# imall

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





### Micro Metal Geared motor w/Encoder - 6V 155RPM 100:1

## SKU:FIT0483



#### INTRODUCTION

A new micro metal gear motor with a difference! This motor comes with a built-in encoder which measures the motor's speed in real time. The average output number of pulses can reach up to 7\*2\*100 pulses per revolution. The motor has a long (0.354"/9.0 mm) D profile metal output shaft that is compatible with the 42x19mm and 32x7mm dimensions of the Pololu wheel. The brass faceplate has two mounting holes threaded for M1.6 screws (1.6mm diameter, 0.35mm thread pitch), or you can use the mounting bracket or extended mounting bracket which are specifically designed to securely mount the gear motor while enclosing the exposed gears. We recommend the extended mounting bracket for wheels with recessed hubs, such as the 42×19mm wheel. The hall sensor of new version has 7 pole pairs, so the encoder resolution will be increased by 7-fold. Compatible with 2WD miniQ Robot Chassis.

#### **SPECIFICATION**

- Rated Voltage: 6.0 V
- Motor Speed: 15000 RPM
- Gear Reduction Ratio: 100:1
- Reducer Length: 9.0 mm
- No-Load Speed: 155 rpm@6v
- No-Load Current: 60 mA
- Rated Torque: 0.7 kg.cm
- Rated Speed: 90 rpm@6V
- Current Rating: 170 mA
- Instant Torque: 1.5 kg.cm
- Hall Feedback Resolution: 1400
- Weight: 18g

#### DOCUMENTS

- Motor Interface https://github.com/Arduinolibrary/DFRobot\_Micro\_Metal\_Gearmotor\_with\_Encoder/raw/master/Interface.png
- Motor Dimension https://github.com/Arduinolibrary/DFRobot\_Micro\_Metal\_Gearmotor\_with\_Encoder/raw/master/Dimension.jpg

#### SHIPPING LIST

- Micro Metal Gearmotor 100:1 w/Encoder x1
- 6-pin connection cable x1
- 2-pin 1.5 mm JST connector x1
- 4-pin 1.5 mm JST connector x1