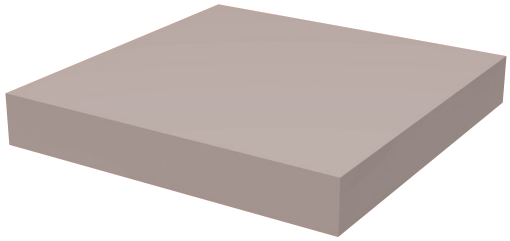
Ciflex N 400

Elastomeric bearing for vibration isolation

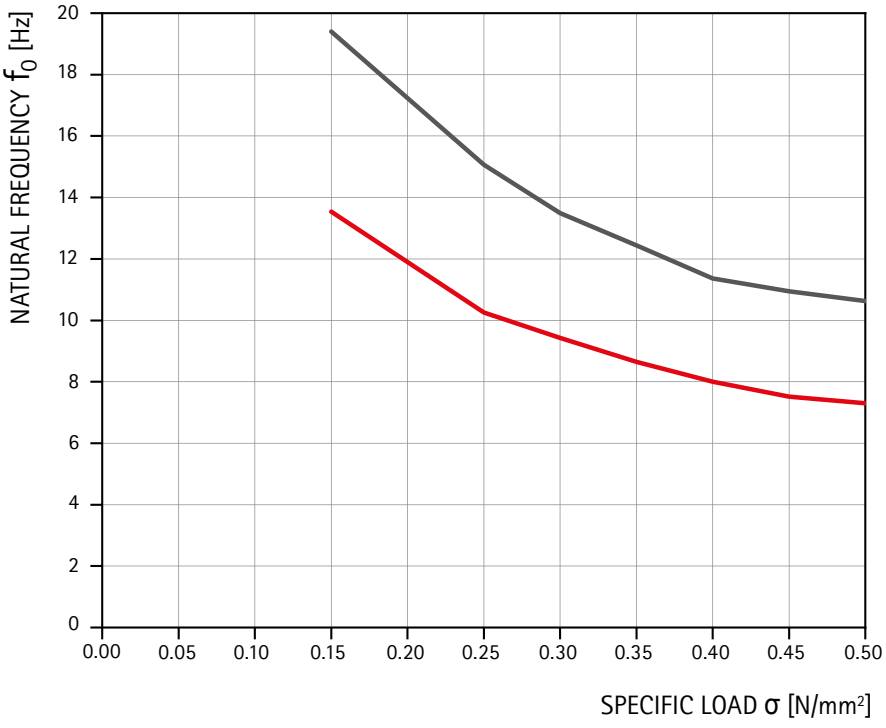
Product information

DIMENSIONS AND WEIGHTS	
Length	1000 mm
Width	500 mm
Thickness	25 mm
	Other thicknesses on request
Weight	16.8 kg / m²
Cut to size	Available on request



PROPERTIES	
Materials	Foamed polyurethane material
Permanent load	≤ 0.45 N/mm²
Permanent load + dynamic load	≤ 0.70 N/mm²
Load peaks (occasional and short-term)	≤ 1.20 N/mm²
Thermal stability	-30°C + 60°C
Flammability	B2 acc. to DIN 4102 (normally combustible)
Water absorption	≤ 4 %

Natural frequency



NATURAL FREQUENCY CURVE

The figure shows the natural frequency of a single-degree-oscillator with Ciflex N 400 as an elastic bearing for an excitation with a velocity amplitude of 1 mm/s.

t = 25 mm

t = 50 mm

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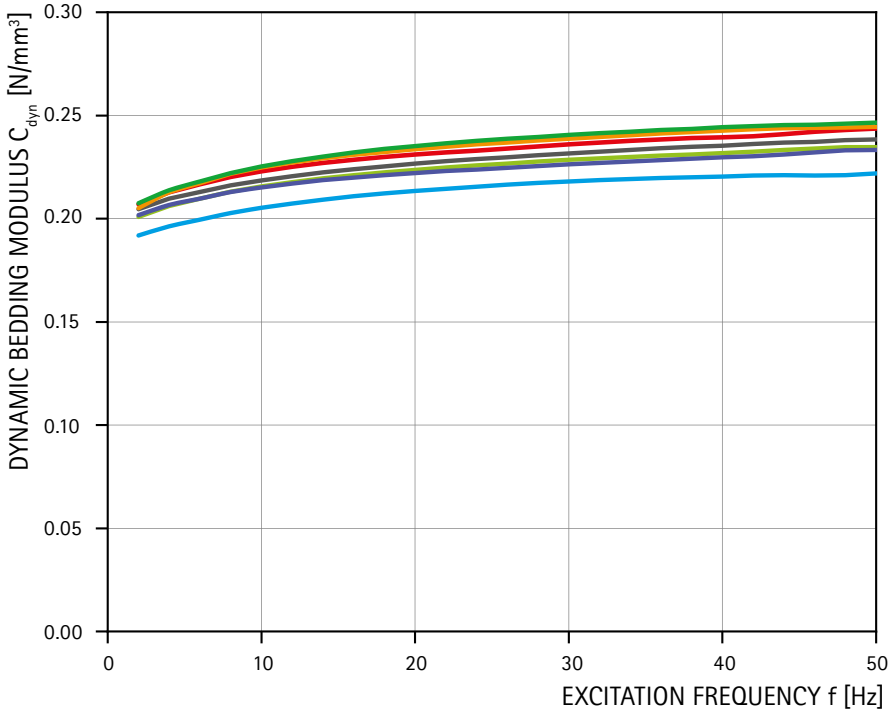
Dynamic bedding modulus depending on the excitation frequency (25 mm)

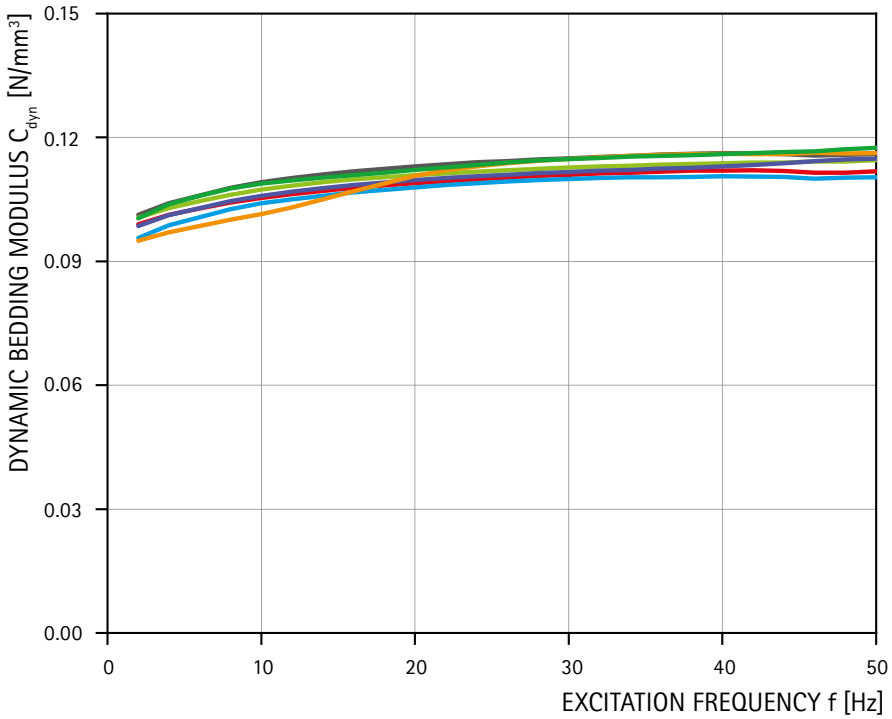


DIAGRAMS

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

- 0.15 N/mm²
- 0.25 N/mm²
- 0.30 N/mm²
- 0.35 N/mm²
- 0.40 N/mm²
- 0.45 N/mm²
- 0.50 N/mm²

Dynamic bedding modulus depending on the excitation frequency (50 mm)



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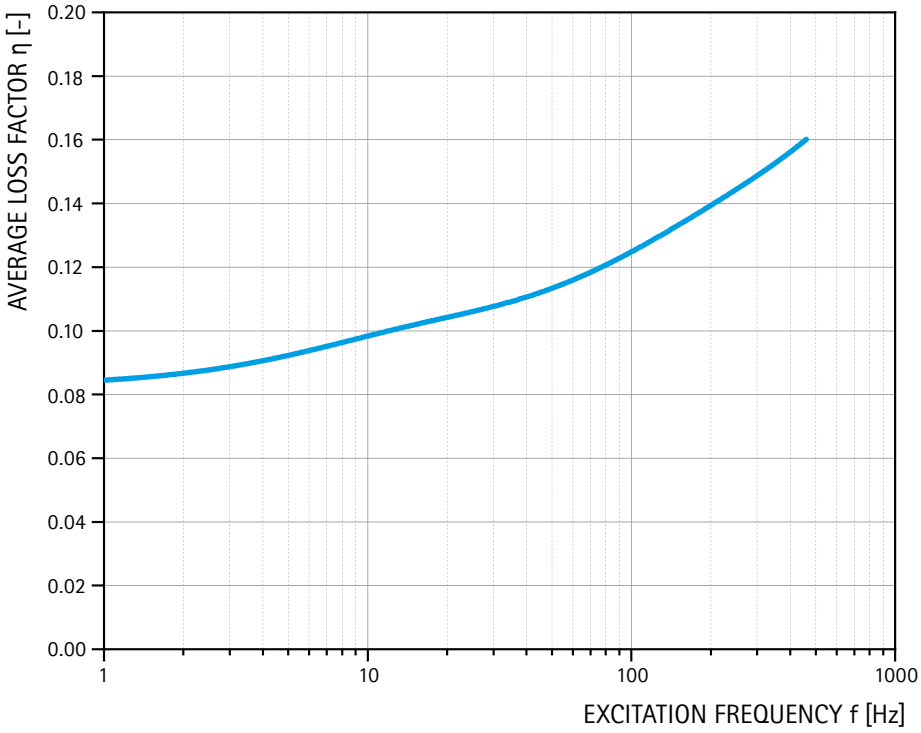
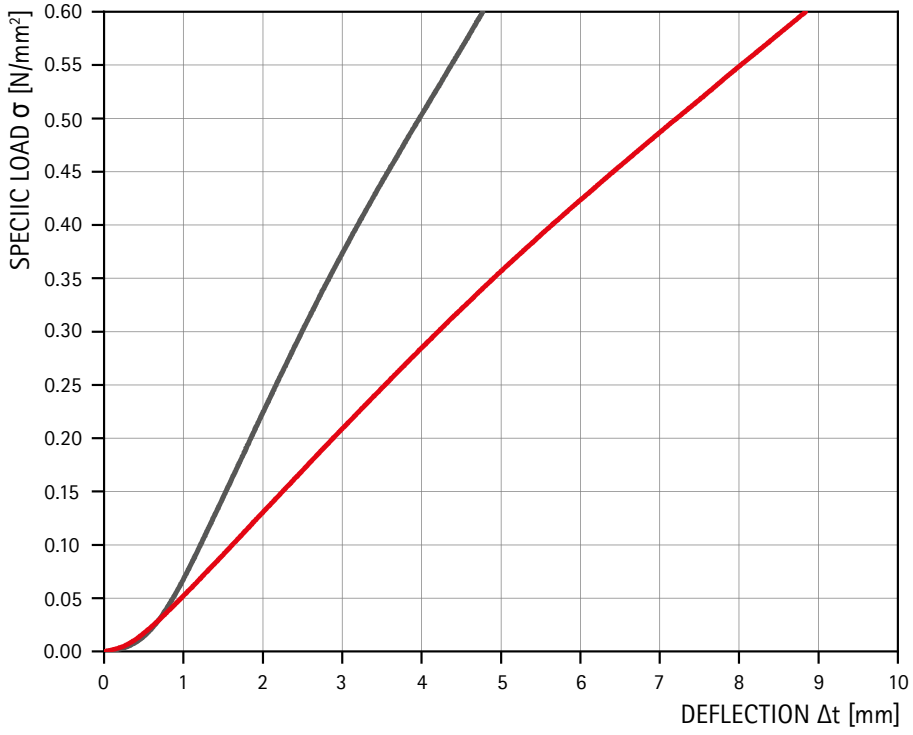
Loss factor



LOSS FACTOR CURVE

The loss factor is a measure of the energy loss per cycle in a vibrating 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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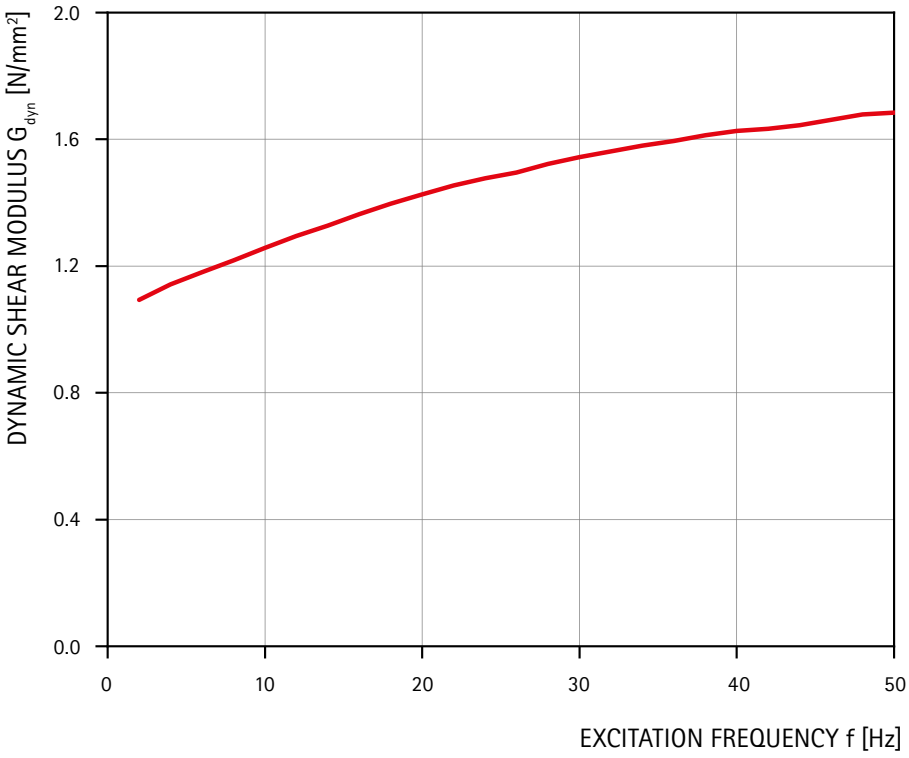
Shear modulus



SHEAR MODULUS CURVE

The diagram shows the shear modulus of the 25 mm thick Ciflex N 400 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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