VC1004 Vibration Control material is an engineered compound with Cork and Natural Rubber.

This product is suitable for vibration control applications in need of very high isolation levels, used as discrete isolators (pads/strips) with a low resonance frequency and medium high load.

**Load Range**

<table>
<thead>
<tr>
<th>Static</th>
<th>1,5–3,0 MPa (217–435 psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4,0 MPa (580 psi)</td>
</tr>
<tr>
<td>Occasional</td>
<td>10,0 MPa (1450 psi)</td>
</tr>
</tbody>
</table>

**E-MODULE (@ Stable Load)**

| Static | 8,0–20,0 MPa (1160–2900 psi) |
| Dynamic | 16,0–50,0 MPa (2320–7251 psi) |

① DIN 53513 (adapted) – tangential modulus (depending on pad geometrics)
② DIN 53513 (adapted) – depending on load and frequency

**Temperature**

Range: -10 / +100°C (+14 / 212 °F)

**Features**

- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate

**Standard Dimensions**

- 1100x550x20mm
- 550x550x30mm
- 550x550x50mm

* Other dimensions (like pads) available under request

**Fire Classification**

E/Ef 😎

① as per ISO 11925–2:2010, ISO 11925–2:2010

**Technical Features**

- Density (kg/m³) 😎 1125 (70 lb/ft³)
- Shore hardness (Shore A) 😎 60–80
- Elongation at break (%) 😎 > 100
- Tensile strength (MPa) 😎 > 6,0 (>870 psi)
- Compression set 50%/23°C/70h (%) 😎 < 15
- Loss Factor 😎 0,16

① ASTM D297 ② ASTM D2240 ③ ASTM F152 ④ DIN EN ISO 1856
⑤ DIN 53513 (Temperature, frequency and load dependent)
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SELECTION GUIDELINE

Material selection can be made using the Static/Dynamic E-Module in the respective load range or using the Vibration Isolation Level Abacus below:

- Based on the machine/system disturbing frequency select the desired isolation level based on the material thickness and respective natural frequency for the specific load/stress.
- Determine the material compression from the deflection curve at the specific load/stress.
- Creep effect can be added to the above deflection via the Creep deflection graph calculating the additional deflection and adding.

MATERIAL DATA SHEET VC1004

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