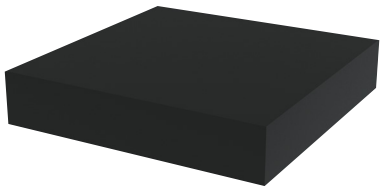
Cisador® 120

Elastomeric bearing for vibration isolation

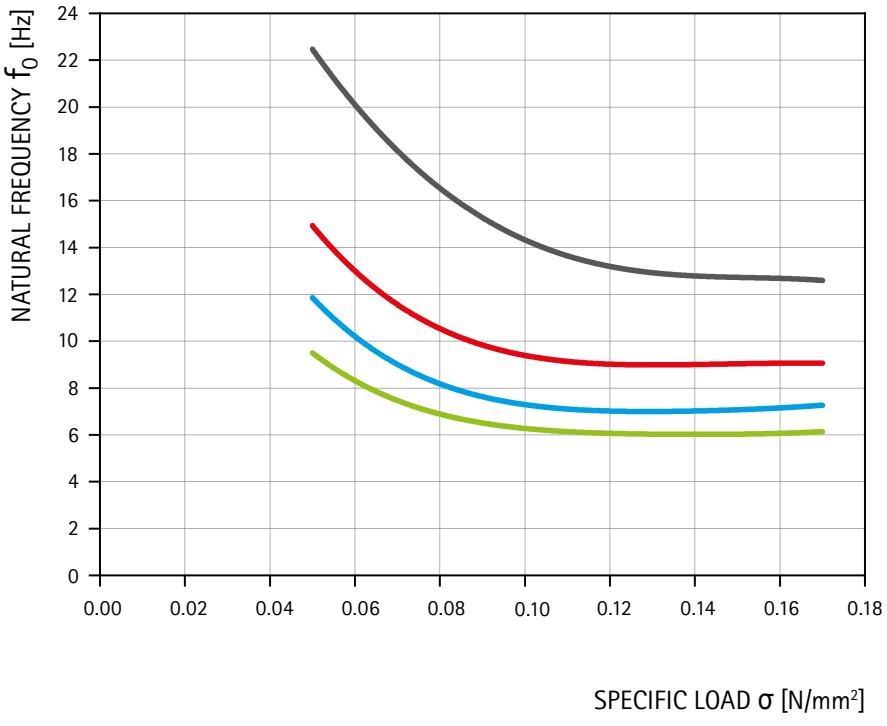
Product information

DIMENSIONS AND WEIGHTS	
Length	1000 mm
Width	750 mm
Thickness	15 mm
Weight	6 kg / m²
Cut to size	available on request



PROPERTIES	
Materials	Closed-cell, microcellular EPDM
Permanent load	≤ 0.12 N/mm²
Permanent load + dynamic load	≤ 0.20 N/mm²
Load peaks (occasional and short-term)	≤ 1.00 N/mm²
Thermal stability	-40°C + 100°C
Flammability	B2 acc. to DIN 4102 (normally combustible)
Water absorption	< 2 %

Natural frequency



NATURAL FREQUENCY CURVE

The figure shows the natural frequency of a single-degree-oscillator with Cisador® 120 as an elastic bearing for an excitation with a velocity amplitude of 1 mm/s.

- t = 15 mm
- t = 30 mm
- t = 45 mm
- t = 60 mm

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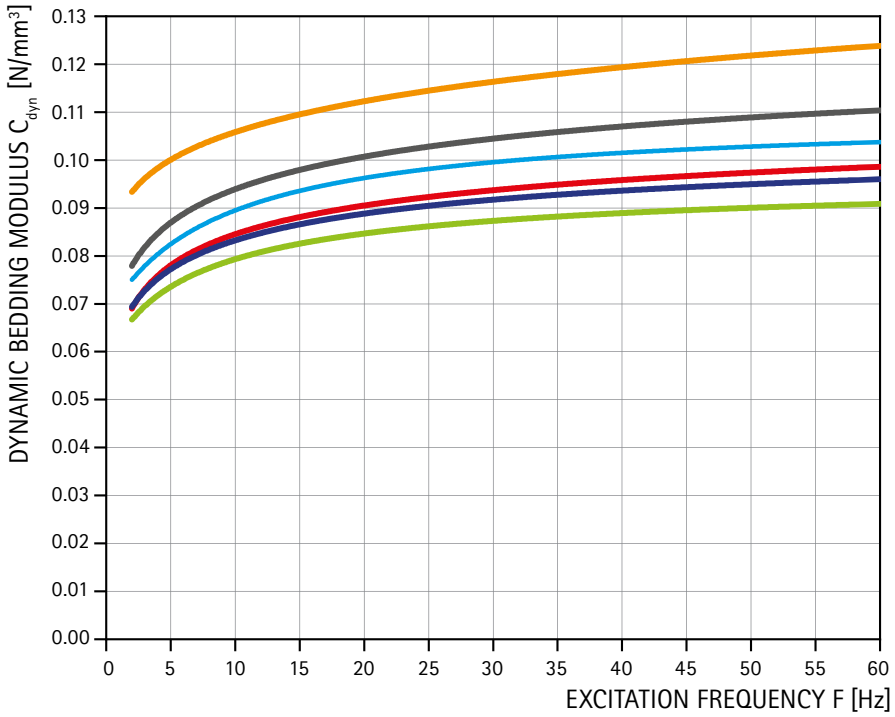
Dynamic bedding modulus depending on the excitation frequency (15 mm)

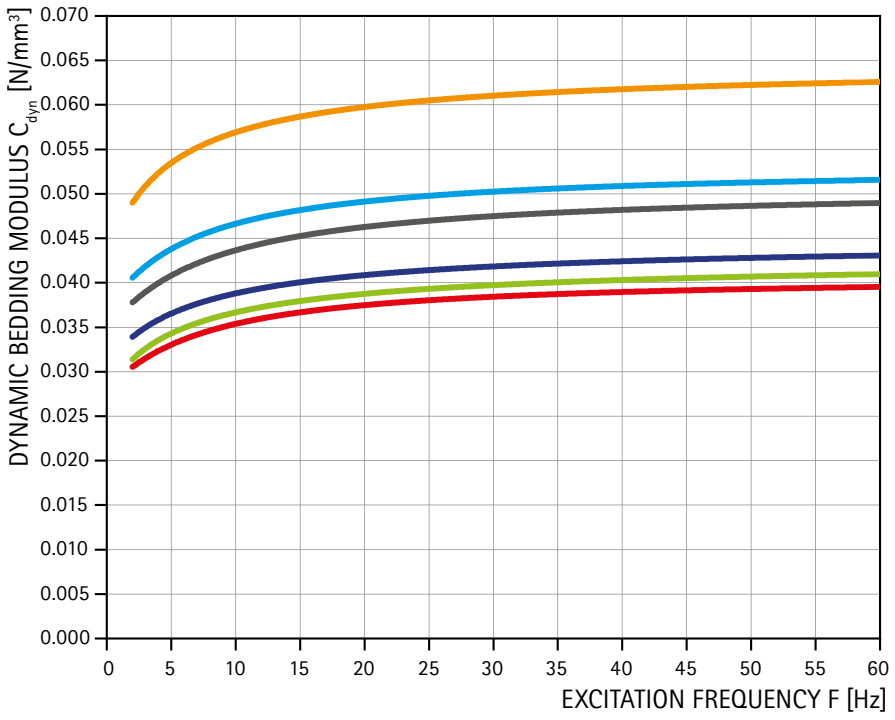


BEDDING MODULUS CURVES

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

- 0.05 N/mm²
- 0.08 N/mm²
- 0.10 N/mm²
- 0.12 N/mm²
- 0.14 N/mm²
- 0.17 N/mm²

Dynamic bedding modulus depending on the excitation frequency (30 mm)



- 0.05 N/mm²
- 0.08 N/mm²
- 0.10 N/mm²
- 0.12 N/mm²
- 0.14 N/mm²
- 0.17 N/mm²

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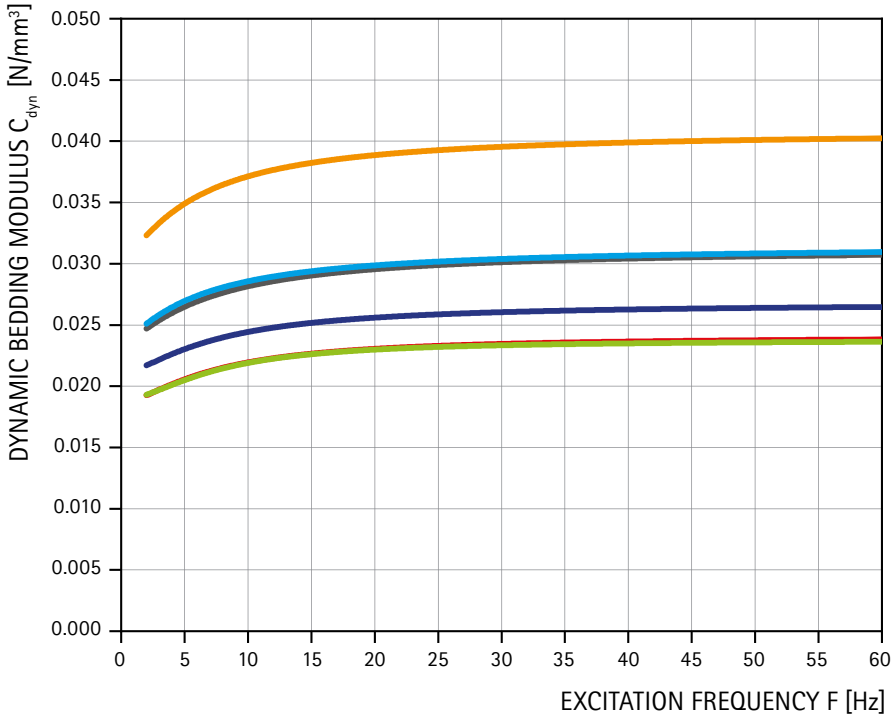
Dynamic bedding modulus depending on the excitation frequency (45 mm)

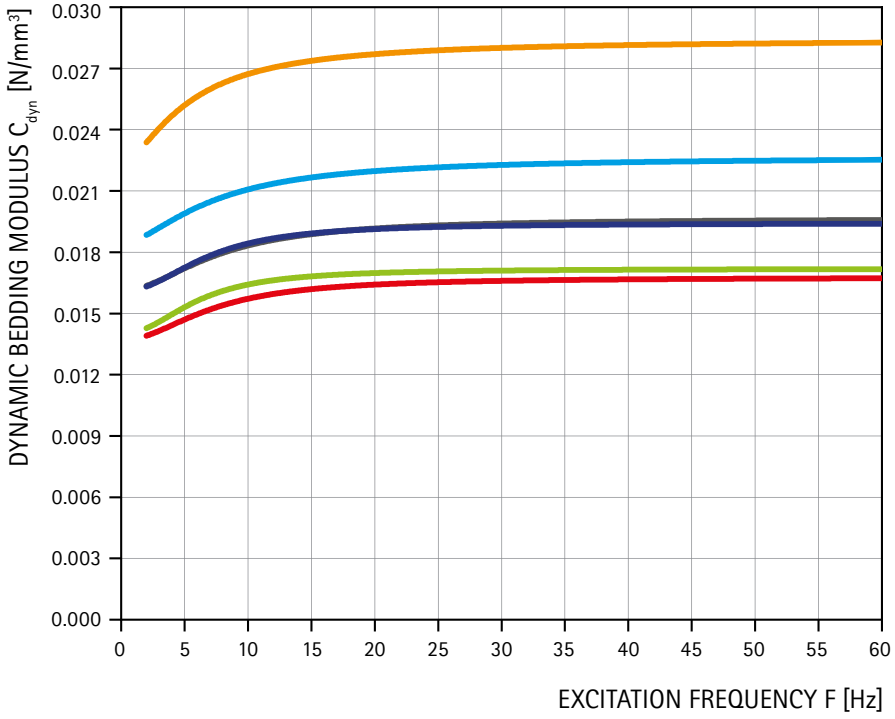


BEDDING MODULUS CURVES

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

- 0.05 N/mm²
- 0.08 N/mm²
- 0.10 N/mm²
- 0.12 N/mm²
- 0.14 N/mm²
- 0.17 N/mm²

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



- 0.05 N/mm²
- 0.08 N/mm²
- 0.10 N/mm²
- 0.12 N/mm²
- 0.14 N/mm²
- 0.17 N/mm²

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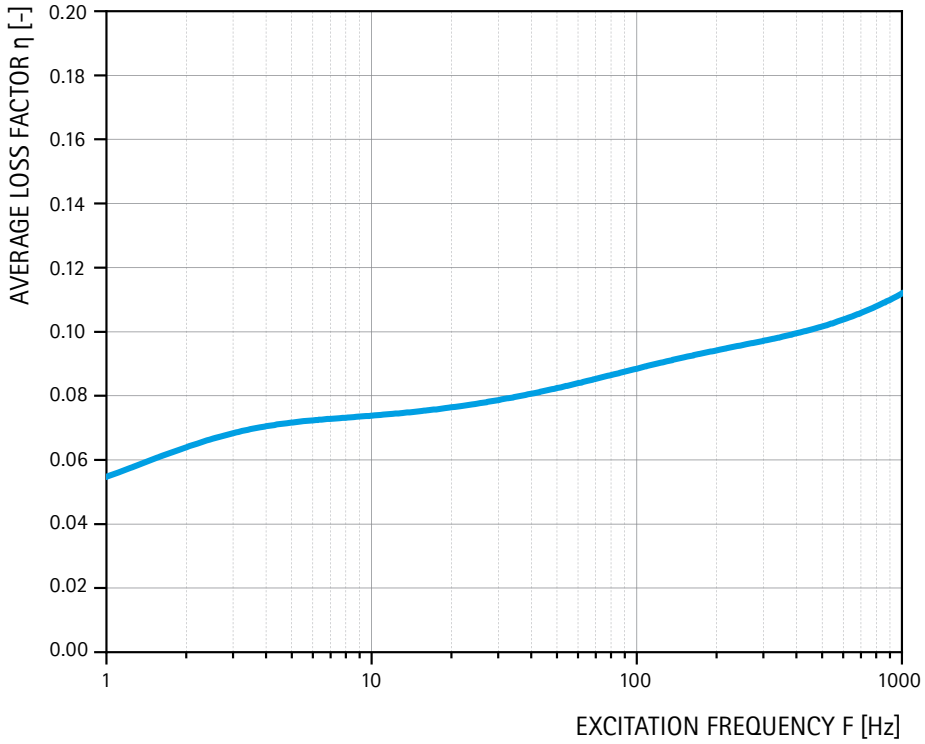
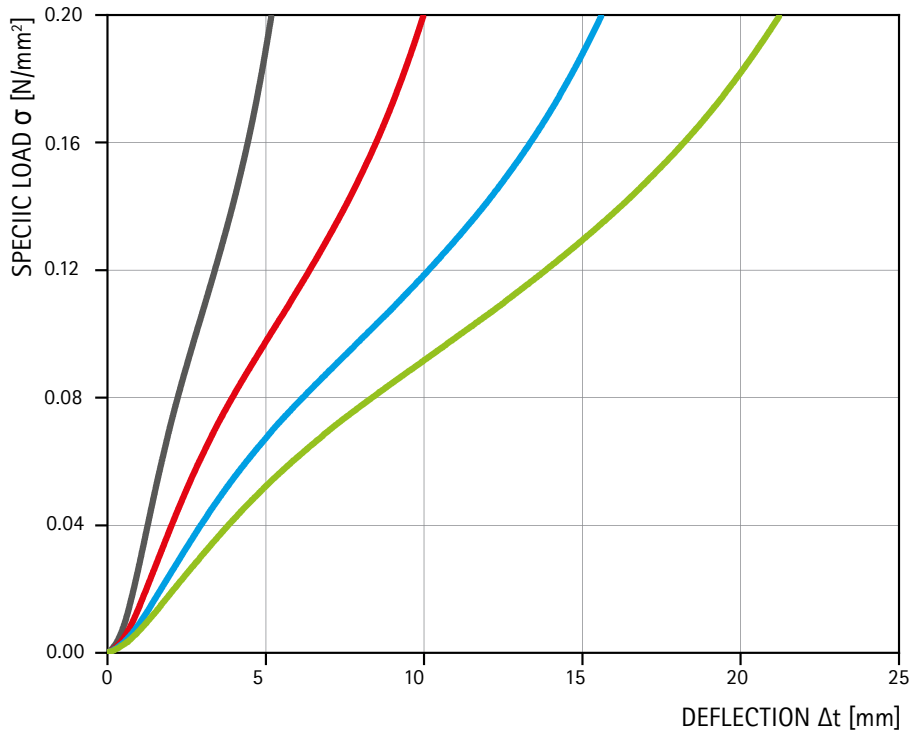
Loss factor



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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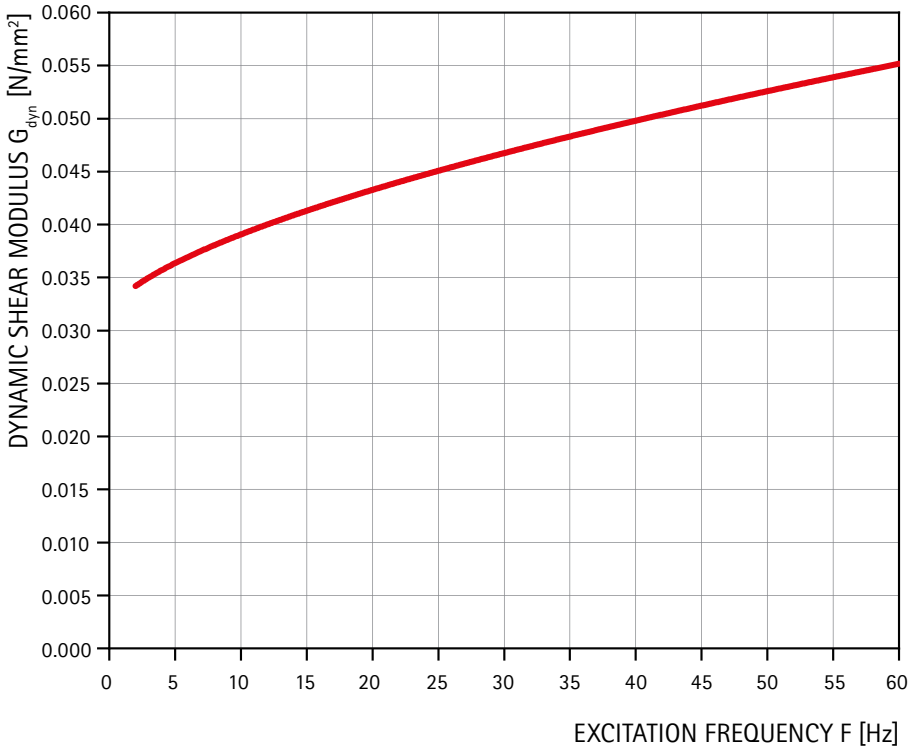
Shear modulus



SHEAR MODULUS CURVE

The diagram shows the shear modulus of the 15 mm thick Cisador® 120 at a vibration velocity amplitude of 1 mm/s as a function of frequency. For greater thicknesses, the shear modulus tends to be lower.

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