

## 2232N5M2B | 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.

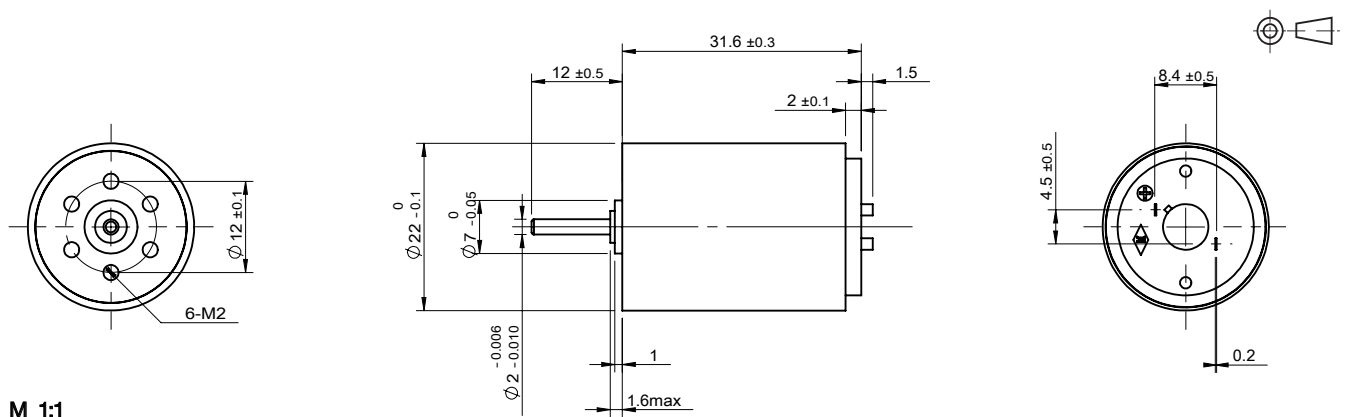
### 主要技术指标 | Characteristics

			03-81-6.0	08-95-9.0	04-100-12.0	
1	电压	Voltage	V	6.0	9.0	12.0
2	端电阻	Terminal resistance	$\Omega$	2.0	2.9	4.3
3	空载转速	No-load speed	rpm	8100	9500	10000
4	空载电流	No-load current	mA	20	20	20
5	堵转转矩	Stall torque	mNm	20.9	27.7	31.5
6	堵转电流	Stall current	mA	3000	3100	2790
7	额定转矩	Nominal torque	mNm	5.0	7.0	8.0
8	额定转速	Nominal speed	rpm	6170	7100	7460
9	额定电流	Nominal current	mA	730	800	720
10	最大输出功率	Max. output power	W	4.4	6.9	8.3
11	最大效率	Max. efficiency	%	84	85	84
12	反电势常数	Back-EMF constant	mV/rpm	0.7	0.9	1.2
13	转矩常数	Torque constant	mNm/A	7.0	9.0	11.4
14	转速 / 转矩斜率	Speed/torque gradient	rpm/mNm	390	340	320
15	转子惯量	Rotor inertia	gcm <sup>2</sup>	4.4	4.4	4.4
16	重量	Weight	g	55.8	55.8	55.8
17	热阻 (机壳 - 环境)	Thermal resistance housing-ambient	K/W		19.4	
18	热阻 (线圈 - 机壳)	Thermal resistance winding-housing	K/W		21.7	
19	热时常数 (电机)	Thermal time constant motor	s		383	
20	热时常数 (线圈)	Thermal time constant winding	s		329	
21	工作温度范围	Operating temperature range	$^{\circ}\text{C}$		-20~+85	
22	绕组耐温等级	Thermal class of winding	$^{\circ}\text{C}$		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 枚滚动轴承/2 ball bearings	
30	换向结构	Commutator			贵金属 5 相/metal 5 segments	
31	防护等级	Protection class			IP 30	

★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



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