Regufoam®
Vibration 510 Plus
Standard forms of delivery, ex warehouse
Plates
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/smaller sizes
On request
Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
0.22 N/mm²
Continuous and variable loads/operating load range
0 to 0.32 N/mm²
Peak loads (rare, short-term loads)
up to 4 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
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<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
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<tr>
<td>Fire behaviour</td>
<td>DIN 4102, DIN EN 13501</td>
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<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
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<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
</tr>
<tr>
<td>Colour</td>
<td>Beige</td>
</tr>
</tbody>
</table>

Based on EN 826
Based on DIN 53513
Based on DIN EN ISO 1856
Based on DIN EN ISO 1798
Based on DIN ISO 34-1
Based on DIN EN ISO 13501
Based on BSW-laboratory
Based on DIN EN ISO 3386-2
Based on DIN EN ISO 8307
Based on DIN EN 14904

N/mm²
N/mm²
[-]
%
**Load Ranges**

**Regufoam® vibration**

<table>
<thead>
<tr>
<th>Permanent load in N/mm²</th>
<th>150</th>
<th>190</th>
<th>220</th>
<th>270</th>
<th>300</th>
<th>400</th>
<th>510</th>
<th>570</th>
<th>680</th>
<th>740</th>
<th>810</th>
<th>990</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.011</td>
<td>0.02</td>
<td>0.018</td>
<td>0.028</td>
<td>0.042</td>
<td>0.055</td>
<td>0.11</td>
<td>0.22</td>
<td>0.30</td>
<td>0.45</td>
<td>0.60</td>
<td>2.50</td>
</tr>
</tbody>
</table>

**Load Deflection**

**Regufoam® vibration 510 plus**

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 510 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base. Dimensions of test specimens 300 mm x 300 mm x 25 mm.

Optimum load range

Dynamic range

Static load range

N/mm²
Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.22 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.22 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
Modulus of Elasticity

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.
Long-Term Creep Test

Dimensions of specimens 300 mm x 300 mm x 50 mm

Static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.