

FL42BLS-IE Series

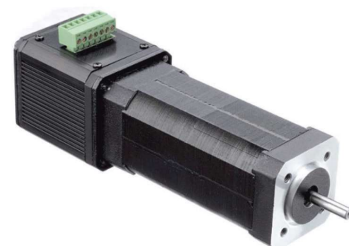
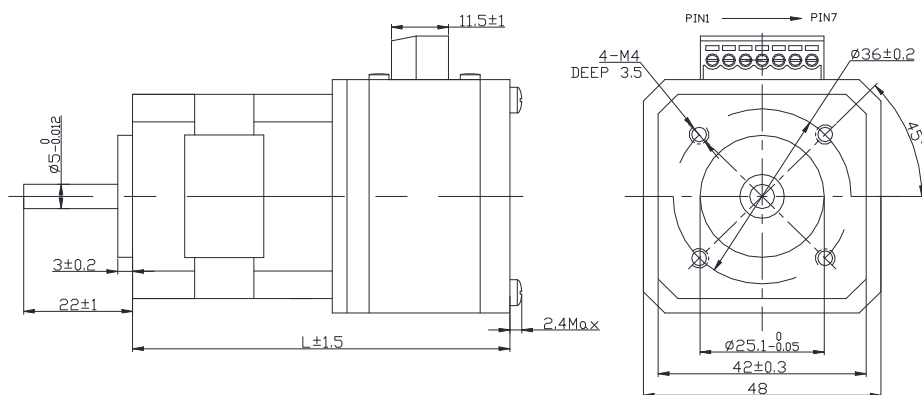
一体化无刷电机
BLDC Motor with Integrated Driver



FULLING MOTOR

机械尺寸

(Dimensions)



配件 Options



接插件



齿轮箱

特性概要

(General Specifications)

绕组连接方式 (Winding Type)	三角形 (Delta 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)	0.025mm@460g
轴向间隙 (Axial Play)	0.08mm@4000g
最大径向负载 (Max radial force)	10N 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)

Pin No		功能 Functions
1	+5V	电压输出(VOLTAGE OUTPUT)
2	F/R	转向控制(ROTATING DIRECTION)
3	SV	调速电压0—5VDC (SPEED VOLTAGE 0—5VDC)
4	PG	速度脉冲输出(TTL) (SPEED PULSE OUTPUT(TTL))
5	GND	接地(GND)
6	GND	接地(GND)
7	+Vp	+24VDC(DC POWER INPUT +24VDC)

电性能

(Electrical Specifications)

	单位 (Unit)	FL42BLS01-IE	FL42BLS02-IE	FL42BLS03-IE	FL42BLS04-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)	N.m	0.0625	0.125	0.185	0.25
连续运行转矩 (Continuous stall torque)	N.m	0.075	0.15	0.22	0.3
额定速度 (Rated speed)	RPM	4000	4000	4000	4000
额定功率 (Rated power)	W	26	52	78	104
峰值转矩 (Peak torque)	N.m	0.11	0.18	0.28	0.28
峰值电流 (Peak current)	A	3.5	5.0	7.5	7.5
线电阻 (Line to line resistance)	ohms@20°C	1.5	0.8	0.43	0.3
线电感 (Line to line inductance)	mH	2.1	1.2	0.71	0.5
转矩常数 (Torque constant)	N.m/A	0.033	0.036	0.037	0.035
反电势 (Back EMF)	Vrms/KRPM	2.45	2.71	2.74	2.62
转动惯量 (Rotor inertia)	g.cm ²	24	48	72	96
机身长度 (Motor length) L	mm	77	97	137	157
重量 (Weight)	Kg	0.45	0.6	0.8	0.95