

## WATER COOLED HIGH POWER RESISTORS

## **RXP2000** Water Power Resistors

# 2K Watts High Power Thick Film, Direct Water Cooling

Rongtech general models of high power resistors. Direct water cooling with normal water ( or other cooling medium ), shows better results compared to traditional cooling method.

For power supply, control device, electric drive, electric transmission and distribution system etc.

#### Technical characteristics:

- ♦ Thick film resistor, non-inductive design,
- ♦ Direct cooling, with normal cooling water.
- $\Leftrightarrow$  Resistance from 0.5Ω to 1MΩ, high reliability.
- ♦ High voltage and pulse loading, "Rongtech power resistor pulse load characteristics"
- ♦ Special resin-filled cover with large creeping distance and air distance.
- ♦ Case material: CTI≥600, in compliance with UL94-V0
- ♦ Cooling size:

L: 68mm; W: 65mm; H: 10mm

## **4** Specifications:

Resistance:  $0.5 \Omega \sim 1M \Omega$  $\Rightarrow$  Tolerance:  $\pm 5\% \sim \pm 10\%$ 

 $\Rightarrow$  TCR:  $\pm 150$ ppm/°C (25°C $\sim 105$ °C)

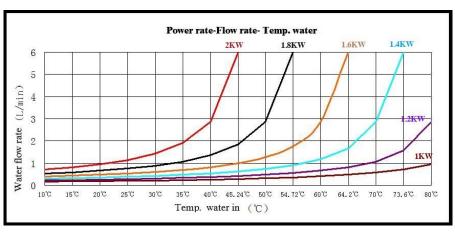
other values on request.

- ♦ Power rating: Max. 2000Watts
- ♦ Max operating voltage: 5,000VDC.
- $\diamond$  Short time overload: 3000W,, 10S,  $\Delta R \leq \pm (0.4\%R + 0.001\Omega)$ .
- $\ensuremath{\diamondsuit}$  Peak current: up to 1500Amp. Depending on pulse length and frequency.
- ♦ Dielectric strength: 6KVrms, 50Hz, 1min, 10KVrms on request.
- ♦ Partial discharge: 4KVrms, <10pC;7KVrms on request.
- $\diamond$  Insulation resistance: 10G  $\Omega$ , Min at 500V.
- ♦ Creeping distance: Min. 42mm. Up to 85mm as request
- ♦ Air distance: 14mm, Min.
- ♦ Inductance: ≤80nH
- ♦ Capacitance /Mass: ≤110pF
- ♦ Capacitance /Parallel: ≤40pF
- ♦ Working temperature: Up to the condition of cooling medium
- ♦ Cooling water: Normal cooling water (high purity water, 0il or other medium)
- ♦ Power rate -Flow rate- Temp. water Graph as bellow
- ♦ Contact terminal: M5 screw, Max torque 2Nm.
- ♦ Resistor installation: M4 screw, Max torque 1.8Nm

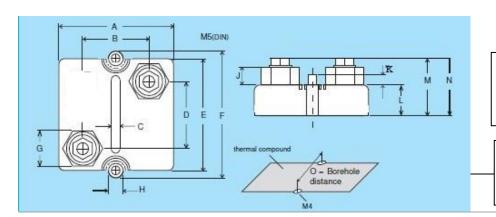
#### **4** Dimensions:

Dim.	Min (mm)	Max (mm)
A	59.20	60.80
В	35.80	36.20
C	4.50	5.50
D	33.80	34.20
E	56.80	57.40
F	64.20	65.80
G	17.50	18.50
Н	4.05	4.30
J	6.50	7.50
K	4.50	5.50
L	14.50	15.50
M	24.50	25.50
N	24.50	25.50
О	56.80	57.20

#### **♣** Power rate -Flow rate- Temp. water Graph :



Note: The above graph is based on the normal cooling water, other mediums please contact Rongtech to confirm.



♣ Applicable standard: IEC60115-1: 2001 (GB/T5729-2003) MIL-STD-202 MIL-R-39009D

♣ Order example: Model R TOL TCR UXP2000 50R 5% 150PPM