

## Speed Transmitter



**Model: YD240**

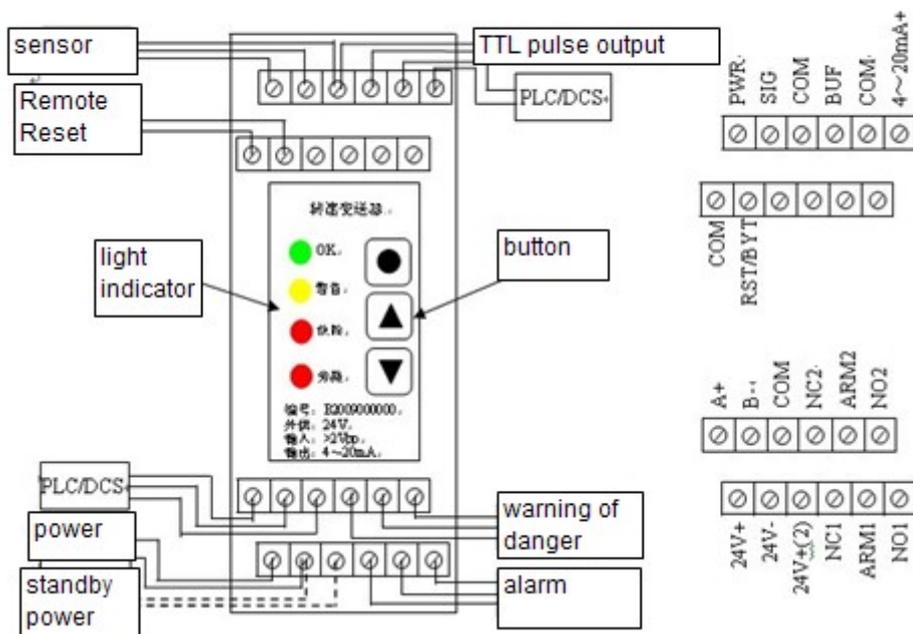
### Brief Introduction

1. YD240 speed transmitter can be used with many output instruments of our company and also can be connected to magnetic-electric and other speed transducers.
2. The transmitter uses the unique precision measurement method to ensure the high precision of the whole measuring range.
3. It can distinguish the vibration signal from the larger rotor vibration signal effectively.
4. Set 1-1000 pulses each turn freely. Level 2 alarm control the relay output, the alarm control mode can be flexible setting, all parameters can be set by RS485 communication.
5. Measured value convert to 4~20mA analog output.
6. Imported integrated circuits, filter components strictly; 100% the whole aging and testing to ensure high reliability of the transducer.
7. There is communication interface to connect with the computer.
8. The shell of transmitter is made of aluminum. In order to shield interference from outside, the shell has been connected with the signal ground in the transmitter. Both the mounting plate and the guide rail cassette are engineering insulation plastics, so it can isolate the transmitter and the earth when install the transmitter.
9. Boundary dimension: 78mm(W)×61mm(L)×65mm(H)(base plate mounted, it is compatible with YD9800 of our company and 3300XL of BN company); 90mm(W)×35mm(L)×70mm(H)(guide rail mounted, it is compatible with 3300XL of BN company). Installation dimension: base plate installation 51mm×51mm, use four M4×12 GB29-76 bolt to install; guide rail installation, can be easily installed on standard 35mm guide rail.

### Main Technical Parameters

1. Measurement speed range: 0~65535;
2. Measurement signal frequency range: 0.2~60kHz;
3. Input signal peak-peak value: >2V;
4. Control relay contact capacity: 3A/125VAC, 3A/30VDC;
5. Transmission output: 4~20mA (load≤750Ω) Precision is better than ±0.05%F.S;
6. Working temperature: -20~75°C;
7. Working Humidity: 5~90% non condensing
8. Supply voltage: 24Vdc;
9. External power supply for sensors: 24Vdc, short circuit current limitation≤25mA.

The connection method of warning light indicator,button,wire connecting terminal and sensor



light indicator

- OK light
- alarm light
- hazard light
- bypass light

- OK light bright: Transmitter normal operation
- OK light bright, alarm light bright: warn alarm
- OK light bright, hazard light bright: dangerous alarm
- OK light flickers, alarm light bright: set warn alarm value
- OK light flickers, hazard light bright: set dangerous alarm value
- Bypass light bright: in a dangerous bypass state

2. Speed adjustment coefficient

Speed measurement value may have some errors with the actual speed value, by setting speed adjustment parameter can correct the errors.

3. Filter coefficient

If there are large fluctuations measured values by various causes in the measurement process, set the filter coefficient appropriately can make it stable.

#### 4. Threshold voltage

In some applications, the duty cycle of the signal that picked up by speed sensor is very small or very large, and there is big shaft vibration on the shaft, then adjust the parameter can obtain the best threshold voltage.

#### 5. Limiting threshold voltage

Limiting threshold voltage can improve the anti-interference ability of speed measurement. When the limiting threshold voltage is larger, the anti-interference ability is better. But the limiting threshold voltage is restricted by speed signal, when the speed signal has a large range, you can set a larger limiting threshold voltage.

#### 6. Alarm delay time

Alarm delay in unit of second, in 0 ~ 10 seconds can be set.

### **Communication**

YD240 Speed Transmitter can be connected to the computer or PLC to communicate, comply with RS485 transmission standards. The communication between transmitter with computer is followed the protocol of ModBus-RTU.