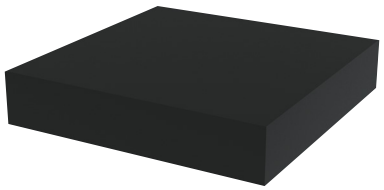
Cisador® 35

Elastomeric bearing for vibration isolation

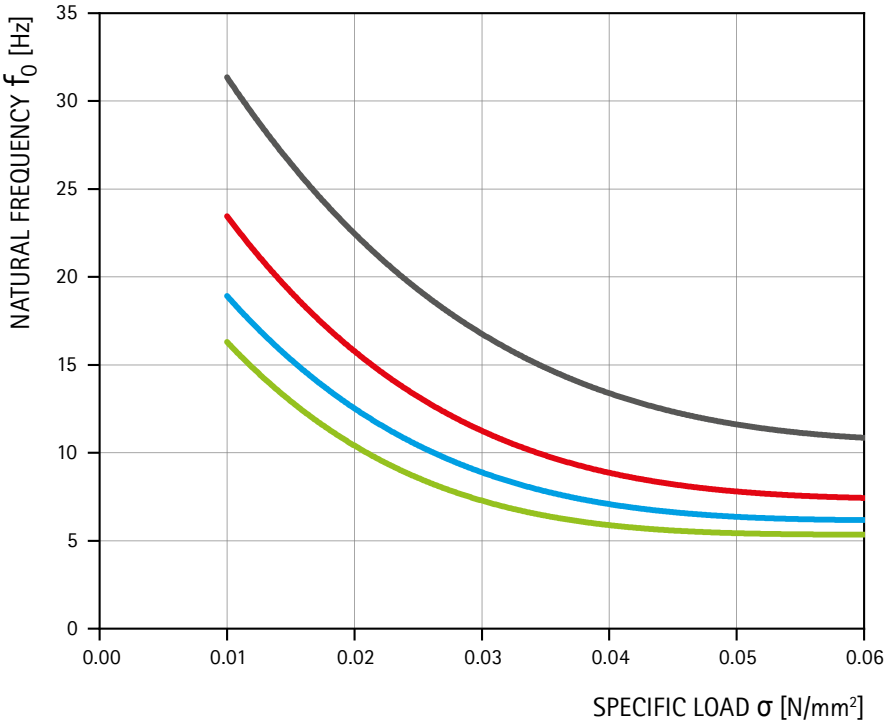
Product information

DIMENSIONS AND WEIGHTS	
Length	1000 mm
Width	750 mm
Thickness	20 mm
Weight	5.0 kg / m²
Cut to size	available on request



PROPERTIES	
Materials	Closed-cell, microcellular EPDM
Permanent load	≤ 0.035 N/mm²
Permanent load + dynamic load	≤ 0.060 N/mm²
Load peaks (occasional and short-term)	≤ 0.300 N/mm²
Thermal stability	-40°C + 70°C
Flammability	B2 acc. to DIN 4102 (normally combustible)
Water absorption	≤ 5 %

Natural frequency



NATURAL FREQUENCY CURVE

The figure shows the natural frequency of a single-degree-oscillator with Cisador® 35 as an elastic bearing for an excitation with a velocity amplitude of 1 mm/s.

- t = 20 mm
- t = 40 mm
- t = 60 mm
- t = 80 mm

Cisador® 35

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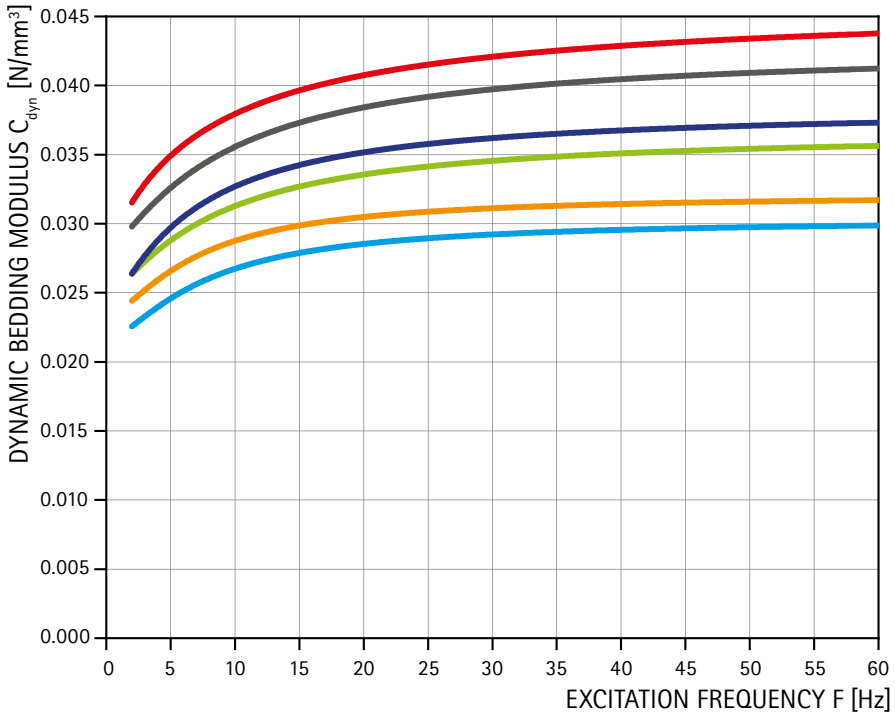
Dynamic bedding modulus depending on the excitation frequency (20 mm)

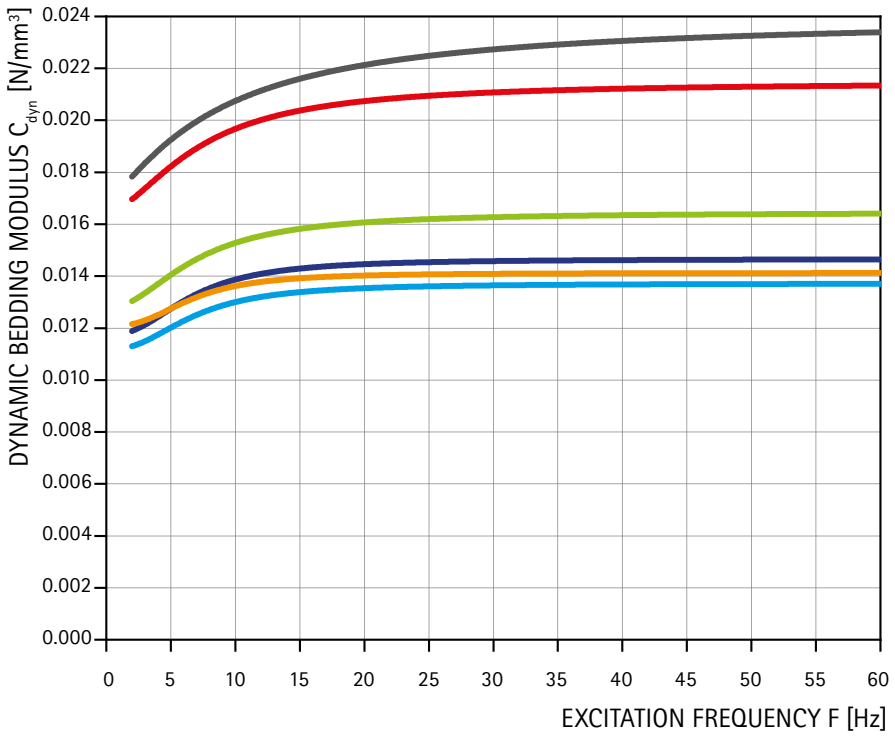


BEDDING MODULUS CURVES

The figures shows the dynamic bedding moduli for an excitation with a velocity amplitude of 1 mm/s and for different vertical compressive stresses.

- 0.010 N/mm²
- 0.020 N/mm²
- 0.030 N/mm²
- 0.035 N/mm²
- 0.040 N/mm²
- 0.060 N/mm²

Dynamic bedding modulus depending on the excitation frequency (40 mm)



- 0.010 N/mm²
- 0.020 N/mm²
- 0.030 N/mm²
- 0.035 N/mm²
- 0.040 N/mm²
- 0.060 N/mm²

Cisador® 35

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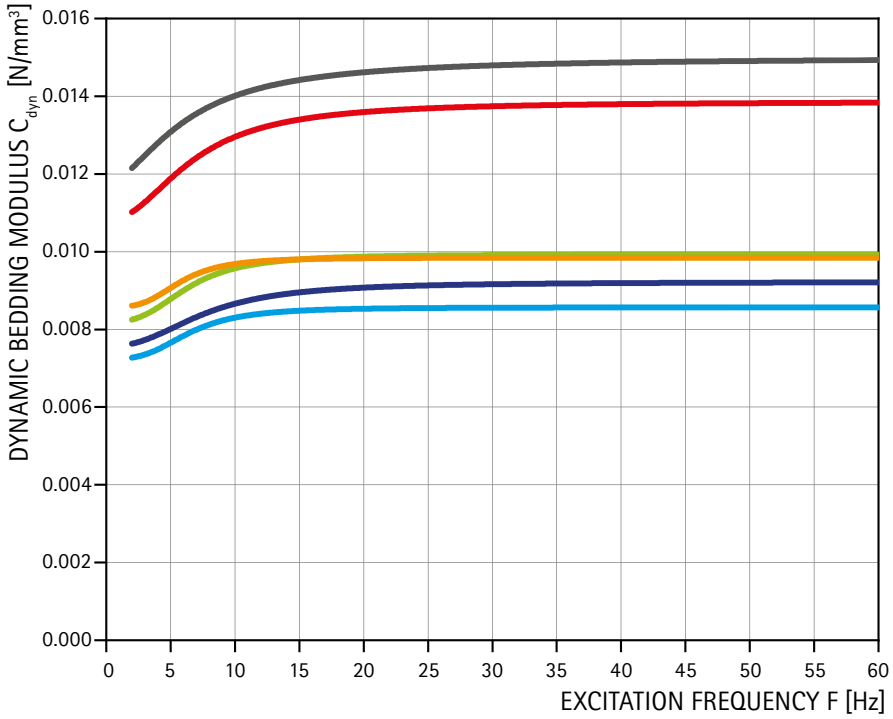
Dynamic bedding modulus depending on the excitation frequency (60 mm)

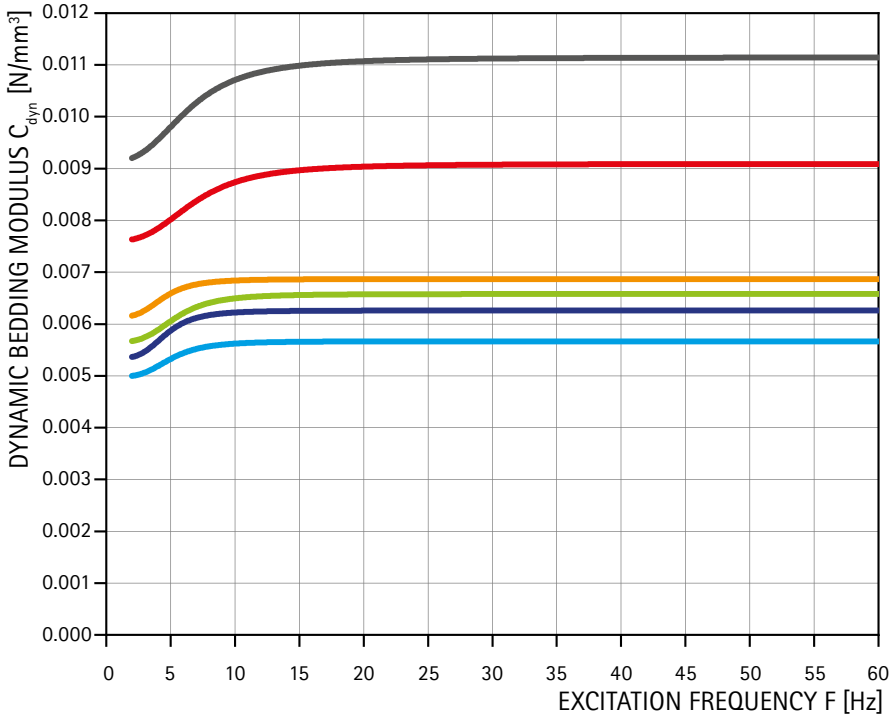


BEDDING MODULUS CURVES

The figures shows the dynamic bedding moduli for an excitation with a velocity amplitude of 1 mm/s and for different vertical compressive stresses.

- 0.010 N/mm²
- 0.020 N/mm²
- 0.030 N/mm²
- 0.035 N/mm²
- 0.040 N/mm²
- 0.060 N/mm²

Dynamic bedding modulus depending on the excitation frequency (80 mm)



- 0.010 N/mm²
- 0.020 N/mm²
- 0.030 N/mm²
- 0.035 N/mm²
- 0.040 N/mm²
- 0.060 N/mm²

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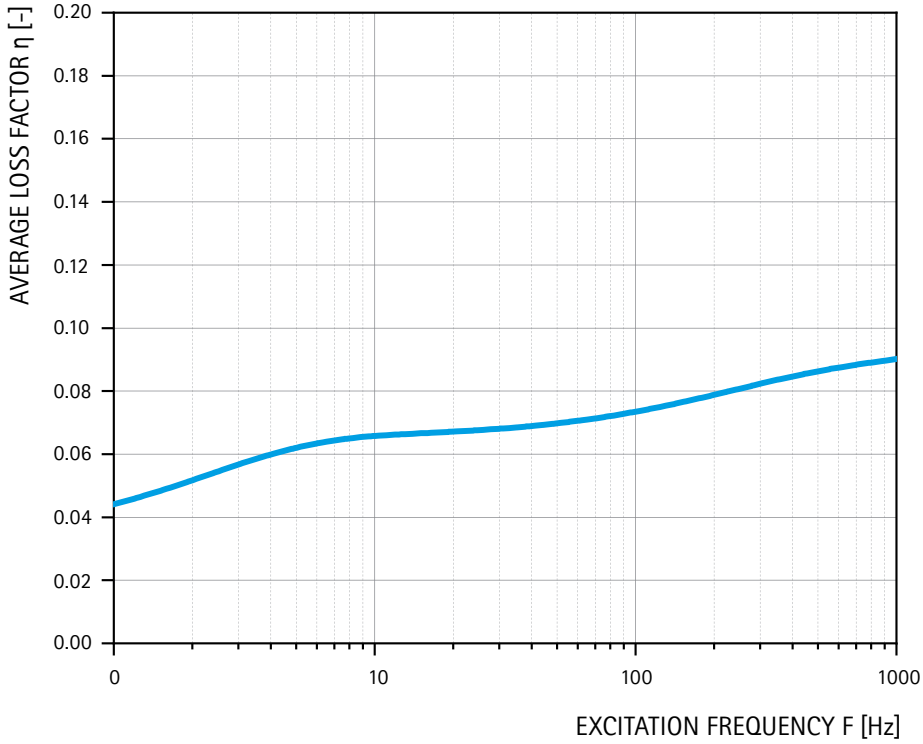
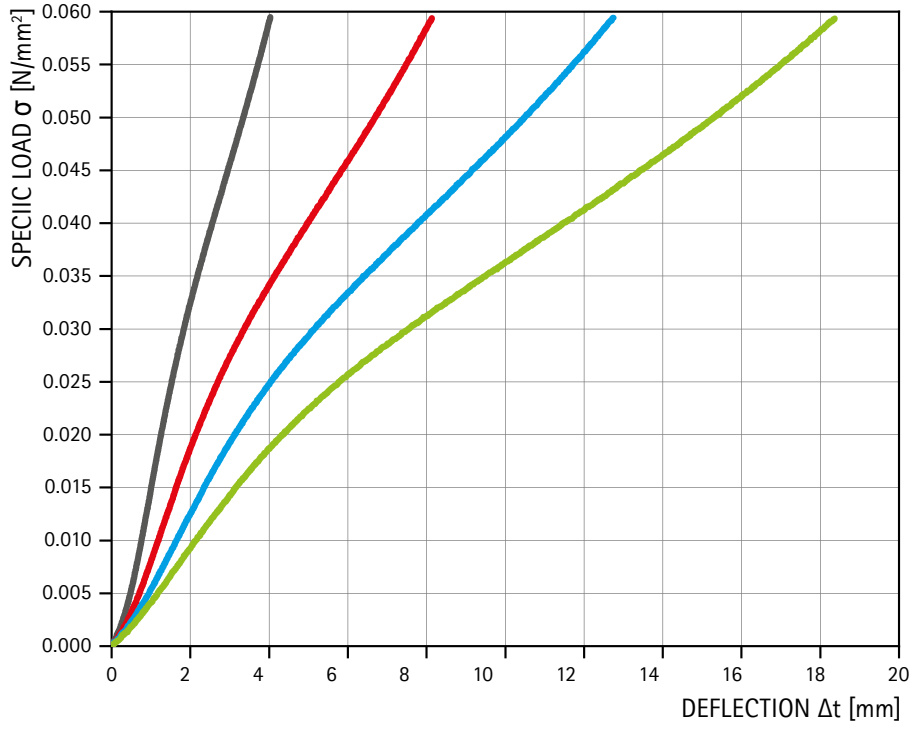
Loss factor



LOSS FACTOR CURVE

The loss factor is a measure of the energy loss per cycle in an oscillating system. The values shown in the diagram were determined by a DMA analysis using the WLF master curve method with a reference temperature of 20°C in order to be able to represent as wide a frequency range as possible.

Load deflection



LOAD DEFLECTION CURVE

Application of uniaxial pressure against vertical deformation.

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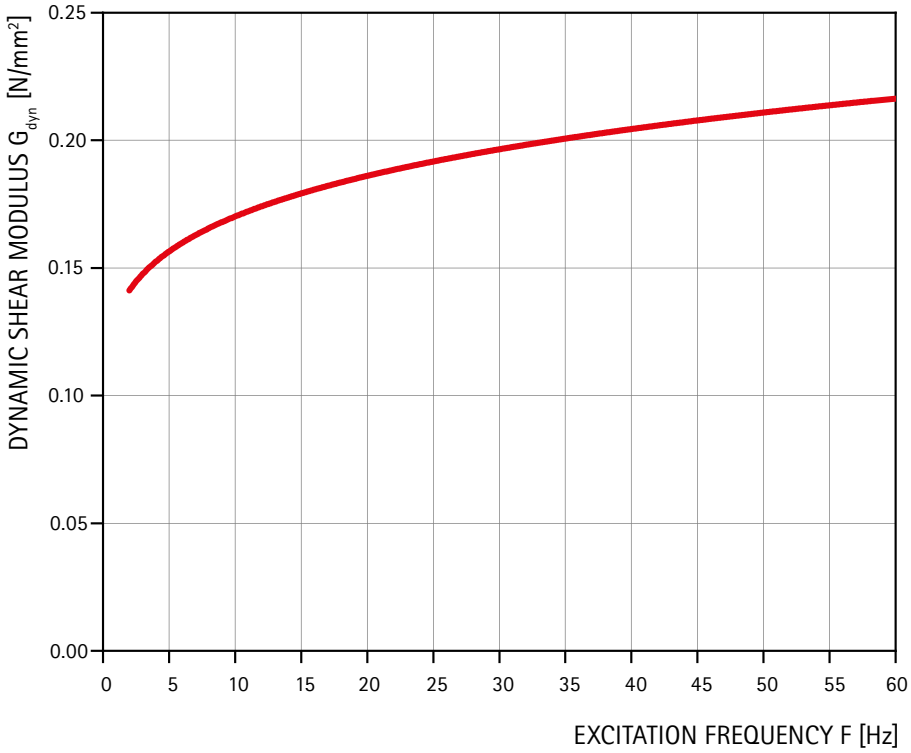
Shear modulus



SHEAR MODULUS CURVE

The diagram shows the shear modulus of the 20 mm thick Cisador® 35 at a vibration velocity amplitude of 1 mm/s as a function of frequency. For greater thicknesses, the shear modulus tends to be lower.

Calenberg Ingenieure GmbH | Am Knübel 2-4 | 31020 Salzhemmendorf | Germany | info@calenberg-ingenieure.de | www.calenberg-ingenieure.com