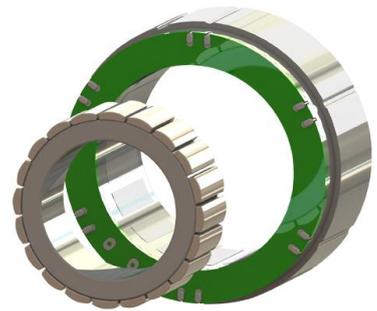


FTM50/68系列无框力矩电机

FTM50/68 Series Frameless torque motor



一般性能参数

绕组类型 winding type	YWE
霍尔电角度 hall angle	120°
介电强度 Dielectric strength	1000VAC/1S
绝缘电阻 Insulation resistance	>100M Ω @500VDC
运行环境 Operation ambient	-20℃~50℃
绝缘等级 Insulation class	F

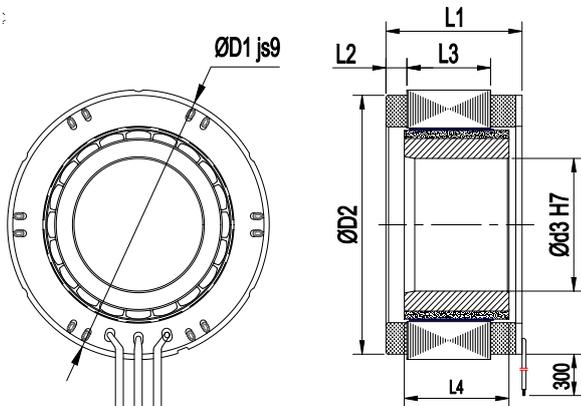
引线接线定义及功能

管脚号或引线颜色 PIN NUM. Or lead color	1	2	3	4	5	6	7	红(U)	蓝(V)	黄(W)
引线功能 Function	NTC	NTC	Vcc	Hu	Hv	Hw	GND	PHu	PHv	PHw
插件型号和线规 Connector type and lead gauge	MOLEX 532610771 or AWG28							AWG20		

电机性能参数

项目	单位	FTM50-			FTM68-		
		08C00350	16C00625	24C00925	08C00630	16C01218	24C01818
电机极数 Motor poles	/	20					
电机相数 Motor phase	/	3					
额定电压 Rated voltage	VDC	48	48	48	48	48	48
额定功率 Rated output power	W	157	157	235	188	225	340
额定转速 Rated speed	rpm	5000	2500	2500	3000	1800	1800
额定转矩 Rated torque	N.m	0.3	0.6	0.9	0.6	1.2	1.8
额定电流 Rated current	A	4.5	5.0	6.8	5.8	6.4	9.5
最高转速 Max. Operating speed	rpm	7500	4250	4000	5000	2800	2800
峰值转矩 Peak torque	N.m	0.9	1.8	2.7	1.8	3.6	5.4
峰值电流 Peak current	A	13.5	15	20.5	20.5	17.5	28.5
反电势常数 Voltage constant	Vrms/krpm	4.5	7.8	8.4	6.7	12	12
转矩常数 Torque constant	N.m/A	0.074	0.129	0.139	0.111	0.199	0.199
绝缘等级 Insulation class	/	F					
转子惯量 Rotor inertia	Kg.m ²	7.2/9.6*	13.6/16*	20/22.4*	14/18.6*	26.4/30.1*	38.8/43.4*
重量 Weight	g	90/98*	140/150*	220/230*	200/210*	285/295*	350/360*

外形图 (outline)



Motor code	L1	L2	L3	L4	D1	D2	D3
FTM50-08C00350	18	3	8	9/12*	50	48	24.6
FTM50-16C00625	24	3	16	17/20*	50	48	24.6
FTM50-24C00925	36	3	24	25/28*	50	48	24.6
FTM68-08C00630	18	4	8	9/12*	68	66	36.6
FTM68-16C01218	24	4	16	17/20*	68	66	36.6
FTM68-24C01818	36	4	24	25/28*	68	66	36.6

Note: The data with "*" refers to the version with Hall.