



P532

Electrical Data	P532 258 012 10 (series)	P532 258 004 10 (series)	P532 258 004 10 (parallel)	P532 258 0.7 10 (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	205 (29)	205 (29)	205 (29)	205 (29)	mNm (oz-in)
7 Holding Torque, 1.5x nominal current (1)	360 (51)	360 (51)	360 (51)	360 (51)	mNm (oz-in)
8 Detent Torque	28 (4)	28 (4)	28 (4)	28 (4)	mNm (oz-in)
9 Rotor Inertia	12.000	12.000	12.000	12.000	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)	330	330	330	330	Hz
17 Electrical Time Constant	2.30	2.30	2.30	2.30	ms
18 Angular Acceleration (nominal current)	171,000	171,000	171,000	171,000	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	250 (8.8)				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

