2040ZWWN

Inner Rotor Without Sensor

Applications: Precision driving field in medical equipment, industrial automation, etc.

Characteristics

			-3-12.0	-4-12.0	-5-9.0
1	Voltage	V	12	12	9
2	Terminal resistance	Ω	1.1	3.6	2.5
3	No-load speed	rpm	15000	8000	6700
4	No-load current	A	0.25	0.22	0.2
5	Nominal torque	mNm	13.5	14.5	17.7
6	Nominal speed	rpm	12200	5200	3800
7	Nominal current	A	2.2	1.3	1.7
8	Max. output power	W	31	8.7	7.2
9	Max. efficiency	%	72	55	58
10	Back-EMF constant	mV/rpm	0.78	1.4	1.3
11	Torque constant	mNm/A	7.5	13.4	12.1
12	KV Value	rpm/V	1250	670	745
13	Speed/torque gradient	rpm/mNm	190	190	163
14	Rotor inertia	gcm^2	2	2	2
15	Weight	g	55	55	55
16	Thermal resistance housing-ambient	K/W	11	11	11
17	Thermal resistance winding-housing	K/W	12.5	12.5	12.5
18	Thermal time constant motor	s	620	620	620
19	Thermal time constant winding	s	4	4	4
20	Operating temperature range	℃	-40~+100	-40~+100	-40~+100
21	Max. winding temperature	℃	155	155	155
22	Axial play	mm	0.012	0.012	0.012
23	Radial play	mm	0.008	0.008	0.008
24	Axial load dynamic	N	5	5	5
25	Axial load static	N	80	80	80
26	Radial load at 3 mm from mounting face	N	29	29	29
27	No. of pole pairs		1	1	1
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

UNIT:mm