

**P760 With Encoder**

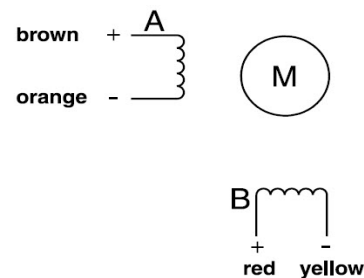
**Electrical Data** **P760 0.4 10 HEDS 5540 A14**

1 Resistance per Phase, typ		0.5	Ohms
2 Inductance per Phase, typ		2.1	mH
3 Nominal Phase Current (2 ph. On)		4.20	A
4 Nominal Phase Current (1 ph. On)		6.00	A
5 Back EMF amplitude		7.10	V/kstep/s
<b>Coil independent parameters</b>			
6 Holding Torque, nominal current		325 (46)	mNm (oz-in)
7 Holding Torque, 1.5x nominal current (1)		600 (85)	mNm (oz-in)
8 Detent Torque		20 (2.8)	mNm (oz-in)
9 Rotor Inertia		18.000	kgm <sup>2</sup> x 10 <sup>-7</sup>
10 Step Angle		8	Degree
11 Absolute accuracy 2 ph. On, Full step mode		+/-5	% Full Step
12 Steps Per Revolution		48	
13 Ambient Temperature Range (operating)		-20 to 50 (-4 to 122)	°C (°F)
14 Maximum Coil Temperature		130 (266)	°C (°F)
15 Thermal Resistance Coil-ambient (2)		0	°C/W
16 Natural Resonance Frequency (nominal current)		240	Hz
17 Electrical Time Constant		4.70	ms
18 Angular Acceleration (nominal current)		190,000	rad/s <sup>2</sup>
19 Bearing Type		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		700 (25)	g (oz)
26 Power Rate (nominal current)		58.0	kW/s

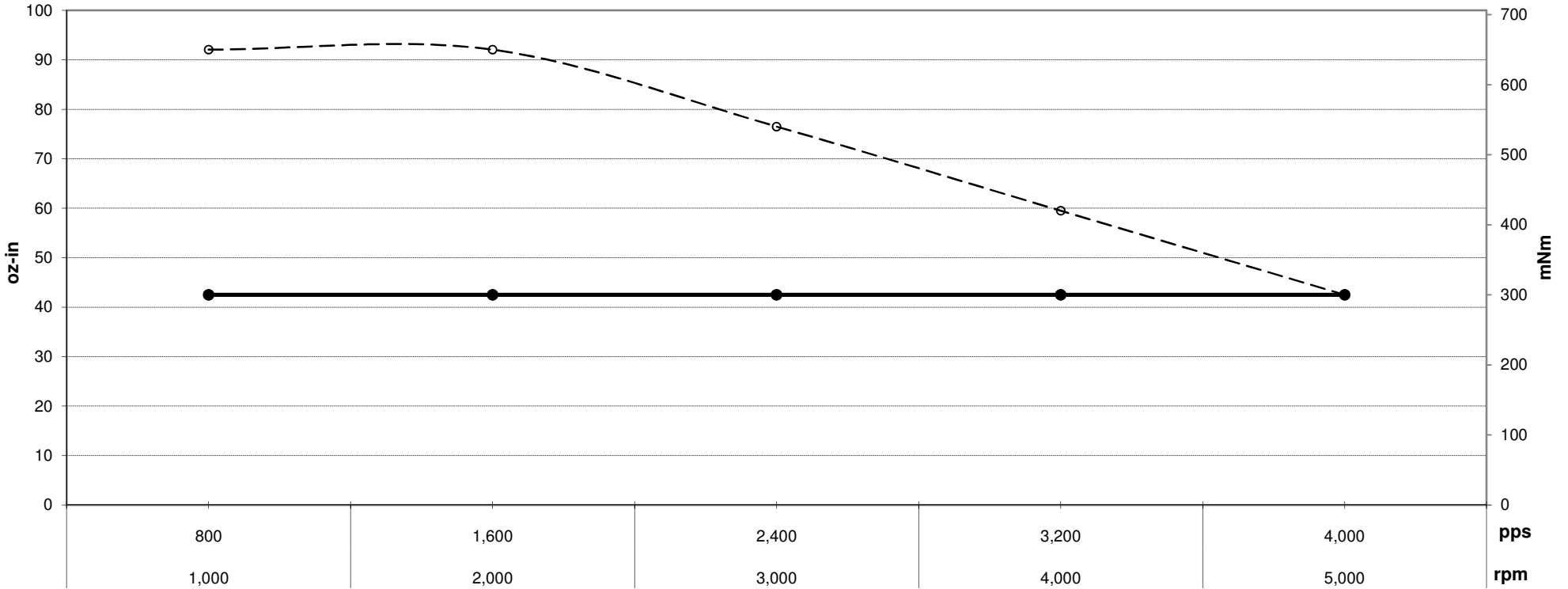
(1) Measured with 1 phase ON. The max coil temperature must be respected

(2) Motor unmounted

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



**P760 0.4 10 HEDS 5540**  
**Torque vs Speed**  
**65 vdc, BLDC Mode**



— ○ — P760 0.4 10 HEDS 5540 A14 Pull-Out Torque @ 65 V, 12 A driven in BLDC mode  
— ● — P760 0.4 10 HEDS 5540 A14 Pull-Out Torque @ 65 V, 6 A driven in BLDC mode