# RELOMER® SRG14



### **DATA SHEET**

# **Product characteristics**

| Material                    | PUR elastomer made from PU-bonded<br>PUR granules for structure-borne sound<br>insulation and vibration isolation |  |  |
|-----------------------------|---|--|--|
| Colour                      | multicoloured   |  |  |
| Standard delivery dimension | Thickness: 12.5 mm / 25 mm  |  |  |
|                             | Strip: 1.2 m long, 1.0 m wide   |  |  |

| Material properties   |                         | Test methods              | Comment                                  |
|---|-------------------------|---------------------------|--|
| Static range of use 1 (static loads)                          | up to 0.014 N/mm²       |                           |  |
| Dynamic range of use <sup>1</sup> (static plus dynamic loads) | up to 0.02 N/mm²        |                           |  |
| Static modulus of elasticity <sup>1</sup>                     | 0.075 N/mm <sup>2</sup> | DIN 53513 <sup>2</sup>    | at a specific load of 0.014 N/mm²        |
| Dynamic modulus of elasticity 1                               | 0.21 N/mm <sup>2</sup>  | DIN 53513 <sup>2</sup>    | at a specific load of 0.014 N/mm², 10 Hz |
| Static shear modulus <sup>1</sup>                             | 0.039 N/mm²             | DIN ISO 1827 <sup>2</sup> | at a specific load of 0.014 N/mm²        |
| Dynamic shear modulus <sup>1</sup>                            | 0.067 N/mm <sup>2</sup> | DIN ISO 1827 <sup>2</sup> | at a specific load of 0.014 N/mm², 10 Hz |
| Min. tensile stress at rupture                                | 0.110 N/mm <sup>2</sup> | ISO 1798 <sup>2</sup>     |  |
| Min. tensile elongation at rupture                            | 110 %                   | ISO 1798 <sup>2</sup>     |  |
| Temperature range   | -30 °C to 70 °C         |                           | Short term higher temperature possible   |
| Flammability  | class E                 | EN ISO 11925-2            | normal combustible, EN 13501-1           |

<sup>&</sup>lt;sup>1</sup> Values apply to shape factor 3

#### Load deflection curve

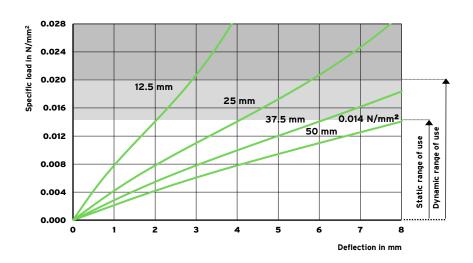


Fig. 1: Quasi-static load deflection curve measured with a loading rate of 0.0014 N/mm<sup>2</sup>/s.

Testing between flat and planeparallel steel plates, recording of 3<sup>rd</sup> load, with filtered starting range in accordance with ISO 844, testing at room temperature.

Shape factor 3



<sup>&</sup>lt;sup>2</sup> Measurement/evaluation in accordance with the relevant standard

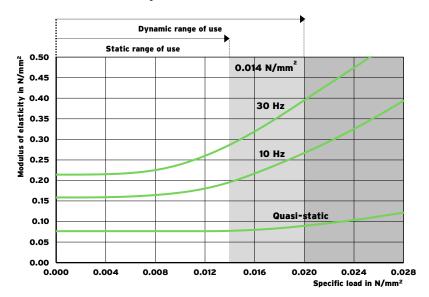


Fig. 2: Quasi-static modulus of elasticity as tangential modulus from the load deflection curve. Dynamic modulus of elasticity from sinusoidal excitation with a velocity level of 100 dB $_{\rm v}$  re.  $5\cdot10^{-8}$  m/s (corresponding to a vibration amplitude of 0.22 mm at 10 Hz and 0.08 mm at 30 Hz).

Measurement in accordance with DIN 53513

Parameter: frequency

Shape factor 3

## **Natural frequencies**

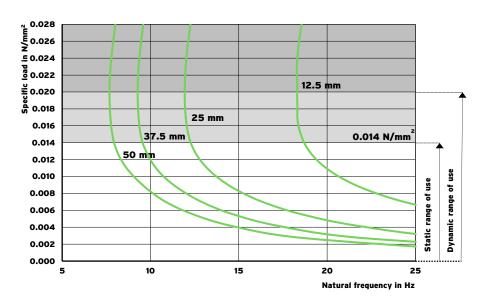


Fig. 3: Natural frequencies of a vibratory system with a single degree of freedom, consisting of a mass and an elastic bearing made of Relomer® SRG14 on a rigid surface.

Parameter: Thickness of the Relomer® bearing

Shape factor 3

Material properties can be determined using the online calculation program FreqCalc. The program can be accessed via www.getzner.com (registration necessary).

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.