



P532 With Encoder

Electrical Data	P532 012 137 HEDS 5540 A14 (series)	P532 004 137 HEDS 5540 A14 (series)	P532 004 137 HEDS 5540 A14 (parallel)	P532 0.7 137 HEDS 5540 A14 (parallel)	
1 Resistance per Phase, typ	27.0	8.8	2.2	0.4	Ohms
2 Inductance per Phase, typ	64.0	20.0	5.0	0.7	mH
3 Nominal Phase Current (2 ph. On)	0.40	0.70	1.40	3.70	A
4 Nominal Phase Current (1 ph. On)	0.56	1.00	2.00	5.20	A
5 Back EMF amplitude	21.00	12.00	6.00	2.30	V/kstep/s
Coil independent parameters					
6 Holding Torque, nominal current	215 (30.3)	215 (30.3)	215 (30.3)	215 (30.3)	mNm (oz-in)
7 Holding Torque, 1.5x nominal current (1)	370 (52.4)	370 (52.4)	370 (52.4)	370 (52.4)	mNm (oz-in)
8 Detent Torque	45 (6.4)	45 (6.4)	45 (6.4)	45 (6.4)	mNm (oz-in)
9 Rotor Inertia	13.000	13.000	13.000	13.000	kgm ² x 10 ⁻⁷
10 Step Angle	4	3.6	3.6	3.6	Degree
11 Absolute accuracy 2 ph. On, Full step mode	+/- 5%	+/- 5%	+/- 5%	+/- 5%	% Full Step
12 Steps Per Revolution	100	100	100	100	
13 Ambient Temperature Range (operating)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	°C (°F)
14 Maximum Coil Temperature	130 (266)	130 (266)	130 (266)	130 (266)	°C (°F)
15 Thermal Resistance Coil-ambient (2)	7	7.3	7.3	7.3	°C/W
16 Natural Resonance Frequency (nominal current)	350	350	350	350	Hz
17 Electrical Time Constant	1.50	1.50	1.50	1.50	ms
18 Angular Acceleration (nominal current)	195,000	195,000	195,000	195,000	rad/s ²
19 Bearing Type	Ball	Ball	Ball	Ball	
20 Dielectric Withstanding Voltage	500 VRMS for 5 seconds (25@5N)				VAC
21 Radial Shaft Play	25@5N				µm
22 Axial Shaft Play	25@5N				µm
23 Maximum Radial Shaft Load	20 (72)				N (oz)
24 Maximum Axial Shaft Load (3)	30 (108)				N (oz)
25 Weight	260 (9.2)				g (oz)
26 Power Rate (nominal current)	35.0				kW/s

(1) Measured with 1 phase ON. The max coil temperature must be respected

(2) Motor unmounted

(3) Shaft must be supported when press-fitting a pulley or

