GB37 DC geared motor

Introduction

GB37 DC geared motor is a miniature geared 520 motor with two Hall sensors to achieve speed detected and rotation direction detected function. Its reduction ratio is 1:30 and it is

usually used in Self-Balancing Car.

Its parameters are as follows

Parameter

Rated voltage：12V

Speed before deceleration：330rpm

Idling current：250ma

Power：4.8w

Blocking maximum current：6.5A

Gearbox length：22mm

Standard sizes

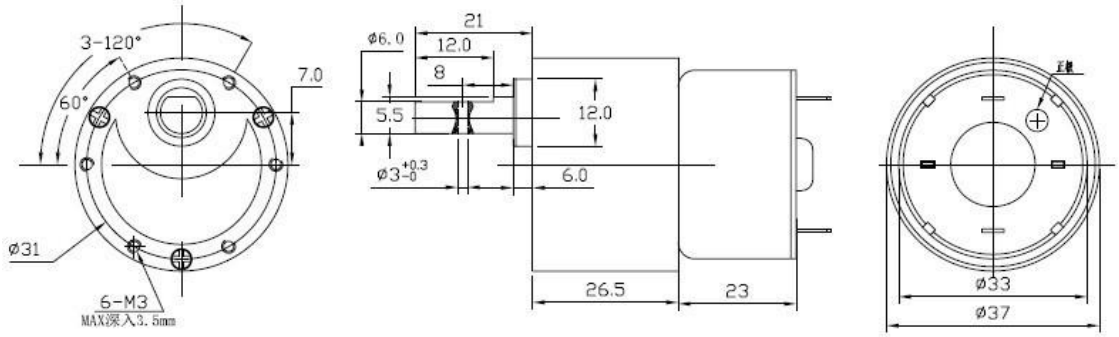

Chart 1

Hall Speed Code Disk

The speed detected module used by the Self-Balancing Car is a Hall

Speed detect sensor module. The sensor has 13-wire strong magnetic code disk, A B dual phase output.

Under this conditions, it can calculated the number of pulses per revolution.

The number of pulses can be reached 30*13*2=780 times when the wheel rotate one revolution.

Single phase can also reach 390 times, the accuracy is enough to make the

Self-Balancing Car become very stable.

Wiring (Use all black cable)

1——Motor power cord
M+

2——Hall Sensor GND
GND

3——Hall Sensor A phase signal A

4——Hall Sensor B phase signal B

5——Hall Sensor VCC
5V

6——Motor power cord
M-