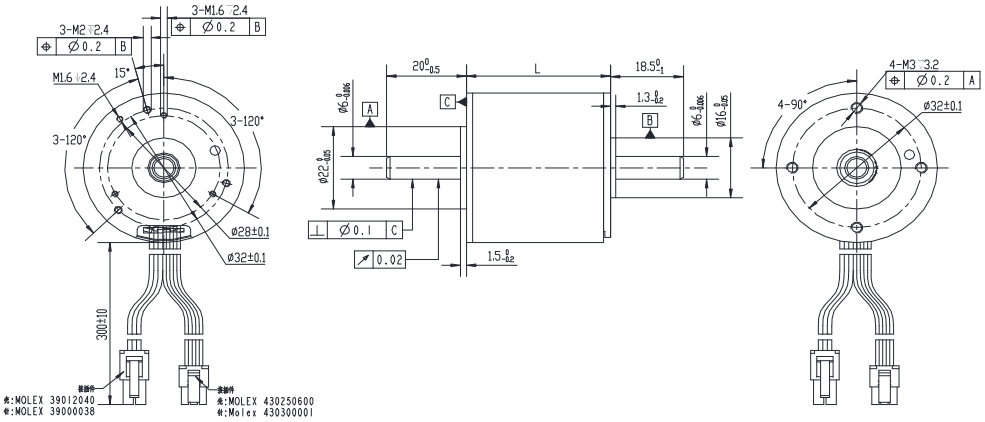
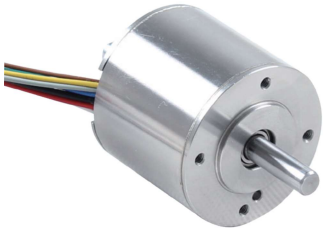
FL40BL Series

常规无刷电机
Regular BLDC Motor

FULLING MOTOR

● 机械尺寸 (Dimensions)





选件 Options

接插件 齿轮箱 编码器

● 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)	preloaded
轴向间隙 (Axial Play)	0.15mm@9N
最大径向负载 (Max radial force)	15N 距法兰5mm (5mm From the flange)
最大轴向负载 (Max axial force)	5N
介电强度 (Dielectric Strength)	500VAC/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 F

● 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 MOLEX 430250600	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	UL1332 AWG20 MOLEX 39012040	红色 (Red)	U相 (Phase U)
2		黑色 (Black)	V相 (Phase V)
3		白色 (White)	W相 (Phase W)

● 电性能 (Electrical Specifications)

	单 位 (Unit)	FL40BL26-12V-9644B	FL40BL26-24V-10357B	FL40BL36-18V-8260B	FL40BL36-36V-8776B
极数 (Number of poles)		14			
相数 (Number of phases)		3			
额定电压 (Rated voltage)	VDC	12	24	18	36
额定转矩 (Rated torque)	mN.m	43.3	52.8	68.7	83.4
连续运行转矩 (Continuous stall torque)	mN.m	52	63	82	100
额定速度 (Rated speed)	RPM	9660	10300	8230	8740
额定功率 (Rated power)	W	44	57	60	76
峰值转矩 (Peak torque)	mN.m	120	158	206	250
峰值电流 (Peak current)	A	13.4	9.35	12.3	7.5
线电阻 (Line to line resistance)	ohms@20℃	0.227	0.501	0.34	0.84
线电感 (Line to line inductance)	mH	0.109	0.39	0.18	0.64
转矩常数 (Torque constant)	mN.m/A	8.95	16.9	16.7	33.5
反电势 (Back EMF)	Vrms/KRPM	0.66	1.25	1.23	2.48
转动惯量 (Rotor inertia)	$g.cm^2$	10.5	10.5	24.2	24.2
机身长度 (Motor length) L	mm	26	26	36	36
重量 (Weight)	Kg	0.17	0.17	0.24	0.24

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

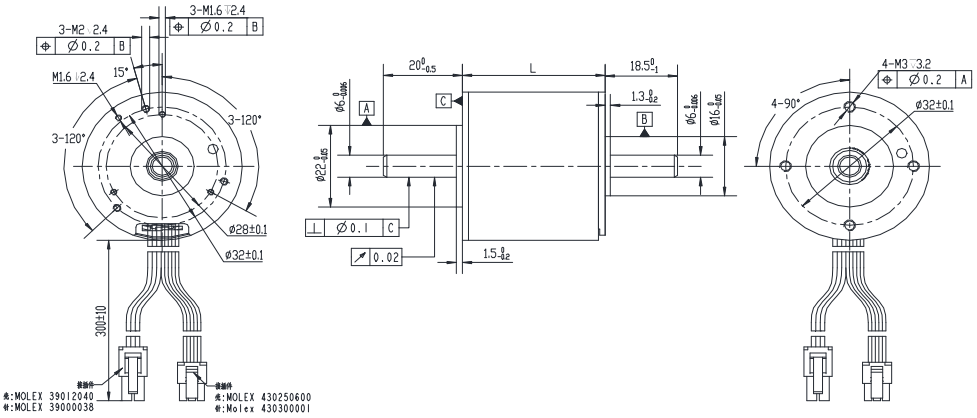
FL40BL Series

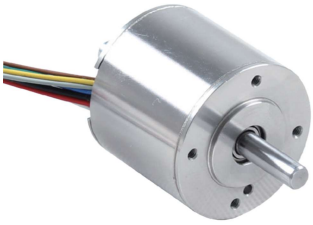
常规无刷电机(高性能)
Regular BLDC Enhanced Motor

FULLING MOTOR

A1

● 机械尺寸 (Dimensions)





选件 Options

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● 电性能 (Electrical Specifications)

	单 位 (Unit)	FL40BL36-36V-6487B	FL40BL36-48V-4165B	FL40BL56-36V-3986B	FL40BL56-48V-43102B
极数 (Number of poles)		14			
相数 (Number of phases)		3			
额定电压 (Rated voltage)	VDC	36	48	36	48
额定转矩 (Rated torque)	mN.m	129	151	207	222
连续运行转矩 (Continuous stall torque)	mN.m	181	181	248	266
额定速度 (Rated speed)	RPM	6450	4100	3950	4390
额定功率 (Rated power)	W	87	65	86	102
峰值转矩 (Peak torque)	mN.m	387	453	621	666
峰值电流 (Peak current)	A	8.4	4.95	8.3	7.3
线电阻 (Line to line resistance)	ohms@20℃	0.59	2.28	0.85	1.01
线电感 (Line to line inductance)	mH	0.51	2.05	0.68	1.0
转矩常数 (Torque constant)	mN.m/A	46.1	91.8	75.2	91
反电势 (Back EMF)	Vrms/KRPM	3.42	6.8	5.57	6.73
转动惯量 (Rotor inertia)	$g.cm^2$	23	23	44	44
机身长度 (Motor length) L	mm	36	36	56	56
重量 (Weight)	Kg	250	250	390	390