RSK-2000 Water-Cooled Fixed Wirewound Resistor

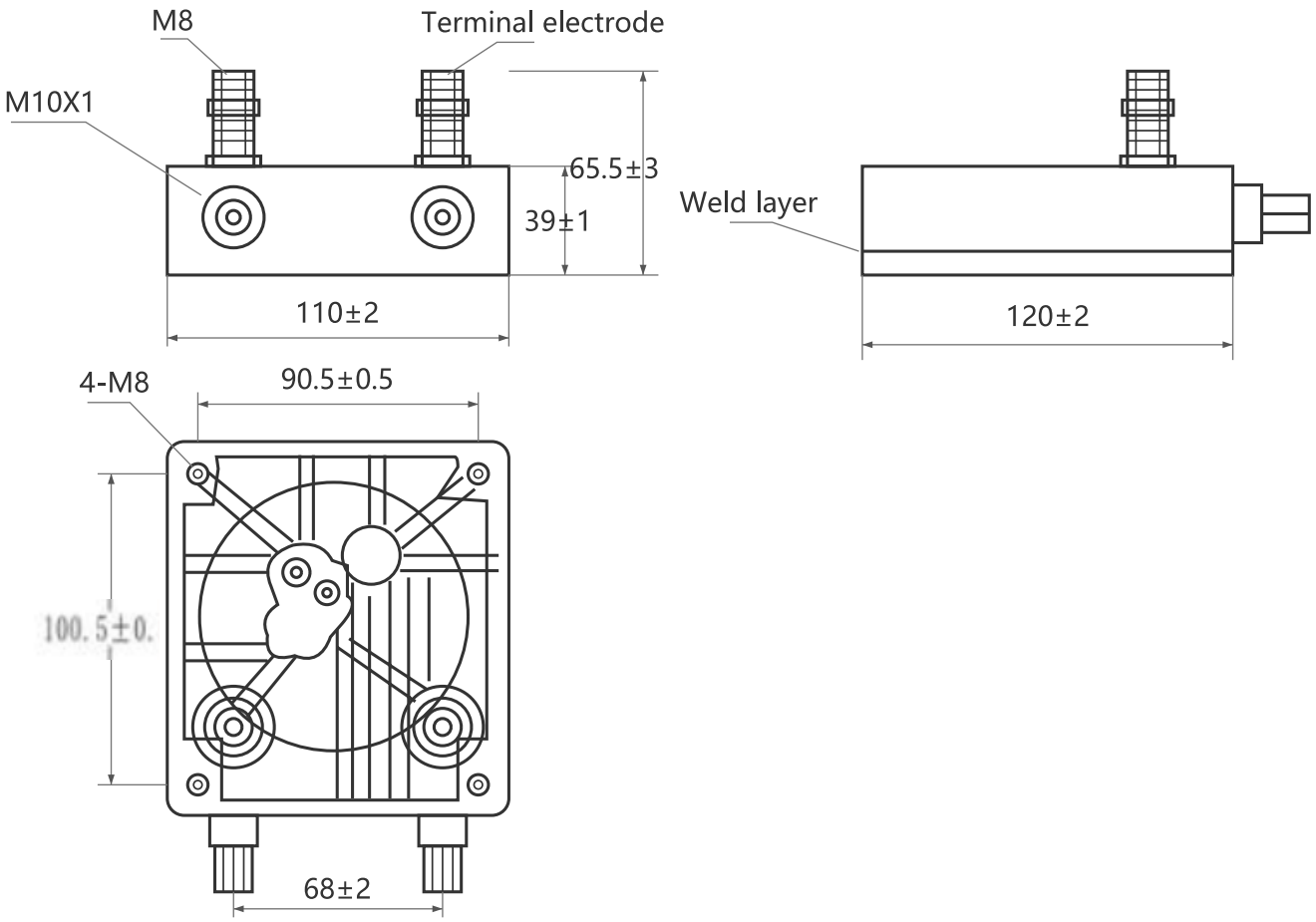
Product Introduction

• Features: compact size and high power. Low inductance. Direct water cooling, low temperature rise, high reliability and convenient maintenance.

• Applications: automatic transmission control, power supply, power transmission, control equipment, etc.



Outline Dimensions



Ordering Example

Model	Rated power	Nominal resistance	Resistance tolerance	Quantity
RSK	2000W	1Ω	±5%	1000 pieces

Specifications

Model	Rated power (W)	Resistance range (Ω)	Cooling medium	Operating environment
RSK-2000	2000W	1 ~ 10	Deionized water + ethylene glycol	Temperature range: (0 ~ +60)°C

Main Test Items

Test item	Test conditions	Performance requirements	Test standard
Leak tightness	Pressure: 1.5MPa, 15min	No water leakage	-
Insulation resistance	Voltage: (500±50)Vdc, 1min, between terminals and mounting plate	≥100MΩ	GB/T 5729-2003 Clause 4.6
Voltage withstand	Voltage: 3000Vac, 1min, between terminals and mounting plate	No breakdown or flashover	GB/T 5729-2003 Clause 4.7
Terminal strength	Torque: 3N·m, 10s	ΔR≤± (1%R+0.05Ω)	GB/T 5729-2003 Clause 4.16
Vibration	Frequency: (10 ~ 55)Hz; amplitude: 0.75mm; 2h	ΔR≤± (5%R+0.05Ω)	GB/T 2423.10-2008
Endurance at room temperature	Rated power, 96h; water flow: 3L/min; inlet water temperature: (45±3°C); cooling-water conductivity ≤5μs/cm	ΔR≤± (5%R+0.05Ω)	-

Notes

1. Mounting: secure the resistor to the mounting surface through at least all 4 peripheral mounting holes.

2. The inlet and outlet should be at the same level, or the inlet should be lower than the outlet.

3. Use Φ6/Φ4mm PVDF tubing for the inlet and outlet water connections.

4. Before use, pass water through the system to purge air from the circulation circuit and the resistor.

5. The resistor covered by this specification carries a high operating current. Ensure reliable electrical connections between cables and terminals to reduce contact resistance.

6. Water pressure during normal operation: 0.2 ~ 0.6MPa.

7. Normal operating conditions: ambient temperature: 0 ~ 60°C; inlet water temperature: 0 ~ 70°C; inlet flow per resistor: 2 ~ 5L/min; outlet water temperature: ≤80°C; cooling-water conductivity: ≤5μs/cm (lower conductivity is better).