255	0.84	4		4.61
150	28.5	C20	20	20/1	105	132	132	255	0.82	4		3.68
120	35.6	C25	25	25/1	110	138	165	255	0.81	4		3.09
107	39.9	C28	28	28/1	105	132	132	255	0.78	4		2.63
100	42.8	C30	30	30/1	88	110	110	200	0.76	4		2.06
86	49.9	C35	35	35/1	110	138	165	255	0.78	4		2.21
75	57.0	C40	40	40/1	105	132	132	255	0.75	4		1.84
60	71.3	C50	50	50/1	110	138	165	255	0.75	4		1.54
100	42.8	C30	30	30/1	215	270	270	515	0.83	3		5.03
75	57.0	C40	40	40/1	285	360	360	630	0.81	3		5.00
60	71.3	C50	50	50/1	285	360	360	630	0.81	3		4.00
43	99.8	C70	70	70/1	285	360	360	630	0.81	3		2.86
30	142.5	D10	100	100/1	215	270	270	630	0.80	3		1.51

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN101B□-B30-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B40-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN101B□-B50-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B30-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B40-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B50-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B70-□□□□-MNO36S1E30FP3	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-C10-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C12-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C16-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C20-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN202B□-C25-□□□□-MNO36S1E30FP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-C10-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C12-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C16-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C20-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C25-□□□□-MNO36S1E30FP2	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C28-□□□□-MNO36S1E30FP3	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C30-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C35-□□□□-MNO36S1E30FP3	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C40-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C50-□□□□-MNO36S1E30FP4	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C30-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C40-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C50-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C70-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-D10-□□□□-MNO36S1E30LP1	10110	20110	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 0.75kW 2.4N.m  
1.6A 3000r/min

Servo motor: 0.75kW 2.4N.m  
1.6A 3000r/min

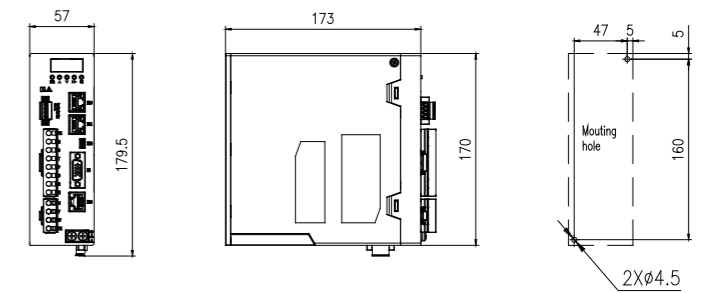
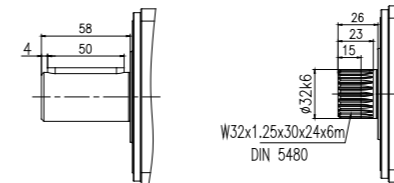
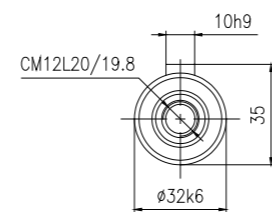
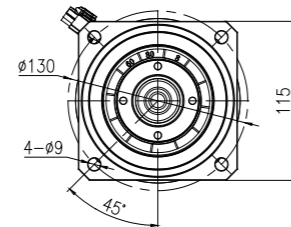
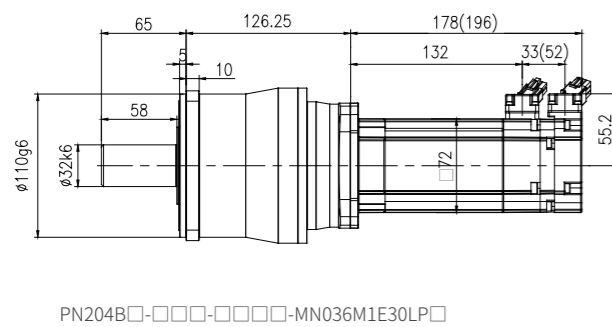
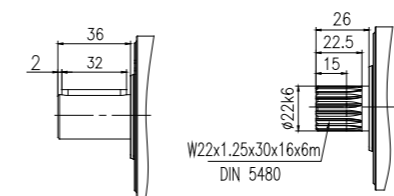
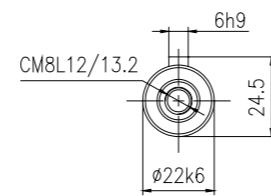
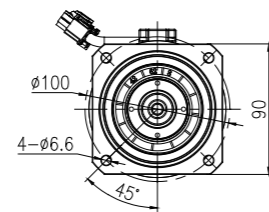
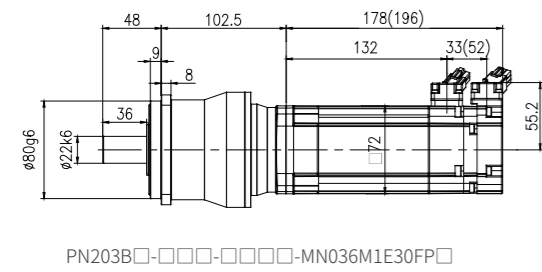
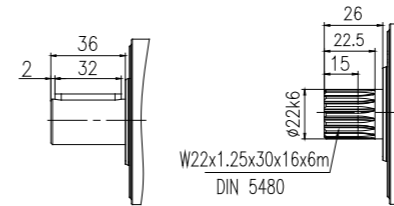
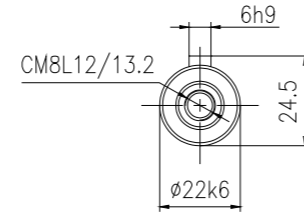
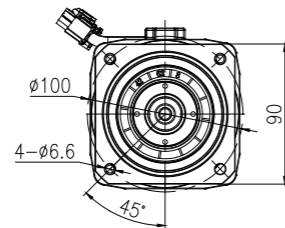
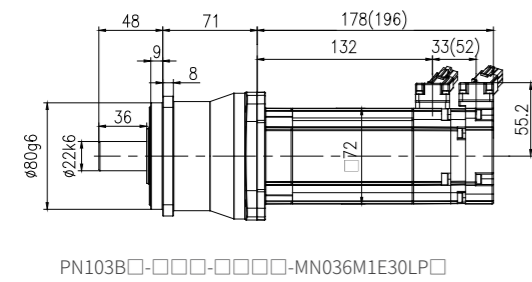
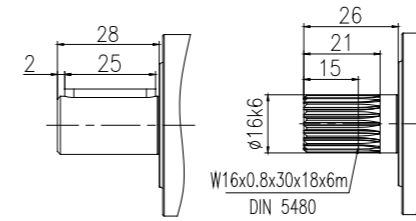
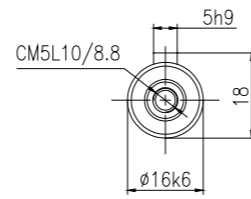
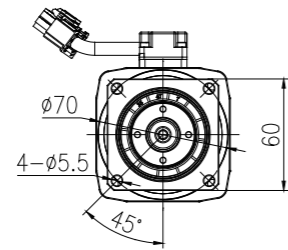
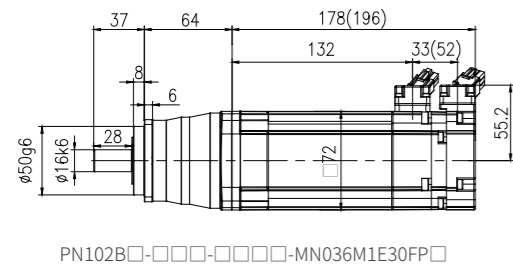
齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	7.0	B30	3	3/1	22	40	55	100	1.59	4		3.15
750	9.3	B40	4	4/1	28	52	70	110	1.51	4		3.01
600	11.6	B50	5	5/1	28	52	70	110	1.47	4		2.41
429	16.3	B70	7	7/1	28	52	70	110	1.44	4		1.72
300	23.3	C10	10	10/1	28	40	55	105	1.43	4		1.20
429	16.3	B70	7	7/1	85	140	185	255	1.54	3		5.22
300	23.3	C10	10	10/1	85	120	160	200	1.48	3		3.65
250	27.4	C12	12	12/1	88	110	110	200	1.54	4		3.22
188	36.5	C16	16	16/1	105	132	132	255	1.51	4		2.88
150	45.6	C20	20	20/1	105	132	132	255	1.49	4		2.30
120	57.0	C25	25	25/1	110	138	165	255	1.48	4		1.93
107	63.8	C28	28	28/1	105	132	132	255	1.45	4		1.64
100	68.4	C30	30	30/1	88	110	110	200	1.43	4		1.29
86	79.8	C35	35	35/1	110	138	165	255	1.45	4		1.38
75	91.2	C40	40	40/1	105	132	132	255	1.42	4		1.15
107	63.8	C28	28	28/1	285	360	360	630	1.56	3		4.46
100	68.4	C30	30	30/1	215	270	270	515	1.50	3		3.14
86	79.8	C35	35	35/1	285	360	360	630	1.55	3		3.57
75	91.2	C40	40	40/1	285	360	360	630	1.48	3		3.13
60	114.0	C50	50	50/1	285	360	360	630	1.48	3		2.50
43	159.6	C70	70	70/1	285	360	360	630	1.48	3		1.79

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN102B□-B30-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B40-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B50-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B70-□□□□-MN036M1E30FP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-C10-□□□□-MN036M1E30FP3	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B70-□□□□-MN036M1E30LP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-C10-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C12-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C16-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C20-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C25-□□□□-MN036M1E30FP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C28-□□□□-MN036M1E30FP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C30-□□□□-MN036M1E30FP3	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C35-□□□□-MN036M1E30FP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C40-□□□□-MN036M1E30FP3	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C28-□□□□-MN036M1E30LP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C30-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C35-□□□□-MN036M1E30LP1	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C40-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C50-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C70-□□□□-MN036M1E30LP2	10112	20112	AN-B3A75-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)

MN036M outline dimension diagram

Outline dimension diagram of the equipped servo driver



AN-B3A75-S-EC

注： ( ) 为带制动器尺寸

Note: ( ) is the size with brake

伺服马达: 1kW 3.2N.m 2.2A  
3000r/min

Servo motor: 1kW 3.2N.m 2.2A  
3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	9.3	B30	3	3/1	22	40	55	100	2.71	4		2.36
750	12.4	B40	4	4/1	28	52	70	110	2.63	4		2.26
600	15.5	B50	5	5/1	28	52	70	110	2.59	4		1.80
1000	9.3	B30	3	3/1	66	108	142	200	3.28	3		7.09
750	12.4	B40	4	4/1	85	140	185	255	2.92	3		6.85
600	15.5	B50	5	5/1	85	140	185	255	2.79	3		5.48
429	21.7	B70	7	7/1	85	140	185	255	2.66	3		3.91
300	31.0	C10	10	10/1	85	120	160	200	2.60	3		2.74
250	36.5	C12	12	12/1	88	110	110	200	2.66	4		2.41
188	48.6	C16	16	16/1	105	132	132	255	2.63	4		2.16
150	60.8	C20	20	20/1	105	132	132	255	2.61	4		1.73
120	76.0	C25	25	25/1	110	138	165	255	2.60	4		1.45
300	31.0	C10	10	10/1	185	290	390	630	2.78	2		5.96
250	36.5	C12	12	12/1	215	270	270	515	3.07	3		5.89
188	48.6	C16	16	16/1	250	360	360	630	2.98	3		5.14
150	60.8	C20	20	20/1	265	360	360	630	2.82	3		4.36
120	76.0	C25	25	25/1	265	360	360	630	2.80	3		3.49
107	85.1	C28	28	28/1	285	360	360	630	2.68	3		3.35
100	91.2	C30	30	30/1	215	270	270	515	2.62	3		2.36
86	106.4	C35	35	35/1	285	360	360	630	2.67	3		2.68
75	121.6	C40	40	40/1	285	360	360	630	2.60	3		2.34
60	152.0	C50	50	50/1	285	360	360	630	2.60	3		1.88
43	212.8	C70	70	70/1	285	360	360	630	2.60	3		1.34
107	85.1	C28	28	28/1	570	760	760	1350	3.07	2		6.70
100	91.2	C30	30	30/1	300	530	530	1250	2.85	2		3.29
86	106.4	C35	35	35/1	560	700	700	1350	3.04	2		5.26
75	121.6	C40	40	40/1	610	760	760	1350	2.80	2		5.02
60	152.0	C50	50	50/1	560	700	700	1350	2.78	2		3.68
43	212.8	C70	70	70/1	610	725	725	1350	2.77	2		2.87
30	304.0	D10	100	100/1	490	590	590	1250	2.76	2		1.61

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID			Servo motor cable configuration order number	
Order number of planetary precision gear servo motor	Without brake	With brake	Servo driver order number	Servo motor power line	Servo motor signal line
PN102B□-B30-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B40-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B50-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B30-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B40-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B50-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B70-□□□□-MN048S1E30FP3	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-C10-□□□□-MN048S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C12-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C16-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C20-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C25-□□□□-MN048S1E30FP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-C10-□□□□-MN048S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C12-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C16-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C20-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C25-□□□□-MN048S1E30FP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C28-□□□□-MN048S1E30FP3	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C30-□□□□-MN048S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C35-□□□□-MN048S1E30FP3	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C40-□□□□-MN048S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C50-□□□□-MN048S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C70-□□□□-MN048S1E30FP4	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C28-□□□□-MN048S1E30LP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C30-□□□□-MN048S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C35-□□□□-MN048S1E30LP1	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C40-□□□□-MN048S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C50-□□□□-MN048S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C70-□□□□-MN048S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-D10-□□□□-MN048S1E30LP2	10210	20210	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



伺服马达: 1.5kW 4.8N.m 3A  
3000r/min

Servo motor: 1.5kW 4.8N.m 3A  
3000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
1000	14.0	B30	3	3/1	22	40	55	100	5.03	4		1.58
750	18.6	B40	4	4/1	28	52	70	110	4.95	4		1.50
600	23.3	B50	5	5/1	28	52	70	110	4.91	4		1.20
1000	14.0	B30	3	3/1	66	108	142	200	5.60	3		4.73
750	18.6	B40	4	4/1	85	140	185	255	5.24	3		4.56
600	23.3	B50	5	5/1	85	140	185	255	5.11	3		3.65
429	32.6	B70	7	7/1	85	140	185	255	4.98	3		2.61
300	46.6	C10	10	10/1	85	120	160	200	4.92	3		1.83
250	54.7	C12	12	12/1	88	110	110	200	4.98	4		1.61
188	73.0	C16	16	16/1	105	132	132	255	4.95	4		1.44
150	91.2	C20	20	20/1	105	132	132	255	4.93	4		1.15
429	32.6	B70	7	7/1	185	390	445	630	5.35	2		5.68
300	46.6	C10	10	10/1	185	290	390	630	5.10	2		3.97
250	54.7	C12	12	12/1	215	270	270	515	5.39	3		3.93
188	73.0	C16	16	16/1	250	360	360	630	5.30	3		3.43
150	91.2	C20	20	20/1	265	360	360	630	5.14	3		2.91
120	114.0	C25	25	25/1	265	360	360	630	5.12	3		2.32
107	127.7	C28	28	28/1	285	360	360	630	5.00	3		2.23
100	136.8	C30	30	30/1	215	270	270	515	4.94	3		1.57
86	159.6	C35	35	35/1	285	360	360	630	4.99	3		1.79
75	182.4	C40	40	40/1	285	360	360	630	4.92	3		1.56
60	228.0	C50	50	50/1	285	360	360	630	4.92	3		1.25
107	127.7	C28	28	28/1	570	760	760	1350	5.39	2		4.46
100	136.8	C30	30	30/1	300	530	530	1250	5.17	2		2.19
86	159.6	C35	35	35/1	560	700	700	1350	5.36	2		3.51
75	182.4	C40	40	40/1	610	760	760	1350	5.12	2		3.34
60	228.0	C50	50	50/1	560	700	700	1350	5.10	2		2.46
43	319.2	C70	70	70/1	610	725	725	1350	5.09	2		1.91
30	456.0	D10	100	100/1	490	590	590	1250	5.08	2		1.07

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN102B□-B30-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B40-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN102B□-B50-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B30-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B40-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B50-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B70-□□□□-MNO48M1E30FP3	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-C10-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C12-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C16-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN203B□-C20-□□□□-MNO48M1E30FP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B70-□□□□-MNO48M1E30LP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-C10-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C12-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C16-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C20-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C25-□□□□-MNO48M1E30FP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C28-□□□□-MNO48M1E30FP3	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C30-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C35-□□□□-MNO48M1E30FP3	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C40-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C50-□□□□-MNO48M1E30FP4	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C28-□□□□-MNO48M1E30LP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C30-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C35-□□□□-MNO48M1E30LP1	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C40-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C50-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C70-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-D10-□□□□-MNO48M1E30LP2	10212	20212	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 1.2kW 5.7N.m  
2.8A 2000r/min

Servo motor: 1.2kW 5.7N.m  
2.8A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	16.6	B30	3	3/1	66	108	142	200	8.11	3		3.98
500	22.1	B40	4	4/1	85	140	185	255	7.75	3		3.84
400	27.6	B50	5	5/1	85	140	185	255	7.62	3		3.07
286	38.7	B70	7	7/1	85	140	185	255	7.49	3		2.20
200	55.3	C10	10	10/1	85	120	160	200	7.43	3		1.54
667	16.6	B30	3	3/1	138	290	390	515	10.19	2		8.32
500	22.1	B40	4	4/1	185	390	515	630	8.83	2		8.36
400	27.6	B50	5	5/1	185	390	515	630	8.32	2		6.69
286	38.7	B70	7	7/1	185	390	445	630	7.86	2		4.78
200	55.3	C10	10	10/1	185	290	390	630	7.61	2		3.35
167	65.0	C12	12	12/1	215	270	270	515	7.90	3		3.31
125	86.6	C16	16	16/1	250	360	360	630	7.81	3		2.89
100	108.3	C20	20	20/1	265	360	360	630	7.65	3		2.45
80	135.4	C25	25	25/1	265	360	360	630	7.63	3		1.96
71	151.6	C28	28	28/1	285	360	360	630	7.51	3		1.88
67	162.5	C30	30	30/1	215	270	270	515	7.45	3		1.32
57	189.5	C35	35	35/1	285	360	360	630	7.50	3		1.50
50	216.6	C40	40	40/1	285	360	360	630	7.43	3		1.32
200	55.3	C10	10	10/1	345	665	750	1250	8.21	2		6.24
167	65.0	C12	12	12/1	300	530	530	1250	9.06	2		4.62
125	86.6	C16	16	16/1	480	760	760	1350	8.77	2		5.54
100	108.3	C20	20	20/1	515	760	760	1350	8.40	2		4.76
80	135.4	C25	25	25/1	515	700	700	1350	8.33	2		3.80
71	151.6	C28	28	28/1	570	760	760	1350	7.90	2		3.76
67	162.5	C30	30	30/1	300	530	530	1250	7.68	2		1.85
57	189.5	C35	35	35/1	560	700	700	1350	7.87	2		2.95
50	216.6	C40	40	40/1	610	760	760	1350	7.63	2		2.82
40	270.8	C50	50	50/1	560	700	700	1350	7.61	2		2.07
29	379.1	C70	70	70/1	610	725	725	1350	7.60	2		1.61
67	162.5	C30	30	30/1	730	1300	1300	2850	8.42	2		4.49
50	216.6	C40	40	40/1	1200	1600	1600	2850	8.28	2		5.54
40	270.8	C50	50	50/1	1200	1600	2000	2850	8.23	2		4.43
29	379.1	C70	70	70/1	1200	1500	1500	2850	8.18	2		3.17
20	541.5	D10	100	100/1	970	1300	1400	2850	8.16	2		1.79

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN103B□-B30-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B40-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B50-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B70-□□□□-MN063S1E20FP2	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-C10-□□□□-MN063S1E20FP3	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B30-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B40-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B50-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B70-□□□□-MN063S1E20FP5	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-C10-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C12-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C16-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C20-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C25-□□□□-MN063S1E20FP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C28-□□□□-MN063S1E20FP2	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C30-□□□□-MN063S1E20FP3	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C35-□□□□-MN063S1E20FP2	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C40-□□□□-MN063S1E20FP3	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN105B□-C10-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C12-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C16-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C20-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C25-□□□□-MN063S1E20FP4	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C28-□□□□-MN063S1E20FP5	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C30-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C35-□□□□-MN063S1E20FP5	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C40-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C50-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C70-□□□□-MN063S1E20FP6	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C30-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C40-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C50-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C70-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-D10-□□□□-MN063S1E20LP1	10310	20310	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



伺服马达: 2.05kW 9.8N.m  
4.6A 2000r/min

Servo motor: 2.05kW 9.8N.m  
4.6A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	28.5	B30	3	3/1	66	108	142	200	14.84	3		2.31
500	38.0	B40	4	4/1	85	140	185	255	14.48	3		2.24
400	47.5	B50	5	5/1	85	140	185	255	14.35	3		1.79
667	28.5	B30	3	3/1	138	290	390	515	16.92	2		4.84
500	38.0	B40	4	4/1	185	390	515	630	15.56	2		4.87
400	47.5	B50	5	5/1	185	390	515	630	15.05	2		3.89
286	66.5	B70	7	7/1	185	390	445	630	14.59	2		2.78
200	95.1	C10	10	10/1	185	290	390	630	14.34	2		1.95
167	111.7	C12	12	12/1	215	270	270	515	14.63	3		1.92
125	149.0	C16	16	16/1	250	360	360	630	14.54	3		1.68
100	186.2	C20	20	20/1	265	360	360	630	14.38	3		1.42
80	232.8	C25	25	25/1	265	360	360	630	14.36	3		1.14
286	66.5	B70	7	7/1	345	830	865	1350	15.77	2		5.18
200	95.1	C10	10	10/1	345	665	750	1250	14.94	2		3.63
167	111.7	C12	12	12/1	300	530	530	1250	15.79	2		2.69
125	149.0	C16	16	16/1	480	760	760	1350	15.50	2		3.22
100	186.2	C20	20	20/1	515	760	760	1350	15.13	2		2.77
80	232.8	C25	25	25/1	515	700	700	1350	15.06	2		2.21
71	260.7	C28	28	28/1	570	760	760	1350	14.63	2		2.19
67	279.3	C30	30	30/1	300	530	530	1250	14.41	2		1.07
57	325.9	C35	35	35/1	560	700	700	1350	14.60	2		1.72
50	372.4	C40	40	40/1	610	760	760	1350	14.36	2		1.64
40	465.5	C50	50	50/1	560	700	700	1350	14.34	2		1.20
71	260.7	C28	28	28/1	1200	1600	1600	2850	15.91	2		4.60
67	279.3	C30	30	30/1	730	1300	1300	2850	15.15	2		2.61
57	325.9	C35	35	35/1	1200	1600	2000	2850	15.80	2		3.68
50	372.4	C40	40	40/1	1200	1600	1600	2850	15.01	2		3.22
40	465.5	C50	50	50/1	1200	1600	2000	2850	14.96	2		2.58
29	651.7	C70	70	70/1	1200	1500	1500	2850	14.91	2		1.84

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN103B□-B30-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B40-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN103B□-B50-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B30-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B40-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B50-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-B70-□□□□-MN063M1E20FP3	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN104B□-C10-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C12-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C16-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C20-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN204B□-C25-□□□□-MN063M1E20FP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN105B□-B70-□□□□-MN063M1E20LP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN105B□-C10-□□□□-MN063M1E20LP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C12-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C16-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C20-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C25-□□□□-MN063M1E20FP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C28-□□□□-MN063M1E20FP3	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C30-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C35-□□□□-MN063M1E20FP3	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C40-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN205B□-C50-□□□□-MN063M1E20FP4	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C28-□□□□-MN063M1E20LP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C30-□□□□-MN063M1E20LP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C35-□□□□-MN063M1E20LP1	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C40-□□□□-MN063M1E20LP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C50-□□□□-MN063M1E20LP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□
PN206B□-C70-□□□□-MN063M1E20LP2	10213	20213	AN-B3B15-S-EC	A2-H□□-A10-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



伺服马达: 2.39kW 11.4N.m  
5A 2000r/min

Servo motor: 2.39kW 11.4N.m  
5A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	33.2	B30	3	3/1	138	290	390	515	28.32	2		4.16
500	44.2	B40	4	4/1	185	390	515	630	26.96	2		4.18
400	55.3	B50	5	5/1	185	390	515	630	26.45	2		3.35
286	77.4	B70	7	7/1	185	390	445	630	25.99	2		2.39
200	110.6	C10	10	10/1	185	290	390	630	25.74	2		1.67
667	33.2	B30	3	3/1	220	500	650	1250	35.07	2		6.63
500	44.2	B40	4	4/1	355	830	1100	1350	30.46	2		8.03
400	55.3	B50	5	5/1	355	830	1100	1350	28.72	2		6.42
286	77.4	B70	7	7/1	345	830	865	1350	27.17	2		4.46
200	110.6	C10	10	10/1	345	665	750	1250	26.34	2		3.12
167	130.0	C12	12	12/1	300	530	530	1250	27.19	2		2.31
125	173.3	C16	16	16/1	480	760	760	1350	26.90	2		2.77
100	216.6	C20	20	20/1	515	760	760	1350	26.53	2		2.38
80	270.8	C25	25	25/1	515	700	700	1350	26.46	2		1.90
71	303.2	C28	28	28/1	570	760	760	1350	26.03	2		1.88
57	379.1	C35	35	35/1	560	700	700	1350	26.00	2		1.48
50	433.2	C40	40	40/1	610	760	760	1350	25.76	2		1.41
286	77.4	B70	7	7/1	925	1525	2030	2800	30.58	2		11.95
200	110.6	C10	10	10/1	900	1200	1600	2600	28.07	2		8.14
167	130.0	C12	12	12/1	730	1300	1300	2850	31.77	2		5.62
125	173.3	C16	16	16/1	1200	1600	1600	2850	30.91	2		6.93
100	216.6	C20	20	20/1	1200	1600	1600	2850	29.00	2		5.54
80	270.8	C25	25	25/1	1200	1600	2000	2850	28.79	2		4.43
71	303.2	C28	28	28/1	1200	1600	1600	2850	27.31	2		3.96
67	324.9	C30	30	30/1	730	1300	1300	2850	26.55	2		2.25
57	379.1	C35	35	35/1	1200	1600	2000	2850	27.20	2		3.17
50	433.2	C40	40	40/1	1200	1600	1600	2850	26.41	2		2.77
40	541.5	C50	50	50/1	1200	1600	2000	2850	26.36	2		2.22
29	758.1	C70	70	70/1	1200	1500	1500	2850	26.31	2		1.58
71	303.2	C28	28	28/1	1900	3000	3200	5550	30.54	2		6.27
67	324.9	C30	30	30/1	1500	1900	2100	5550	28.33	2		4.62
57	379.1	C35	35	35/1	1900	3000	3900	5550	30.30	2		5.01
50	433.2	C40	40	40/1	1900	3000	3000	5550	28.04	2		4.39
40	541.5	C50	50	50/1	1900	3000	3700	5550	27.93	2		3.51
29	758.1	C70	70	70/1	1700	2600	2600	5550	27.82	2		2.24
20	1083.0	D10	100	100/1	1700	2200	2200	5550	27.77	2		1.57

行星精密齿轮伺服马达订货号	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN104B□-B30-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-B40-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-B50-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-B70-□□□□-MN080S1E20FP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-C10-□□□□-MN080S1E20FP3	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B30-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B40-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B50-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B70-□□□□-MN080S1E20FP5	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-C10-□□□□-MN080S1E20FP6	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C12-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C16-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C20-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C25-□□□□-MN080S1E20FP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C28-□□□□-MN080S1E20FP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C35-□□□□-MN080S1E20FP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C40-□□□□-MN080S1E20FP3	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-B70-□□□□-MN080S1E20LP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-C10-□□□□-MN080S1E20LP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C12-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C16-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C20-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C25-□□□□-MN080S1E20FP4	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C28-□□□□-MN080S1E20FP5	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C30-□□□□-MN080S1E20FP6	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C35-□□□□-MN080S1E20FP5	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C40-□□□□-MN080S1E20FP6	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C50-□□□□-MN080S1E20FP6	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C70-□□□□-MN080S1E20FP6	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C28-□□□□-MN080S1E20LP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C30-□□□□-MN080S1E20LP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C35-□□□□-MN080S1E20LP1	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C40-□□□□-MN080S1E20LP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C50-□□□□-MN080S1E20LP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C70-□□□□-MN080S1E20LP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-D10-□□□□-MN080S1E20LP2	10410	20410	AN-B3B15-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
 With brake 16 (5m)B50 With battery 11 B50(5m)  
 (7m)B70 B70(7m)  
 (10m)C10 C10(10m)



伺服马达: 3.98kW 19N.m  
8.1A 2000r/min

Servo motor: 3.98kW 19N.m  
8.1A 2000r/min

齿轮箱 输出转速	齿轮箱 输出扭矩	齿轮箱 速比代号	齿轮箱 公称速比	齿轮箱 精确速比	齿轮箱 额定扭矩	齿轮箱 最大加速 扭矩	齿轮箱 最大扭矩	齿轮箱 急停扭矩	齿轮箱 转动惯量	齿轮箱 最大回程 间隙	齿轮箱 扭转刚度	齿轮箱 服务系数
Gearbox output speed	Gearbox output torque	Gearbox speed ratio code	Gearbox nominal speed ratio	Gearbox accurate speed ratio	Gearbox rated torque	Gearbox maximum acceleration torque	Gearbox maximum torque	Gearbox emergency stop torque	Gearbox rotational inertia	Gearbox maximum return clearance	Gearbox torsional stiffness	Gearbox service coefficient
$n_{2N}$ r/min	$T_2$ N.m	Code	i	$i_{ex}$	$T_{2N}$ N.m	$T_{2B}$ N.m	$T_{2a}$ N.m	$T_{2NOT}$ N.m	$J_1$ kgcm <sup>2</sup>	$J_t$ arcmin	$C_2$ Nm/arcmin	f
667	55.3	B30	3	3/1	138	290	390	515	51.72	2		2.50
500	73.7	B40	4	4/1	185	390	515	630	50.36	2		2.51
400	92.2	B50	5	5/1	185	390	515	630	49.85	2		2.01
286	129.0	B70	7	7/1	185	390	445	630	49.39	2		1.43
667	55.3	B30	3	3/1	220	500	650	1250	58.47	2		3.98
500	73.7	B40	4	4/1	355	830	1100	1350	53.86	2		4.82
400	92.2	B50	5	5/1	355	830	1100	1350	52.12	2		3.85
286	129.0	B70	7	7/1	345	830	865	1350	50.57	2		2.67
200	184.3	C10	10	10/1	345	665	750	1250	49.74	2		1.87
167	216.6	C12	12	12/1	300	530	530	1250	50.59	2		1.39
125	288.8	C16	16	16/1	480	760	760	1350	50.30	2		1.66
100	361.0	C20	20	20/1	515	760	760	1350	49.93	2		1.43
80	451.3	C25	25	25/1	515	700	700	1350	49.86	2		1.14
71	505.4	C28	28	28/1	570	760	760	1350	49.43	2		1.13
667	55.3	B30	3	3/1	580	1200	1600	2600	77.70	2		10.49
500	73.7	B40	4	4/1	950	1525	2030	2800	63.98	2		12.89
400	92.2	B50	5	5/1	965	1525	2030	2800	58.67	2		10.47
286	129.0	B70	7	7/1	925	1525	2030	2800	53.98	2		7.17
200	184.3	C10	10	10/1	900	1200	1600	2600	51.47	2		4.88
167	216.6	C12	12	12/1	730	1300	1300	2850	55.17	2		3.37
125	288.8	C16	16	16/1	1200	1600	1600	2850	54.31	2		4.16
100	361.0	C20	20	20/1	1200	1600	1600	2850	52.40	2		3.32
80	451.3	C25	25	25/1	1200	1600	2000	2850	52.19	2		2.66
71	505.4	C28	28	28/1	1200	1600	1600	2850	50.71	2		2.37
67	541.5	C30	30	30/1	730	1300	1300	2850	49.95	2		1.35
57	631.8	C35	35	35/1	1200	1600	2000	2850	50.60	2		1.90
50	722.0	C40	40	40/1	1200	1600	1600	2850	49.81	2		1.66
40	902.5	C50	50	50/1	1200	1600	2000	2850	49.76	2		1.33
167	216.6	C12	12	12/1	1500	1900	2100	5550	65.65	2		6.93
125	288.8	C16	16	16/1	1900	3000	3200	5550	63.82	2		6.58
100	361.0	C20	20	20/1	1900	3100	3200	5550	58.57	2		5.26
80	451.3	C25	25	25/1	1900	3100	3900	5550	58.11	2		4.21
71	505.4	C28	28	28/1	1900	3000	3200	5550	53.94	2		3.76
67	541.5	C30	30	30/1	1500	1900	2100	5550	51.73	2		2.77
57	631.8	C35	35	35/1	1900	3000	3900	5550	53.70	2		3.01
50	722.0	C40	40	40/1	1900	3000	3000	5550	51.44	2		2.63
40	902.5	C50	50	50/1	1900	3000	3700	5550	51.33	2		2.11
29	1263.5	C70	70	70/1	1700	2600	2600	5550	51.22	2		1.35

行星精密齿轮伺服马达订货号  Order number of planetary precision gear servo motor	伺服马达ID		伺服驱动器订货号	伺服马达线缆配置订货号	
	无制动器	带制动器		伺服马达动力线	伺服马达信号线
	Servo motor ID		Servo driver order number	Servo motor cable configuration order number	
Without brake	With brake	Servo motor power line		Servo motor signal line	
PN104B□-B30-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-B40-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-B50-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN104B□-B70-□□□□-MN080M1E20FP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B30-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B40-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B50-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-B70-□□□□-MN080M1E20FP4	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN105B□-C10-□□□□-MN080M1E20FP5	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C12-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C16-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C20-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C25-□□□□-MN080M1E20FP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN205B□-C28-□□□□-MN080M1E20FP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-B30-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-B40-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-B50-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-B70-□□□□-MN080M1E20LP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN106B□-C10-□□□□-MN080M1E20LP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C12-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C16-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C20-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C25-□□□□-MN080M1E20FP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C28-□□□□-MN080M1E20FP4	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C30-□□□□-MN080M1E20FP5	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C35-□□□□-MN080M1E20FP4	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C40-□□□□-MN080M1E20FP5	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN206B□-C50-□□□□-MN080M1E20FP5	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C12-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C16-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C20-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C25-□□□□-MN080M1E20LP1	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C28-□□□□-MN080M1E20LP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C30-□□□□-MN080M1E20LP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C35-□□□□-MN080M1E20LP2	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C40-□□□□-MN080M1E20LP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C50-□□□□-MN080M1E20LP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□
PN207B□-C70-□□□□-MN080M1E20LP3	10412	20412	AN-B3B30-S-EC	A2-H□□-A15-□□□	A2-H17-A□□-□□□

Without brake 18 (3m)B30 Without battery 10 B30(3m)  
With brake 16 (5m)B50 With battery 11 B50(5m)  
(7m)B70 B70(7m)  
(10m)C10 C10(10m)



### 9 输出轴允许的轴向力和径向力

输出轴轴承配置1: 深沟球轴承+深沟球轴承

输出轴 载荷	Output shaft load	代号 Code	单位 Unit	PN101B	PN102B	PN103B	PN104B	PN105B	PN106B	PN107B
					PN202B	PN203B	PN204B	PN205B	PN206B	PN207B
20000h 的径向力	Radial force for 20000h	Fr20000h	N	600	1300	2050	2500	3500	7350	9300
20000h 的轴向力	Axial force for 20000h	Fa20000h		250	500	750	1050	1750	2600	3350
30000h 的径向力	Radial force for 30000h	Fr30000h		500	1150	1750	2200	3050	6400	8100
30000h 的轴向力	Axial force for 30000h	Fa30000h		200	400	650	900	1550	2250	2950
20000h 的侧倾力矩	Tilting moment for 20000h	Mk20000h	Nm	30	93	173	266	464	1099	1638
30000h 的侧倾力矩	Tilting moment for 30000h	Mk30000h		26	81	151	232	405	960	1431

注: 深沟球轴承+深沟球轴承配置的典型应用: 联轴器、径向力较小的直齿轮等

### 9 Permissible axial and radial forces on the output shaft

Output shaft bearing configuration 1: Angular contact ball bearing + tapered roller bearing

Note: Typical application of Deep groove ball bearing+Deep groove ball bearing: Couplings, spur gears with small radial force, etc.

输出轴轴承配置2: 角接触球轴承+圆锥滚子轴承

输出轴 载荷	Output shaft load	代号 Code	单位 Unit	PN101B	PN102B	PN103B	PN104B	PN105B	PN106B	PN107B
					PN202B	PN203B	PN204B	PN205B	PN206B	PN207B
20000h 的径向力	Radial force for 20000h	Fr20000h	N	/	2950	6200	7900	13100	25650	30450
20000h 的轴向力	Axial force for 20000h	Fa20000h		/	2700	5050	6900	11650	18450	23350
30000h 的径向力	Radial force for 30000h	Fr30000h		/	2600	5500	7000	11600	22700	26950
30000h 的轴向力	Axial force for 20000h	Fa30000h		/	2400	4500	6100	10300	16350	20700
20000h 的侧倾力矩	Tilting moment for 20000h	Mk20000h	Nm	/	272	703	1137	2376	5409	7531
30000h 的侧倾力矩	Tilting moment for 30000h	Mk30000h		/	241	623	1007	2103	4789	6668

注: 角接触球轴承+圆锥滚子轴承配置的典型应用: 有径向力, 有轴向力的斜齿轮等

Output shaft bearing configuration 2: Angular contact ball bearing + tapered roller bearing

Note: Typical application of Deep groove ball bearing+Deep groove ball bearing: Couplings, spur gears with small radial force, etc.

### 10 重量表

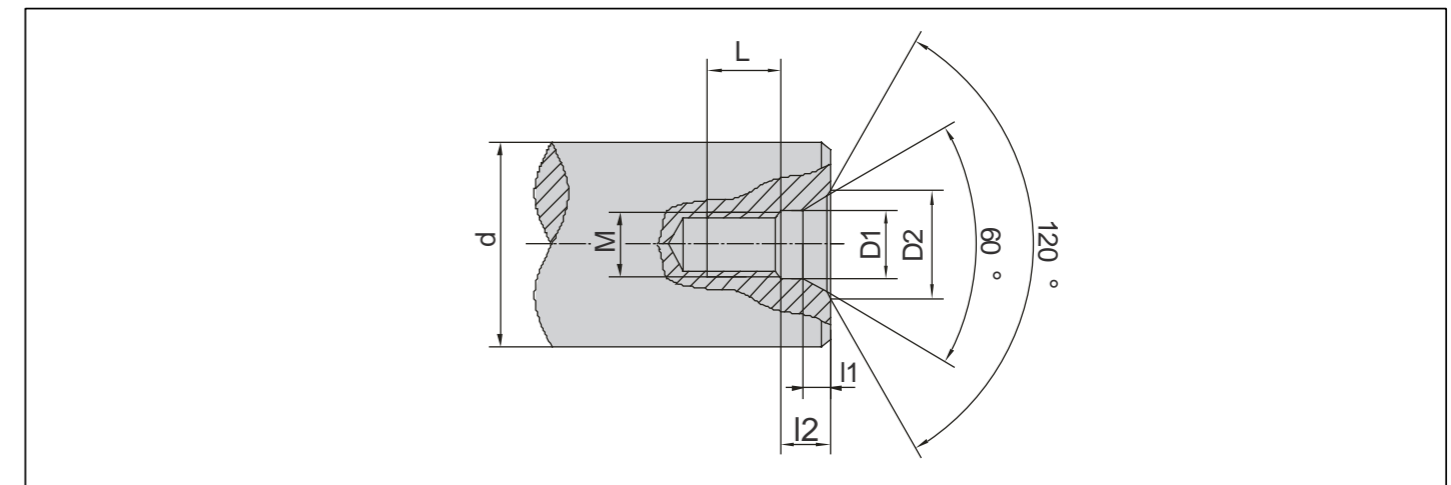
### 10 Weight table

		PN(B)行星齿轮箱重量表(kg)						PN(B)Current Planetary Weight table(kg)	
机座号	Frame size	PN101B	PN102B	PN103B	PN104B	PN105B	PN106B	PN107B	
重量	Weight	1.1	1.8	3.5	7.5	14.6	25.1	39.4	
机座号	Frame size	PN202B		PN203B	PN204B	PN205B	PN206B	PN207B	
重量	Weight			2.1	4.2	8.9	17.6	33.9	51.2

		直连MN伺服马达重量表(Kg)										Directly connected MN servo motor weight table (Kg)	
机座号	Frame size	MN028S1	MN028M1	MN036S1	MN036M1	MN048S1	MN048M1	MN063S1	MN063M1	MN080S1	MN080M1		
额定功率(KW)	Rated power (KW)	0.28	0.42	0.47	0.75	1	1.5	1.2	2.05	2.39	3.98		
不带制动	Without brake	1.8	2.4	2.7	3.9	4.5	7	7.1	10.9	13.6	21.9		
带制动	With brake	2	2.7	3.1	4.3	5.2	7.7	8	11.8	14.3	23.9		

### 11 轴端C型螺纹的中心孔尺寸表

### 11 Center hole size table of shaft end C thread



d	M	L	12	11	D1	D2
7 < d ≤ 10	M3	10	2.6	1.8	3.2	5.8
10 < d ≤ 13	M4	10	3.2	2.1	4.3	7.4
13 < d ≤ 16	M5	10	4	2.4	5.3	8.8
16 < d ≤ 21	M6	12	5	2.8	6.4	10.5
21 < d ≤ 24	M8	12	6	3.3	8.4	13.2
24 < d ≤ 30	M10	15	7.5	3.8	10.5	16.3
30 < d ≤ 38	M12	20	9.5	4.4	13	19.8
38 < d ≤ 50	M16	25	12	5.2	17	25.3
50 < d ≤ 85	M20	30	15	6.4	21	31.3
85 < d ≤ 130	M24	35	18	8	26	38

## MN通用型伺服马达

### 12 伺服马达概述

MN系列伺服马达匹配博能AN系列伺服驱动器可组成精确定位的伺服系统。MN伺服马达出厂常用的冷却方式为自然冷却,其他冷却方式,如强制风冷、水冷伺服马达可特殊定制并实现更高的功率输出,具体参数另请咨询。MN伺服马达设计生产符合ISO、IEC、GB等相关标准要求。BONENG伺服马达适用于连续工作制(S1),同时满足大部分断续工作方式(S2-S10)

#### 12.1 马达技术特征

马达型号	Motor model	通用型三相交流同步伺服马达	Universal Three-phase AC synchronous servo motor
磁性材料	Magnetic material	稀土永磁材料	Rare earth permanent magnet material
轴高(mm)	Shaft height(mm)	28、36、48、63、80	28、36、48、63、80
额定功率(kW)	Rated power(kW)	0.28-3.98	0.28-3.98
额定转矩(N.m)	Rated torque(N.m)	0.8-19	0.8-19
额定转速(r/min)	Rated speed(r/min)	2000、3000、4500	2000、3000、4500
绝缘等级	Insulation class	F	F
防护等级	Protection class	IP65 (不包括连接器部分)	IP65 (Excluding connector parts)
冷却方式	Cooling method	自然冷却	Natural cooling
振动等级	Vibration level	A级	A
噪声(dB)	Noise(dB)	55-70	55-70
径向圆跳精度、同轴度和断面圆跳精度等级	Runout Accuracy and Concentricity	N	N
能效等级	Energy efficiency level	IE5	IE5
编码器	Encoder	编码器分辨率 $2^{23}$	Encoder resolution $2^{23}$
连接器	Connector	塑壳端子	plastic case terminals
选件	Options	内置永磁失电制动器	Built-in permanent magnet power-off brake

#### 12.2 马达运行环境

所允许的相对湿度:  
 $-20^{\circ}\text{C} \leq T \leq 20^{\circ}\text{C}: 100\%$   $20^{\circ}\text{C} < T \leq 30^{\circ}\text{C}: 95\%$   $30^{\circ}\text{C} < T \leq 40^{\circ}\text{C}: 55\%$   
 对于更高的环境温度、以及(或者)高于海拔1000m的地点,马达的额定功率换算系数为Kht所允许的功率值:  
 $P_n' = P_n \cdot K_{ht}$

海拔高度 Altitude	对于不同高度和(或)不同环境温度的功率折算系数Kht					
	Power conversion factor for different altitudes and different ambient temperatures Kht					
	对应海拔高度的环境温度 Ambient temperature corresponding to altitude					
	<30°C	30~40°C	45°C	50°C	55°C	60°C
1000 m	1.07	1	0.96	0.92	0.87	0.82
1500 m	1.04	0.97	0.93	0.89	0.84	0.79
2000 m	1	0.94	0.9	0.86	0.82	0.77
2500 m	0.96	0.9	0.86	0.83	0.78	0.74
3000 m	0.92	0.86	0.82	0.79	0.75	0.7
3500 m	0.88	0.82	0.79	0.75	0.71	0.67
4000 m	0.82	0.77	0.74	0.71	0.67	0.63

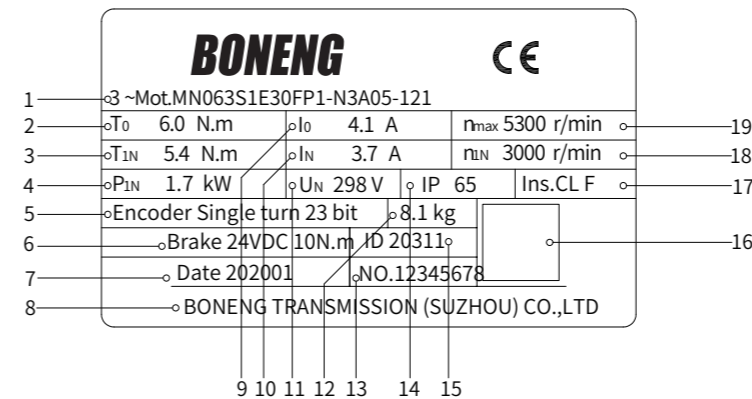
## MN universal servo motor

### 12 Servo motors overview

MN series servo motors matched with BonengAN series servodrivers can form a precise positioning servo system. The commonly used cooling method for MN servo motors at the factory is natural cooling, while other cooling methods such as forced air cooling and water-cooled servo motors can be specially customized and achieved high power output, please consult for specific parameters. The design and production of MN servo motors comply with relevant standards such as ISO, IEC, and GB. BONENG servo motor is suitable for continuous working system(S1), Simultaneously meeting most intermittent working modes (S2-S10)

#### 12.1 Motor technical characteristics

#### 12.3 马达铭牌信息



#### 12.3 Motor nameplate information

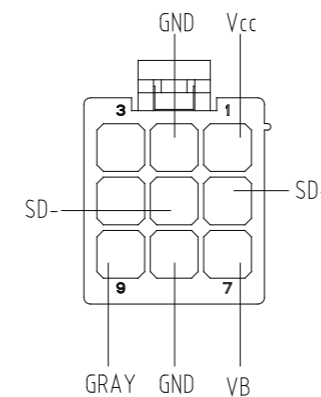
- |                 |                         |
|-----------------|-------------------------|
| 1. 马达型号         | 1. Model of motor       |
| 2. 静止转矩(100K)   | 2. Static torque(100K)  |
| 3. 额定转矩(100K)   | 3. Rated torque(100K)   |
| 4. 额定功率         | 4. Rated power          |
| 5. 编码器参数        | 5. Parameter of encoder |
| 6. 制动器参数        | 6. Parameter of brake   |
| 7. 生产日期         | 7. Date in produced     |
| 8. 公司名称         | 8. Company name         |
| 9. 静止电流         | 9. Static current       |
| 10. 额定电流        | 10. Rated current       |
| 11. 额定转速下的感应线电压 | 11. Back EMF            |
| 12. 重量          | 12. Weight              |
| 13. 出厂编号        | 13. Factory number      |
| 14. 防护等级        | 14. Level of protection |
| 15. 马达ID        | 15. ID of the motor     |
| 16. 二维码         | 16. QR code             |
| 17. 绝缘等级        | 17. Insulation grade    |
| 18. 额定转速        | 18. Rated speed         |
| 19. 最大转速        | 19. Maximum speed       |

#### 12.4 马达制动器参数

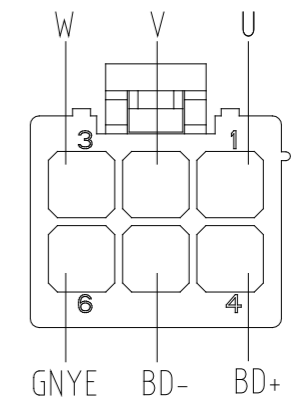
制动器型号	Brake model	BN028	BN036	BN048	BN063	BN080
静摩擦力矩(N.m)	Static friction torque(N.m)	≥1.9	≥2.4	≥3.8	≥10	≥22
制动器功率(W)	Brake power(W)	8.76	6.74	13.4	14	19
转动惯量(kg·cm <sup>2</sup> )	Moment of inertia(kg·cm <sup>2</sup> )	0.09	0.11	0.39	0.78	2.55
额定间隙(mm)	Rated clearance(mm)	0.15	0.12	0.2	0.2	0.3
工作电压(VDC)	Operating voltage(VDC)	24±10%	24±10%	24±10%	24±10%	24±10%
工作温度(°C)	Operating temperature(°C)	-15~120	-15~120	-15~120	-15~120	-15~120
制动器吸合时间(ms)	Brake pull-in time(ms)	≤20	≤20	≤30	≤25	≤30
制动器释放时间(ms)	Brake release time(ms)	≤35	≤80	≤50	≤90	≤100
紧急制动次数(次)	Emergency braking times(times)	2000	2000	2000	500	2000
紧急制动次数(次/小时)	Emergency braking times(times/hour)	20	20	20	20	20
最大紧急制动转速(r/min)	Maximum emergency braking speed(r/min)	6000	6000	6000	3000	3000
适配马达机座号	Compatible motor frame size	28	36	48	063/080S	080M

#### 12.4 Motor brake parameters

#### 12.5 马达电气连接



马达信号端插头 motor signal end plug



马达动力端插头 motor power end plug

#### 12.5 Motor electrical connection

### 13 伺服马达参数及特性曲线 13 Servo motor parameters and characteristic curve

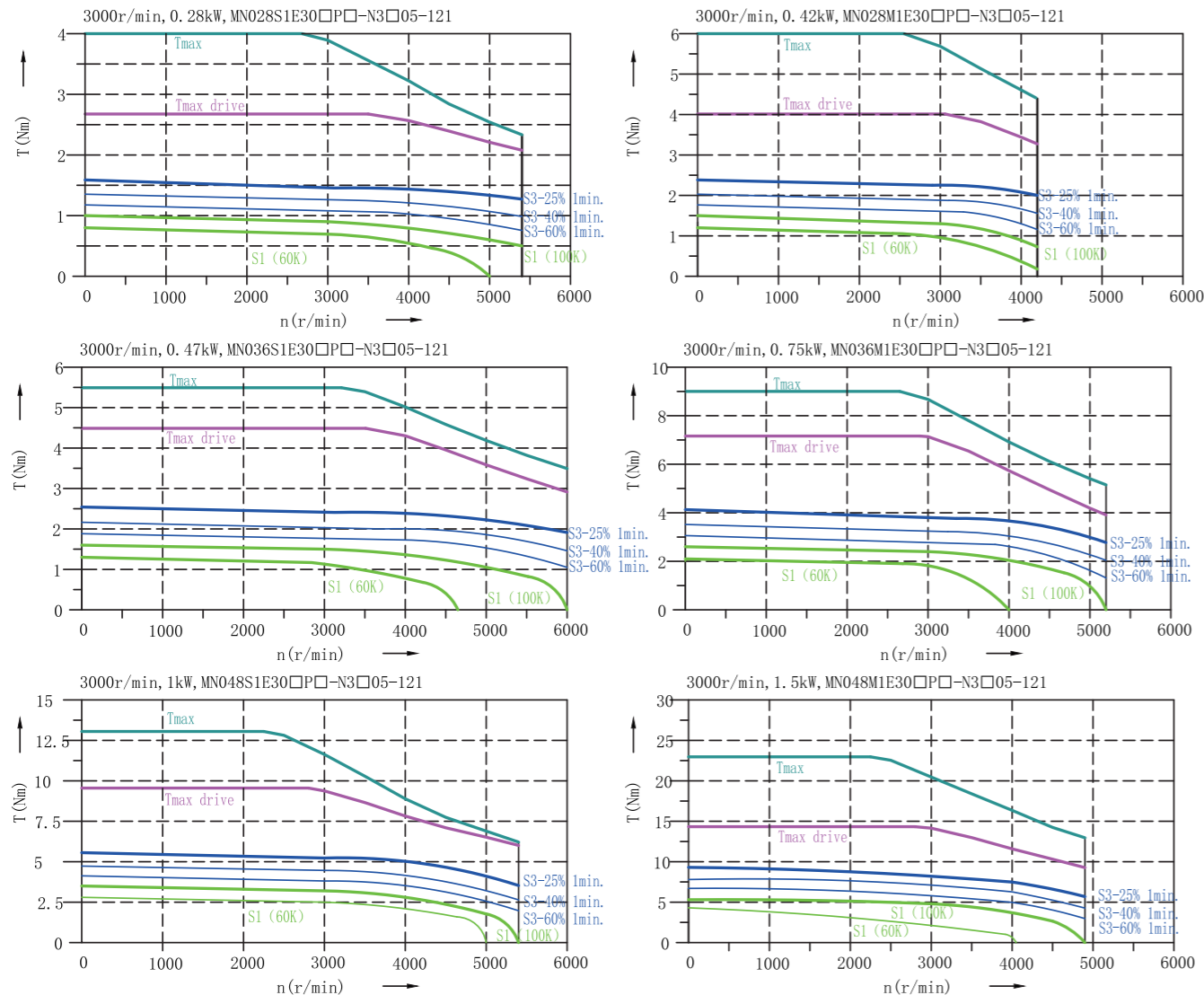
机座号028、036和048伺服马达参数、外形尺寸以及特性曲线

Frame size 028、036 and 048 servo motor parameters, dimensions and characteristic curve

马达型号	Motor Model	MN028S1E30 □P□-N3□ 05-121	MN028M1E30 □P□-N3□ 05-121	MN036S1E30 □P□-N3□ 05-121	MN036M1E30 □P□-N3□ 05-121	MN048S1E30 □P□-N3□ 05-121	MN048M1E30 □P□-N3□ 05-121
额定转速 $n_N$ (r/min)	Rated speed $n_N$ (r/min)	3000	3000	3000	3000	3000	3000
额定功率 $P_{IN}$ (kW)	Rated power $P_{IN}$ (kW)	0.28	0.42	0.47	0.75	1	1.5
额定电流 $I_N$ (100K)(A)	Rated current $I_N$ (100K)(A)	0.9	1	1.15	1.6	2.2	3
额定转矩 $T_N$ (100K)(N.m)	Rated torque $T_N$ (100K)(N.m)	0.9	1.3	1.5	2.4	3.2	4.8
静止电流 $I_0$ (A)	Static current $I_0$ (A)	1	1.2	1.3	1.8	2.5	3.4
静止转矩 $T_0$ (N.m)	Static torque $T_0$ (N.m)	1	1.5	1.6	2.6	3.5	5.3
最大转速 $n_{max\ drive}$ (r/min)	Maximum speed $n_{max\ drive}$ (r/min)	5400	4200	6000	5200	5400	4900
最大电流 $I_{max\ drive}$ (A)	Maximum current $I_{max\ drive}$ (A)	2.7	3	3.45	4.8	6.6	9
最大转矩 $T_{max\ drive}$ (N.m)	Maximum torque $T_{max\ drive}$ (N.m)	2.7	3.9	4.5	7.2	9.6	14.4
极限电流 $I_{max}$ (A)	Limit current $I_{max}$ (A)	4	4.8	4.5	6.2	9.3	14.8
极限转矩 $T_{max}$ (N.m)	Limit torque $T_{max}$ (N.m)	4	6	5.5	9	13	23
转动惯量 $J$ ( $10^{-4}$ kg.m <sup>2</sup> )	Moment of inertia $J$ ( $10^{-4}$ kg.m <sup>2</sup> )	0.15(0.17)	0.25(0.27)	0.74(0.77)	1.41(1.44)	2.53(2.76)	4.85(5.08)

注：括号内为带制动器的数据

Note: The data in parentheses are with brake



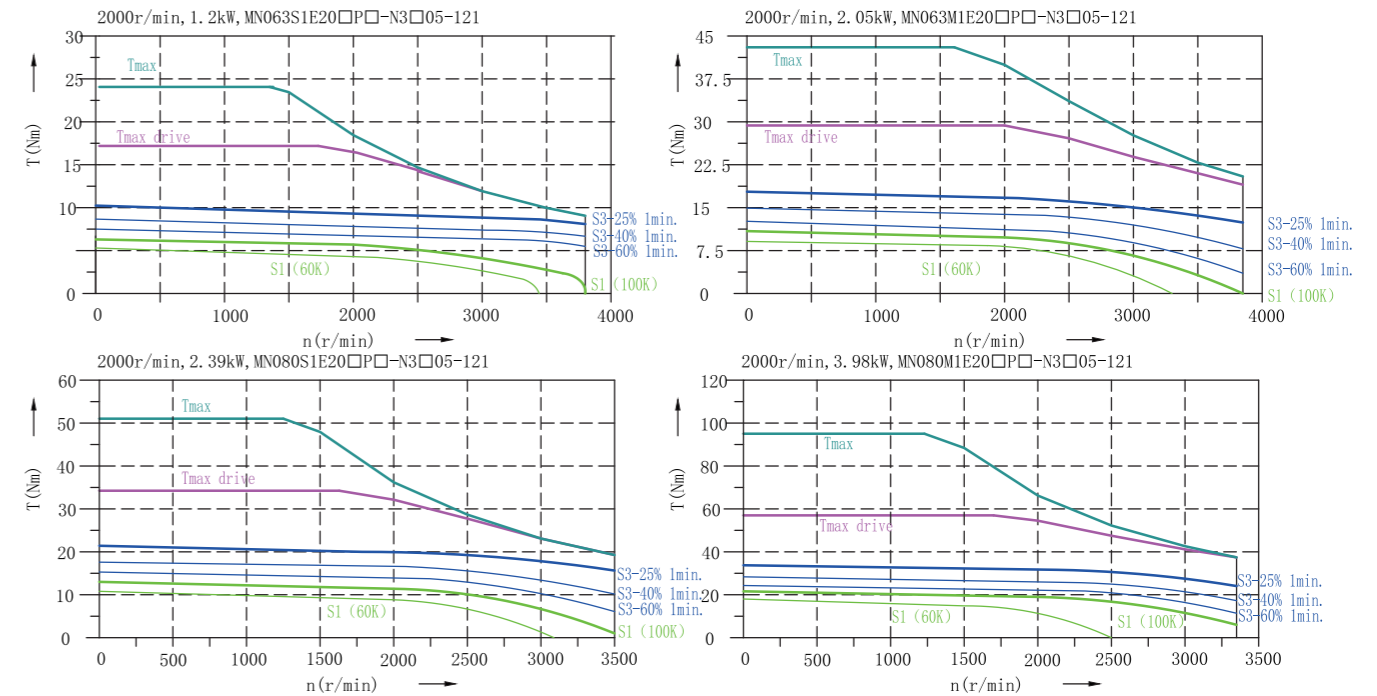
机座号063和080伺服马达参数、外形尺寸以及特性曲线

Frame size 063 and 080 servo motor parameters, dimensions and characteristic curve

马达型号	Motor Model	MN063S1E20□P □-N3□05-121	MN063M1E20□P □-N3□05-121	MN080S1E20□P □-N3□05-121	MN080M1E20□P □-N3□05-121
额定转速 $n_N$ (r/min)	Rated speed $n_N$ (r/min)	2000	2000	2000	2000
额定功率 $P_{IN}$ (kW)	Rated power $P_{IN}$ (kW)	1.2	2.05	2.39	3.98
额定电流 $I_N$ (100K)(A)	Rated current $I_N$ (100K)(A)	2.8	4.6	5	8.1
额定转矩 $T_N$ (100K)(N.m)	Rated torque $T_N$ (100K)(N.m)	5.7	9.8	11.4	19
静止电流 $I_0$ (A)	Static current $I_0$ (A)	3.1	5.1	5.7	9.2
静止转矩 $T_0$ (N.m)	Static torque $T_0$ (N.m)	6.3	10.9	13	21.6
最大转速 $n_{max\ drive}$ (r/min)	Maximum speed $n_{max\ drive}$ (r/min)	3800	3850	3500	3350
最大电流 $I_{max\ drive}$ (A)	Maximum current $I_{max\ drive}$ (A)	8.4	13.8	15	24.3
最大转矩 $T_{max\ drive}$ (N.m)	Maximum torque $T_{max\ drive}$ (N.m)	17.1	29.4	34.2	57
极限电流 $I_{max}$ (A)	Limit current $I_{max}$ (A)	11.8	20.1	22.4	40.5
极限转矩 $T_{max}$ (N.m)	Limit torque $T_{max}$ (N.m)	24	43	51	95
转动惯量 $J$ ( $10^{-4}$ kg.m <sup>2</sup> )	Moment of inertia $J$ ( $10^{-4}$ kg.m <sup>2</sup> )	7.36(7.57)	14.09(14.31)	25.49(25.59)	48.89(50.08)

注：括号内为带制动器的数据

Note: The data in parentheses are with brake



### AN通用型伺服驱动器 14 伺服驱动器概述

AN系列伺服驱动器是支持EtherCAT工业以太网的通用型伺服驱动器,支持STO安全转矩关断功能,配合MN通用型伺服马达,在不降低控制性能的同时,可为伺服系统提供更加优化的成本配置。



### AN general servo drive 14 Preface

The AN series servo drive is a general servo drive that supports EtherCAT industrial Ethernet communication protocol. It features STO (Safe Torque Off) safety torque shutdown function, which means that the torque output of the servo system can be safely stopped when needed, ensuring the safety of operators and equipment. When paired with MN universal servo motors, the AN series servo drive can provide a more optimized cost configuration for servo systems without compromising control performance, making it particularly attractive for applications that are cost-sensitive yet require high performance.

#### 14.1 伺服驱动器型号表示方法

##### 通用型伺服驱动器

##### 电压等级

B = 400VAC

##### 输入相数

3=3相

##### 功率代号

A75 = 0.75kW

B15 = 1.5kW

B30 = 3.0kW

##### 版本类型

S=标准型驱动器

##### 通讯类型

EC=EtherCAT通讯

##### General servo drive

##### Voltage level

B = 400VAC

##### Input phase

3=3 phase

##### Power

A75 = 0.75kW

B15 = 1.5kW

B30 = 3.0kW

##### Version

S=Standard type drive

##### Communication type

EC=EtherCAT Communication

#### 14.1 Model indication method

AN - B 3 B15 - S - EC

#### 14.2 伺服驱动器订货数据

380...480V 3AC输入		380...480V 3AC input		外形尺寸 Dimensions	型号 Order number
额定数据 Rated data		额定功率(kW)	额定电流(A)		
0.75	1.9	0.75	1.9	N1	AN-B3A75-S-EC
1.5	5.3	1.5	5.3	N1	AN-B3B15-S-EC
3	10.53	3	10.53	N2	AN-B3B30-S-EC

#### 14.3 伺服驱动器通用技术数据

#### 14.3 General data of AN general servo drive

参数 Parameter	描述 Description
过载能力 Typical inverter load cycles	
电磁兼容性 Electromagnetic compatibility	符合 IEC 61800-3 According to IEC 61800-3
<b>环境条件 Ambient condition</b>	
运行环境 Operating environment	室内(无阳光直射)、无腐蚀性气体、易燃气体、油气或灰尘 In door(no direct sunlight), without corrosive gases, flammable gases, dust
环境温度 Relative humidity	运行 Operating -20℃~+40℃:无功率降额, +40℃~+55℃:有功功率降额 -20℃~+40℃:without current derating, +40℃~+55℃:with current derating 
存储 Storage	-40℃ ~ +70℃ -40℃ ~ +70℃
环境湿度 Relative humidity	< 95% (无凝露) < 95% (without ripping water)
海拔 Installation altitude	
振动 vibration	符合 IEC 60068-2-6 10Hz~58Hz:0.075mm偏转, 58Hz~200Hz:1g振动 According to IEC 60068-2-6 10Hz~58Hz:0.075mm deflection, 58Hz~200Hz:1g vibration
冲击 impact	符合 IEC60068-2-27 峰值加速度:5g/0ms及15g/11ms, 冲击数量:每方向上3个轴6次冲击, 冲击持续时间:1s According to IEC60068-2-27 Peak acceleration:5g/0ms and 15g/11ms, impact quantity:six impacts on 3 axes in each direction, impact duration:1s
污染等级 Pollution	等级2 Suitable for environments with degree of pollution 2
噪音排放 Noise intensity	<75dB
防护等级 Protection level	IP20
盐雾 Salt mist	符合 IEC60068-2-11 According to IEC60068-2-11
<b>输入输出信号 Input and output signals</b>	
数字量输入信号 Digital input signal	5路公共端子COM的DI 电气隔离, 支持Source和Sink模式, 最大电压:DC30V DI of 5-way common terminal COM Electrical isolation, supports Source and Sink modes, maximum voltage: DC 30V
数字量输出信号 Digital output signal	"1"信号电压:>15V, "0"信号电压:<5V, 24V典型电流:4mA 3路开集电极DO 最大电压:DC30V, 最大电流:DC50mA "1" Signal voltage:>15V, "0" Signal voltage:<5V, 24V Typical current: 4mA 3-way open collector DO Maximum voltage: DC30V, maximum current: DC50mA
LED显示功能 LED display function	主电源带电指示, 5位LED显示 Main power supply live indication, 5-digit LED display
调试 Debugging	通过USB调试参数 Debugging parameters through USB

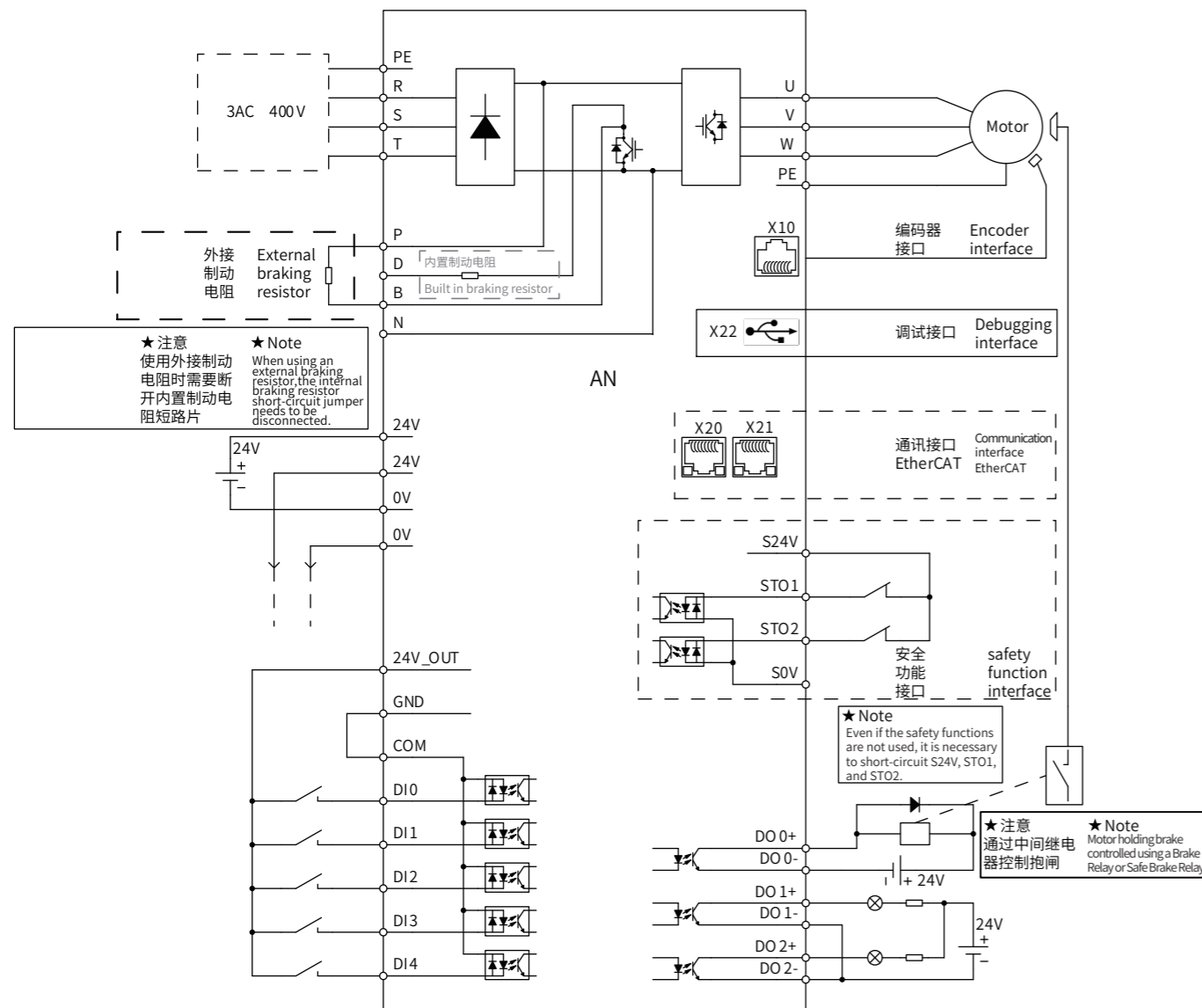
14.4 伺服驱动器特定技术数据

14.4 Technical data for servo drives

AN系列伺服驱动器		AN series servo drive		0.75kW	1.5kW	3kW
控制电源	Control power supply	输入电压	Input voltage	24VDC, ±10%		
		输入电流	Input current	1.5A max		
主电源	Main power supply	电压	Voltage	3AC 380V ~ 480VAC, ±10%		
		频率	Frequency	47Hz ~ 63Hz		
输入电流 (A)	Input current (A)			1.6	4.5	10.5
连续输出电流 (A)	Continuous output current (A)			1.9	5.3	10.53
瞬时最大输出电流 (A)	Instantaneous maximum output current (A)			5.7	15.9	31.59
冷却方式	Cooling method	Fan cooling				
冷却风量 (CFM)	Cooling Air Volume (CFM)			12.26	12.26	36.1
制动电阻	Braking resistor	Built in(100Ω/80W)	Built in(100Ω/80W)	Built in(50Ω/80W)		
短路电流	Short-circuit current	Maximum short-circuit current ≤ 65kA				
尺寸 (宽x高x深, mm)	Dimensions (width x height x depth, mm)	57x179.5x186.4	57x179.5x186.4	80x179.5x196.4		
重量 (kg)	Weight (kg)	1.3	1.3	1.7		

14.5 伺服驱动器端子配线图

14.5 Servo drive terminal connection



14.6 接口端子信号定义

14.6 Interface signal definitions

控制电源端子:采用带固定螺丝的脱落式端子,引脚间距3.5mm,线径范围0.5~1.5mm<sup>2</sup>。

Control power terminal: Using detachable terminals with fixed screws, pin spacing 3.5mm, wire diameter range 0.5~1.5mm<sup>2</sup>.

端子序号 Terminal number	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X1	1	24V	输入24V电源正
	2	24V	Positive terminal of 24V input power supply
	3	0V	输入24V电源负
	4	0V	Negative terminal of 24V input power supply

主电源进线端子:采用带固定卡扣的脱落式端子,引脚间距7.62mm,线径范围0.2~2.5mm<sup>2</sup>。

Main power input terminal: Utilizes detachable terminals with fixed latch, pin spacing of 7.62mm, wire diameter range of 0.2~2.5mm<sup>2</sup>.

端子序号 Terminal number	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X2	1	PE	接地
	2	R	连接三相电源
	3	S	
	4	T	
	5	P	直流母线正
	6	D	使用内置制动电阻时,短接P和D
	7	B	连接外置制动电阻时,先取掉接于P和D的短接片,再将制动电阻接于P和R
	8	N	直流母线负

电机端子:采用带固定卡扣的脱落式端子,引脚间距7.62mm,线径范围0.2~2.5mm<sup>2</sup>。

Motor terminals: Utilizes detachable terminals with fixed latch, pin spacing of 7.62mm, wire diameter range of 0.2~2.5mm<sup>2</sup>.

端子序号 Terminal number	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X3	1	U	连接伺服电机进线
	2	V	
	3	W	
	4	PE	接地

安全功能端子:采用带固定螺丝的脱落式端子,引脚间距3.5mm,线径范围0.5~1.5mm<sup>2</sup>。

Safety function terminals: Utilizes detachable terminals with fixed screws, pin spacing of 3.5mm, wire diameter range of 0.5~1.5mm<sup>2</sup>.

端子序号 Terminal number	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X4	1	S0V	安全功能24V电源
	2	S24V	
	3	STO1	两路安全功能输入
	4	STO2	

数字量输入输出端子:采用  
D-SUB15端子。

Digital input/output terminals:  
Utilizes D-SUB15 connectors.

端子序号 Terminal number	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X5	10	DI0	数字量 输入 Digital input
	9	DI1	
	8	DI2	
	7	DI3	
	11	DI4	
	13	COM	输出24V 电源 24V output power supply
	14	24V_OUT	
	15	GND	数字量 输出 Digital output
	1	D00+	
	6	D00 -	
	3	D01+	
	2	D01 -	
	5	D02+	
	4	D02 -	

编码器端子:采用RJ45母座。

Encoder terminals: Utilizes RJ45  
female socket.

端子位置 Terminal number	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X10	1	TEMP+	电机温度 侦测 Motor temperature detection
	2	TEMP -	
	3	-	编码器 数据信号 Encoder data signal
	4	RS485B	
	5	RS485A	
	6	-	编码器 5V电源 Encoder 5V power supply
	7	5V	
	8	GND	

调试端子:采用标准MINI USB  
接口,端子序号为X22。

Debugging terminals: Utilizes  
standard MINI USB interface, terminal  
number is X22.

通讯端子:采用RJ45母座。

Communication terminals: Utilizes  
RJ45 female socket.

端子编码 Encoder 5V power supply	引脚序号 Pin number	信号名称 Signal name	功能定义 Function definition
X20, X21	1	TD+	数据发送+
	2	TD -	数据发送-
	3	RD+	数据接收+
	4	-	-
	5	-	-
	6	RD -	数据接收-
	7	-	-
	8	-	-

X20: EtherCAT IN,X21:  
EtherCAT OUT

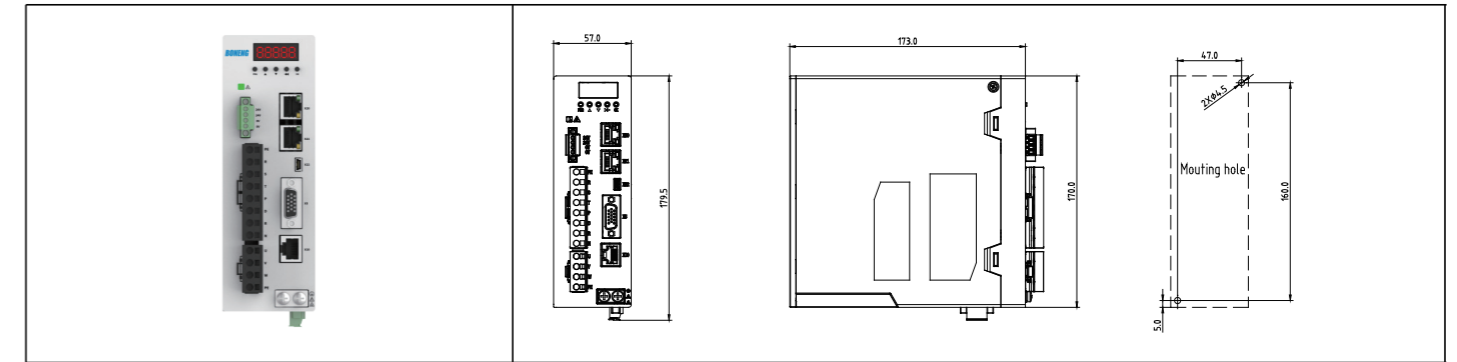
X20: EtherCAT IN,X21:  
EtherCAT OUT

### 15 整机外形及安装尺寸图

### 15 Overall appearance and installation dimension diagram

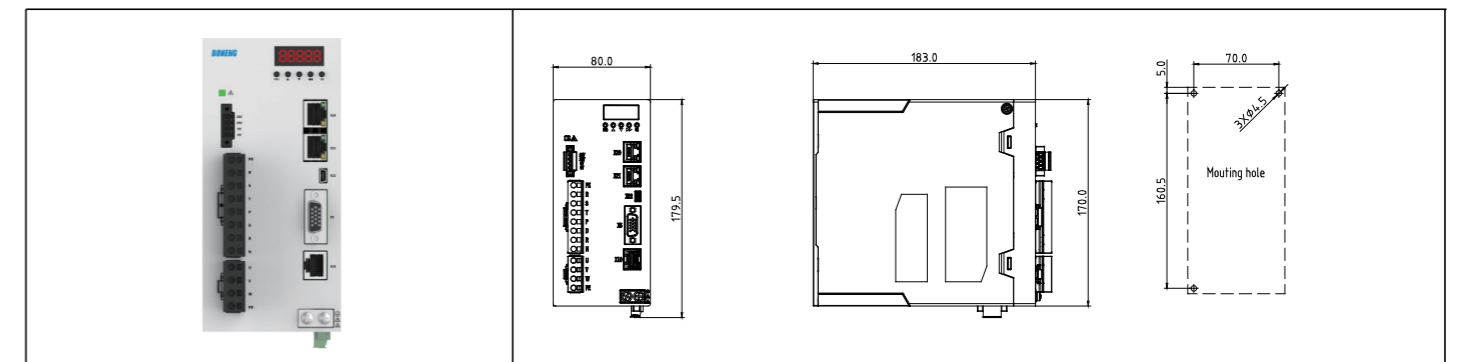
整机外形图及安装尺寸图,  
N1-N2功率范围,单位: mm  
N1(0.75kW-1.5kW)

Overall appearance diagram and  
installation dimension diagram,  
N1~N2 power range, unit: mm  
N1(0.75kW-1.5kW)



### N2(3.0kW)

### N2(3.0kW)



## 16 可选件

### 16.1 进线电抗器

当系统的故障率高时,需要加装进线电抗器以保护驱动器不受过大的谐波电流的干扰,改善驱动器的输入侧功率因数;防止过载,并将进线谐波限制在允许的值内,以确保驱动器达到期望的使用寿命。400V 50/60Hz AN系列驱动器可选的进线电抗器推荐型号如下表:

框架	Dimensions	伺服驱动器型号	Order number	额定电流 Rated current	电感 Inductance	订货号	Ordering Data
				(A)	(mH)		
N1		AN - B3A75-S-EC		2.3	2.8	A1 - H12-TB280	
		AN - B3B15-S-EC		6.3	2	A1 - H12-TB200	
N2		AN - B3B30-S-EC		14.7	0.93	A1 - H12-TA930	

### 16.2 进线滤波器

进线滤波器的作用是抑制驱动器通过输入电源线所传输到公共电网中的电磁干扰,同时也衰减从电源线进入驱动器的干扰;在安装时请尽量靠近驱动器的输入端子侧进行安装,请使用驱动器专用的进线滤波器。400V 50/60Hz AN系列驱动器可选的进线滤波器推荐型号如下表:

框架	Dimensions	伺服驱动器型号	Order number	额定电流 Rated current	订货号	Ordering Data
				(A)		
N1		AN - B3A75-S-EC		10	A1 - H11-A-C10	
		AN - B3B15-S-EC		10	A1 - H11-A-C10	
N2		AN - B3B30-S-EC		20	A1 - H11-A-C20	

## 16 Optional parts

### 16.1 Incoming Reactor

When the failure rate of the system is high, it is necessary to install an incoming reactor to protect the driver from the interference of large harmonic currents and improve the input power factor of the driver; Prevent overloading and limit incoming harmonics within allowable values to ensure that the driver reaches the expected service life. The recommended models of incoming reactors for 400V50/60Hz AN series drives are as follows:

### 16.2 Incoming filter

The function of the incoming filter is to suppress the electromagnetic interference transmitted by the driver through the input power line to the public power grid, while also attenuating the interference entering the driver from the power line; When installing, please try to install it as close to the input terminal side of the driver as possible, and use a dedicated input filter for the driver. The recommended models for optional incoming line filters for 400V 50/60Hz AN series drives are shown in the table below:

### 16.3 制动电阻

制动电阻用于使大转动惯量的负载迅速制动。在电机和负载制动时,动能转换成的再生电能会返回到驱动器中,直流母线电压因此抬高,驱动器将这些再生的能量几乎全部消耗在制动电阻上;400V 50/60Hz AN系列驱动器可选的制动电阻推荐规格如下:

### 16.3 Braking resistor

The braking resistor is used to quickly brake a load with a large moment of inertia. During motor and load braking, the regenerated energy converted from kinetic energy will return to the driver, causing the DC bus voltage to rise. The driver will consume almost all of this regenerated energy on the braking resistor; The recommended specifications for the optional braking resistor of the 400V50/60Hz AN series driver are as follows:

驱动器		允许的最小阻值	2%ED的非频繁制动应用场合			20%ED的频繁制动应用场合			
框架	伺服驱动器型号		功率(kW)	阻值(Ω)	内置制动电阻	推荐值		博能订货型号	
Servo driver model		ALLOW minimum resistance value	2% ED for non frequent braking applications			20% ED for frequent braking applications			
Dimensions	Order number		Power (KW)	Resistance value(Ω)	Built in braking resistor	Recommended value		Boneng ordering model	
					Power (KW)	Resistance value(Ω)	Ordering Data	Equivalent breaking resistance	
N1	AN-B3A75-S-EC	100 Ω	0.08	100	80W 100 Ω	0.3	240	A1-H02-A40-K-D24	400W 240 Ω
	AN-B3B15-S-EC	100 Ω	0.08	100	80W 100 Ω	0.6	130	A1-H02-A80-K-D13	800W 130 Ω
N2	AN-B3B30-S-EC	50 Ω	0.08	50	80W 50 Ω	1.2	75	A1-H02-B12-K-C75	1200W 75 Ω

制动电阻接线注意事项:

- 使用外接制动电阻时请将P、D之间短接线拆除,否则会导致制动管过流损坏;
- 请勿将外接制动电阻直接接到母线正负极,否则会导致炸机和跳闸;
- 请勿小于最小允许阻值,否则会导致过流报警或损坏驱动器;

Precautions for brake resistor wiring:

- When using an external brake resistor, please remove the short circuit between P and D, otherwise it may cause overcurrent damage to the brake IGBT;
- Do not directly connect the external braking resistor to the positive and negative poles of the bus, otherwise it may cause the machine to explode and trip;
- Do not exceed the minimum allowable resistance value, otherwise it may cause over-current alarm or damage to the drive;

控制层 CONTROL

驱动层 DRIVE

马达层 MOTOR

齿轮层 GEAR

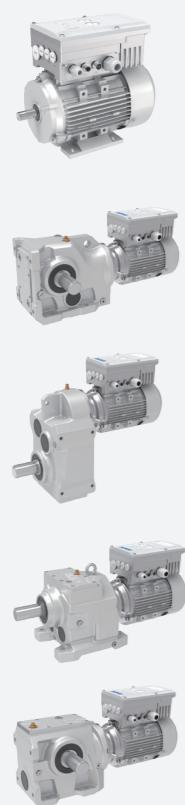


X3010 PLC  
EtherCAT&Modbus  
24VDC



X3050 运动控制器  
Motion Controller  
EtherCAT&Modbus  
24VDC

C/F/K/S-M  
\* . . . D  
马达分布式  
变频驱动器  
Integrated  
Gearmotor  
Drive



EtherCAT&  
Modbus  
380~480VAC  
0.25~3kW  
i=4~355

AM 变频驱动器  
Variable Frequency Drive



Modbus  
380~480VAC  
0.75~5.5kW

A1 变频驱动器  
Variable Frequency Drive



Modbus/CANopen  
/PROFINET  
380~480VAC  
0.75~250kW

C/F/K/S/R  
齿轮马达  
Gearmotor



380~480VAC  
0.09~200kW  
i=1.25~500

MP/MU/MA  
三相交流异步马达  
Asynchronous Motor



380~480VAC  
0.09~90kW  
960/1450r/min  
1160/1750r/min

HB/BE/HK  
齿轮箱  
Gearbox



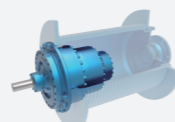
4.2~15775kW  
i=5.6~450

P/PK  
行星齿轮箱  
Planetary  
Gearbox



0.4~14000kW  
i=25~4000

PW  
卷扬齿轮箱  
Planetary  
Winch  
Gearbox



1~1810kW  
i=13~940

PS  
回转齿轮箱  
Planetary  
Slewing  
Gearbox



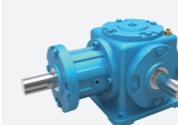
1~1626kW  
i=14~947

J/JB  
升降机  
Jack



0.35~22.63kW  
i=5~34

T  
转向箱  
Spiral Bevel  
Gearbox



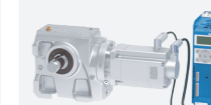
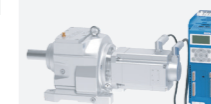
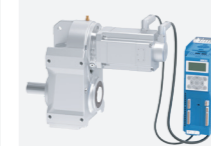
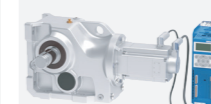
0.08~303kW  
i=1:1~3:1

MX&AX  
伺服马达&伺服  
驱动器  
Permanent  
Magnet  
Servo Motor  
& Servo Drive



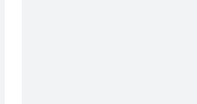
EtherCAT/  
PROFINET  
380~480VAC  
0.28~14kW  
1500/2000r/min  
3000/4500r/min

C/F/K/S-MX  
& AX 齿轮伺  
服马达&伺  
服驱动器  
Servo  
Gearmotor  
& Servo Drive



EtherCAT/  
PROFINET  
380~480VAC  
0.28~14kW  
i=1.25~315

PX-MX&AX  
行星伺服马达  
& 伺服驱动器  
Planetary  
Precision Gear  
Servo Motor  
& Servo Drive



EtherCAT/  
PROFINET  
380~480VAC  
0.38~14kW  
i=3~100

PN-MN&AN  
行星伺服马达  
& 伺服驱动器  
Planetary  
Precision Gear  
Servo Motor  
& Servo Drive



EtherCAT  
380~480VAC  
0.28~5.03kW  
i=3~100

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河南省开封市宋城路四大街11号 海神机械院内五号厂房 电话: 0371-23335238	5th Workshop, Haishen Machinery, No.11, Fourth Street, Songcheng Road,New District, Kaifeng City, Henan Province, China TEL: 0371-23335238
<b>博能传动(长沙)有限公司</b>	<b>BONENG TRANSMISSION(CHANGSHA)CO.,LTD.</b>
湖南省长沙市望城经济开发区 普瑞大道1288号 电话: 0731-88386958	No. 1288 Puri Avenue, Wangcheng Economic Development Zone, Changsha City, Hunan Province, China TEL: 0731-88386958
<b>博能传动设备(成都)有限公司</b>	<b>BONENG TRANSMISSION EQUIPMENT(CHENGDU) CO., LTD.</b>
四川省成都市金牛区金牛坝路9号5栋 向荣中心A座7楼-703 电话: 028-87741100	703, 7th Floor, Block A, Xiangrong Center, Building 5, No. 9 Jinniuba Road, Jinniu District, Chengdu City, Sichuan Province, China TEL: 028-87741100
<b>博能传动(肇庆)有限公司</b>	<b>BONENG TRANSMISSION(ZHAOQING)CO.,LTD.</b>
广东省肇庆市鼎湖区肇庆新区 科创大道7号平谦国际现代产业园 一期A12北厂房 电话: 0757-86719757	No. 7 Science and Technology Innovation Avenue, Zhaoqing New Area, Dinghu District, Zhaoqing City, Guangdong Province, China TEL: 0757-86719757
<b>博能传动(苏州)有限公司</b>	<b>BONENG TRANSMISSION(SUZHOU)CO.,LTD.</b>
江苏省苏州市相城区如元路100号 电话: 0512-66189662	No. 100, Ruyuan Road, Xiangcheng District, Suzhou, Jiangsu Province, China TEL: 0512-66189662

<b>博能传动(美国)有限公司</b>	<b>BONENG TRANSMISSION(USA)LLC.</b>
1250 E 222nd Euclid, OH 44117, United Staes TEL: 1-216-618-0138 TEL: 1-216-618-0496 TEL: 1-216-618-3099	1250 E 222nd Euclid, OH 44117, United Staes TEL: 1-216-618-0138 TEL: 1-216-618-0496 TEL: 1-216-618-3099
<b>博能传动(印度)有限公司</b>	<b>BONENG TRANSMISSION(INDIA)PVT.LTD</b>
Plot No. E-10/3, MIDC sinnar (Malegaon) Industrial Area, Nashik, 422123, Maharashtra, India. TEL:+91-11- 4507 6293 (DELHI) TEL:+91-22-2781 3385 (MUMBAI)	Plot No. E-10/3, MIDC sinnar (Malegaon) Industrial Area, Nashik, 422123, Maharashtra, India. TEL:+91-11- 4507 6293 (DELHI) TEL:+91-22-2781 3385 (MUMBAI)