High Power Watercooled Resistor Series W500

Our resistor Series W500 is designed for usage in high power applications. Due to the direct watercooling these resistors are good for a continuous power load up to 2000 W (short time overload up to 4000 W)! The easy M4 mounting, wide ohmic range, precise tolerance and temperature coefficient values as well as a high dielectric strength capability are only some of the features of this resistor series. Series W500 is available in two standard configurations, with or without isolated contact. Also voltage dividers are possible!

<table>
<thead>
<tr>
<th>Model</th>
<th>Wattage*</th>
<th>Max. Peak Voltage**</th>
<th>Isolation Voltage*** (Optional)</th>
<th>Dimensions in mm ± 2.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>W500.50</td>
<td>1000</td>
<td>70 kV</td>
<td>7 kV</td>
<td>178 x 10</td>
</tr>
<tr>
<td>W500.70</td>
<td>1400</td>
<td>100 kV</td>
<td>10 kV</td>
<td>228 x 15</td>
</tr>
<tr>
<td>W500.100</td>
<td>2000</td>
<td>150 kV</td>
<td>15 kV</td>
<td>328 x 20</td>
</tr>
</tbody>
</table>

* max. power at cooling medium temperature < 50°C, flow > 7 l / min.
** DC or AC peak between contacts 1 and 2, Configuration A
*** between contact 3 and isolated contact 1, Configuration B

Electrical Characteristics:

- Resistance Value: 0.5Ω to 10MΩ (or other special values on request)
- Tolerance: ± 10% (±5% or other on request)
- Temperature Coefficient: ± 100 ppm/°C
- Cooling: Cooling medium MUST be non-conductive (e.g. distilled water or distilled water – glycol mixture)
- Inductivity: 50 .. 150 nH typical (depending on size and resistance value)
- Cooling Medium Pressure: Max. 10 bar
- Cooling Connection: 1/8 G thread or Metal One-touch Fittings (optional)
- Encapsulation: High Temperature Silicone Coating
- Resistor Material: Ruthenium Oxide
- Contact Material: CrNi (stainless)