

# 力矩 电机

## TORQUE MOTORS



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##### 特点

- 体积小，功率大，效率高和机械特性硬的特点。
- 转矩与输入电流成正比，在低速下能平稳地运行。
- 负载端有高的转矩惯量比和高的耦合刚度。
- 电动机能直接与负载连击，不用齿轮箱，故传动链短没有齿隙误差。

##### FEATURES

- Small size, high power, high efficiency and hard mechanical characteristics.
- Torque is proportional to input current and can run smoothly at low speed.
- Load end has high torque inertia ratio and high coupling stiffness.
- The motor can directly connect with the load without gear box, so the transmission chain.
- Short without backlash error.



### 主要技术指标 Main Technical Indicators

型号 TYPE	运转堵转转矩 Operating Blocking TorqueM		堵转电压 (伏) Locked rotor voltage (V)	堵转电流 (安) Locked rotor current (A)	空载转速 (转每分) No-load speed (RPM)	堵转时 输入功率 (瓦) Blocking time Input power (W)	转矩波动 (%)	转矩灵敏度 Torque sensitivity		重量 WEIGHT/KG
	(克.厘米) (G.CM)	(牛.米) (mN·m)						(克.厘米每安) (G.CM/A)	(牛.米每安) (N.M/A)	
SYZ-01	1200	0.1176	15	0.5	600	7.5	10	2400	0.2352	0.5
SYZ-02	2800	0.2744	28	0.6	330	16.8	7	4700	0.4606	0.7
SYZ-05	5000	0.49	24	1.0	300	24	7	5000	0.49	0.9
SYZ-20A	21000	2.058	24	2.4	220	57.6	7	9000	0.882	1.8

直流力矩电动机可以长期运行在堵转和低速状态下，所以特别适合高精度的位置控制系统和低速运行的速度控制系统。此外，还可在一般仪器仪表装置中作执行或驱动元件用。

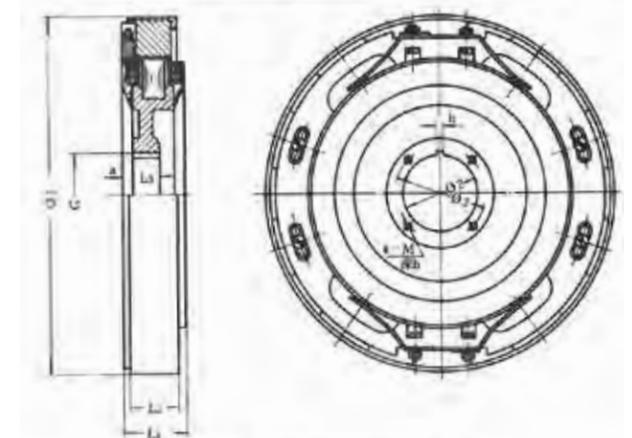
DC torque motor can be operated in the condition of blockage and low speed for a long time, so it is especially suitable for high precision position control system and low speed speed speed control system. In addition, it can also be used as an executive or driving element in general instruments and instruments.

### 外形及安装尺寸

#### Shape & installation dimensions

电动机为盘式扁平结构，多极永磁式的定子，嵌有电枢绕组和换向器的转子以及电刷架为分装安装。电枢通电时，如将导电片接头对换电动机可以改变转向。

The motors is a disc flat structure, multi-pole permanent magnet stator, rotor with armature winding and commutator and brush holder are installed separately. When armature is electrified, the steering can be changed if the conductive disc joint is exchanged for the motors.



型号 TYPE	尺寸和公差 (毫米) SIZE & TOLERANCE (MM)										
	Ø1	Ø2	L1	L2	L3	G	b	Ø3	M	h	a
	d	D	±0.1	±0.1	-0.1	+0.12	-0.02	±0.1			
SYZ-01	Ø72	Ø20	19	14	12.8	—	—	—	—	—	31
SYZ-02	Ø88	Ø50	24	11	13.5	—	—	—	—	—	5.25
SYZ-05	Ø85	Ø12	29	13	20	—	—	—	—	—	4.5
SYZ-20A	Ø143	Ø30	25	19	10	31.1	3	37	M3	6	4.5