



## 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

- Motor Interface [https://github.com/Arduinolib/DFRobot\\_12V\\_DC\\_Motor\\_350RPM\\_with\\_Encoder/raw/master/Motor\\_interface.png](https://github.com/Arduinolib/DFRobot_12V_DC_Motor_350RPM_with_Encoder/raw/master/Motor_interface.png)
- Motor Dimension [https://github.com/Arduinolib/DFRobot\\_12V\\_DC\\_Motor\\_350RPM\\_with\\_Encoder/raw/master/Dimension.png](https://github.com/Arduinolib/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