

Brushless DC Motors 无刷直流电机

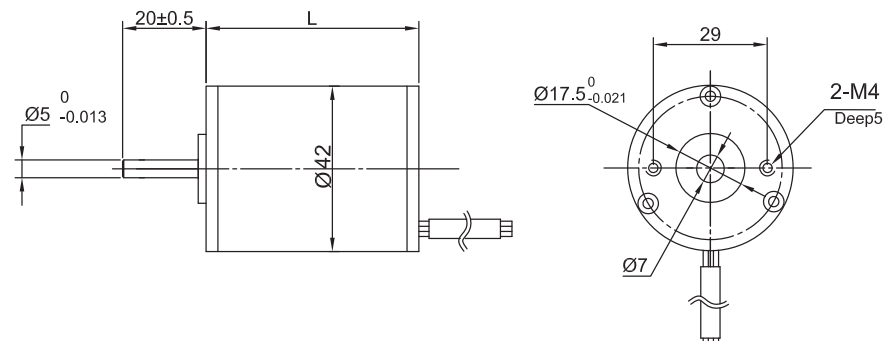
42BYA Series



General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.02mm /400g
Max. radial force 径向最大承受力	15N @ 10mm from the flange
Max. axial force 轴向最大承受力	10N
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

Dimensions in mm



Performance Data

Model 型号	Units	42BYA045 B020X-01	42BYA045 B040X-01	42BYA045 B060X-01	42BYA054 B020X-01	42BYA054 B040X-01	42BYA054 B060X-01	42BYA075 B020X-01	42BYA075 B040X-01
Number of poles 极数									
Number of phase 相数									
Rated voltage 额定电压	VDC								
Rated speed 额定转速	RPM	2000	4000	6000	2000	4000	6000	2000	4000
Continuous stall torque 持续堵转转矩	N.m	0.048	0.048	0.048	0.096	0.096	0.096	0.192	0.192
Rated torque 额定转矩	N.m	0.04	0.04	0.04	0.08	0.08	0.08	0.16	0.16
Rated power 额定功率	W	8.4	16.75	25	21	42	63	33.5	100
Peak torque 峰值转矩	N.m	0.12	0.12	0.12	0.25	0.25	0.25	0.45	0.45
Peak current 峰值电流	A	1.34	2.68	4	3.7	7	10.5	5.6	16.8
Torque constant 转矩常数	Nm/A	0.075	0.04	0.028	0.075	0.043	0.029	0.075	0.029
Back E.M.F 反电势	V/KRPM	8	4.6	3	8	4.6	3	8	3
Rotor inertia 转动惯量	g.cm ²	14.6	14.6	14.6	20.3	20.3	20.3	38	38
Body length 电机长度	mm	43	43	43	54	54	54	73	73
Voltage range 电压范围	VDC								
Speed Range 转速范围	RPM								
Weight 重量	Kg	0.37	0.37	0.37	0.46	0.46	0.46	0.63	0.63