

# TS.BB.01 Specification



## 1. Introduce

TS.BB.01 is our latest development of electric bicycle power sensor, it contains torque signal and speed signal.

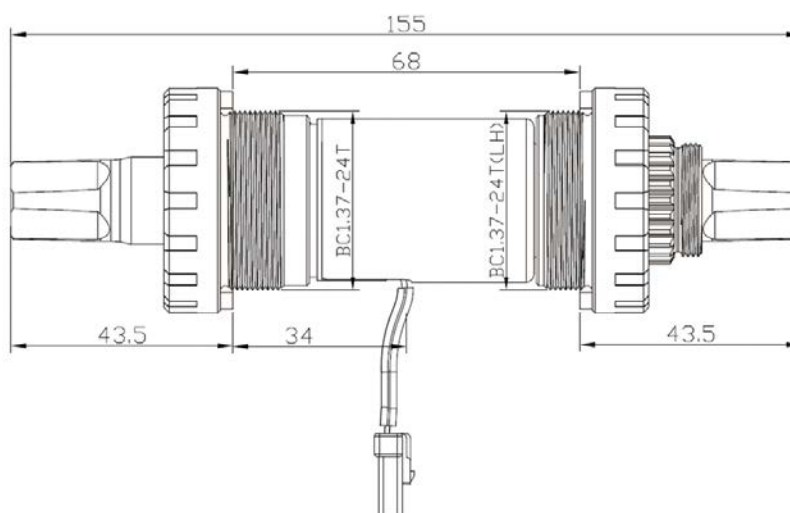
The characteristics of the sensor are as follows:

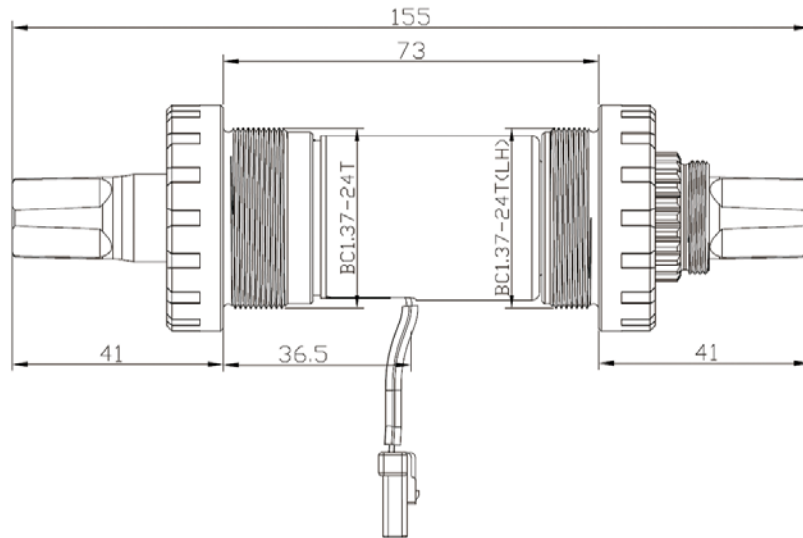
- a. High precision and good linearity;
- b. Fast dynamic response;
- c. Maintenance free and good interchangeability;
- d. Small volume(can be fitted with the standard BB);
- e. Non-contact type, long service life, insensitive to bending moment and axial force;
- f. Low power consumption and good stability。
- g. Assembly dimensions and input/output signals can be adjusted

## 2. Technical parameter

Type	Unit	Parameter
Input voltage	V	4.5~5.5
Input power	W	<0.3
Torque output range	V	0.75~3.4
Speed signal pulse	r	36
Speed signal duty cycle	%	50%
Torque signal resolution	mV/N.m	35
Torque measuring range	N.m	0.5~80
Design standard	EN	14764
Bowl specification		BS (C) 1.375*24
Protect grade	EN60529	IP66
Working temperature	°C	-20~85
Storage temperature	°C	-40~120

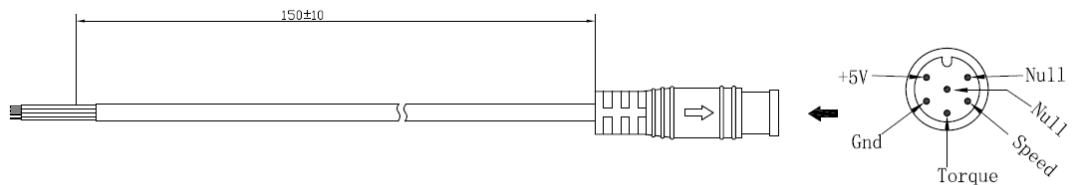
## 3. Mechanical Dimension(JIS standard—square shaft)





#### 4. Wire、Connect definition

##### 4.1 Wire definition:



##### 4.2 Connect: Julet : JL-F35-Z609JG

#### 5. Instructions

##### 5.1 Application range:

This torque and speed sensor is applied on the electric bicycle.

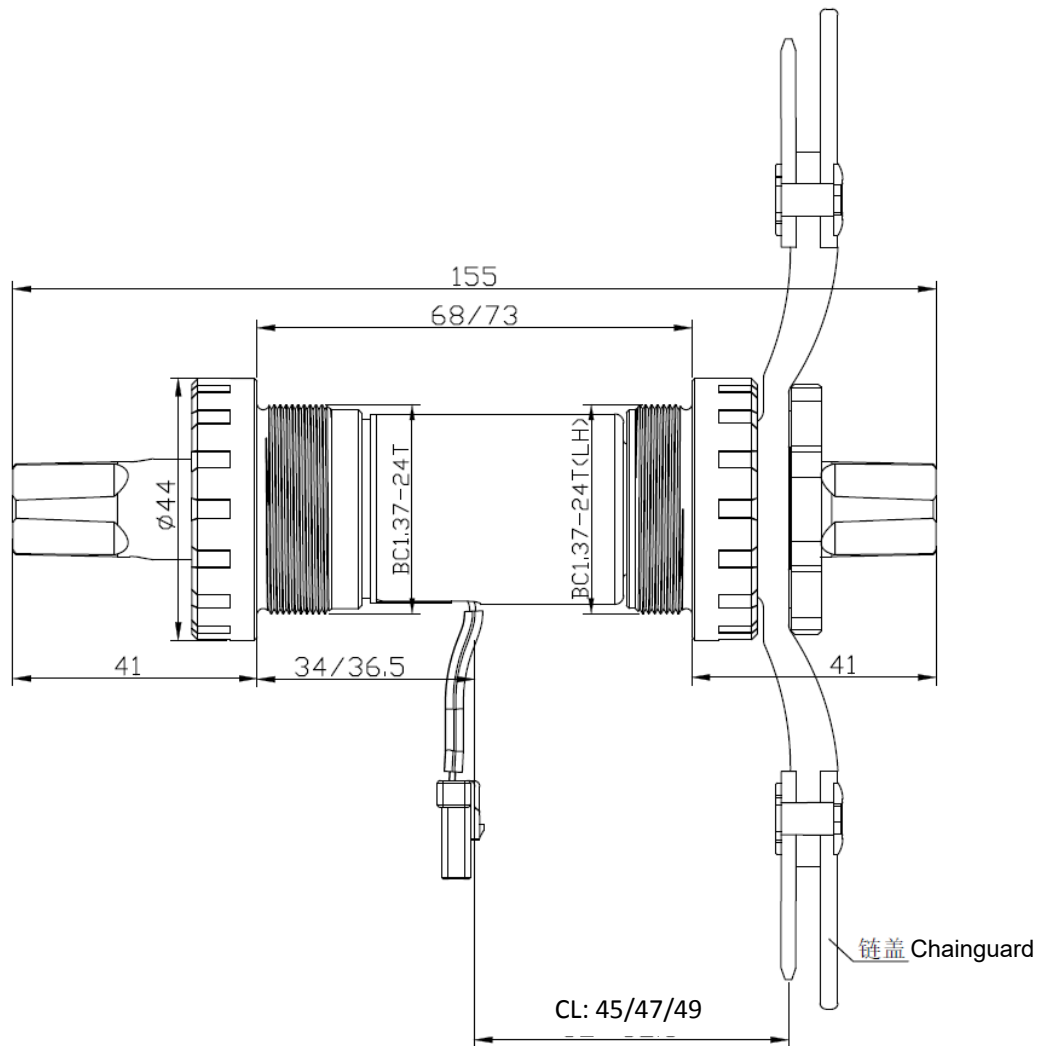
##### 5.2 External working condition:

Excessive mechanical stress on the torque, for example, longitudinal force, load and vibration are over the limit, may lead to damage the sensor or output undesirable signal. And, external high-intensity magnetic field may affect the measurement result ,If any doubts ,pls contact with manufacturer for support.

##### 5.3 Note

- 1) Do not open the sensor housing under any circumstances
- 2) Before usage, pls check concerning max & min electrical and mechanical loads in part 2"Technical performance"
- 3) Do not expose sensor into any electromagnetic field that beyond the electromagnetic compatibility requirement.

## 5.4 CL dimension

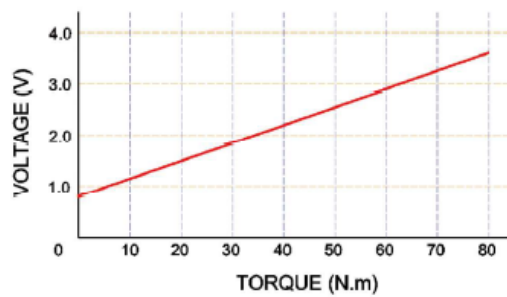


## 6.5 Assembling instructions



## 6.6 Signal diagram

Torque output diagram



Speed output diagram

