

Brushless DC Motors 无刷直流电机

57BYB Series



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 /4000g
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	100MΩ min., 500VDC

Performance Data

Model 型号	Units	57BYB054 B020X-01	57BYB054 B040X-01	57BYB074 B020X-01	57BYB074 B040X-01	57BYB094 B020X-01	57BYB094 B040X-01	57BYB114 B020X-01	57BYB114 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	2000	4000	2000	4000	2000	4000	2000	4000
Continuous stall torque 持续堵转转矩	N.m	0.192	0.192	0.348	0.348	0.492	0.492	0.684	0.684
Rated torque 额定转矩	N.m	0.16	0.16	0.29	0.29	0.41	0.41	0.57	0.57
Rated power 额定功率	W	33.5	67	60	121	86	172	119	238
Peak torque 峰值转矩	N.m	0.48	0.48	0.87	0.87	1.23	1.23	1.71	1.71
Peak current 峰值电流	A	6	12	10.7	21.6	15.3	30.7	21.2	42.5
Torque constant 转矩常数	Nm/A	0.08	0.07	0.08	0.04	0.08	0.04	0.08	0.04
Back E.M.F 反电势	V/KRPM	8.57	4.8	8.57	4.8	8.57	4.8	8.57	4.8
Rotor inertia 转动惯量	g.cm ²	75	75	119	119	173	173	230	230
Body length 电机长度	mm	82.5	82.5	102.5	102.5	122.5	122.5	142.5	142.5
Voltage range 电压范围	VDC					12~80			
Speed Range 转速范围	RPM					2000~4000			
Weight 重量	Kg	0.4	0.4	0.8	0.8	1.1	1.1	1.3	1.3

Dimensions in mm

