

MOTOR SPECIFICATION (TENTATIVE)

MOTOR MODEL S42D110A-XXXX

CUSTOMER MODEL

1. SCOPE

THIS SPECIFICATION COVERS THE GENERAL REQUIREMENTS FOR THE STEP MOTOR THAT CONSISTS OF BIPOLAR WINDING STATOR AND HYBRID MAGNET ROTOR

2. ELECTRICAL CHARACTERISTICS

ITEM	SPECIFICATION	DESCRIPTION
DUTY	CONTINUOUS	
DRIVE VOLTAGE	24 V D.C	
RATED CURRENT	1.0 A (PHASE)	
STEP ANGLE	1.8°(DEG) FULL STEP	
NUMBER OF PHASE	2PHASE UNIPOLAR 2PHASE EXCITING	
INSULATION CLASS(UL)	UL CLASS B (COIL)	
WINDING RESISTANCE	2.7Ω±10%	25°C
WINDING INDUCTANCE	2.3mH±20%	NOTE)1
HOLDING TORQUE	0.23N·m(2.2kgf·cm) MIN.	NOTE)2
DETENT TORQUE	80mN·m(0.8Kg·cm) REF.	
MAX STARTING PULSE RATE	1300PPS MIN.	NOTE)3
POSITIONAL ACCURACY	±0.09°(DEG) MAX.	NOTE)4
DIELECTRIC STRENGTH	500V A.C 1MINUTE NO ABNORMAL	NOTE)5
INSULATION RESISTANCE	100 MΩ MIN.	NOTE)6
TEMPERATURE RISE	80 K (80 DEG) MAX.	NOTE)7

3. MECHANICAL CHARACTERISTICS


ITEM	SPECIFICATION	DESCRIPTION
MECHANICAL DEMENSION	ACCORDING TO SPECIFICATION Y-20-1223-0(PAGE3/3)	
SHAFT MATERIAL	SUS303	
BEARING	SINGLE ROW BALL BEARING	
END BELL MATERIAL	ALUMINUM ALLOY	
MASS	APPROXIMATELY 380g	
ROTOR INERTIA	33g·cm ² (33×10 ⁻³ g·cm ⁻²) APPROXIMATELY 33g·cm ² (33×10 ⁻³ g·cm ⁻²)	

4. ADDITIONAL

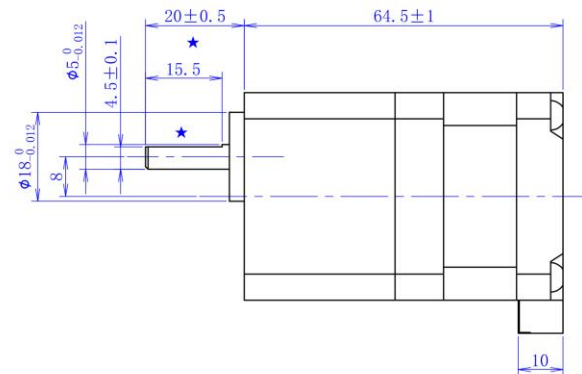
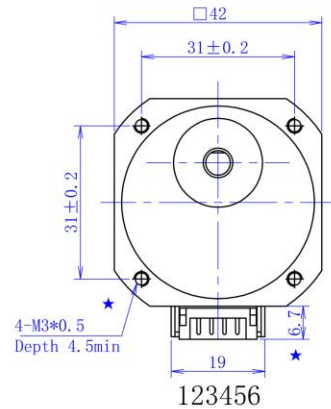
ITEM	SPECIFICATION	DESCRIPTION
DIRECTION OF ROTATION	PHASE SEQUENCE TO PRODUCE CLOCKWISE ROTATION VIEWED FROM MOUNTING END IS AS TABLE 1	
TYPE OF LEAD WIRE	UL 1430 CSA AWG 26	
COLOR OF LEAD WIRE	ACCORDING TO TABLE 2	
LIFE	5000 HOURS MIN.	NOTE)8
MATERIALS OF MOTOR CONTAIN TEN SUBSTANCES Pb Cr(VI+) Cd Hg PBB PBDE DEHP BBP DBP AND DIBP THOSE CONTENTS COMPLY WITH THE RoHS INSTRUCTION.		

ITEM	SPECIFICATION	DESCRIPTION
OPERATION AMBIENT TEMPERATURE	0°C～+50°C	
OPERATION AMBIENT HUMIDITY	20%RH ～ 90%RH	NOTE)9
STORAGE AMBIENT TEMPERATURE	0°C～+50°C	
STORAGE AMBIENT HUMIDITY	15%RH ～ 95%RH	NOTE)9

CAUTION AND RECOMMENDATION	PLEASE DON'T HOLD MOTOR BY LEAD WIRES NO OUTSIDE FORCE ON THE EXIT OF LEAD WIRES
	PLEASE DON'T PLUG OR UNPLUG THE MOTOR CONNECTOR WHILE POWER ON
	PLEASE DON'T DROP HURL AND DUMP MOTOR AGAINST HARD MATERIAL MALFUNCTION MAY NOT BE OBSERVED AT EARLY STAGE AFTER SUCH SHOCK BUT IT MAY BE FOUND LATER THIS TYPE OF MISHANDLING VOIDS OUR WARRANTY
	THE FUNCTION OR PERFORMANCE SHALL BE EVALUATED BY INSTALLING MOTOR TO APPLICATION THAT SHOULD BE CHECKED AT BUYER'S SIDE
	PLEASE DON'T REUSE DISASSEMBLED MOTOR
	OUR CORPORATION WILL NOT BE RESPONSIBLE FOR ANY PATENT DISPUTE OR PROBLEM CAUSED BY ACTUAL APPLICATIONS

MATERIAL	----							S42D110A-XXXX
FINISH	----	--	'20-12-23	----	00 First version	Hu Jinping		
		SYM	DATE	REVISION NO.	REVISIONS	BY		NOTE
DRAWN	DESIGNED	CHECKED	CHECKED	SCALE	--	TITLE	MOTR SPECIFICATION	THIRD ANGLI PROJECTION
Dongguan Kaifull '20-12-23 Xu Yuanhao	Dongguan Kaifull '20-12-23 Xu Yuanhao					DWGNO.	Y-20-1223-0	
							SHEET	1/3

CN1 CN2 PIN NUMBER	1	2	3	4	5	6
LEAD COLOR	GREEN	WHITE	BLUE	BLACK	YELLOW	RED



Reduction ratio	Permissible torque	Back clearance	Transmission efficiency	Weight
3.6	0.2N.M	0.5°-1°	50%-80%	About 120g
7.2	0.4N.M	0.5°-1°	50%-80%	About 120g
9	0.5N.M	0.5°-1°	50%-80%	About 120g
10	0.56N.M	0.5°-1°	50%-80%	About 120g
18	0.8N.M	0.5°-1°	50%-80%	About 120g
36	0.8N.M	0.5°-1°	50%-80%	About 120g
50	0.8N.M	0.5°-1°	50%-80%	About 120g
100	0.8N.M	0.5°-1°	50%-80%	About 120g


MAKER J.S.T.MFG.CO.,LTD.

CN1 HOUSING: S 6B-PH-K-S(LF)(SN)
COLOR:NATURAL

CN2 HOUSING: PHP-6 **COLOR:NATURAL**

[WIRING DIAGRAM]

The diagram shows two coils. The first coil has terminals 4, 5, and 1 on the left, and a common terminal A on the right. The second coil has terminals 6, 2, and 3 on the left, and a common terminal BCOM on the right. A circle is drawn between the two coils.

TOLERANCES (EXCEPT AS NOTES)		±0.3		PORTIONS MARKED BY ★ ARE USED BY CUSTOMER (MOUNTING-POWER TRANSMISSION-POWER SUPPLY)						
MATERIAL	----							S42D110A-XXXX		
FINISH	----	--	*20-12-23	----	00 First version	Hu Jinping	NOTE			
		SYM	DATE	REVISION NO.	REVISIONS	BY				
DRAWN	DESIGNED	CHECKED	CHECKED	SCALE	--	TITLE	MOTR SPECIFICATION	THIRD ANGLI PROJECTION		
Dongguan Kaifull *20-12-23 Xu Yuanbao	Dongguan Kaifull *20-12-23 Xu Yuanbao					DWG.NO.	Y-20-1223-0			
							SHEET	3/3		