符合RoHS指令要求
CONFORM TO RoHS INSTRUCTIONS

◎步进电机规格书

SPECIFICATION FOR STEPPER MOTOR

上海四横电机制造有限公司

42BYGH233-1334A

◎电气特性参数/ELECTRICAL PARAMETER

相　数　PHASES	2	
步 进 角　STEP ANGEL	1.8° ±5%	
步进角误差　STEP ANGEL ERRORS	±0.09°	注释)3
额定电压　RATED VOLTAGE	2.8　V	
额定电流　RATED CURRENT	1.33 A	
电　阻　RESISTANCE	2.1 ohm±10%	at 20° C
电　感　INDUCTANCE	4.2 mH±20%	注释)1
保持力矩　HOLDING TORQUE	0.22N.m	注释)2
绝缘耐压 DIELECTRIC STRENGTH	500V A.C 1分钟/MINITE	注释)4
绝缘电阻 INSULATION RESISTANCE	100 MΩ以上/MIN.	注释)5
绝缘等级　INSULATION CLASS	Class B	
温度上升　TEMPERATURE RISE	80K MAX.	注释)6
转子惯量　ROTOR INERTIA	≈35g.cm^2	
重　量　WEIGHT	≈220g	
最大轴向跳动 MAXIMUM AXIAL RUNOUT TOLERANCE	0.075mm(负载920g)	
最大径向跳动 MAXIMUM RADIAL RUNOUT TOLERANCE	0.025mm(负载450g)	
使用环境温度 CONSERVE AMBIENT TEMP.	0° C----+50° C	
使用环境湿度 CONSERVE AMBIENT HUM.	20%RH----90%RH	注释)8
保存环境温度 CONSERVE AMBIENT TEMP.	-20° C----+70° C	
保存环境湿度 CONSERVE AMBIENT HUM.	15%RH----95%RH	注释)8
使用寿命　SERVICE LIFE	5000 小时/HOURS	注释)7

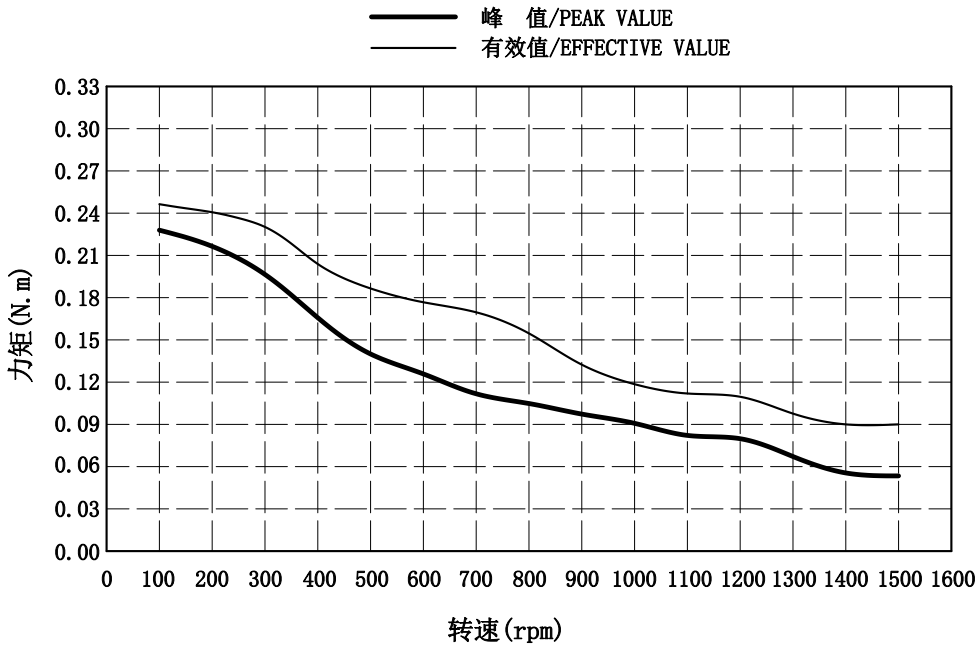
注释）：
1.在1k Hz 1Vrms条件下测试；
2.在额定电流，2相励磁下进行测试；
3.不包括励磁误差2相励磁；
4.在电机引线和铁芯之间加50HZ交流电压1分钟无异常，漏电流小于3mA；
5.在电机引线和铁芯之间加500V.D.C电压；
6.额定电流无负载安装在铝板上使用电阻法测试；
7.额定电流轴承温度低于80℃条件下进行寿命试验；
8.表面无结霜；

Notes）：
1. Testing at 1K hz 1 VRMS;
2. Test at rated current, 2-phase excitation;
3. Excluding excitation error 2 phase excitation;
4. Add 50 HZ AC voltage between motor lead and iron core for 1 minute without abnormal, leakage current less than 3 ma;
5. Add 500 v. between the motor lead and the iron core. D. C Voltage;
6. Rated current no load mounting on aluminum plate using resistance method;
7. Rated current bearing temperature below 80 ° C for Life Test;
8. No Frost on the surface;

◎力矩曲线/MOMENT CURVE

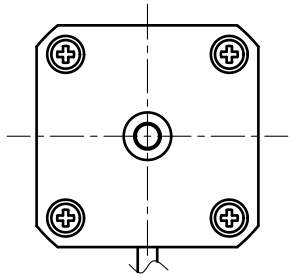
驱动方式/DRIVING MODE：恒流驱动/CONSTANT CURRENT DRIVE
驱动电压/DRIVING VOLTAGE：24VDC
励磁方式/EXCITATION MODE：2相/PHASES

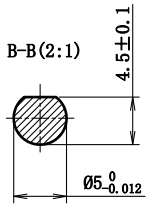
备注:电流峰值等于$\sqrt{2}$倍的有效值
REMARK:PEAK CURRENT IS EQUAL TO $\sqrt{2}$ TIMES EFFECTIVE VALUE

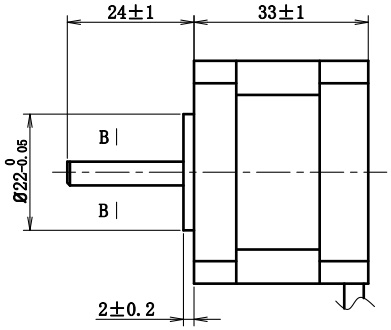


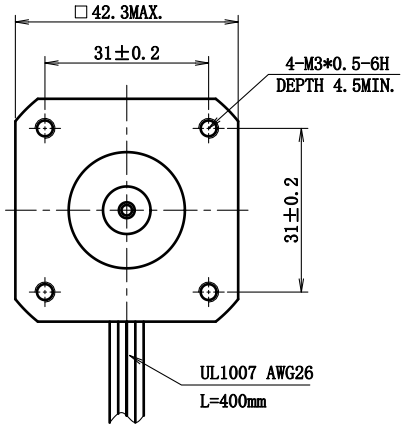
CONFIRMED&ACCEPTED BY CUTOMER (客户确认&接受) COMPANY CHOP&SIGNATURE (盖章&签名)							型号/MODEL	
							42BYGH233-1334A	
一般公差 TOLERANCE ±0.3/±3°	版本 REV.	年 月 日 DATE	变更番号 ECO NO.	变 更 内 容 REVISIONS		设计 BY	备 注 NOTE	REV. A
设 计/DESIGNED		比例 SCALE	1:1	品　名 TITLE	步进电机规格书 STEPPING MOTOR SPECIFICATION			三视图 THIRD ANGLE PROJECTION
审 核/CHECKED		单位 UNIT	mm					
		上海四横电机制造有限公司				页 SHEET		1/1

符合RoHS指令要求
CONFORM TO RoHS INSTRUCTIONS

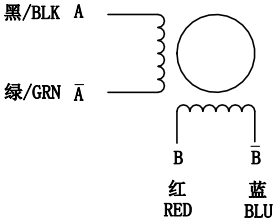








接线图/Wiring Diagram



励磁顺序(2相励磁)
EXCITING SEQUENCE(TWO PHASE)

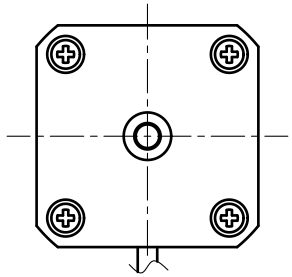
STEP	A	B	Ā	B̄
1	+	+	−	−
2	−	+	+	−
3	−	−	+	+
4	+	−	−	+

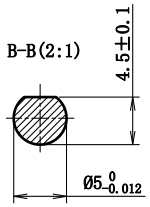
CW ↓ ↑ CCW

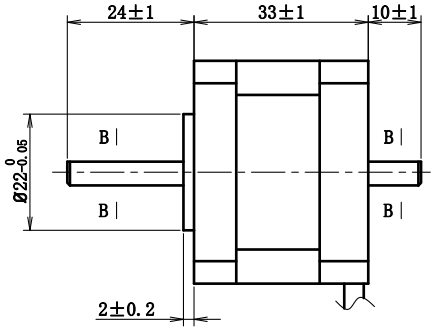
CONFIRMED&ACCEPTED BY CUTOMER (客户确认&接受)						型号/MODEL	
COMPANY CHOP&SIGNATURE (盖章&签名)						42BYGH233-1334A	
一般公差 TOLERANCE ±0.3/±3°	版本 REV.	年 月 日 DATE	变更番号 ECO NO.	变 更 内 容 REVISIONS	设计 BY	备 注 NOTE	REV. A

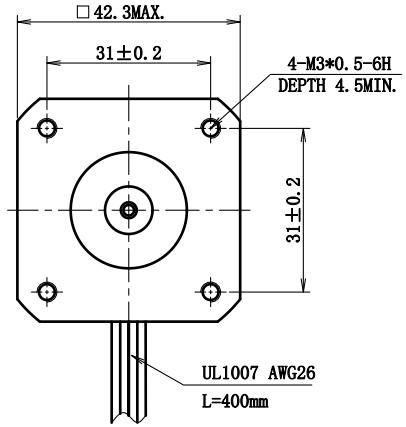
设 计/DESIGNED		比例 SCALE	1:1	品 名 TITLE	步进电机规格书 STEPPING MOTOR SPECIFICATION	三视图 THIRD ANGLE PROJECTION
审 核/CHECKED		单位 UNIT	mm			
		上海四横电机制造有限公司			页 SHEET	1/1

符合RoHS指令要求
CONFORM TO RoHS INSTRUCTIONS

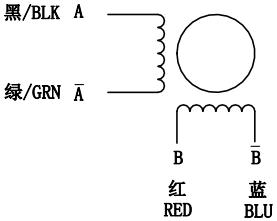








接线图/Wiring Diagram



励磁顺序(2相励磁)
EXCITING SEQUENCE(TWO PHASE)

STEP	A	B	Ā	B̄
1	+	+	−	−
2	−	+	+	−
3	−	−	+	+
4	+	−	−	+

CW ↓ CCW ↑

CONFIRMED&ACCEPTED BY CUTOMER (客户确认&接受)						型号/MODEL	
COMPANY CHOP&SIGNATURE (盖章&签名)						42BYGH233-1334B	
一般公差 TOLERANCE ±0.3/±3°	版本 REV.	年 月 日 DATE	变更番号 ECO NO.	变 更 内 容 REVISIONS	设计 BY	备 注 NOTE	REV. A
设 计/DESIGNED	比例 SCALE	1:1	品 名 TITLE	步进电机规格书 STEPPING MOTOR SPECIFICATION		三视图 THIRD ANGLE PROJECTION	
审 核/CHECKED	单位 UNIT	mm					
上海四横电机制造有限公司					页 SHEET	1/1	