

直流减速电机使用和安装注意事项

- 1、为抑制电机的干扰信号，微型减速电机安装时，可以在正极与负极之间焊接一个 $0.1\ \mu\text{F}$ （63V）的涤纶电容，负极要接地。
- 2、在安装、调试、使用中应该尽量避免堵转现象发生。如果不可避免地要发生堵转，应该明确地告诉本公司，事先采取必要的措施。大减速比、大转矩的产品，要由客户自己采取限制输入电流的方法，作为防止因发生堵转而损坏减速器的措施。
- 3、微型减速电机水平方向安装是理想的。要尽量避免减速器出轴朝上安装和运转，因为减速器内的润滑油脂可能会受热融化，如果渗透到碳刷，可能使得碳刷很快磨损而损坏。
- 4、焊接导线应由熟练的操作工人进行，使用合适的电烙铁、焊锡和助焊剂，焊接动作要求快捷和准确。一般建议使用40W的烙铁，烙铁头部的温度在 $320 \pm 20^\circ\text{C}$ ，焊接时间最好在2~3秒。如果电机上的焊接片过份受热，严重的会使电机内部的焊点松脱，和损坏防干扰的电子元件。一般的也可能改变电机电刷对换向器的压力，增加火花量，影响电机寿命。
- 5、在减速器出轴上安装结构件时，不允许直接在减速器出轴上敲打或压配；在减速器出轴上用粘结剂固定传动结构件时，不能粘着减速器的轴承。不良的操作会损坏减速器。
- 6、不要擅自打开减速器，否则会噪音增加。
- 7、在安装前对减速电机要进行通电运转检查，在安装过程中不应使减速电机受到冲击、跌落。
- 8、引出线不能用力拉，接线焊接端子不能弯曲，否则会发生内部导电不良，影响性能。
- 9、要控制好安装螺钉的长度，旋入过长会顶坏减速器里面的结构件。
- 10、电机安装前先要检查被电机拖动的传动系统是否有故障，如果发生堵转可能使得减速器齿轮损坏。

USAGE AND INSTALLATION INSTRUCTIONS OF DC GEAR MOTOR

- 1、To restrain motor's interference signal, a capacitor $0.1\ \mu\text{F}$ (63V) can be welded between Positive and negative pole of small gear motor while installation.
- 2、Try not to appear stall running during the process of gear motor's installation, testing and using. If stall running will inevitably occur, please explicitly inform our company to take necessary measures in advance. For items with large reduction ratio and high torque, customers themselves should adopt the method of restricting input current to avoid happening of stall running and damage to gearboxes.
- 3、It is ideal to install gear motor at horizontal direction. upwards installation and operation of Gearbox's output shaft should be avoided since lubricating grease inside the gearbox may melt when it is heated. If lubricating grease permeates to carbon brush, the brush may be damaged.
- 4、Let skillful operating workers weld leads to ensure fast and accurate soldering work. Use suitable electric soldering iron, soldering tin and scaling powder. 40W soldering iron is suggested. The temperature of top soldering iron should be $320 \pm 20^\circ\text{C}$. Weld time should be 2~3 seconds. If welded patch is excessively heated, seriously, welding spot inside gear motor may fetch away and electronic interference suppression component may be damaged; generally, it may change carbon brush's pressure to the commutator, then increase the spark and influence gear motor life.
- 5、When installing structural parts on the output shaft of gearbox, direct strikes and pressure on the output shaft is not allowed. When fixing operating structural parts using binder on the output shaft of gearbox, shaft cannot be cohered. Unsuitable operation will damage gearbox.
- 6、Do not open gearbox, or noise level would go up.
- 7、Power-on operation check should be done before the installation of gear motor. Gear motor should not be impacted or dropped during installation.
- 8、Outgoing leads should not be strongly pulled. Solder terminal cannot be curve, or inner electric conduction would be abnormal, then gear motor performance will be affected.
- 9、Make installation screw at a suitable length, or structural parts inside gearbox may be damaged.
- 10、Before installation, please check if operational system driven by the motor is normal. Gears may be damaged if stall happens.