

## 12V DC Gear Motor Encoder Photoelectric Encoder Motor 6-24V 8.6-977rpm Optical Encoder Motor With Encoding disc

### Item specifics

Efficiency:IE 2  
Continuous Current(A):0.12a-0.3a  
Voltage(V): 12V  
Output Power:1.25w  
Torque: 0.11 kg.cm-12kg.cm  
Type:Gear Motor  
diameter: 25mm  
Construction:Permanent Magnet  
Protect Feature: Totally Enclosed  
Usage:Car,Electric Bicycle  
Certification:CE,ROHS

### Speed(RPM):

12V: 977rpm 463rpm 201rpm 126rpm 95rpm 55rpm 41rpm 25rpm 19rpm 11rpm 8.6rpm

Remark: Pls confirm the voltage and speed before ordering.

### Specifications

#### 1.Standard Operating Conditions

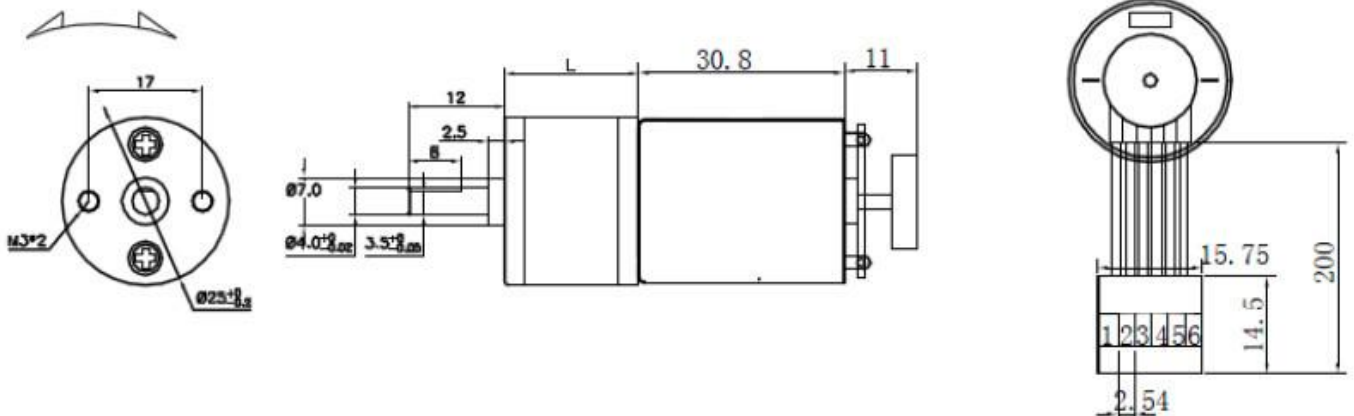
- 1-1 Rated Voltage: **12V**
- 1-2 Direction of Rotation:CW when viewed from output shaft side
- 1-3Operating Temperature and Humidity:Temperature range of **-10C~+50C**,Humidity range of **30%~80%**.
- 1-4Storage Temperature:Temperature range of **-20C~+60C**

#### 2.Measuring Conditions:

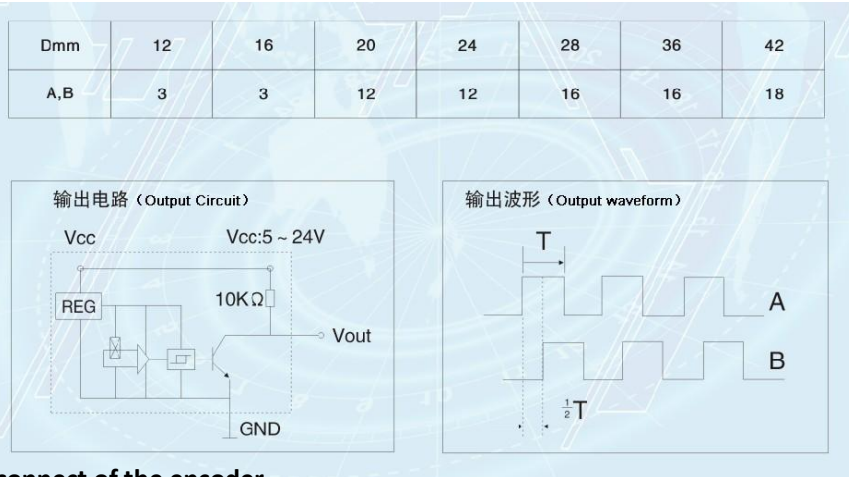
- 2-1Motor Position:To be place t horizontally when measuring
- 2-2Power Supply: Regulated DC power supply
- No load speed:**8.6-977rpm**.
- Robotics, Small Appliance, Fanner, Electric Curtain;
- Medical Pump, Surgery Tools, Medical Stirrer, centrifugal Machine; Electric Valve, Actuator, medical device.
- Electric motor,low noise,low current and no spark.
- Reduction ratio: **1/4.4,1/9.28,1/21.3,1/34,1/45,1/78,1/103,1/171,1/226,1/378,1/500**

### Size:

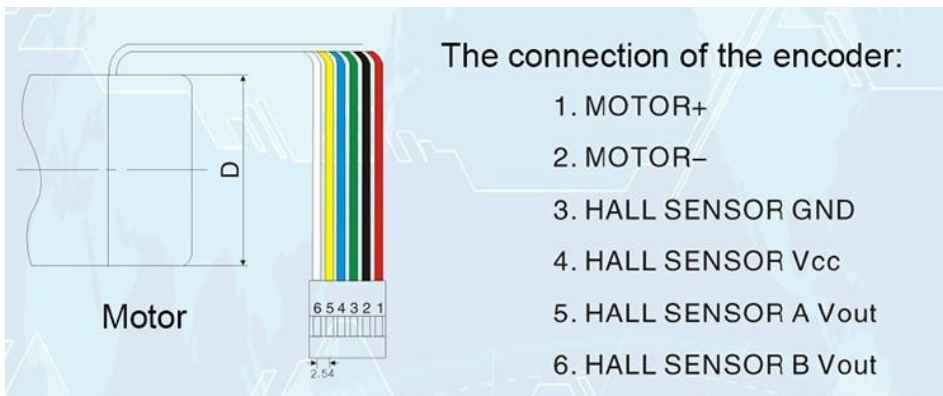
#### DIRECTION OF ROTATION



## Encoder Output:



### connect of the encoder



### Line function definition

The two root yellow line is the motor poles

The green line and white line is pulse output line, theory with a can, at the same time with two can test the motor turning

Encoder power wiring is red and the black, red for positive, black for negative, 3.5 5 v voltage

Note: red and black line never wrong, or you will burn out the encoder.

### Relation about Voltage and speed (rpm)

Workable Range	Rated Volt.V	Speed rpm	current ma	speed rpm	current ma	Torque kg.cm	Output W	Torque kg.cm	Current A	Ratio	Size mm	unit g
6-24V	12	977	46	781	300	0.11	1.25	0.55	1	4.4	15	80
6-24V	12	463	46	370	300	0.23	1.25	1.1	1	9.28	17	82
6-24V	12	201	46	168	250	0.53	1.25	2.65	1	21.3	19	84
6-24V	12	126	46	100	250	0.85	1.25	4.2	1	34	21	85
6-24V	12	95	46	76	200	1.1	1.25	5.5	1	45	21	86
6-24V	12	55	46	44	200	1.95	1.25	9.7	1	78	23	88
6-24V	12	41	46	32	150	2.5	1.25	12.5	1	103	23	89
6-24V	12	25	46	20	150	4.2	1.25	21	1	171	25	91
6-24V	12	19	46	15	120	5.6	1.25	28	1	226	25	92
6-24V	12	11	46	8.8	120	9.45	1.25	47	1	378	27	94
6-24V	12	8.6	46	6.8	120	12	1.25	60	1	500	27	96