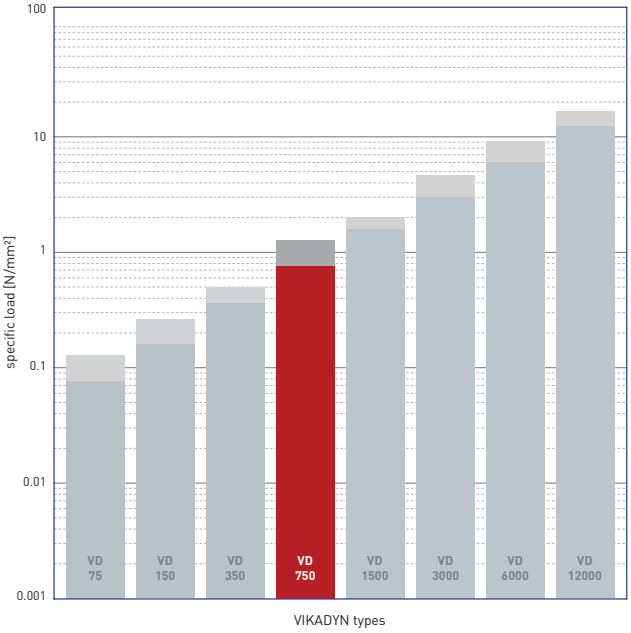
Working range



VD 750

Recommendations for elastic bearing

Static load: up to [N/mm²]

0.75

Dynamic load: up to [N/mm²]

1.2

Load peaks: up to [N/mm²]

6.0

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

- Material closed cellular polyether-urethane
- Colour red

Sheet specifications

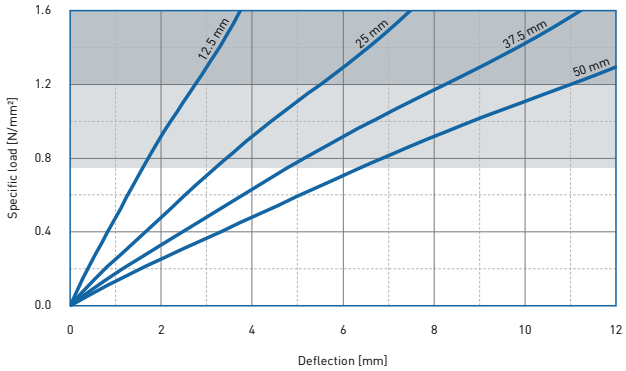
- Standard Thickness 12.5 mm and 25 mm
- Custom Thickness Combine two or more sheets
- Dimensions 2.000 x 500 mm

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

Properties	Value	Test method	Comment
Mechanical loss factor [1]	0.04	DIN 53513 [2]	guide value
Static E-modulus [1]	5.21 N/mm²	DIN 53513 [2]	
Dynamic E-modulus [1]	8.88 N/mm²	DIN 53513 [2]	
Static shear modulus [1]	0.80 N/mm²	DIN 53513 [2]	preload 0.75 N/mm²
Dynamic shear modulus [1]	1.22 N/mm²	DIN 53513 [2]	preload 0.75 N/mm², 10 Hz
Resistance to strain	0.59 N/mm²		at 10% deformation
Residual compression set	< 6 %	DIN EN ISO 1856	50%, 23°C, 70 h, 30 min after unloading
Tensile strength	> 5.0 N/mm²	DIN 53455-6-4	minimum
Elongation at break	> 500 %	DIN 53455-6-4	minimum
Tear resistance	> 4.3 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	0.10 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

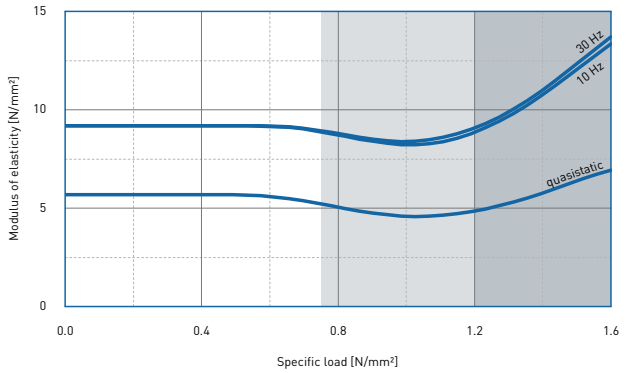
[1] measured at maximum limit of static application range
[2] test according to DIN 53513
All information and data is based on our current knowledge. The data are subject to typical manufacturing tolerances and are not guaranteed.
We reserve the right to amend the data.

Load deflection curve



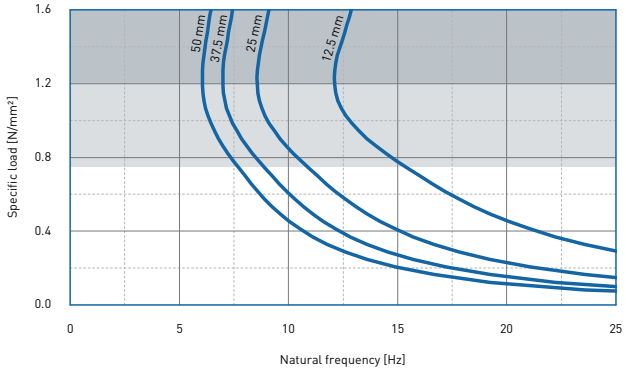
Recording of the 3rd loading; testing between steel plates at room temperature measured with a deflection rate of 1% of the thickness per second.
Form factor q = 3

Modulus of elasticity



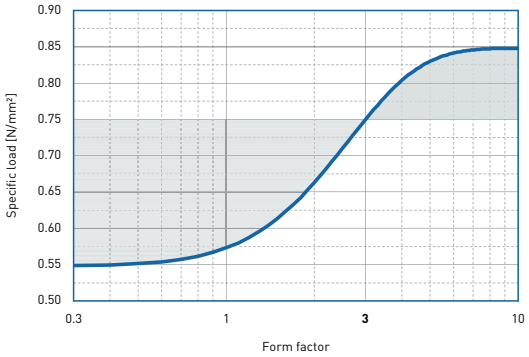
- Dynamic test: sinusoidal excitation with an oscillating range of ± 0.11 mm at 10 Hz and ± 0.04 mm at 30 Hz.
- Quasistatic modulus of elasticity: tangent modulus taken from the load deflection curve.
- Test according to DIN 53513. Form factor q = 3

Natural frequency based on the Modulus of elasticity @ 10Hz

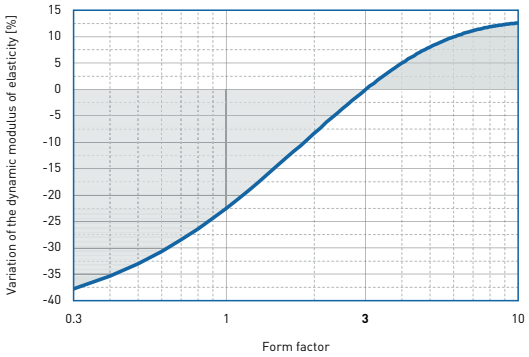


Natural frequency of a single-degree-of-freedom system consisting of a fixed mass and an elastic bearing consisting of VIKADYN VD 750 on a stiff subgrade.
Form factor q = 3

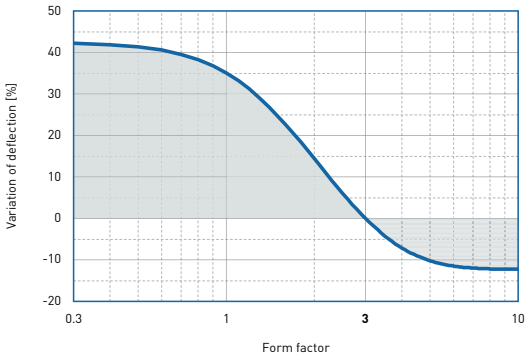
Static load range



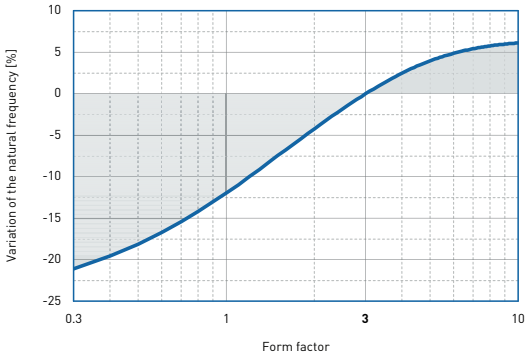
Dynamic modulus of elasticity @ 10Hz



Deflection



Natural frequency



Correction values varying form factors specific load 0.35 N/mm².
Form factor q = 3