

Citrigon® 115

Elastomeric bearing for vibration isolation

Citrigon® 115 is a high-strength elastomeric bearing. It is suitable for vibration isolation of machines or for vibration protection of buildings. The characteristic individual load that can be permanently absorbed is 100 kN.

If Citrigon® 115 is to be installed as vibration protection on pile heads or on the rising structural elements, prefabricated modules can be supplied. This is an easy way to support larger areas. The modules consist of several Citrigon® 115 bearings and a lost formwork. After the butt joints have been taped and the entire surface area of the bearings has been covered with a construction foil, concrete can be poured directly on top of it.

Our technical department will be happy to assist you in finding the right solution.

Product information

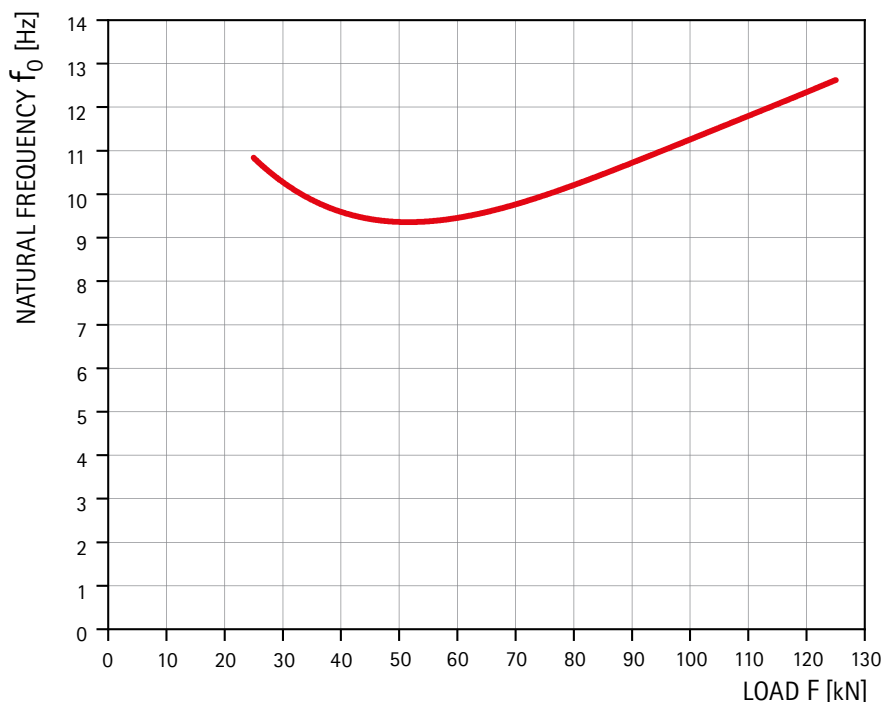
DIMENSIONS AND WEIGHTS

Bearing size	100mm x 100mm	
Thickness	50mm	
Weight	≈ 1.2 kg / m ²	

PROPERTIES

Materials	NR rubber with reinforcement of weatherproof steel
Permanent load	100 kN
Permanent load + dynamic load	125 kN
Load peaks (occasional and short-term)	200 kN
Thermal stability	-40°C + 70°C
Flammability	B2 acc. to DIN 4102 (normally combustible)
Water absorption	No water absorption

Natural frequency



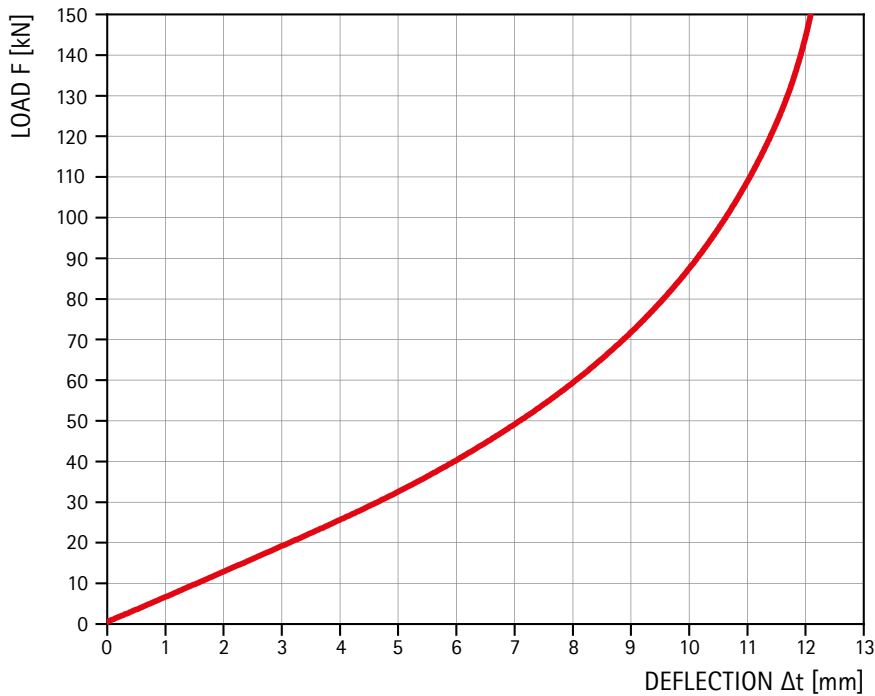
DIAGRAMM

The natural frequency f_0 of an ideal single-mass oscillator mounted on Citrigon® 115 is an essential characteristic for the evaluation of the vibration damping effect. The figure shows f_0 in dependence from the vertical load F .

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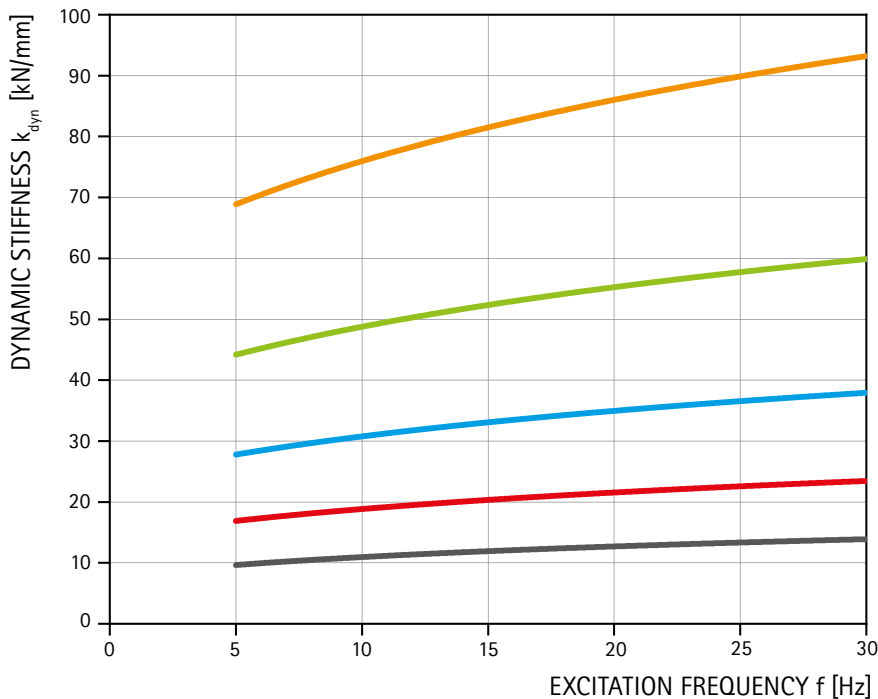
Load deflection



LOAD DEFLECTION CURVE

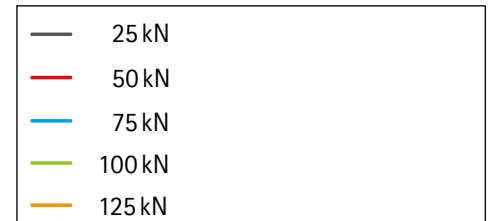
The figure shows the load deflection curve of Citrigon® 115

Dynamic stiffness



DYNAMIC STIFFNESS CURVE

The dynamic stiffness k_{dyn} of Citrigon® 115 depends on the load F and the excitation frequency f . The figure shows k_{dyn} in dependence from f for various loads. The values were determined by tests with a constant excitation amplitude of 1 mm/s.



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.

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