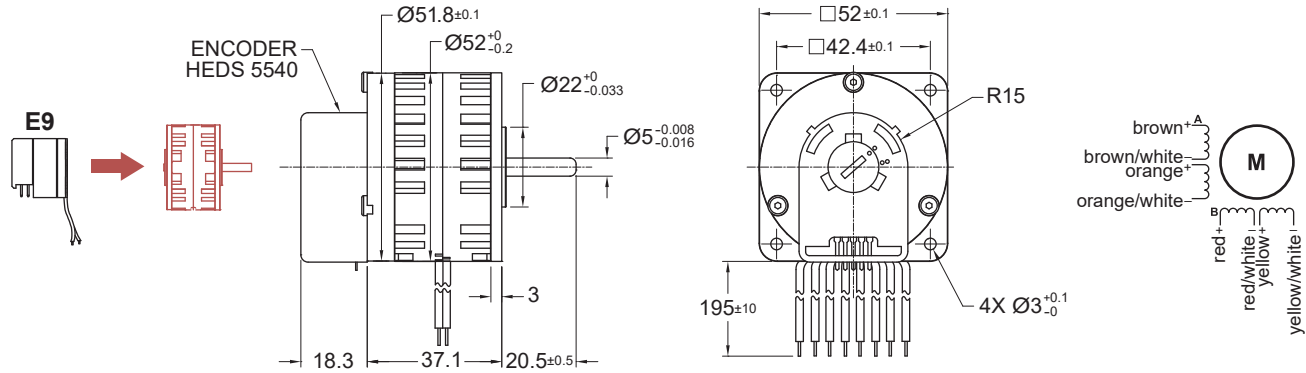


P532 with Encoder

Ø 52 mm • 205 mNm



Dimensions in mm.

Electrical Data	P532 012 150 HEDS		P532 004 150 HEDS		P532 0.7 150 HEDS	Unit
	5540 A11 (series)	5540 A11 (series)	5540 A11 (parallel)	5540 A11 (parallel)	5540 A11 (parallel)	
1 Resistance per Phase, typ	27.0	8.80	2.20	0.31		Ohms
2 Inductance per Phase, typ	64.0	20.0	5.0	0.70		mH
3 Nominal Phase Current (2 ph. On)	0.40	0.70	1.40	3.74		A
4 Nominal Phase Current (1 ph. On)	0.56	1.00	2.00	5.29		A
5 Back EMF Amplitude	21.00	12.00	6.00	2.30		V/kstep/s
General Data						
6 Holding Torque, nominal current				205 (29)		mNm (oz-in)
7 Holding Torque, 1.5x nominal current (1)				300 (42.5)		mNm (oz-in)
8 Detent Torque				45 (6.4)		mNm (oz-in)
9 Rotor Inertia				13.0		kgm ² x 10 ⁻⁷
10 Step Angle				3.6		Degree
11 Absolute Accuracy 2 ph. On, Full step mode				+/- 5%		% Full Step
12 Steps Per Revolution				100		
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)				7.3		°C/W
16 Natural Resonance Frequency (nominal current)				350		Hz
17 Electrical Time Constant				2.30		ms
18 Angular Acceleration (nominal current)				171,000		rad/s ²
19 Bearing Type				Ball		
20 Dielectric Withstanding Voltage				500 VRMS for 5 seconds		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

Notes:

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
4. For encoder specification, please refer to the dedicated encoder catalog page for HEDS 5540

