

2224N5M | 贵金属电刷 Precious Metal Commutation

应用领域：医疗、保健、汽车、机器人、工业自动化等精密驱动领域。

Applications: precision drives in medical equipment and devices, healthcare products, automotive, robotics, and industrial automation.

主要技术指标 | Characteristics

			11-105-6.0	09-158-12.0	12-112-12.0
1 电压	Voltage	V	6.0	12.0	12.0
2 端电阻	Terminal resistance	Ω	1.3	2.0	5.9
3 空载转速	No-load speed	rpm	10500	15800	11200
4 空载电流	No-load current	mA	60	55	30
5 堵转转矩	Stall torque	mNm	24.6	42.7	20.2
6 堵转电流	Stall current	mA	4620	6000	2030
7 额定转矩	Nominal torque	mNm	5.0	5.0	3.0
8 额定转速	Nominal speed	rpm	8360	13950	9530
9 额定电流	Nominal current	mA	990	750	330
10 最大输出功率	Max. output power	W	6.8	17.7	5.9
11 最大效率	Max. efficiency	%	79	82	77
12 反电势常数	Back-EMF constant	mV/rpm	0.6	0.8	1.1
13 转矩常数	Torque constant	mNm/A	5.4	7.2	10.1
14 转速 / 转矩斜率	Speed/torque gradient	rpm/mNm	430	370	560
15 转子惯量	Rotor inertia	gcm ²	2.4	2.4	2.4
16 重量	Weight	g	36	36	36
17 热阻 (机壳 - 环境)	Thermal resistance housing-ambient	K/W	22.31		
18 热阻 (线圈 - 机壳)	Thermal resistance winding-housing	K/W	6.06		
19 热时常数 (电机)	Thermal time constant motor	s	313		
20 热时常数 (线圈)	Thermal time constant winding	s	218		
21 工作温度范围	Operating temperature range	°C	-20~+85		
22 绕组耐温等级	Thermal class of winding	°C	130		
23 轴向间隙	Axial play	mm	0.02~0.15		
24 径向间隙	Radial play	mm	0.025		
25 动态轴向载荷	Axial load dynamic	N	3.3		
26 静态轴向载荷	Axial load static	N	60		
27 径向载荷 (距安装面 3mm)	Radial load at 3 mm from mounting face	N	14		
28 极对数	No. of pole pairs		1		
29 轴承	Bearings		2 枚含油轴承/2 sleeve bearings		
30 换向结构	Commutator		贵金属 5 相/metal 5 segments		
31 防护等级	Protection class		IP 40		

★可选参数 Options: 导线长度 Lead wires length 轴长 Shaft length 性能 Special coils

轴承 Bearing type 齿轮箱 Gearheads

外观图 | Outline Drawing

