

Overview

The 150W 22V Micro Vacuum Brushed Motor is a robust, high-performance DC motor designed specifically for high-suction applications like DIY mini vacuums, custom dust extractors, and portable cleaning appliances. Unlike standard axial fans that lack the static pressure required to shift dust and heavy particles, this motor features an integrated, precision-balanced centrifugal impeller.

Operating optimally at 22.2V (ideal for 6S LiPo configurations), it pulls air directly into the central intake and forces it outward through side exhaust vents. Utilizing a straightforward brushed DC mechanism, it offers rugged simplicity and does not require complex electronic speed controllers (ESCs) to function.



Features

- **Massive Suction Power:** High-speed rotation drives an internal impeller to generate the strong low-pressure zone and static pressure needed for serious vacuuming.
- **Integrated Centrifugal Impeller:** Aerodynamic casing resists stalling even when airflow is heavily restricted by filters or debris.
- **Simple Brushed DC Control:** Operates directly using standard DC power via dual brass solder tabs. Compatible with simple switches, relays, or high-current PWM speed controllers.
- **Optimised for Cordless Power:** Perfectly suited for 6-cell (6S) Lithium-Polymer battery setups or matching 22V–24V DC power supplies.
- **Air-Through Cooling Design:** Includes internal motor ventilation slots for thermal dissipation during operation.

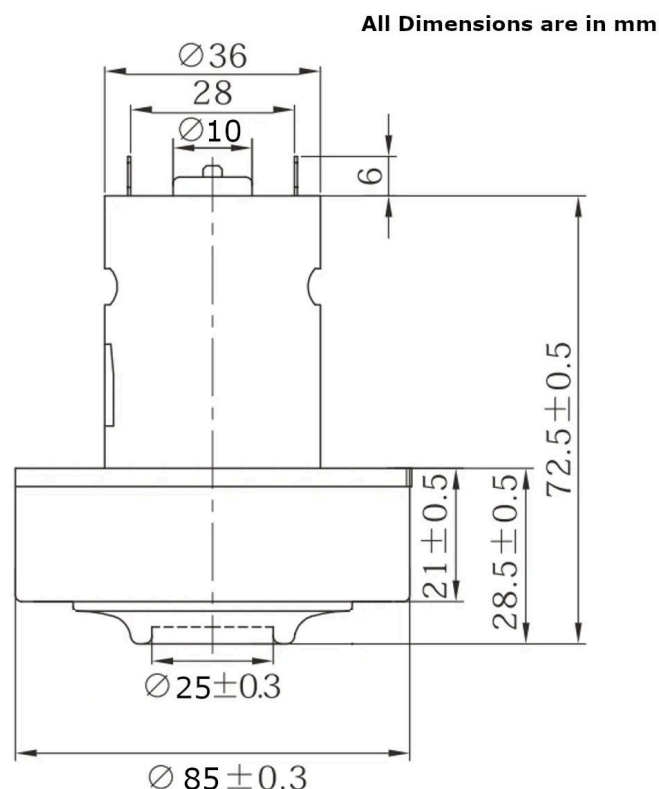
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Technical Specifications

Parameter	Specification
Product Name	150W Micro Vacuum Cleaner Motor
Motor Type	Brushed DC Motor
Operating Voltage	22.2V DC (Optimized for 6S LiPo / 20V–24V sources)
Power Rating	150W
Current Draw	~6.7A to 7.5A (Under load) (Recommended supply: 10A+ surge capacity)
Impeller Type	Centrifugal Vacuum Fan with Metal & Plastic Casing
Electrical Connections	Dual Brass Solder Tabs
Cooling Mechanism	Air-through design with internal motor vents

Dimensions:



Pin Configuration

Terminal	Description
Positive (+)	Connect to the positive output of your 22.2V / 24V DC power source or battery via a heavy-duty switch/relay.
Negative (-)	Connect to the negative ground return of your power system.

Applications

- **Cordless Stick Vacuums:** Drop-in replacement or core component for custom 22V handheld dustbusters and stick vacuums.
- **Workshop Dust Extraction:** Building automated desktop or mini cyclone dust collectors for CNC machines and saws.
- **Combat Robotics & Hovercrafts:** Creating powerful "downforce" suction systems to enhance surface traction for lightweight robots.

Important Notes

1. **Startup Surge:** *Ensure your power source or battery pack can supply at least 10A to safely handle the high current spike when the motor spins up.*
2. **Voltage Range:** *Running this motor on lower voltages (e.g., a 12V car battery) will cause a steep drop in RPM and heavily degraded suction performance.*
3. **Filter Restrictions:** *While the centrifugal design resists stalling, always ensure adequate airflow filtration to prevent debris from reaching the internal motor winding.*

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