# Revo<sup>™</sup> Micro DATASHEET





#### Summary

- Max Printing Temperature: 300°C
- Mass: ~30g
- Temperature sensor type: thermistor, Semitec 104NT-4-R025H42G
- Voltage options: 12V or 24V
- Wattage: 40W
- Filament diameter: 1.75mm

## **Volume and Dimensions**



# **Power vs Temperature**



Initial Resistance of a 24V heater at  $23^{\circ}$ C: 14.4 $\Omega$ Temp Coefficient of HeaterCore: 0.002078 Temp Coefficient of Heater Cartridge: 0.002078

## **Mounting Guidance**

Mounting type: screw thread (M12x1.5). Depth 5mm.

Minimum plate thickness: 1mm

Maximum plate thickness: 5mm



[Figure 6: 9mm threaded plate mounting]

[Figure 7: Cross section 9mm threaded plate mounting]

# **Cable Orientation**

Turn Revo HeaterCore anti-clockwise to orient cables. Turning clockwise will cause the spring to disengage

# Assembly

There is no need to hot-tighten the Revo Micro assembly. Tools must not be used to fasten the Revo Nozzle to the HeaterCore.

#### **Operational Temperatures**

Maximum recommended ambient operating temperature (PLA): 40°C Lowest temperature rated component: Fan 70°C

#### **Electrical Specification**

Fan:

- 5V
- Please use the supplied regulator board. Running directly from 12V or 24V will cause failure
- Fan current: 176mA
- Fan noise: 25.0dB(A

#### Heater:

12V or 24V, 40W nominal power at ambient

Temperature:

Temperature sensor: Semitec 104NT-4-R025H42G

# Connections

Fan: Molex Micro-Fit 3.0, 2 pin vertical Heater: Molex Micro-Fit 3.0, 2 pin horizontal Temperature sensor: Molex Micro-Fit 3.0, 2 pin horizontal Assembly is supplied with 1m cables to connect to mainboard

# **Materials**

Heatsink: Aluminium (black anodised) Nut: Nylon HeaterCore: Alumina, Bronze Fan shroud: Polycarbonate

# Compliance

- Reach
- RoHS
- WEEE

# **Exploded View**



- 1. M12 x 1.5 nut
- 2. Collet
- 3. Revo Micro HeatSink
- 4. Revo Spring
- 5. Revo HeaterCore
- 6. Revo HeaterCore sock

- 7. Revo Nozzle
- 8. Revo Nozzle sock
- 9. Collet clip
- 10. Revo Micro fan duct
- 11. 20 x 20 x 10 5V fan

# Changelog

Edition 4 Approved: RY 19/07/22 Published: 19/07/22 Notes: Migrated PDF to Zendesk, Power vs Temperature graph added and minor phrasing changes

**Edition 3** 

Approved: DR 07/12/21 Published: 07/12/21 Notes: Flow rate units changed to 10mm³/sec

Edition 2 Approved: RY 13/09/21 Published: 12/10/21 Notes: Thread renamed to Revo Micro

Edition 1 Approved: RY 17/09/21 Published: 17/09/21



