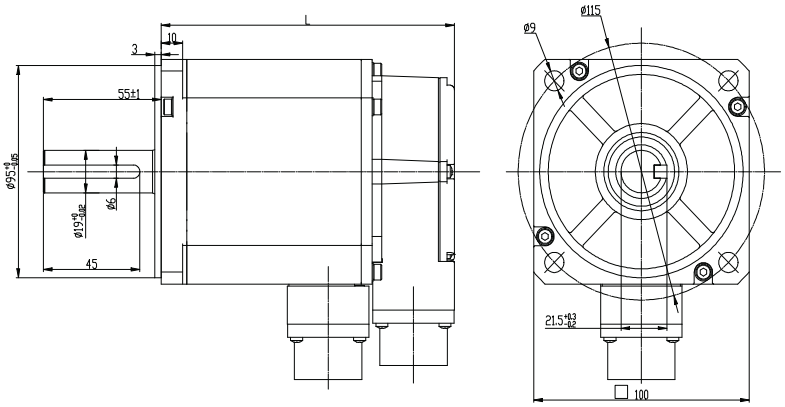
FL100BLG Series

高性能防水无刷电机
High Performance and Water Proof BLDC motor

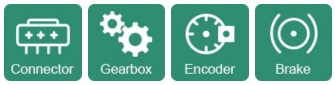
FULLING MOTOR

A2

● 机械尺寸 (Dimensions)



选件 Options



接插件 齿轮箱 编码器 刹 车

● 特性概要 (General Specifications)

绕组连接方式 (Winding Type)	星形 (Star connection)
径向负载 (Max radial force)	490N @ 20mm from the flange
轴向负载 (Max axial force)	196N
绝缘等级 (Insulation Class)	Class F
防护等级 (Protection level)	IP65
使用环境温度 (Temperature)	-20℃~ +50℃
使用环境湿度 (Relative humidity)	≤90%RH (无凝露)(No dewing)
存储环境 (Storage Condition)	-20℃~ +85℃，≤85%RH (无凝露)(No dewing)
安装环境(Installation environment)	远离腐蚀、可燃性气体，油滴，灰尘， 海拔≤1000m Far away active gas, Combustible gas, oil drop, ash

● 接线说明 (Electric Connection)

Pin No	引出线型号 Type	引出线颜色 Color	功能 Functions
5	UL1332 AWG26	绿色 (Green)	霍尔电源正 (Vcc)
1		黄色 (Yellow)	霍尔 U (Hu)
2		棕色 (Brown)	霍尔 V (Hv)
3		灰色 (Gray)	霍尔 W (Hw)
4		蓝色 (Blue)	霍尔电源负 (GND)
1	具体规格见图纸定义	黄色 (Yellow)	U相 (Phase U)
2		红色 (Red)	V相 (Phase V)
3		黑色 (Black)	W相 (Phase W)

● 电性能 (Electrical Specifications)

	单 位 (Unit)	FL100BLG100		FL100BLG150	
极数 (Number of poles)		10			
相数 (Number of phases)		3			
额定电压 (Rated voltage)	VDC	310	48	310	48
额定转矩 (Rated torque)	N.m	3.18	3.18	4.77	4.77
连续运行转矩 (Continuous stall torque)	N.m	3.81	3.81	5.72	5.72
额定速度 (Rated speed)	RPM	3000	3000	3000	3000
额定功率 (Rated power)	W	1000	1000	1500	1500
峰值转矩 (Peak torque)	N.m	7	7	10.5	10.5
峰值电流 (Peak current)	A	13.7	84.3	20.6	121
线电阻 (Line to line resistance)	ohms@20℃	0.82	0.022	0.54	0.015
线电感 (Line to line inductance)	mH	7.4	0.2	5.2	0.15
转矩常数 (Torque constant)	Nm/A	0.51	0.083	0.51	0.087
反电势 (Back EMF)	Vrms/KRPM	38	6.18	38	6.48
转动惯量 (Rotor inertia)	kg.cm2	1.3	1.3	1.84	1.84
机身长度 (Motor length) L	mm	137	142	159	164
重量 (Weight)	kg	3.73	3.8	4.7	4.8