

# FL42RBL-IE Series

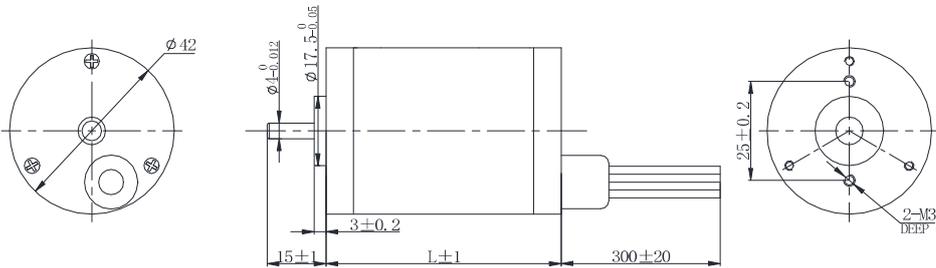
一体化无刷电机  
BLDC Motor with Integrated Driver



FULLING MOTOR

## 机械尺寸

(Dimensions)



选件 Options



接插件 齿轮箱

## 特性概要

(General Specifications)

绕组连接方式 (Winding Type)	星形 (Star connection)
霍尔分布角度 (Hall Effect Angle)	120度电角度 (Electrical Angle of 120 degree)
径向间隙 (Radial Play)	0.02mm@450g
轴向间隙 (Axial Play)	0.08mm@450g
最大径向负载 (Max radial force)	15N 距法兰10mm (10mm From the flange)
最大轴向负载 (Max axial force)	10N
介电强度 (Dielectric Strength)	600VAC/1S
绝缘电阻 (Insulation Resistance)	100MΩ, 500VDC
环境温度 (Ambient Temperature)	-20°C ~ +50°C
绝缘等级 (Insulation Class)	Class B

## 接线说明

(Electric Connection)

引出线型号 Type	引出线颜色 Color	功能 Functions
UL1007	红色 (Red)	电源正 (Vcc)
AWG22	黑色 (Black)	电源负 (GND)
UL1007 AWG22	白色 (White)	转向控制 (Rotating Direction) CW/CCW
	蓝色 (Blue)	模拟量调速(Speed Control with analog ref) SV
	黄色 (Yellow)	转速信号反馈 (Tacho out) PG

## 电性能

(Electrical Specifications)

	单位 (Unit)	FL42RBL60-24V-4030A-IE
极数 (Number of poles)		8
相数 (Number of phases)		3
额定电压 (Rated voltage)	VDC	24
额定转矩 (Rated torque)	mN.m	56
连续运行转矩 (Continuous stall torque)	mN.m	68
额定速度 (Rated speed)	RPM	4200
额定功率 (Rated power)	W	25
峰值扭矩 (Peak torque)	mN.m	105
峰值电流 (Peak current)	A	3
线电阻 (Line to line resistance)	ohms@20°C	1.6
线电感 (Line to line inductance)	mH	1.94
转矩常数 (Torque constant)	mN.m/A	41.31
反电势 (Back EMF)	Vrms/KRPM	3.04
转动惯量 (Rotor inertia)	g.cm <sup>2</sup>	33
机身长度 (Motor length) L	mm	64
重量 (Weight)	Kg	0.4