

Explanation of terminology

1 Nominal voltage

is the applied voltage between two powered phases in block commutation.

2 No load speed

is the speed at which the unloaded motor runs with the nominal voltage applied. It is approximately proportional to the applied voltage.

3 No load current

This is the typical current that the unloaded motor draws when operating at nominal voltage. It increases with rising speed owing to bearing friction and iron losses. No load friction depends heavily on temperature. It decreases in extended operation and increases at lower temperatures.

4 Nominal speed

is the speed set for operation at nominal voltage and nominal torque at a motor temperature of 25° C.

5 Nominal torque

is the torque generated for operation at nominal voltage and nominal current at a motor temperature of 25° C. It is at the limit of the motor's continuous operation range. Higher torques heat up the winding too much.

6 Nominal current

is the current in the active phase in block commutation that generates the nominal torque at the given nominal speed (= max. permissible continuous load current).

7 Stall torque

is the torque produced by the motor when at standstill. Rising motor temperatures reduce stall torque.

8 Stall current

is the quotient from nominal voltage and the motor's terminal resistance. Stall current is equivalent to stall torque.

9 Max. efficiency

is the optimal relationship between input and output power at nominal voltage. It also doesn't always denote the optimal operating point.

10 Terminal resistance phase to phase

is determined through the resistance at 25° C between two connections.

11 Terminal inductance phase to phase

is the winding inductance between two connections. It is measured at 1 kHz, sinusoidal.

12 Torque constant

This may also be referred to as «specific torque» and represents the quotient from generated torque and applicable current.

13 Speed constant

indicates the theoretical no load speed per volt of applied voltage, disregarding friction losses.

14 Speed/torque gradient

The speed/torque gradient is an indicator of the motor's performance. The smaller the value, the more powerful the motor and consequently the less motor speed varies with load variations. It is based on the quotient of ideal no load speed and ideal stall torque (tolerance $\pm 20\%$).

15 Mechanical time constant

is the time required for the rotor to accelerate from standstill to 63% of its no load speed.

16 Rotor moment of inertia

is the mass moment of inertia of the rotor, based on the axis of rotation.

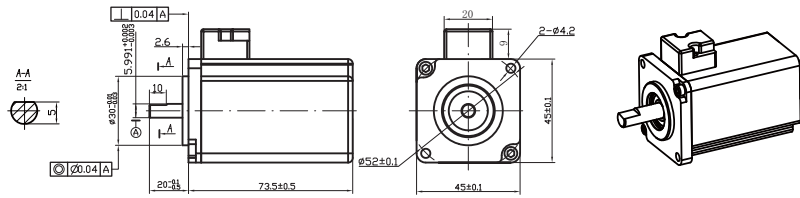


直流无刷电机(空心杯) BLDC MOTOR (CORELESS)

无铁芯，设计独特的高精度线圈，气隙小，高性能稀土类磁石，高功率密度，高转矩，高效率，无转矩波动，出色的体积功率比，重量轻，运转流畅，快速响应，无齿槽效应，启动转矩低，调速范围宽，散热效果好，发热量低，温升小。

Non iron core , the unique design of high-precision coil , thin air gap , high performance rare earth magnet , high power density , high torque , high efficiency , no torque fluctuation , excellent volume power ratio , smooth running , light weight , quick response , no cogging , low starting torque , wide speed range , good heat dissipation effect , low heat , low temperature rise .

BMP45 | 无刷 Brushless

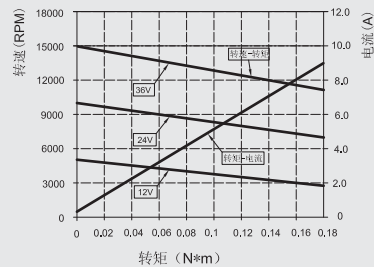


电机参数 Motor Data

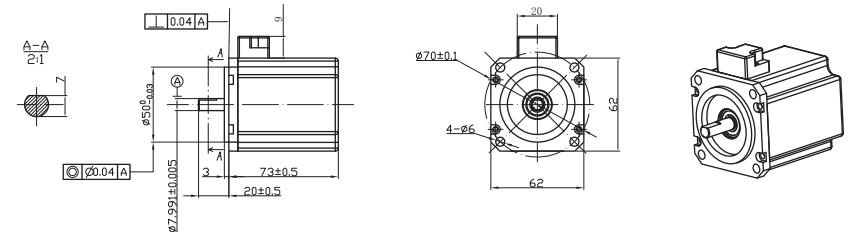
电机型号	motor model		BMP4512	BMP4524	BMP4536		
1	空载电压	no load voltage	Vnl	12	24	36	Volts
2	空载转速	no load speed	Wnl	5000	10000	15000	rpm
3	空载电流	no load current	Inl	0.4	0.8	1.2	Amps
4	额定转矩	rated torque	Tc	0.18	0.16	0.14	Nm
5	额定转速	rated speed	Wc	3000	7500	12000	rpm
6	额定电流	rated current	Ic	8.5	7.5	6.6	amps
7	额定电压	rated voltage	Vc	12	24	36	VDC
8	输出功率	output power	Pc	57	126	176	watts
9	马达常数	motor constant	Km	0.0355	0.0355	0.0355	Nm/sqrt (W)
10	转矩常数	torque constant	Kt	0.0233	0.0233	0.0233	Nm/amp
11	诱起电压常数	back EMF constant	Kv	0.0233	0.0233	0.0233	V/rad/s
			Ke	416	416	416	rpm/volt
12	端子间电阻	terminal resistance	Rt	0.43	0.43	0.43	ohms (Ω)
13	齿槽效应和滞后转矩	cogging and hysteresis torque	Tc Th	0	0	0	mNm
14	定子电感	terminal inductance	L	30	30	30	uH
15	机械时间常数	mechanical time constant	Tm	28	28	28	ms
16	电气时间常数	electrical time constant	Te	0.070	0.070	0.070	ms
17	马达重量	weight	Wt		0.52		kg
18	系统的最大效率	max efficiency	η	71	81	84	%
19	转子最高温度	max permissible rotor temperature	Temp 1		120		°C
20	最大输出功率	max output power	Pmax	74	230	435	W
21	接线定义	Terminal definitions	U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色				

曲线图 Graph

转矩-转速-电流
torque-speed-current



BMP62 | 无刷 Brushless

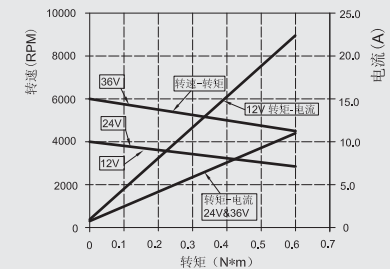


电机参数 Motor Data

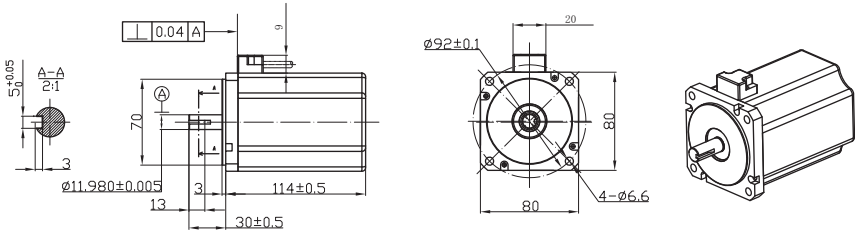
电机型号	motor model		BMP6212	BMP6224	BMP6236		
1	空载电压	no load voltage	V	12	24	36	volts
2	空载转速	no load speed	Wnl	4000	4000	6000	rpm
3	空载电流	no load current	Inl	1.2	0.6	0.9	Amps
4	额定电压	rated voltage	Vc	12	24	36	VDC
5	额定转矩	rated torque	Tc	0.6	0.6	0.6	Nm
6	额定转速	rated speed	Wc	3000	3000	4520	rpm
7	额定电流	rated current	Ic	22.8	11.4	11.4	amps
8	输出功率	output power	Pc	188	188	284	watts
9	马达常数	motor constant	Km	0.103	0.104	0.104	Nm/sqrt (W)
10	转矩常数	torque constant	Kt	0.029	0.058	0.058	Nm/amp
11	诱起电压常数	back EMF constant	Kv	0.029	0.058	0.058	V/rad/s
			Ke	329.3	164.6	164.6	rpm/volt
12	端子间电阻	terminal resistance	Rt	0.08	0.31	0.31	ohms (Ω)
13	齿槽效应和滞后转矩	cogging and hysteresis torque	Tc Th	0	0	0	mNm
14	定子电感	terminal inductance	L	9.0	35	35	uH
15	机械时间常数	mechanical time constant	Tm	18	18	18	ms
16	电气时间常数	electrical time constant	Te	0.114	0.114	0.114	ms
17	马达重量	weight of motor	Wt		0.83		kg
18	系统的最大效率	max efficiency	η	80	82	84	%
19	转子最高温度	max permissible rotor temperature	Temp 1		120		°C
20	最大输出功率	max output power	Pmax	300	330	710	W
21	接线定义	Terminal definitions	U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色				

曲线图 Graph

转矩-转速-电流
torque-speed-current



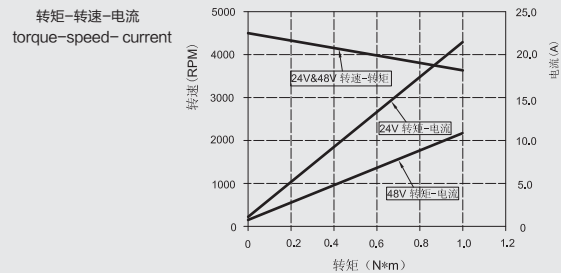
BMP80 | 无刷 Brushless



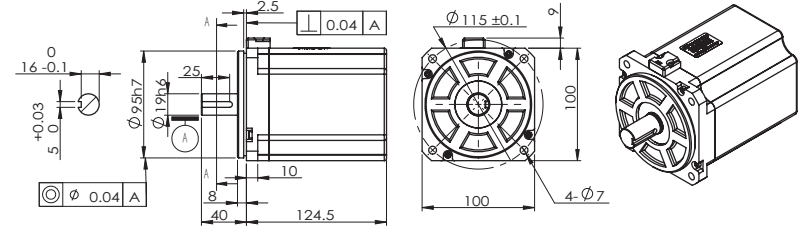
电机参数 Motor Data

电机型号 motor model		BMP8024	BMP8048	
1 空载电压 no load voltage	V	24	48	volts
2 空载转速 no load speed	Wnl	4500	4500	rpm
3 空载电流 no load current	Inl	1.8	0.8	Amps
4 额定电压 rated voltage	Vc	24	48	VDC
5 额定转矩 rated torque	Tc	1.0	1.0	Nm
6 额定转速 rated speed	Wc	3650	3650	rpm
7 额定电流 rated current	Ic	21.6	10.8	amps
8 输出功率 output power	Pc	382	382	watts
9 马达常数 motor constant	Km	0.180	0.183	Nm/sqrt (W)
10 转矩常数 torque constant	Kt	0.051	0.102	Nm/amp
11 诱起电压常数 back EMF constant	Kv	0.051	0.102	V/rad/s
	Ke	187.2	93.6	rpm/volt
12 端子间电阻 terminal resistance	Rt	0.08	0.31	ohms (Ω)
13 齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
14 定子电感 terminal inductance	L	12.6	50	uH
15 机械时间常数 mechanical time constant	Tm	20	20	ms
16 电气时间常数 electrical time constant	Te	0.158	0.161	ms
17 马达重量 weight	Wt	1.7	1.7	kg
18 系统的最大效率 max efficiency	η	82	85	%
19 转子最高温度 max permissible rotor temperature	Temp1	120	120	°C
20 最大输出功率 max output power	Pmax	1000	1100	°C
21 接线定义 terminal definitions		U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色		

曲线图 Graph



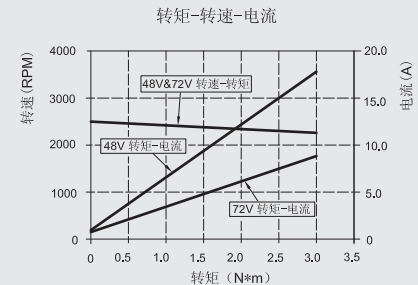
BMP100 | 无刷 Brushless



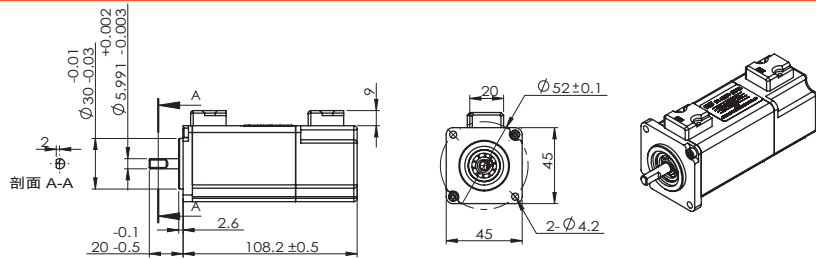
电机参数 Motor Data

电机型号 motor model		BMP10048	BMP10072	
1 空载电压 no load voltage	V	48	72	volts
2 空载转速 no load speed	Wnl	2500	3750	rpm
3 空载电流 no load current	Inl	1.4	1.8	Amps
4 额定电压 rated voltage	Vc	48	72	VDC
5 额定转矩 rated torque	Tc	2.5	2.5	Nm
6 额定转速 rated speed	Wc	2300	3450	rpm
7 额定电流 rated current	c	15.0	15	amps
8 输出功率 output pwr	Pc	602	900	watts
9 马达常数 motor constant	Km	0.382	0.382	Nm/sqrt (W)
10 转矩常数 torque constant	Kt	0.183	0.183	Nm/amp
11 诱起电压常数 back EMF constant	Kv	0.183	0.183	V/rad/s
	Ke	52.1	52.1	rpm/volt
12 端子间电阻 terminal resistance	Rt	0.24	0.24	ohms (Ω)
13 齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
14 定子电感 terminal inductance	L	48.5	18.5	uH
15 机械时间常数 mechanical time constant	Tm	24	24	ms
16 电气时间常数 electrical time constant	Te	0.202	0.202	ms
17 马达重量 weight	Wt	3.8	3.8	kg
18 系统的最大效率 max efficiency	η	86	86	%
19 转子最高温度 max permissible rotor temperature	Temp1	110	110	°C
20 最大输出功率 max output power	Pmax	1160	1890	W
21 接线定义 terminal definitions		U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色		

曲线图 Graph



SMP45 | 伺服 Servo

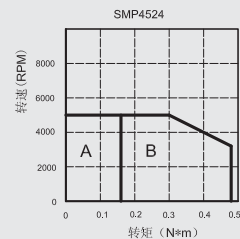
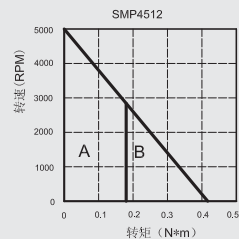


电机参数 Motor Data

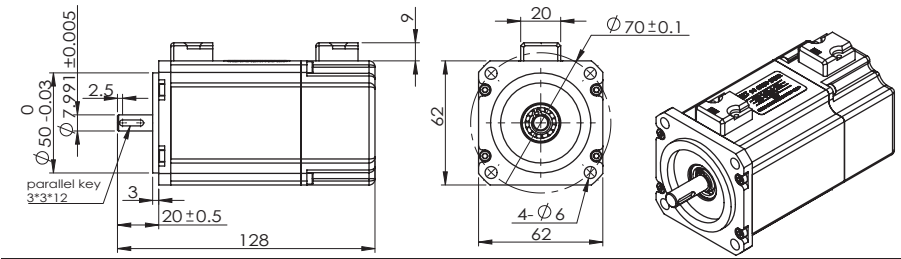
1	电机型号 motor model		SMP4512	SMP4524	
2	额定功率 rated power	PR	57	84	W
3	额定电压 rated voltage	VT	12	24	V
4	额定线电流 rated current	IR	8.5	7.5	A
5	瞬时最大电流 instantaneous maximum current	IP	20.0	22.5	A
6	额定转速 rated speed	NR	3000	5000	RPM
7	最高转速 maximum speed	NP	5000	5000	RPM
8	额定力矩 rated torque	TR	0.18	0.16	Nm
9	峰值力矩 peak torque	TP	0.42	0.48	Nm
10	力矩系数 torque constant	KT	0.0233		Nm/A
11	反电动势常数 back EMF constant	Ke	2.44		V/Krpm
12	转子惯量 rotor inertia	J	0.34		Kg*cm ²
13	额定角加速度 rated angular acceleration	Ar	4706		rad/s ²
14	线间电阻 terminal resistance	R	0.43		Ω
15	齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0		mNm
16	线圈电感 terminal inductance	L	30		uH
17	机械时间常数 mechanical time constant	Tm	33		ms
18	电气时间常数 electric time constant	Te	0.070		ms
19	极数 number of poles	2p	6		极
20	重量 weight	W	0.62		Kg
21	编码器可选 encoder options		增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver		
22	电机绝缘等级 motor insulation class		B级 class B		
23	防护等级 protection class		IP64(自然冷却) self cooling		
24	使用环境 ambient temperature		-20~+40°C		

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



SMP62 | 伺服 Servo

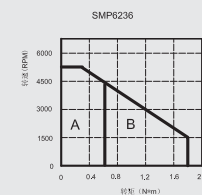
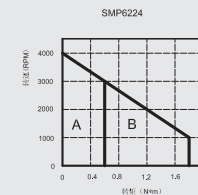
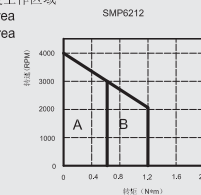


电机参数 Motor Data

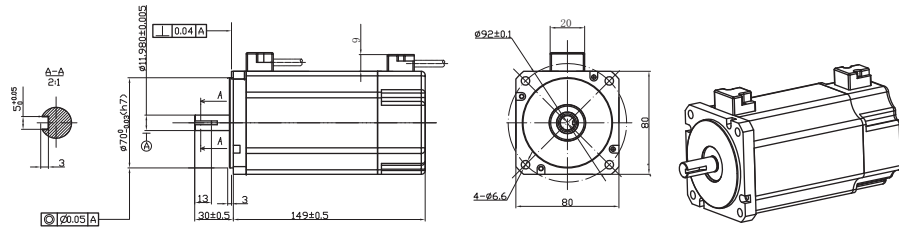
1	电机型号 motor model		SMP6212	SMP6224	SMP6236	
2	额定功率 rated power	PR	188	188	284	W
3	额定电压 rated voltage	VT	12	24	36	V
4	额定线电流 rated current	IR	22.8	11.4		A
5	瞬时最大电流 instantaneous maximum current	IP	45	35		A
6	额定转速 rated speed	NR	3000	3000	4520	RPM
7	最高转速 maximum speed	NP	4000	4000	5000	RPM
8	额定力矩 rated torque	TR	0.6	0.6		Nm
9	峰值力矩 peak torque	TP	1.2	1.8		Nm
10	力矩系数 torque constant	KT	0.029	0.058		Nm/A
11	反电动势常数 back EMF constant	Ke	3.03	6.07		V/Krpm
12	转子惯量 rotor inertia	J	1.98	1.98		Kg*cm ²
13	额定角加速度 rated angular acceleration	Ar	2626	2626		rad/s ²
14	线间电阻 terminal resistance	R	0.08	0.31		Ω
15	齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0		mNm
16	线圈电感 terminal inductance	L	9.0	35		uH
17	机械时间常数 mechanical time constant	Tm	22	22		ms
18	电气时间常数 electric time constant	Te	0.113	0.114		ms
19	极数 number of poles	2p	8	8		极
20	重量 weight	W	1.01	1.01		Kg
21	编码器可选 encoder options		增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver			
22	电机绝缘等级 motor insulation class		B级 class B			
23	防护等级 protection class		IP64(自然冷却) self cooling			
24	使用环境 ambient temperature		-20~+40°C			

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



SMP80 | 伺服 Servo

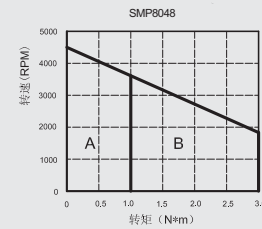
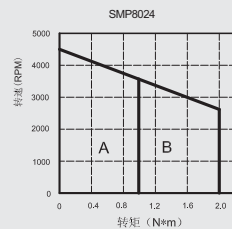


电机参数 Motor Data

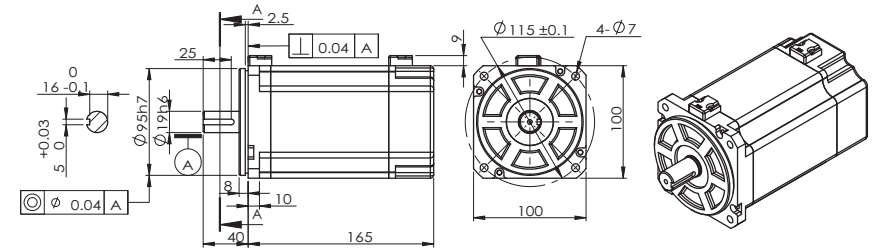
1	电机型号 motor model		SMP8024	SMP8048	
2	额定功率 rated power	PR	382	382	W
3	额定电压 rated voltage	VT	24	48	VDC
4	额定线电流 rated current	IR	21.6	10.8	A
5	瞬时最大电流 instantaneous maximum current	IP	44	32	A
6	额定转速 rated speed	NR	3650	3650	RPM
7	最高转速 maximum speed	NP	4500	4500	RPM
8	额定力矩 rated torque	TR	1.0	1.0	Nm
9	峰值力矩 peak torque	TP	2.0	3.0	Nm
10	力矩系数 torque constant	KT	0.051	0.102	Nm/A
11	反电动势常数 back EMF constant	Ke	5.34	10.7	V/Krpm
12	转子惯量 rotor inertia	J	6.05	6.05	Kg*cm ²
13	额定角加速度 rated angular acceleration	Ar	1488	1488	rad/s ²
14	线间电阻 terminal resistance	Ra	0.08	0.31	Ω
15	齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
16	线圈电感 terminal inductance	La	12.6	50	uH
17	机械时间常数 mechnica time constant	Tm	24	24	ms
18	电气时间常数 electric time constant	Te	0.158	0.161	ms
19	极数 number of poles	2p	8	8	极
20	重量 weight	W	2.05	2.05	Kg
21	编码器可选 encoder options	增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver			
22	电机绝缘等级 motor insulation class	B级 class B			
23	防护等级 protection class	IP64 (自然冷却) self cooling			
24	使用环境 ambient temperature	-20~+40℃			

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



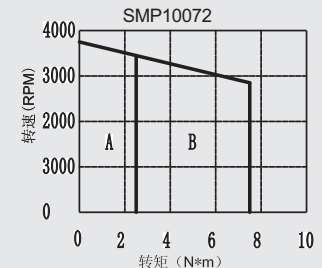
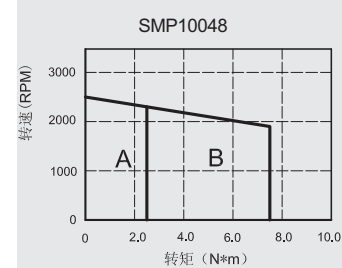
SMP100 | 伺服 Servo



电机参数 Motor Data

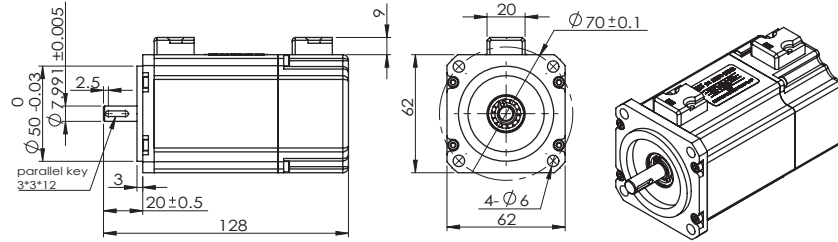
1	电机型号 motor model		SMP10048	SMP10072	
2	额定功率 rated power	PR	600	900	W
3	额定电压 rated voltage	VT	48	72	V
4	额定线电流 rated current	IR	15.0	7.5	A
5	瞬时最大电流 instantaneous max current	IP	45.0	45.0	A
6	额定转速 rated speed	NR	2300	3450	RPM
7	最高转速 maximum speed	NP	2500	3750	RPM
8	额定力矩 rated torque	TR	2.5	2.5	Nm
9	峰值力矩 peak torque	TP	7.5	7.5	Nm
10	力矩系数 torque constant	KT	0.183	0.183	Nm/A
11	反电动势常数 back EMF constant	Ke	52.1	52.1	V/Krpm
12	转子惯量 rotor inertia	J	35.4	35.4	Kg*cm ²
13	额定角加速度 rated angular acceleration	Ar	4706	4706	rad/s ²
14	线间电阻 terminal resistance	R	0.24	0.24	Ω
15	齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
16	线圈电感 terminal inductance	L	48.5	48.5	uH
17	机械时间常数 mechnica time constant	Tm	26	24	ms
18	电气时间常数 electric time constant	Te	0.202	0.202	ms
19	极数 number of poles	2p	8	8	极
20	重量 weight	W	4.2	4.2	Kg
21	编码器可选 encoder options	增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver			
22	电机绝缘等级 motor insulation class	B级 class B			
23	防护等级 protection class	IP64(自然冷却) self cooling			
24	使用环境 ambient temperature	-20~+40℃			

曲线图 Graph



A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area

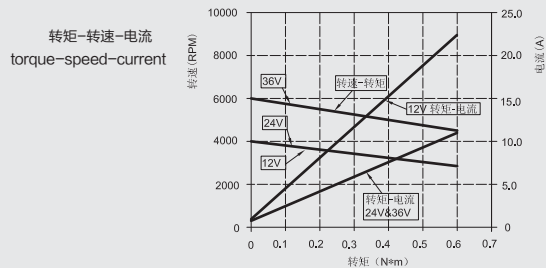
BMP62B | 无刷 Brushless 带抱闸 (Brake)



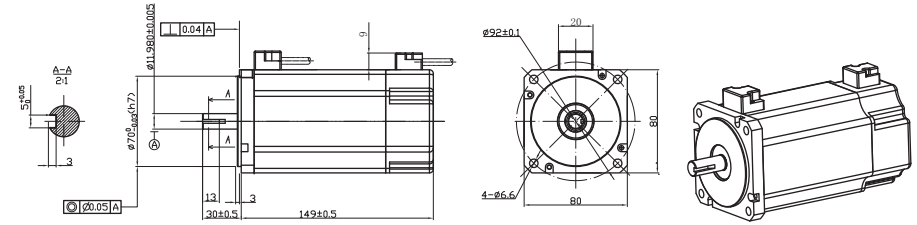
电机参数 Motor Data

电机型号	motor model		BMP6212B	BMP6224B	BMP6236B		
1	空载电压	no load voltage	V	12	24	36	volts
2	空载转速	no load speed	Wnl	4000	4000	6000	rpm
3	空载电流	no load current	Inl	1.2	0.6	0.9	Amps
4	额定电压	rated voltage	Vc	12	24	36	VDC
5	额定转矩	rated torque	Tc	0.6	0.6	0.6	Nm
6	额定转速	rated speed	Wc	3000	3000	4520	rpm
7	额定电流	rated current	Ic	22.8	11.4	11.4	amps
8	输出功率	output pwer	Pc	188	188	284	watts
9	马达常数	motor constant	Km	0.103	0.104	0.104	Nm/sqrt (W)
10	转矩常数	torque constant	Kt	0.029	0.058	0.058	Nm/amp
11	诱起电压常数	back EMF constant	Kv	0.029	0.058	0.058	V/rad./s
			Ke	329.3	164.6	164.6	rpm/volt
12	端子间电阻	terminal resistance	Rt	0.08	0.31	0.31	ohms (Ω)
13	齿槽效应和滞后转矩	cogging and hysteresis torque	Tc Th	0	0	0	mNm
14	定子电感	terminal inductance	L	9.0	35	35	uH
15	机械时间常数	mechanical time constant	Tm	18	18	18	ms
16	电气时间常数	electrical time constant	Te	0.114	0.114	0.114	ms
17	马达重量	weight	Wt		1.21		kg
18	系统的最大效率	max efficiency	η	80	82	84	%
19	转子最高温度	max permissible rotor temperature	Temp 1		120		°C
20	最大输出功率	max output power	PMAX	300	330	710	W
21	接线定义	Terminal definitions	U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色				

曲线图 Graph



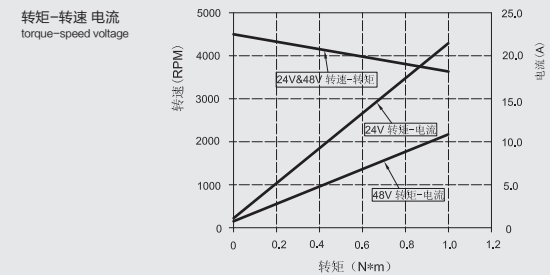
BMP80B | 无刷 Brushless 带抱闸 (Brake)



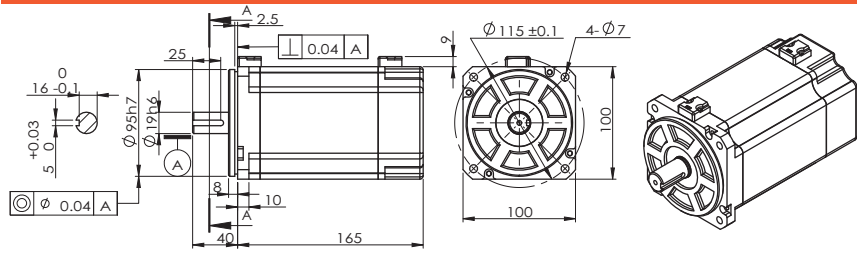
电机参数 Motor Data

电机型号	motor model		BMP8024B	BMP8048B		
1	空载电压	no load voltage	V	24	48	volts
2	空载转速	no load speed	Wnl	4500	4500	rpm
3	空载电流	no load current	Inl	1.8	0.8	Amps
4	额定电压	rated voltage	Vc	24	48	VDC
5	额定转矩	rated torque	Tc	1.0	1.0	Nm
6	额定转速	rated speed	Wc	3650	3650	rpm
7	额定电流	rated current	Ic	21.6	10.8	amps
8	输出功率	output power	Pc	382	382	watts
9	马达常数	motor constant	Km	0.180	0.183	Nm/sqrt (W)
10	转矩常数	torque constant	Kt	0.051	0.102	Nm/amp
11	诱起电压常数	back EMF constant	Kv	0.051	0.102	V/rad./s
			Ke	187.2	93.6	rpm/volt
12	端子间电阻	terminal resistance	Rt	0.08	0.31	ohms (Ω)
13	齿槽效应和滞后转矩	cogging and hysteresis torque	Tc Th	0	0	mNm
14	定子电感	terminal inductance	L	12.6	50	uH
15	机械时间常数	mechanical time constant	Tm	20	20	ms
16	电气时间常数	electrical time constant	Te	0.158	0.161	ms
17	马达重量	weight	Wt	2.48	2.48	kg
18	系统的最大效率	max efficiency	η	82	85	%
19	转子最高温度	max permissible rotor temperature	Temp1	120	120	°C
20	最大输出功率	max output power	PMAX	1000	1100	W
21	接线定义	terminal definitions	U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色			

曲线图 Graph



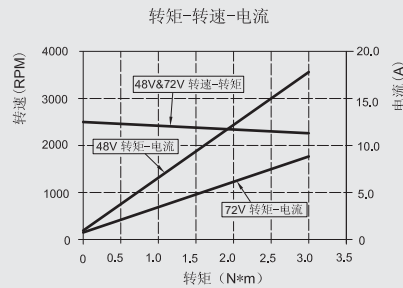
BMP100B | 无刷 Brushless 带抱闸 (Servo)



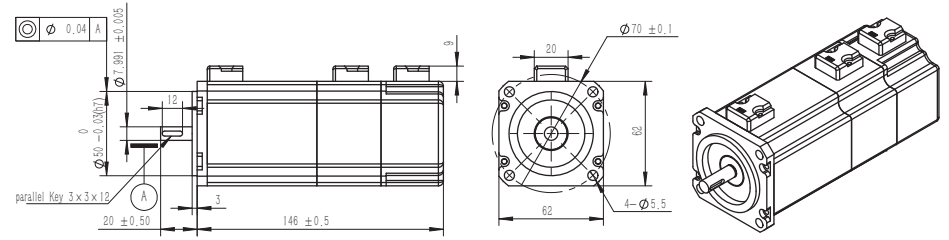
电机参数 Motor Data

电机型号 motor model		BMP10048B	BMP10072B	
1 空载电压 no load voltage	V	48	72	volts
2 空载转速 no load speed	Wnl	2500	3750	rpm
3 空载电流 no load current	Inl	1.4	1.8	Amps
4 额定电压 rated voltage	Vc	48	72	VDC
5 额定转矩 rated torque	Tc	2.5	2.5	Nm
6 额定转速 rated speed	Wc	2300	3450	rpm
7 额定电流 rated current	c	15.0	15	amps
8 输出功率 output pwer	Pc	602	900	watts
9 马达常数 motor constant	Km	0.382	0.382	Nm/sqrt (W)
10 转矩常数 torque constant	Kt	0.183	0.183	Nm/amp
11 诱起电压常数 back EMF constant	Kv	0.183	0.183	V/rad.s
	Ke	52.1	52.1	rpm/volt
12 端子间电阻 terminal resistance	Rt	0.24	0.24	ohms (Ω)
13 齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
14 定子电感 terminal inductance	L	48.5	18.5	μ H
15 机械时间常数 mechanical time constant	Tm	24	24	ms
16 电气时间常数 electrical time constant	Te	0.202	0.202	ms
17 马达重量 weight	Wt	3.8	3.8	kg
18 系统的最大效率 max efficiency	η	86	86	%
19 转子最高温度 max permissible rotor temperature	Temp1	110	110	$^{\circ}$ C
20 最大输出功率 max output power	Pmax	1160	1890	W
21 接线定义 terminal definitions	U : 绿 V : 黑 W : 红 +5V : 黄 GND : 灰 H1 : 棕 H2 : 橙 H3 : 蓝 温控电阻 : 紫色			

曲线图 Graph



SMP62B | 伺服 Servo 带抱闸 (Servo)

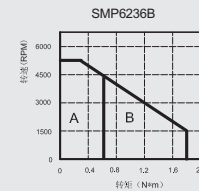
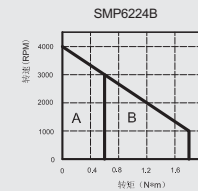
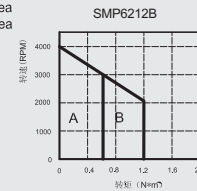


电机参数 Motor Data

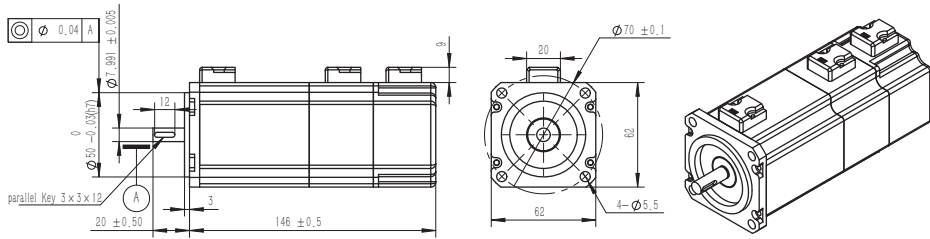
电机型号 motor model		SMP6212B	SMP6224B	SMP6236B	
1 电机型号 motor model		SMP6212B	SMP6224B	SMP6236B	
2 额定功率 rated power	PR	188	188	284	W
3 额定电压 rated voltage	VT	12	24	36	V
4 额定线电流 rated current	IR	22.8	11.4		A
5 瞬时最大电流 instantaneous maximum current	IP	45	35		A
6 额定转速 rated speed	NR	3000	3000	4520	RPM
7 最高转速 maximum speed	NP	4000	4000	5000	RPM
8 额定力矩 rated torque	TR	0.6	0.6		Nm
9 峰值力矩 peak torque	TP	1.2	1.8		Nm
10 力矩系数 torque constant	KT	0.029	0.058		Nm/A
11 反电动势常数 back EMF constant	Ke	3.03	6.07		V/Krpm
12 转子惯量 rotor inertia	J	1.98	1.98		Kg*cm ²
13 额定角加速度 rated angular acceleration	Ar	2626	2626		rad/s ²
14 线间电阻 terminal resistance	R	0.08	0.31		Ω
15 齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0		mNm
16 线圈电感 terminal inductance	L	9.0	35		μ H
17 机械时间常数 mechanical time constant	Tm	22	22		ms
18 电气时间常数 electric time constant	Te	0.113	0.114		ms
19 极数 number of poles	2p	8	8		极
20 重量 weight	W	1.51	1.51		Kg
21 编码器可选 encoder options		增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver			
22 电机绝缘等级 motor insulation class		B级 class B			
23 防护等级 protection class		IP64(自然冷却) self cooling			
24 使用环境 ambient temperature		-20~+40 $^{\circ}$ C			

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



SMP80B | 伺服 Servo 带抱闸 Brake

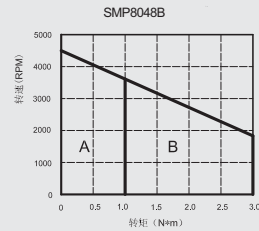
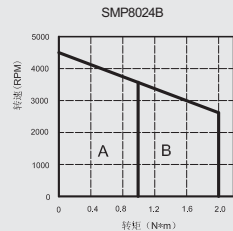


电机参数 Motor Data

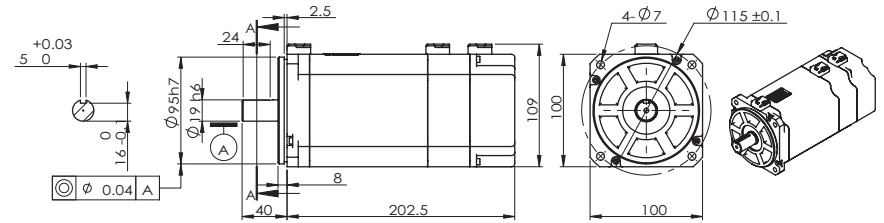
1	电机型号 motor model		SMP8024B	SMP8048B	
2	额定功率 rated power	PR	382	382	W
3	额定电压 rated voltage	VT	24	48	VDC
4	额定线电流 rated current	IR	21.6	10.8	A
5	瞬时最大电流 instantaneous maximum current	IP	44	32	A
6	额定转速 rated speed	NR	3650	3650	RPM
7	最高转速 maximum speed	NP	4500	4500	RPM
8	额定力矩 rated torque	TR	1.0	1.0	Nm
9	峰值力矩 peak torque	TP	2.0	3.0	Nm
10	力矩系数 torque constant	KT	0.051	0.102	Nm/A
11	反电动势常数 back EMF constant	Ke	5.34	10.7	V/Krpm
12	转子惯量 rotor inertia	J	6.05	6.05	Kg*cm ²
13	额定角加速度 rated angular acceleration	Ar	1488	1488	rad/s ²
14	线间电阻 terminal resistance	Ra	0.08	0.31	Ω
15	齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
16	线圈电感 terminal inductance	La	12.6	50	uH
17	机械时间常数 mechanical time constant	Tm	24	24	ms
18	电气时间常数 electric time constant	Te	0.158	0.161	ms
19	极数 number of poles	2p	8	8	极
20	重量 weight	W	2.84	2.84	Kg
21	编码器可选 encoder options	增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver			
22	电机绝缘等级 motor insulation class	B级 class B			
23	防护等级 protection class	IP64(自然冷却) self cooling			
24	使用环境 ambient temperature	-20~+40°C			

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



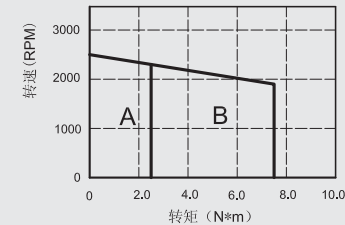
SMP100B | 伺服 Servo 带抱闸 Brake



电机参数 Motor Data

1	电机型号 motor model		SMP10048B	SMP10072B	
2	额定功率 rated power	PR	600	900	W
3	额定电压 rated voltage	VT	48	72	V
4	额定线电流 rated current	IR	15.0	7.5	A
5	瞬时最大电流 instantaneous max current	IP	45.0	45.0	A
6	额定转速 rated speed	NR	2300	3450	RPM
7	最高转速 maximum speed	NP	2500	3750	RPM
8	额定力矩 rated torque	TR	2.5	2.5	Nm
9	峰值力矩 peak torque	TP	7.5	7.5	Nm
10	力矩系数 torque constant	KT	0.183	0.183	Nm/A
11	反电动势常数 back EMF constant	Ke	52.1	52.1	V/Krpm
12	转子惯量 rotor inertia	J	35.4	35.4	Kg*cm ²
13	额定角加速度 rated angular acceleration	Ar	4706	4706	rad/s ²
14	线间电阻 terminal resistance	R	0.24	0.24	Ω
15	齿槽效应和滞后转矩 cogging and hysteresis torque	Tc Th	0	0	mNm
16	线圈电感 terminal inductance	L	48.5	48.5	uH
17	机械时间常数 mechanical time constant	Tm	26	24	ms
18	电气时间常数 electric time constant	Te	0.202	0.202	ms
19	极数 number of poles	2p	8	8	极
20	重量 weight	W	4.2	4.2	Kg
21	编码器可选 encoder options	增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver			
22	电机绝缘等级 motor insulation class	B级 class B			
23	防护等级 protection class	IP64(自然冷却) self cooling			
24	使用环境 ambient temperature	-20~+40°C			

曲线图 Graph



SMP10048B

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area

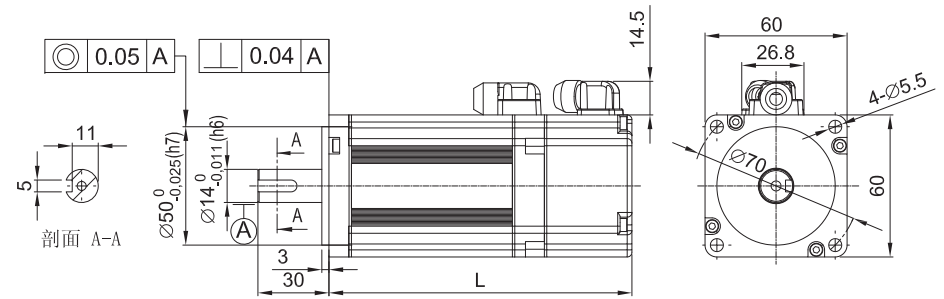


交流伺服电机 AC SERVO MOTOR

无电刷和换向器，因此工作可靠，对维护和保养要求低。定子绕组散热比较方便，惯量小，易于提高系统的快速性。适应于高速大力矩工作状态。

Without brushes and a commutator, so reliable, low requirement for repair and maintenance. heat dissipation of stator winding is more convenient. rotary inertia is small, easy to improve system's rapidity. apply to the high speed high torque working state.

SMH60 | 铁芯式伺服 Core Type Servo

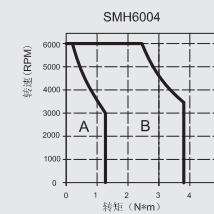
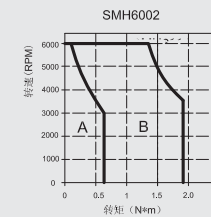


电机参数 Motor Data

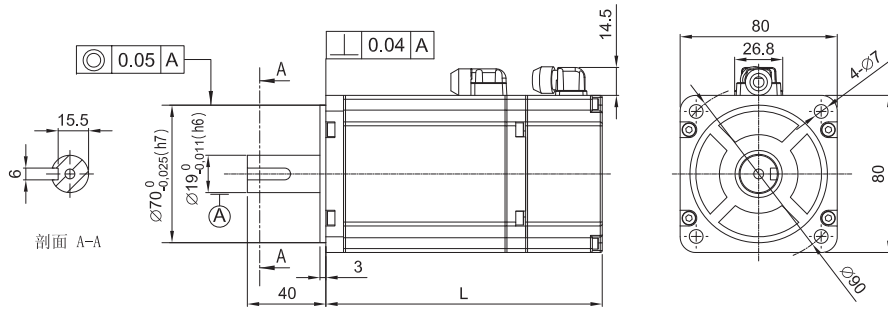
1	电机型号 motor type	SMH6002C	SMH6004C	
2	电机长度L motor length	108	128	mm
3	额定线电压 rated voltage	220	220	V
4	额定功率 rated power	200	400	W
5	额定线电流 rated current	1.6	3.1	A
6	额定转速 rated speed	3000	3000	rpm
7	最高转速 maximum speed	6000	6000	rpm
8	线间电感 terminal inductance	10.3	5.6	mH
9	额定力矩 rated torque	0.64	1.27	Nm
10	峰值力矩 peak torque	1.9	3.8	Nm
11	力矩系数 torque constant	0.43	0.45	Nm/A
12	转子惯量 rotor inertia	0.25(中惯量)	0.43(中惯量)	Kg·m ² ×10 ⁻⁴
13	线间电阻 terminal resistance	9.4	2.8	Ω
14	重量 weight	1.0	1.4	Kg
15	编码器可选 encoder options	增量型incremental (2500PPR) \ 绝对值Absolute (17/33bit) \ 旋转变压器resolver		
16	电机绝缘等级 motor insulation class	F(155°C)		
17	冷却方式 cooling mode	自然冷却 self-cooling		
18	防护等级 protection class	IP64		
19	使用环境 ambient temperature	-20 ~ +40 (不冰 No ice) 90%RH以下无凝露 No condensation		
20	电机绕组引线 motor line	U(黑/black) V(红/red) W(白/white) PE(黄绿/黑 yellow green/black)		
21	轴承径向力F _{r(N)} Bearing radial force	245		
22	轴承轴向力F _{a(N)} Bearing axial force	68		
23	励磁方式 Excitation mode	永磁式 Permanent magnet type		
24	安装方式 installation	法兰式 Flange type		

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



SMH80 | 铁芯式伺服 Core Type Servo

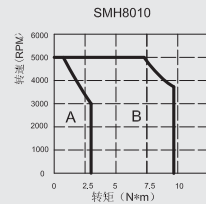
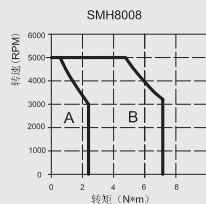


电机参数 Motor Data

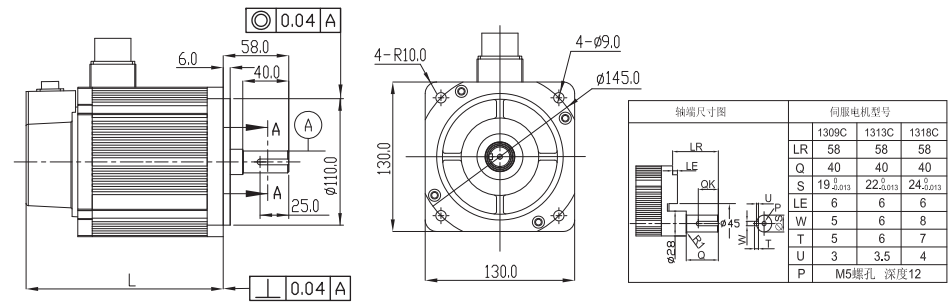
1	电机型号 motor type	SMH8008C	SMH8008F	SMH8010C	
2	电机长度L motor length	140	182.2	160	mm
3	额定线电压 rated voltage	220	220	220	V
4	额定功率 rated power	750	750	1000	W
5	额定线电流 rated current	4.0	4.0	5.5	A
6	额定转速 rated speed	3000	3000	3000	rpm
7	最高转速 maximum speed	5000	5000	5000	rpm
8	额定力矩 rated torque	2.37	2.37	3.18	Nm
9	峰值力矩 peak torque	7.1	7.1	9.5	Nm
10	力矩系数 torque constant	0.6	0.6	0.58	Nm/A
11	转子惯量 rotor inertia	1.29(中惯量)	1.5(中惯量)	2.3(中惯量)	Kg*m ² *10 ⁻⁴
12	线间电阻 terminal resistance	2.2	2.2	1.86	Ω
13	线间电感 terminal inductance	8.6	8.6	9.7	mH
14	重量 weight	2.7	3.0	3.3	Kg
15	编码器可选 encoder options	增量型Incremental (2500PPR) \ 绝对值Absolute (17133bit) \ 旋转变压器resolver			
16	电机绝缘等级 motor insulation class	B(130°C)			
17	冷却方式 cooling mode	自然冷却 self-cooling			
18	防护等级 protection class	IP64			
19	使用环境 ambient temperature	-20°C ~ +40°C (不结冰) No ice 90%RH以下(无凝露) No condensation			
20	电机绕组引线 motor line	U(黑/black) V(红/red) W(白/white) PE(黄绿/黑 yellow green/black)			
21	轴承径向力Fr(N) Bearing radial force	392			
22	轴承轴向力Fa(N) Bearing axial force	147			
23	励磁方式 Excitation mode	永磁式 Permanent magnet type			
24	安装方式 installation	法兰式 Flange type			

曲线图 Graph

A: 连续工作区域 B: 反复工作区域
A: Continuous Working Area
B: Repeatedly Working Area



SMH130 | 铁芯式伺服 Core Type Servo



电机参数 Motor Data

1	电机型号 motor type	SMH1309C	SMH1313C	SMH1318C	
2	电机长度L motor length L	168	188	208	mm
3	额定线电压 rated voltage	220	220	220	V
4	额定功率 rated power	850	1300	1800	W
5	额定线电流 rated current	5.0	7.9	10.1	A
6	额定转速 rated speed	1500	1500	1500	rpm
7	最高转速 maximum speed	2000	2000	2000	rpm
8	额定力矩 rated torque	5.39	8.28	11.5	Nm
9	峰值力矩 peak torque	13.8	23.4	28.9	Nm
10	力矩系数 torque constant	1.08	1.05	1.14	Nm/A
11	转子惯量 rotor inertia	14.6(中惯量)	19.8(中惯量)	26.2	Kg*m ² *10 ⁻⁴
12	线间电阻 terminal resistance	1.4	0.76	0.51	Ω
13	线间电感 terminal inductance	9.2	5.8	4.1	mH
14	重量 weight	6.0	8.1	9.6	Kg
15	编码器可选 encoder options	增量型Incremental (2500PPR) \ 绝对值Absolute (17133bit) \ 旋转变压器resolver			
16	电机绝缘等级 motor insulation class	F(155°C)			
17	冷却方式 cooling mode	自然冷却 self-cooling			
18	防护等级 protection class	IP64			
19	使用环境 ambient temperature	-20°C ~ +40°C (不结冰) No ice 90%RH以下(无凝露) No condensation			
20	电机绕组引线 motor line	U(黑/black) V(红/red) W(白/white) PE(黄绿/黑 yellow green/black)			
21	轴承径向力Fr(N) Bearing radial force	686			
22	轴承轴向力Fa(N) Bearing axial force	343			
23	励磁方式 Excitation mode	永磁式 Permanent magnet type			
24	安装方式 installation	法兰式 Flange type			

曲线图 Graph

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