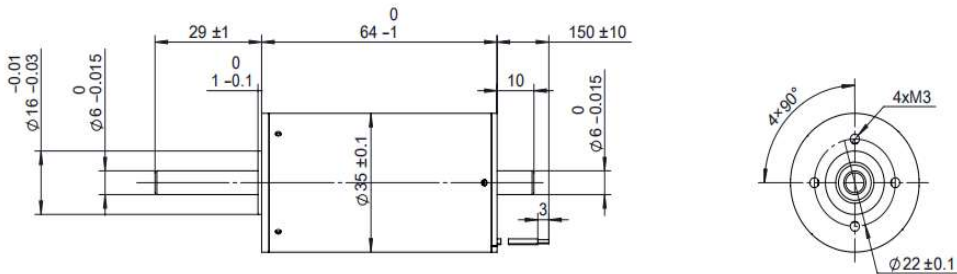


Φ35 mm brushless motor (high power)



Motor Data			106506407				
Values at nominal voltage 额定电压值							
1	Nominal voltage 额定电压	U_N	48				V
2	No load speed 空载转速	n_o	7200				rpm
3	No load current 空载电流	I_o	100				mA
4	Stall torque 堵转转矩	M_H	496.6				mNm
5	Stall current 堵转电流	M_I	8.0				A
6	Max. efficiency 最大效率	η_{max}	86				%
7	Nominal power 额定功率	W_N	75.2				W
8	Nominal speed 额定转速	n_N	5013				rpm
9	Nominal torque (max.continuous torque) 额定转矩	M_N	150				mNm
10	Nominal current (max.continuous current) 额定电流	I_N	2.5				A
Characteristics 技术参数							
11	Terminal resistance phase to phase 相间电阻	R	6				Ω
12	Terminal inductance phase to phase 相间电感	L	825				uH
13	Back-EMF constant 反电势常数	K_E	6.58				mV/rpm
14	Torque constant 转矩常数	K_M	62.87				mNm/A
15	Speed constant 转速常数	K_n	152				rpm/V
16	Current constant 电流常数	K_I	0.016				A/mNm
17	Speed / torque gradient 转速/转矩斜率	$\Delta n/\Delta M$	14.50				rpm/mNm
18	Mechanical time constant 机械时间常数	τ_m	6.3				ms
19	Rotor inertia 转子惯量	J	25.0				gcm ²
Specifications 技术参数							
20	Operating temperature range: 工作温度范围:						
	Motor 电机			-20.....+100			°C
	winding, max permissible 线圈最高允许温度			+125			°C
21	Direction of rotation 旋转方向			electronically reversible			
22	Max. speed 最大允许转速	n_{max}		10000			rpm
23	Number of pole pairs 磁极对数			1			
24	Number of phases 相数			3			
25	Magnet material 磁钢材料			NdFeB			
26	Hall sensors 霍尔传感器						
Mechanical data 机械参数							
27	Bearing type 轴承类型			ball bearings, preloaded			
28	Axial play 轴向间隙			0 - 0.3			mm
29	Max. axial load (dynamic) 最大轴向载荷 (动态)			6			N
30	Max. force for press fits (static) 最大轴向压配合力 (静态)			90			N
	(static, shaft supported) (静态, 支撑轴)			1200			N
31	Max. radial loading, 5 mm from flange 最大径向载荷			28			N
Product 产品							
32	Weight of motor 重量		308				g

Dimensional drawing 尺寸图



Option, cable and connection information 选件, 电缆和连接信息

Connection Motor (Cable AWG20)			
Motor winding A		red	Vhall 4.5V.....24V
Motor winding B		black	GND
Motor winding C		yellow	Hall sensors A
			Hall sensors B
			blue
			green