

12V Gear Motor Reversed With Encoding disk Customized Speed High Torque Speed Measuring Motor For DIY Toy

Item specifics

Efficiency:IE 2
 Continuous Current(A):0.25a-0.46a
 Voltage(V): 12V 24V
 Output Power:3-11w
 Torque: 1 kg.cm-60kg.cm
 Type:Gear Motor
 diameter: 25mm
 Construction:Permanent Magnet
 Protect Feature: Totally Enclosed
 Usage:Car,Electric Bicycle
 Certification:CE,ROHS
 Speed(RPM):
 12V: 800rpm 500rpm 265rpm 166rpm 80rpm 55rpm 38rpm 30rpm 18rpm 10rpm 6rpm
 24V: 1600rpm 1000rpm 530rpm 333rpm 178rpm 111rpm 76rpm 60rpm 37rpm 20rpm 12rpm
Remark: Pls confirm the voltage and speed before ordering.

Specifications

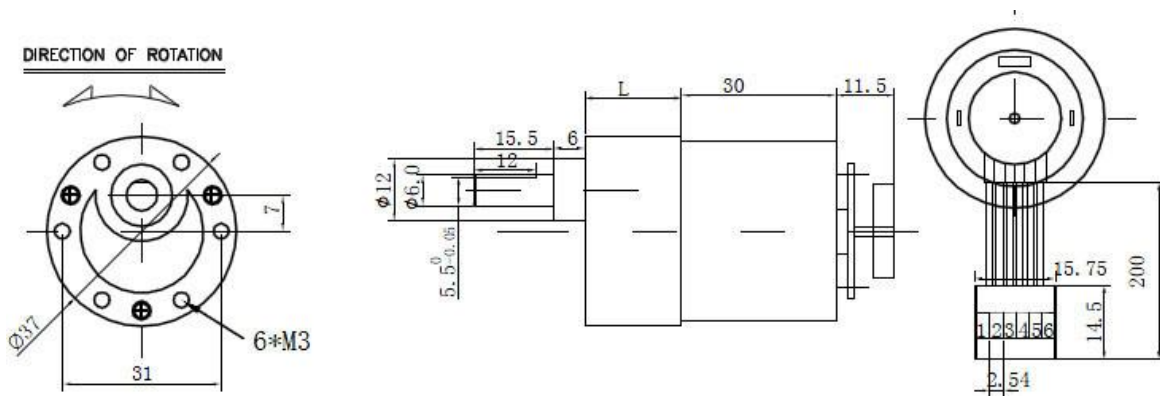
1.Standard Operating Conditions

- 1-1 Rated Voltage: **12V-24V**
- 1-2 Direction of Rotation: CW when viewed from output shaft side
- 1-3 Operating Temperature and Humidity: Temperature range of **-10C~+50C**, Humidity range of **30%~80%**.
- 1-4 Storage Temperature: Temperature range of **-20C~+60C**

2.Measuring Conditions:

- 2-1 Motor Position: To be placed horizontally when measuring
- 2-2 Power 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: **1/6.3,1/10,1/18.8,1/30,1/56,1/90,1/131,1/168,1/270,1/506,1/810**.

Size:



Parameter:

Voltage: 5-24v

Temperature: -40°C~+120°C

Connection to encoder

Red line: Motor positive pole

Black line: Motor negative pole

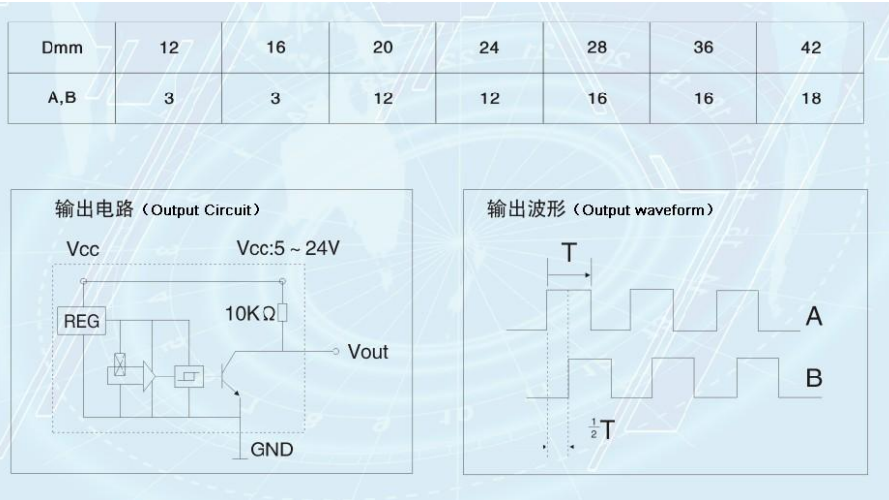
Green line: Encoder Ground line

Blue line: Encoder power

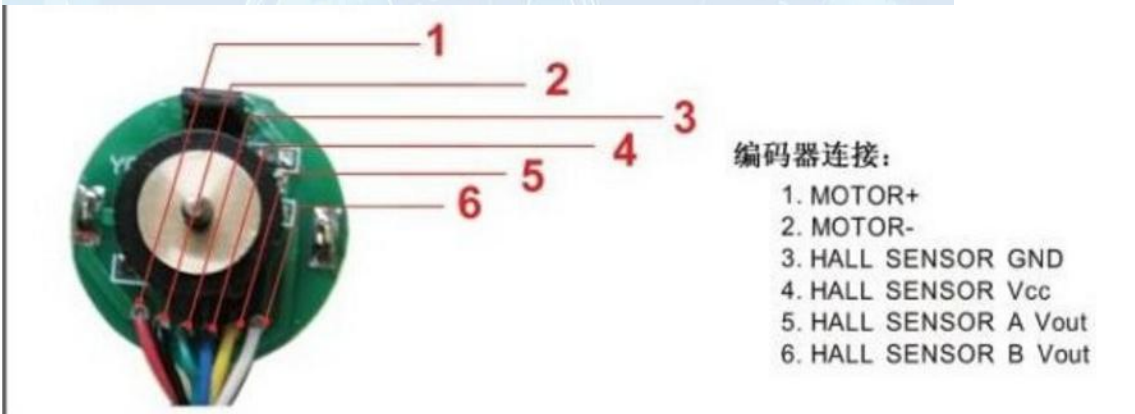
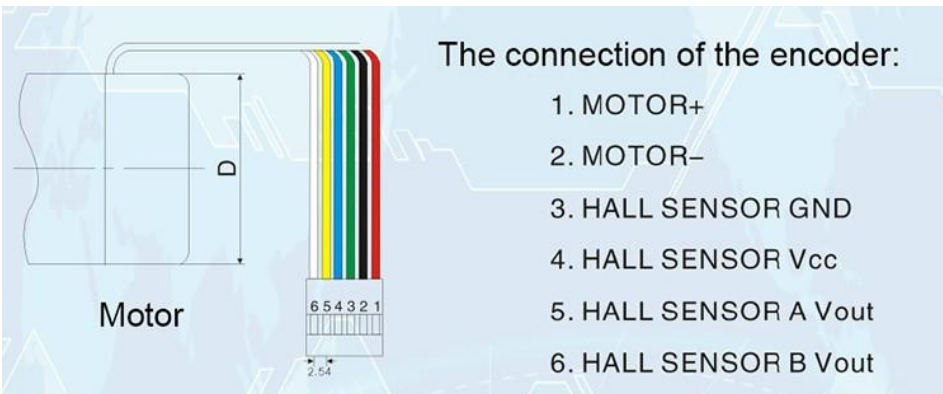
Yellow line: Signal A output point

White line: Signal B output point

Encoder Output:



connect of the encoder



规格特性	代号	测试条件	极小	基本	最大	UNITS
输入电压	Vcc	---	4.5	--	24	V
输出电流	Ic	Vce=12V; Gauss<-170	--	<0.1	20	mA

relation about Voltage and speed (rpm)

item		voltage		no load		rated load				stall	
		range	test	speed	current	speed	current	torque	wattage	torque	current
	ratio		v	r/min	mA	r/min	MA	kg.cm	W	kg.cm	A
3530 encoder	6.3	12-24	24	1600	70	1280	460	0.66	11	3.5	2.5
	10	12-24	24	1000	70	800	460	1	11	5.65	2.5
	18.8	12-24	24	530	70	430	460	2	11	10.6	2.5
	30	12-24	24	333	70	266	460	3.2	11	17	2.5
	56	12-24	24	178	70	143	460	6	11	31	2.5
	90	12-24	24	111	70	90	460	9.5	11	50	2.5
	131	12-24	24	76	70	60	460	14	11	65	2.5
	168	12-24	24	60	70	48	460	18	11	70	2.5
	270	12-24	24	37	70	30	460	28	11	70	2.5
	506	12-24	24	20	70	16	460	53	11	70	2.5
	810	12-24	24	12	70	9.6	460	60	11	70	2.5
3530 encoder	6.3	12-24	12	800	90	640	250	0.3	3	1.7	1.2
	10	12-24	12	500	90	400	250	0.53	3	2.8	1.2
	18.8	12-24	12	265	90	215	250	1	3	5.3	1.2
	30	12-24	12	166	90	130	250	1.6	3	8.4	1.2
	56	12-24	12	80	90	65	250	3	3	15	1.2
	90	12-24	12	55	90	45	250	4.7	3	25	1.2
	131	12-24	12	38	90	30	250	7	3	36	1.2
	168	12-24	12	30	90	24	250	9	3	47	1.2
	270	12-24	12	18	90	14	250	14	3	70	1.2
	506	12-24	12	10	90	10	250	27	3	70	1.2
	810	12-24	12	6	90	5	250	43	3	70	1.2