

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# 12V DC Motor 350RPM w/Encoder (12kg\*cm)

### SKU:FIT0493





#### INTRODUCTION

This is a gear motor with encoder. It is a motor with a 34:1 gearbox and an integrated quadrature encoder that provides a resolution of 11 pulse single per round giving a maximum output of 374 within one round. With an Arduino controller and motor driver, applications for this include a closed-loop PID control or PWM motor speed control. This motor is an ideal option for mobile robot projects. The copper output shaft, embedded thread and reinforced connector greatly extends the motor's service life.

#### **SPECIFICATION**

• Rated Voltage: 12V

• Gear Reduction Ratio: 34:1

No-Load Speed: 350 rpm@12v

No-Load Current: 20 mA

Maximum efficiency point parameters: 2.0kg.cm/285rpm/5.0W/0.65A

• Maximum power point parameters: 5.8kg.cm/180rpm/9.0W/1.65A

Stall current: 5.5A
Stall torque: 12kg.cm
Hall Feedback Resolution: 374

• Weight: 98g

#### **DOCUMENTS**

- $\bullet \quad Motor\ Interface \quad \text{https://github.com/Arduinolibrary/DFRobot\_12V\_DC\_Motor\_350RPM\_with\_Encoder/raw/master/Motor\_interface.png}$
- $\bullet \quad Motor\ Dimension \quad \text{https://github.com/Arduinolibrary/DFRobot\_12V\_DC\_Motor\_350RPM\_with\_Encoder/raw/master/Dimension.png}$

#### **SHIPPING LIST**

- 12V DC Motor 350RPM w/Encoder (12kg\*cm) x1
- 6P\*15cm connection cable x1