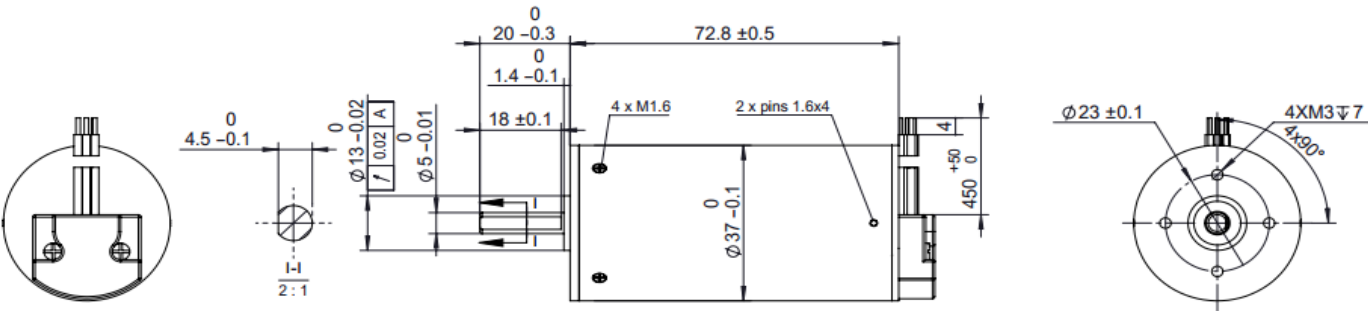


Φ35 mm brushless motor (high power)



|                  |                     |           |  |  |  |              |  |                  |
|------------------|---------------------|-----------|--|--|--|--------------|--|------------------|
| 电机数据             |                     | 106507019 |  |  |  |              |  |                  |
| 额定电压值            |                     |           |  |  |  |              |  |                  |
| 1 额定电压           | $U_N$               | 48        |  |  |  |              |  | V                |
| 2 空载转速           | $n_0$               | 18500     |  |  |  |              |  | rpm              |
| 3 空载电流           | $I_0$               | 500       |  |  |  |              |  | mA               |
| 4 堵转转矩           | $M_H$               | 17900.0   |  |  |  |              |  | mNm              |
| 5 堵转电流           | $M_f$               | 76.2      |  |  |  |              |  | A                |
| 6 最大效率           | $\eta_{max}$        | 84        |  |  |  |              |  | %                |
| 7 额定功率           | $W_N$               | 105.0     |  |  |  |              |  | W                |
| 8 额定转速           | $n_N$               | 17500     |  |  |  |              |  | rpm              |
| 9 额定转矩           | $M_N$               | 60        |  |  |  |              |  | mNm              |
| 10 额定电流 (热极限)    | $I_N$               | 3.2       |  |  |  |              |  | A                |
| 技术参数             |                     |           |  |  |  |              |  |                  |
| 11 相间电阻          | $R$                 | 0.63      |  |  |  |              |  | $\Omega$         |
| 12 相间电感          | $L$                 | 0.17      |  |  |  |              |  | mH               |
| 13 反电势常数         | $K_E$               | 2.58      |  |  |  |              |  | mV/rpm           |
| 14 转矩常数          | $K_M$               | 24.61     |  |  |  |              |  | mNm/A            |
| 15 转速常数          | $K_n$               | 388       |  |  |  |              |  | rpm/V            |
| 16 电流常数          | $K_f$               | 0.041     |  |  |  |              |  | A/mNm            |
| 17 转速/转矩斜率       | $\Delta n/\Delta M$ | 1.03      |  |  |  |              |  | rpm/mNm          |
| 18 机械时间常数        | $\tau_m$            | 12.3      |  |  |  |              |  | ms               |
| 19 转子惯量          | $J$                 | 26.8      |  |  |  |              |  | gcm <sup>2</sup> |
| 技术参数             |                     |           |  |  |  |              |  |                  |
| 20 工作温度范围:       |                     |           |  |  |  |              |  |                  |
| 电机               |                     |           |  |  |  | -20.....+100 |  | °C               |
| 线圈最高允许温度         |                     |           |  |  |  | +125         |  | °C               |
| 21 旋转方向          |                     |           |  |  |  | 电子可逆         |  |                  |
| 22 最大允许转速        | $n_{max}$           |           |  |  |  | 20000        |  | rpm              |
| 23 磁极对数          |                     |           |  |  |  | 1            |  |                  |
| 24 相数            |                     |           |  |  |  | 3            |  |                  |
| 25 磁钢材料          |                     |           |  |  |  | 钕磁铁          |  |                  |
| 26 霍尔传感器         |                     |           |  |  |  | 数字           |  |                  |
| 机械参数             |                     |           |  |  |  |              |  |                  |
| 27 轴承类型          |                     |           |  |  |  | 预紧滚珠轴承       |  |                  |
| 28 轴向间隙          |                     |           |  |  |  | 0 - 0.3      |  | mm               |
| 29 最大轴向载荷 (动态)   |                     |           |  |  |  | 6            |  | N                |
| 30 最大轴向压配合力 (静态) |                     |           |  |  |  | 90           |  | N                |
| (静态, 支撑轴)        |                     |           |  |  |  | 1200         |  | N                |
| 31 最大径向载荷        |                     |           |  |  |  | 28           |  | N                |
| 产品               |                     |           |  |  |  |              |  |                  |
| 32 重量            |                     | 374       |  |  |  |              |  | g                |

尺寸图



选件, 电缆和连接信息

|                                 |        |                    |
|---------------------------------|--------|--------------------|
| Connection Motor (UL1569 AWG20) |        | UL1569 AWG24       |
| Motor winding A                 | red    | Vhall 4.5V.....24V |
| Motor winding B                 | black  | GND                |
| Motor winding C                 | yellow | Hall sensors A     |
|                                 |        | Hall sensors B     |
|                                 |        | Hall sensors C     |
|                                 |        | red                |
|                                 |        | black              |
|                                 |        | blue               |
|                                 |        | green              |
|                                 |        | white              |