Material: closed-cell PU elastomer (polyurethane)
Colour: dark brown

Standard delivery dimension:
 Thickness: 12.5 mm / 25 mm
 Mat: 1.2 m wide, 1.5 m long

Other dimensions as well as punched parts on request.

<table>
<thead>
<tr>
<th>Range of use</th>
<th>Compressive load</th>
<th>Deformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static range of use (static loads)</td>
<td>up to 12.0 N/mm²</td>
<td>approx. 8%</td>
</tr>
<tr>
<td>Dynamic range of use (static and dynamic loads)</td>
<td>up to 16.0 N/mm²</td>
<td>approx. 10%</td>
</tr>
<tr>
<td>Load peaks (occasional, brief loads)</td>
<td>up to 24.0 N/mm²</td>
<td>approx. 15%</td>
</tr>
</tbody>
</table>

Mechanical loss factor: 0.08 (DIN 53513) 
Compressive load: up to 12.0 N/mm² (SEISO 1856) 
Compression set: < 5% (SEISO 1856) 
Static shear modulus: 4.0 N/mm² (SEISO 1827) 
Dynamic shear modulus: 5.3 N/mm² (SEISO 1827) 
Coefficient of friction (steel): ≥ 0.4 (Getzner Werkstoffe) 
Coefficient of friction (concrete): ≥ 0.6 (Getzner Werkstoffe) 
Thermal conductivity: 0.19 W/(mK) (DIN EN 12664) 
Temperature range: -30°C to 70°C 
Flammability: class E (EN ISO 11925-2) 

Static range of use

Temperature, frequency, specific load- and amplitude-dependent
25% deformation, 23°C, 72 h, 30 min after removal of load
at a pretension of 12.0 N/mm² at a pretension of 12.0 N/mm², 10Hz

All information and data is based on our current knowledge. The data can be applied for calculations and as guidelines, are subject to typical manufacturing tolerances and are not guaranteed. Material properties as well as their tolerances can vary depending on type of application or use and are available from Getzner on request.

Further information can be found in VDI Guideline 2062 (Association of German Engineers) as well as in glossary. Further characteristic values on request.
**Load deflection curve**

Quasi-static load deflection curve measured with a loading rate of 1.2 N/mm²/s.

Testing between sandblasted, flat steel plates; recording of the 1st load, with filtered starting range in accordance with ISO 844, testing at room temperature.

Shape factor: q = 3

**Modulus of elasticity**

Quasi-static modulus of elasticity as tangential modulus from the load deflection curve. Dynamic modulus of elasticity from sinusoidal excitation with a velocity level of 100 dBv re. 5 · 10⁻⁸ m/s corresponding to a vibration amplitude of 0.22 mm at 10 Hz and 0.08 mm at 30 Hz.

Measurement in accordance with DIN 53513

Shape factor: q = 3

**Natural frequencies**

Natural frequencies of a vibratory system with a single degree of freedom, consisting of a mass and an elastic bearing made of Sylodyn® HRB HS 12000 on a rigid surface.

Parameter: thickness of the Sylodyn® bearing

Shape factor: q = 3
### Static creep behaviour

Deformation under consistent loading.

Parameter: permanent static load

Shape factor: $q = 3$

![Graph showing deformation under static load depending on time.](image)

**Fig. 4: Deformation under static load depending on time**

### Dependency on amplitude

Typical dependency of the dynamic modulus of elasticity on the amplitude of vibration.

Sylodyn® HRB HS 12000 materials exhibit a negligible dependency of amplitude.

![Graph showing change in dynamic modulus of elasticity depending on amplitude.](image)

**Fig. 5: Dynamic modulus of elasticity depending on the vibration amplitude**
Influence of the shape factor

The graphs show the material properties at different shape factors.

Fig. 6: Static range of use in relation to the shape factor

Fig. 7: Deflection\(^1\) in relation to the shape factor

Fig. 8: Dynamic modulus of elasticity\(^2\) at 10 Hz in relation to the shape factor

Fig. 9: Natural frequency\(^3\) in relation to the shape factor

\(^1\) Reference value: specific load 12.0 N/mm\(^2\), shape factor \(q = 3\)

\(^2\) Reference value: specific load 12.0 N/mm\(^2\), shape factor \(q = 3\)