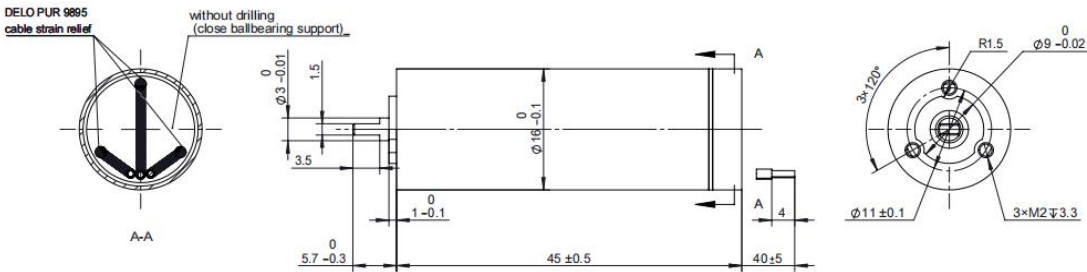


Φ16 mm brushless motor (high power)



Motor Data		103504501					
Values at nominal voltage 额定电压值							
1	Nominal voltage 额定电压	U_N	32				V
2	No load speed 空载转速	n_o	40000				rpm
3	No load current 空载电流	I_o	90				mA
4	Stall torque 堵转转矩	M_H	92.7				mNm
5	Stall current 堵转电流	M_I	12.3				A
6	Max. efficiency 最大效率	η_{max}	84				%
7	Nominal power 额定功率	W_N	26.9				W
8	Nominal speed 额定转速	n_N	36849				rpm
9	Nominal torque (max.continuous torque) 额定转矩	M_N	7.3				mNm
10	Nominal current (max.continuous current) 额定电流	I_N	1.05				A
Characteristics 技术参数							
11	Terminal resistance phase to phase 相间电阻	R	2.6				Ω
12	Terminal inductance phase to phase 相间电感	L	200				μH
13	Back-EMF constant 反电势常数	K_E	0.79				mV/rpm
14	Torque constant 转矩常数	K_M	7.58				mNm/A
15	Speed constant 转速常数	K_n	1259				rpm/V
16	Current constant 电流常数	K_I	0.132				A/mNm
17	Speed / torque gradient 转速/转矩斜率	$\Delta n/\Delta M$	431.71				rpm/mNm
18	Mechanical time constant 机械时间常数	τ_m	0.7				ms
19	Rotor inertia 转子惯量	J	0.72				gcm^2
Specifications 技术参数							
20	Operating temperature range: 工作温度范围:						
	Motor 电机				-20.....+155		$^{\circ}C$
	winding, max permissible 线圈最高允许温度				+125		$^{\circ}C$
21	Direction of rotation 旋转方向				electronically reversible		
22	Max. speed 最大允许转速	n_{max}			60000		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）				3		N
30	Max. force for press fits (static) 最大轴向压配合力（静态）				25		N
	(static, shaft supported) （静态，支撑轴）				250		N
31	Max. radial loading, 5 mm from flange 最大径向载荷				10		N
Product 产品							
32	Weight of motor 重量		42				g

Dimensional drawing 尺寸图



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

Connection Motor (Cable AWG22)

Motor winding A		red
Motor winding B		black
Motor winding C		yellow