BBTS 1.0 Specification

1. Introduce

   BBTS 1.0 is our latest development of electric bicycle power sensor, it contains torque signal and speed signal.

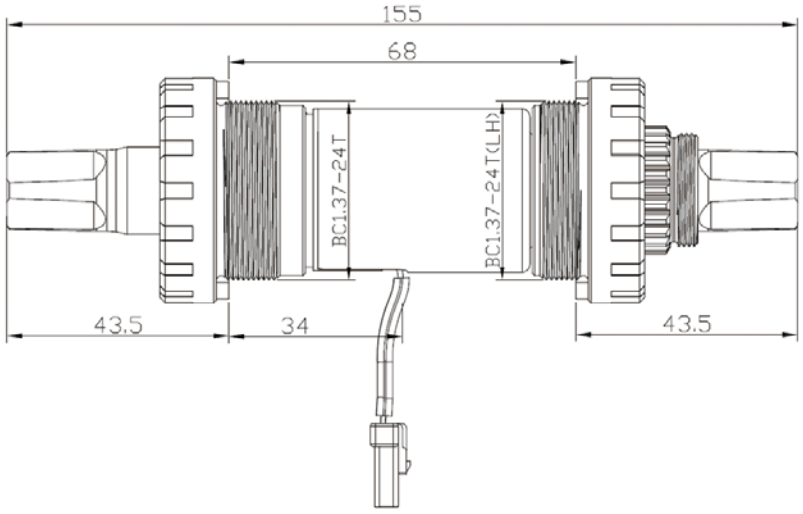
   The characterstics of the sensor are as follows：

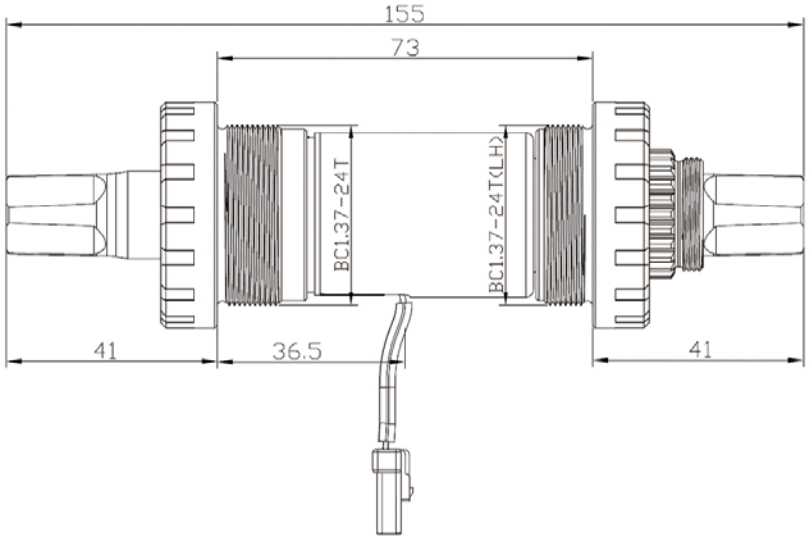
   a. High precision and good linearity；
   b. Fast dynamic response；
   c. Maintenance free and good interchangeabilty；
   d. Small volume(can be fitted with the standard BB)；
   e. Non-contact type, long service life, insensitive to bending moment and axial force；
   f. Low power consumption and good 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	℃	-20~85
Storage temperature	℃	-40~120

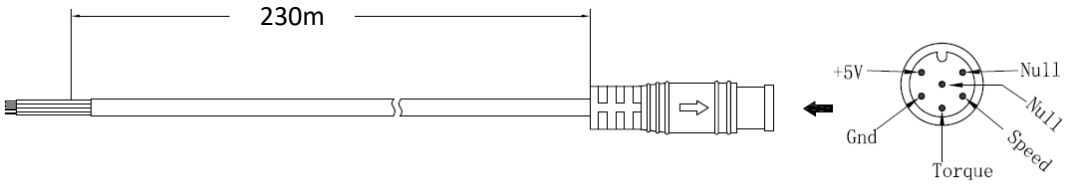
3. Mechanical Dimension(JIS standard—square shaft)





4. Wire、Connect definition

4.1 Wire definition：



4.2 Connect：Julet : JL-F-Z609AG

5. Instructions

5.1 Application range：

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

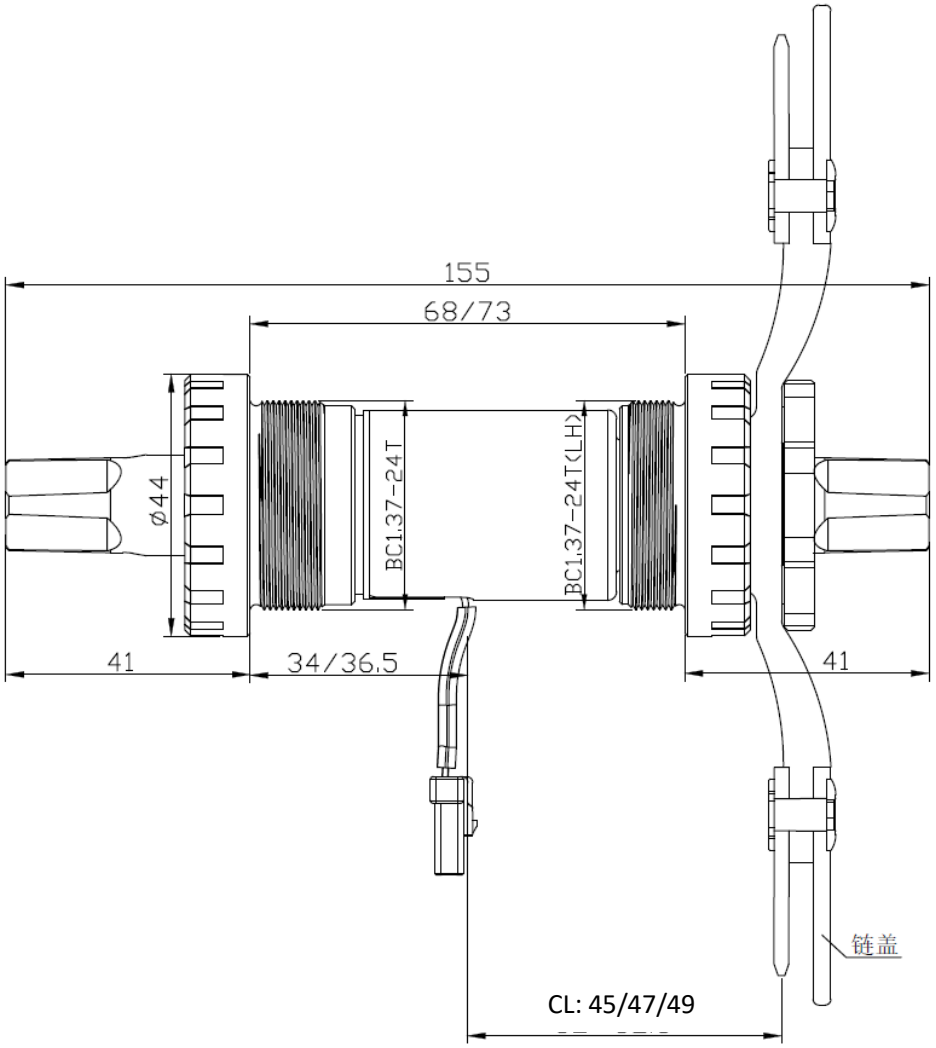
5.2 External working condition：

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.

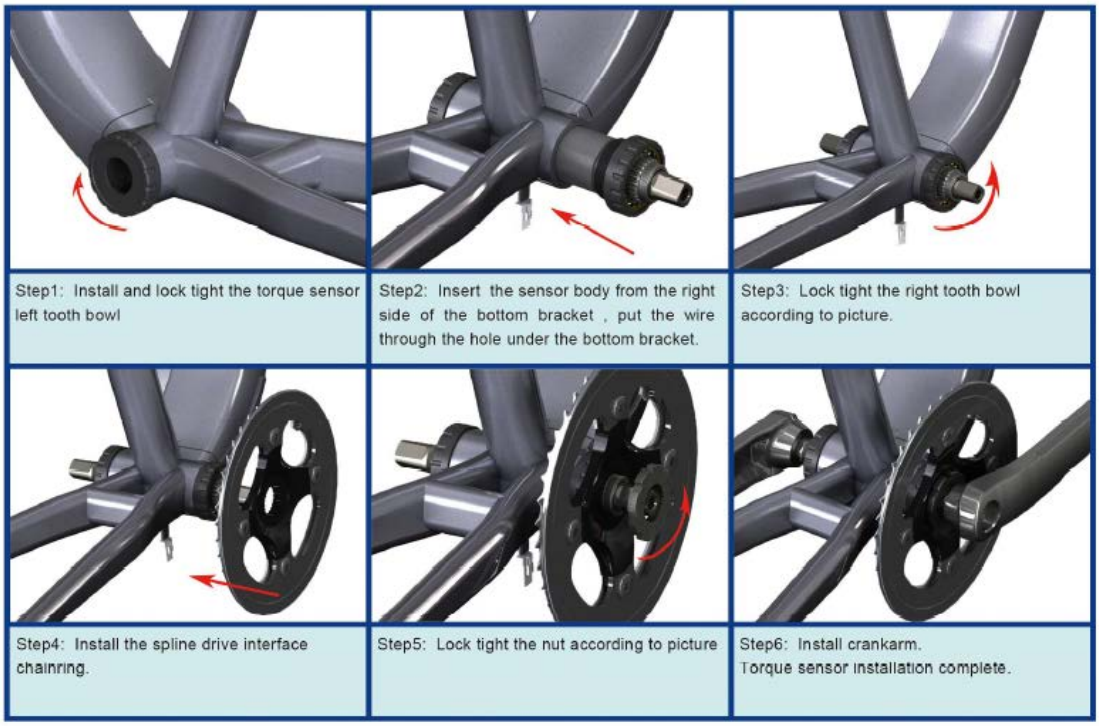
5.3 Note

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