

SEMPU

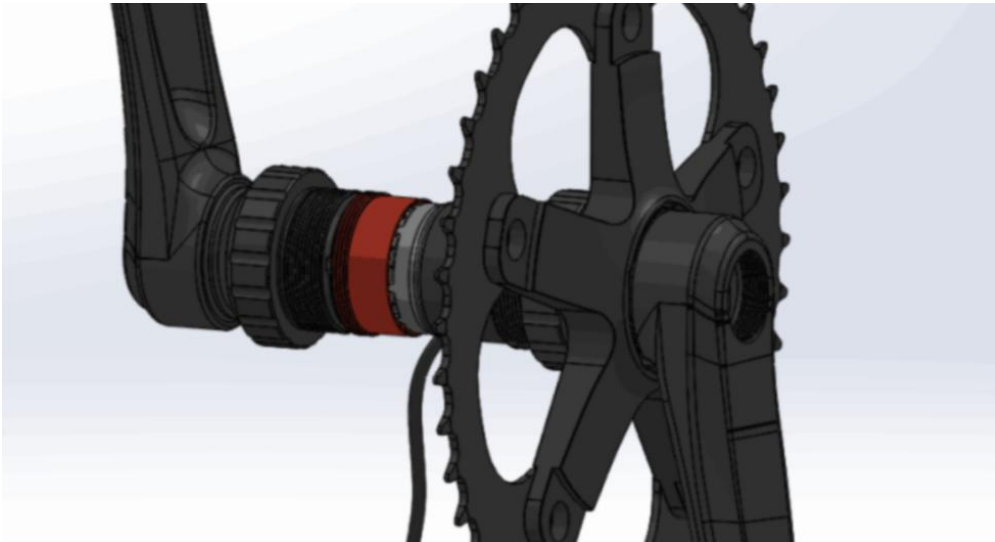
3th generation of non-contact torque sensor

(2018-First edition)

The BB cup and the fixed cup are designed to be segmented, thus don't have to worry about rough disassembly damaging the cable for any more.



Compare to the former generation product, the speed signal is increased from 32(2 way add up) to 48 pulses/turn, so the start/stop reaction become quicker.



Specifications:

Supply voltage:	10-60V DC (*1)	Working current:	$\leq 35\text{mA}$ (*2)
Pedal pulse:	48/T	Resolution:	0.25Kg·F
Base voltage:	$1.5\text{V} \pm 0.03$	Non-linearity:	$\pm 0.04\text{V}$
Voltage scale:	0.25V/10Kg·F	Max. output voltage:	4V
Sleep current:	$\leq 8\text{mA}$	Sleep time:	10 min (*3)
Rated load:	60Kg·F	Maximum load:	200Kg·F
Signal update rate:	100Hz	Output impedance:	100 Ω
Working temperature:	-20~+60°C	IP level:	IP65

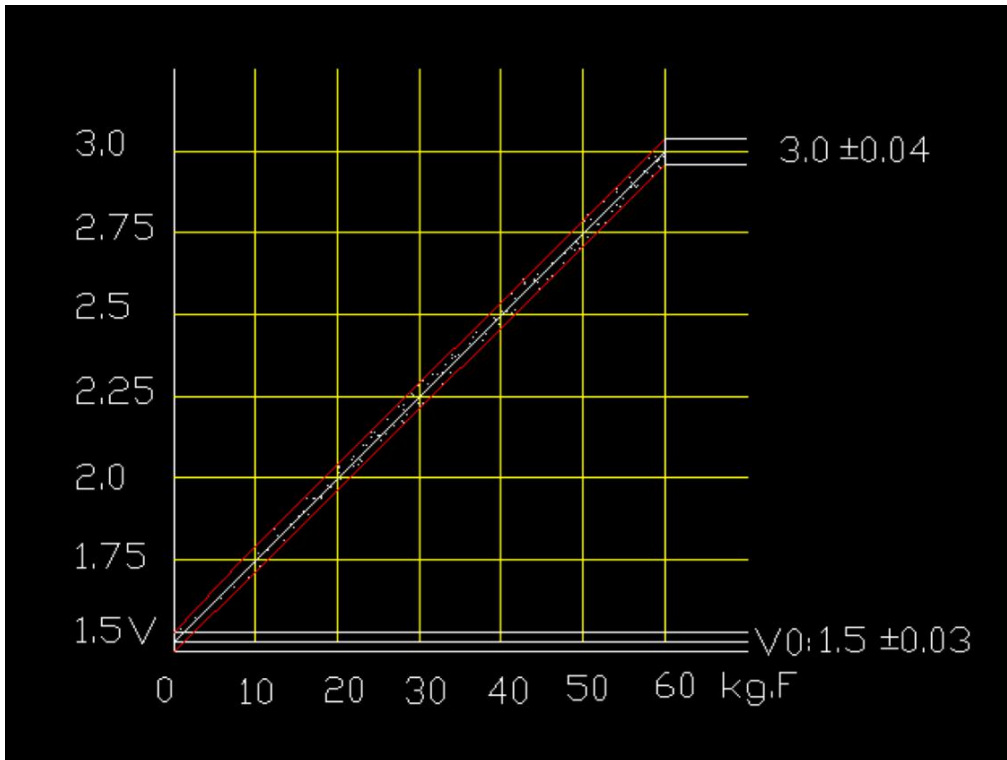
Notes:

*1、 Pure speed version is 3-30V power supply;

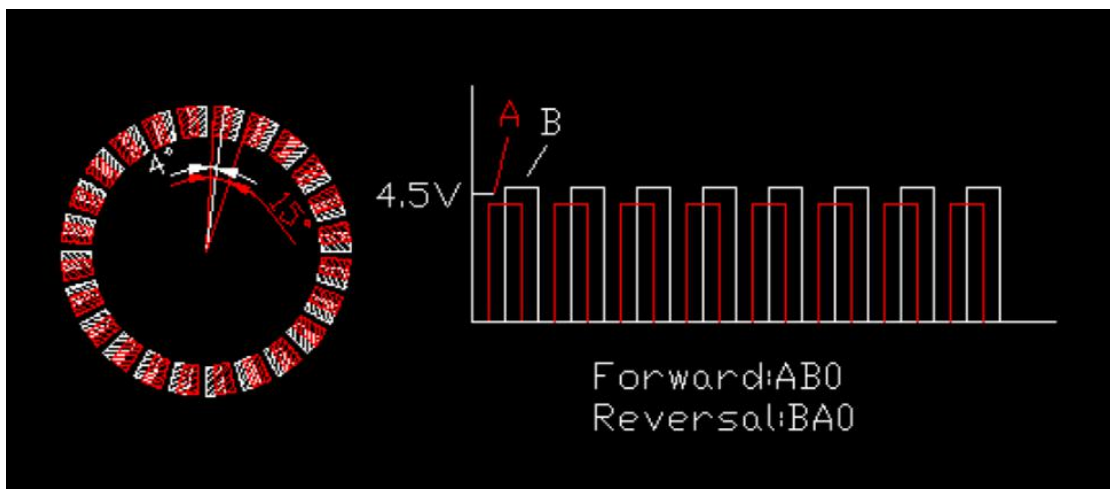
*2、 The working current is based on 12V, and the working current varies with different supply voltage;

*3、 When the crank does not move, the torque module enters dormancy, and the speed signal does not sleep. When the cranks rotate 15 degrees, it wakes up.

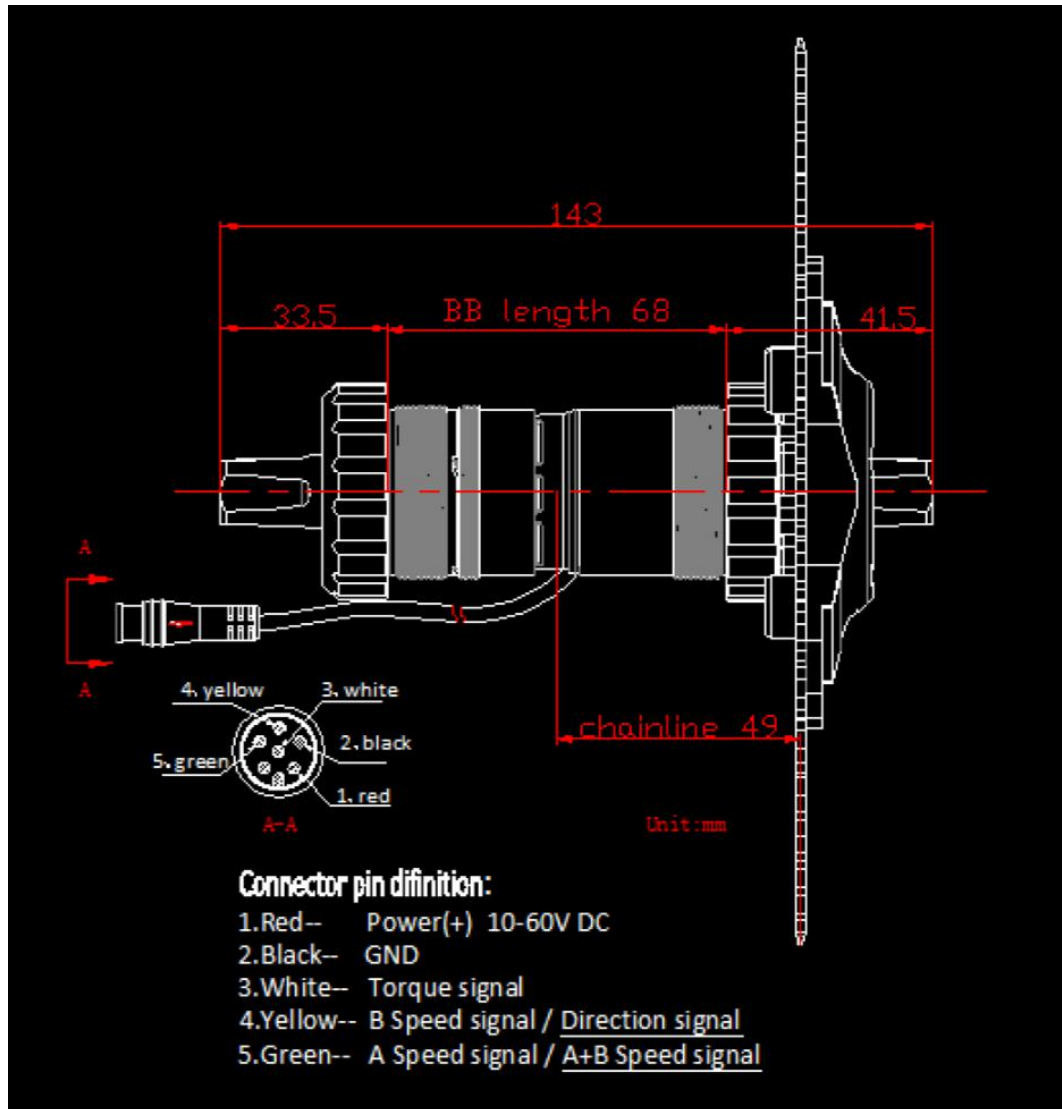
Linearity between trampling force and signal output :



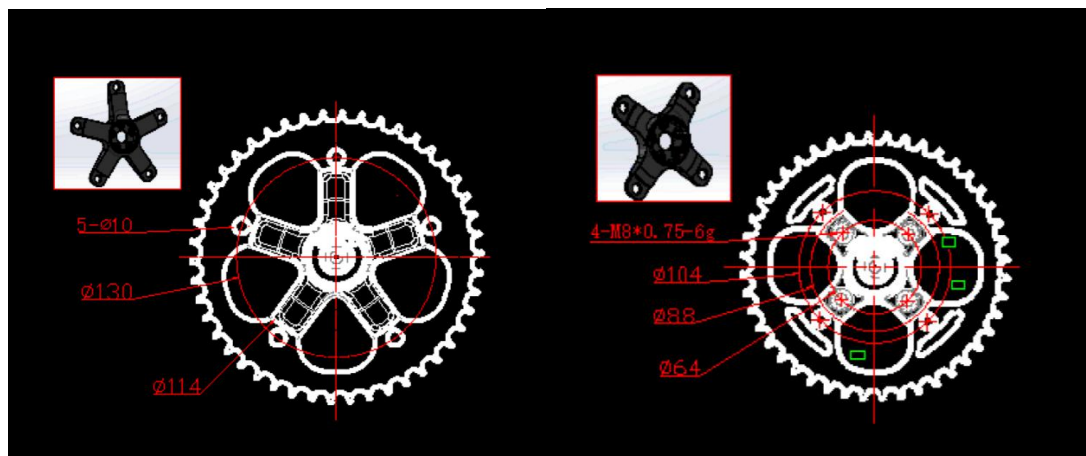
Two speed signals are 48(2 way add up) per cycle, and the fastest starting angle is 4 degrees.



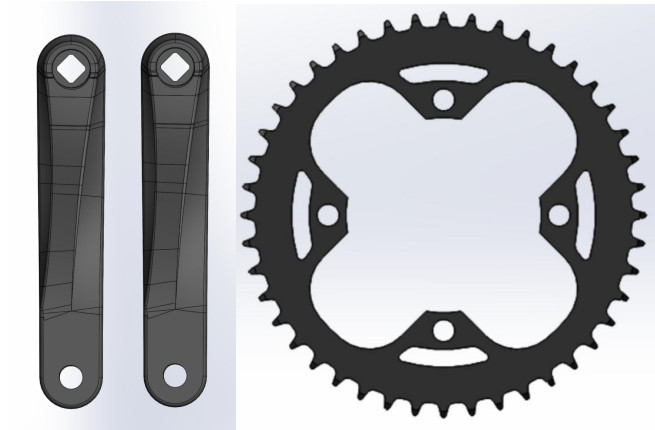
T4.3 Assembly size and outlet definition:



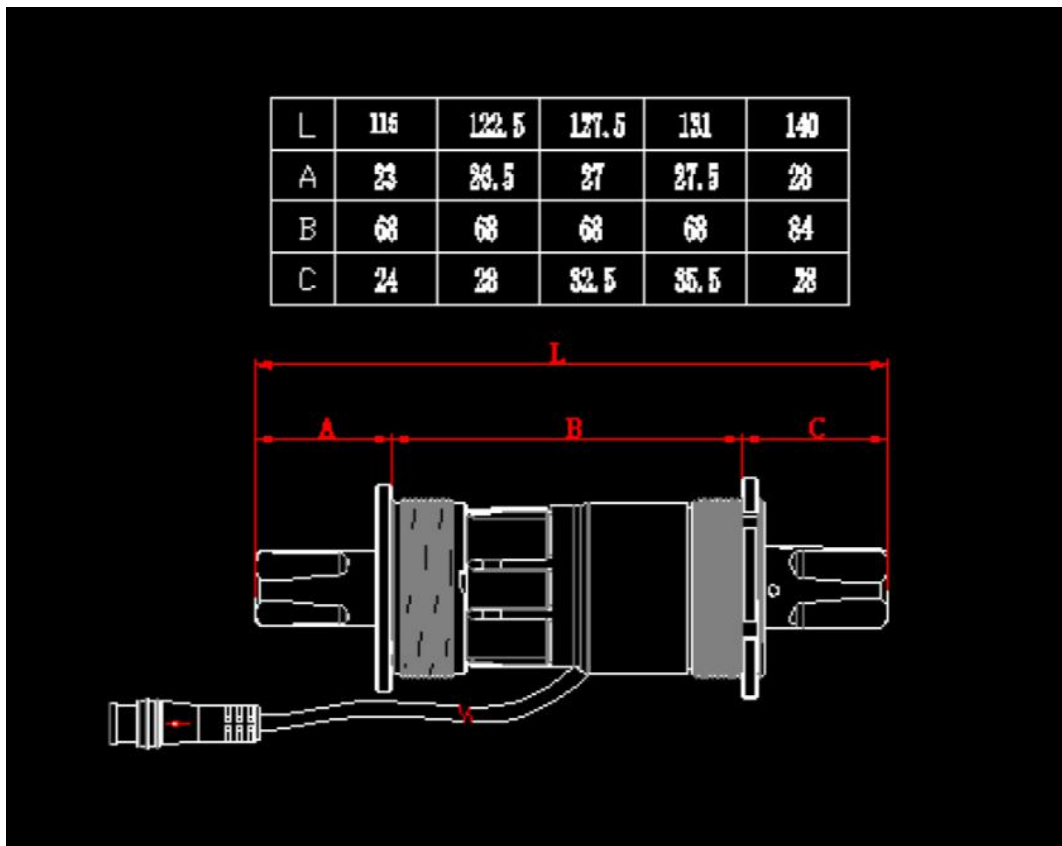
5 claws and 4 claws available for chainwheel:



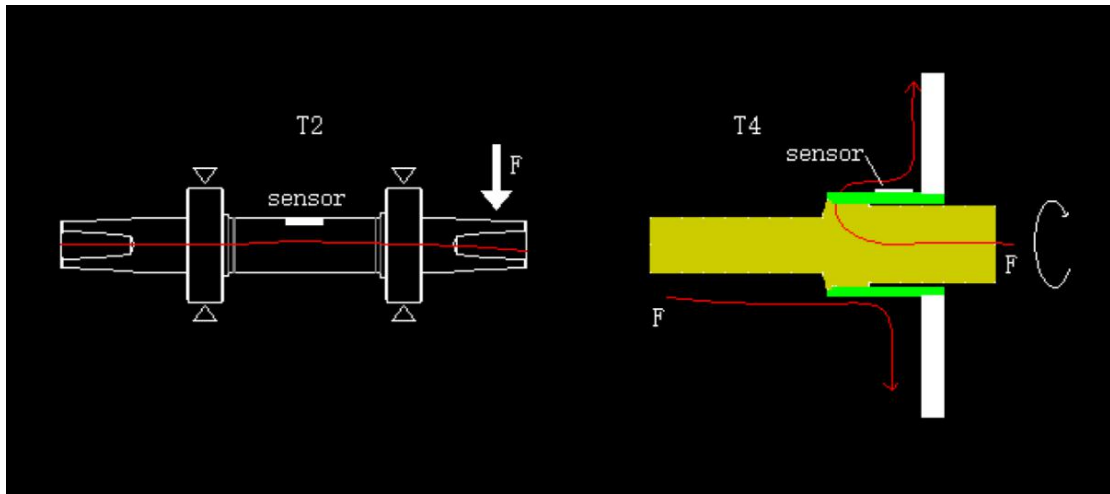
The cranks and chainring:



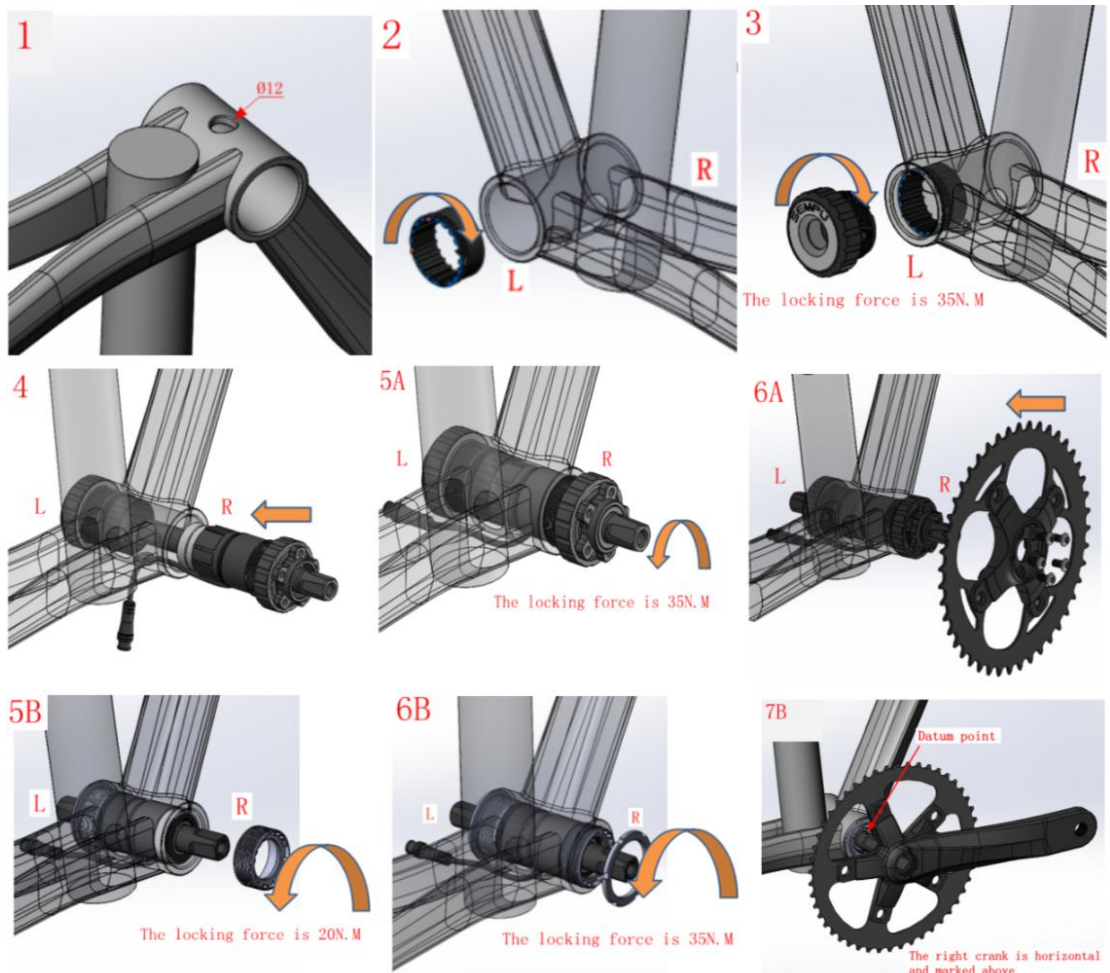
T2.3 dimensions and options:



The difference between T2 and T4:



Assembly procedure:



T4: 1-2-3-4-5A-6A

T2: 1-2-3-4-5B-6B-7B