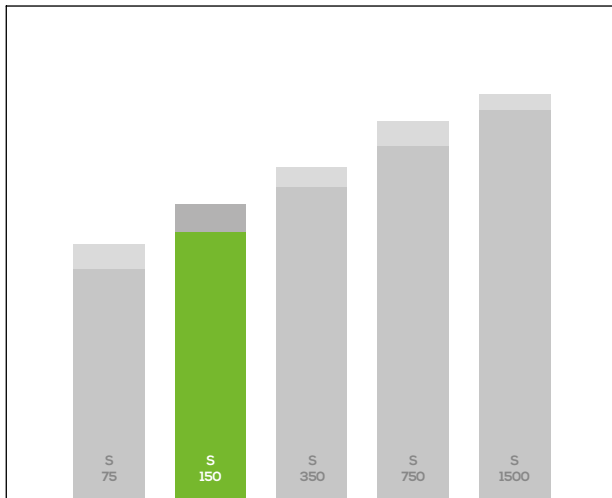


PURASYS vibradyn series
Working range



Recommendations for elastic bearing:

Static load: up to [N/mm²]

0.150

Dynamic load: up to [N/mm²]

0.250

Load peaks: up to [N/mm²]

3.0

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

Material closed cellular polyether-urethane

Colour green

Delivery specifications

Thickness: 12.5 – 50 mm

Mats: max. 1.0 m wide, 2.0 m long

Stripes: max. 2.0 m long

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

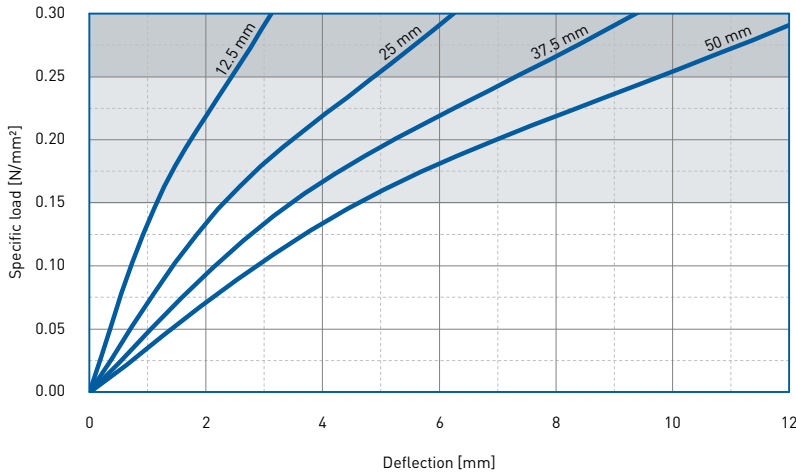
Properties	Value	Test method	Comment
Mechanical loss factor ⁽¹⁾	0.03	DIN 53513 ⁽²⁾	guide value
Static E-modulus ⁽¹⁾	1.25 N/mm ²	DIN 53513 ⁽²⁾	
Dynamic E-modulus ⁽¹⁾	1.65 N/mm ²	DIN 53513 ⁽²⁾	
Static shear modulus ⁽¹⁾	0.22 N/mm ²	DIN 53513 ⁽²⁾	preload 0.15 N/mm ²
Dynamic shear modulus ⁽¹⁾	0.35 N/mm ²	DIN 53513 ⁽²⁾	preload 0.15 N/mm ² , 10 Hz
Resistance to strain	0.16 N/mm ²		at 10% deformation
Residual compression set	< 5 %	DIN EN ISO 1856	50%, 23°C, 70 h, 30 min after unloading
Tensile strength	> 2.0 N/mm ²	DIN 53455-6-4	minimum
Elongation at break	> 500 %	DIN 53455-6-4	minimum
Tear resistance	> 2.1 N/mm	DIN ISO 34-1/A	
Rebound elasticity	70 %	DIN EN ISO 8307	± 10%
Specific volume resistance	>10 ¹¹ Ω·cm	DIN IEC 93	dry
Thermal conductivity	0.075 W/[m·K]	DIN 52612-1	
Operating temperature	-30 up to +70 °C		
Temperature peak	+120 °C		
Inflammability	Class E / EN 13501-1	EN ISO 11925-1	normal flammable

⁽¹⁾ measured at maximum limit of static application range

⁽²⁾ 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.

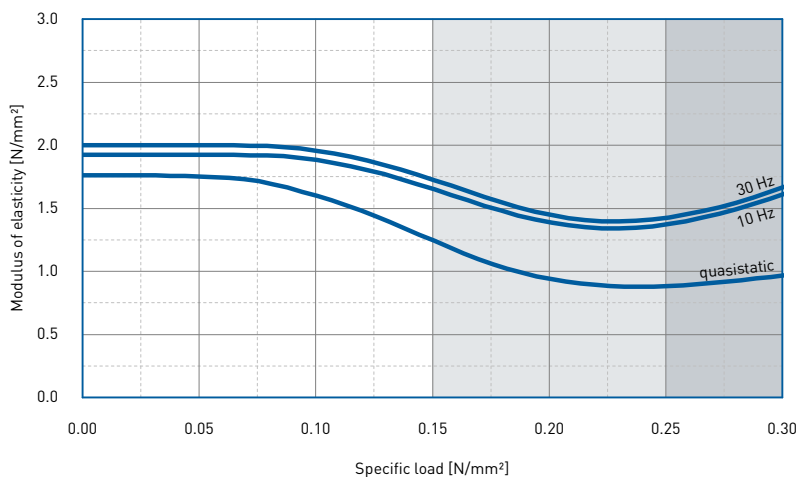
Load deflection curve



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



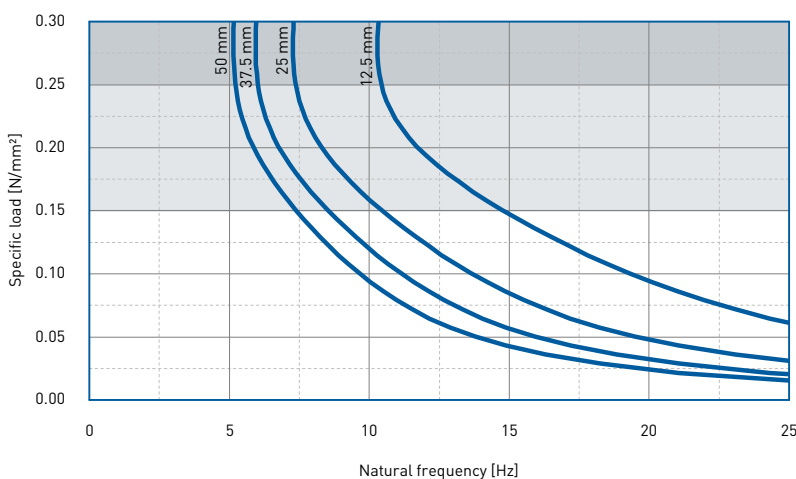
Dynamic test: sinusoidal excitation with an oscillating range of ± 0.11 mm at 10 Hz and ± 0.04 mm at 30 Hz.

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

Test according to DIN 53513

Form factor $q = 3$

Natural frequency



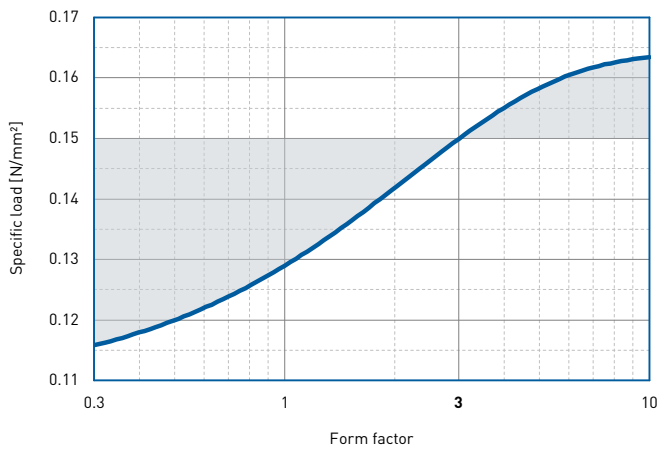
Natural frequency of a single-degree-of-freedom system consisting of a fixed mass and an elastic bearing consisting of PURASYS vibradyn S 150 on a stiff subgrade.

Form factor $q = 3$

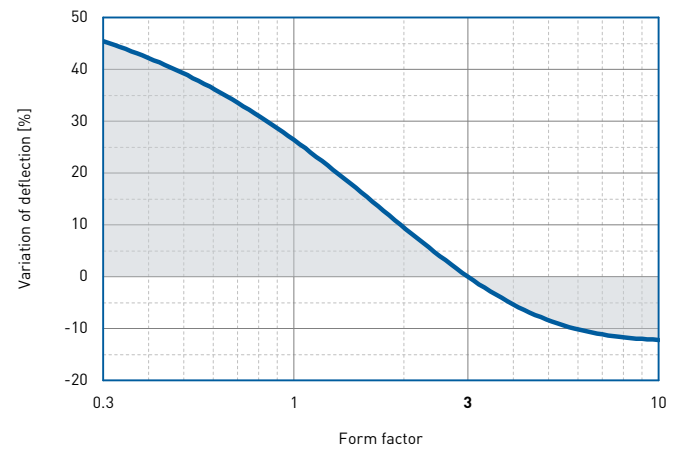
Correction values varying form factors

specific load 0.15 N/mm², form factor q = 3

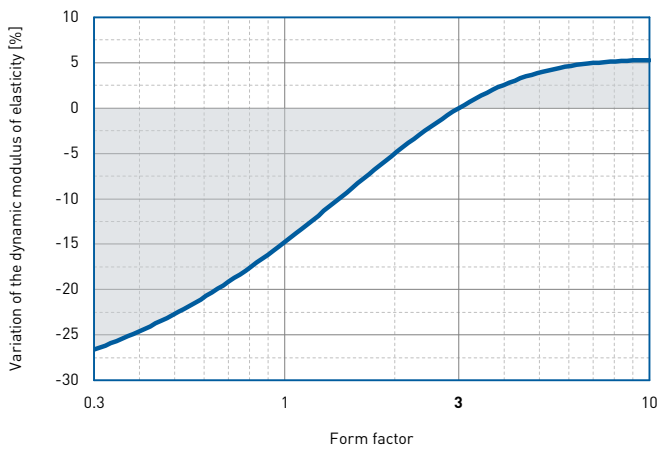
Static load range



Deflection



Dynamic modulus of elasticity at 10 Hz



Natural frequency

