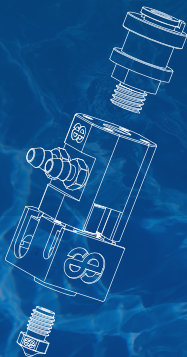


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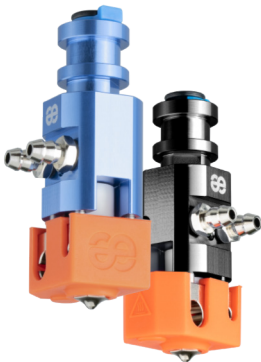
# Dragon Water Hotend® WHF

## Assembly Instruction



Please read and keep this manual carefully  
before using our products properly

## Product Appearance



Thank you for buying Phaetus'  
Dragon Water Hotend.

## Product Features

Well-designed  
compact structure

Superior thermal  
isolation of heatbreak

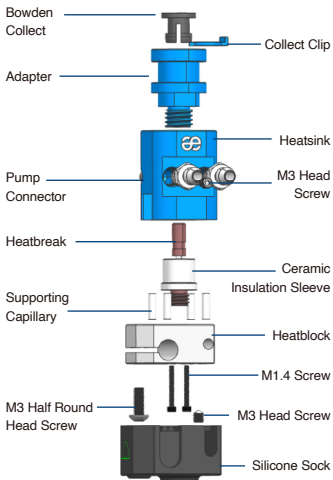
Reinforced  
rigid structure

High temperature  
resistance

## Compatible Filaments

Compatible with all consumables, including:  
PLA, ABS, PETG, TPU, PP, PC, Nylon, PEEK,  
PEI.

# Product Exploded View



## Specifications

Product Name: Dragon Hotend WHF

Product Size: 30.0mm\*26.5mm\*62.2mm

Default Nozzle: Plated copper 0.4/1.75mm

Product Color: Blue/Black

Product Net Weight: 67.4g

## Parts & Accessories



M2.5x8 screws \*4pcs

M2.5x12 screws \*4pcs

M1.4x12 screws \*2pcs

H1.27 / H1.5 / H2.0 hexagon bar \*1pcs

H8.0 open wrench \*1pcs

Heat conducting silicone grease

Brass sleeve

## Product Advantage

- Heatbreak with an ultra-thin wall thickness as thin as 0.1mm, realizing an excellent thermal insulation.
- Increased rigid support structure guarantee the heatbreak remaining intact under the impact of external force.
- Integral frame rigid structure makes nozzle replacement more convenient without grasping the heatblock.
- The inner hole roughness of nozzle and heatbreak Ra0.3, which allow a more smooth movement of filament, resulting a higher resolution prints.
- Standard hotend and high flow hotend share the same overall dimension, which realize a zero barrier for interchangeability.
- The hotend is mainly composed of copper alloy material which has the advantage of faster heating and better heat dissipation.
- Standard all metal kit, with overall high temperature resistance up to 500 °C.
- Flexible combined structure design makes a strong compatibility.

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# Phætus®

欢迎使用

Welcome

Bienvenu

Willkommen

Bienvenida

Välkommen

This user guide helps you get started  
using Dragon Water Hotend  
And discover all the amazing things it  
can do on a 3D printer

## Assembly Steps

1. Insert the bowden collect into the top of the adapter, insert the collect clip between the bowden collect and the adapter to secure the bowden collect;



2. Screw the adapter into the heatsink;



3. Screw the heatbreak into side A of the heatblock using an open – ended wrench (about 4.5NM torque), and put the ceramic protective sleeve over the heatbreak;



4. Insert the 4 supporting tubes into the 4 round holes at the bottom of the heatsink;



5. Align the 4 supporting tubes at the bottom of the assembled heatsink, insert them into the 4 round holes on side A of the heatblock, and press them firmly (Note that the side with small beads

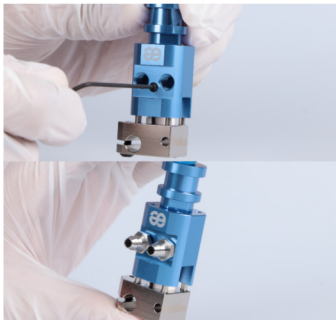
on the side of the heatsink is opposite to the side engraved with Phaetus logo on the heatblock);



6. On side B (4 holes) of the heatblock, screw the 3 screws shown in the following figure into the corresponding screw holes using an appropriate hexagon bar (Warning: Excessive tightening of the M1.4\*12 screw will damage the thread, or lead to screw fracture and hexagon nut sliding teeth, etc.);



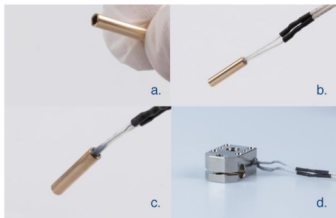
7. Screw the M3 head screw and water connector into the 3 corresponding screw holes on the side of the heatsink;



8. Put the silicone sock on the heatblock;



9. If you are using a glass ball thermocouple, first install the thermocouple into the brass sleeve in the accessories kit (the brass sleeve is shown below), seal the port with the thermal adhesive carried in the accessories kit, then put it into the heatblock and lock it with the head screw.



## Hot – Tightening

1. Hot - tightening is the last mechanical step before Dragon Water Hotend is ready! It is essential for the sealing of the nozzle and heatbreak to ensure that molten filaments do not leak out of the hotend during use.
2. Using the printer's control software (or LCD screen) to set the hotend's temperature to 285°C. Wait one minute after its temperature reaches 285°C to equalize the temperature of all components.
3. Gently tighten the nozzle while fixing the heatblock with a wrench, and finally tighten the nozzle with a smaller 7.0mm wrench. This will keep the nozzle close to the heatbreak and ensure that the hotend does not leak.
4. The tightening torque of the hot nozzle is about 2.5NM, which is about the pressure applied by one finger on the small wrench.



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