

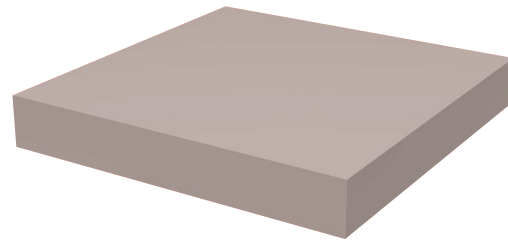
Ciflex N 400

Elastomeric bearing for vibration isolation

Product information

DIMENSIONS AND WEIGHTS

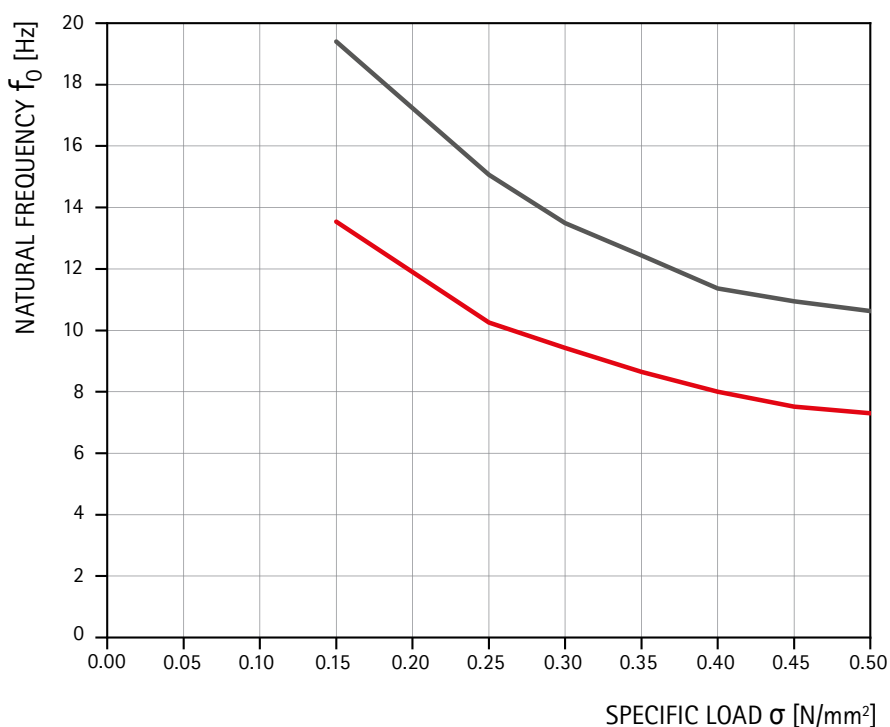
Length	1000 mm
Width	500 mm
Thickness	25 mm
	Other thicknesses on request
Weight	16.8 kg/m ²
Cut to size	Available on request



PROPERTIES

Materials	Foamed polyurethane material
Permanent load	≤ 0.40 N/mm ²
Permanent load + dynamic load	≤ 0.70 N/mm ²
Load peaks (occasional and short-term)	≤ 1.20 N/mm ²
Thermal stability	-30°C + 60°C
Flammability	B2 acc. to DIN 4102 (normally combustible)
Water absorption	≤ 4%

Natural frequency



NATURAL FREQUENCY CURVE

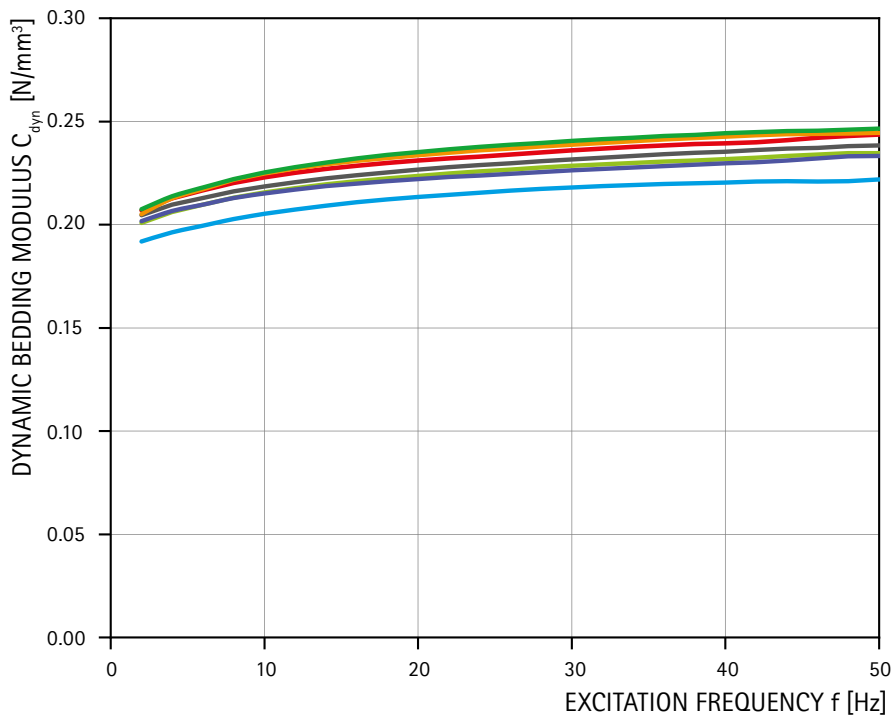
The figure shows the natural frequency of a single-degree-oscillator with Ciflex N 400 as an elastic bearing for an excitation with a velocity amplitude of 1 mm/s.

— t = 25 mm
— t = 50 mm

Ciflex N 400

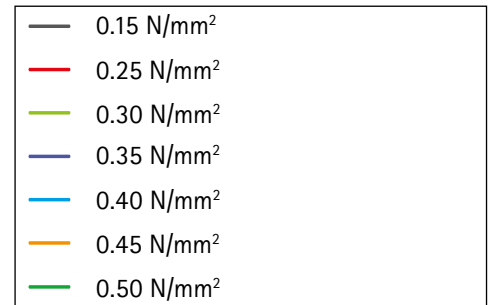
Elastomeric bearing for vibration isolation

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

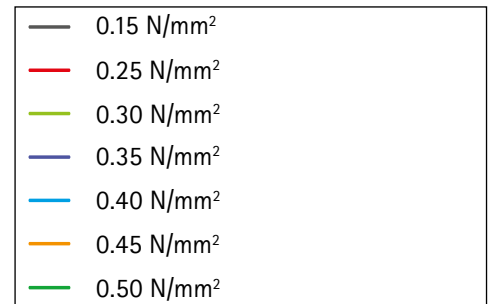
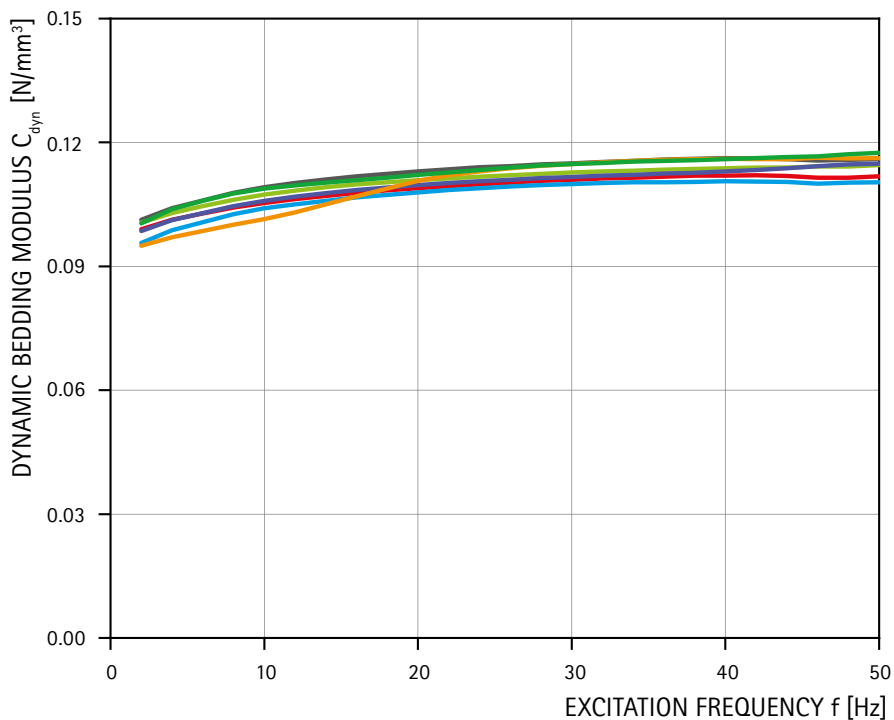


DIAGRAMS

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



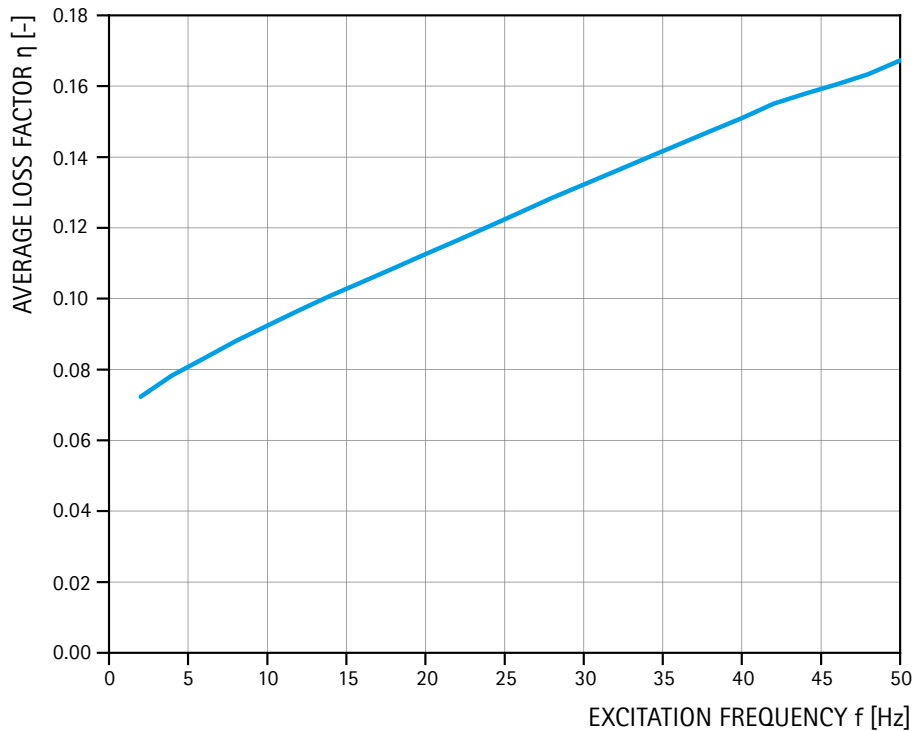
Dynamic bedding modulus depending on the excitation frequency (50 mm)



Ciflex N 400

Elastomeric bearing for vibration isolation

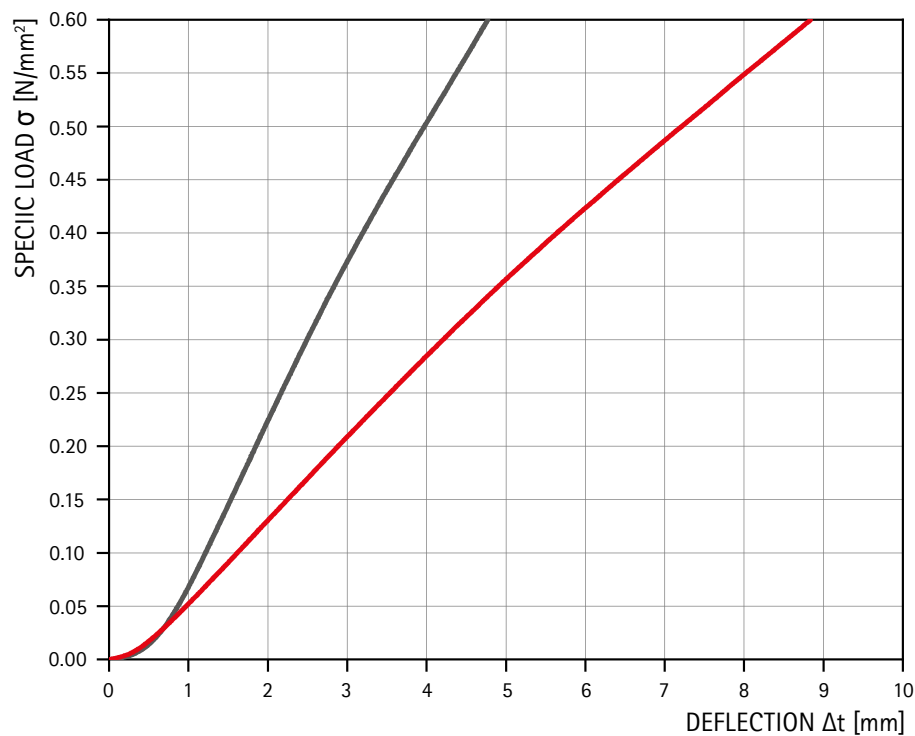
Loss factor



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 are valid for an excitation with a vibration velocity amplitude of 1 mm/s.

Load deflection



LOAD DEFLECTION CURVE

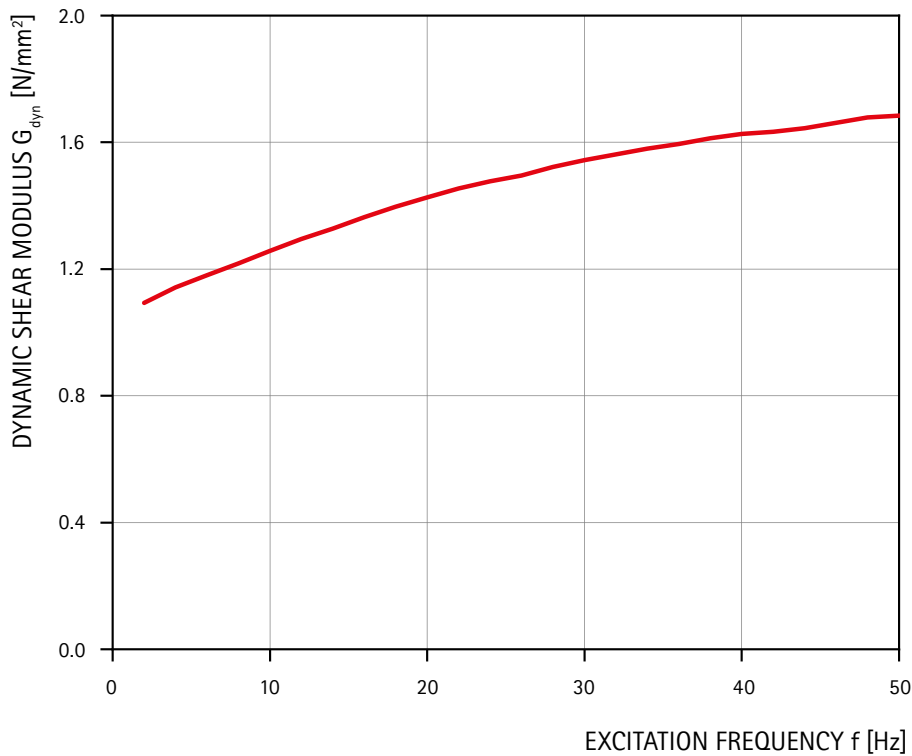
Application of uniaxial pressure against vertical deformation.

— t = 25 mm
— t = 50 mm

Ciflex N 400

Elastomeric bearing for vibration isolation

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.

The contents of this publication are the result of many years of research and experience gained in the application of this technology. All information is given in good faith; it does not represent a guarantee with respect to characteristics and does not exempt the user from testing the suitability of products and from ascertaining that the industrial property rights of third parties are not violated. No liability whatsoever will be accepted for damage – regardless of its nature and its legal basis – arising from advice given in this publication. We reserve the right to make technical modifications in the course of product development.

© Copyright – Calenberg Ingenieure GmbH – 2020

Version 1

14 December 2020

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