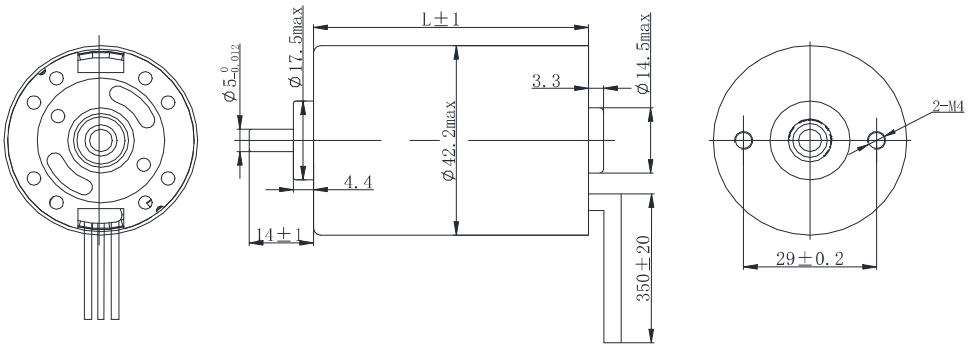
FL42CBL-IE Series

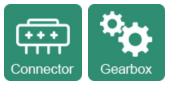
一体化无刷电机
BLDC Motor with Integrated Driver

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
UL1332 AWG22	红色 (Red)	电源正 (Vcc)
	黑色 (Black)	电源负 (GND)
UL1430 AWG26	绿色 (Green)	转向控制 (Rotating Direction) CW/CCW
	白色 (White)	PWM调速 (Speed Control)
	蓝色 (Blue)	刹车 (Brake)
	黄色 (Yellow)	PG转速信号反馈 (Tacho out)

● 电性能 (Electrical Specifications)

	单 位 (Unit)	FL42CBL60-24V-5943-IE	FL42CBL66-24V-3031A-IE
极数 (Number of poles)		4	
相数 (Number of phases)		3	
额定电压 (Rated voltage)	VDC	24	
额定转矩 (Rated torque)	mN.m	68	100
连续运行转矩 (Continuous stall torque)	mN.m	81.6	120
额定速度 (Rated speed)	RPM	5900	3000
额定功率 (Rated power)	W	43	31
峰值转矩 (Peak torque)	mN.m	92	200
峰值电流 (Peak current)	A	3	3
线电阻 (Line to line resistance)	ohms@20℃	0.82	2.5
线电感 (Line to line inductance)	mH	1.2	3.3
转矩常数 (Torque constant)	mN.m/A	33.75	65
反电势 (Back EMF)	Vrms/KRPM	2.5	4.82
转动惯量 (Rotor inertia)	$g.cm^2$	44	55
机身长度 (Motor length) L	mm	60	66
重量 (Weight)	Kg	0.35	0.44

该款电机可以根据客户需求定制。The motor can be designed & manufactured with customized request.