

Brushless DC Motors 无刷直流电机

57BYA Series (big torque)

General Specification

Winding type 绕组连续方式	Delta
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /460g
End play 轴向间隙	0.025mm /400g
Max. radial force 径向最大承受力	75N @ 20mm from the flange
Max. axial force 轴向最大承受力	15N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VDC for one minute
Insulation resistance 绝缘电阻	100M Ω min., 500VDC

Performance Data

Model 型号	Units	57BYA044 B040X-01	57BYA044 B060X-01	57BYA054 B020X-01	57BYA054 B040X-01	57BYA054 B060X-01	57BYA074 B020X-01	57BYA074 B040X-01	57BYA094 B020X-01	57BYA094 B040X-01	57BYA114 B020X-01	57BYA114 B040X-01
Number of poles 极数		4										
Number of phase 相数		3										
Rated voltage 额定电压	VDC	24										
Rated speed 额定转速	RPM	4000	6000	2000	4000	6000	2000	4000	2000	4000	2000	4000
Continuous stall torque 持续堵转转矩	N.m	0.096	0.096	0.19	0.19	0.19	0.384	0.384	0.54	0.54	0.72	0.72
Rated torque 额定转矩	N.m	0.08	0.08	0.16	0.16	0.16	0.32	0.32	0.45	0.45	0.6	0.6
Rated power 额定功率	W	33.5	50	33.5	67	100.5	67	134	94	188	125	251
Peak torque 峰值转矩	N.m	0.24	0.24	0.48	0.48	0.48	0.96	0.96	1.35	1.35	1.8	1.8
Peak current 峰值电流	A	6	9	5.58	11.1	16.7	11.1	22.2	15.6	31.2	20.8	41.6
Torque constant 转矩常数	Nm/A	0.04	0.026	0.081	0.045	0.028	0.081	0.045	0.081	0.045	0.081	0.045
Back E.M.F 反电势	V/KRPM	4.8	3	8.57	4.8	3	8.57	4.8	8.57	4.8	8.57	4.8
Rotor inertia 转动惯量	g.cm ²	31	31	60.5	60.5	60.5	113	113	181.5	181.5	242	242
Body length 电机长度	mm	44	44	54	54	54	74	74	94	94	114	114
Voltage range 电压范围	VDC	12~80										
Speed Range 转速范围	RPM	2000~6000										
Weight 重量	Kg	0.25	0.25	0.5	0.5	0.5	0.75	0.75	1	1	1.25	1.25

Dimensions in mm

