



DIGITAL OPTICAL ROTARY ENCODER



Technical Details:

| | | |
|-------------------------|-----------------------------|--|
| Item | | Diameter 38mm shaft 6mm type Incremental rotary encoder |
| Resolution (P/R) | | 100, 360, 400, 600, 1000 PPR |
| Input Phase | | AB Phase |
| Output Phase | | NPN Open Collector |
| | Supply Voltage | 5-24 VDC |
| Electrical | Current Consumption | Max , 40mA |
| | Response Frequency | Max , 100 KHz |
| | Allowable Revolution | Max , 3000 rev /min |
| Mechanical | Starting torque | Max , 20 gf.cm (0.002N.,m) |
| | Rotor inertia | Max , 15 g.cm2 (1,5* 10 -6 kg.m2) |
| | Shaft Loading | Radial : Max 2kgf, Axial : Max .1kgf |
| | Mechanical Speed | Max .5000 rev / min (*1) |
| Environmental | Ambient Temperature | -10~ 70 (at non- freezing status) , Stronger :- 25 ~ 85 |
| | Ambient Humidity | 35 ~85% RH , Stronger : 35~ 90 % RH |
| | Protection | Ip52 (IEG Standard) |
| | Vibration | 1.5 mm amplitude at frequency of 10-55 Hz in each Of X,Y,Z direction for 2 hour. |
| | Shock | Max. 40G |
| Unit Weight | | Approx :180g |
| Cable | | 2.0m (the cable length can be customized) |
| Approval | | CE ROHS |
| (*1) | | Mechanical speed > Allowable revolution , Please take allowable speed as standard when use |

| Wire Colour | OC VP OP 3-CHANNEL | TTL / HTL 6- CHANNEL | PIN 9-POLE | EXPLANATION |
|-------------|--------------------|----------------------|------------|----------------|
| RED | VCC | VCC | 1 | Supply Voltage |
| BLACK | 0 V | 0 V | 4 | Common Port |
| GREEN | A | A | 5 | Signal wire |
| WHITE | B | B | 3 | Signal wire |
| YELLOW | Z | Z | 8 | Signal wire |
| BROWN | - | -A | 6 | Signal wire |
| GRAY | - | -B | 7 | Signal wire |
| ORANGE | - | -Z | 2 | Signal wire |
| SHIELD | SHIELD | SHIELD | 9 | |

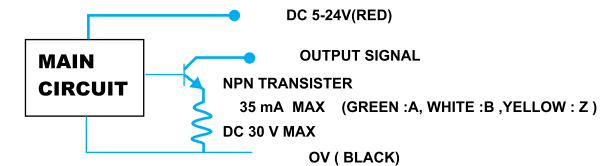
Output:

AB two-phase quadrature output rectangular pulse, the circuit output is NPN open collector output type.

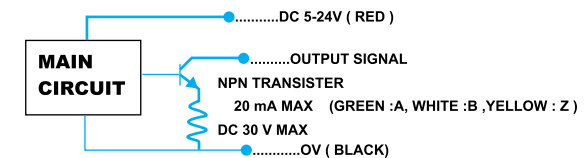
This type can be output with internal pull -up resistor available in Arduino, microcontroller s or PLC, such asAtmega, pic, 51 or microcontroller Mitsubi shi PLC.

If Internal Pullup is not available, then you need to Pull-up Output Channel A & B with resistors supplied with product. i.e. resister between Green and RED, White and RED wire.

OC NPN OPEN COLLECTOR



OC VOLTAGE OUTPUT



LD : LONG DRIVER OUTPUTS 5V
LDH : LONG DRIVER OUTPUTS 5-24V

