Technical Information

DOGLAS® 250G

<table>
<thead>
<tr>
<th>Product description</th>
<th>Engineered composite material made of resin-bound glass fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard colour</td>
<td>brown</td>
</tr>
<tr>
<td>Main applications</td>
<td>Electrical and thermal insulation parts for machine engineering and process industry</td>
</tr>
<tr>
<td>Delivery program</td>
<td>Sheets, panels and highly precise machined parts and finished components</td>
</tr>
</tbody>
</table>

**Physical characteristics**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Standard</th>
<th>Unit</th>
<th>Typical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity</td>
<td>ISO 1183</td>
<td>g/cm³</td>
<td>1.9</td>
</tr>
<tr>
<td>Water absorption</td>
<td>ISO 62</td>
<td>%</td>
<td>0.15</td>
</tr>
</tbody>
</table>

**Thermal characteristics**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Standard</th>
<th>Unit</th>
<th>Typical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature, continuous</td>
<td>–</td>
<td>°C</td>
<td>250</td>
</tr>
<tr>
<td>Operation temperature, short-term</td>
<td>–</td>
<td>°C</td>
<td>260</td>
</tr>
<tr>
<td>Coeff. of linear thermal expansion</td>
<td>DIN 51045</td>
<td>10⁻⁶ x K⁻¹</td>
<td>20</td>
</tr>
<tr>
<td>Thermal conductivity</td>
<td>DIN 52612</td>
<td>W/mK</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**Mechanical characteristics**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Standard</th>
<th>Unit</th>
<th>Typical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength at 23 °C</td>
<td>ISO 604</td>
<td>N/mm²</td>
<td>570</td>
</tr>
<tr>
<td>Compressive strength at 250 °C</td>
<td>ISO 604</td>
<td>N/mm²</td>
<td>350</td>
</tr>
<tr>
<td>Flexural strength at 23 °C</td>
<td>ISO 178</td>
<td>N/mm²</td>
<td>400</td>
</tr>
</tbody>
</table>

**Electrical characteristics**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Standard</th>
<th>Unit</th>
<th>Typical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparative tracking index</td>
<td>IEC 112</td>
<td>-</td>
<td>CTI 350</td>
</tr>
<tr>
<td>Permittivity</td>
<td>DIN 53483</td>
<td>-</td>
<td>5.5</td>
</tr>
<tr>
<td>Electric strength (+)</td>
<td>IEC 243-1</td>
<td>KV/3 mm</td>
<td>30</td>
</tr>
<tr>
<td>Electric strength (⊥)</td>
<td>IEC 243-1</td>
<td>KV/25 mm</td>
<td>35</td>
</tr>
</tbody>
</table>

The standard values shown in this data sheet are measured by standard test methods. Depending on operation terms and dimensions the material properties can differ from these values.

Please contact our applications and sales engineers to clarify the suitability of the material for your application.