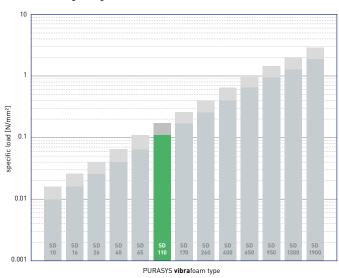


## PURASYS **vibra**foam series Working range



# Recommendations for elastic bearing:

Static load: up to [N/mm<sup>2</sup>]

0.110

Dynamic load: up to [N/mm²]

0.170

Load peaks: up to [N/mm²]

3.0

Values depending on form factor and apply to form factor q = 3

Material mixed cellular polyether-urethane

Colour green

Delivery specifications

Thickness: 12.5 mm and 25 mm

Mats: 1.0 m wide, 2.0 m long

Stripes: max. 2.0 m lang

Other dimensions on request (also stamping and moulded parts).

Properties	Value	Test method	Comment
Mechanical loss factor [1]	0.12	DIN 53513 (2)	guide value
Static E-modulus (1)	0.861 N/mm²	DIN 53513 (2)	
Dynamic E-modulus (1)	1.86 N/mm²	DIN 53513 (2)	
Static shear modulus (1)	0.21 N/mm²	DIN 53513 (2)	preload 0.11 N/mm²
Dynamic shear modulus [1]	0.49 N/mm²	DIN 53513 (2)	preload 0.11 N/mm², 10 Hz
Resistance to strain	0.130 N/mm²		at 10% deformation
Residual compression set	< 5 %	DIN EN ISO 1856	50%, 23°C, 70 h, 30 min after unloading
Tensile strength	> 0.95 N/mm <sup>2</sup>	DIN 53455-6-4	minimum
Elongation at break	> 400 %	DIN 53455-6-4	minimum
Tear resistance	> 1.9 N/mm	DIN ISO 34-1/A	
Rebound elasticity	50 %	DIN EN ISO 8307	± 10%
Specific volume resistance	>10 <sup>11</sup> Ω·cm	DIN IEC 93	dry
Thermal conductivity	0.08 W/[m·K]	DIN 52612-1	
Operating temperature	-30 to +70 °C		
Temperature peak	+120 °C		
Inflammability	Class E / EN 13501-1	EN ISO 11925-1	normal flammable

<sup>[1]</sup> measured at maximum limit of static application range

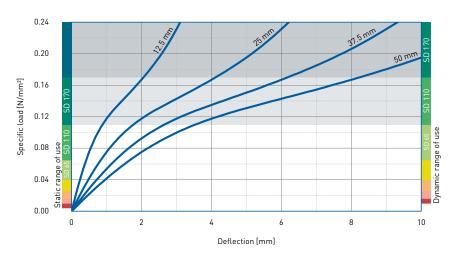
 $<sup>^{(2)}</sup>$  test according to DIN 53513

All information and data is based on our current knowledge. The data are subject to typical manufacturing tolerances and are not guaranteed. We reserve the right to amend the data.



www.purasys.com

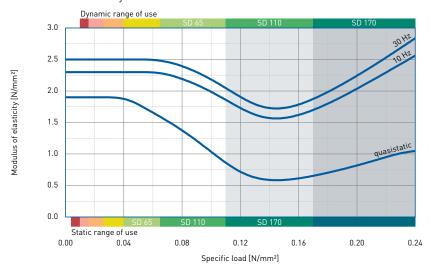
Load deflection curve



Recording of the 3rd loading; testing between steel plates at room temperature measured with a deflection rate of 1% of the thickness per second

Form factor q = 3

## Modulus of elasticity

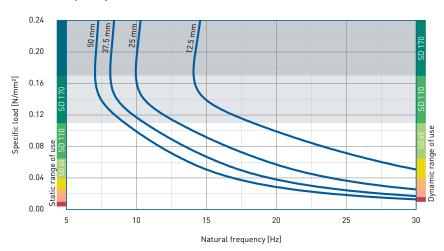


Dynamic test: sinusoidal excitation with an oscillating range of  $\pm\,0.22$  mm at 10 Hz and  $\pm\,0.08$  mm at 30 Hz

Quasistatic modulus of elasticity: tangent modulus taken from the load deflection curve

Test according to DIN 53513 Form factor q = 3

### Natural frequency

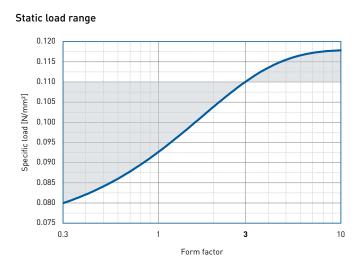


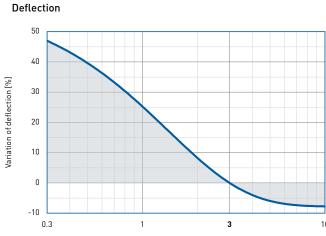
Natural frequency of a single-degree-offreedom system consisting of a fixed mass and an elastic bearing consisting of PURASYS **vibra**foam SD 110 on a stiff subgrade.

Form factor q = 3



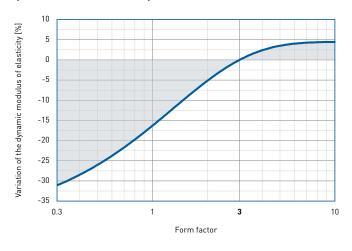
# Correction values varying form factors specific load $0.11 \text{ N/mm}^2$ , form factor q = 3



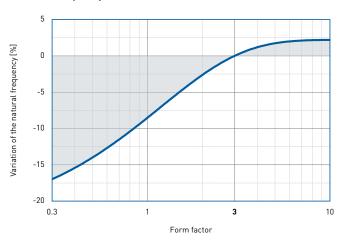


Form factor

### Dynamic modulus of elasticity at 10 Hz



### Natural frequency



#### DISCLAIMER:

The information provided is intended only as a summary and general overview on matters of interest. The information is not intended to be comprehensive nor does it constitute expert advice. KRAIBURG PuraSys shall not be liable for incidental and/or consequential damages directly or indirectly sustained, nor any loss caused by not complying with relevant industry/product standards and improper use of any PURASYS **vibra**foam products. Due to varying construction methods, any other circumstances not stated above should be brought to the attention of KRAIBURG PuraSys for review. For suitability to the prevailing site conditions, it is advised that certified testing should be conducted. It is recommended to seek further advice on your application with our technical staff prior to use.

The data sheet is not subject to any change service! All information is without guarantee. Latest version of this document available on www.kraiburg-purasys.com