

3216ZWW

Outer Rotor Without Sensor

Applications: UAV gimbals and handheld gimbals

Characteristics

		-1-12.0	
1	Voltage	V	12
2	Terminal resistance	Ω	4.1
3	Terminal inductance	mH	1.34
4	No-load speed	rpm	3200
5	No-load current	A	0.5
6	Nominal torque	mNm	50.7
7	Nominal speed	rpm	1600
8	Nominal current	A	1.5
9	Max. output power	W	8.4
10	Max. efficiency	%	73
11	Back-EMF constant	mV/rpm	3.7
12	Torque constant	mNm/A	35
13	Speed/torque gradient	rpm/mNm	32
14	Rotor inertia	gcm ²	35
15	Weight	g	48
16	Thermal resistance housing-ambient	K/W	4.8
17	Thermal resistance winding-housing	K/W	10.2
18	Thermal time constant motor	s	110
19	Thermal time constant winding	s	6.9
20	Operating temperature range	$^{\circ}\text{C}$	-40~+100
21	Max. winding temperature	$^{\circ}\text{C}$	155
22	Axial play	mm	0.08
23	Radial play	mm	0.006
24	Axial load dynamic	N	5
25	Axial load static	N	80
26	Radial load at 3 mm from mounting face	N	29
27	No. of pole pairs		7
28	Bearings		2 ball bearings
29	Commutation		Sensorless
30	Protection class		IP 20

Options

- Lead wires length
- Shaft length
- Special coils
- Gearheads
- Bearing type
- Hall sensor
- Encoder
- Driver

Outline Drawing

