Lm393 Motor Speed Measuring Sensor Module For Arduino
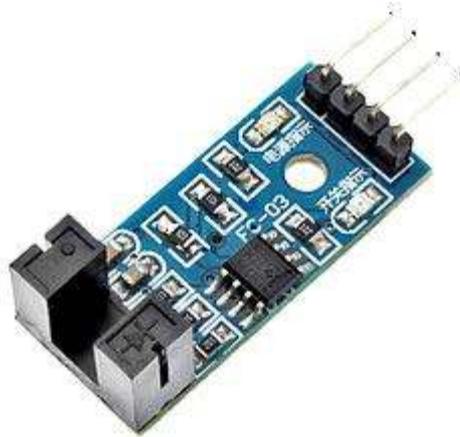
Widely used in motor speed detection, pulse count, the position limit, etc. The DO output interface can be directly connected to a micro-controller IO port, if there is a block detection sensor, such as the speed of the motor encoder can detect.

DO modules can be connected to the relay, limit switch, and other functions, it can also with the active buzzer module, compose alarm.

Main technical characteristics:
- Dimensions: 32 x 14 x 7mm.
- The sensor reading slot has a width of 5mm.
- Two outputs, one Digital and one Analog.
- LED power indicator.
- LED indicator of the output pulses of pin D0.

Features
- Using imported trough type optical coupling sensor, groove width 5 mm.
- The output state light, lamp output level, the output low level light.
- Covered : output high level; Without sunscreen : the output low level.
- The comparator output, signal clean, good waveform, driving ability is strong, for more than 15 ma.
- The working voltage of 3.3 V to 5 V
- Output form: digital switch output (0 and 1)
- A fixed bolt hole, convenient installation
- Small board PCB size: 3.2 cm x 1.4 cm
- Use the LM393 wide voltage comparator Module

USES:
- The module without slot, the receiving tube conduction, module DO output low level, shade, the DO output high level;

- the DO output interface can be directly connected to a microcontroller IO port, if there is a block detection sensor, such as the speed of the motor encoder can detect.
- DO modules can be connected to the relay, limit switch, and other functions, can also with the active buzzer module, alarm.Product connection details:The positive 3.3-1, VCC power supply 5 v2, GND connect power cathode
- DO TTL switch signal output4, AO the module does not workShipping list:A speed measuring sensor module

This IR speed module sensor with the comparator LM393, we can calculate the speed of rotation of the wheels of our robot. If we place a ring gear that rotates attached to our wheel. It could also be used as an optical switch.

The basic operation of this sensor is as follows; If anything is passed between the sensor slot, it creates a digital pulse on the D0 pin. This pulse goes from 0V to 5V and is a digital TTL signal. Then with Arduino we can read this pulse.

Here are the different parts:

Main parts of the encoder
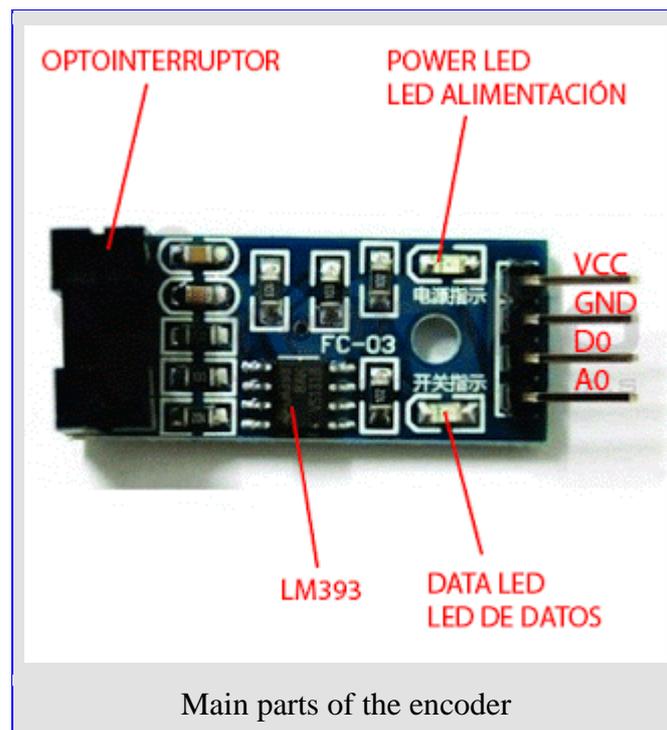
Wiring specification:
- **VCC Connect the positive 3.3 5 v power supply**
- **GND** Connect power negative
- **DO** TTL switch signal output
- **AO** This module does not work
- The module do not have Analog output.