

## Product Details

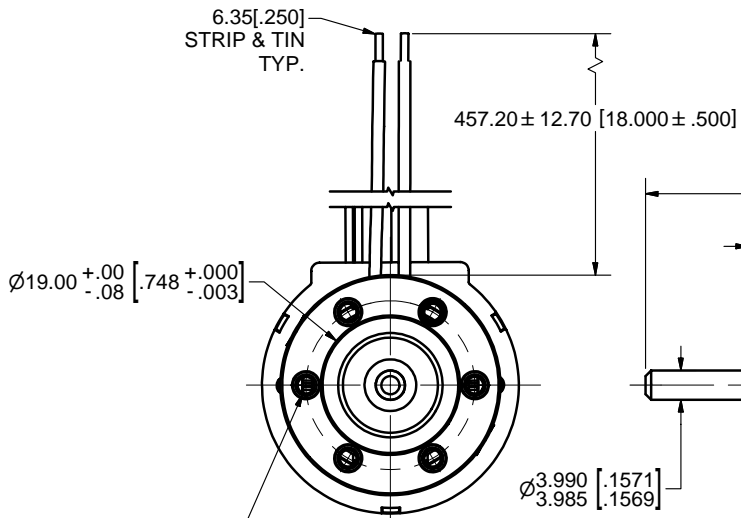
### Brush DC Motor 8541S040-SP

Note: Product photo is for illustrative purposes. Please refer to Engineering Drawing for specifics.

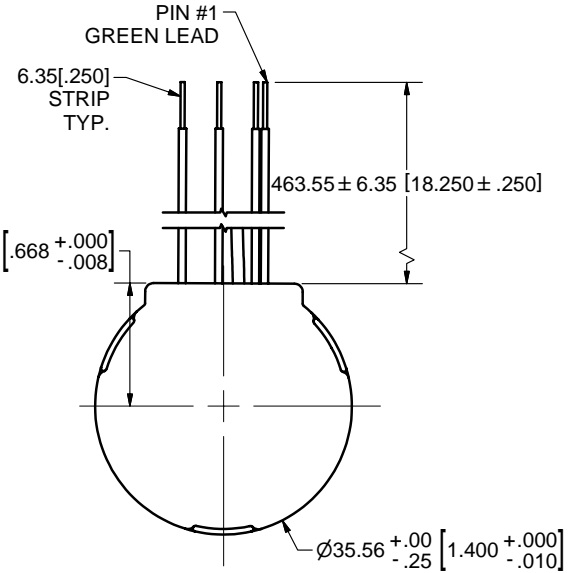
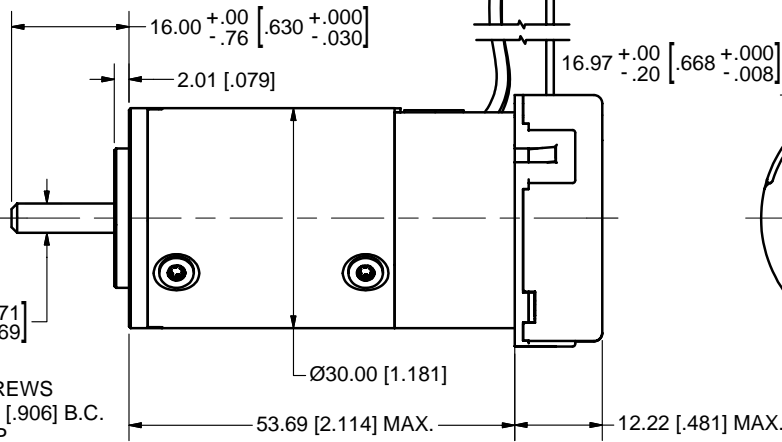


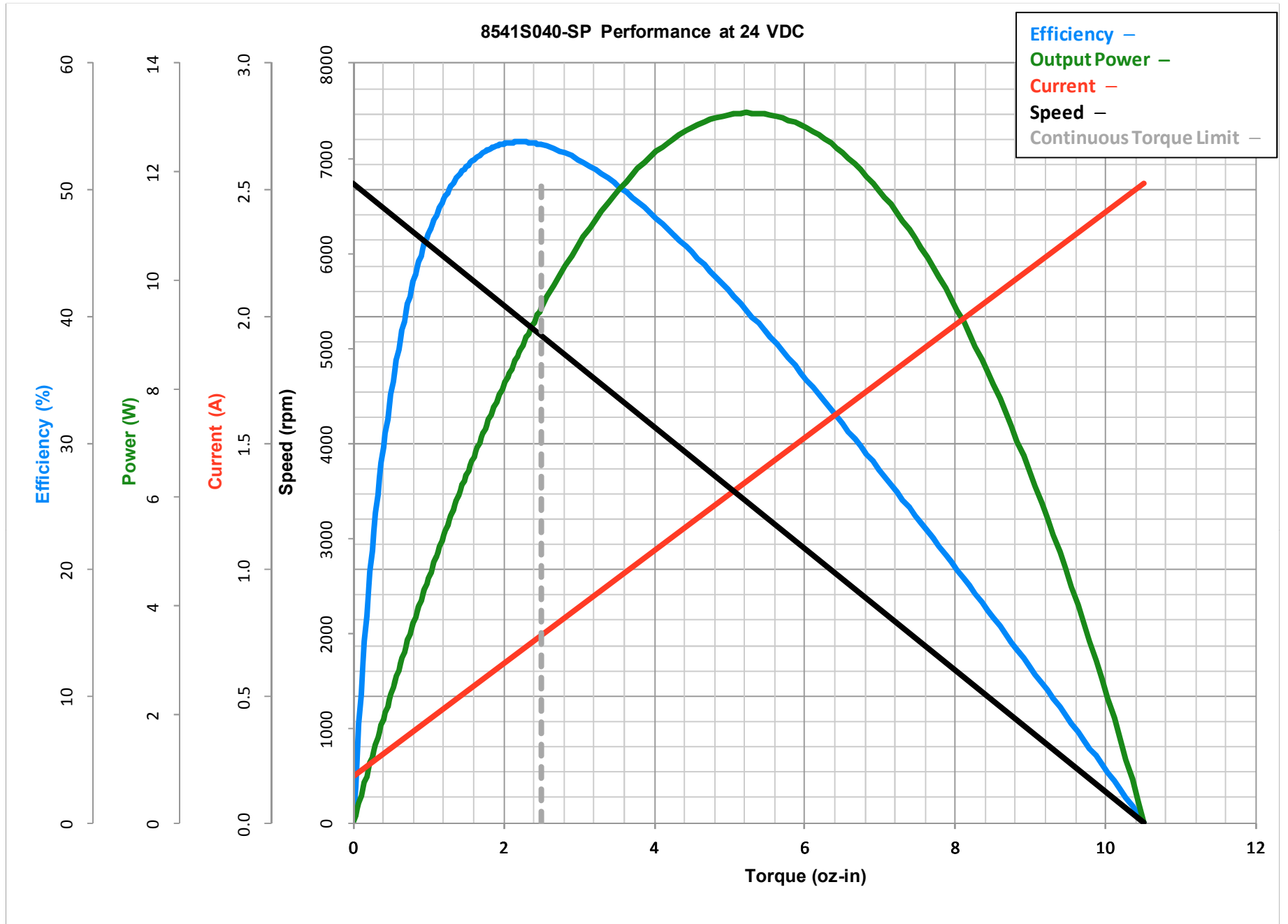
Motor Series	Series 8540 LO-COG Brush Commutated DC Motors
Price (USD)	\$229.84
Frame Size (Mounting Face) (in)	1.181
Motor Frame Size (in)	1.181
Gear Frame Size (in)	n/a
Overall Body Length (in)	2.595
Supply Voltage (V)	24
Continuous Output Torque (oz-in)	2.5
Output Speed @ Cont. Torque (RPM)	4180
Current @ Cont. Torque (A)	0.79
Continuous Output Power (W)	7.7
No Load Current (A)	0.18
No Load Output Speed (RPM)	6730
Peak Current (A)	2.5
Peak Output Torque (oz-in)	11
Motor Constant (oz-in/√W)	1.45
Motor Torque Constant (oz-in/A)	4.48
Motor Voltage Constant (V/krpm)	3.31
Terminal Resistance (Ohms)	9.5
Inductance (mH)	7.3
Coulomb Friction Torque (oz-in)	0.5
Viscous Damping Factor (oz-in/krpm)	0.025
Electrical Time Constant (ms)	0.77
Mechanical Time Constant (ms)	19
Thermal Time Constant (min)	10
Thermal Resistance (°C/Watt)	17
Maximum Winding Temperature (°C)	155
Rotor Inertia (oz-in-s <sup>2</sup> )	0.00029
Output Bearing	Ball
Gear Series	n/a
Gear Ratio (xx.x:1)	n/a
Gear Type	n/a
Gear Efficiency	n/a
Gear Maximum Torque (oz-in)	n/a
Encoder Series	E35A
Encoder Resolution (CPR)	500
Encoder Output Channels	2
Weight (Mass) (oz)	5
Voltage Note	n/a
Torque Warning	n/a

N/C	N/C
N/C	N/C
VIOLET	CHAN B
N/C	N/C
BLUE	CHAN A
N/C	N/C
N/C	N/C
N/C	N/C
WHITE	V <sub>CC</sub> +5VDC
GREEN	ENC GND
COLOR	FUNCTION

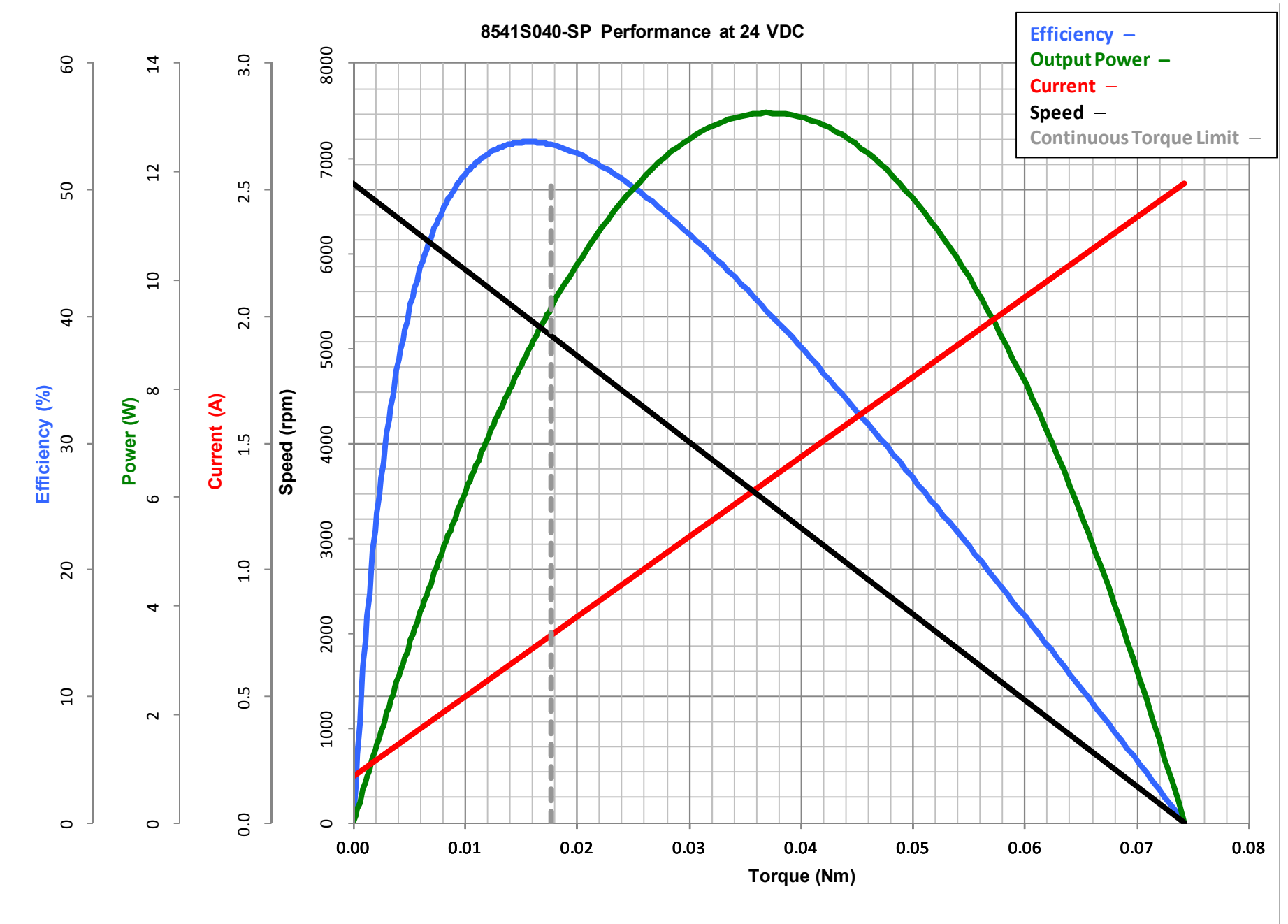


MOUNTING HOLES FOR M2.5 / #3 SCREWS  
 6 HOLES EQUALLY SPACED ON 23.00 [.906] B.C.  
 6.35 [.250] MIN. / 9.50 [.375] MAX. DEEP  
 TORQUE TO 0.34 Nm [3 IN.LB.] MAX.





All values are nominal at 25°C. Peak torque and peak current are theoretical values. Curves are shown for reference only. Visit [www.pittman-motors.com](http://www.pittman-motors.com).



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