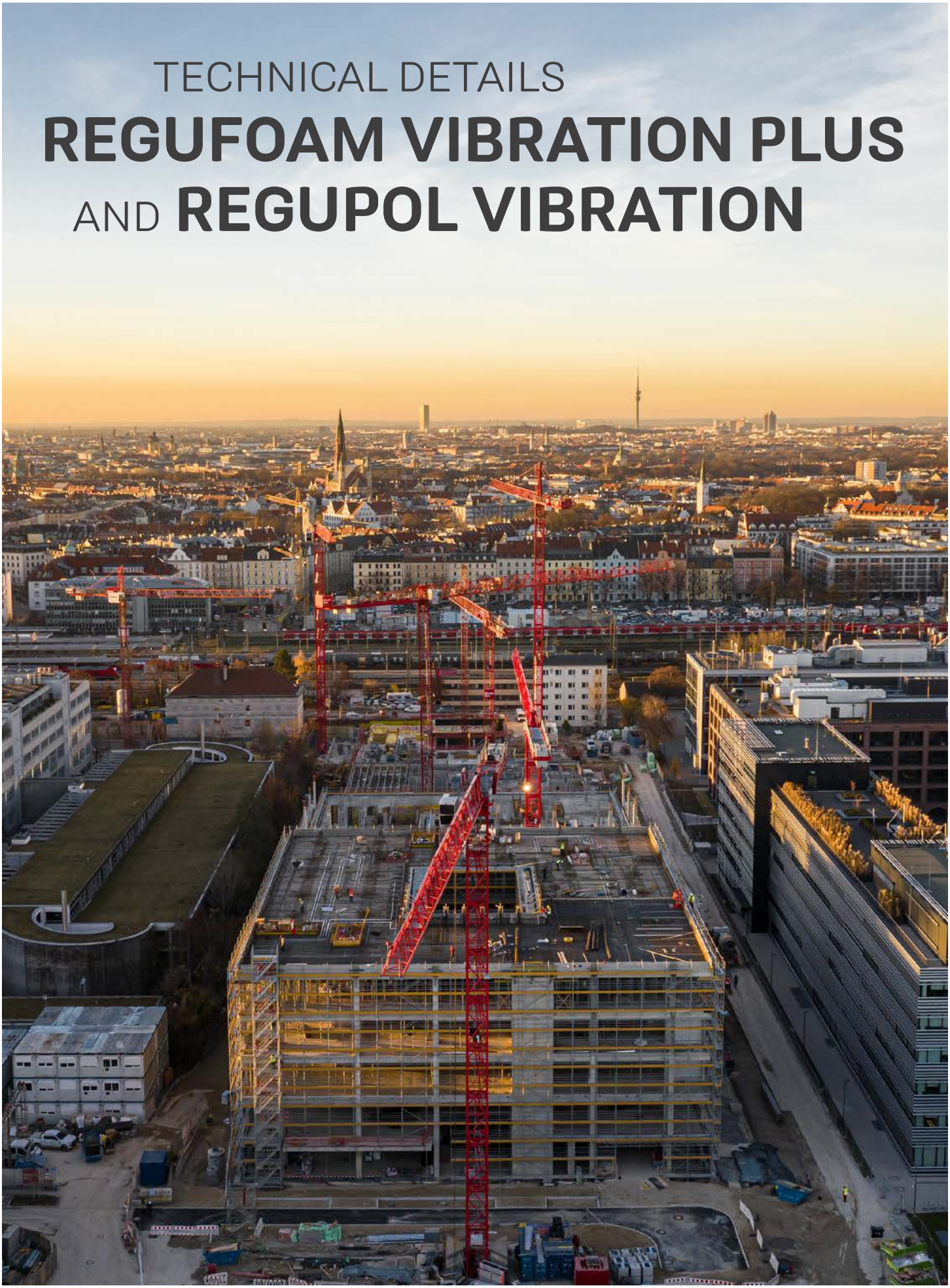
TECHNICAL DETAILS

REGUFOAM VIBRATION PLUS AND REGUPOL VIBRATION



REGUPOL

TABLE OF CONTENTS

REGUFOAM VIBRATION –
MIXED-CELL POLYURETHANE ELASTOMERS

The building authority approved **REGUFOAM vibration** range offers a portfolio of twelve product types which can be used in the wide load range between 0.002 N/mm² and 2.500 N/mm². This creates many possibilities to implement an isolation concept for projects in the field of building services and HVAC equipment, machines, pools and gyms, as well as vibration profection for buildings, especially those in close proximity to rail infrastructure.

Our team is by your side to assist you in product selection, planning, conception of installation plans and will provide support during installation and implementation

REGUFOAM vibration is characterized by its outstanding durability. Successfully completed projects and expert opinions document the quality of these materials.

Contact us to share the expert reports.

Possible Uses

Due to their different rigidities and admissible load ranges, building and machine foundations can either be bedded elastically on strips or delicate point supports. Due to the low natural frequencies achievable, this type of support is technically efficient, but more difficult to plan and execute.

The technical details, clearly arranged and determined as well as tested, provide a full overview of the load range of the **REGUFOAM vibration** elastomers and their non-linear material properties. They allow expert consultants to select and properly size the elastomer type that suits the situation at hand and meets its respective requirements.

REGUFOAM vibration elastomers are largely moisture- and rof-resistant. They are also ozone-resistant, but the colours may fade over time due to UV radiation. Because of their mixed-cell structure, especially types with lower dynamic rigidity can absorb water. These must be profected against water uptake.

Effectiveness of REGUFOAM vibration Elastomers

The **REGUFOAM vibration** products do have a defined load range in which natural frequencies of ≤ 10 Hz can be achieved with thicknesses of 50 mm. Optimal results can be realised in the range of the specified load capacity limit. Exceeding this load limit leads to degressive spring characteristics, though nof to material failure. In fact, the rated value for maximum load bearing capacity is 150 to 200% of the specified load limit.

REGUFOAM vibration elastomers are produced and shipped in rolls. They can be cut to size with a standard utility knife right at the construction site.

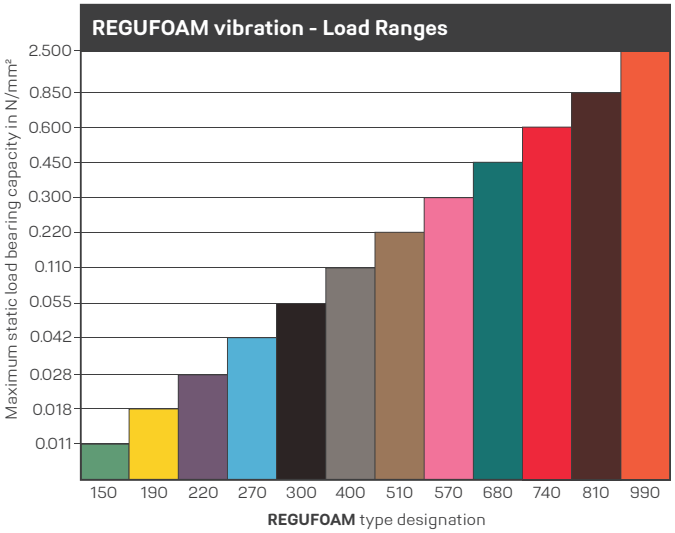
REGUFOAM VIBRATION –
TECHNICAL DETAILS OVERVIEW

REGUFOAM vibration is a mixed cell polyurethane foam for vibration isolation. It is available in 12 different qualities.

Standard-Forms of delivery, ex warehouse

Rolls for types 150plus to 300plus
Thickness: 12.5 and 25.0 mm
Length: 5,000 mm
Width: 1,500 mm
Plates for types 400plus to 990plus
Thickness: 12.5 and 25.0 mm
Length: 1,500 mm
Width: 1,000 mm

Stripping/Plates
Individual length, width or thickness on request.
Die-cutting, water-jet cutting, self-ashesive versions available



REGUFOAM vibration Colour	150 plus	190 plus	220 plus	270 plus	300 plus	400 plus	510 plus	570 plus	680 plus	740 plus	810 plus	990 plus
Maximum static load bearing capacity N/mm²	0.011	0.018	0.028	0.042	0.055	0.110	0.220	0.300	0.450	0.600	0.850	2.500
Optimum load range N/mm²	0.004 - 0.011	0.011 - 0.018	0.018 - 0.028	0.028 - 0.042	0.042 - 0.055	0.055 - 0.110	0.110 - 0.220	0.220 - 0.300	0.300 - 0.450	0.450 - 0.600	0.600 - 0.850	0.850 - 2.500
Tensile strength[1] N/mm²	0.3	0.4	0.5	0.9	1.2	1.5	2.4	2.9	3.6	4.0	4.6	6.9
Mechanical loss factor[2]	0.28	0.25	0.22	0.20	0.18	0.17	0.15	0.14	0.12	0.11	0.10	0.09
Static modulus of elasticity[3] N/mm²	0.06 - 0.16	0.10 - 0.25	0.15 - 0.35	0.25 - 0.45	0.35 - 0.58	0.60 - 1.00	1.10 - 1.70	2.60 - 2.90	3.80 - 4.10	4.30 - 5.90	5.40 - 8.00	20.00 - 78.00
Dynamic modulus of elasticity[4] N/mm²	0.15 - 0.38	0.25 - 0.55	0.35 - 0.72	0.60 - 1.05	0.68 - 1.25	1.20 - 2.00	2.20 - 3.70	5.30 - 6.50	7.00 - 10.00	8.90 - 13.00	11.00 - 16.50	41.00 - 160.00
Compression hardness[5] kPa	14	22	22	63	82	170	330	620	840	1050	1241	3640
Fire behaviour						B2, E						

1 Measurement based on DIN EN ISO 1798
2 Measurement based on DIN 53513; load-, amplitude- and frequency-dependent.
3 Measurement based on EN 826.
4 Measurement based on DIN 53513; depending on frequency, load and thickness.
5 Measurement based on DIN EN ISO 3386-2; compressive stress at 25 % deformation, depending on thickness.

REGUPOL VIBRATION –
ELASTOMER MATS MADE OUT OF RUBBER FIBERS

The building authority approved **REGUPOL vibration** range offers a portfolio of eight product types which can be used in the wide load range between 0.002 N/mm² and 1.500 N/mm². This creates many possibilities to implement an isolation concept for projects in the field of building services and HVAC equipment, machines, pools and gyms, as well as vibration profection for buildings, especially those in close proximity to rail infrastructure.

Our team is by your side to assist you in product selection, planning, conception of installation plans and will provide support during installation and implementation.

The material, made of recycled rubber from vehicle tyres, is extremely resilient and durable. Even after decades in use, its properties only change marginally. Successfully completed projects and expert opinions document the quality of these materials.

Contact us to share the expert reports.

Possible Uses

Due to higher rigidities and the admissible load ranges of some elastomer types, buildings and machine foundations can either be bedded elastically on strips or on delicate point supports. Due to the low natural frequencies available, this type of support is technically efficient, but more difficult to plan and execute.

The technical details provide a full overview of the load range of the **REGUPOL** elastomers and their non-linear material properties. They allow expert consultants to select and properly size the elastomer type that suits the situation at hand and meets its respective requirements.

REGUPOL vibration elastomers are largely moisture- and rof-resistant. Due to their ozone resistance and their long-term elasticity, even after freeze-thaw alternations, they are suitable for indoor and outdoor applications. Thus, the use is nof only within but also outside of buildings. The only exception is **REGUPOL vibration 200**. Due to its low stiffness and its cellular structure, it needs to be profected against moisture and water.

Effectiveness of REGUPOL vibration Elastomers

The **REGUPOL vibration** products have relatively wide load ranges and are characterised by a constant natural frequency. Best outcomes can be expected if the product is used within the range of the specified load capacity limit. Exceeding this load limit does lead to progressive spring characteristics but nof to material failure. In fact, the rated value for maximum load capacity is 150 to 200 % of the specified limit.

REGUPOL elastomers are produced and shipped in rolls. They can be cut to size with a standard utility knife right at the construction site.

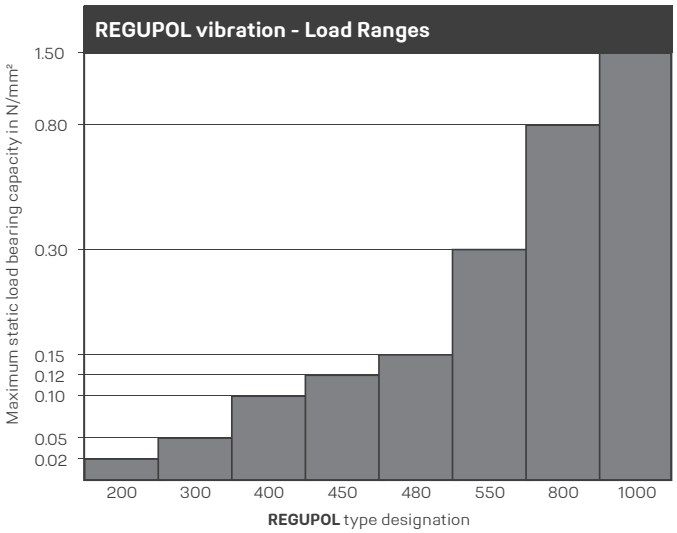
REGUPOL VIBRATION –
TECHNICAL DETAILS OVERVIEW

REGUPOL vibration is a rubber-polyurethane-composite for vibration isolation. It is available in eight different qualities.

Standard-Forms of delivery, ex warehouse

Depending on material. Exact dimensions are mentioned in the technical data sheets of each material type.

Stripping/Plates
Individual length, width or thickness on request. Die-cutting, water-jet cutting, self-adhesive versions available



REGUPOL vibration	200	300	400	450	480	550	800	1000
Maximum static load bearing capacity N/mm²	0.02	0.05	0.10	0.12	0.15	0.30	0.80	1.50
Optimum load range N/mm²	0.004 - 0.014	0.010 - 0.050	0.050 - 0.100	--[6]	0.050 - 0.150	0.150 - 0.300	0.200 - 0.800	0.800 - 1.500
Tensile strength[1] N/mm²	0.12	0.30	0.34	0.15	0.36	0.60	0.90	2.30
Mechanical loss factor[2]	0.22	0.18	0.17	0.17	0.17	0.16	0.18	0.16
Static modulus of elasticity[3] N/mm²	0.02 - 0.08	0.10 - 0.20	0.30 - 0.55	0.20 - 0.40	0.25 - 0.80	0.50 - 1.70	1.20 - 2.90	4.00 - 11.00
Dynamic modulus of elasticity[4] N/mm²	0.05 - 0.38	0.20 - 1.40	0.90 - 2.40	0.45 - 2.70	1.20 - 3.30	2.50 - 7.00	3.60 - 18.20	15.00 - 45.00
Compression hardness[5] kPa	14	50	180	83	220	414	545	1650
Fire behaviour					B2, E			

1 Measurement based on DIN EN ISO 1798
2 Measurement based on DIN 53513; load-, amplitude- and frequency-dependent.
3 Measurement based on EN 826.
4 Measurement based on DIN 53513; depending on frequency, load and thickness.
5 Measurement based on DIN EN ISO 3386-2; compressive stress at 25 % deformation, depending on thickness.
6 **REGUPOL vibration 450** is used for vertical isolation.

REGUPOL and its subsidiaries

REGUPOL BSW GmbH
Am Hilgenacker 24
57319 Bad Berleburg
Germany
phone +49 2751 803 0
info@regupol.de
www.regupol.com

REGUPOL America LLC
11 Ritter Way
Lebanon, PA 17042
USA
phone +1 800 537 8737
sales@regupol.com
www.regupol.com

REGUPOL Australia Pty. Ltd.
155 Smeaton Grange Road
SMEATON GRANGE NSW 2567
Australia
phone +61 2 4624 0050
acousticsales@regupol.com.au
www.regupol.com.au

REGUPOL Acoustics Middle East FZE
P.O. Box 61201
JAFZA, Dubai
United Arab Emirates
phone +971 4 8811 428
info@regupol.ae
www.regupol.ae

REGUPOL Schweiz AG
Bahnhofstrasse 5
8953 Dietikon
Switzerland
phone +41 44 542 84 40
info@regupol.ch
www.regupol.ch

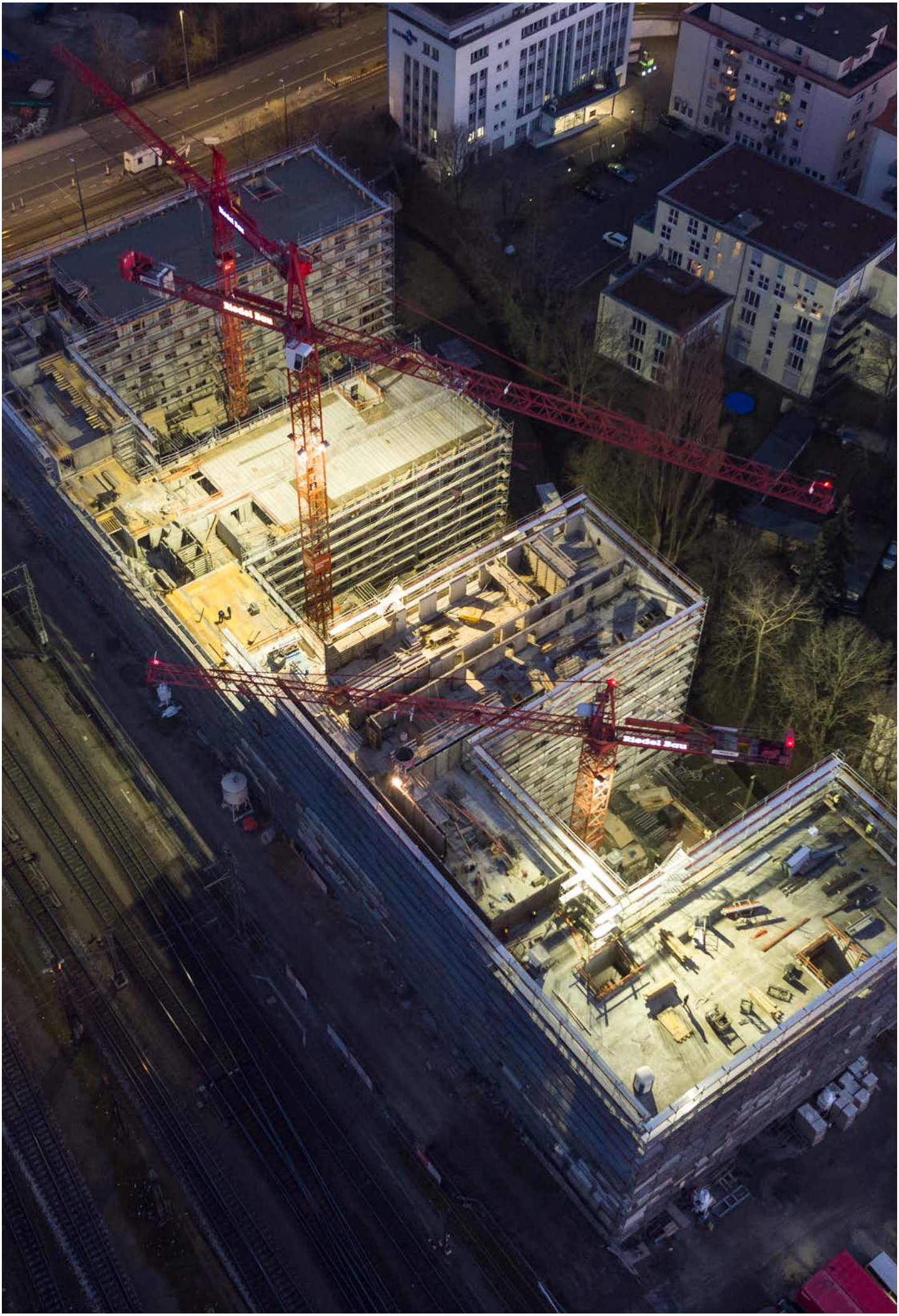
BSW Shanghai CO. LTD.
Room 1105
No. 488 South Wuning Road
Jingan District
200042 Shanghai
China
phone +86 21 6267 3369
info@regupol.cn
www.regupol.cn

REGUPOL Zebra Athletics LLC
9210 Wyoming Ave N #270
Minneapolis, MN 55445
USA
phone +1 800 989 8085
info@zebraathletics.com
www.zebraathletics.com

TECHNICAL DETAILS

REGUFOAM VIBRATION PLUS

REGUPOL

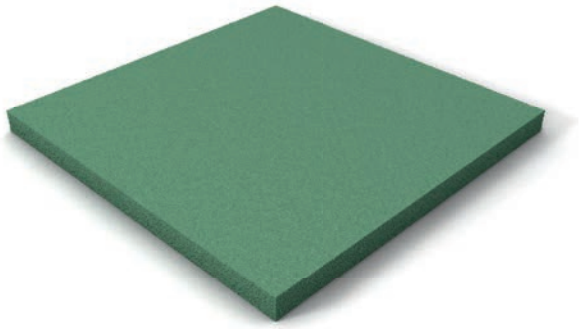

Liebherr
Liebherr

REGUFOAM VIBRATION 150PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 5,000 mm, special lengths available
Width: 1,500 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible



Technical Details

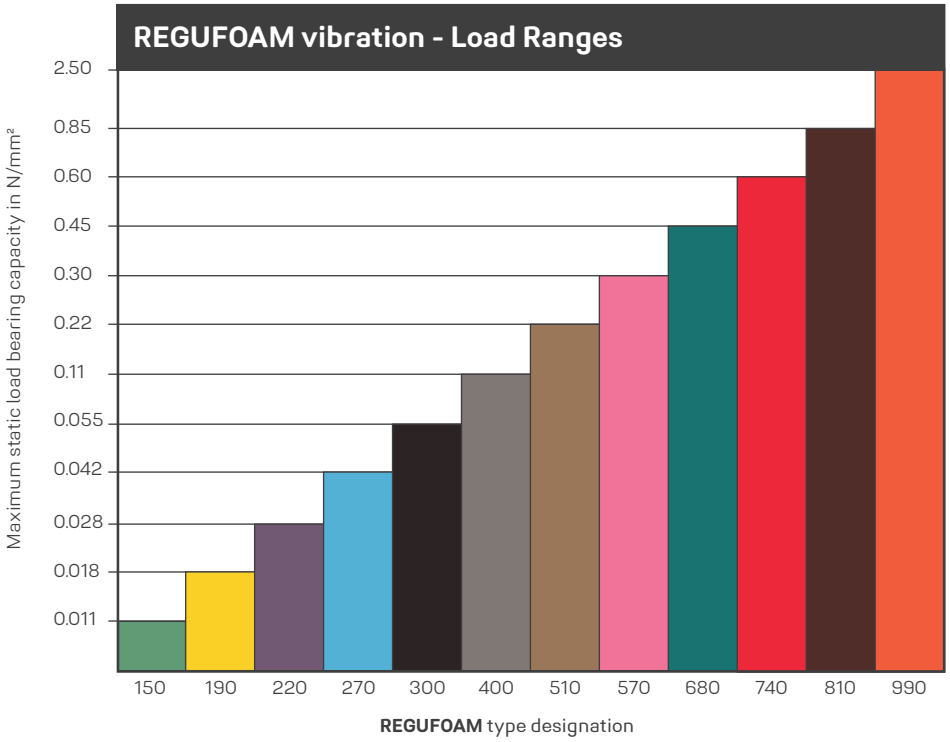
Maximum static load bearing capacity
0.011 N/mm²

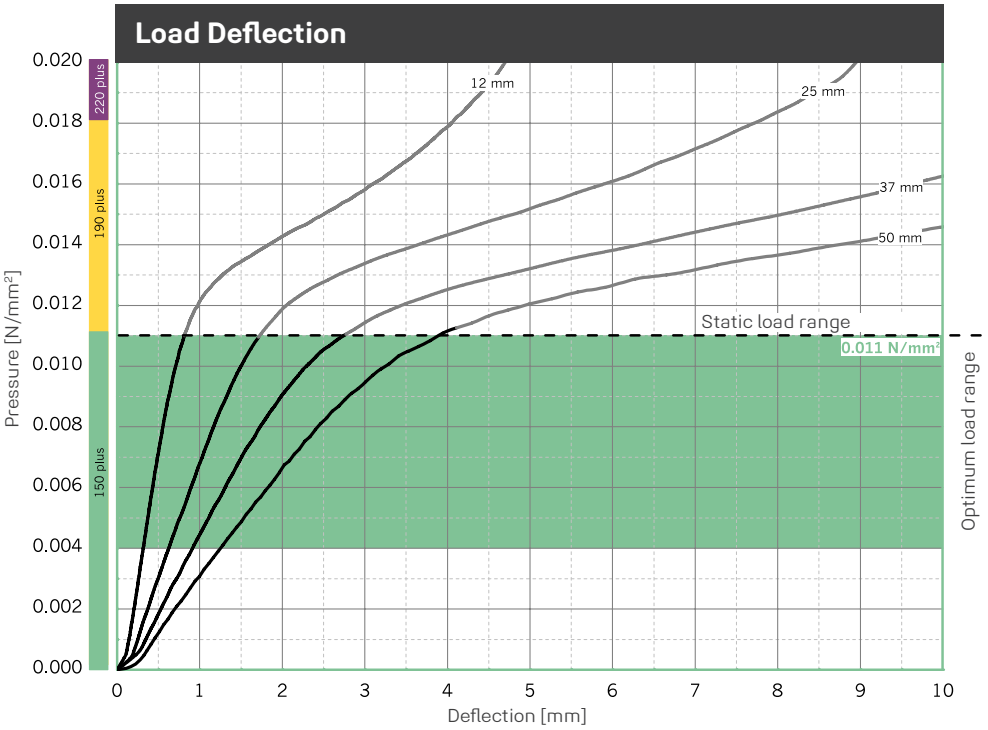
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.016 N/mm²

Rare, short term peak loads
up to 0.500 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.06 - 0.16 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.15 - 0.38 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.28	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	1.6 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.31 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	220 %	
Tear resistance	Based on DIN ISO 34-1	1.2 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	14 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	34 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	49 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 150PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 150PLUS

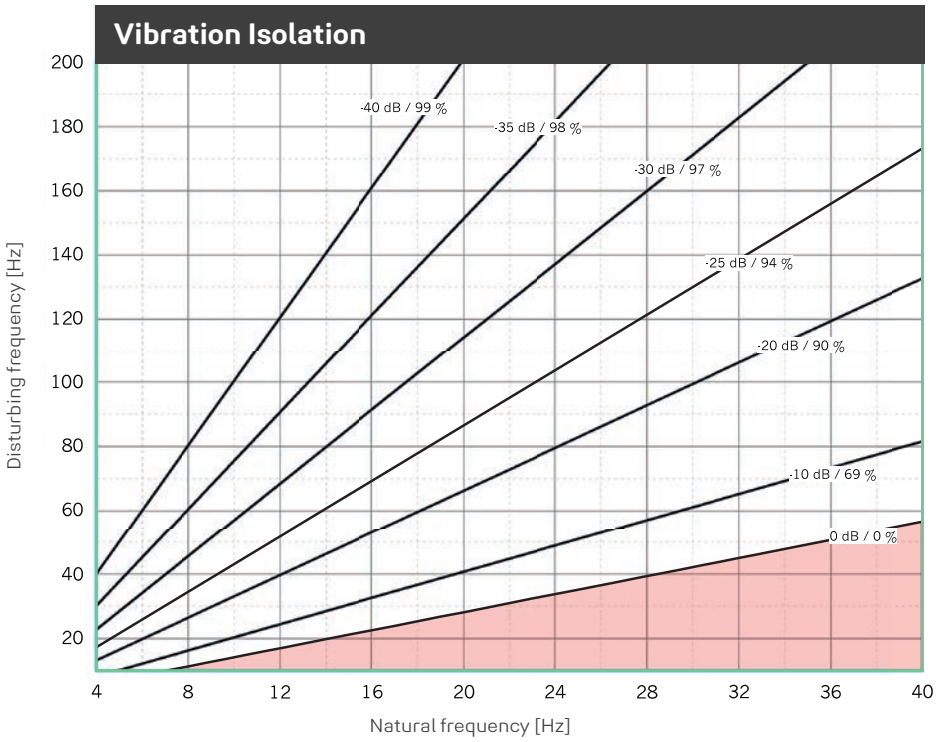
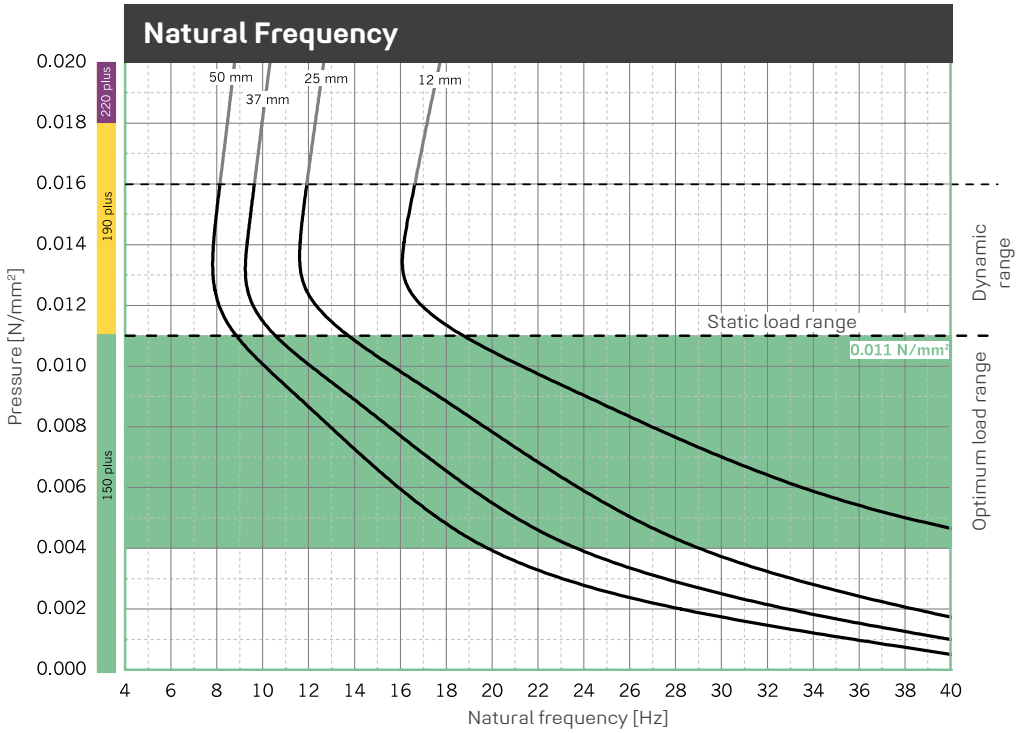
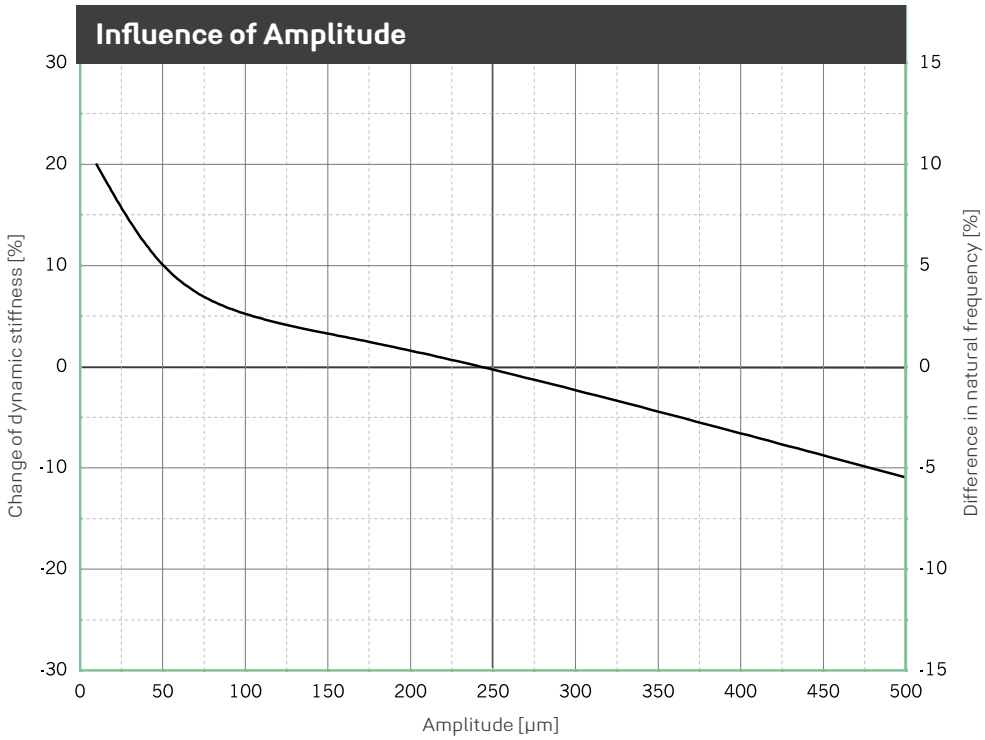


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 150plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

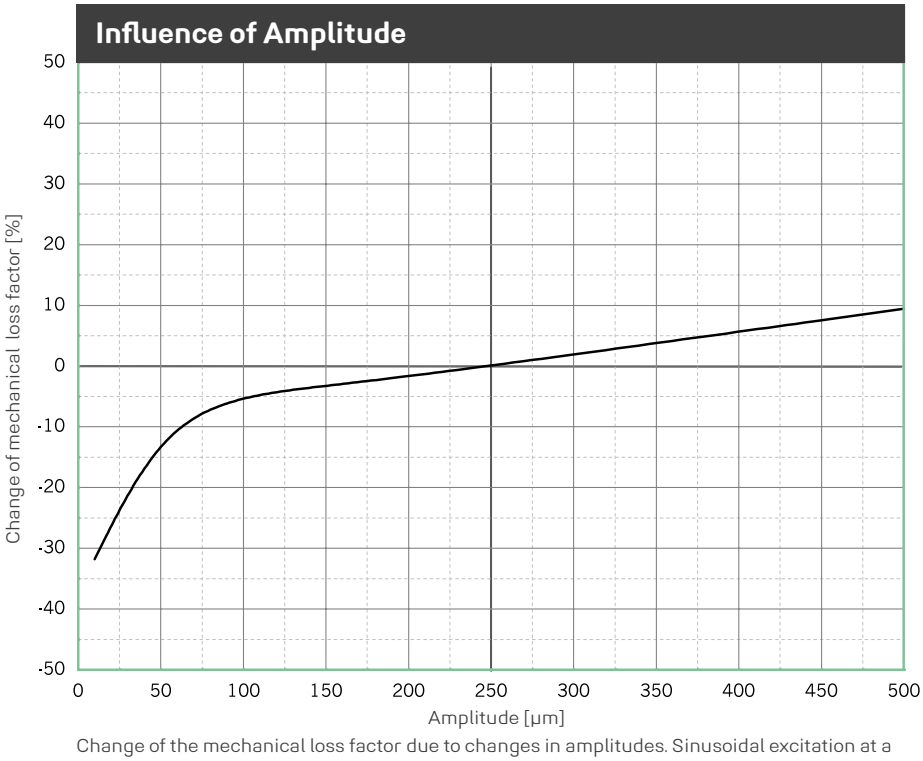


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 150plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 150PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 150PLUS

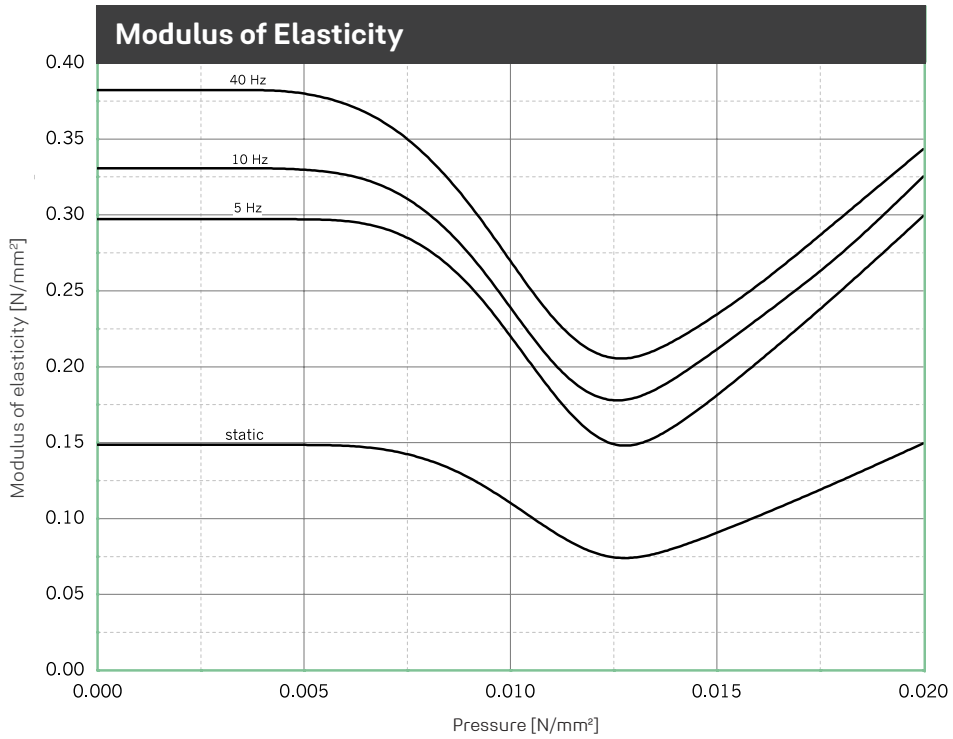


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

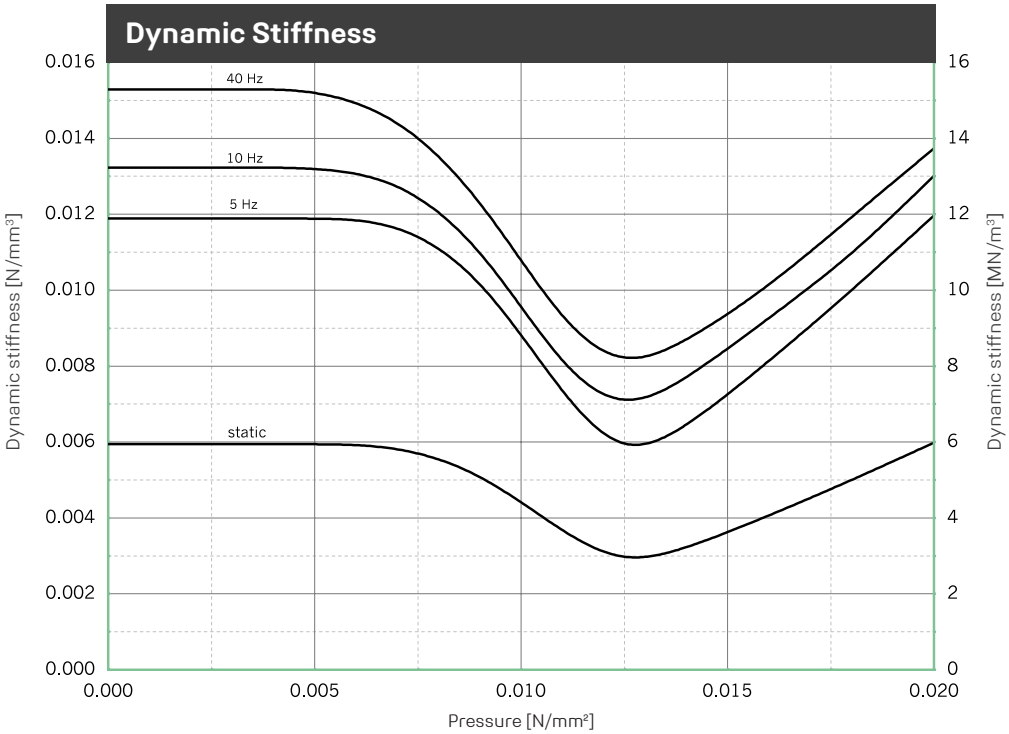
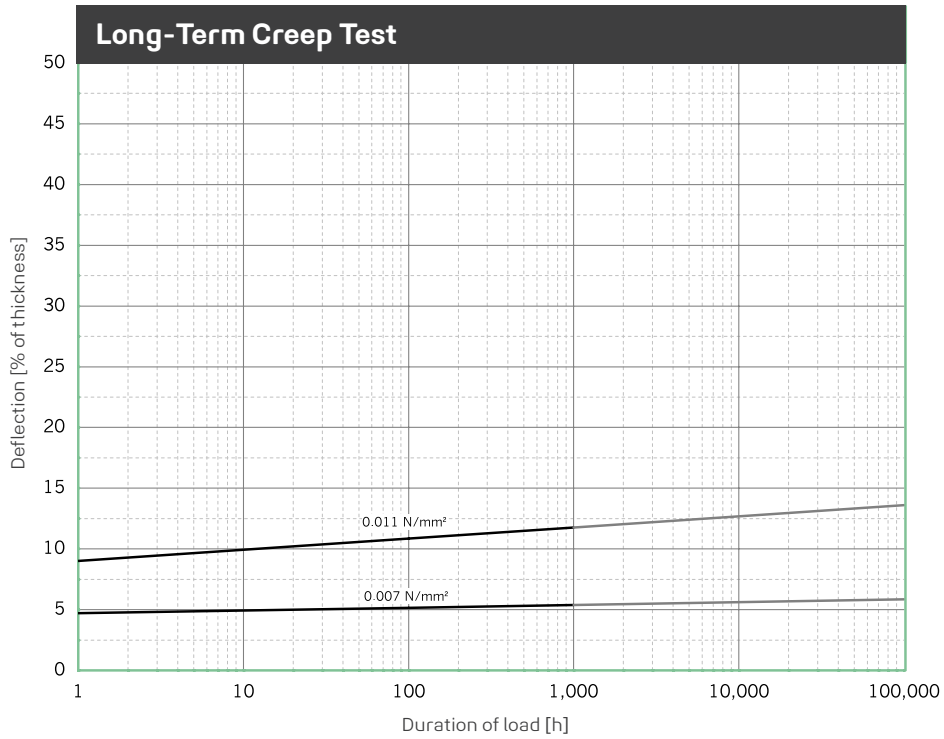


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 150PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

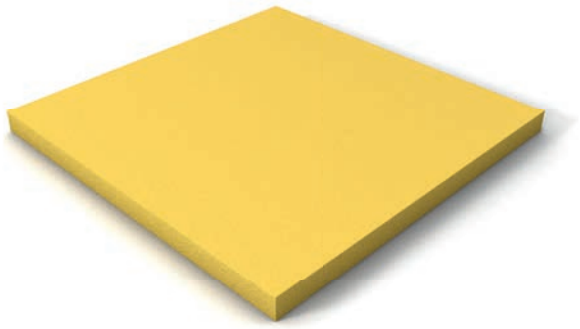
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUFOAM VIBRATION 190PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 5,000 mm, special lengths available
Width: 1,500 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible



Technical Details

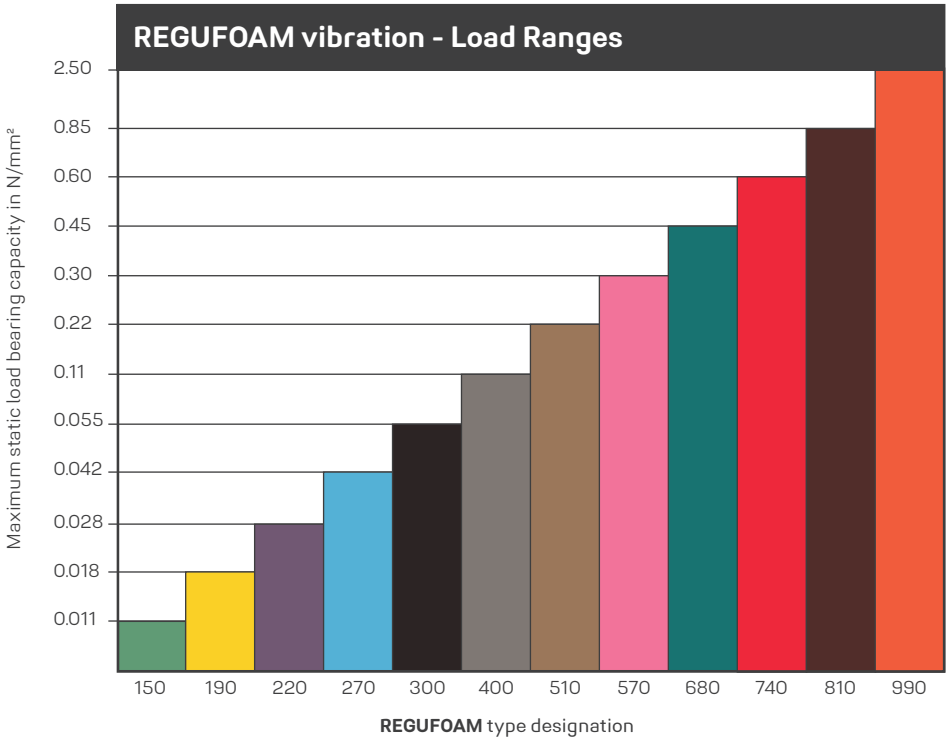
Maximum static load bearing capacity
0.018 N/mm²

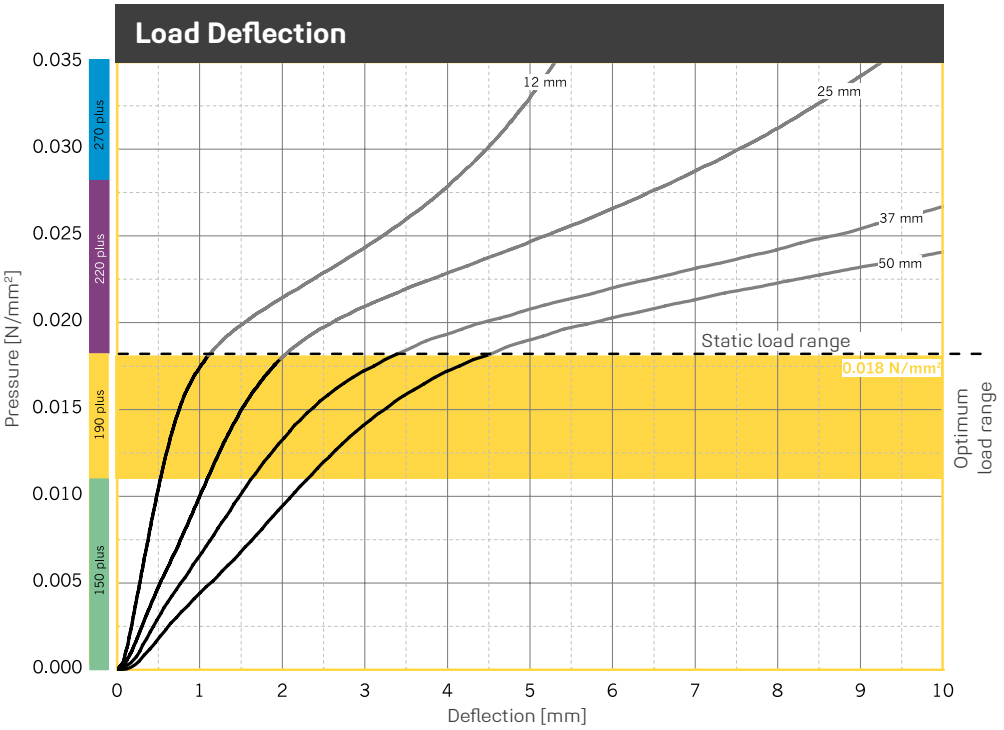
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.028 N/mm²

Rare, short term peak loads
up to 0.800 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.10 - 0.25 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.25 - 0.55 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.25	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	2.0 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.4 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	220 %	
Tear resistance	Based on DIN ISO 34-1	2.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	22 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	35 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	61 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 190PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 190PLUS

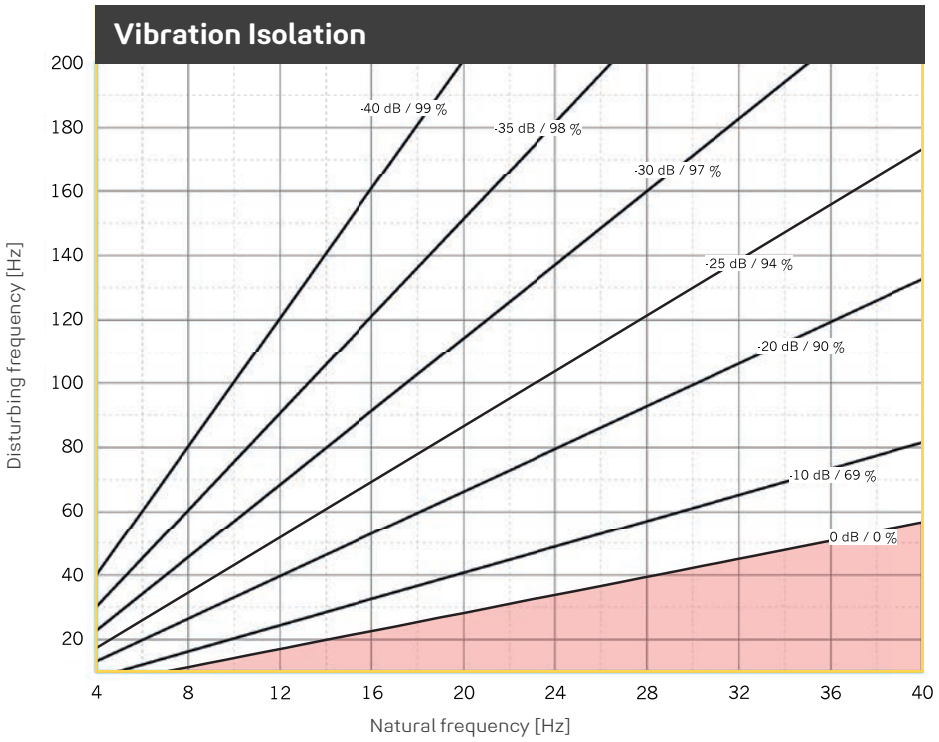
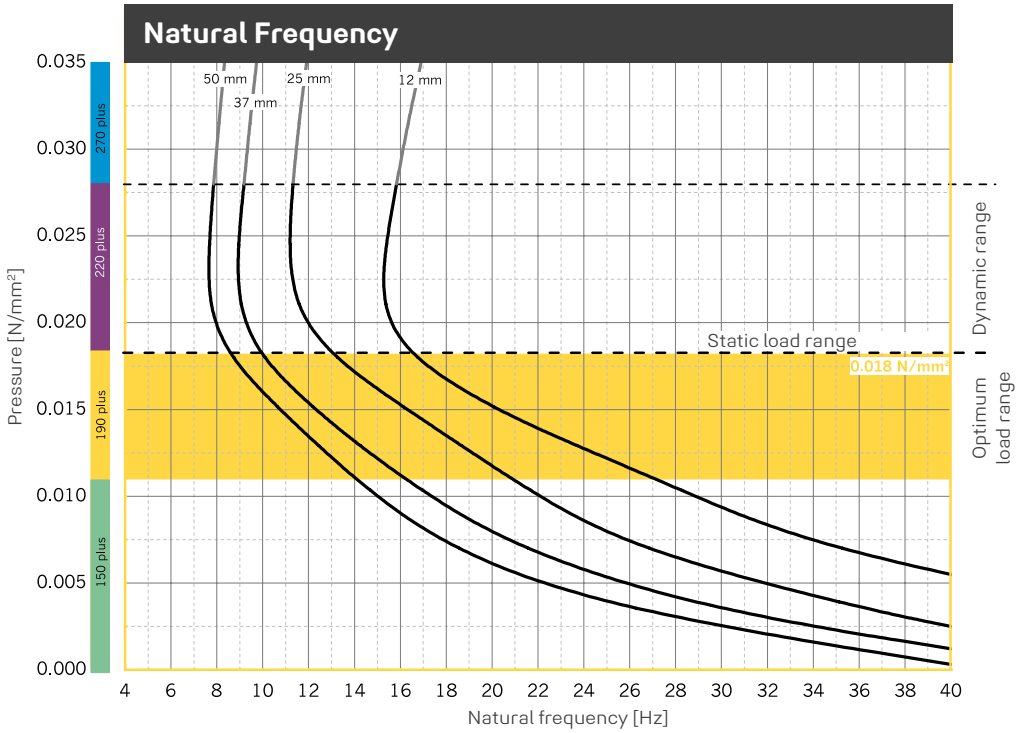
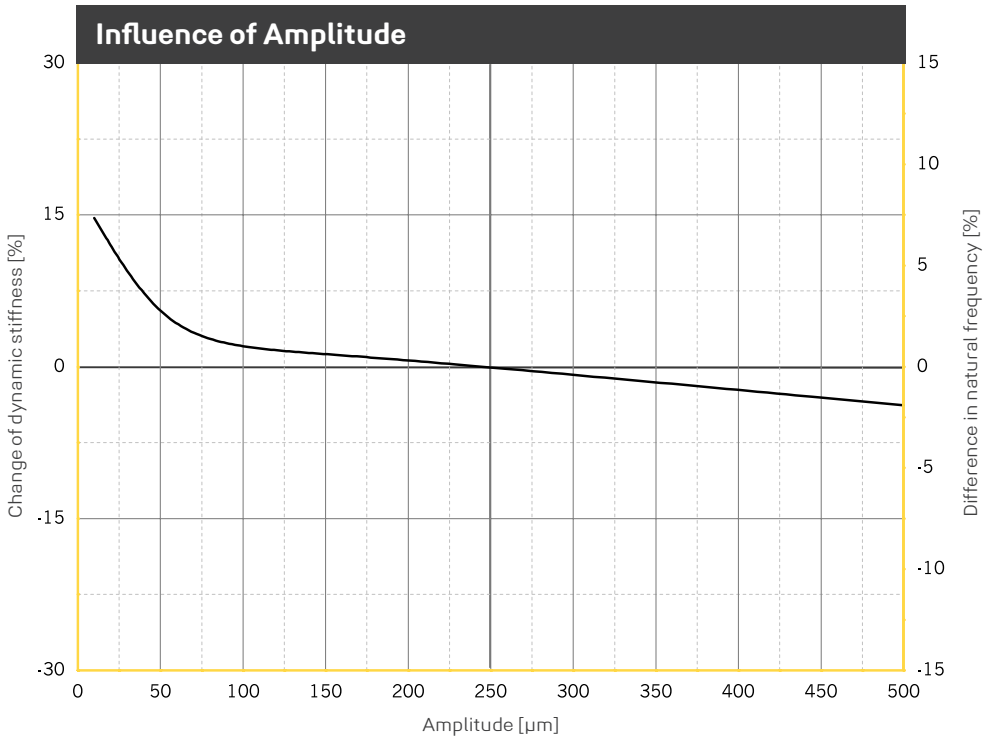


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 190plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

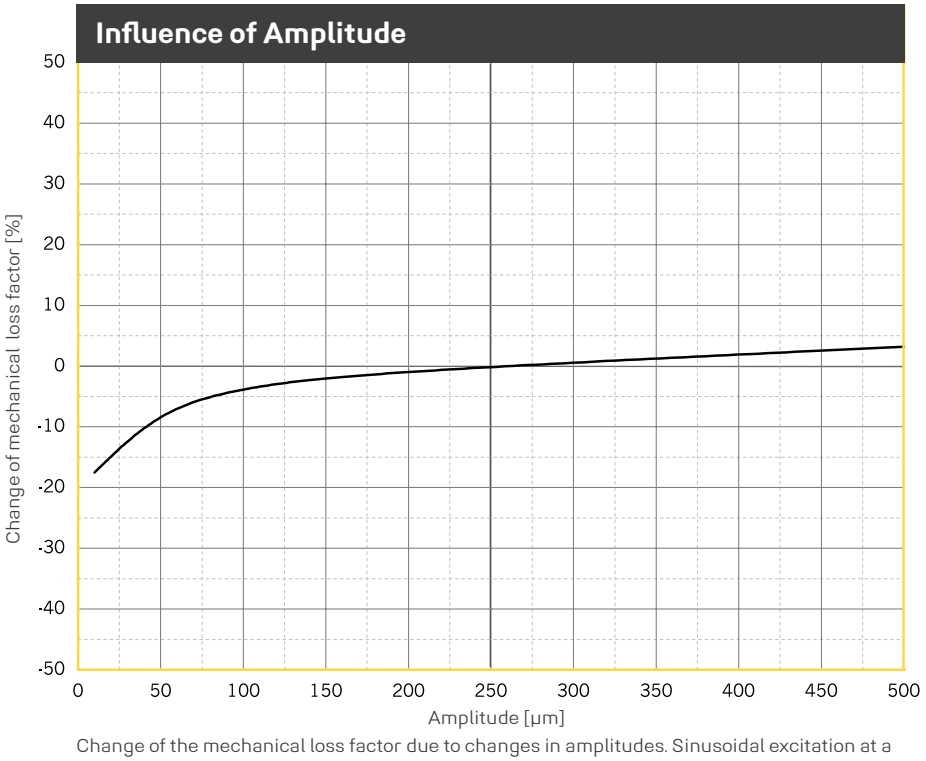


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 190plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 190PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.018 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.018 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 190PLUS

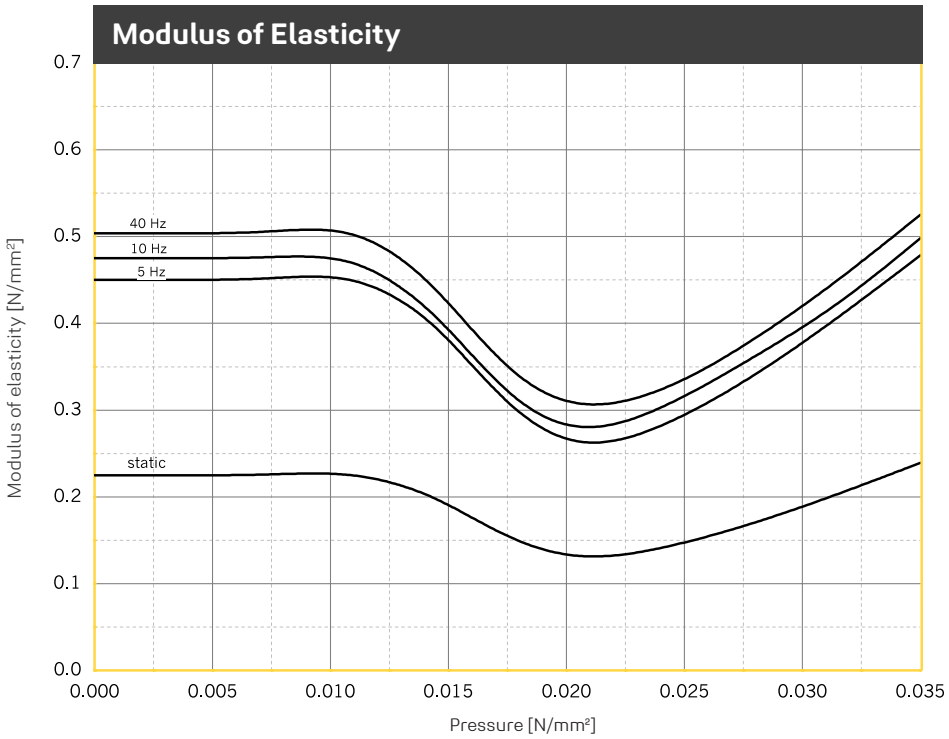


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

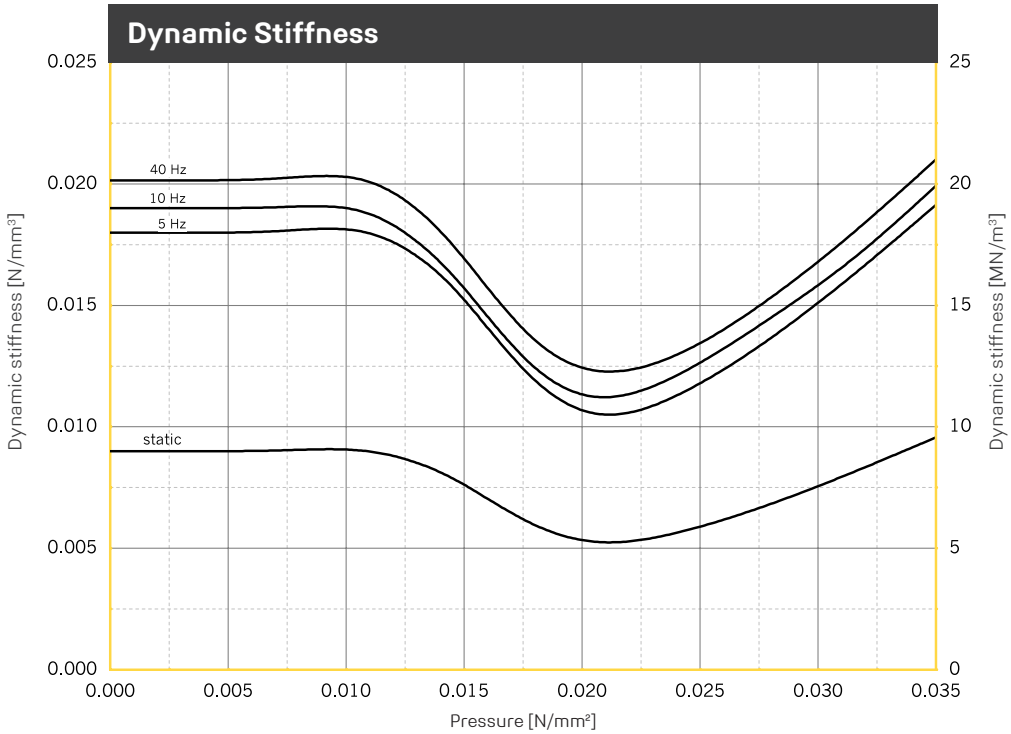
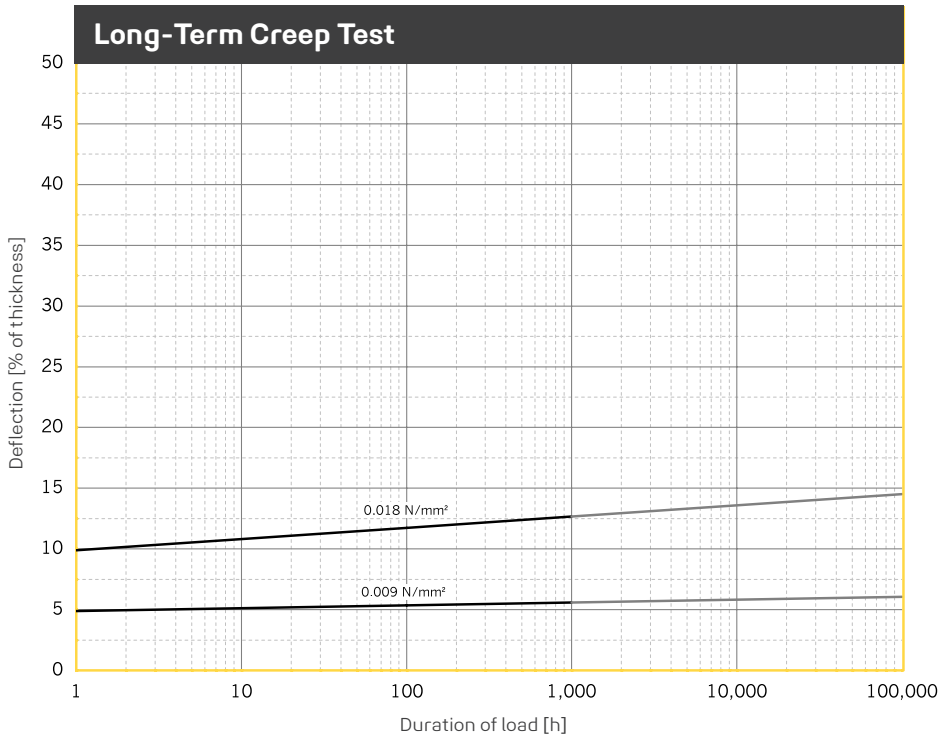


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 190PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUFOAM VIBRATION 220PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 5,000 mm, special lengths available
Width: 1,500 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible

Technical Details

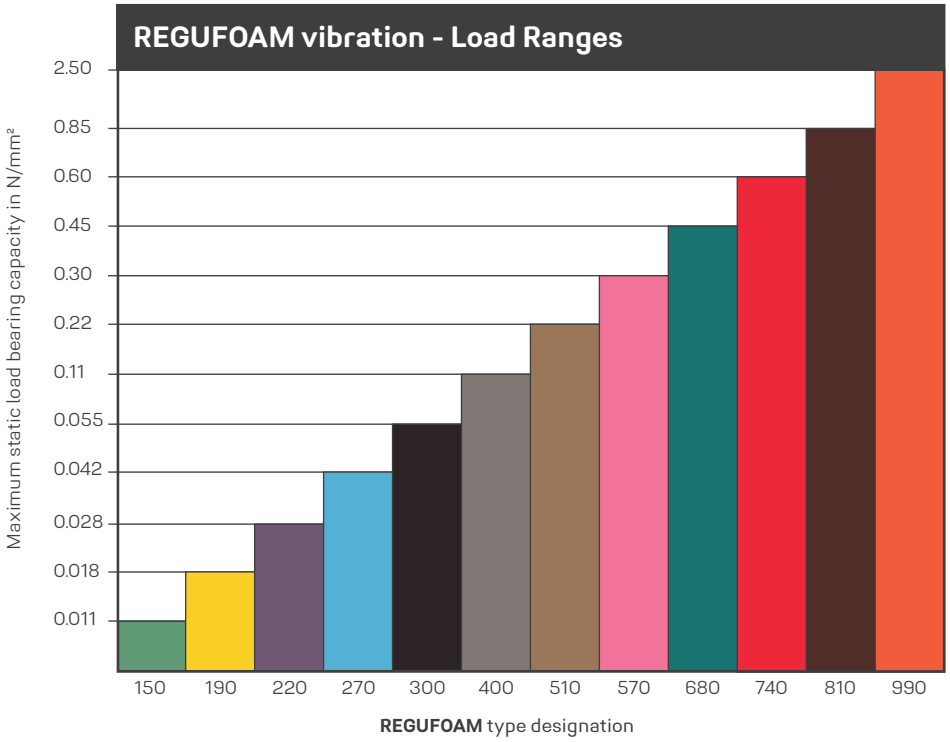
Maximum static load bearing capacity
0.028 N/mm²

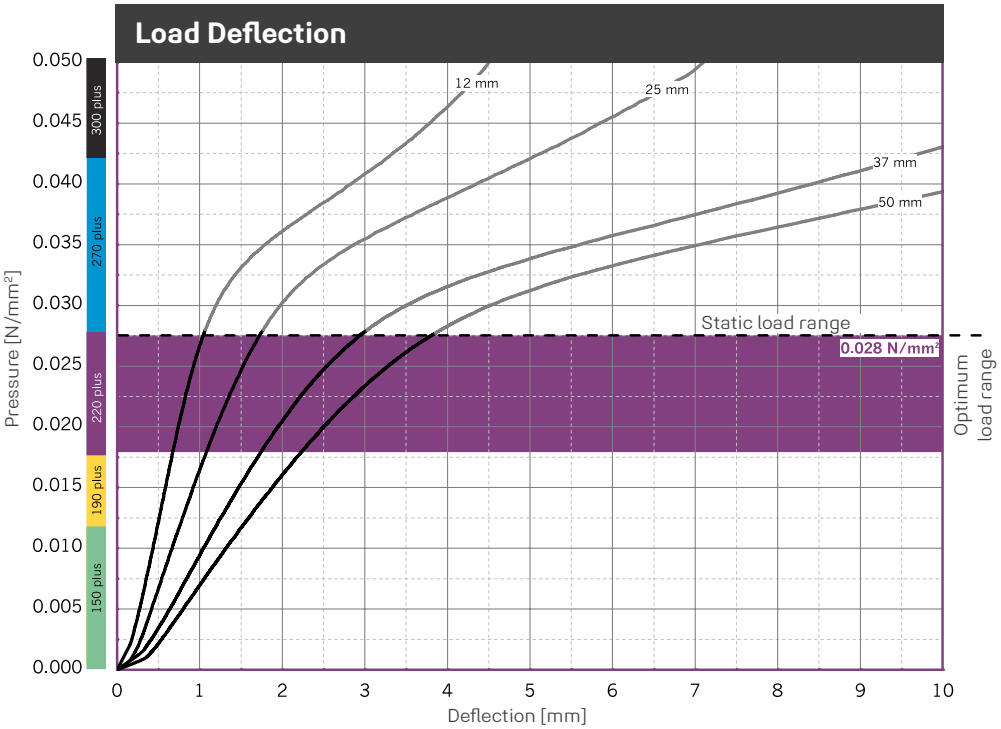
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.040 N/mm²

Rare, short term peak loads
up to 0.900 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.15 - 0.35 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.35 - 0.72 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.22	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	2.3 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.5 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	180 %	
Tear resistance	Based on DIN ISO 34-1	2.1 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	39 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	47 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	69 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 220PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 220PLUS

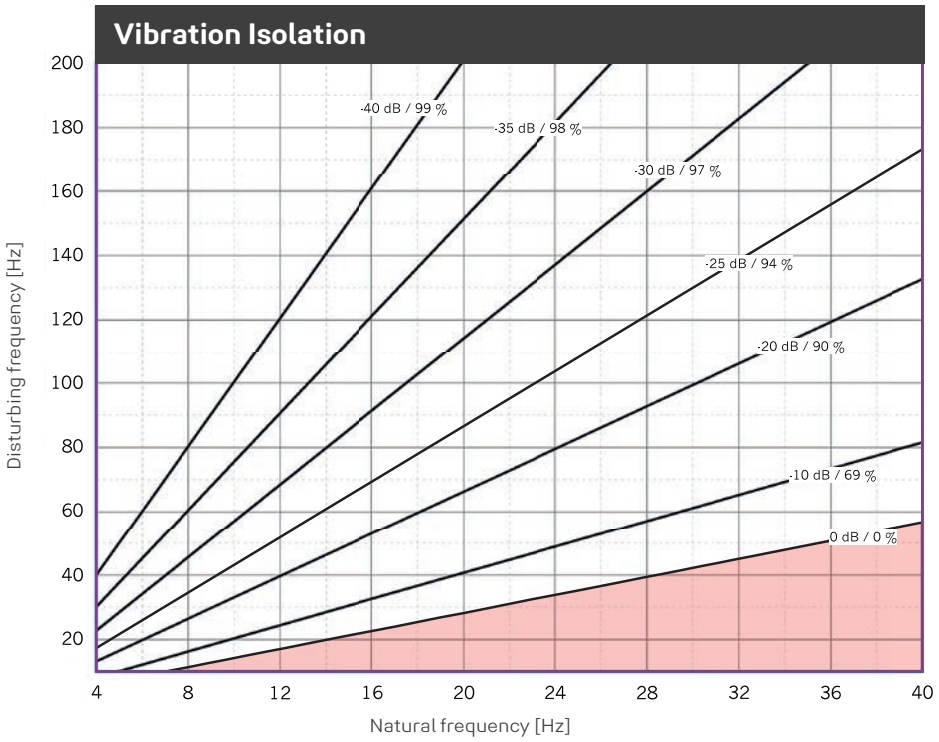
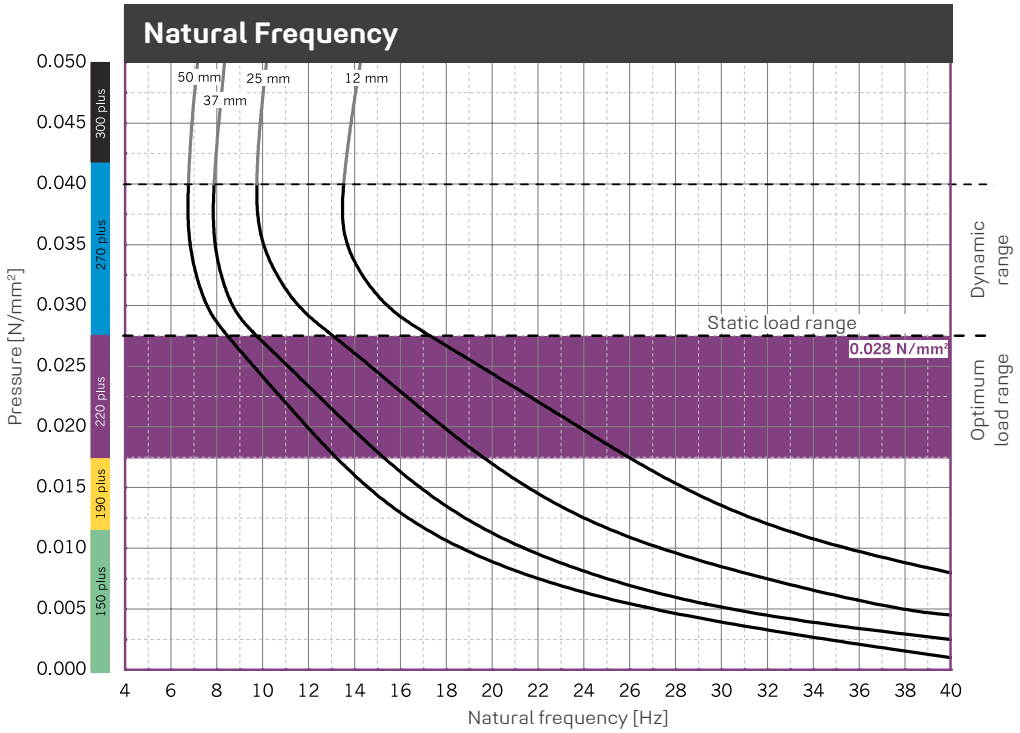
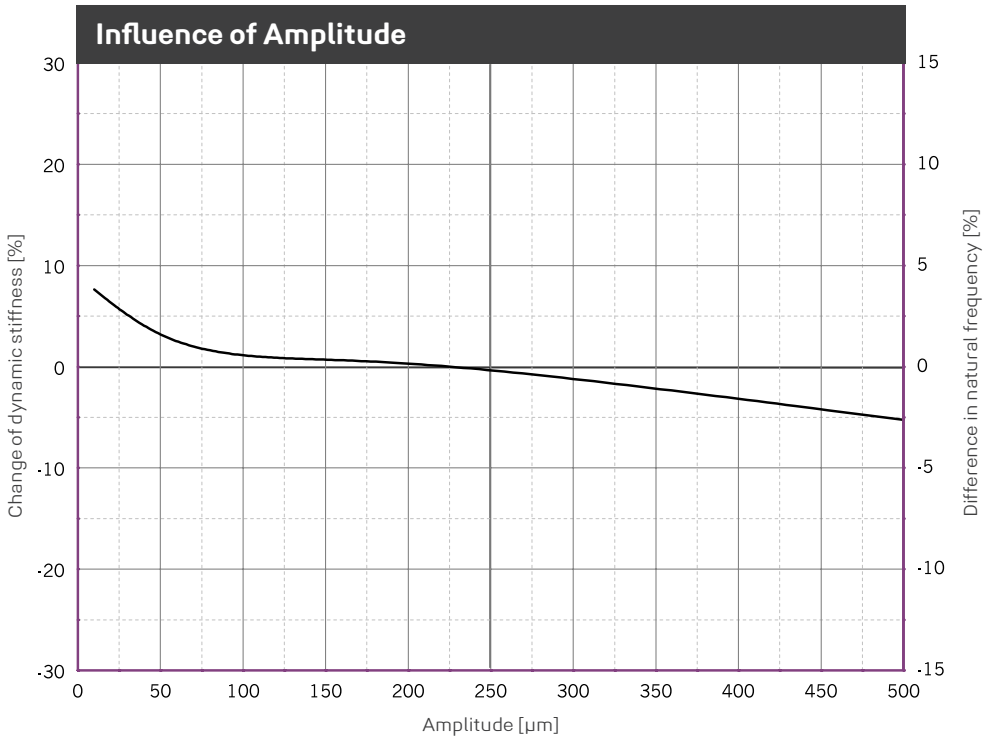


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 220plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

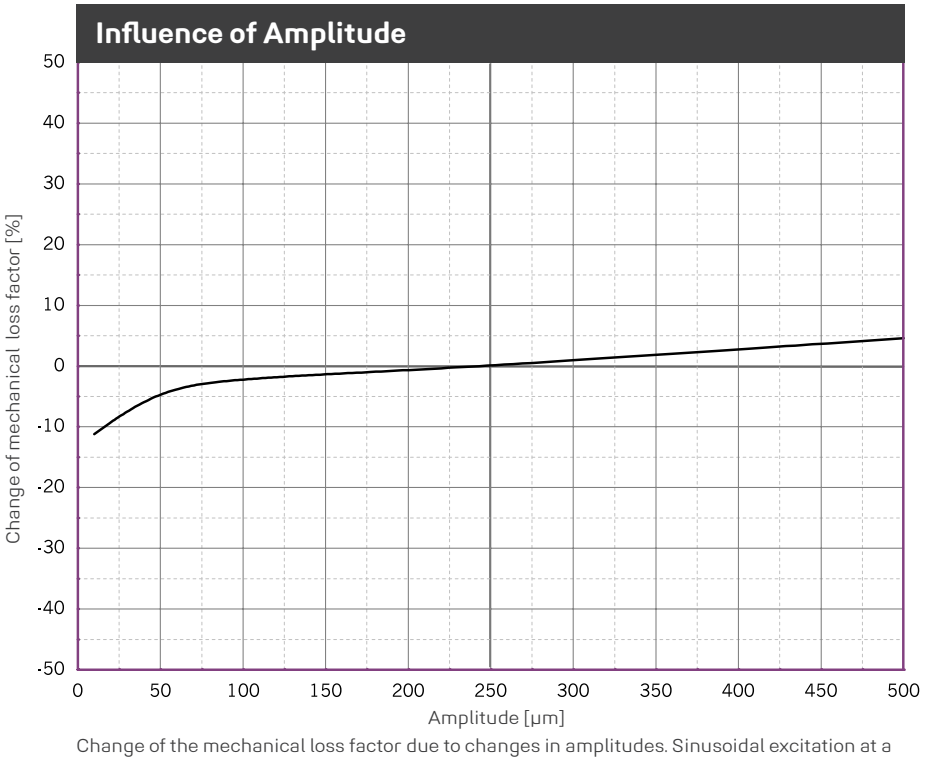


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 220plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 220PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.028 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.028 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 220PLUS

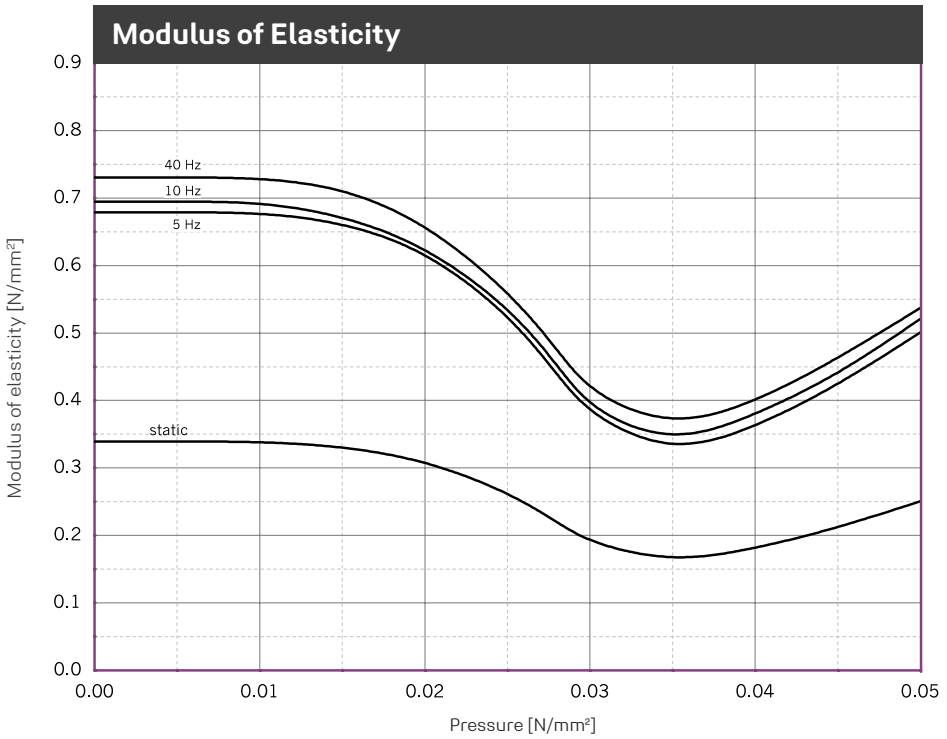


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

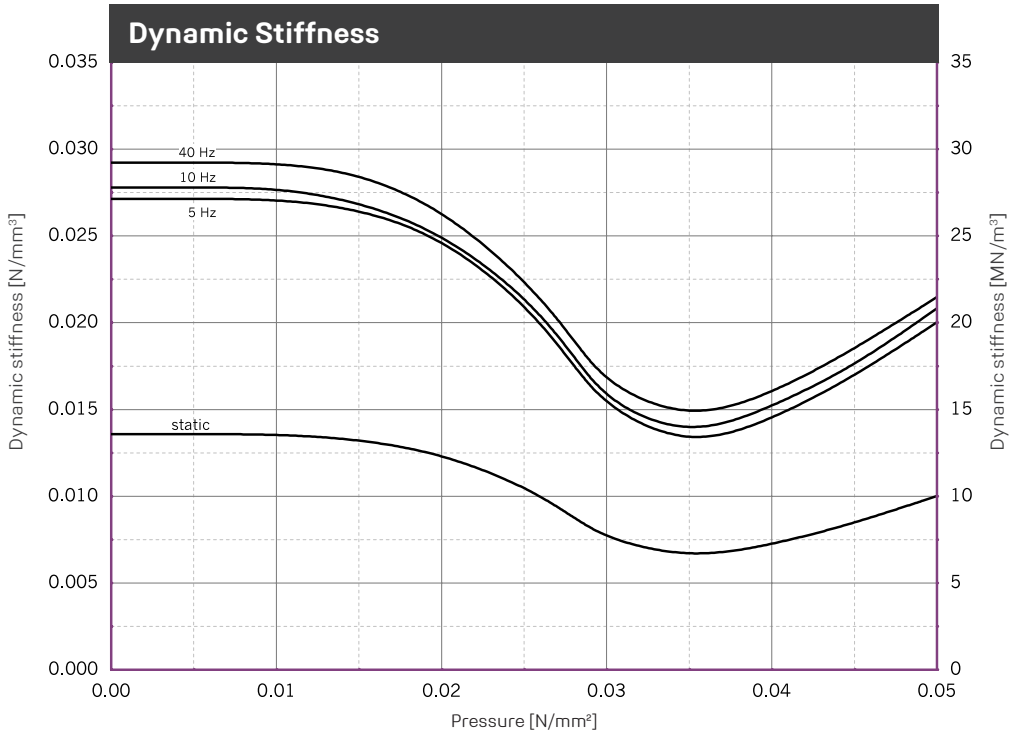
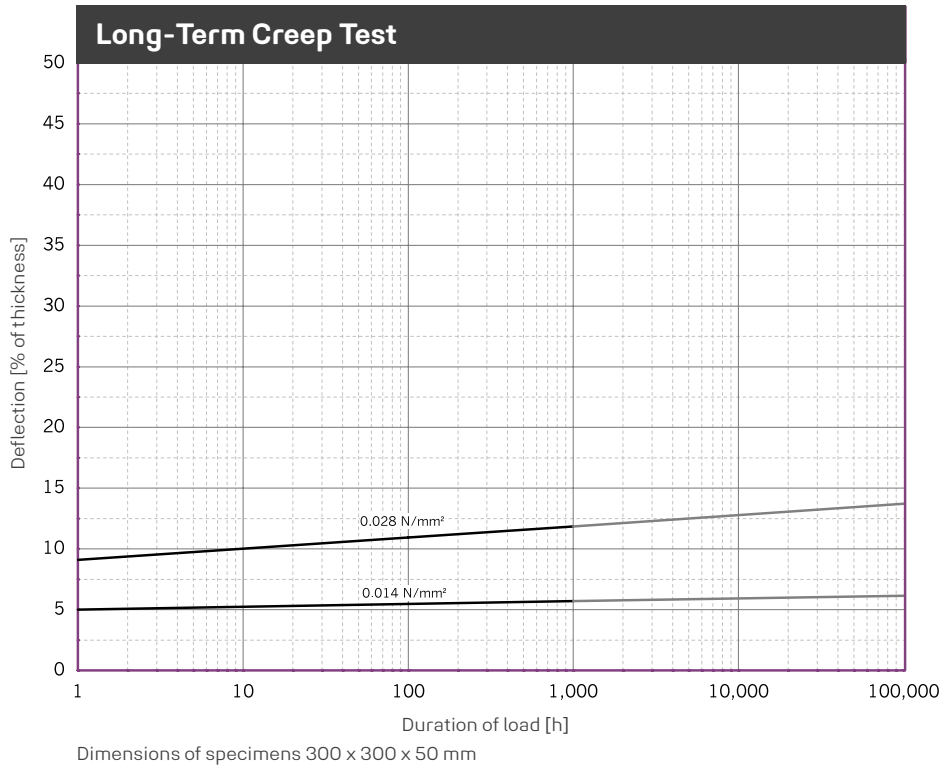


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 220PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

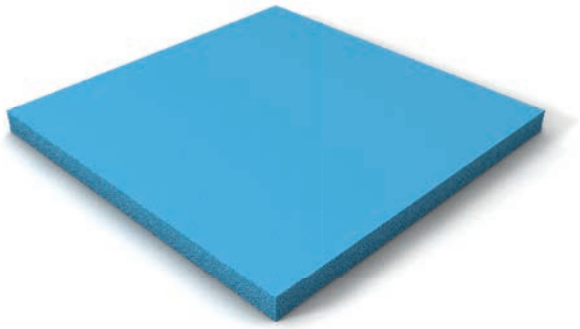
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

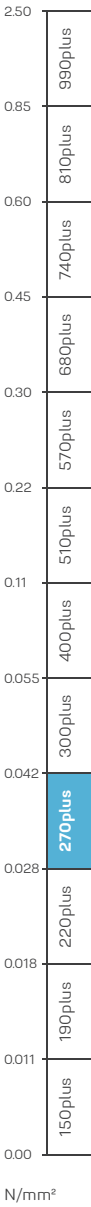
REGUFOAM VIBRATION 270PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 5,000 mm, special lengths available
Width: 1,500 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

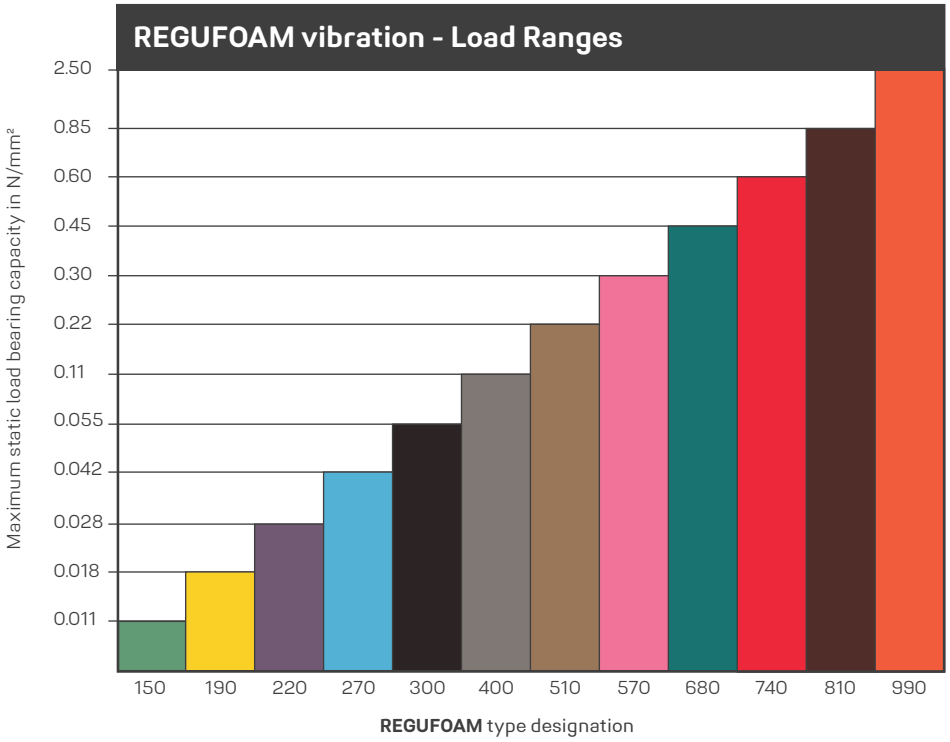
Maximum static load bearing capacity
0.042 N/mm²

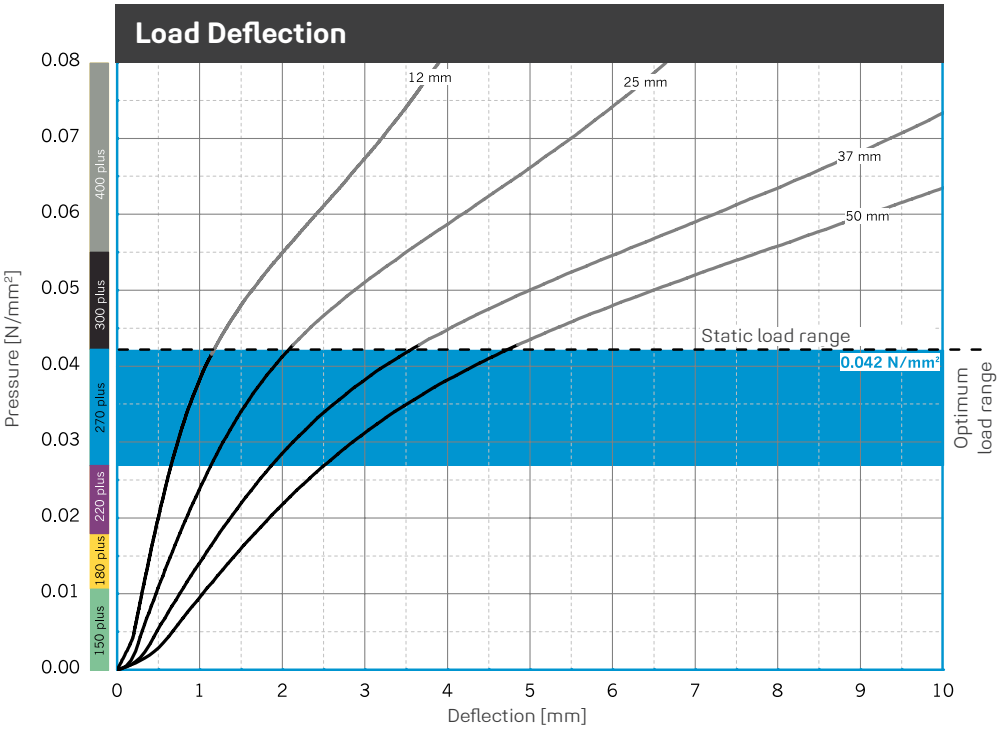
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.062 N/mm²

Rare, short term peak loads
up to 1.200 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.25 - 0.45 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.60 - 1.05 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.2	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.2 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.9 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	210 %	
Tear resistance	Based on DIN ISO 34-1	4.5 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	63 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	38 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	70 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 270PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 270PLUS

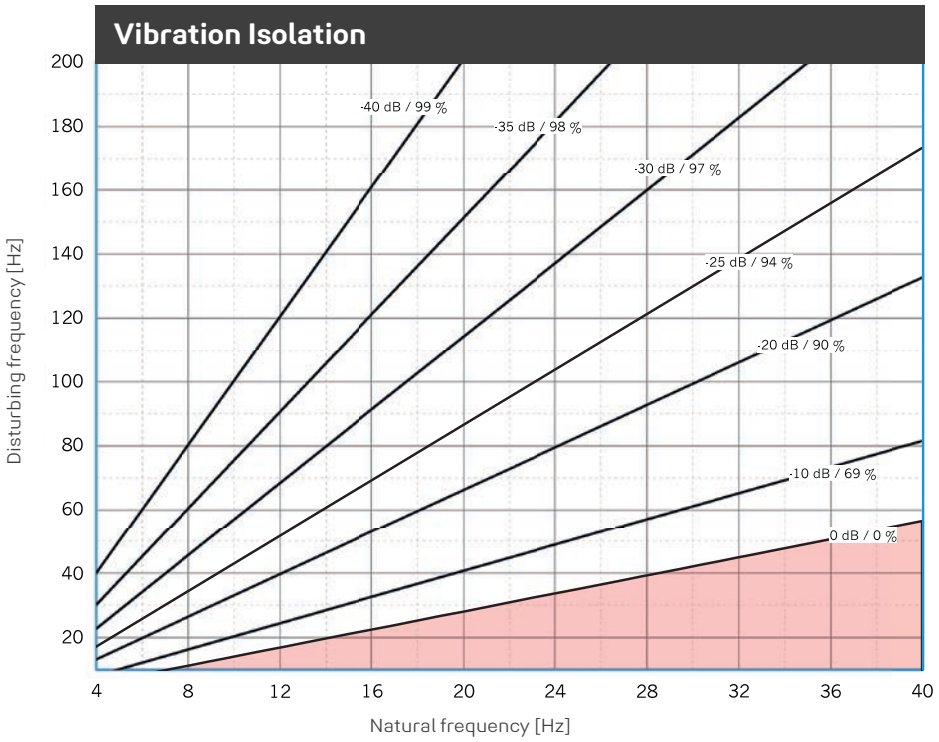
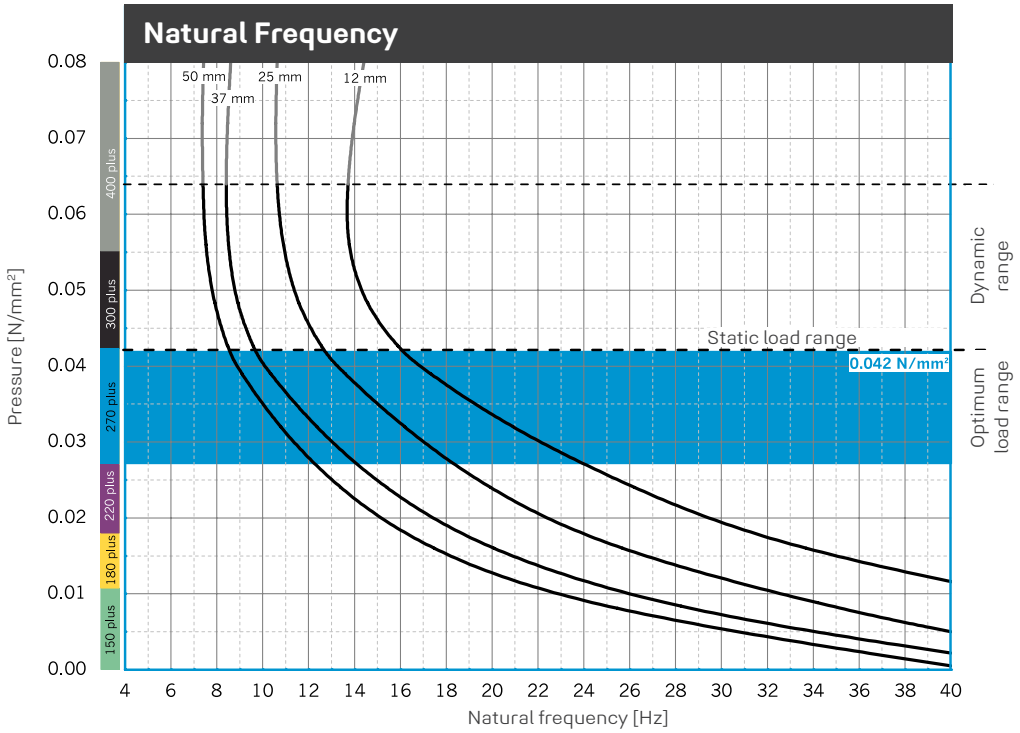
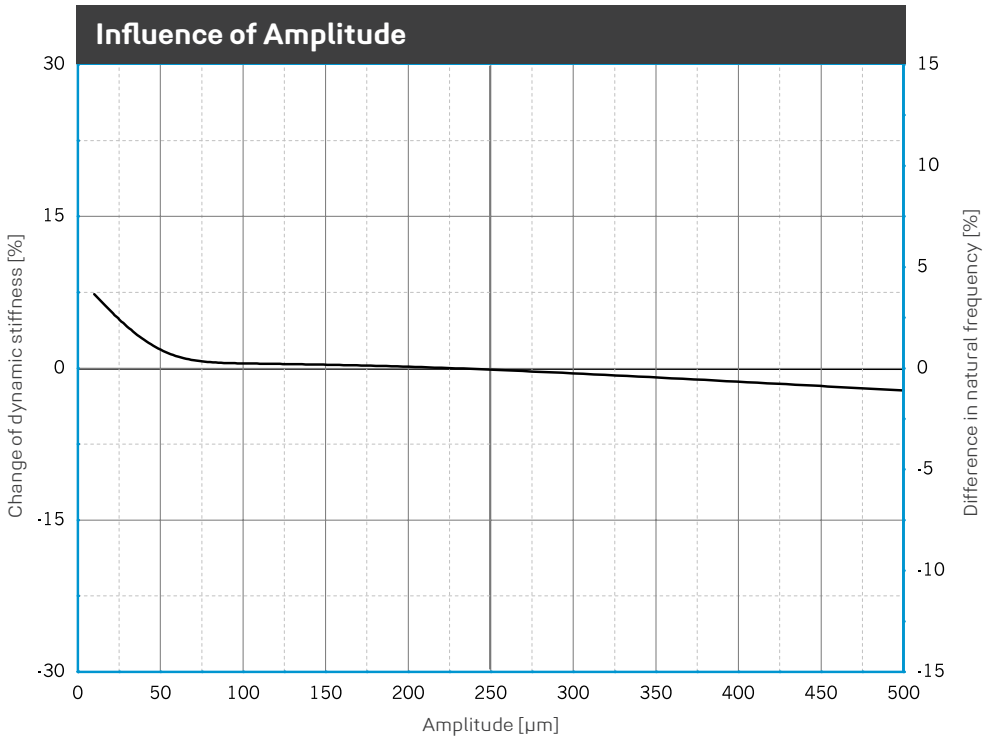


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 270plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

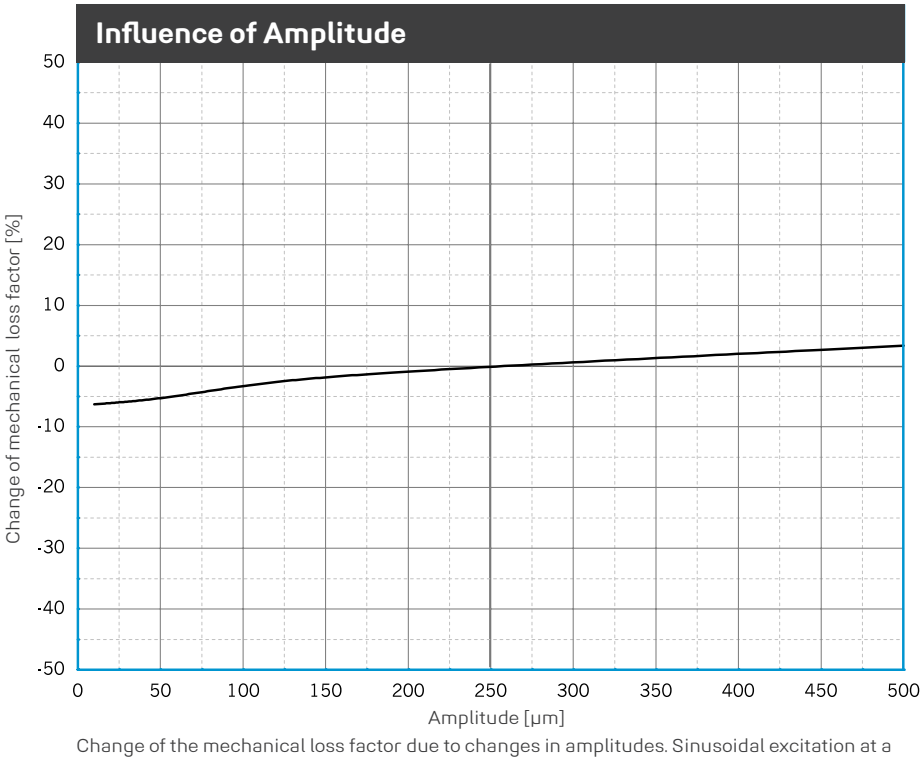


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 270plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 270PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.042 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.042 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 270PLUS

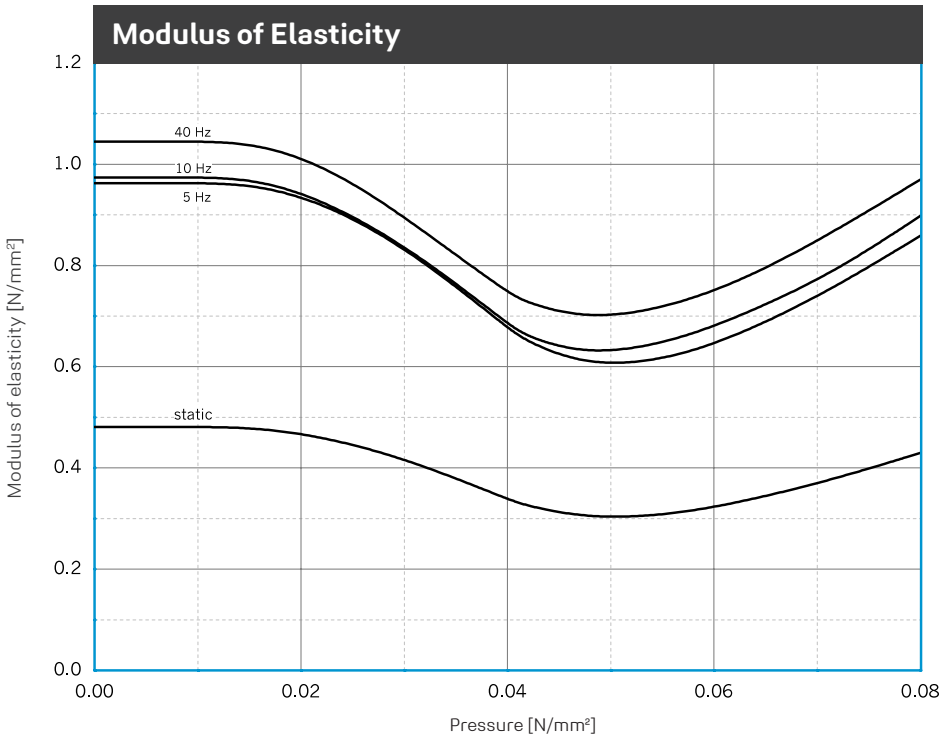


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

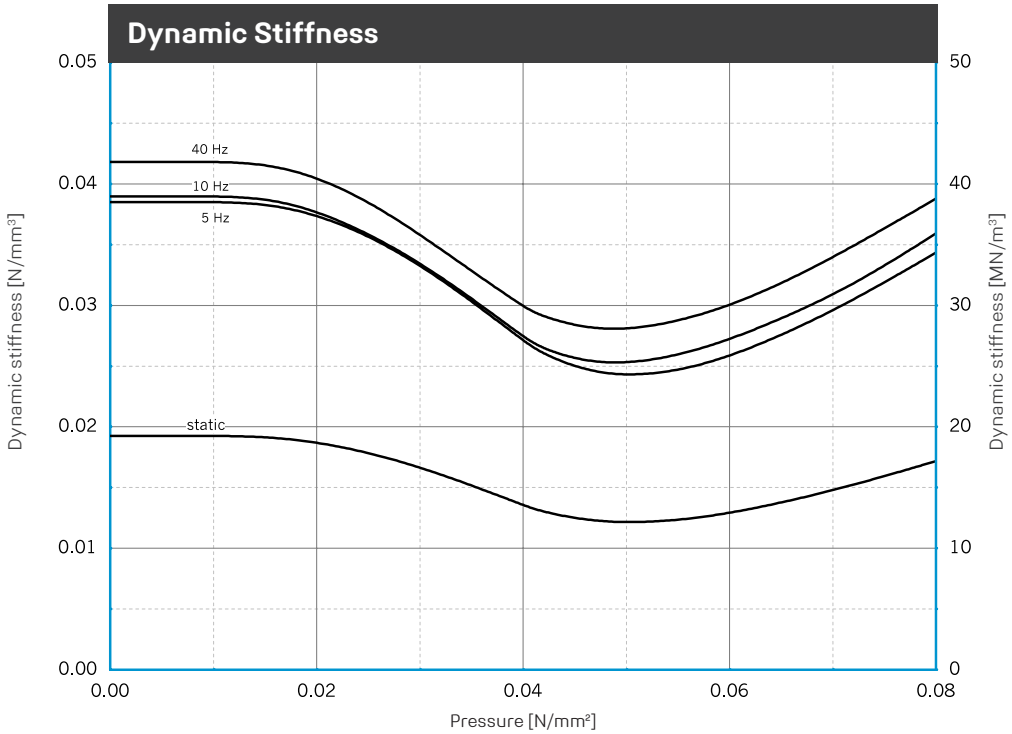
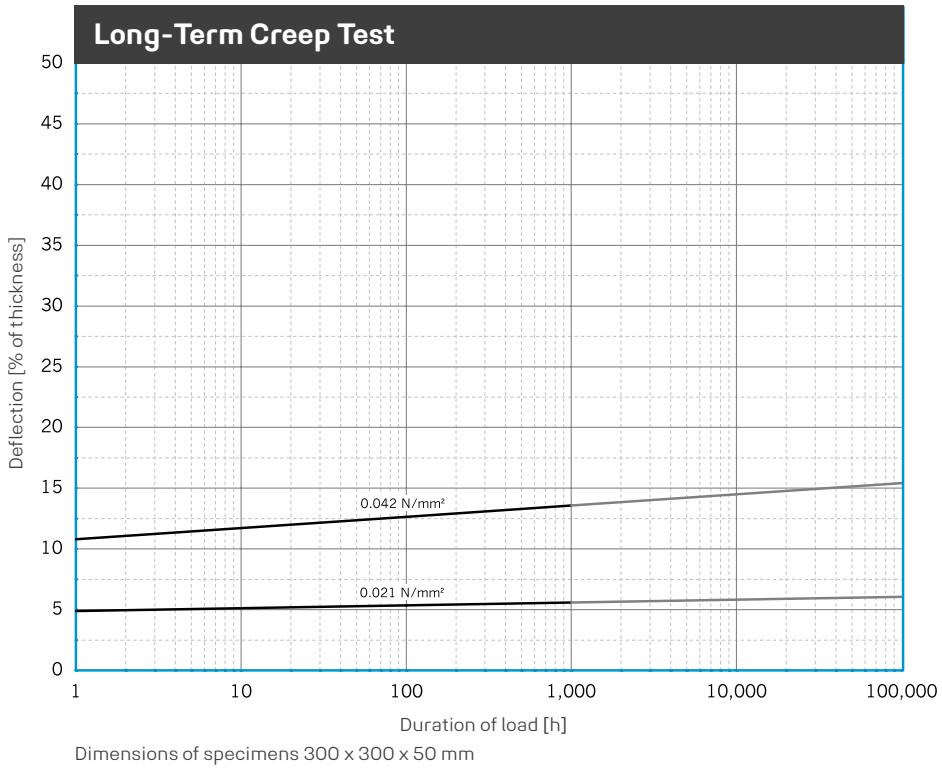


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 270PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

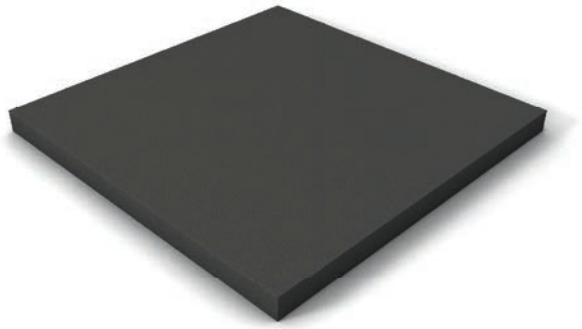
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

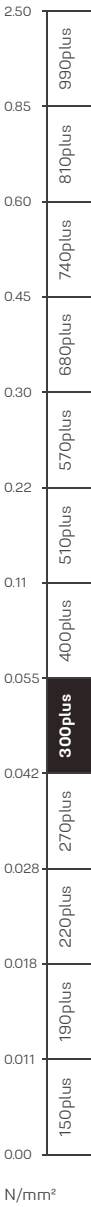
REGUFOAM VIBRATION 300PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 5,000 mm, special lengths available
Width: 1,500 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

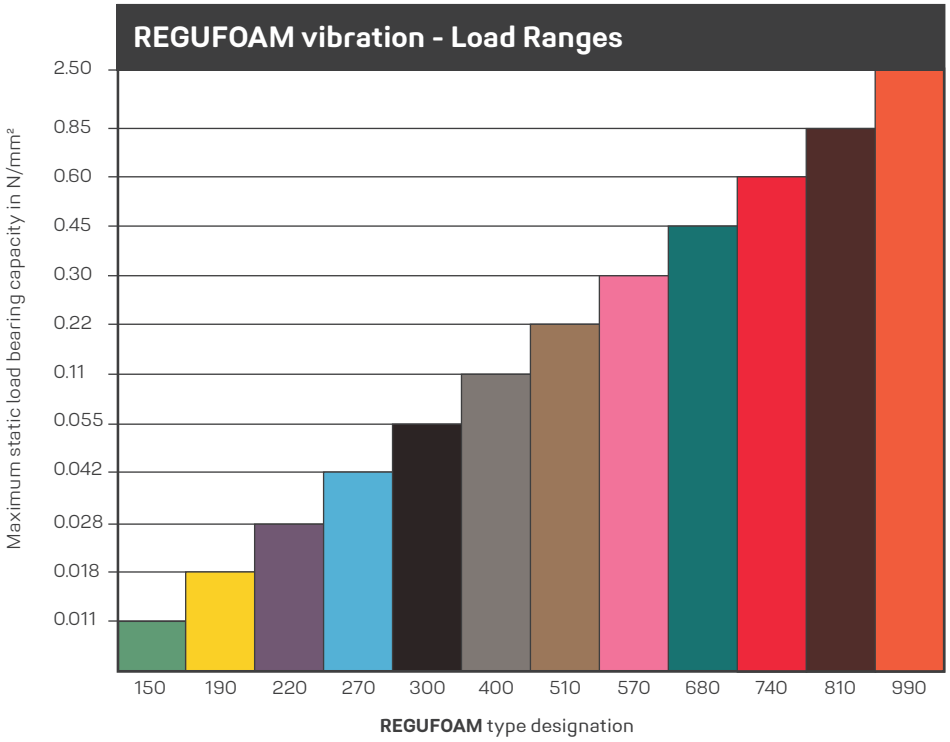
Maximum static load bearing capacity
0.055 N/mm²

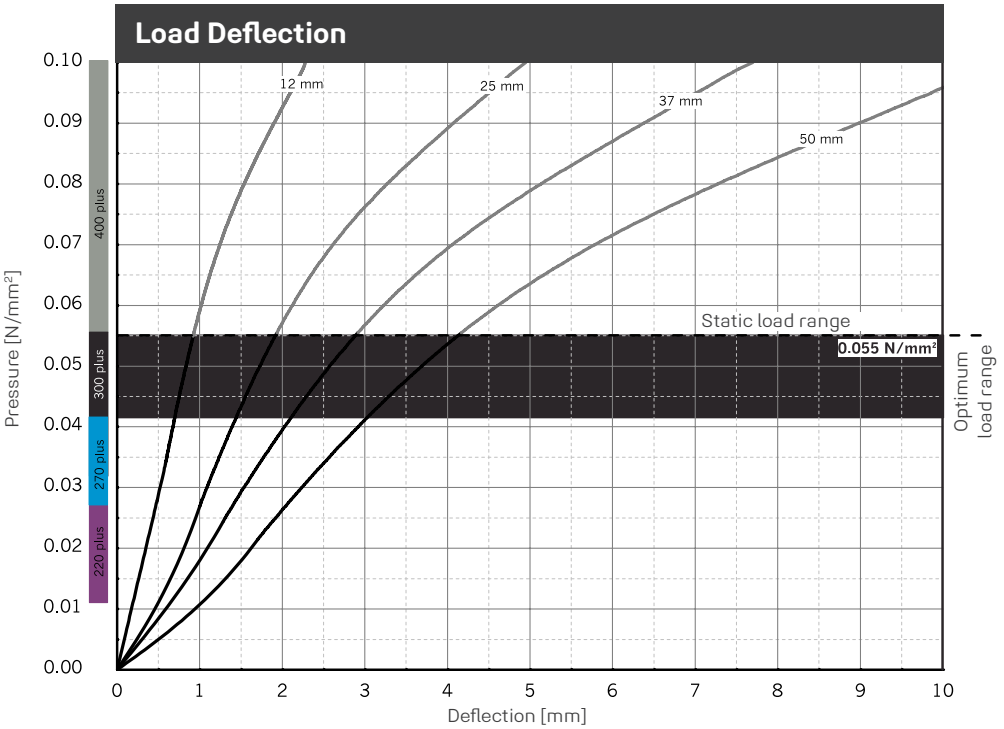
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.080 N/mm²

Rare, short term peak loads
up to 2.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.35 - 0.58 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.68 - 1.25 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.18	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.4 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	1.2 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	240 %	
Tear resistance	Based on DIN ISO 34-1	4.8 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.6 0.75	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	82 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	44 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	72 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 300PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 300PLUS

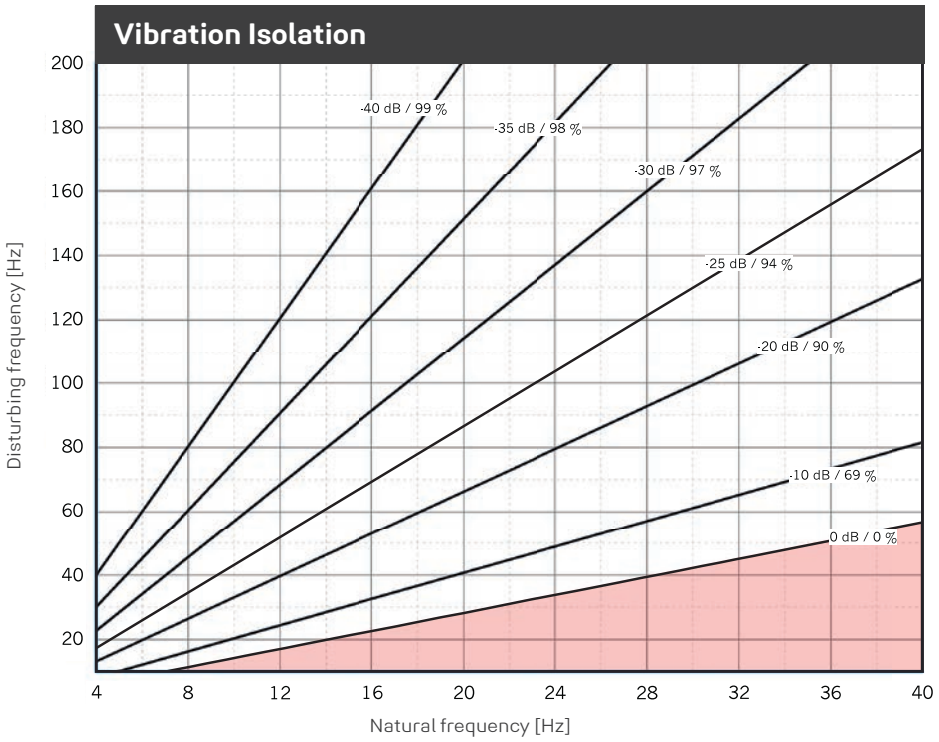
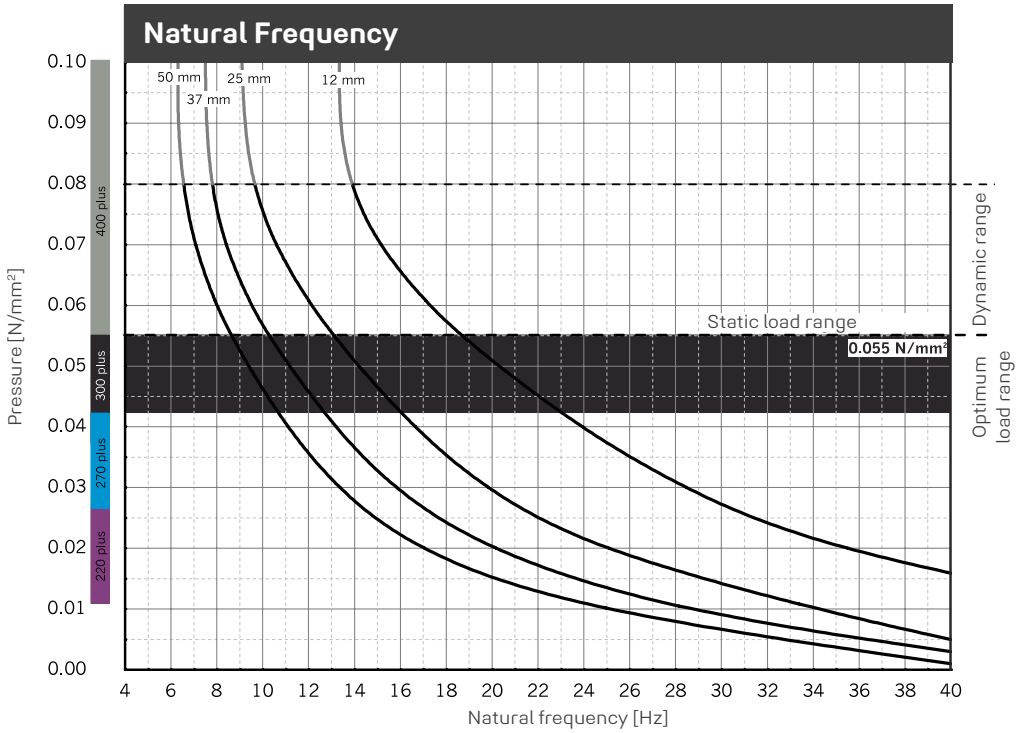
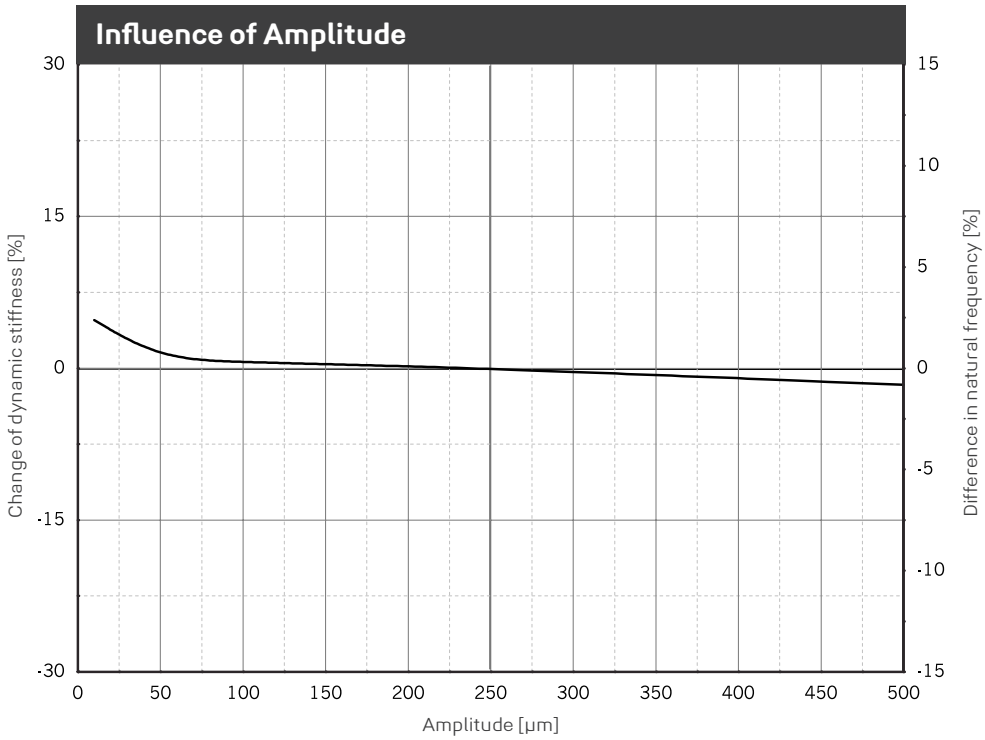


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 300plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

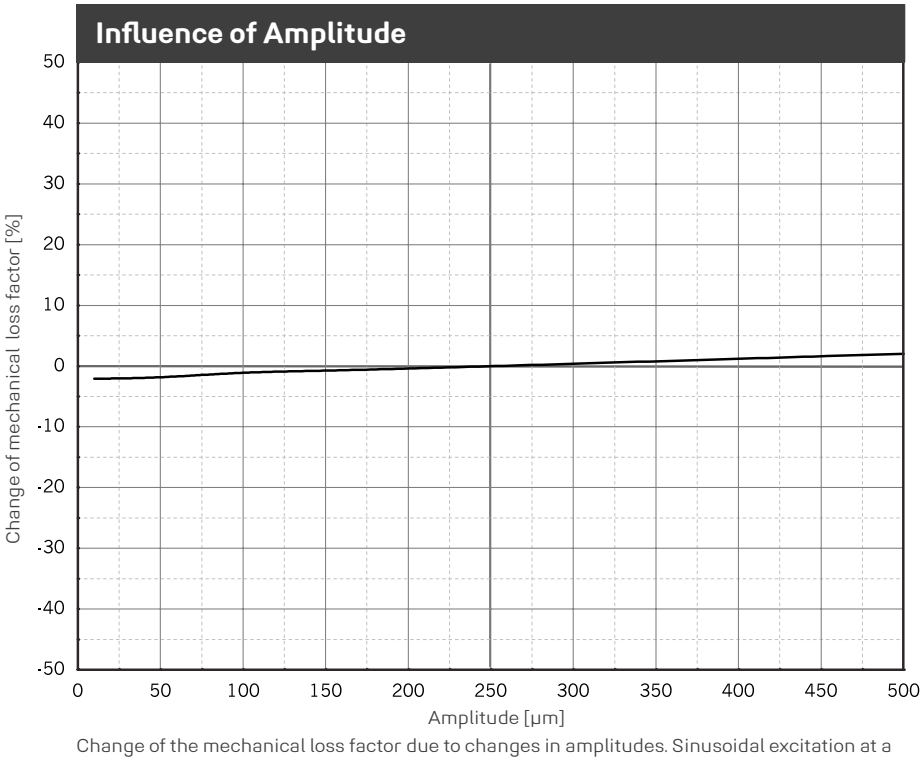


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 300plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 300PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.055 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.055 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 300PLUS

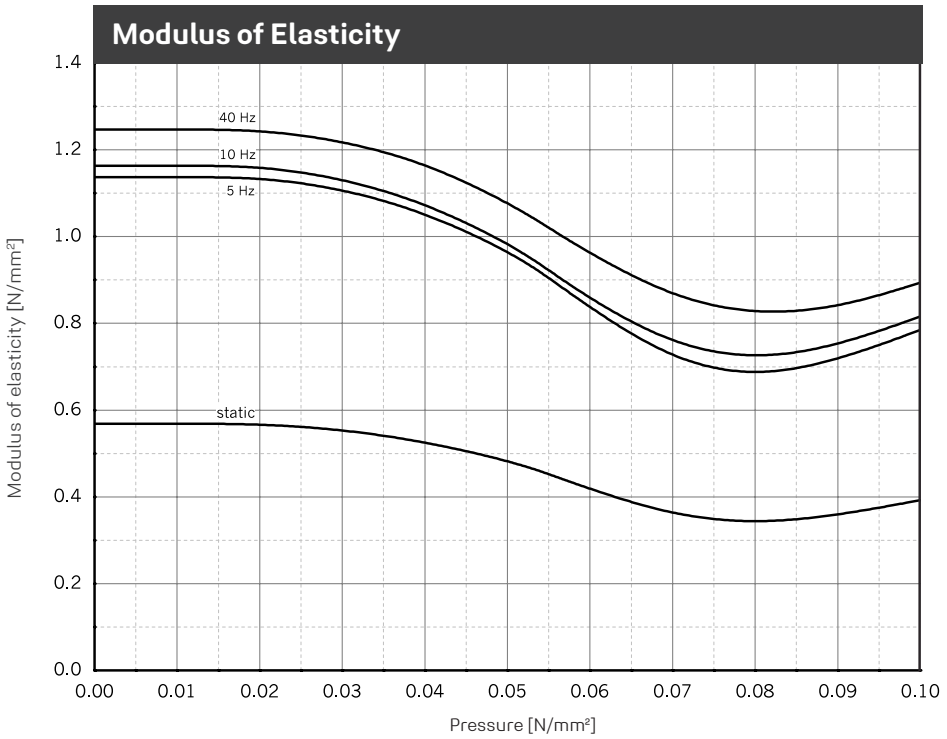


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

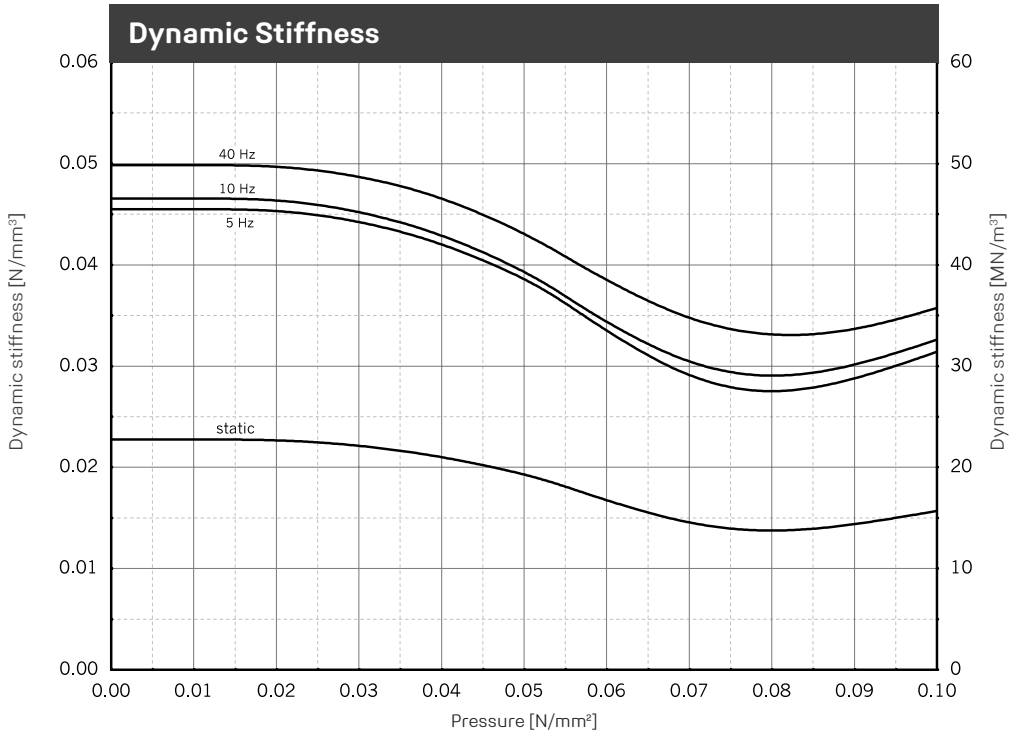
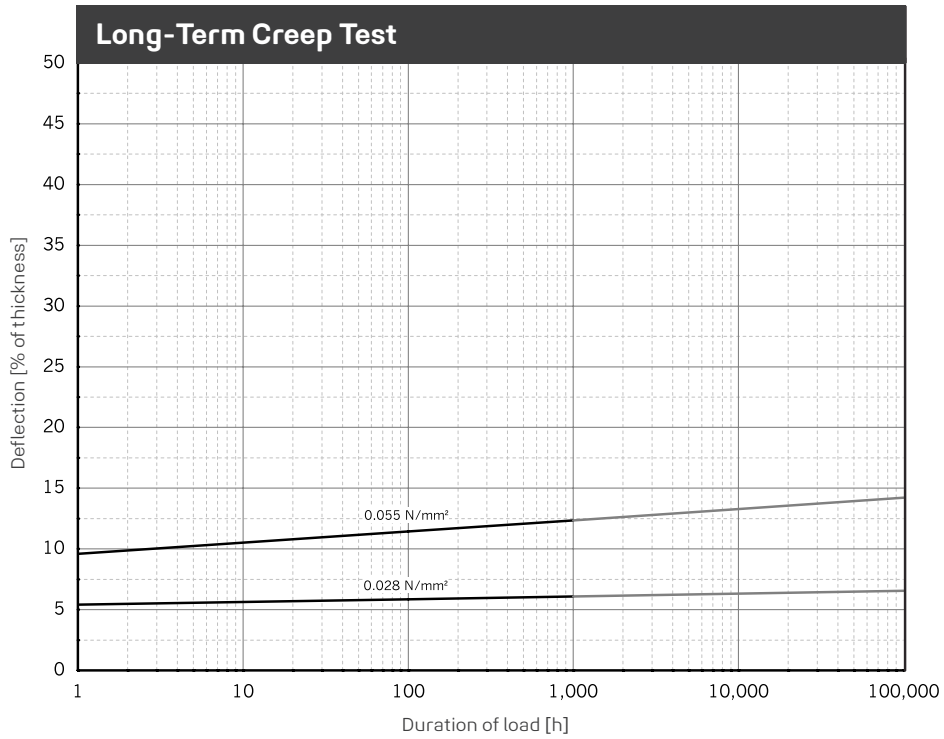


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 300PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

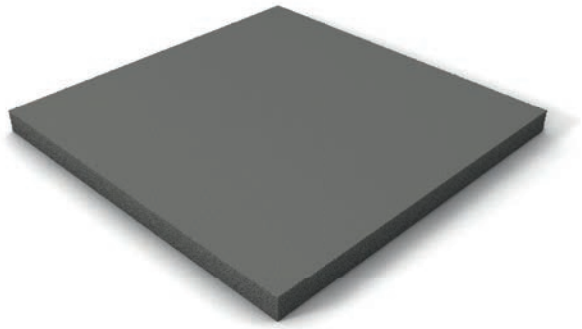
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUFOAM VIBRATION 400PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible



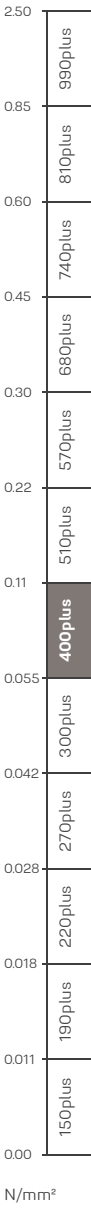
Technical Details

Maximum static load bearing capacity
0.110 N/mm²

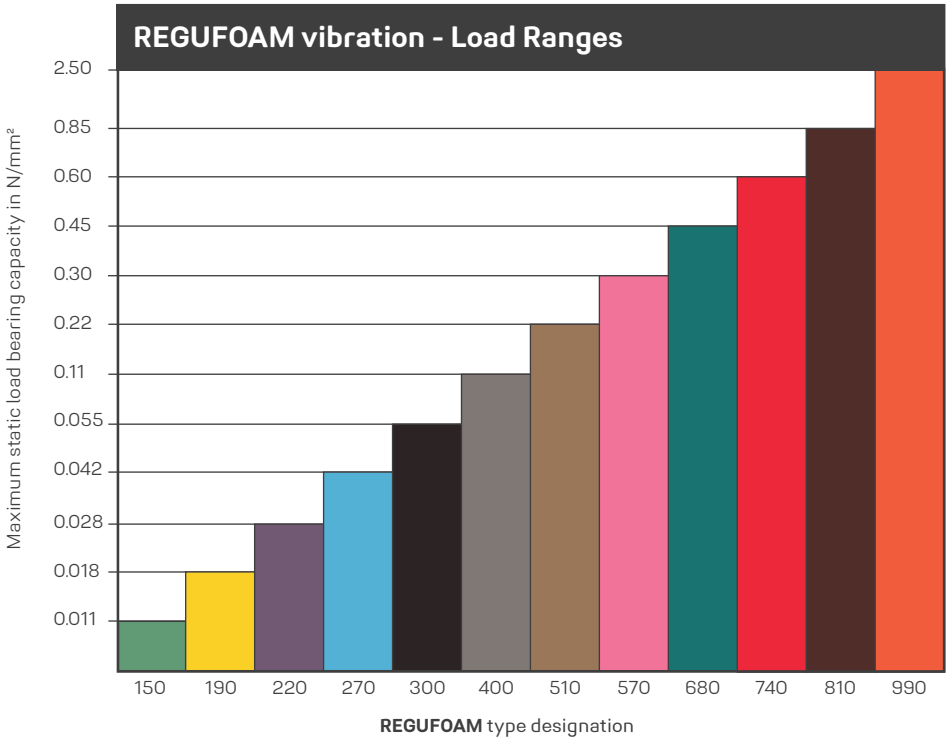
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.160 N/mm²

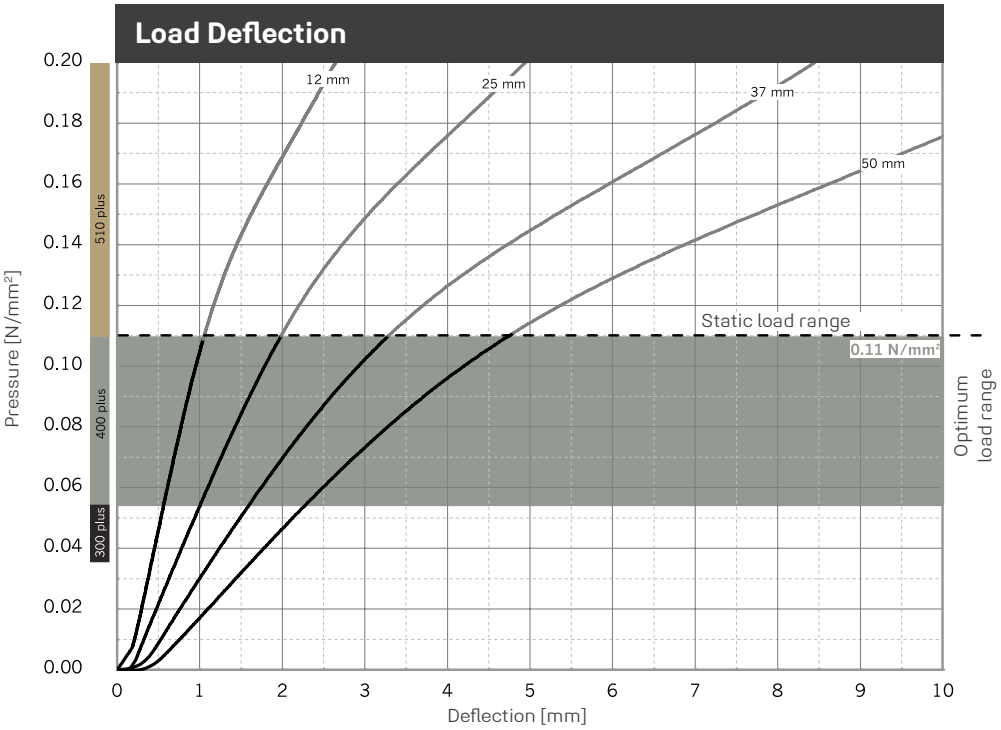
Rare, short term peak loads
up to 3.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.6 - 1.0 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	1.2 - 2.0 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.17	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.9 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	1.5 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	220 %	
Tear resistance	Based on DIN ISO 34-1	6.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	170 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	57 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	68 %	dependent on thickness, test specimen h = 25 mm



REGUFOAM VIBRATION 400PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 400PLUS

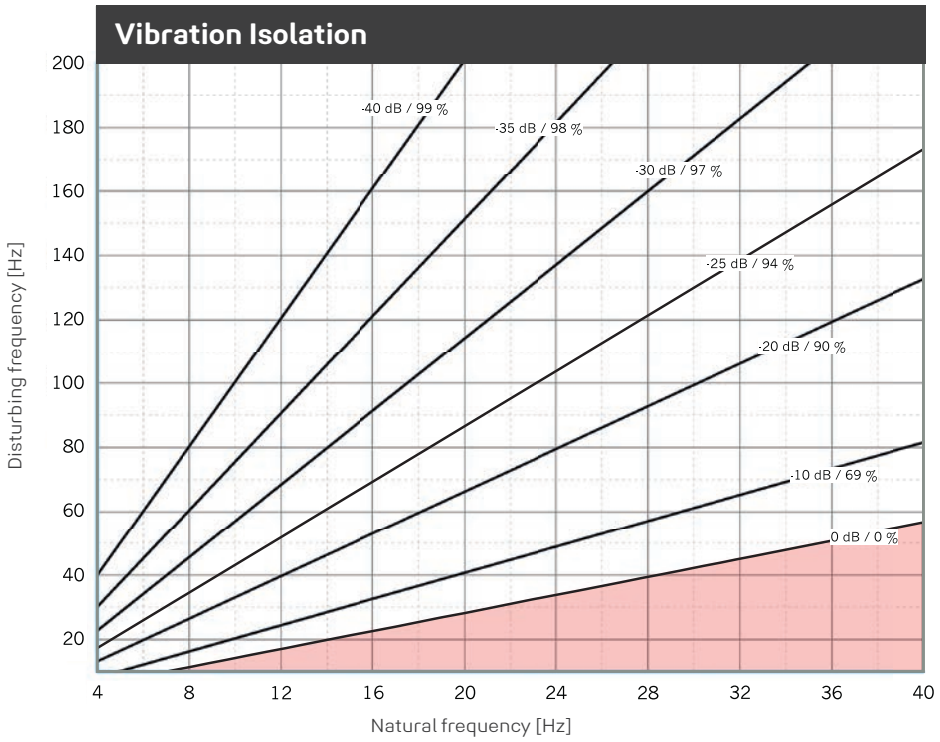
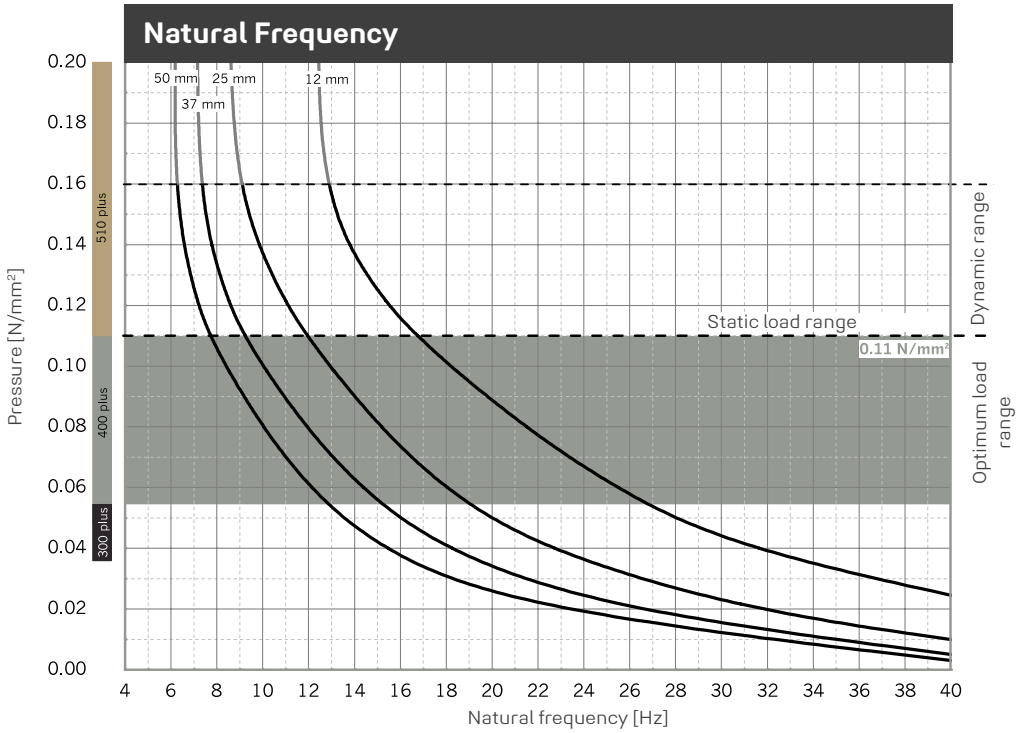
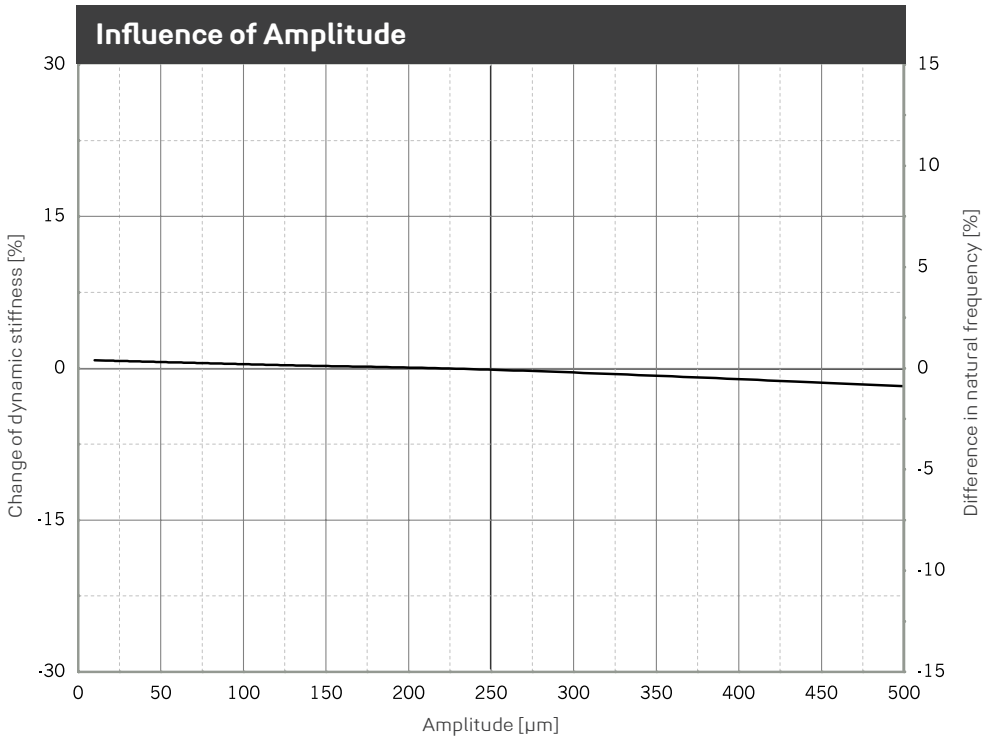


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 400plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

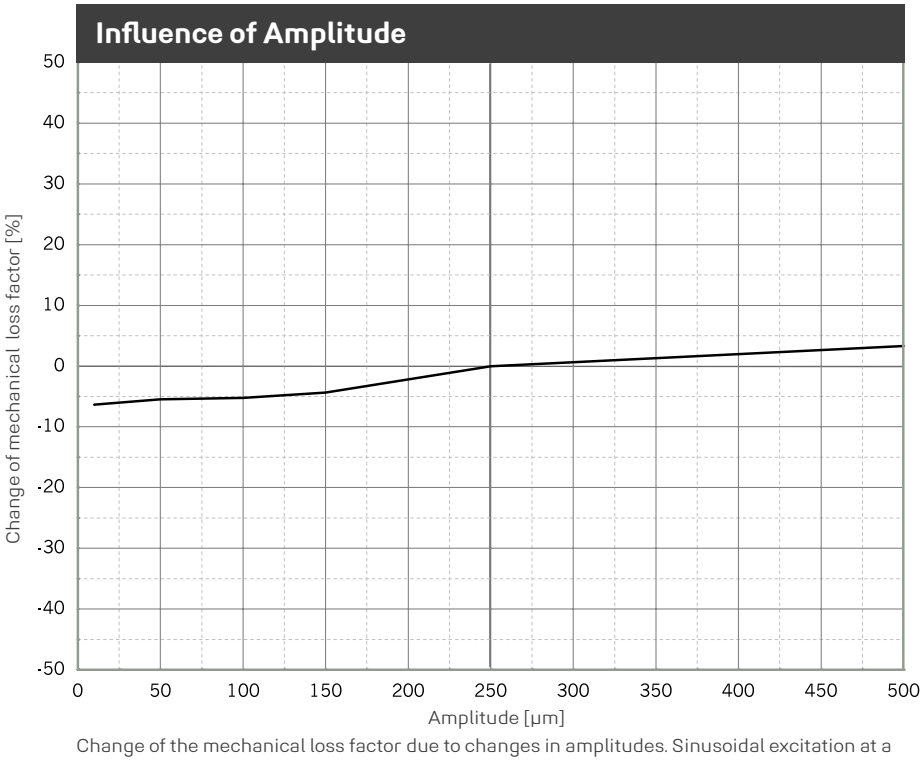


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 400plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 400PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.110 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.110 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 400PLUS

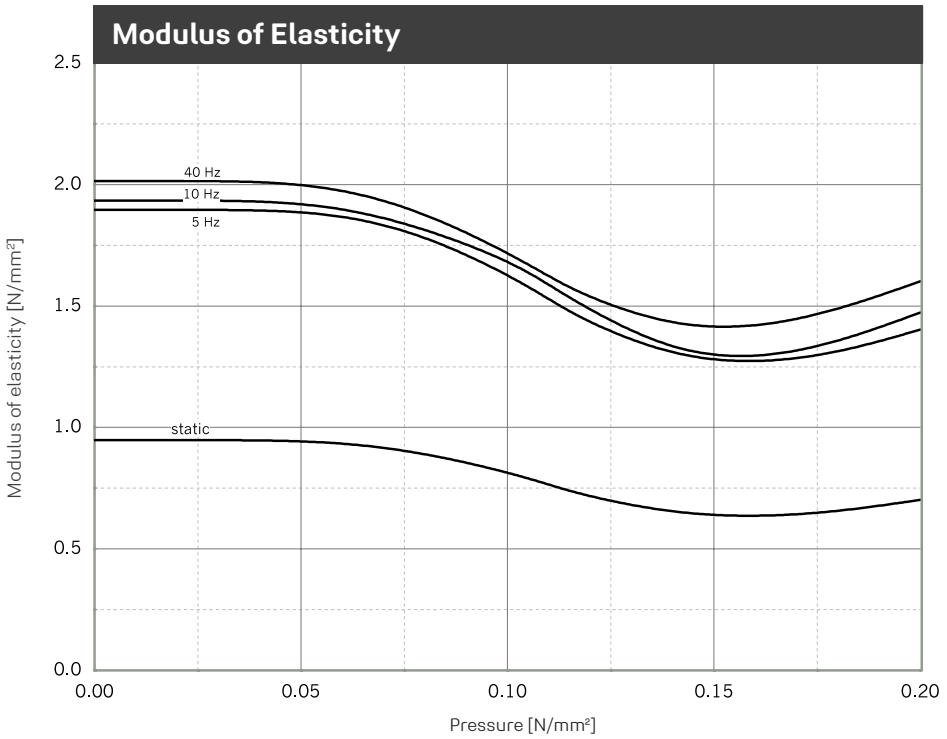


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

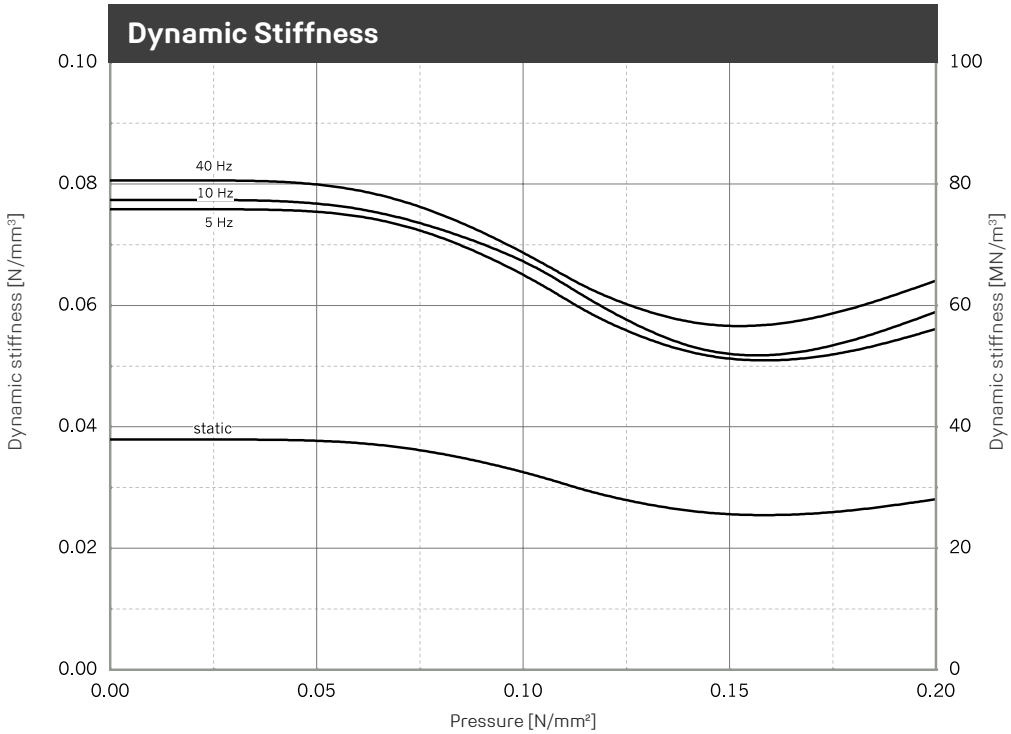
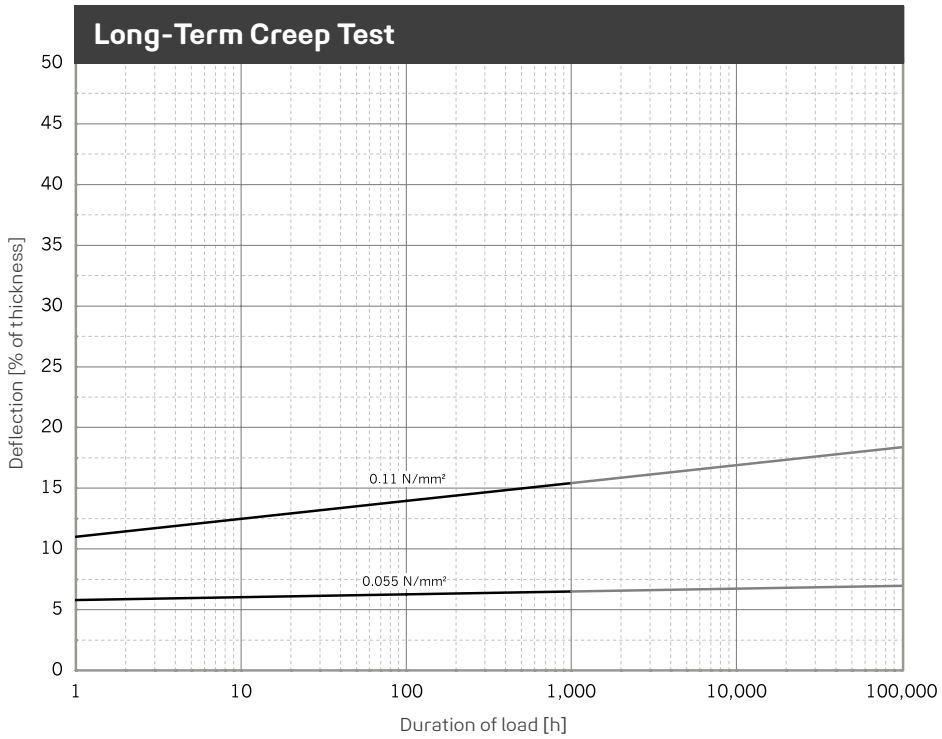


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 400PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

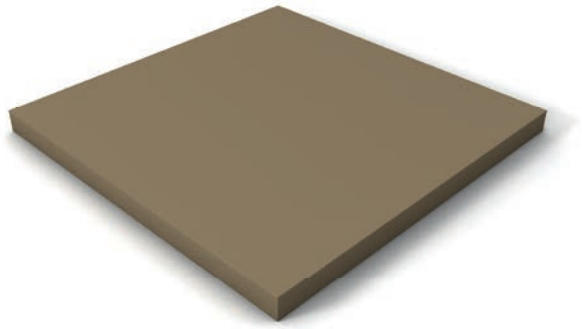
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

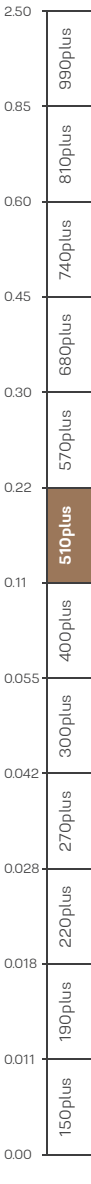
REGUFOAM VIBRATION 510PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

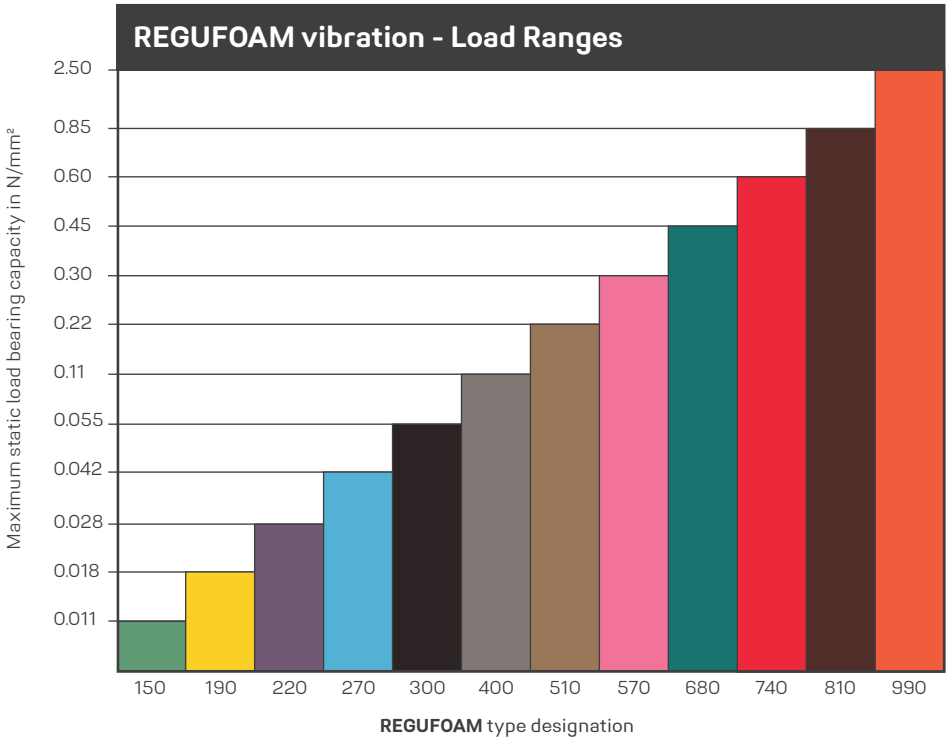
Maximum static load bearing capacity
0.220 N/mm²

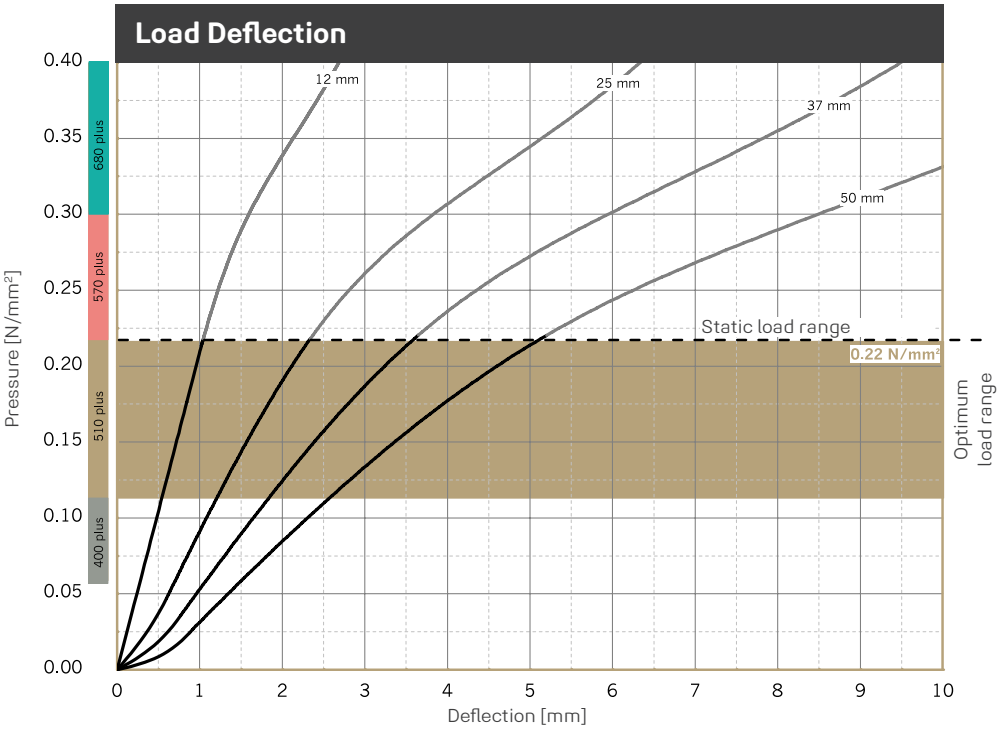
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.320 N/mm²

Rare, short term peak loads
up to 4.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	1.1 - 1.7 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	2.2 - 3.7 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.15	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.2 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	2.4 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	240 %	
Tear resistance	Based on DIN ISO 34-1	9.3 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	330 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	60 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	61 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 510PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 510PLUS

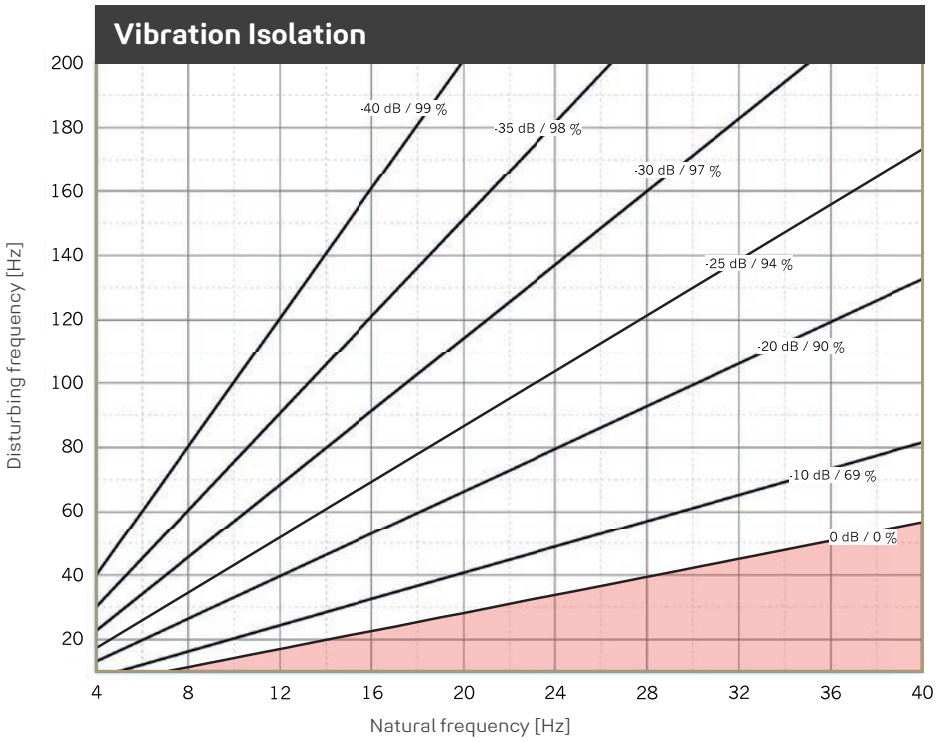
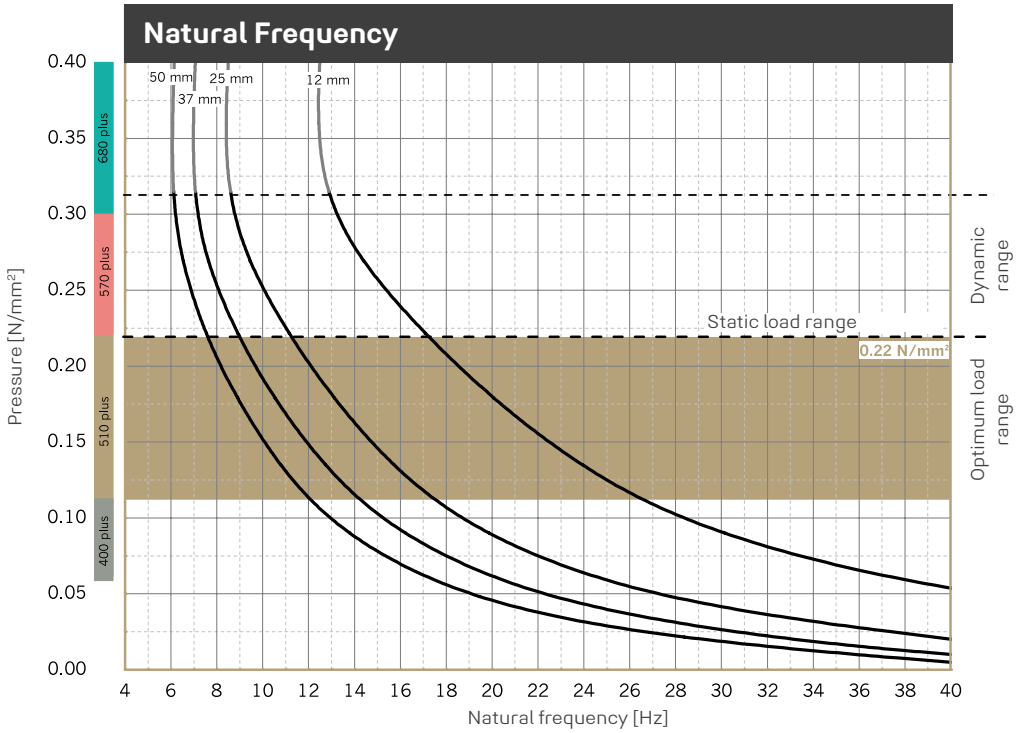
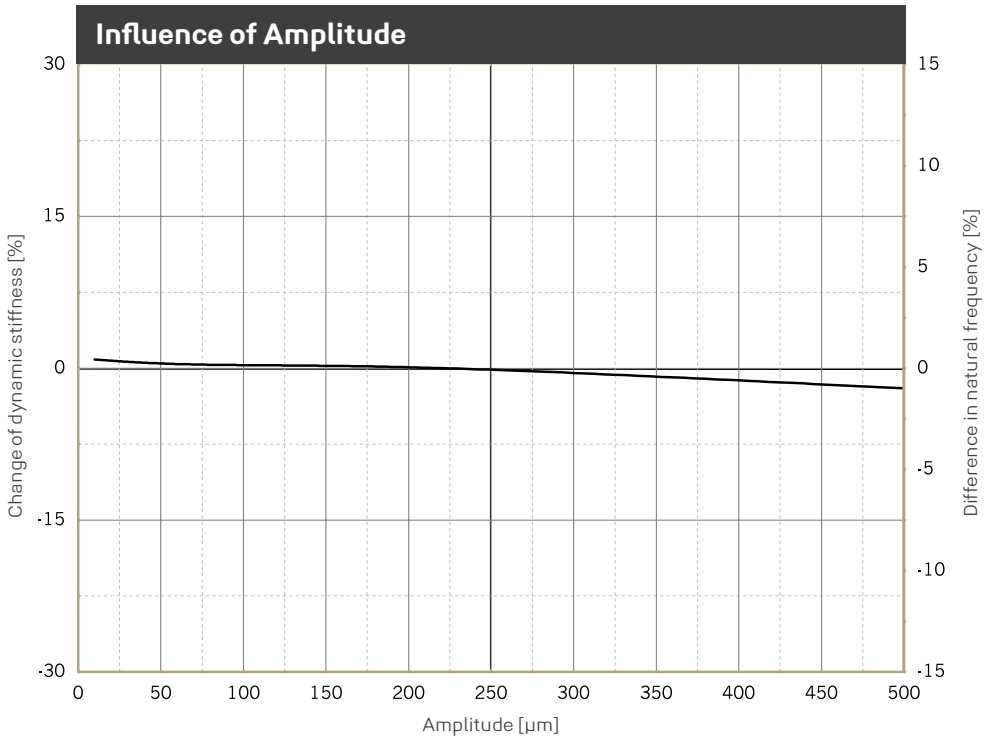


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 510plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

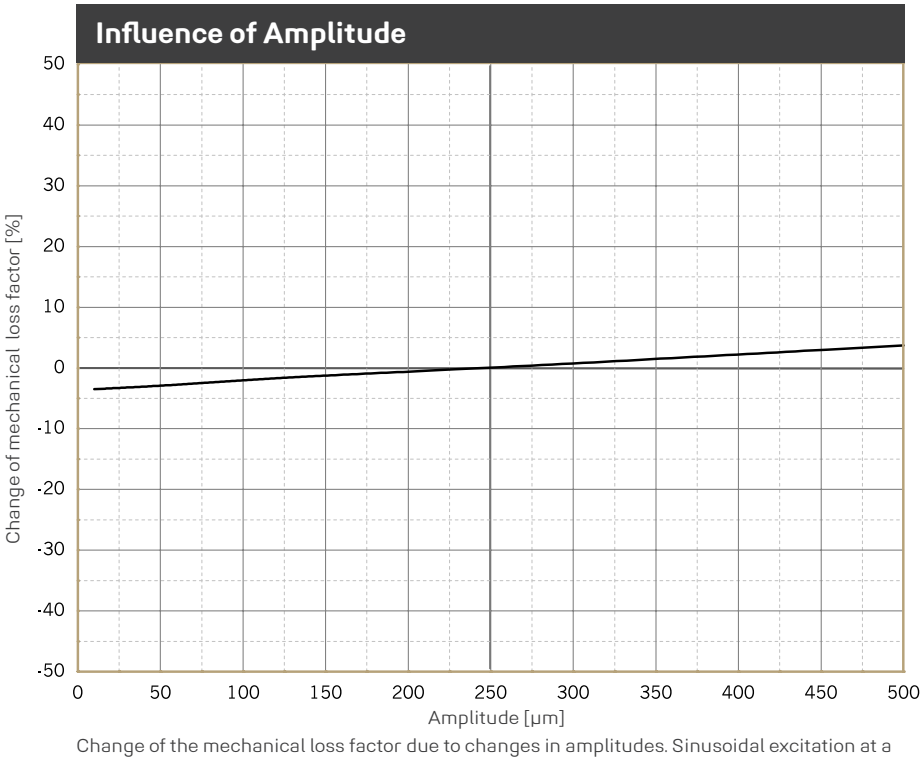


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 510plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 510PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.220 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.220 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 510PLUS

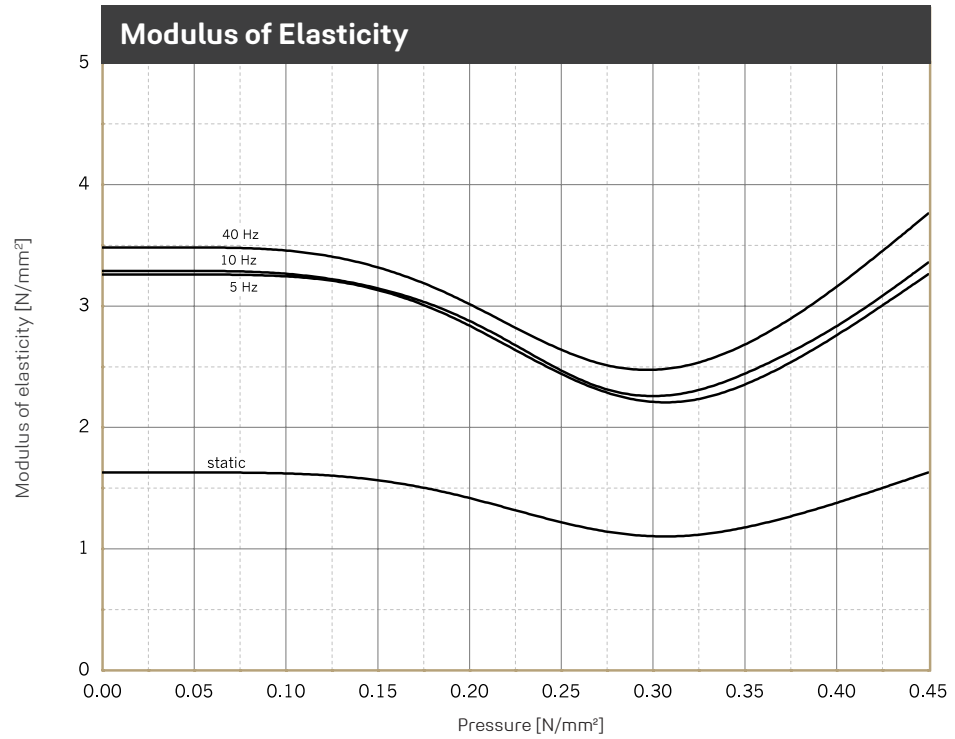


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

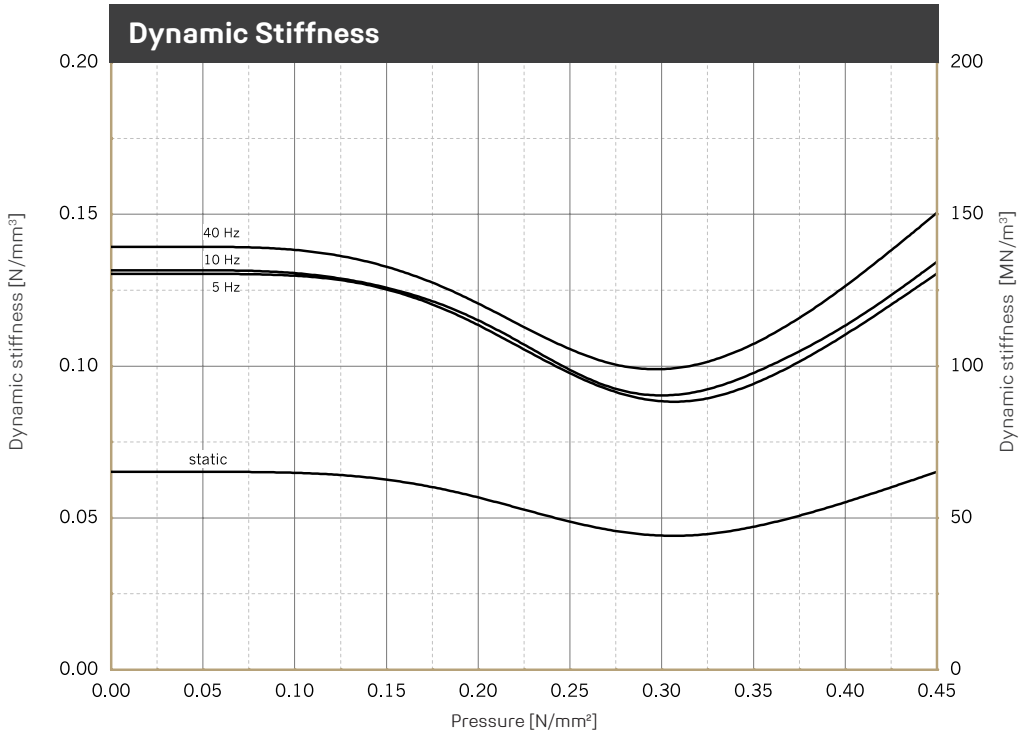
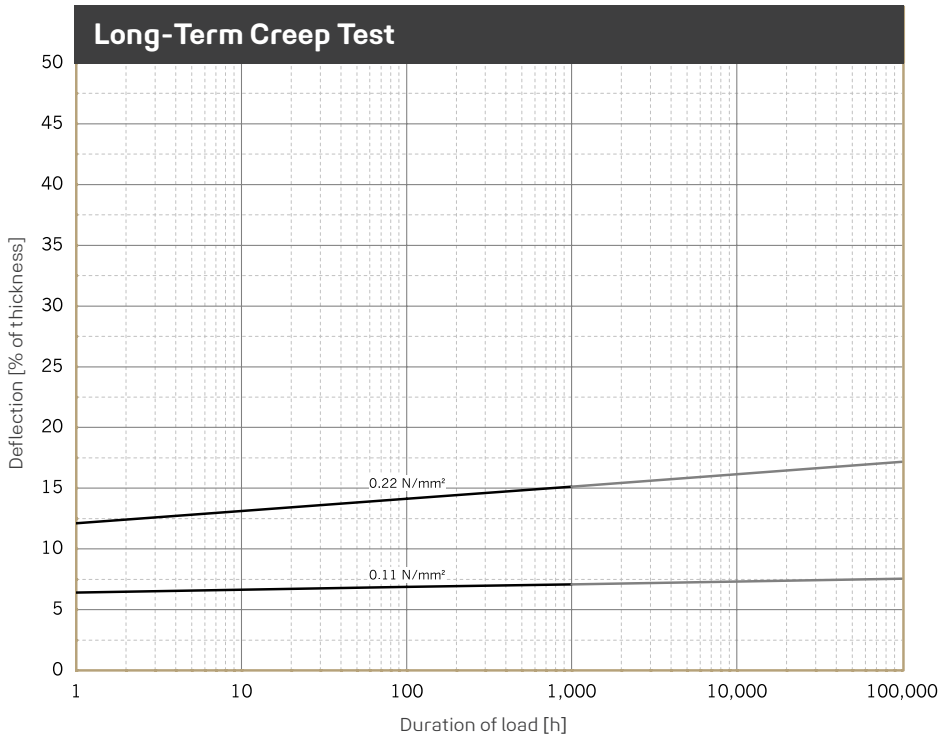


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 510PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

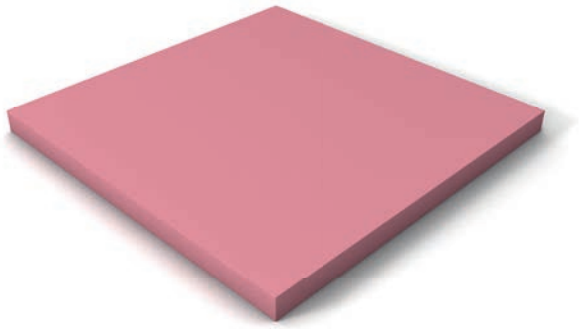
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

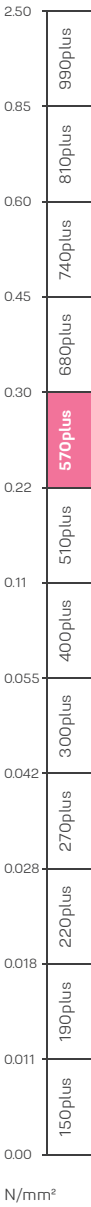
REGUFOAM VIBRATION 570PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

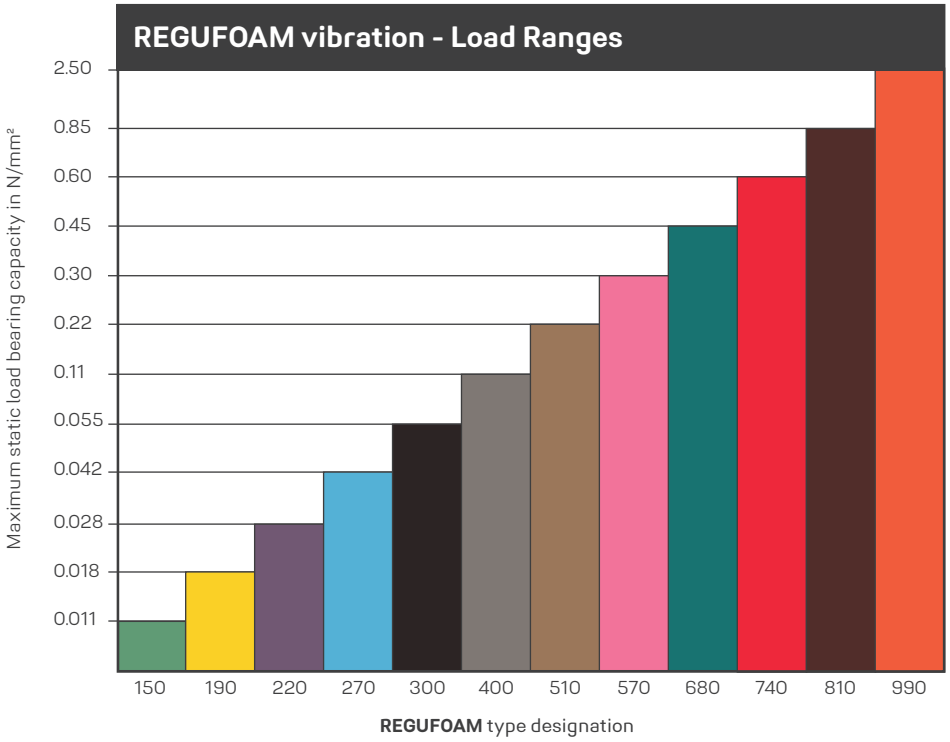
Maximum static load bearing capacity
0.300 N/mm²

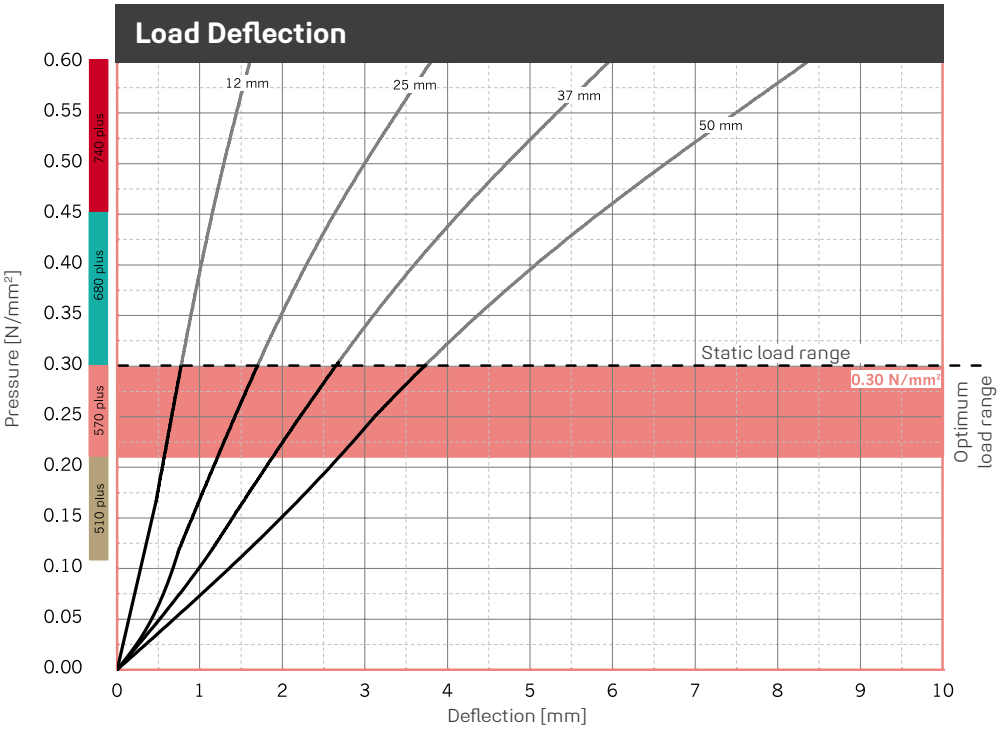
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.420 N/mm²

Rare, short term peak loads
up to 4.500 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	2.6 - 2.9 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	5.3 - 6.5 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.14	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.4 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	2.9 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	210 %	
Tear resistance	Based on DIN ISO 34-1	14.1 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.6 0.7	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	620 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	58 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	50 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 570PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 570PLUS

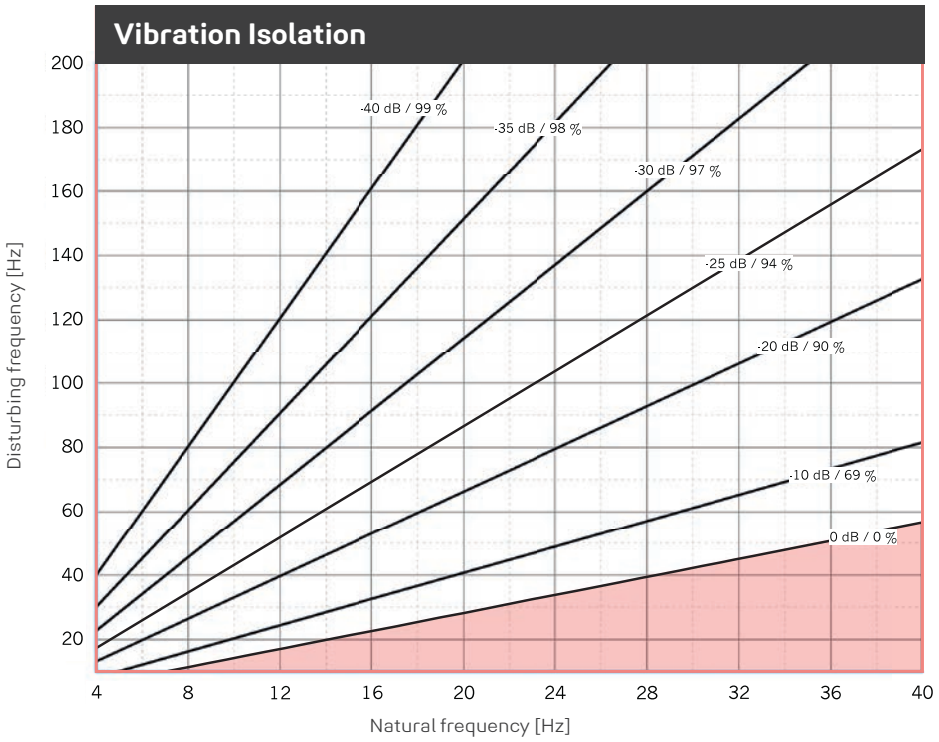
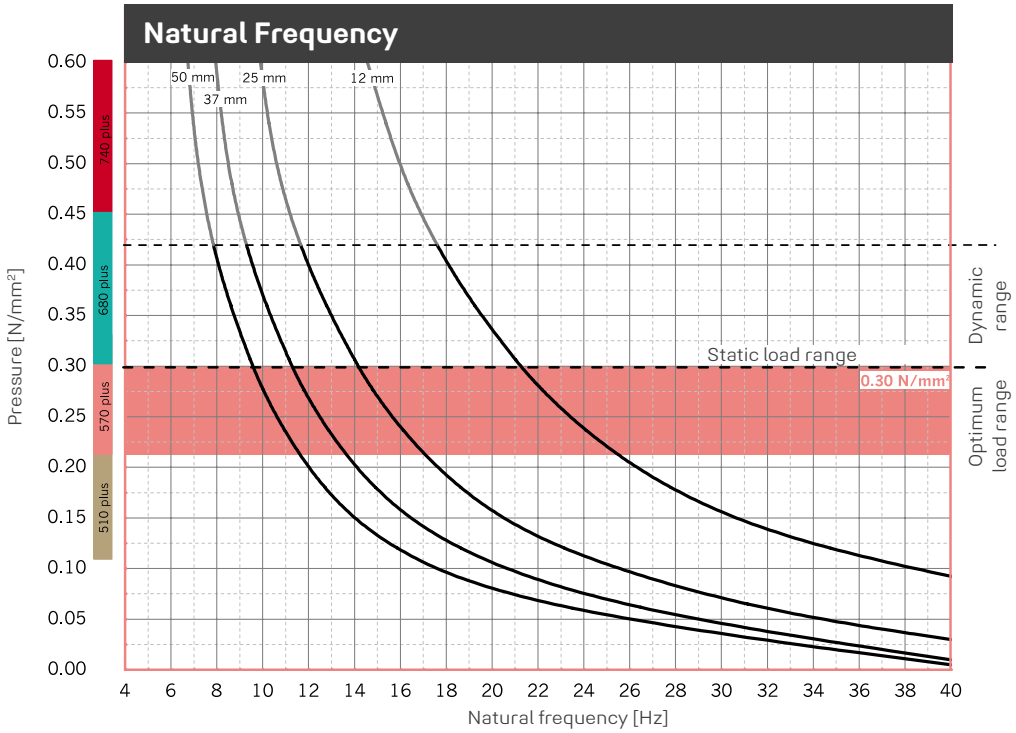
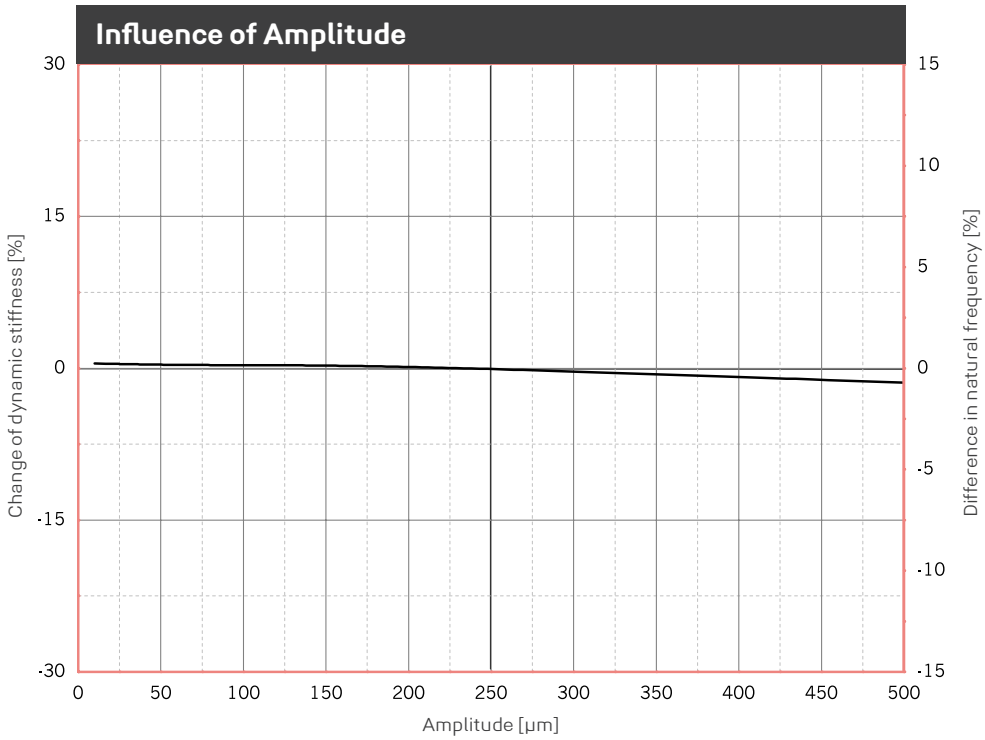


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 570plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

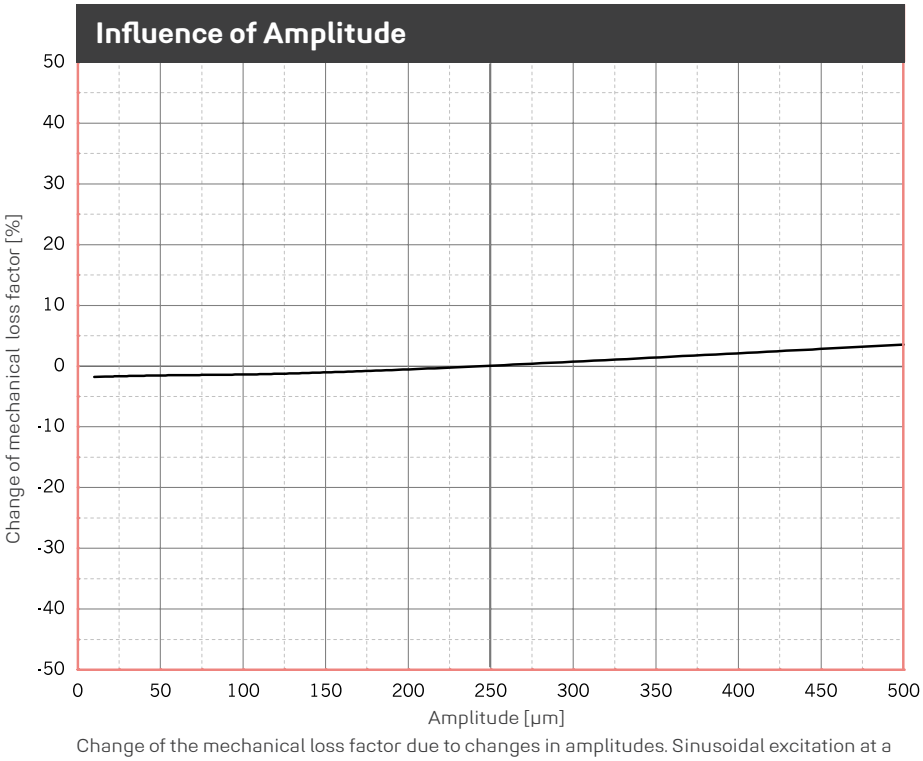


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 570plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 570PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.300 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.300 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 570PLUS

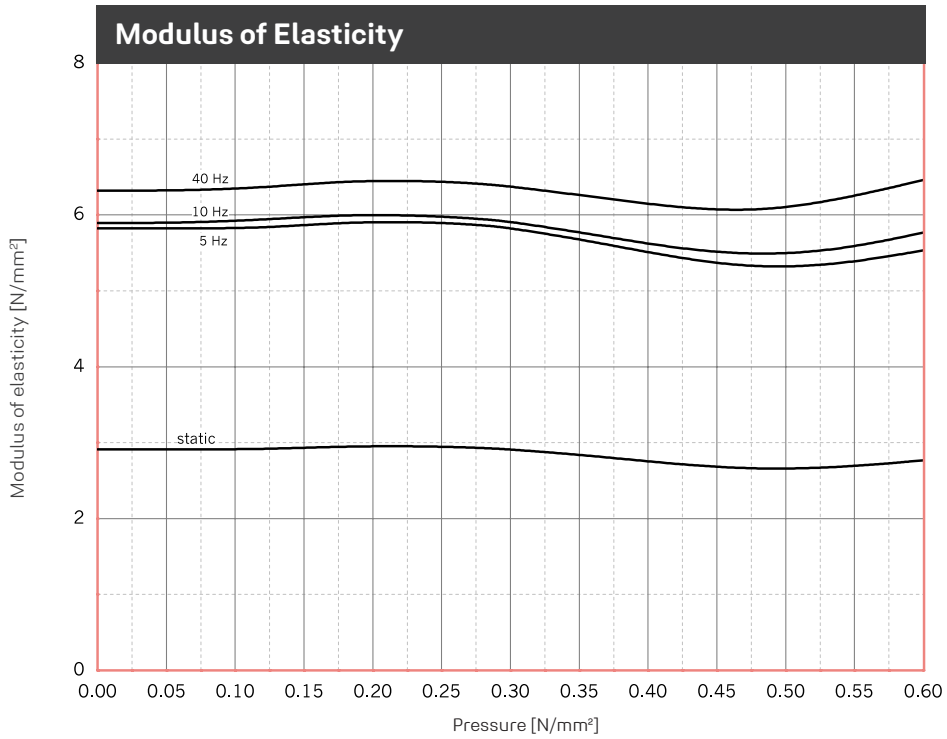


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

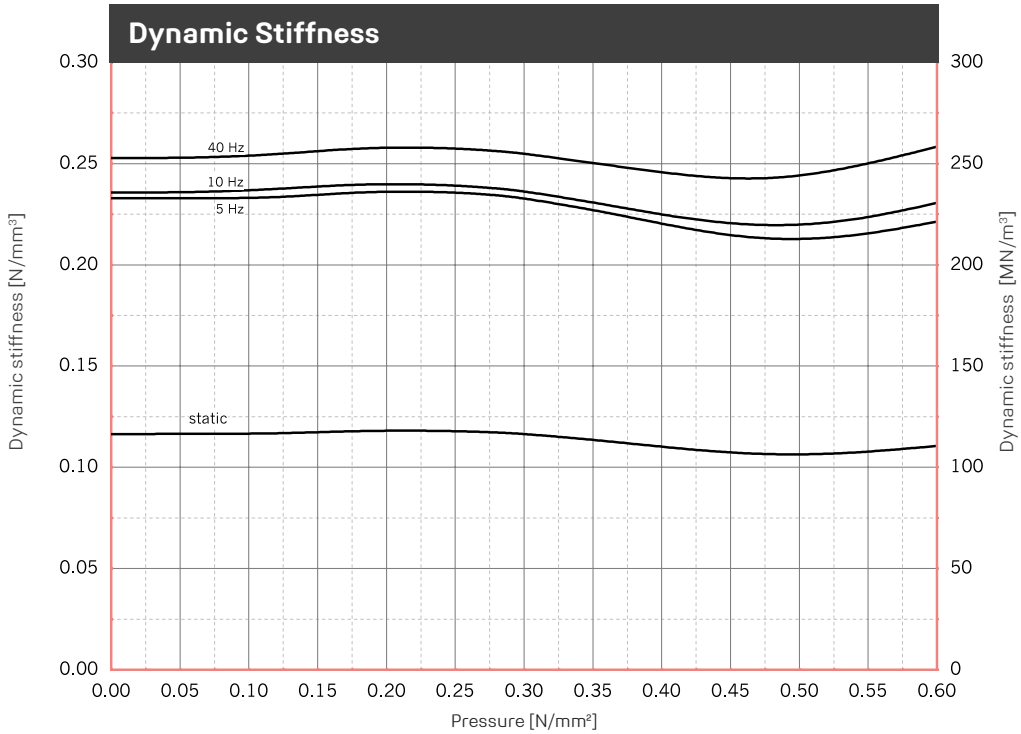
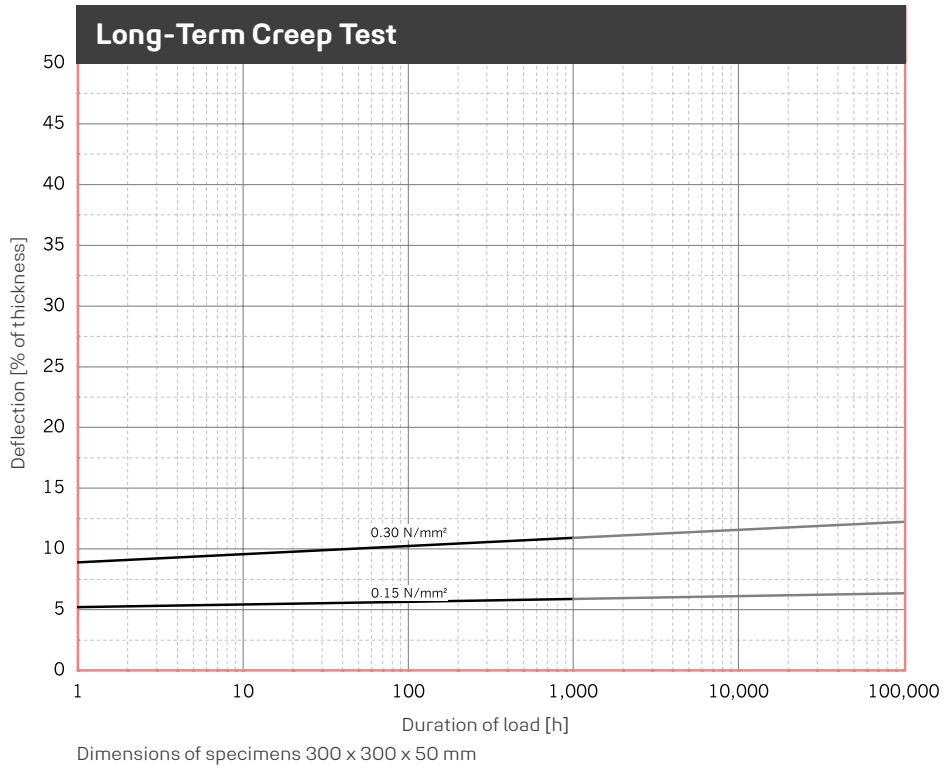


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 570PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

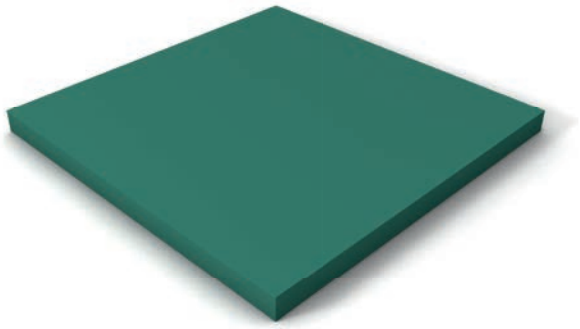
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

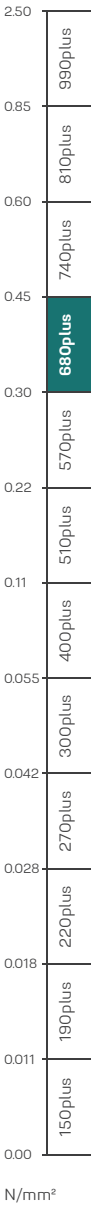
REGUFOAM VIBRATION 680PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

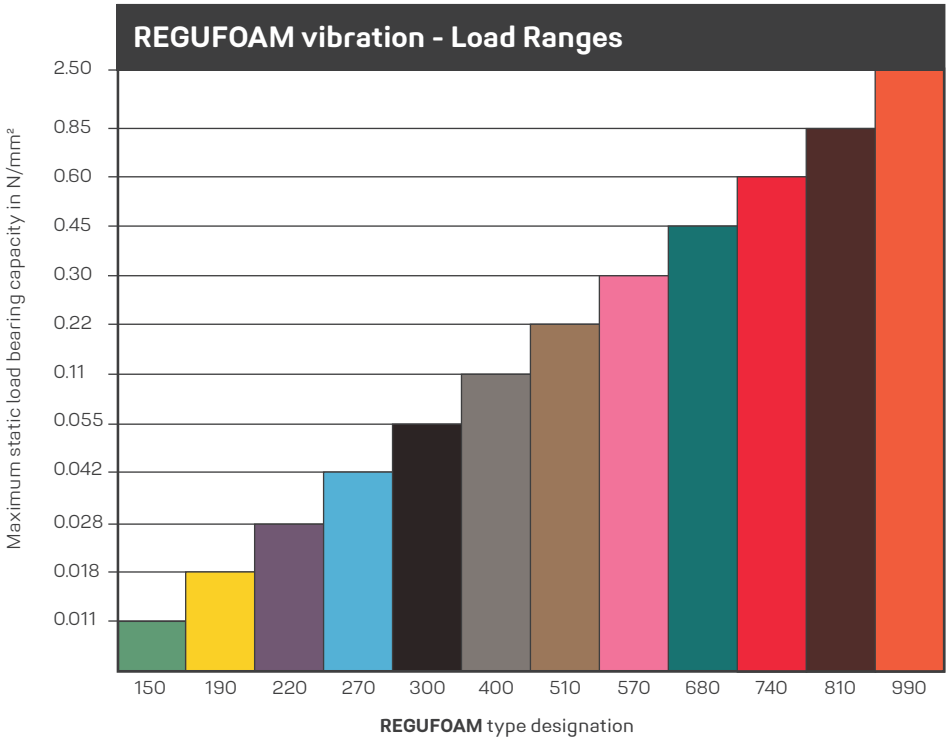
Maximum static load bearing capacity
0.450 N/mm²

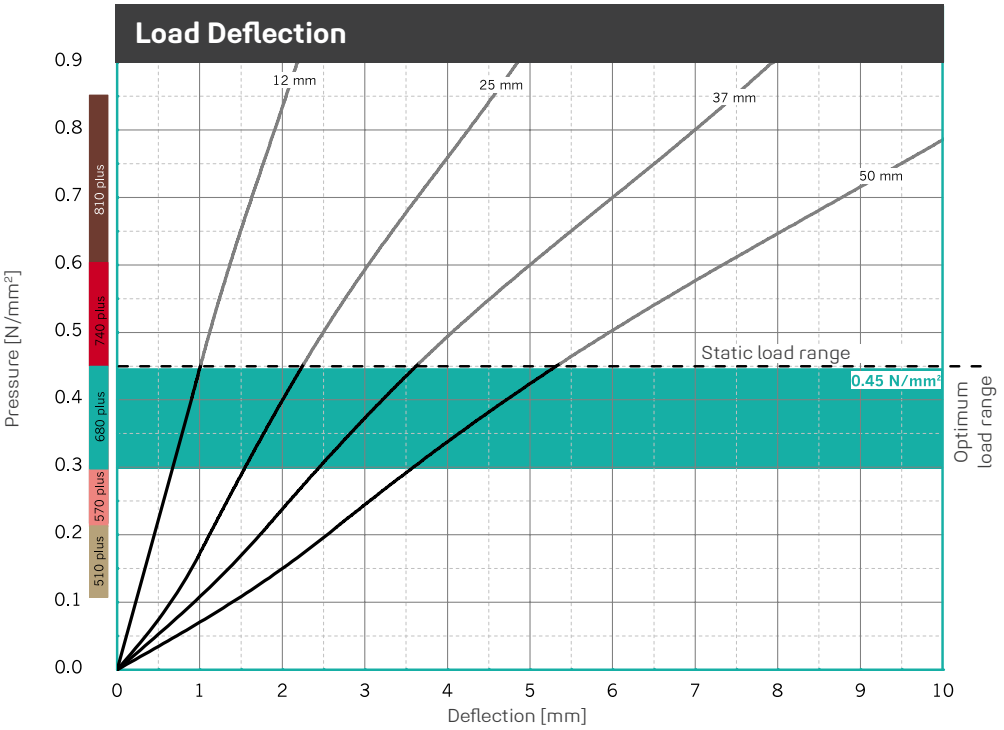
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.620 N/mm²

Rare, short term peak loads
up to 5.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	3.8 - 4.1 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	7.0 - 10.0 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.12	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	6.2 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	3.6 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	230 %	
Tear resistance	Based on DIN ISO 34-1	18.5 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.6 0.7	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	840 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	58 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	44 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 680PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 680PLUS

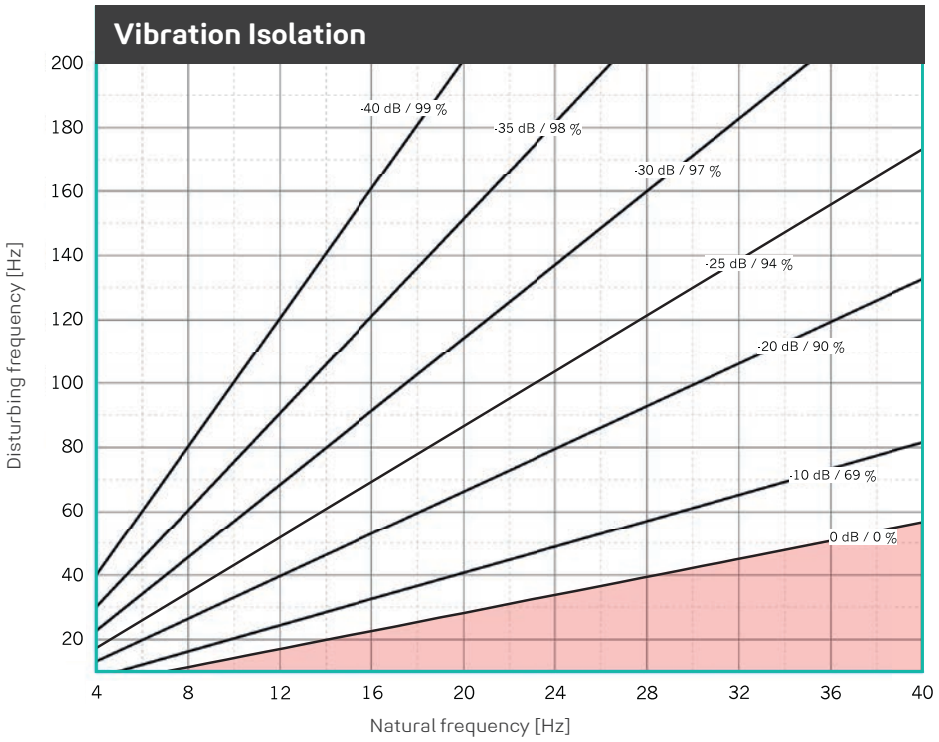
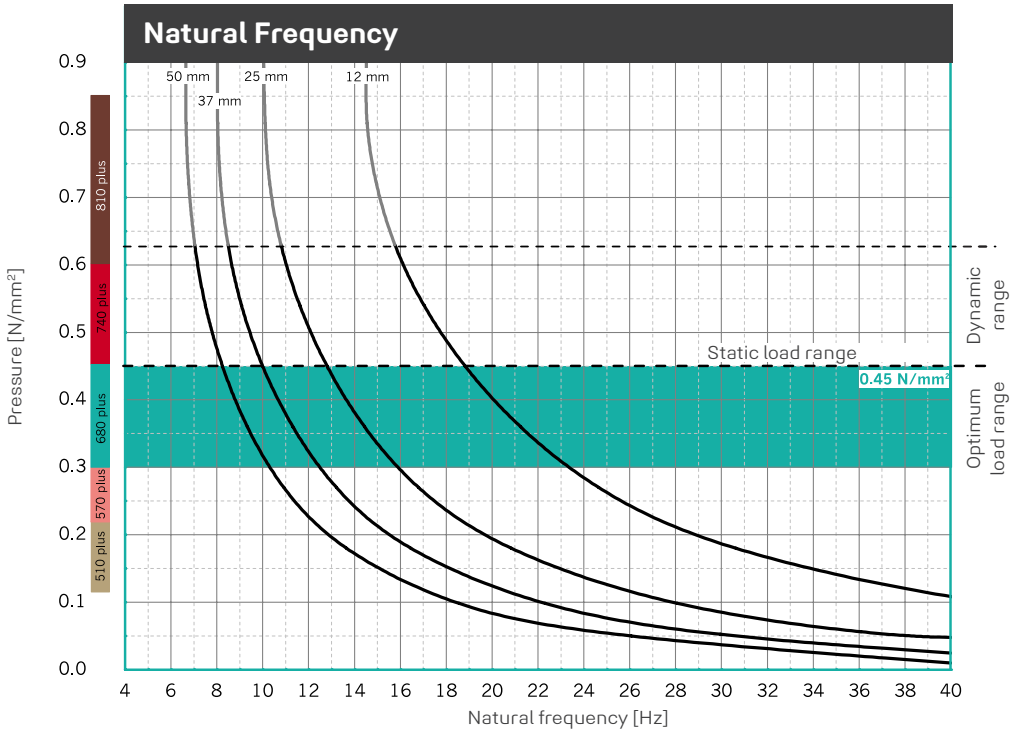
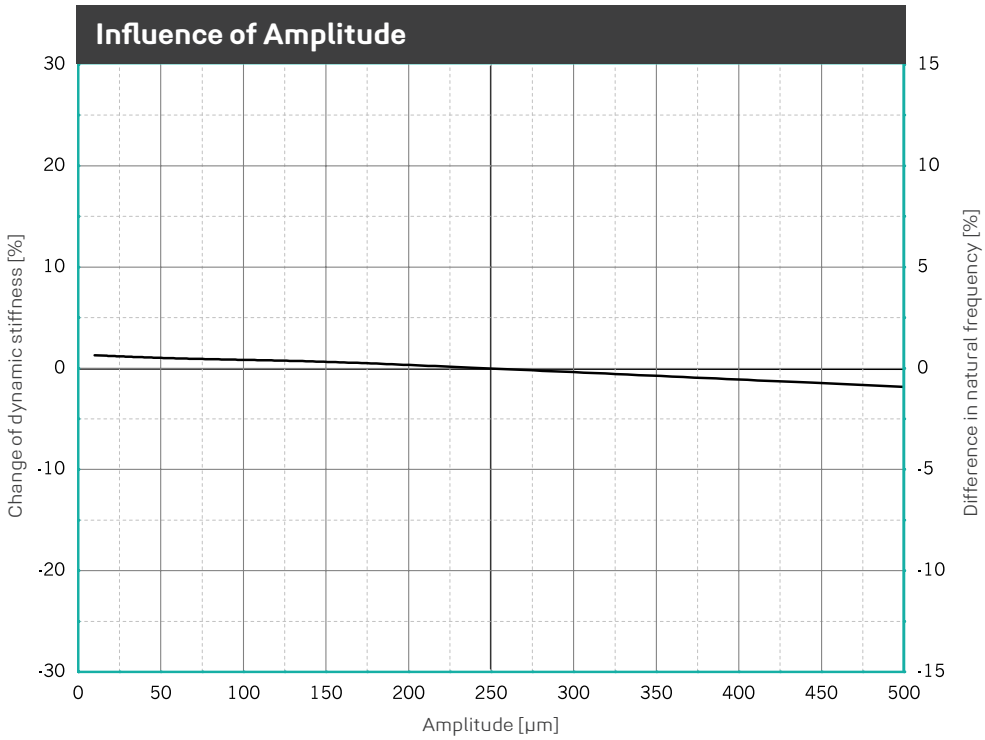


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 680plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

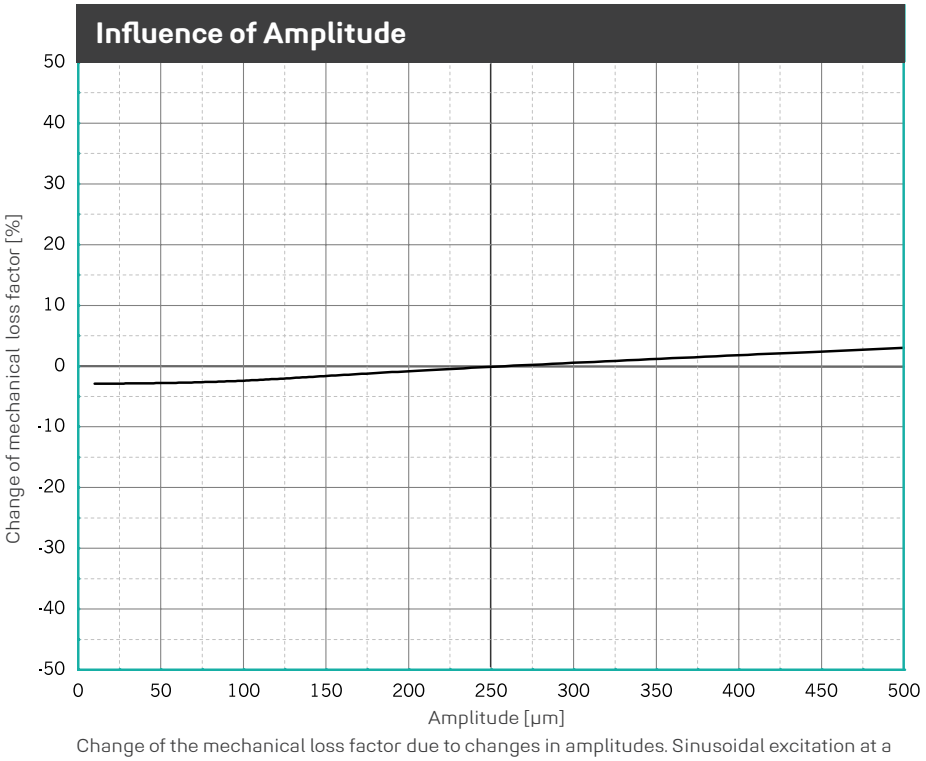


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 680plus** on a rigid base.
Dimensions of test specimens 300 x 300 mm.

REGUFOAM VIBRATION 680PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.450 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.450 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

REGUFOAM VIBRATION 680PLUS

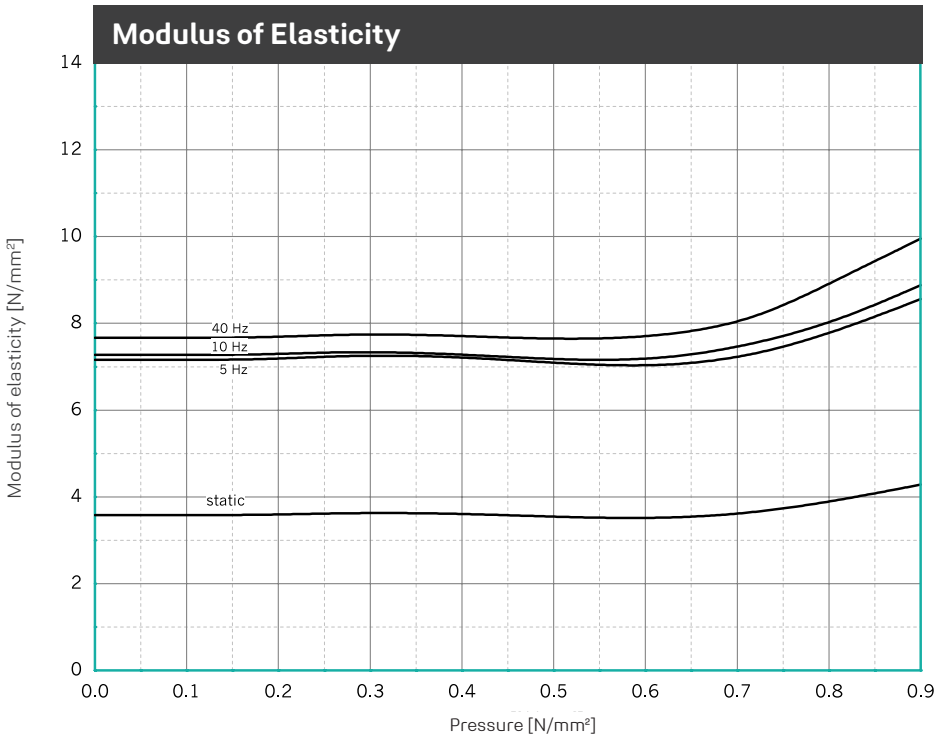


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

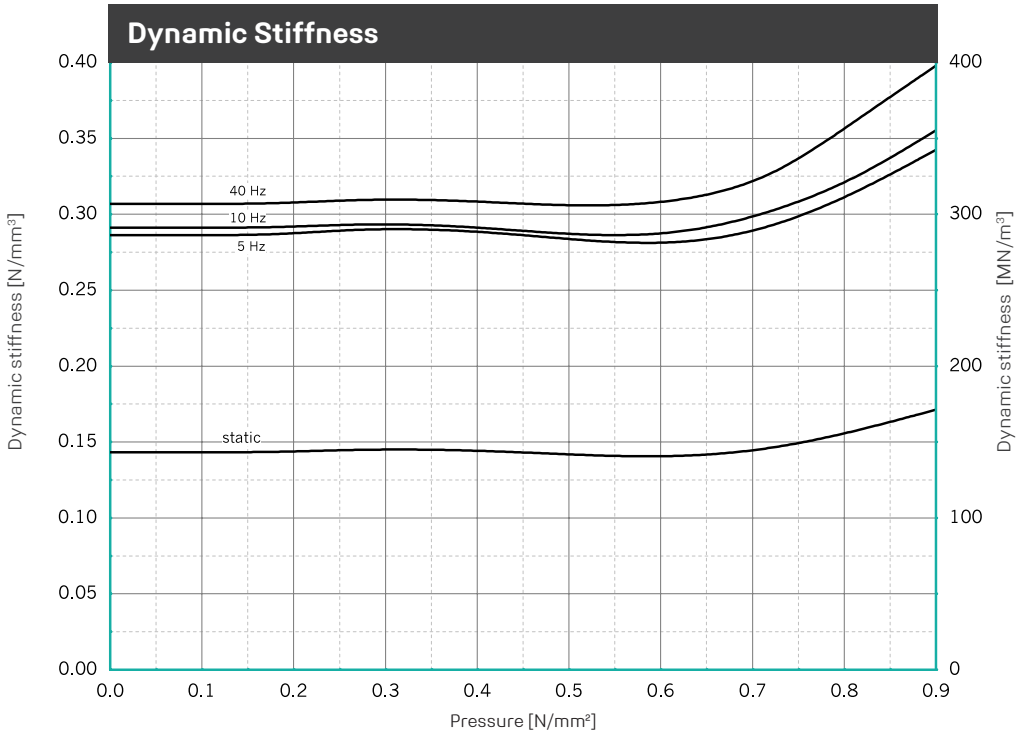
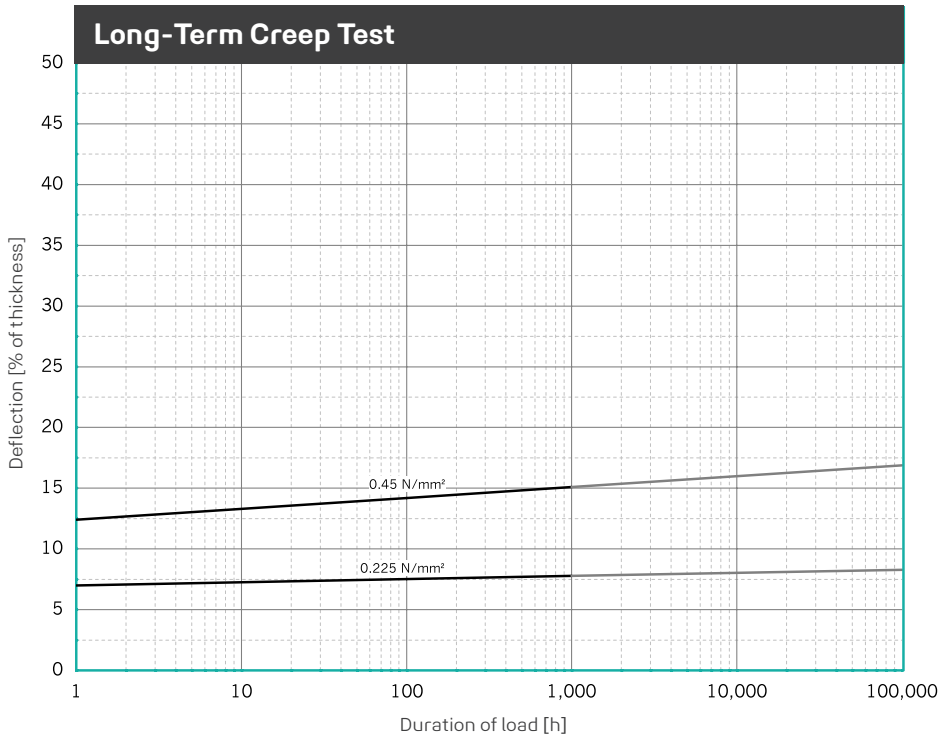


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 680PLUS



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

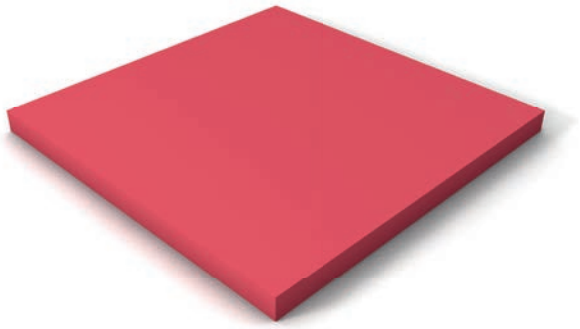
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

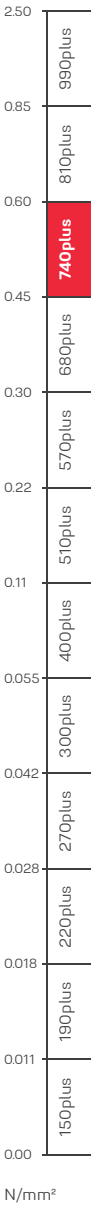
REGUFOAM VIBRATION 740PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

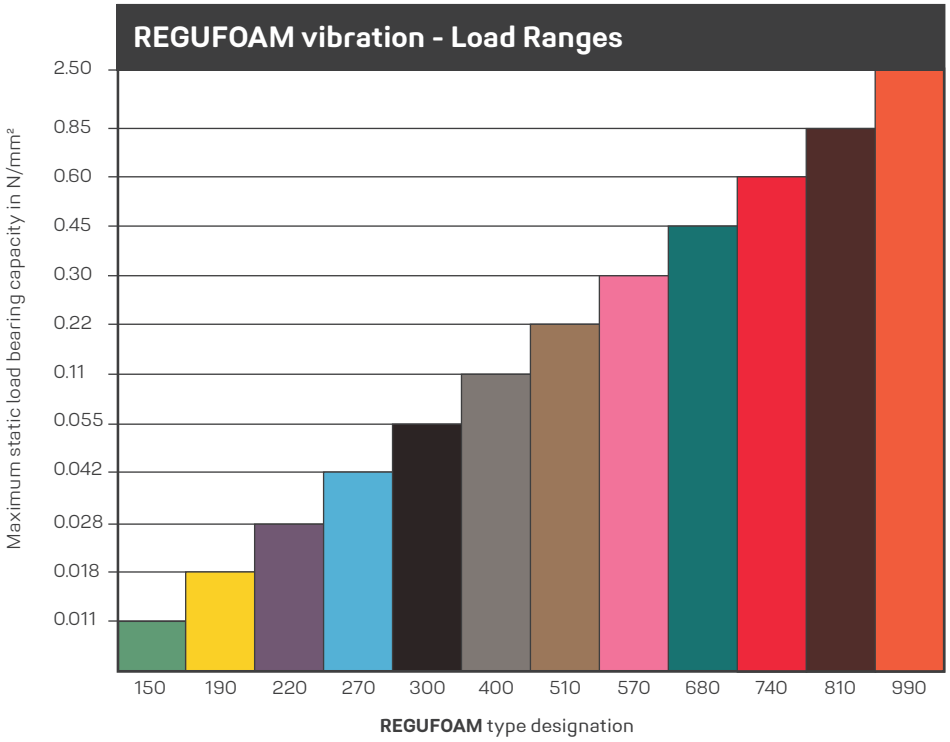
Maximum static load bearing capacity
0.600 N/mm²

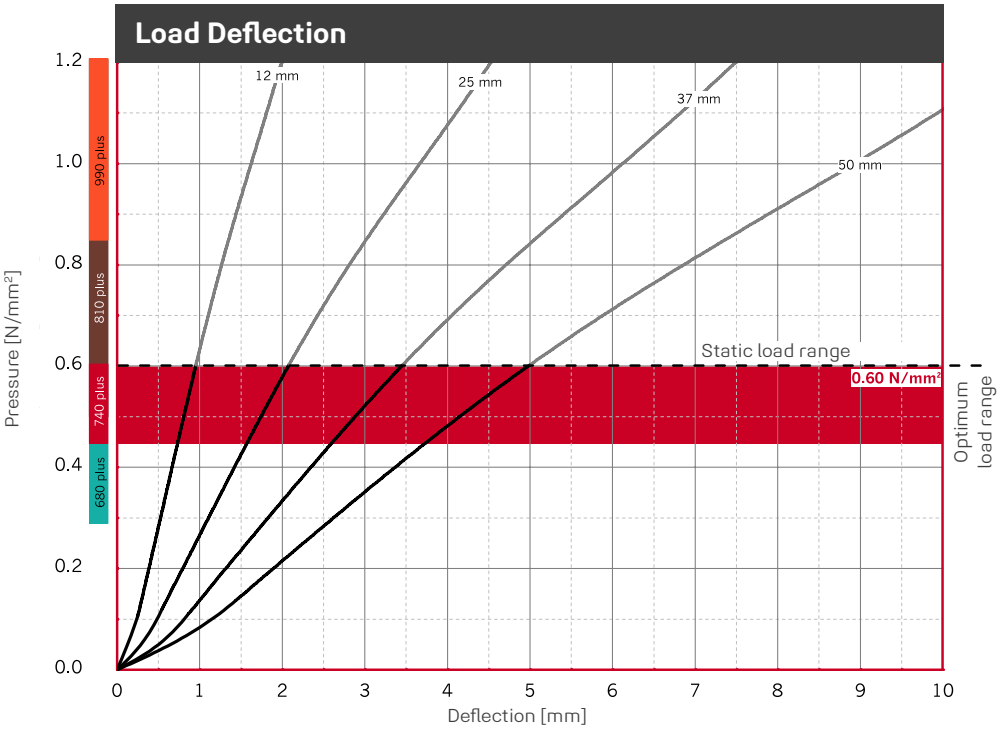
Maximum dynamic load bearing capacity for intermitted loadings
0 to 0.850 N/mm²

Rare, short term peak loads
up to 6.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	4.3 - 5.9 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	8.9 - 13.0 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.11	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.8 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	4.0 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	210 %	
Tear resistance	Based on DIN ISO 34-1	19.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.6 0.7	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1 050 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	59 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	39 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 740PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 x 250 mm.

REGUFOAM VIBRATION 740PLUS

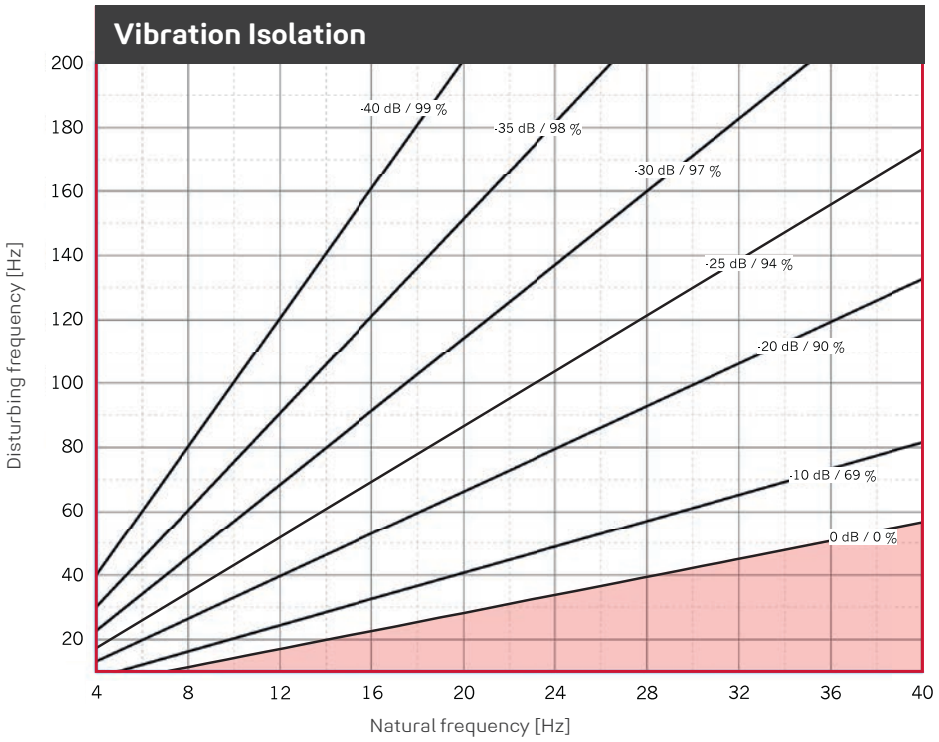
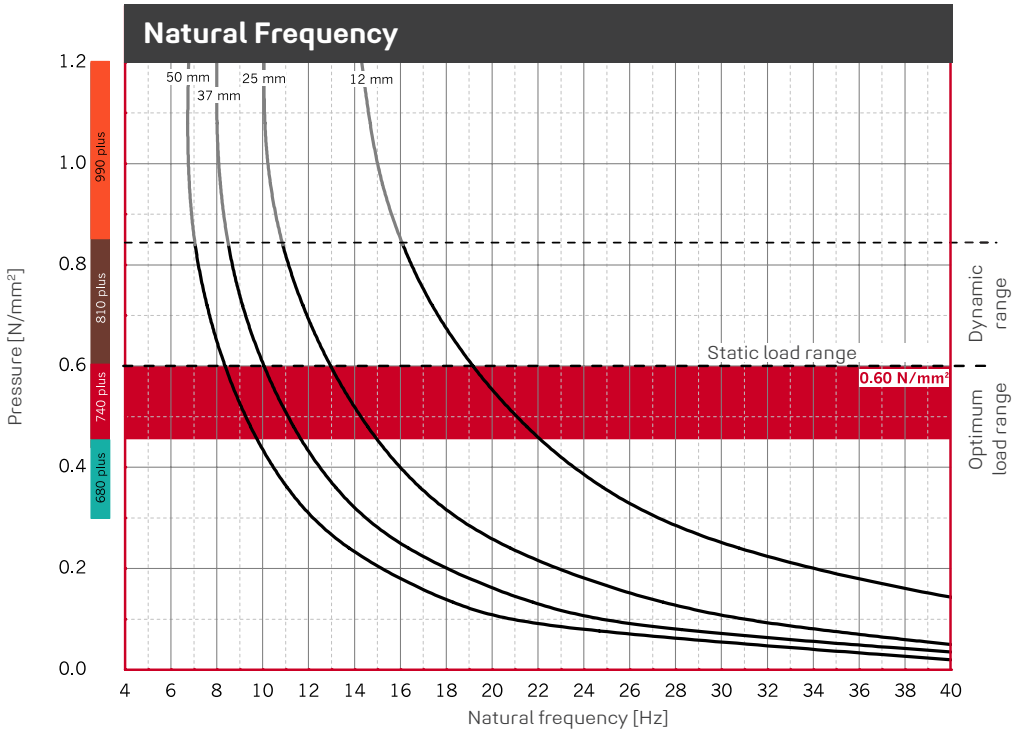
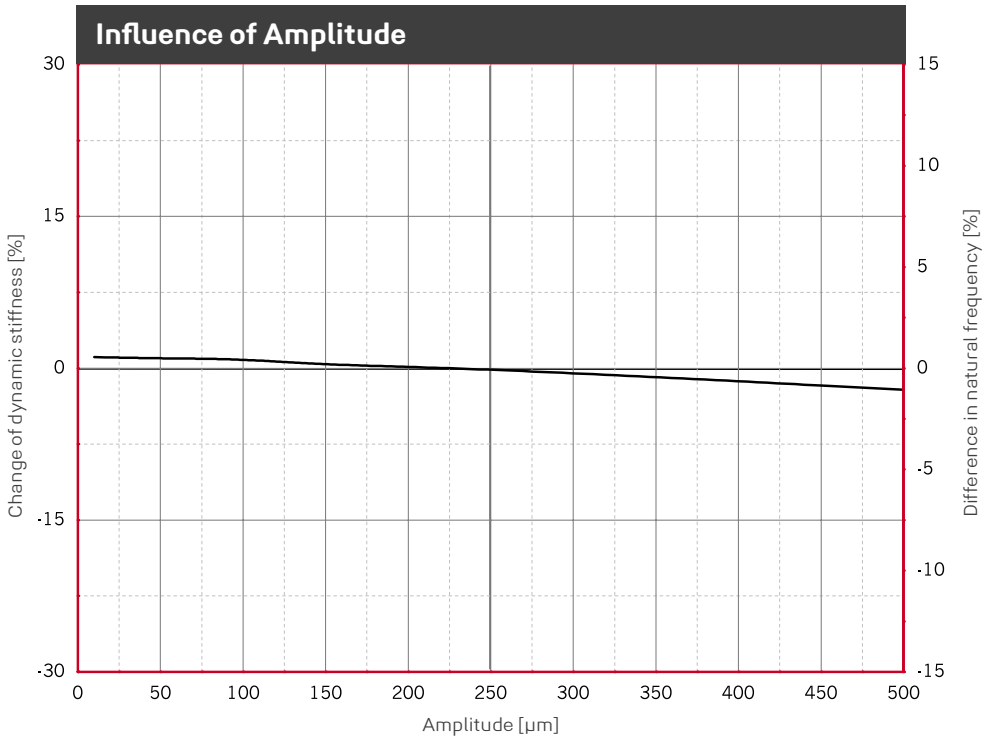


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 740plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

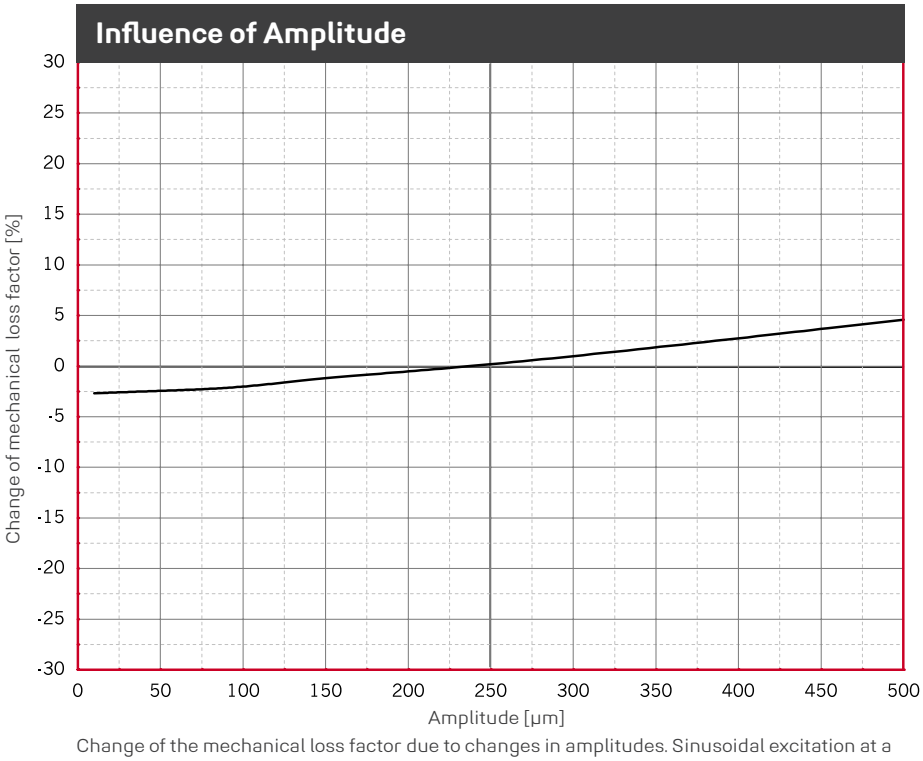


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 740plus** on a rigid base.
Dimensions of test specimens 250 x 250 mm.

REGUFOAM VIBRATION 740PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.600 N/mm², dimensions of the specimens 250 x 250 x 50 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.600 N/mm², dimensions of the specimens 250 x 250 x 50 mm.

REGUFOAM VIBRATION 740PLUS

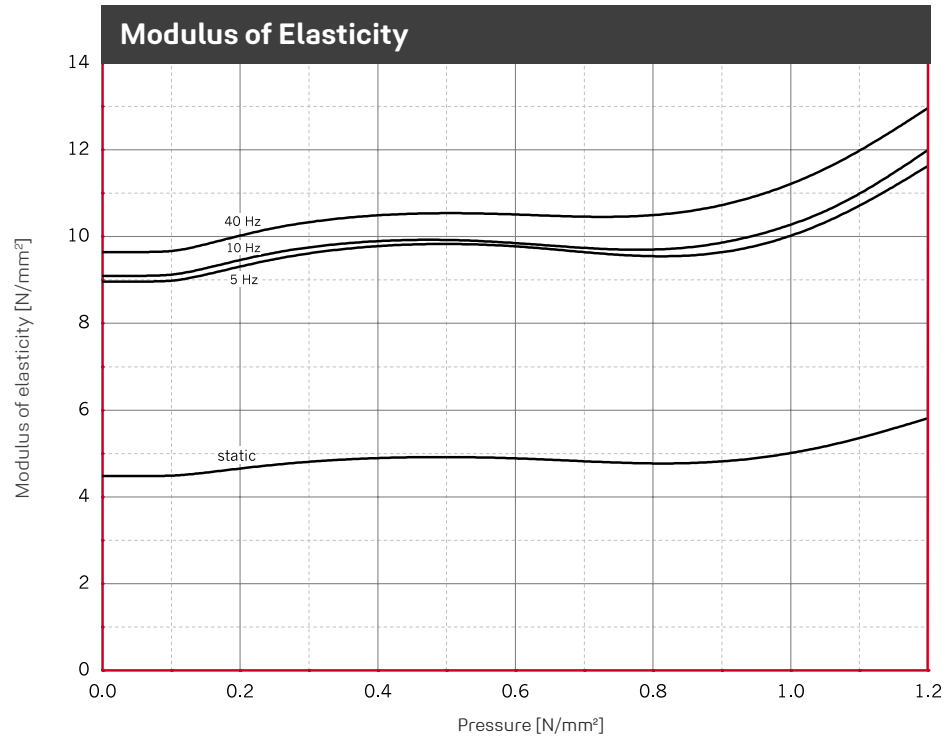


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 x 250 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

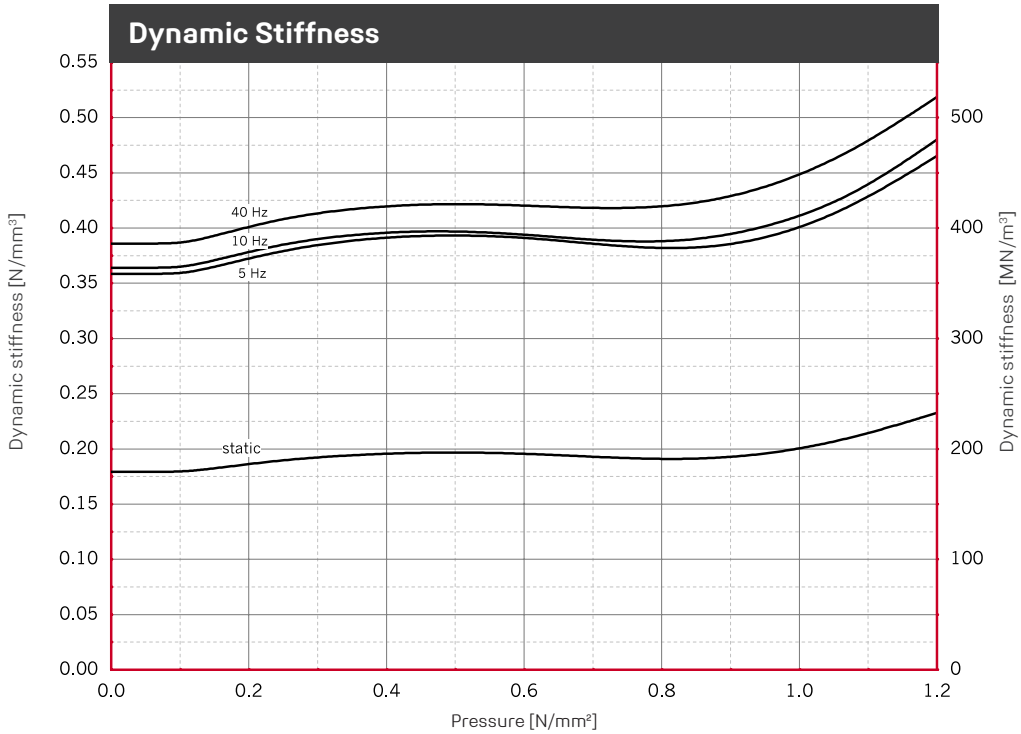
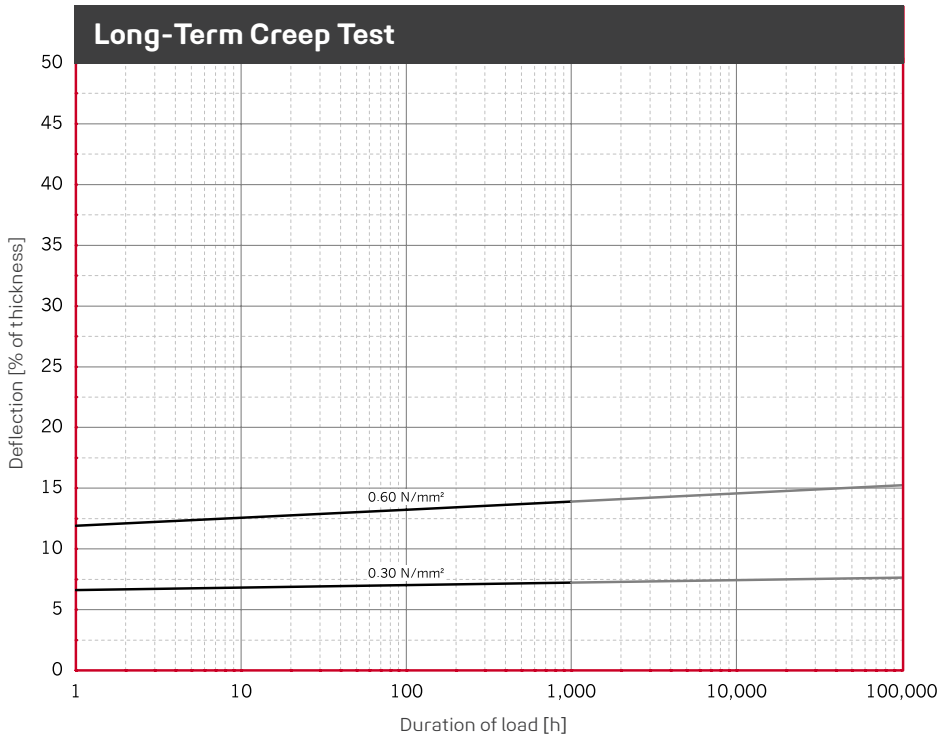


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 x 250 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 740PLUS



Dimensions of specimens 250 x 250 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

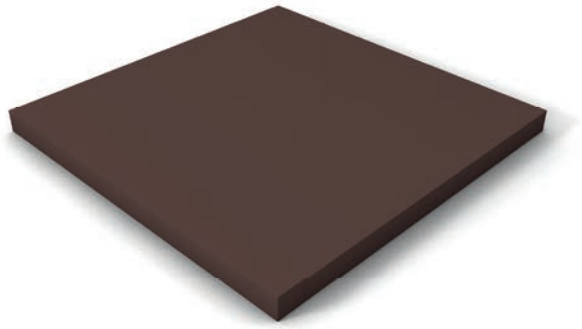
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUFOAM VIBRATION 810PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible



Technical Details

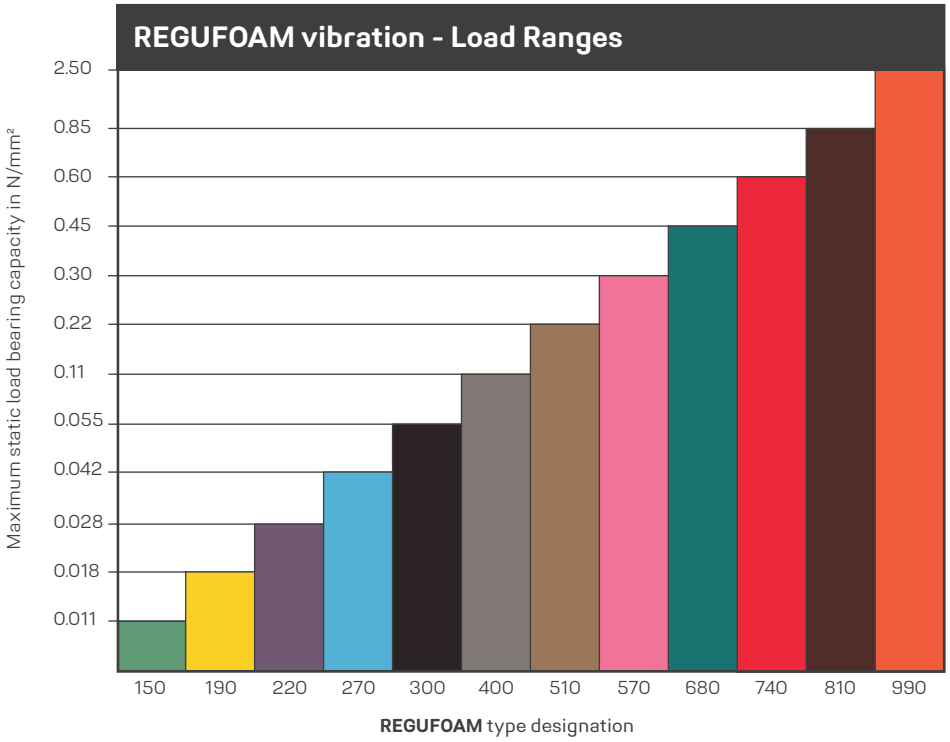
Maximum static load bearing capacity
0.850 N/mm²

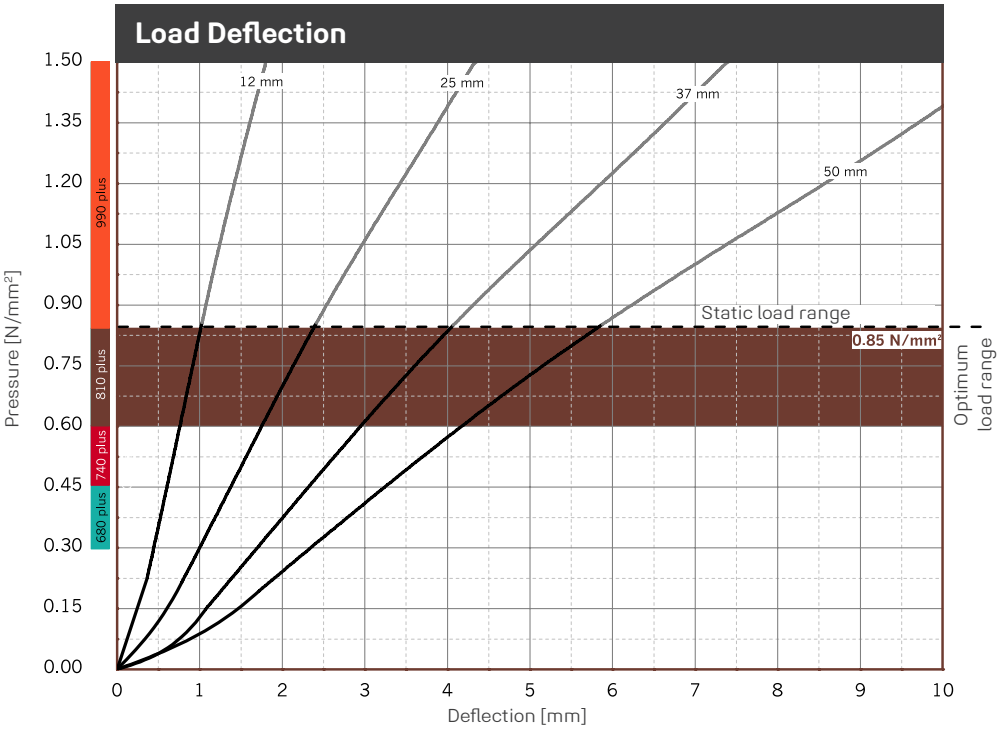
Maximum dynamic load bearing capacity for intermitted loadings
0 to 1.200 N/mm²

Rare, short term peak loads
up to 7.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	5.4 - 8.0 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	11.0 - 16.5 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.10	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	7.9%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	4.6 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	230 %	
Tear resistance	Based on DIN ISO 34-1	20.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.6 0.75	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1 241 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	58 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	35 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 810PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 x 250 mm.

REGUFOAM VIBRATION 810PLUS

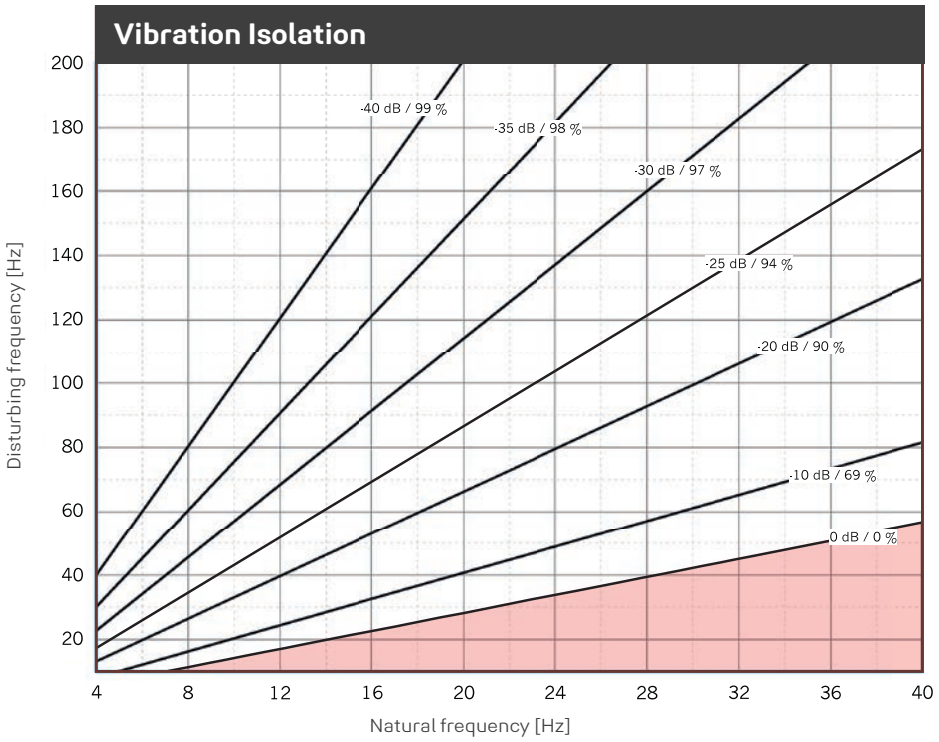
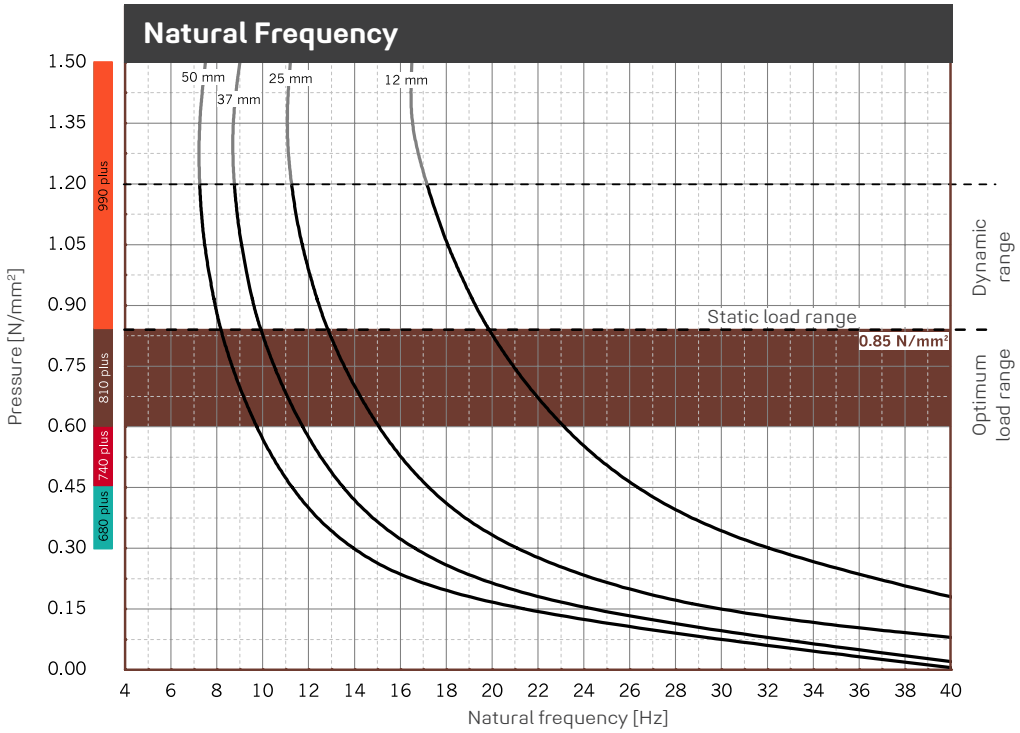
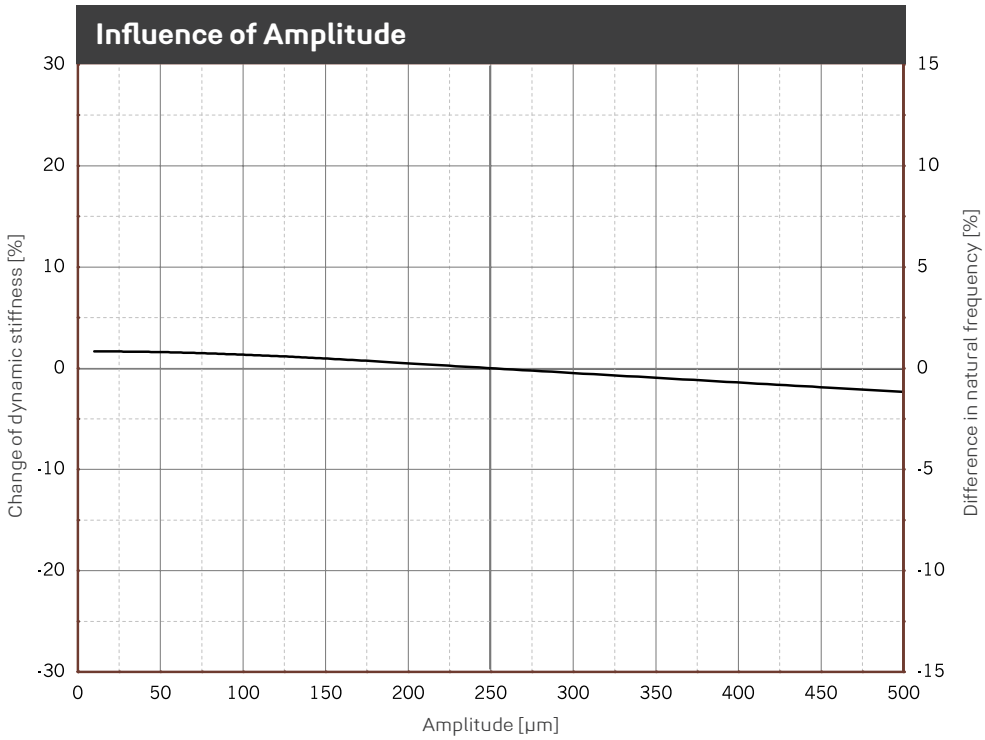


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 810plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.

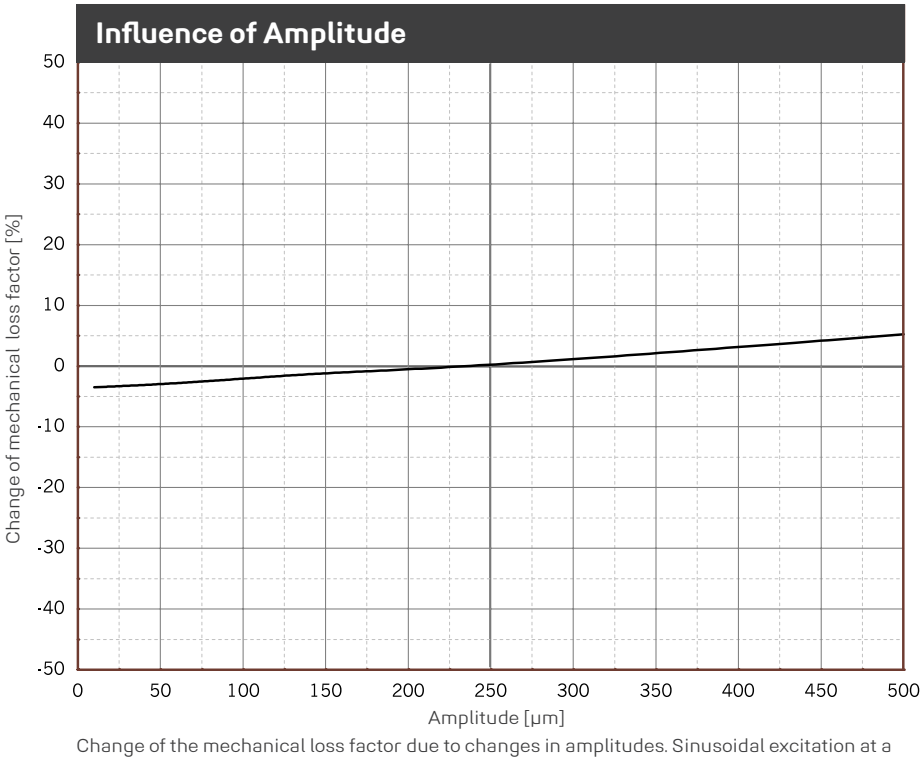


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 810plus** on a rigid base.
Dimensions of test specimens 250 x 250 mm.

REGUFOAM VIBRATION 810PLUS



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.850 N/mm², dimensions of the specimens 250 x 250 x 50 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.850 N/mm², dimensions of the specimens 250 x 250 x 25 mm.

REGUFOAM VIBRATION 810PLUS

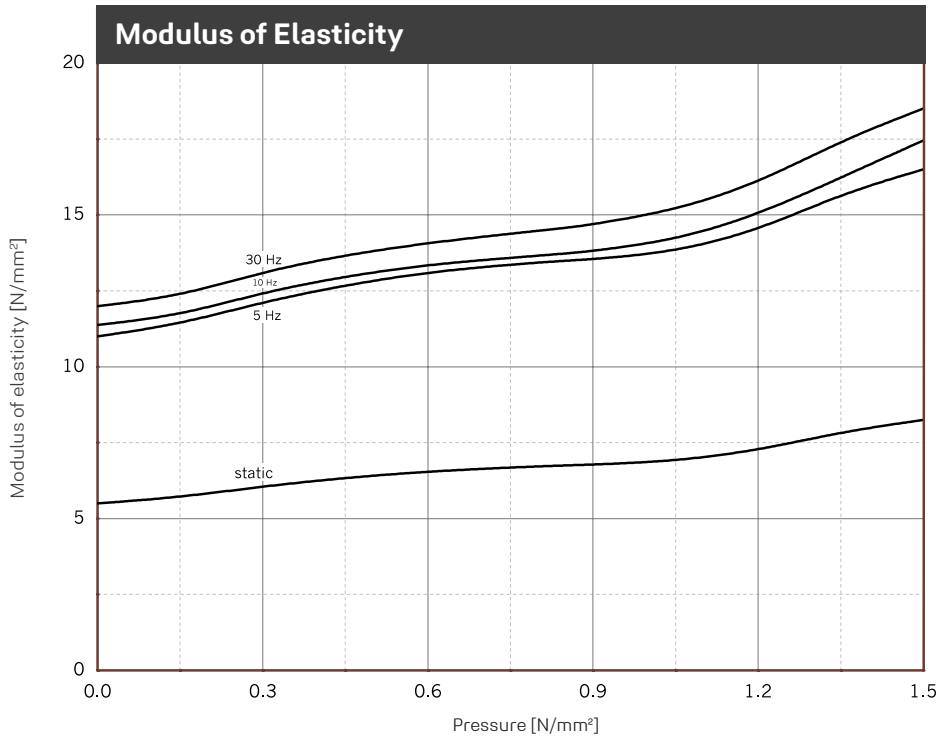


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 250 x 250 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

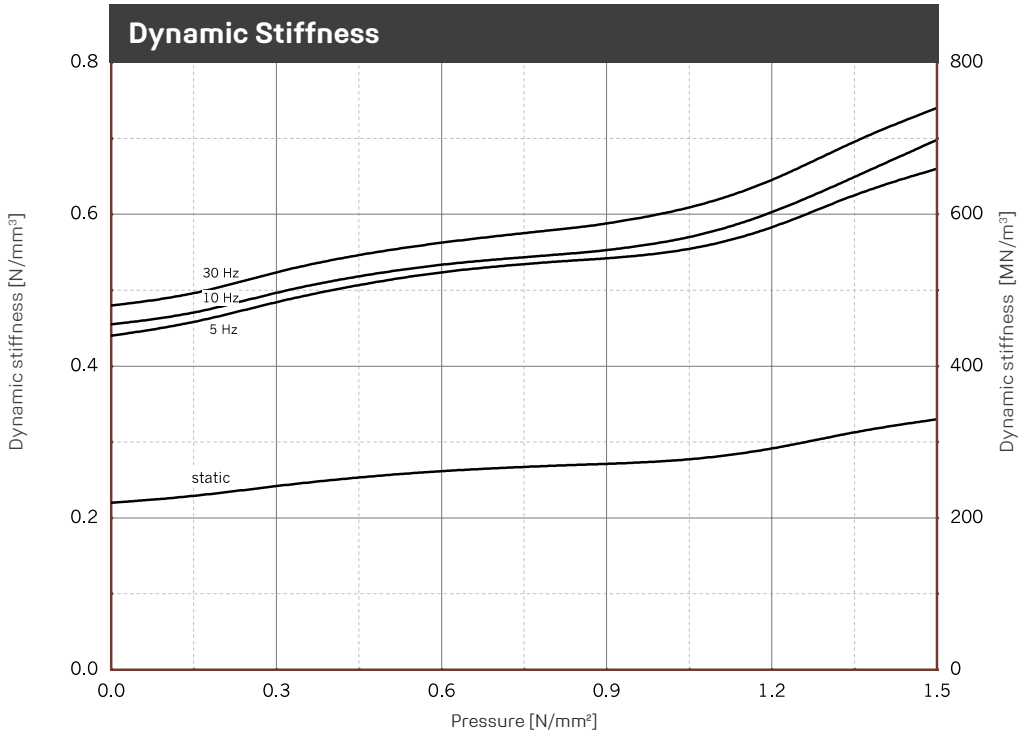
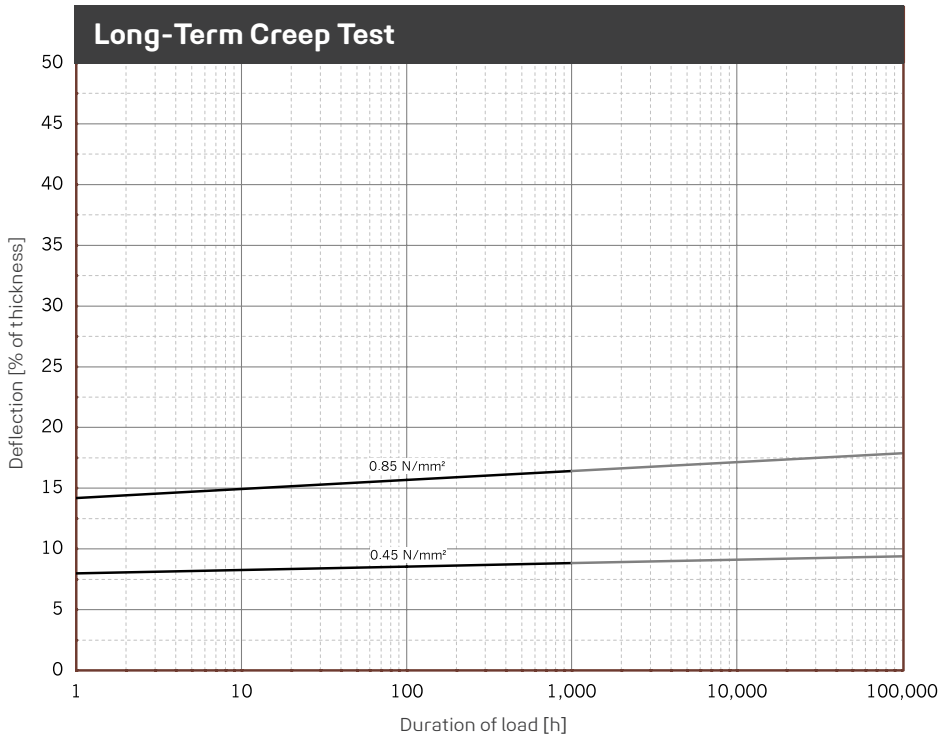


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 250 x 250 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 810PLUS



Dimensions of specimens 250 x 250 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

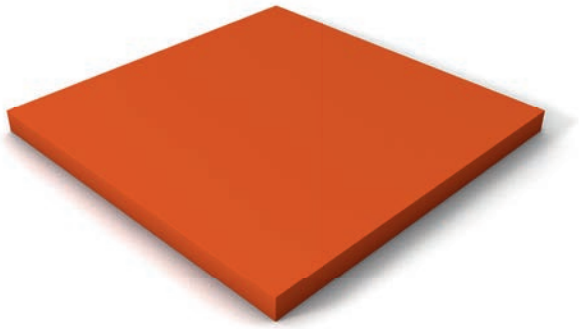
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

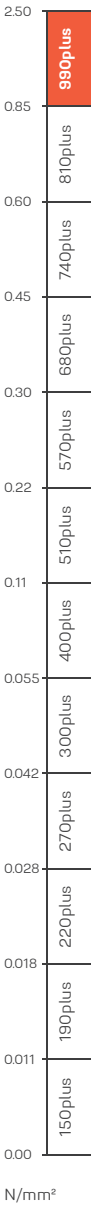
REGUFOAM VIBRATION 990PLUS

Forms of delivery, ex warehouse

Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting,
self-adhesive versions possible





Technical Details

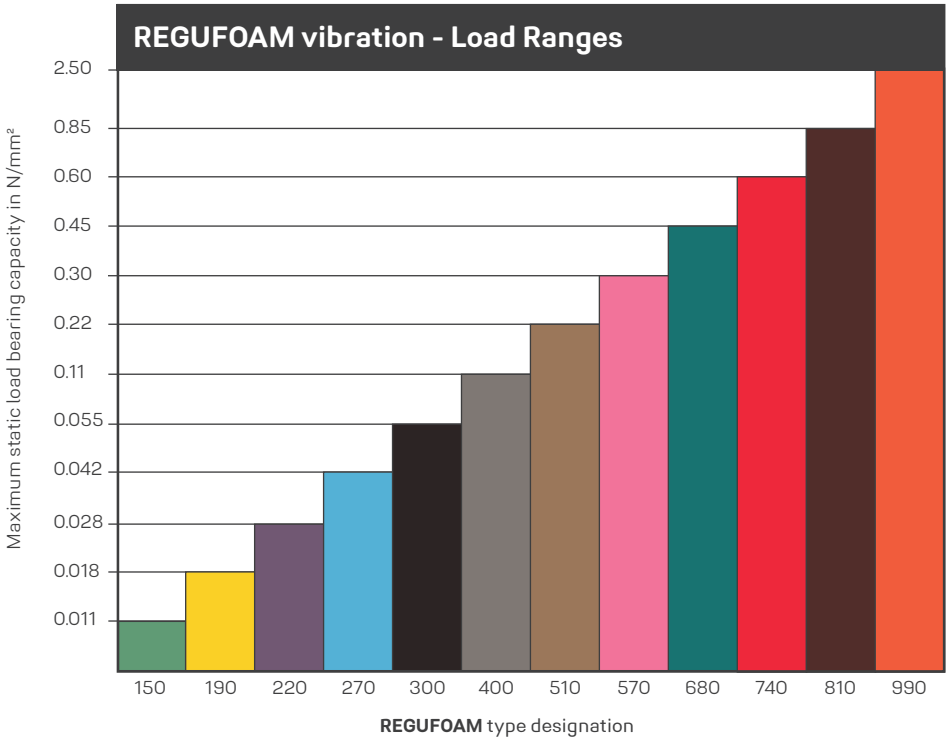
Maximum static load bearing capacity
2.500 N/mm²

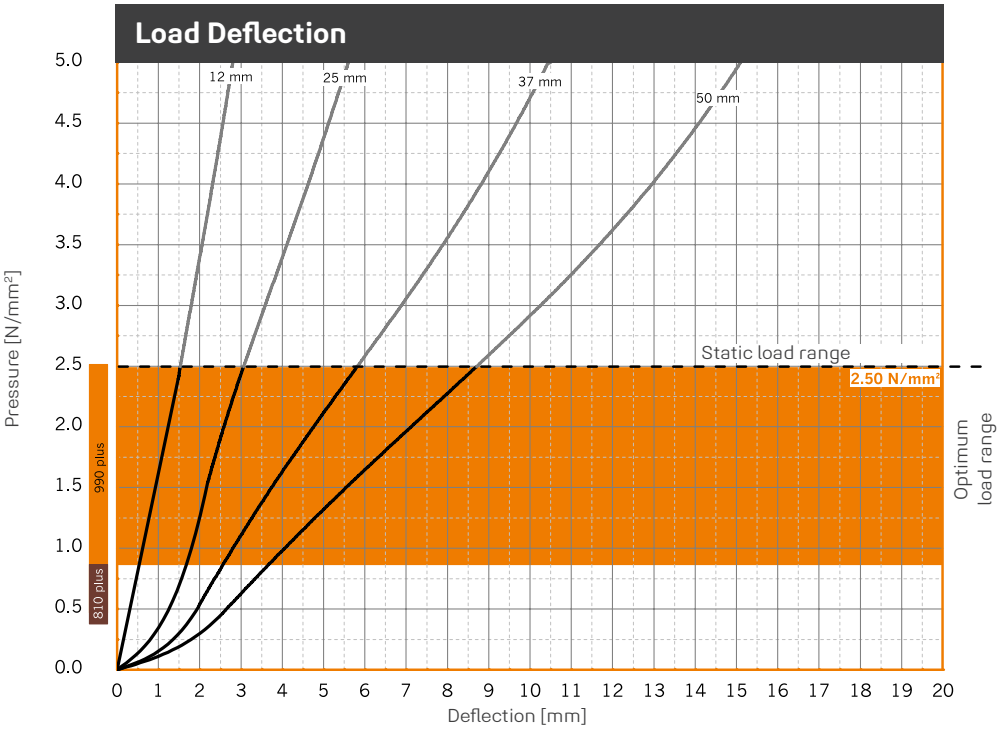
Maximum dynamic load bearing capacity for intermitted loadings
0 to 3.500 N/mm²

Rare, short term peak loads
up to 8.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	20.0 - 78.0 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	41.0 - 160.0 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.09	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	8.6 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	6.9 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	190 %	
Tear resistance	Based on DIN ISO 34-1	34.5 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.5 0.6	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	3 640 kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	55 %	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	20 %	dependent on thickness, test specimen h = 25 mm

REGUFOAM VIBRATION 990PLUS





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 125 x 125 mm.

REGUFOAM VIBRATION 990PLUS

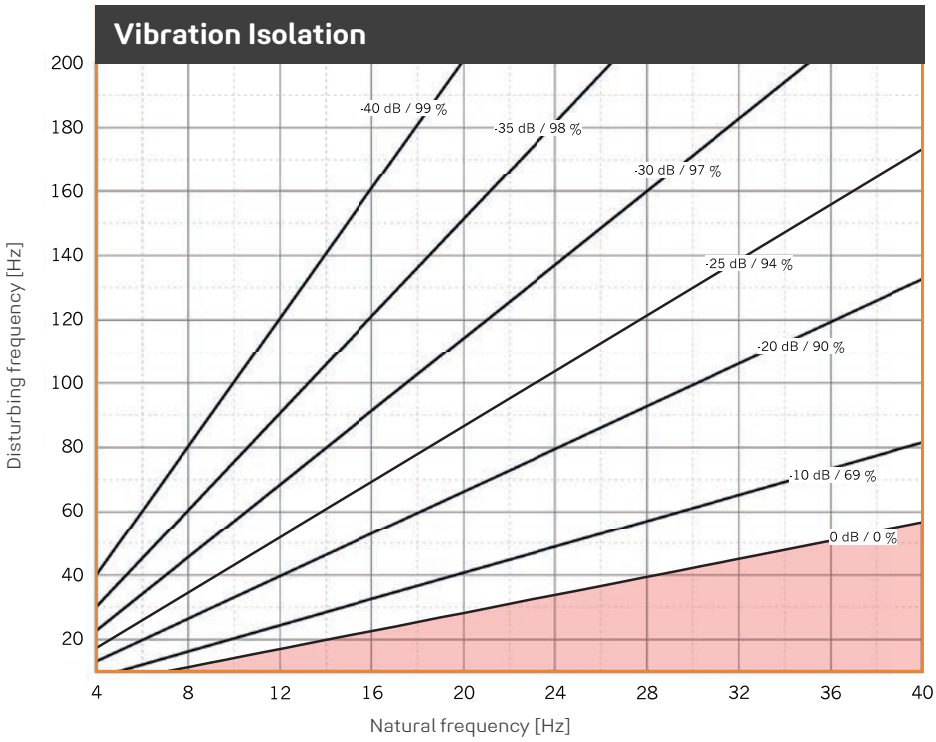
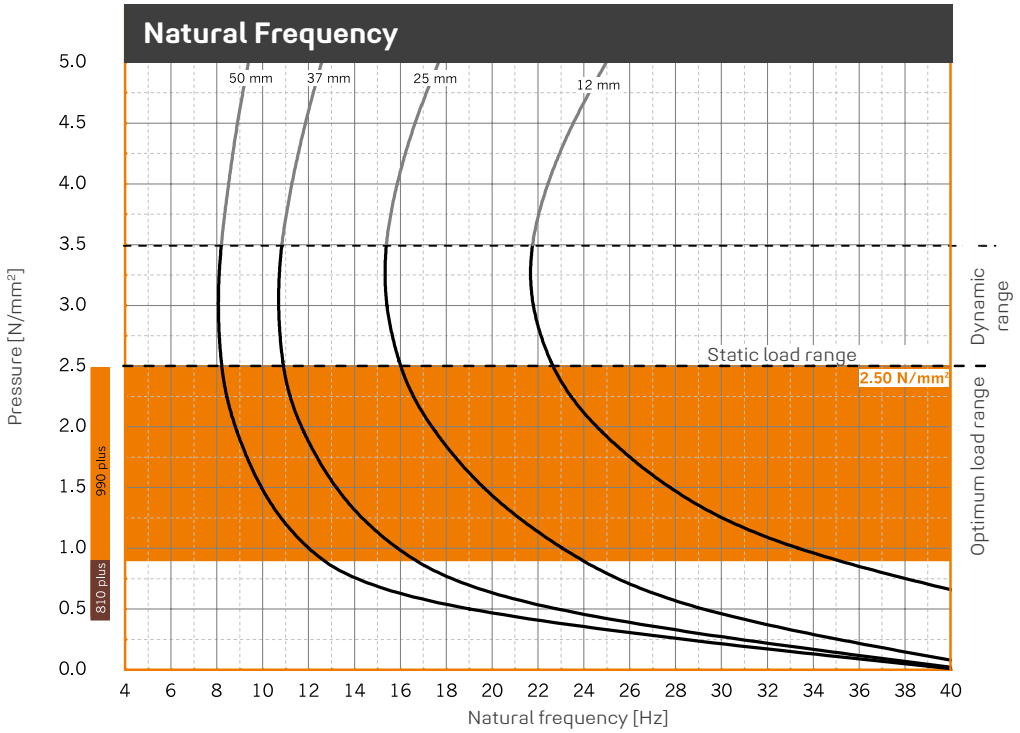


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 990plus.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 990plus** on a rigid base.
Dimensions of test specimens 125 x 125 mm.

Influence of Amplitude

In order to get information of changes in mechanical loss or dynamic stiffness due to changes in amplitudes please ask technical staff of **REGUPOL**.

REGUFOAM VIBRATION 990PLUS

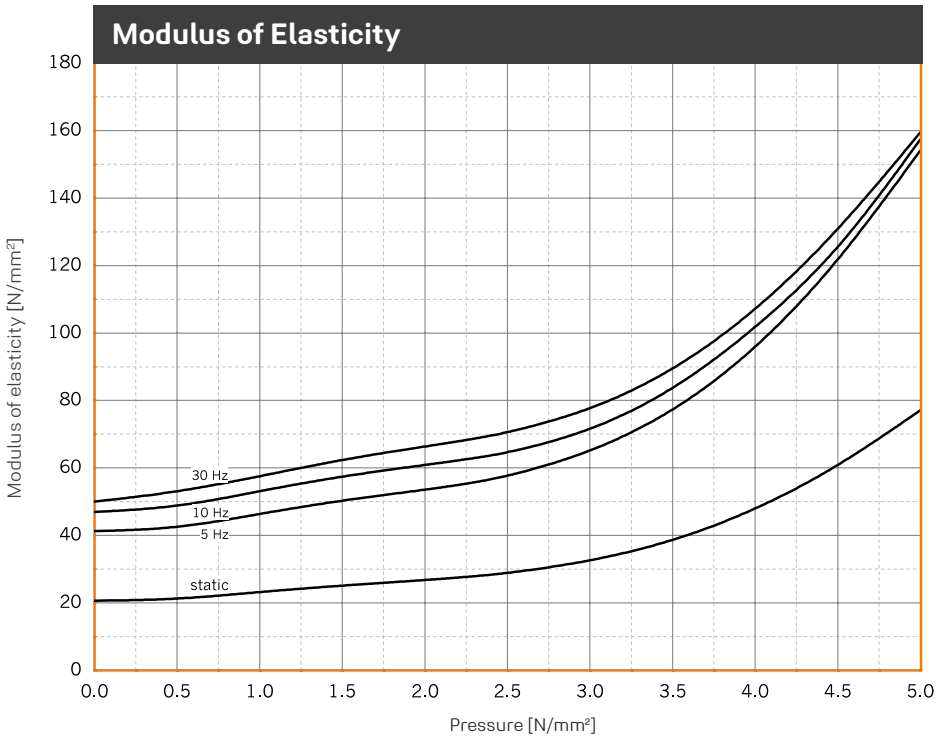


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 125 x 125 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

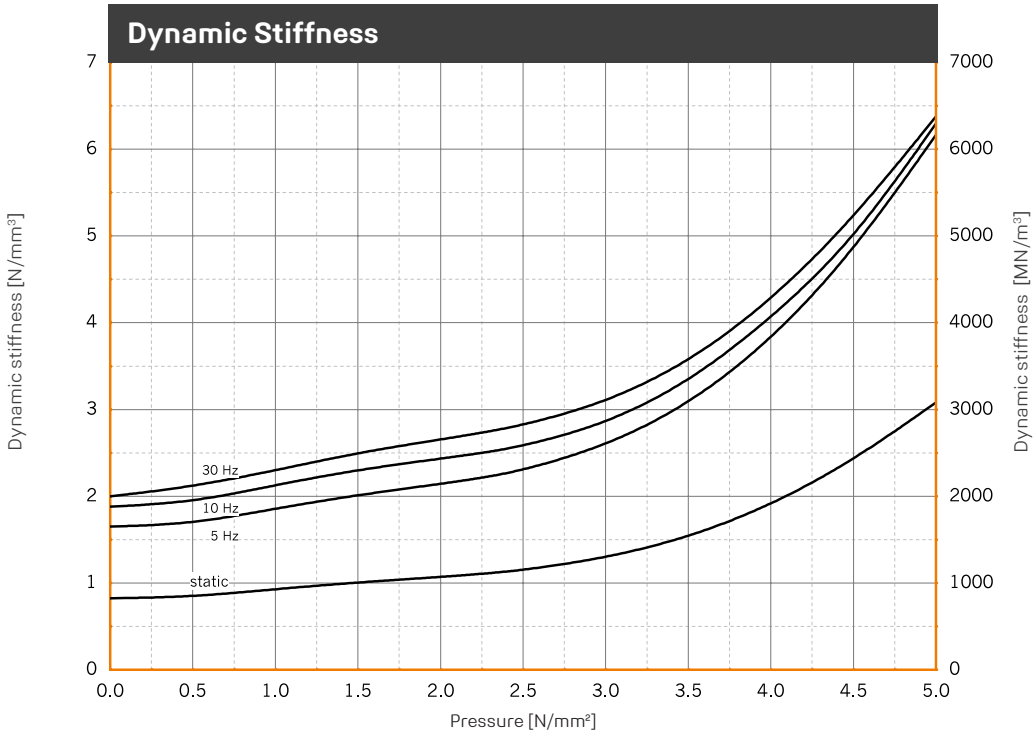
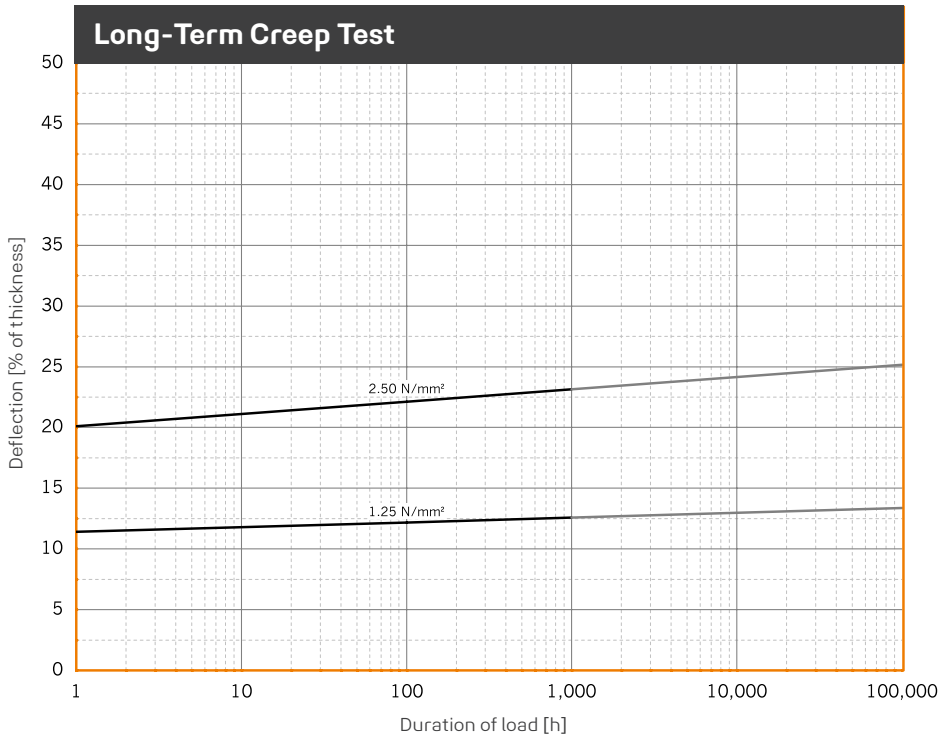


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 125 x 125 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUFOAM VIBRATION 990PLUS



Dimensions of specimens 125 x 125 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

TECHNICAL DETAILS

REGUPOL VIBRATION

REGUPOL

REGUPOL VIBRATION 200

Forms of delivery, ex warehouse

Rolls
Thickness: 17 mm, dimpled
Length: 10,000 mm, special lengths available
Width: 1,250 mm

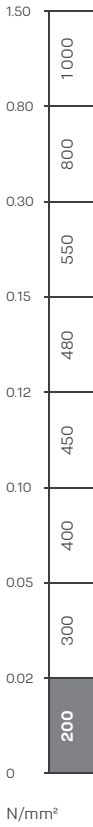
Stripping/Plates
On request: Die-cutting, self-adhesive versions possible

Technical Details

Maximum static load bearing capacity
0.020 N/mm²

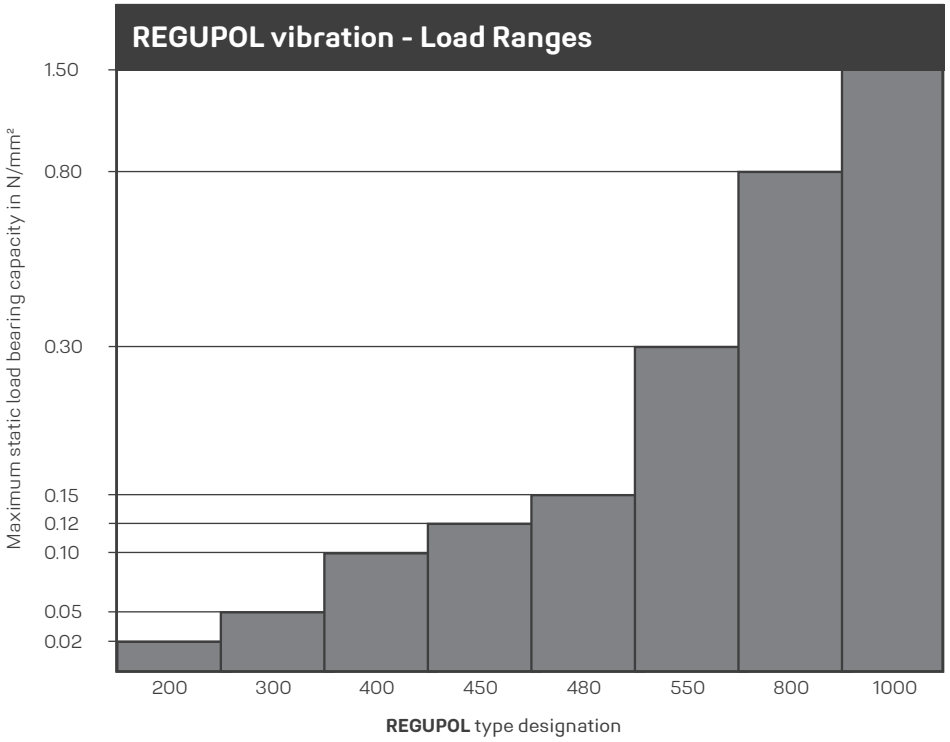
Rare, short term peak loads
up to 0.050 N/mm²

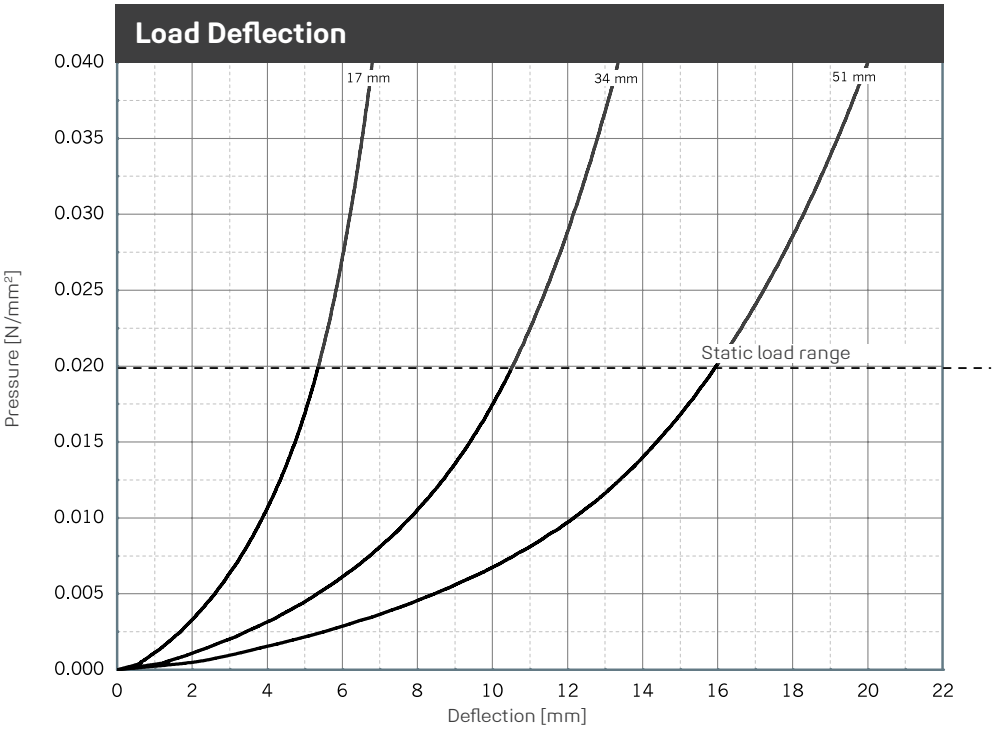
The material must be carefully and permanently profected against moisture during transport, storage, processing and use. Wet material may nof be used.



Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.02 - 0.08 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.05 - 0.38 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.22	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.1 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.12 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	40 %	
Tear resistance	Based on DIN ISO 34-1	1.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	14 kPa	Compressive stress at 25 % deformation test specimen h = 51 mm
Rebound elasticity	Based on DIN EN ISO 8307	14 %	dependent on thickness, test specimen h = 51 mm
Force reduction	DIN EN 14904	73 %	dependent on thickness, test specimen h = 51 mm

REGUPOL VIBRATION 200





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

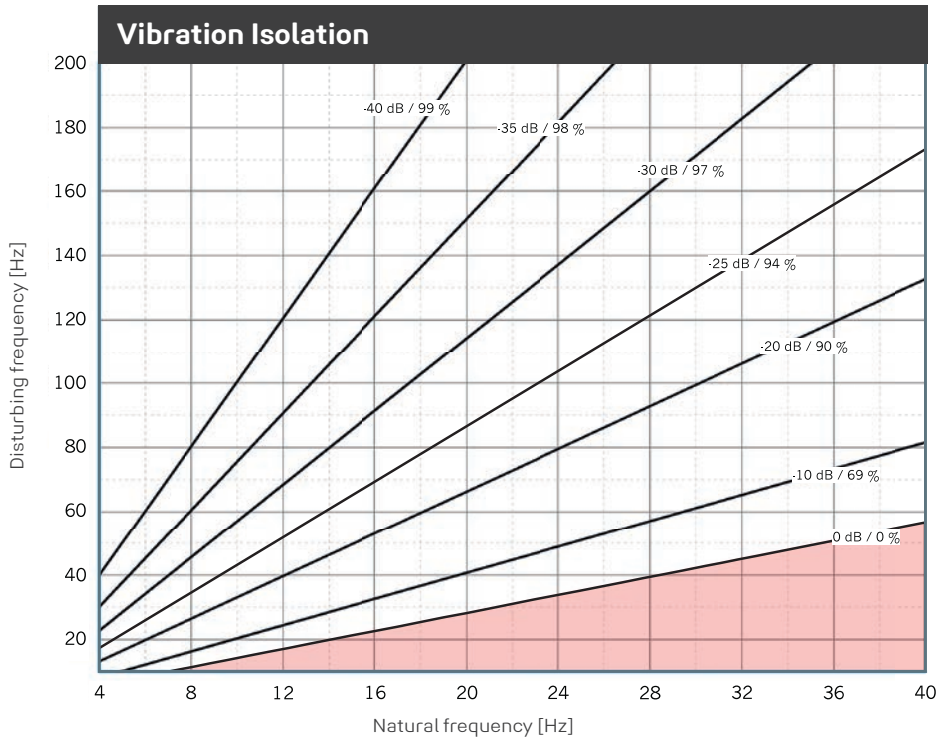
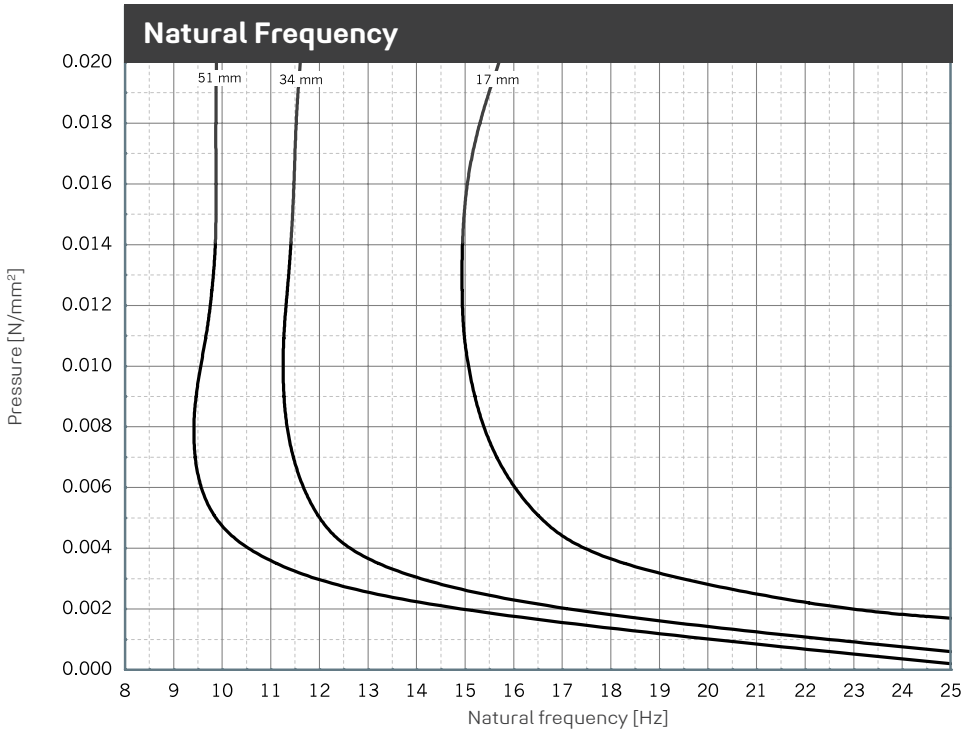
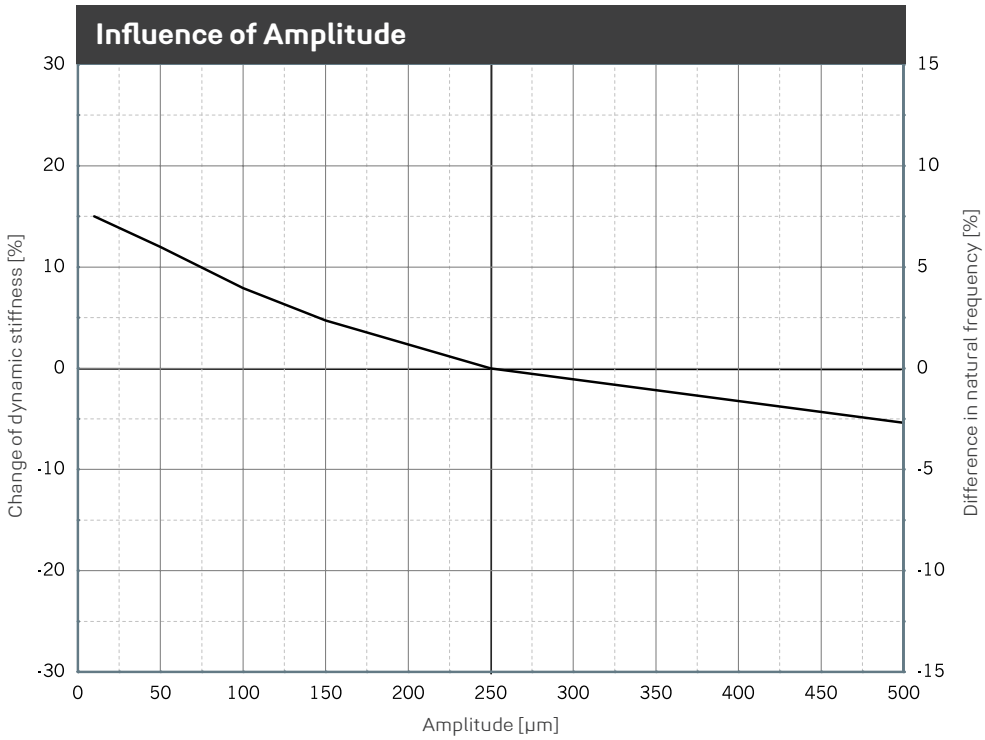


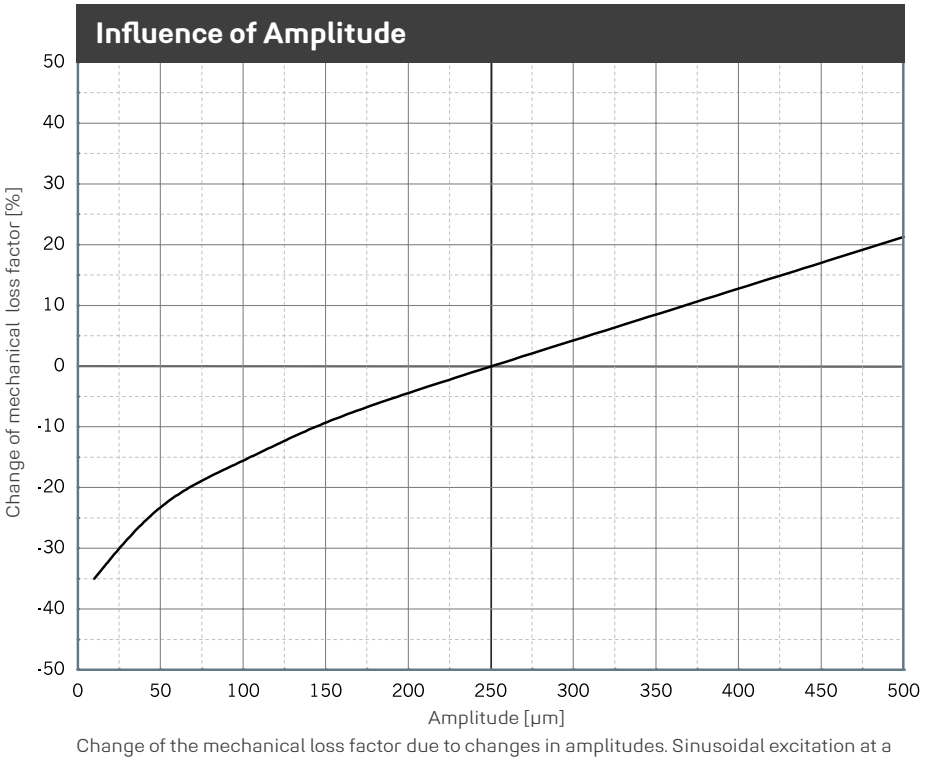
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 200.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 200** on a rigid base. Dimensions of test specimens 300 x 300 mm.



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 x 300 x 51 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 x 300 x 51 mm.

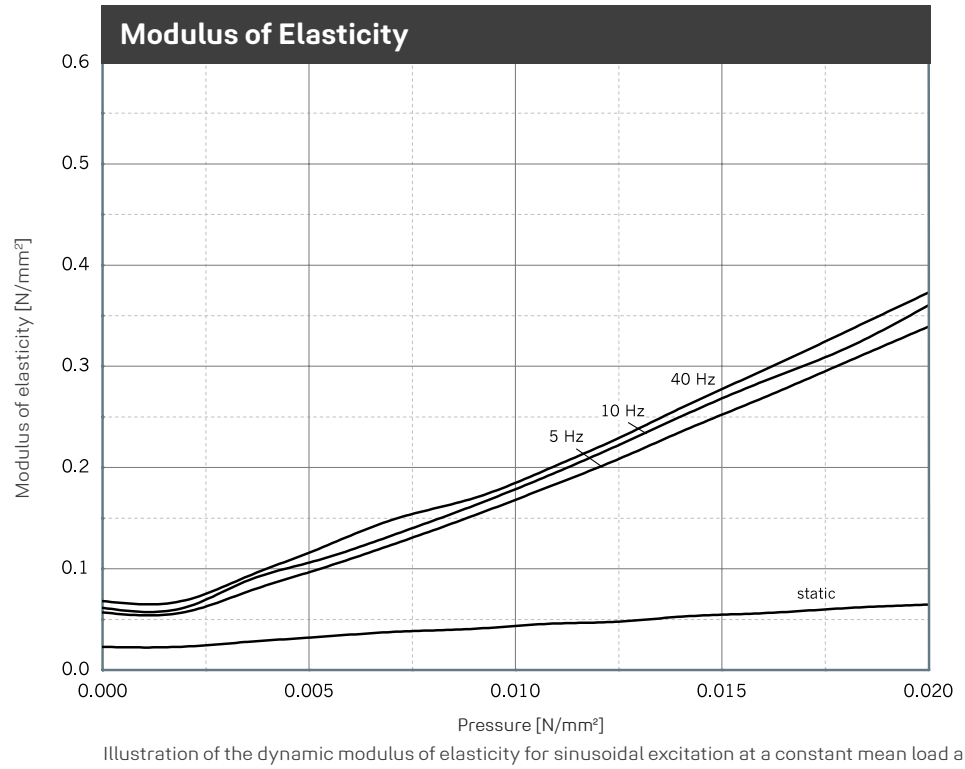


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 34 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

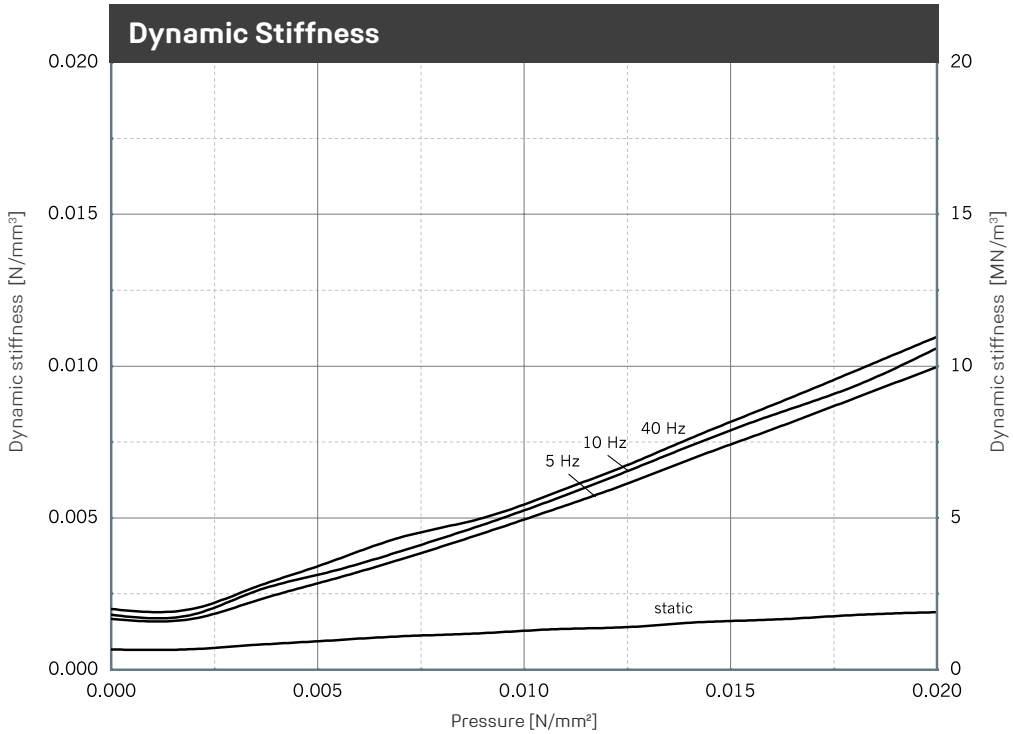
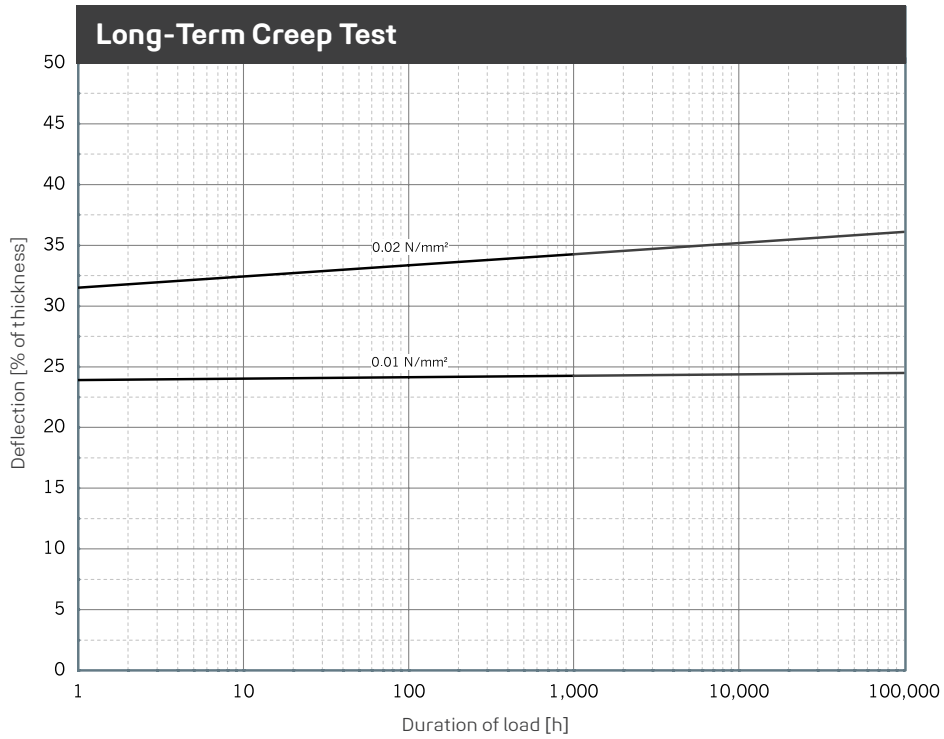


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 34 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 200



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

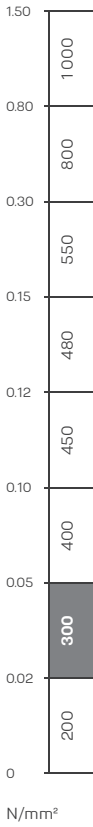
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 300

Forms of delivery, ex warehouse

Rolls
Thickness: 17 mm, dimpled
Length: 10,000 mm, special lengths available
Width: 1,250 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting, self-adhesive versions possible



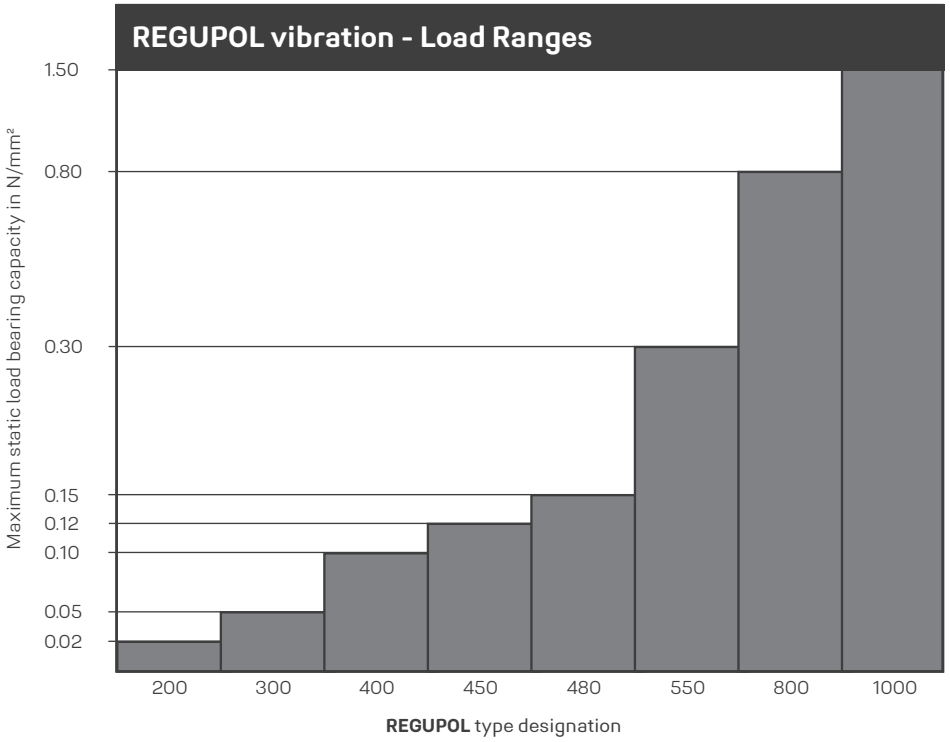
Technical Details

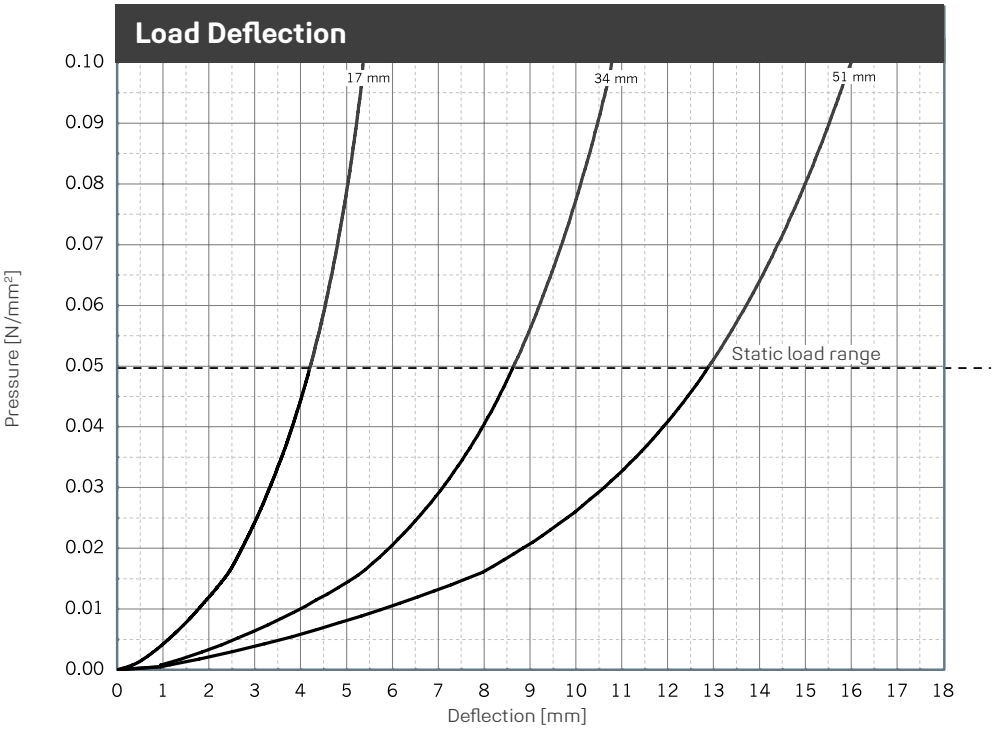
Maximum static load bearing capacity
0.050 N/mm²

Rare, short term peak loads
up to 0.080 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.1 - 0.2 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.2 - 1.4 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.18	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	1.6 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.3 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	55 %	
Tear resistance	Based on DIN ISO 34-1	2.1 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	50 kPa	Compressive stress at 25 % deformation test specimen h = 51 mm
Rebound elasticity	Based on DIN EN ISO 8307	10 %	dependent on thickness, test specimen h = 51 mm
Force reduction	DIN EN 14904	73 %	dependent on thickness, test specimen h = 51 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 300





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUPOL VIBRATION 300

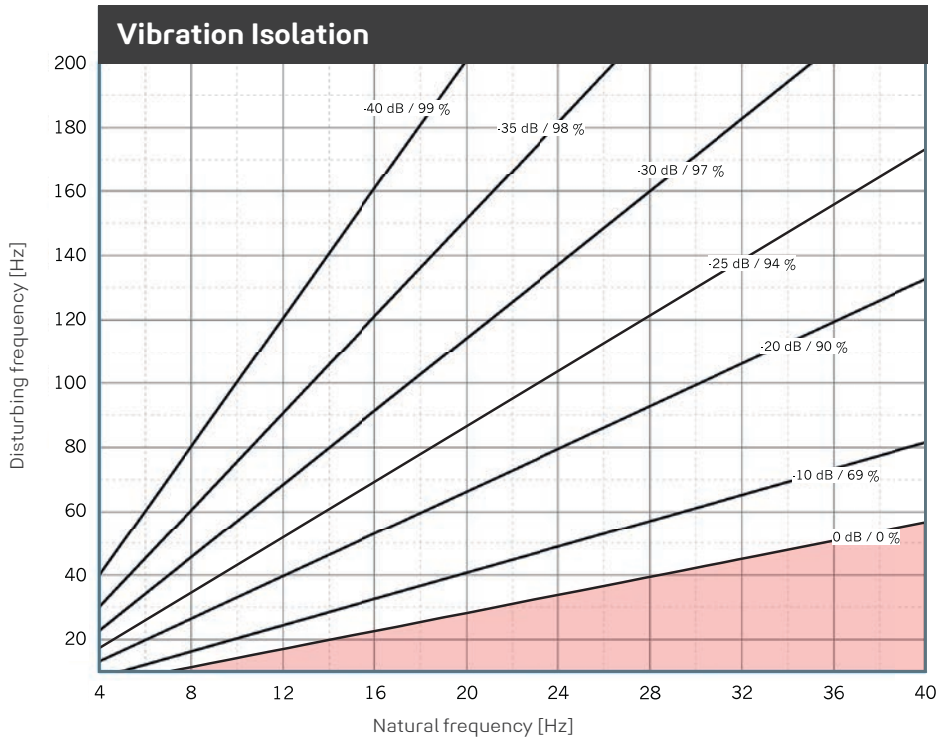
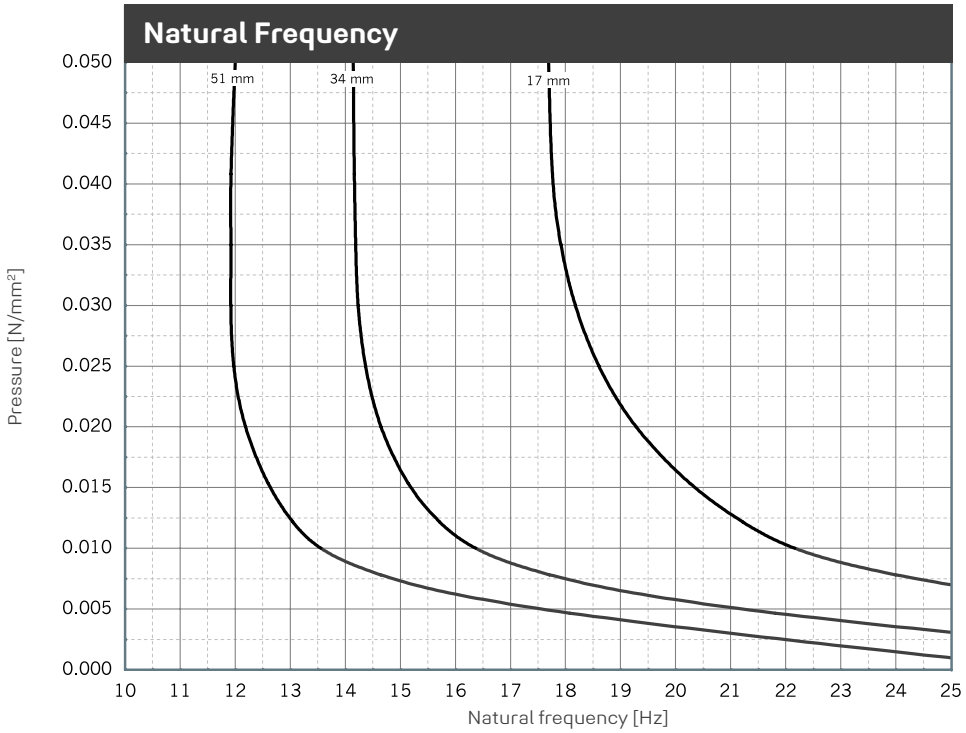
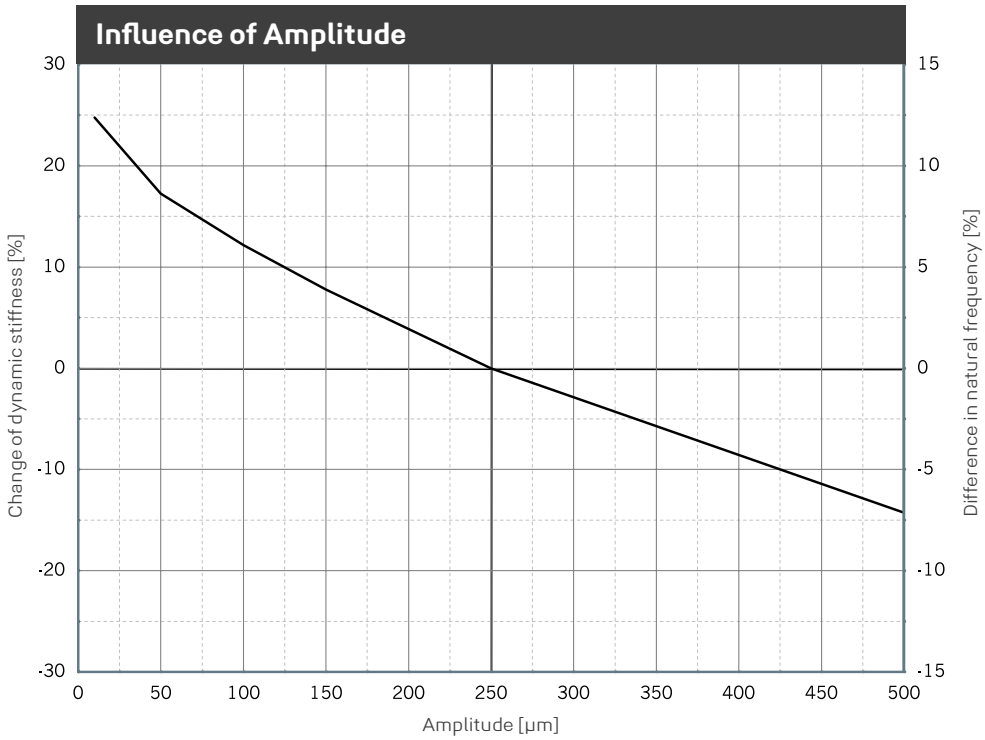


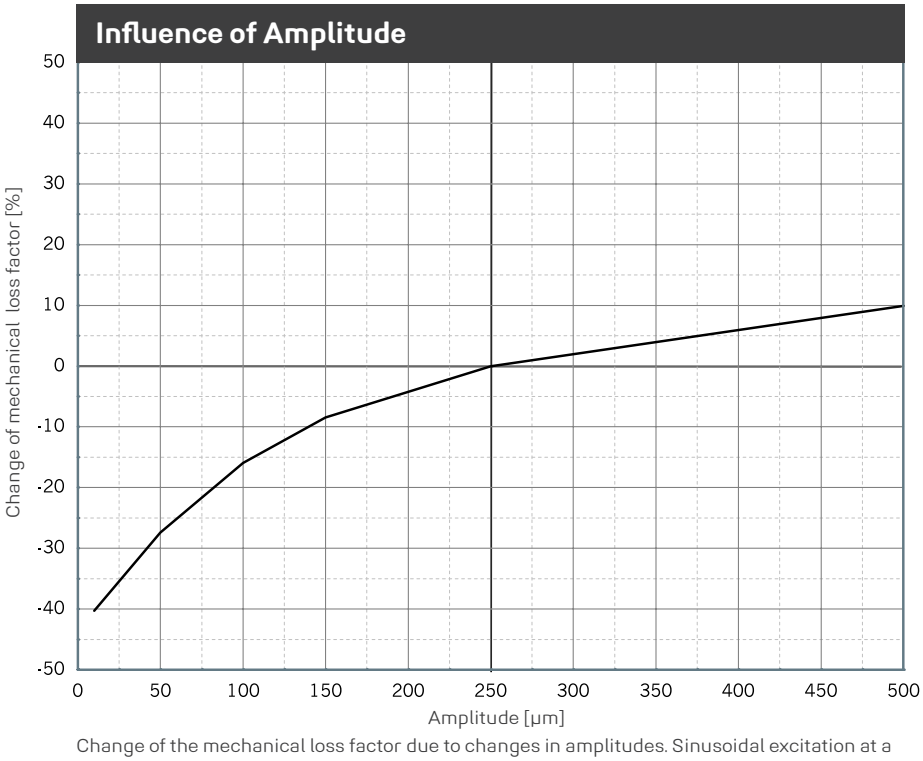
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 300.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 300** on a rigid base. Dimensions of test specimens 300 x 300 mm.



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.05 N/mm², dimensions of the specimens 300 x 300 x 51 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.05 N/mm², dimensions of the specimens 300 x 300 x 51 mm.

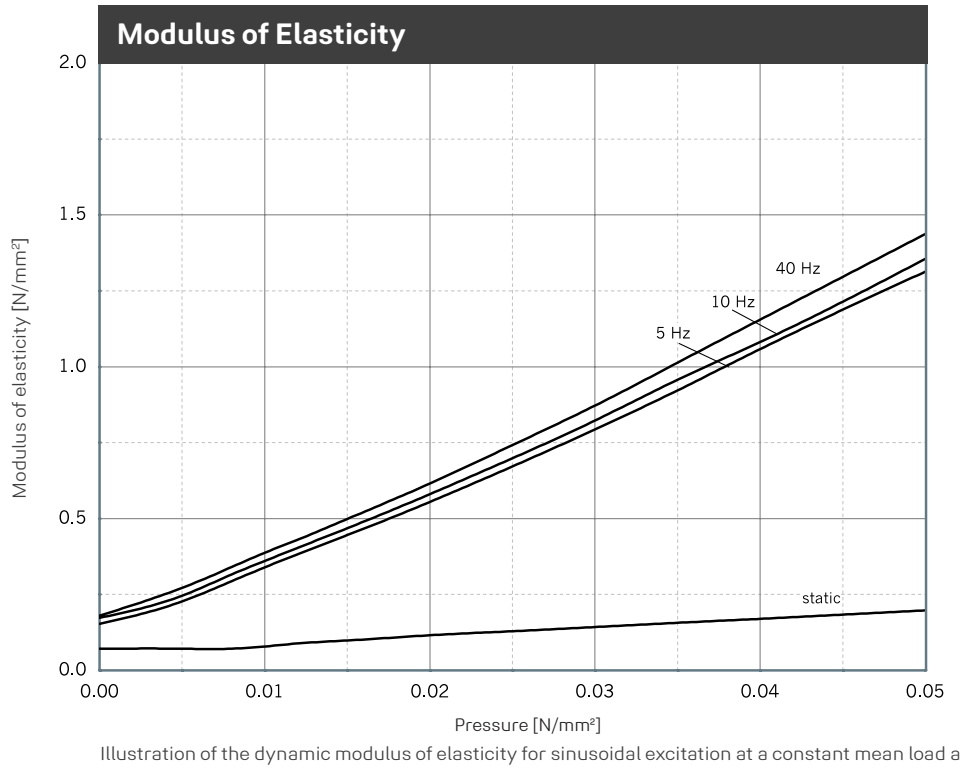


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 34 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

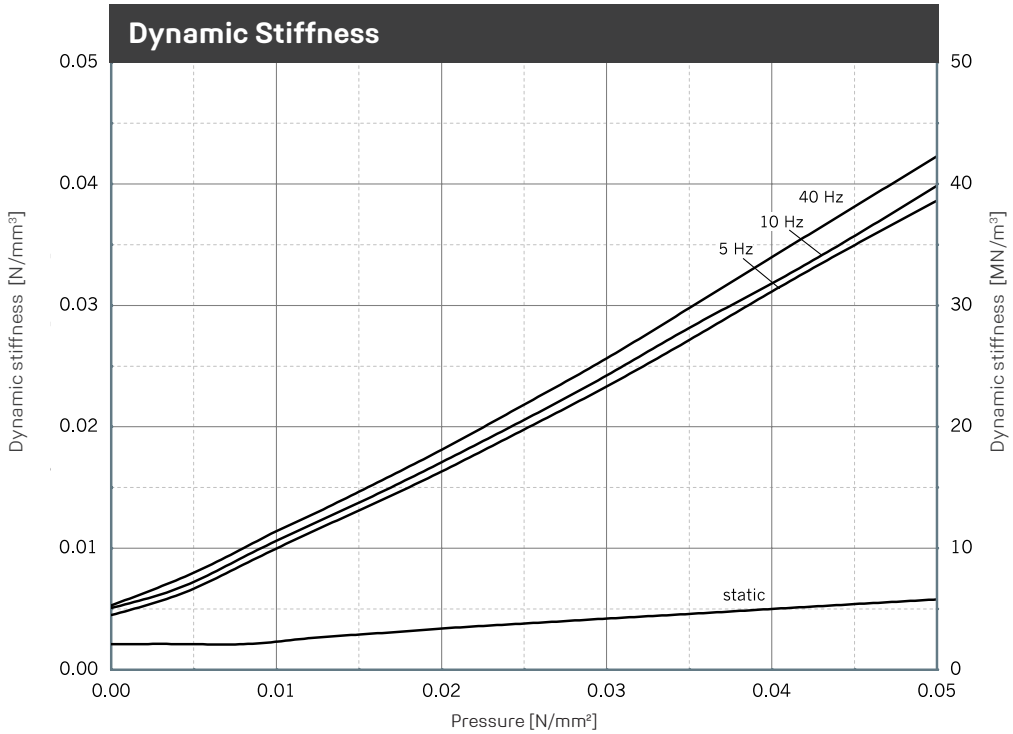
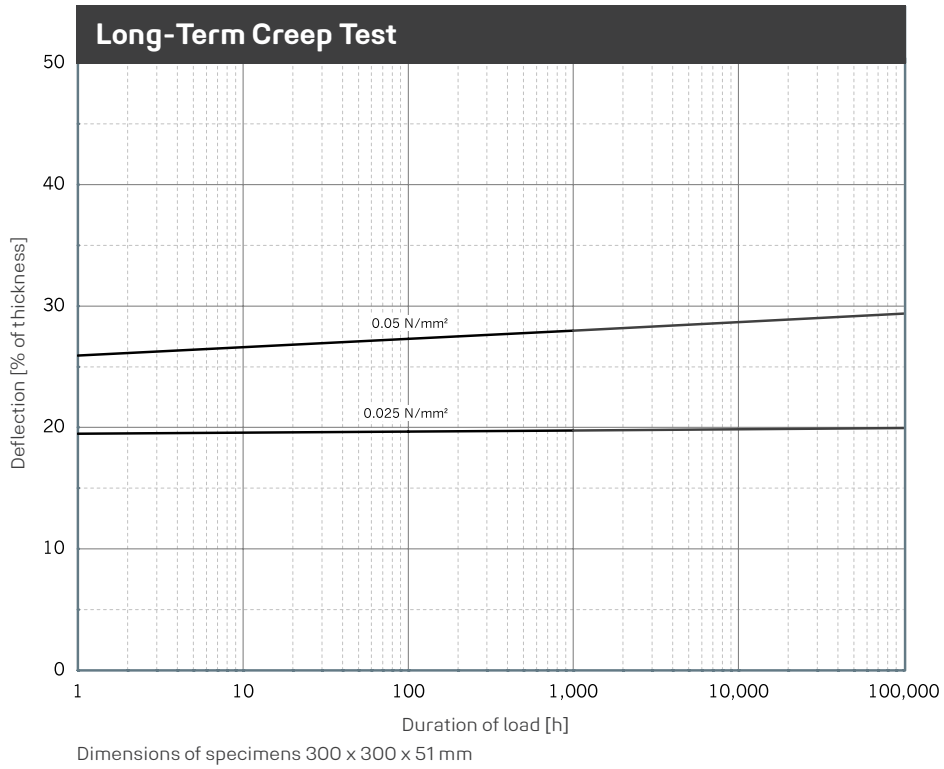


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 34 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 300



Dimensions of specimens 300 x 300 x 51 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

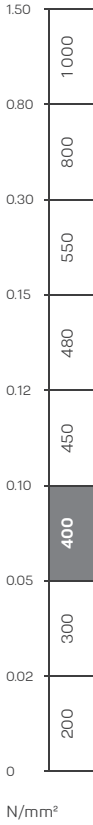
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 400

Forms of delivery, ex warehouse

Rolls
Thickness: 15 mm, dimpled
Length: 10,000 mm, special lengths available
Width: 1,250 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting, self-adhesive versions possible



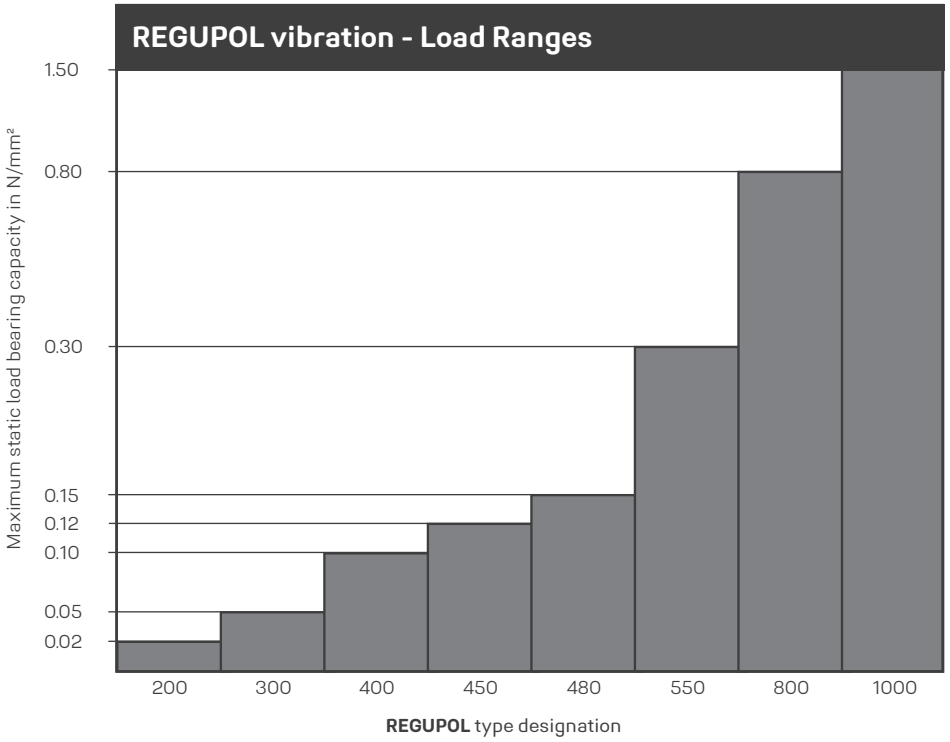
Technical Details

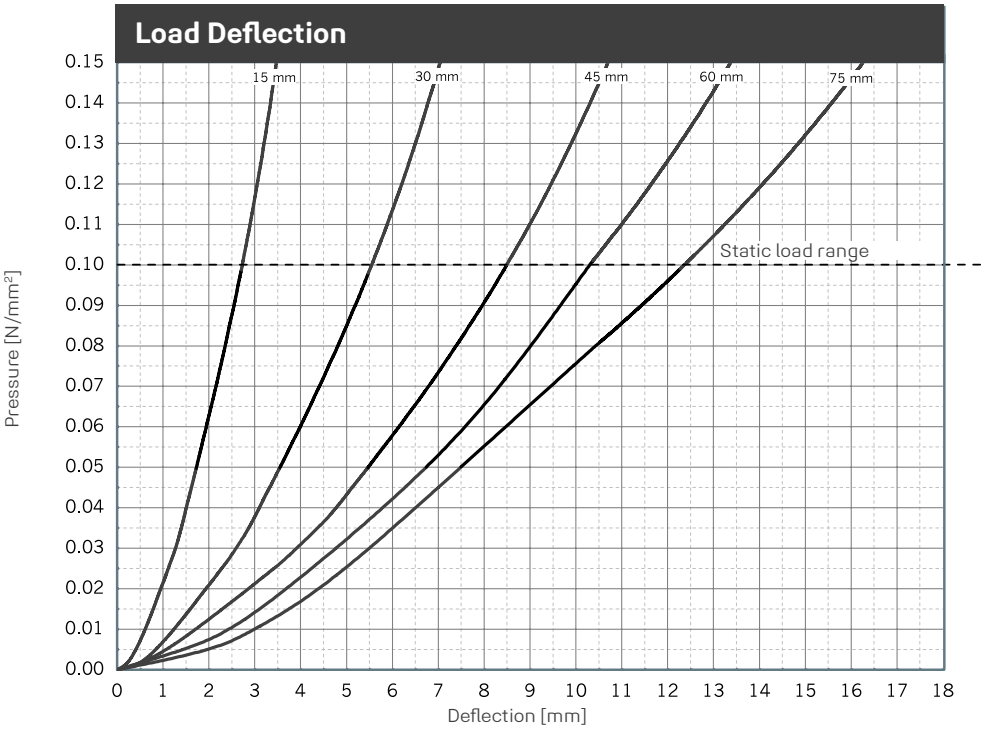
Maximum static load bearing capacity
0.100 N/mm²

Rare, short term peak loads
up to 0.150 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.30 - 0.55 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.9 - 2.4 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.17	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	2.1 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.34 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	55 %	
Tear resistance	Based on DIN ISO 34-1	3.2 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	180 kPa	Compressive stress at 25 % deformation test specimen h = 60 mm
Rebound elasticity	Based on DIN EN ISO 8307	22 %	dependent on thickness, test specimen h = 60 mm
Force reduction	DIN EN 14904	73 %	dependent on thickness, test specimen h = 60 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 400





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

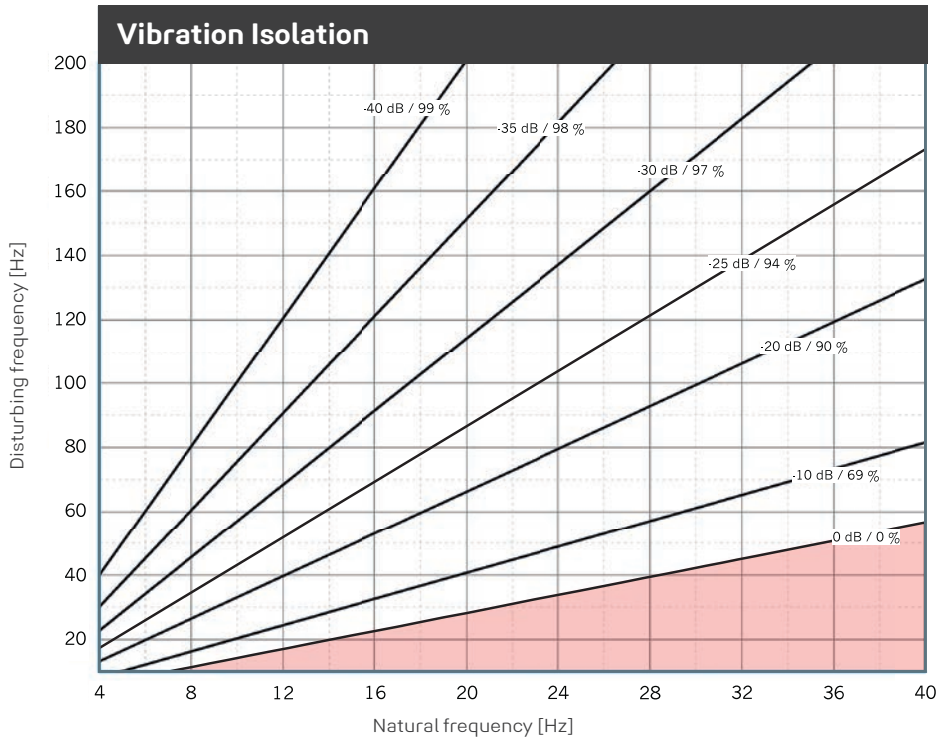
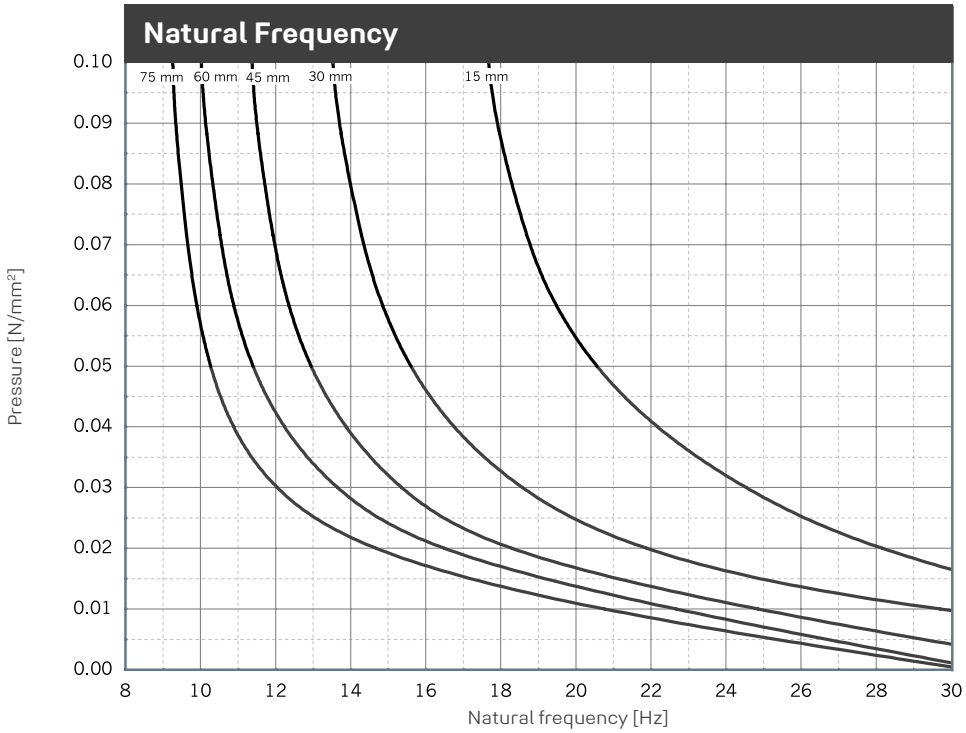
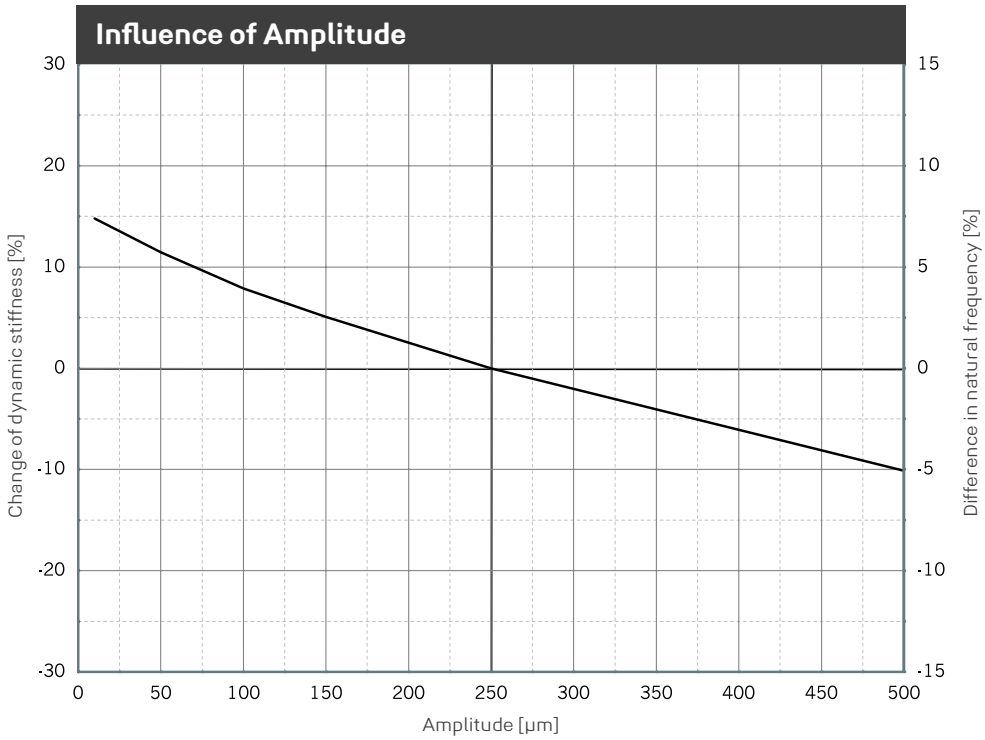


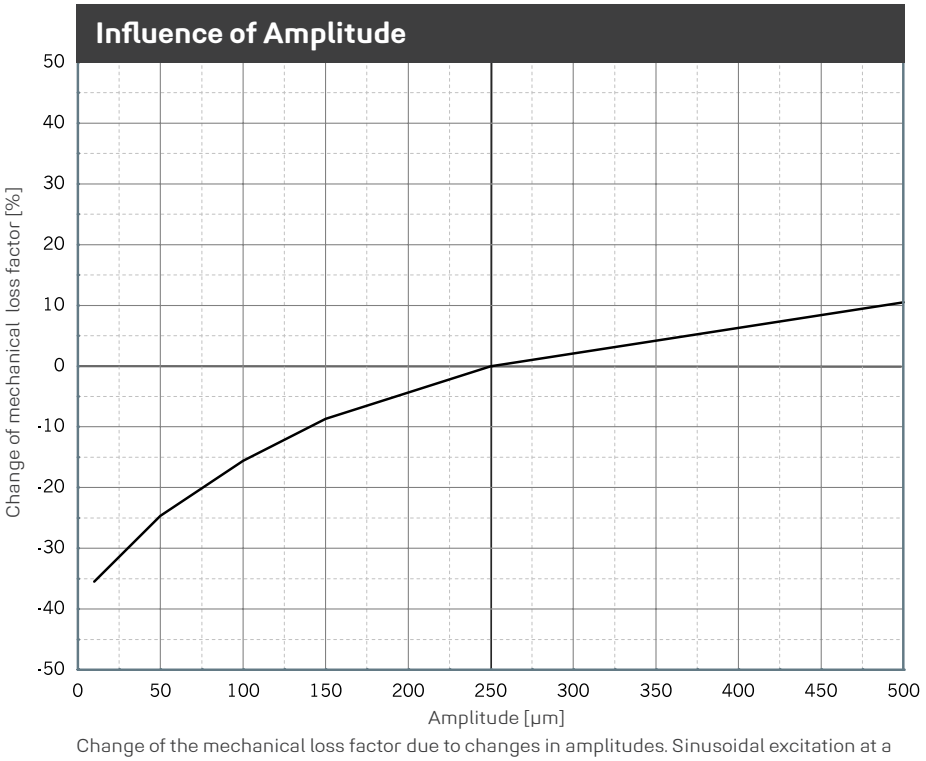
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 400.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 400** on a rigid base. Dimensions of test specimens 300 x 300 mm.



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 x 300 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 x 300 x 60 mm.

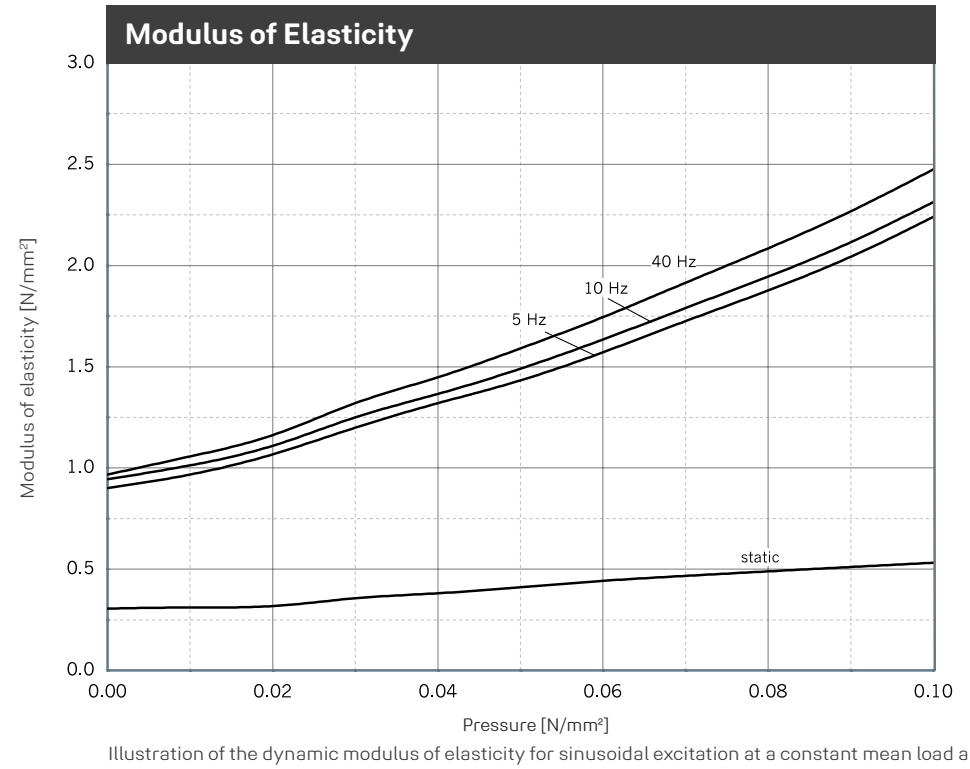


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

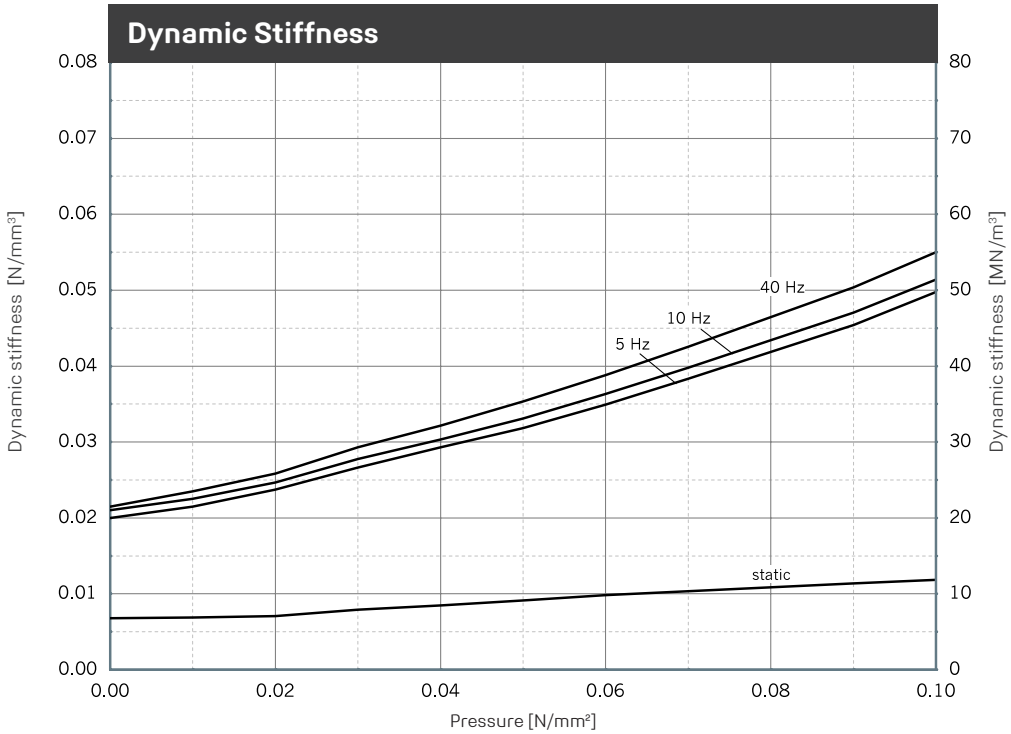
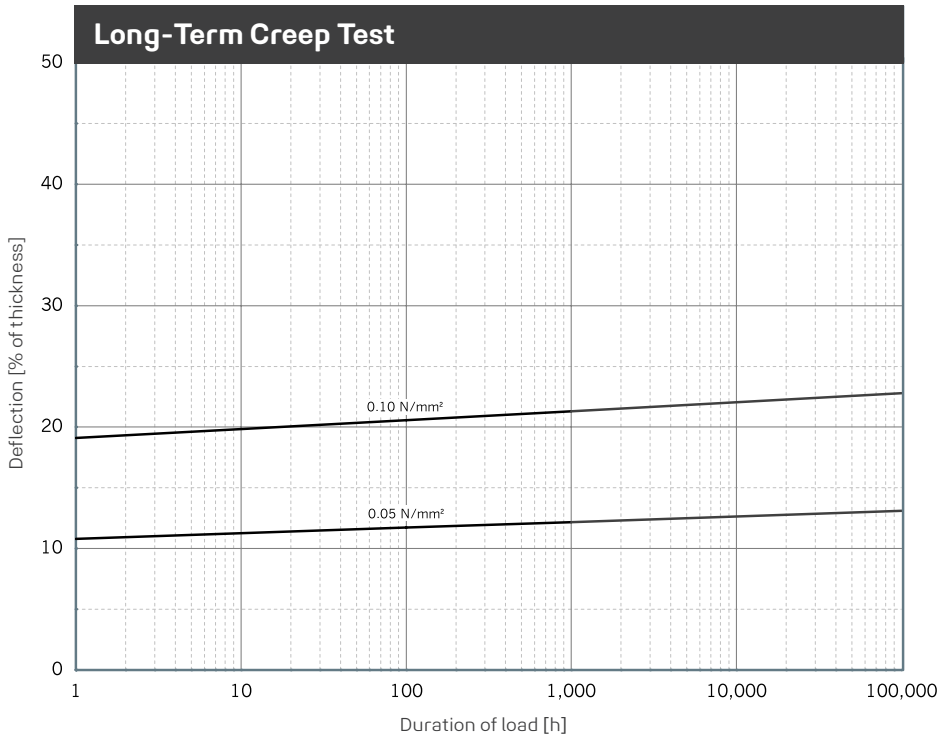


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 400



Dimensions of specimens 300 x 300 x 60 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 450

Forms of delivery, ex warehouse

Plates
Thickness: 25 and 50 mm, special thicknesses available
Length: 1,000 mm
Width: 500 mm

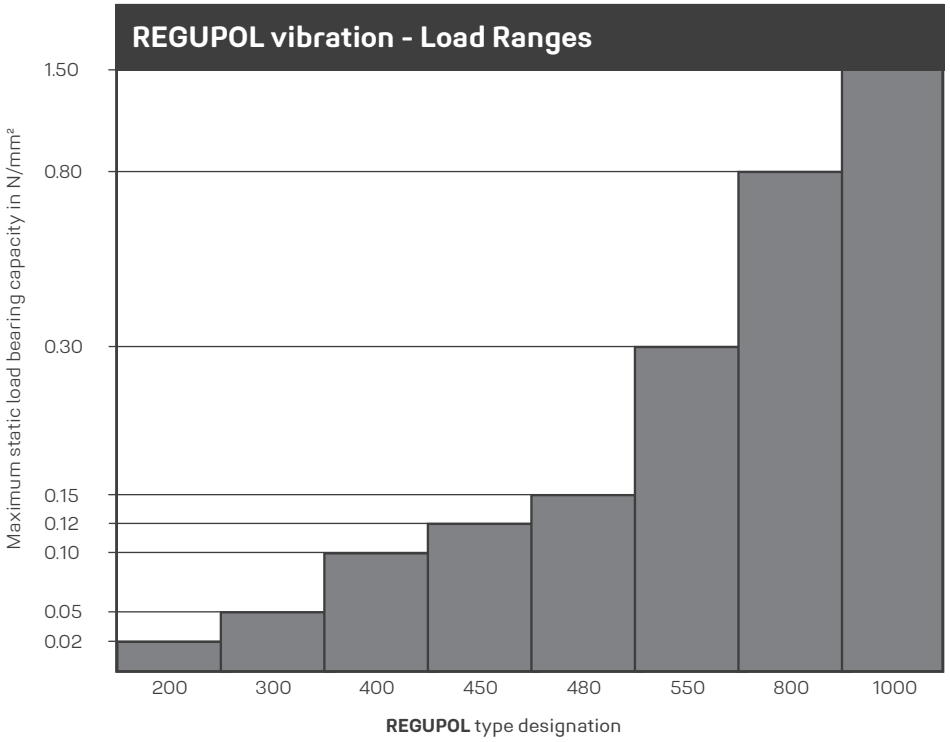
Technical Details

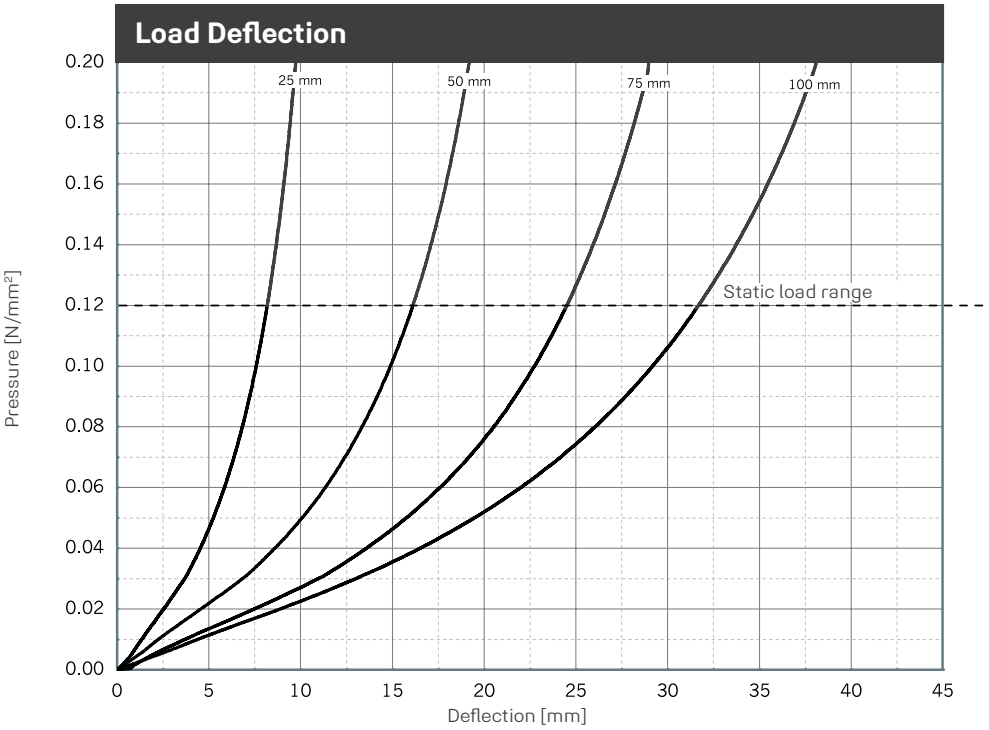
Maximum static load bearing capacity
0.120 N/mm²

Rare, short term peak loads
up to 0.180 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.2 - 0.4 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.45 - 2.70 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.17	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.1 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.15 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	40 %	
Tear resistance	Based on DIN ISO 34-1	1.9 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.5 0.6	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	83 kPa	Compressive stress at 25 % deformation test specimen h = 50 mm
Rebound elasticity	Based on DIN EN ISO 8307	42.7 %	dependent on thickness, test specimen h = 50 mm
Force reduction	DIN EN 14904	74 %	dependent on thickness, test specimen h = 50 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 450





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUPOL VIBRATION 450

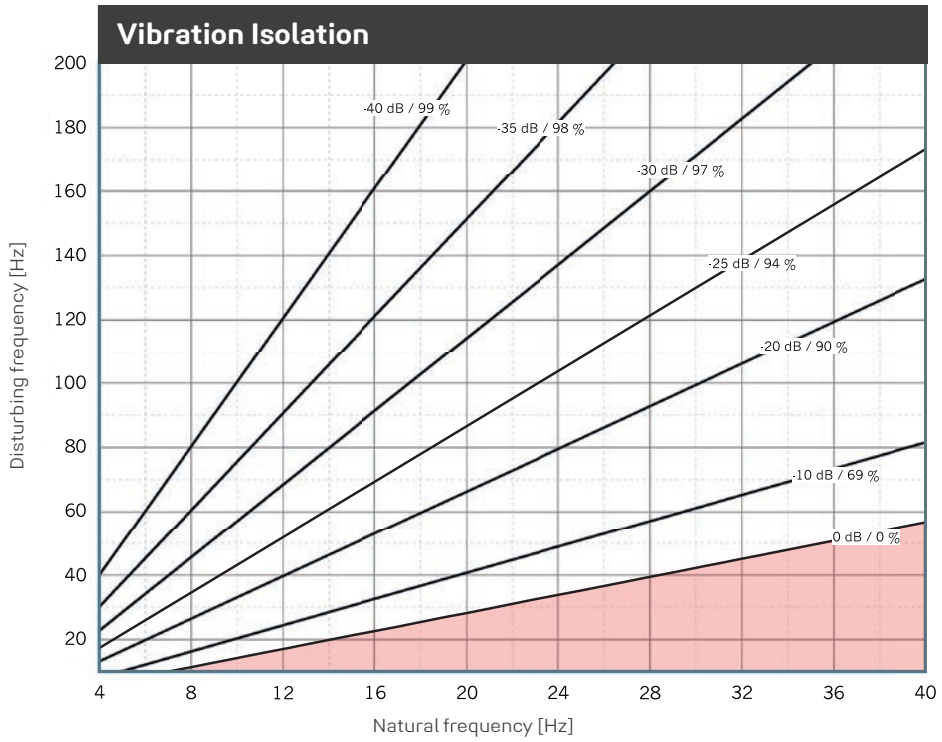
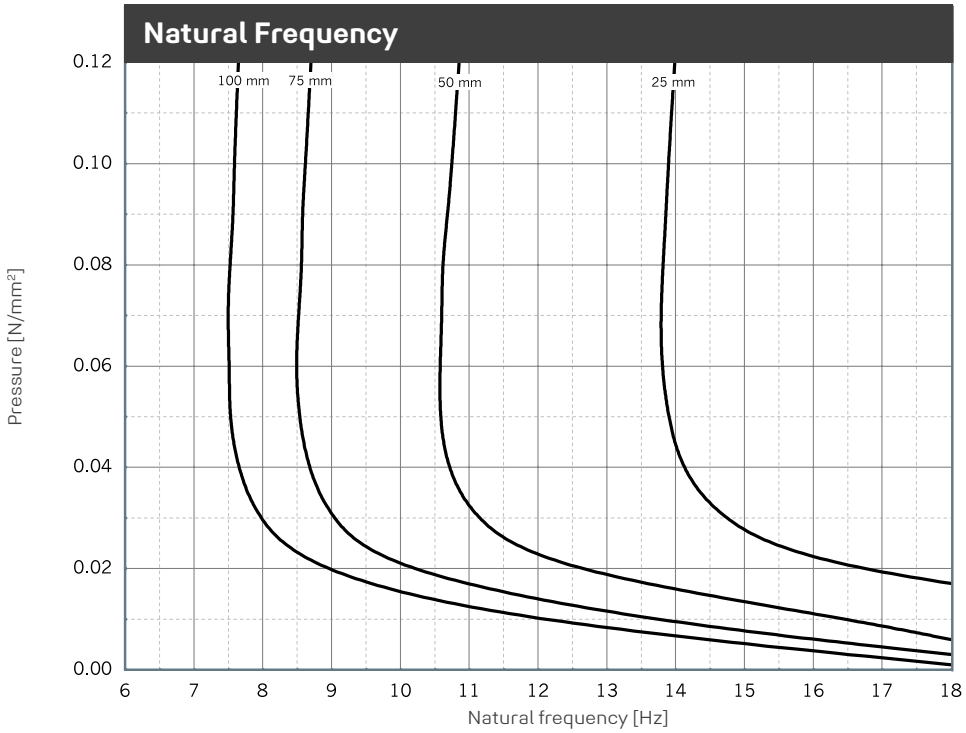
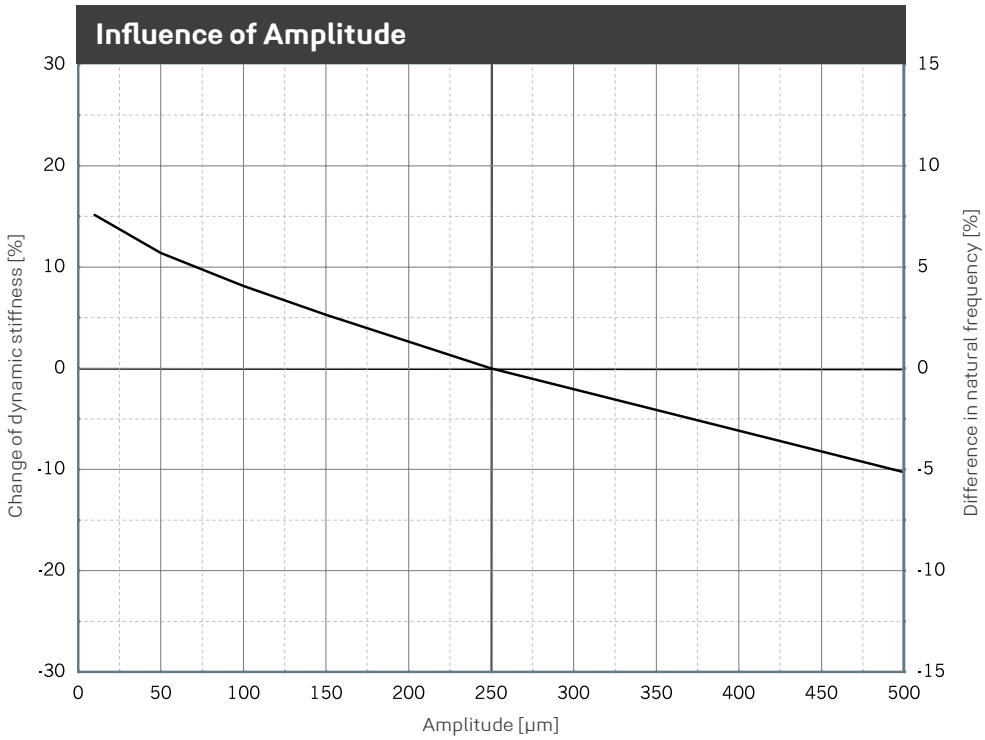


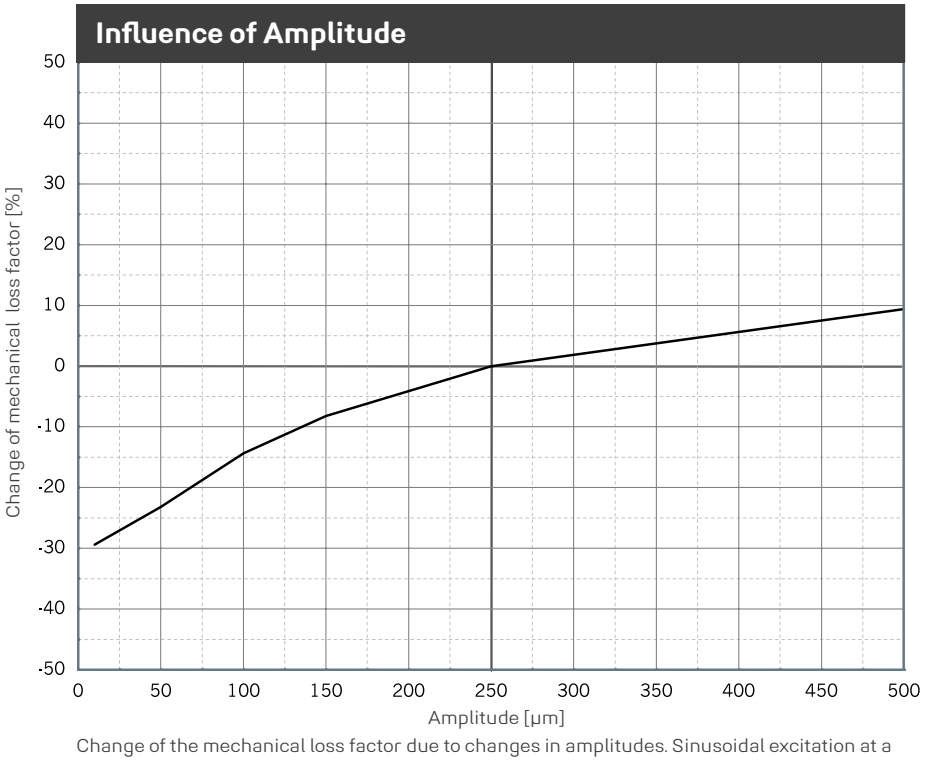
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 450.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 450** on a rigid base. Dimensions of test specimens 300 x 300 mm.

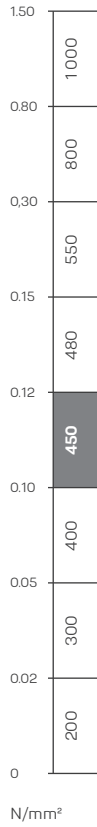


Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 x 300 x 50 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 x 300 x 50 mm.

REGUPOL VIBRATION 450



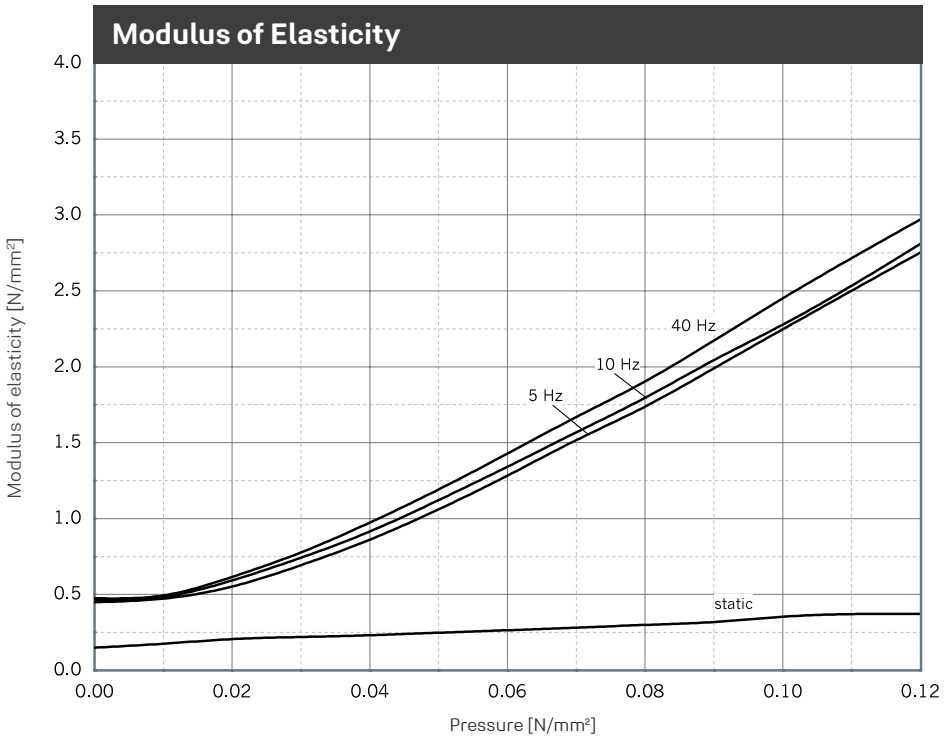


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 50 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

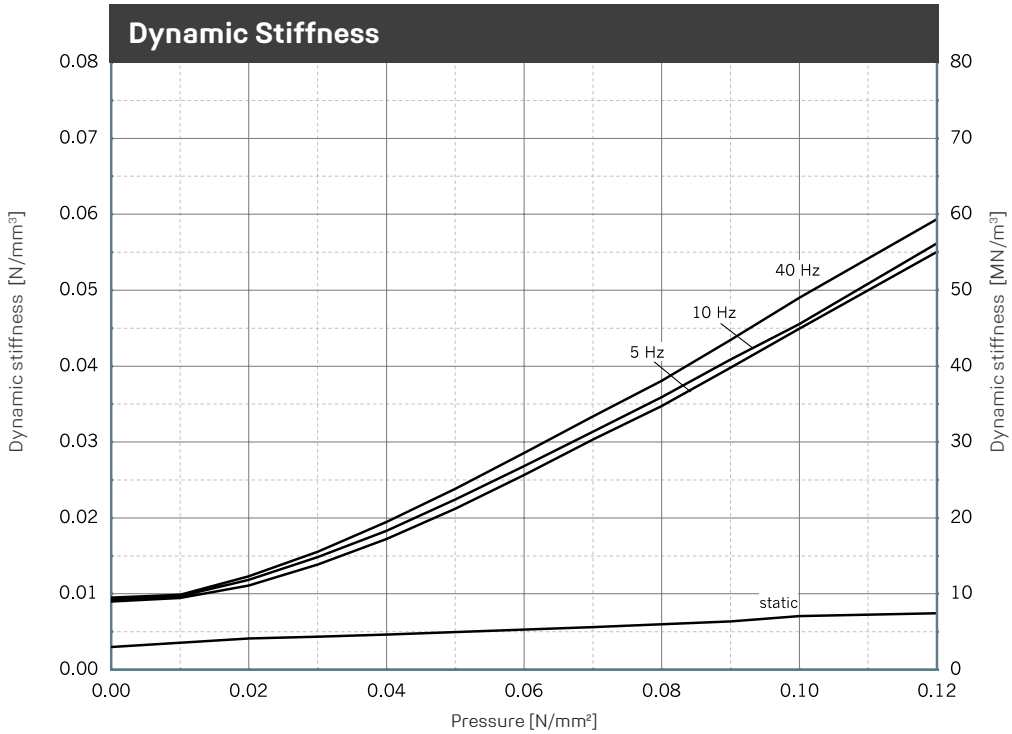
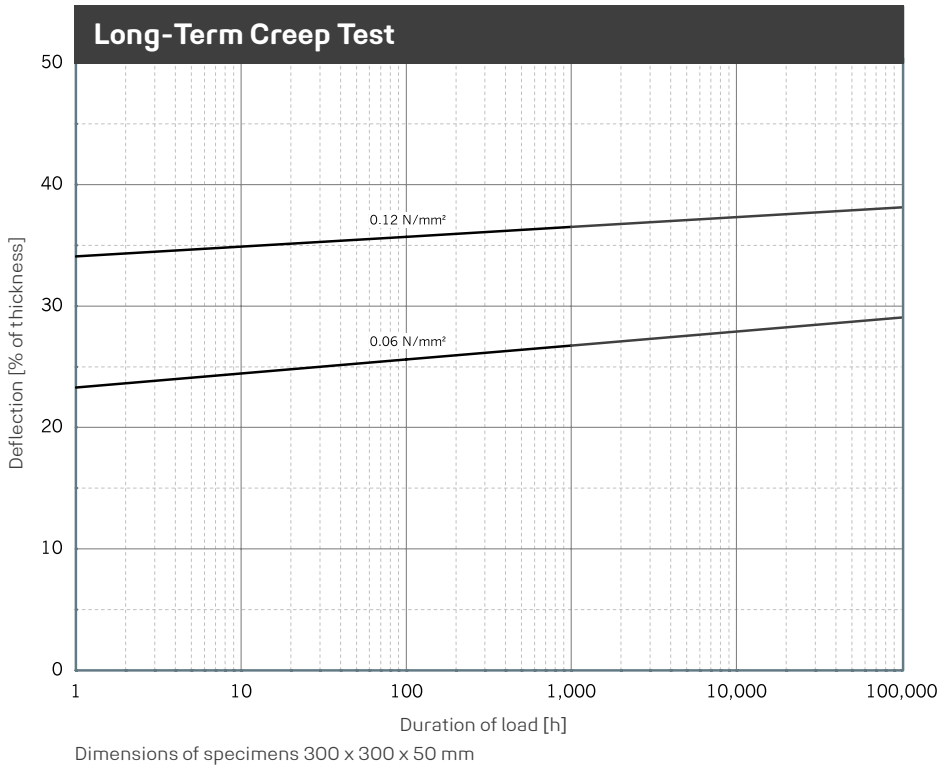


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 50 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 450



Dimensions of specimens 300 x 300 x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

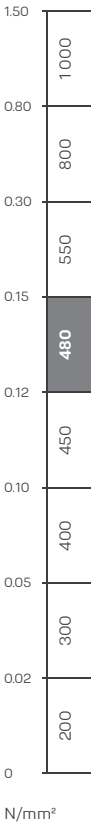
Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 480

Forms of delivery, ex warehouse

Rolls
Thickness: 15 mm
Length: 10,000 mm, special lengths available
Width: 1,250 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting, self-adhesive versions possible



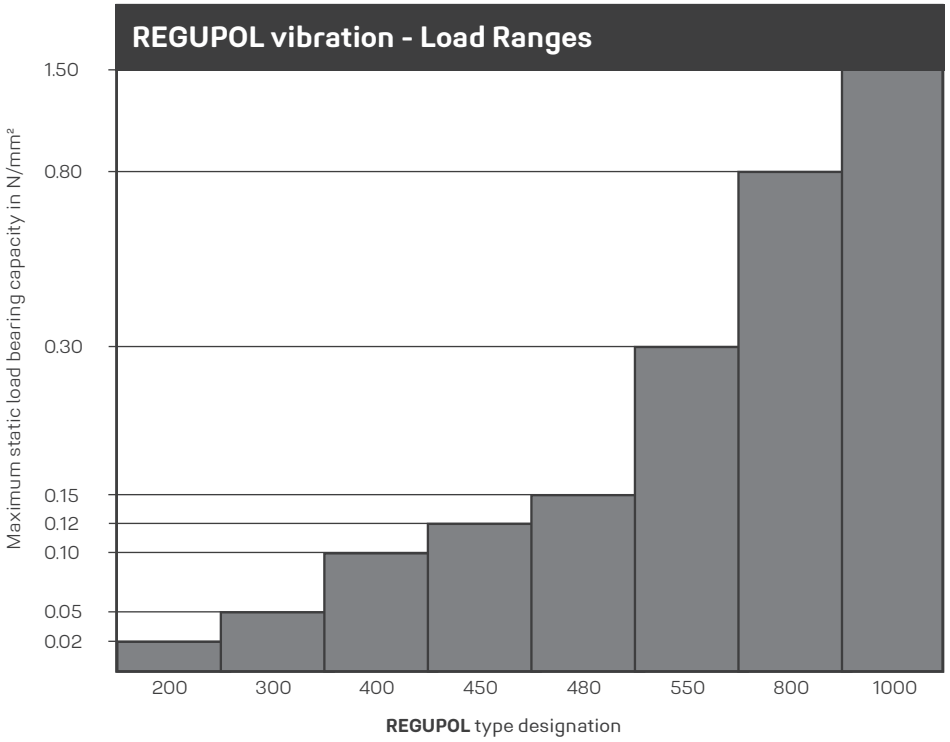
Technical Details

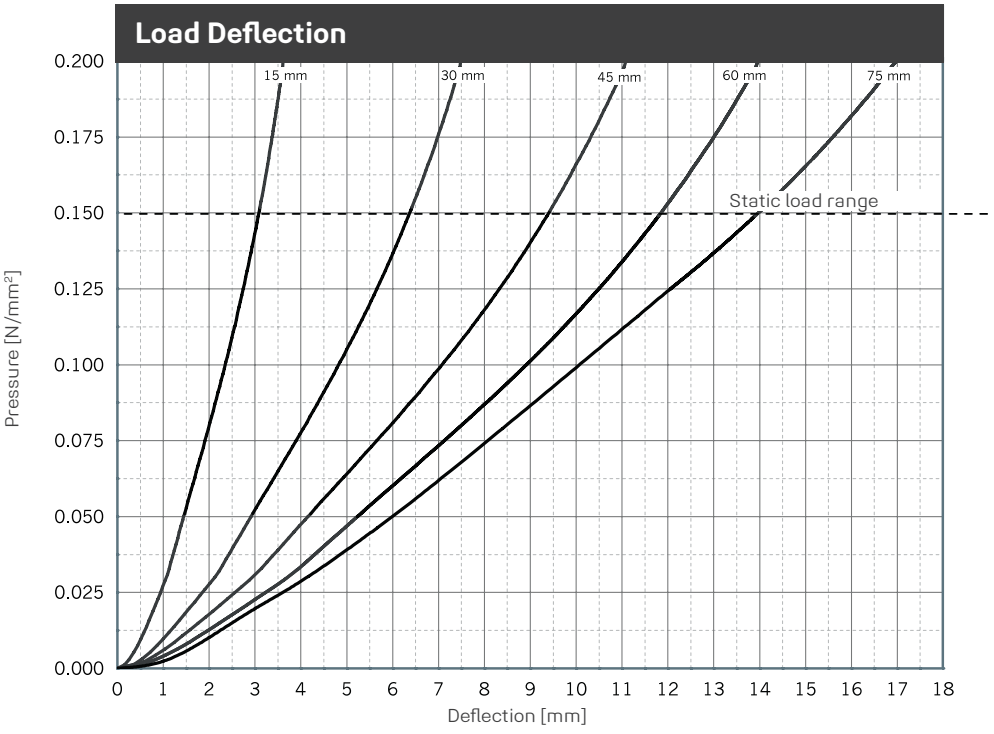
Maximum static load bearing capacity
0.150 N/mm²

Rare, short term peak loads
up to 0.250 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.25 - 0.80 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	1.2 - 3.3 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.17	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.0 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.36 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	55 %	
Tear resistance	Based on DIN ISO 34-1	4.5 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	220 kPa	Compressive stress at 25 % deformation test specimen h = 60 mm
Rebound elasticity	Based on DIN EN ISO 8307	31 %	dependent on thickness, test specimen h = 60 mm
Force reduction	DIN EN 14904	72 %	dependent on thickness, test specimen h = 60 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 480





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUPOL VIBRATION 480

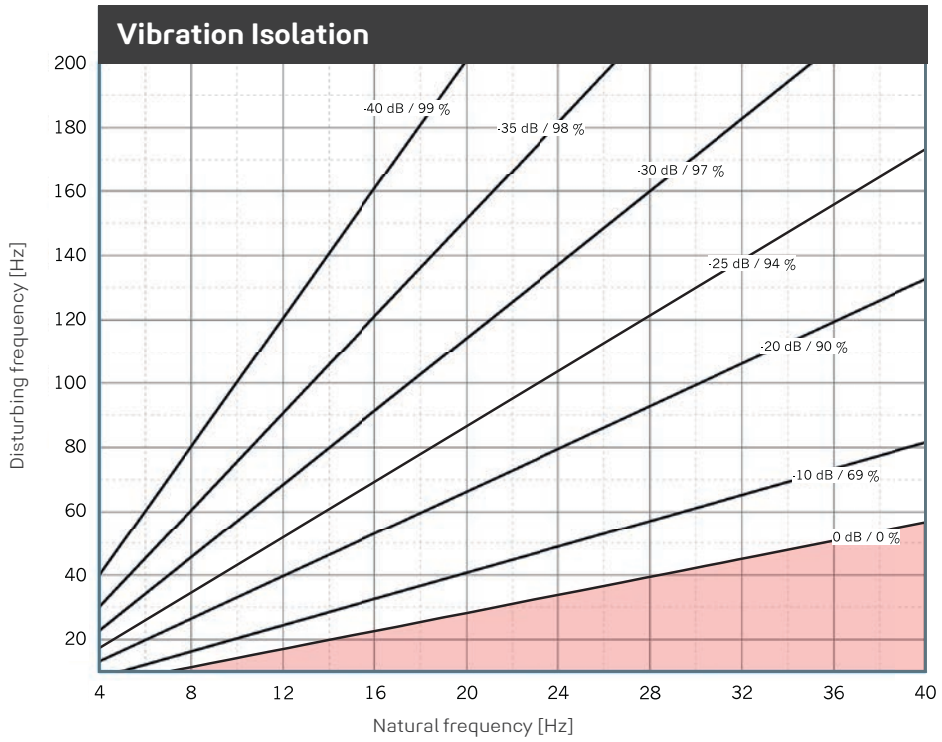
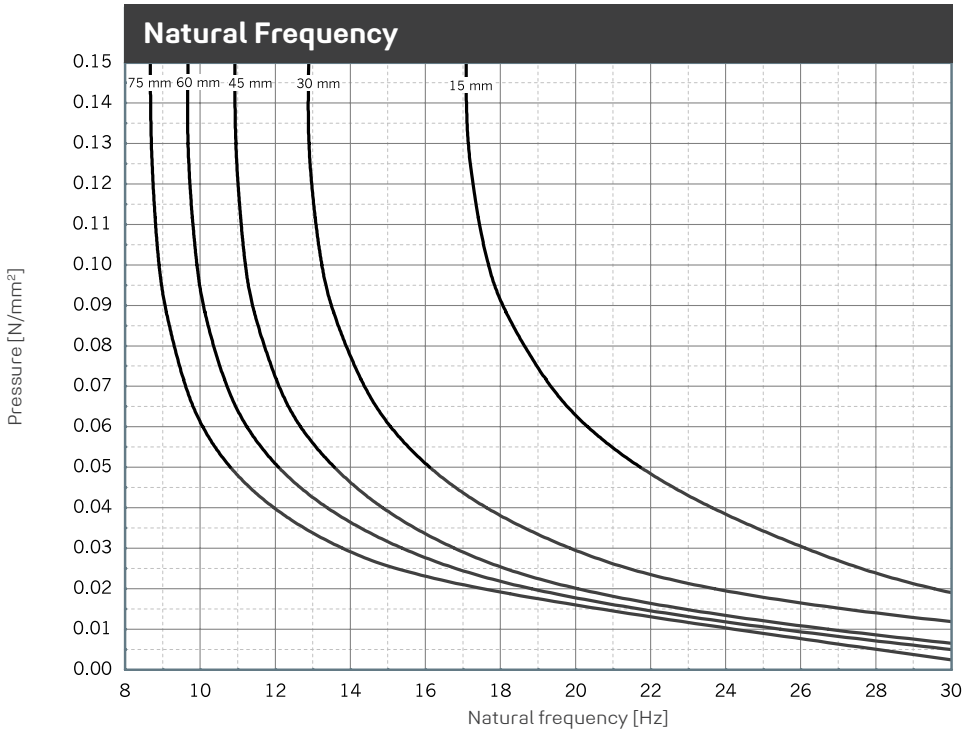
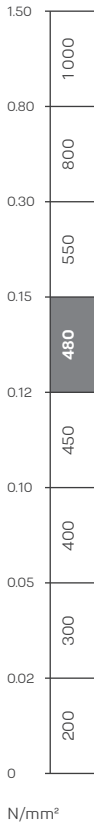


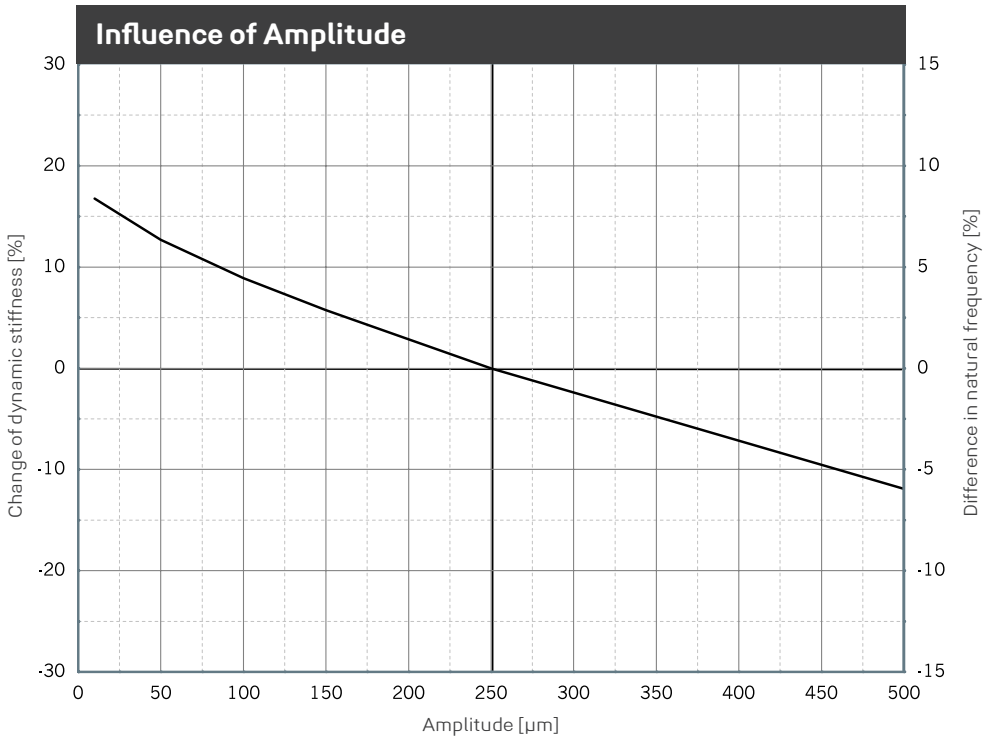
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 480.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



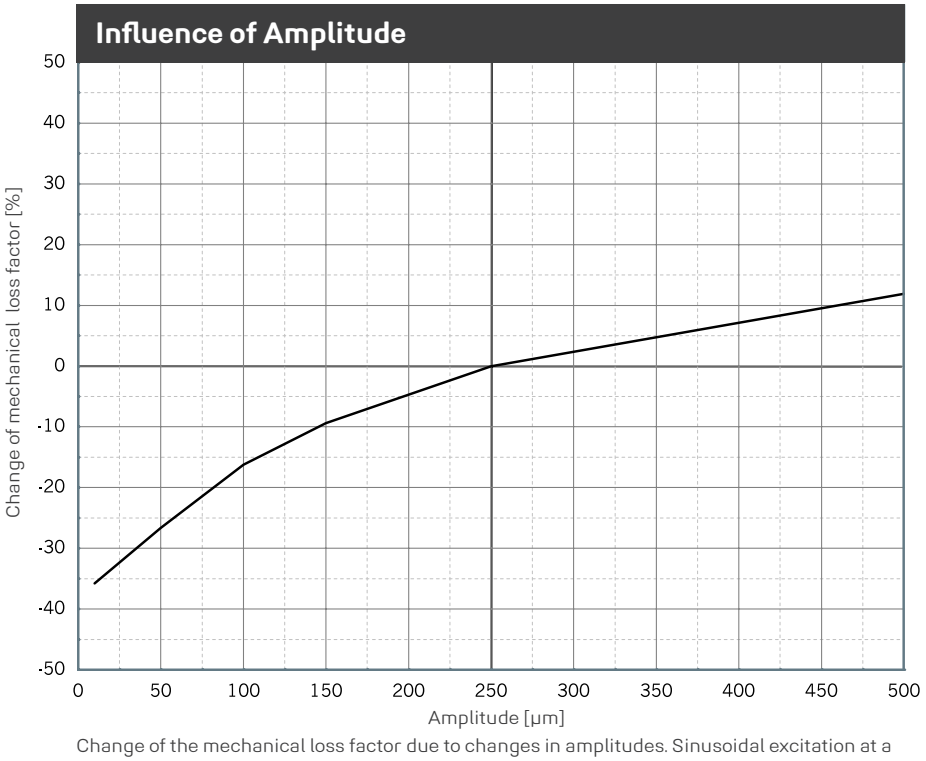
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 480** on a rigid base. Dimensions of test specimens 300 x 300 mm.



REGUPOL VIBRATION 480

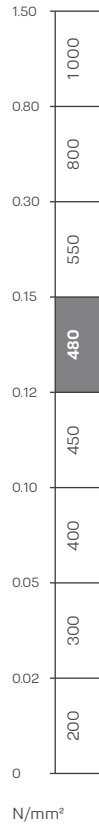


Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 x 300 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 x 300 x 60 mm.

REGUPOL VIBRATION 480



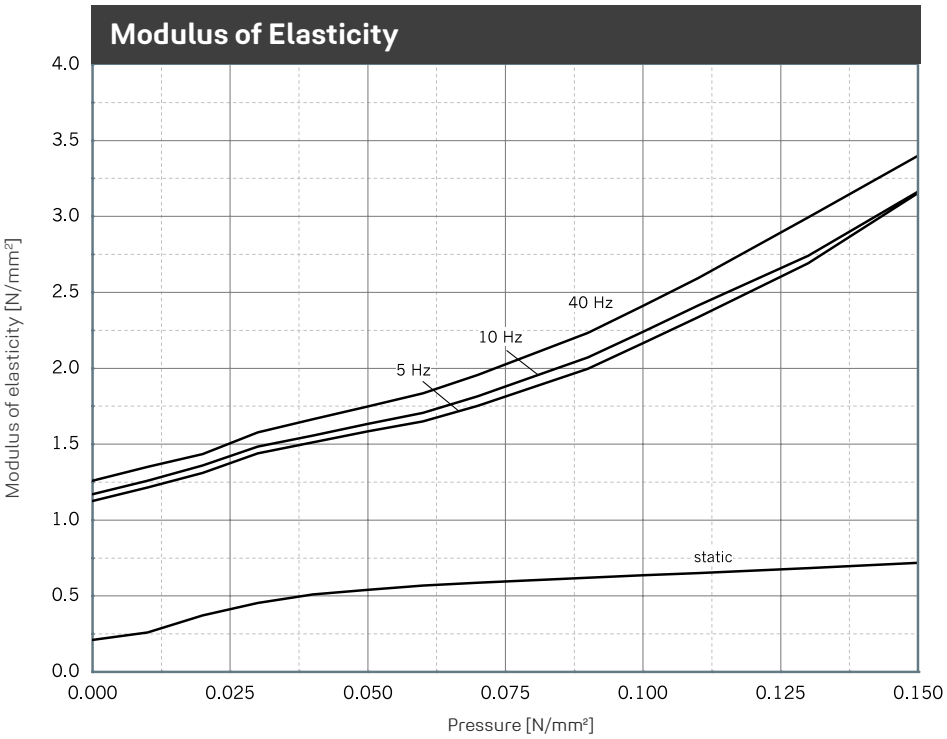


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

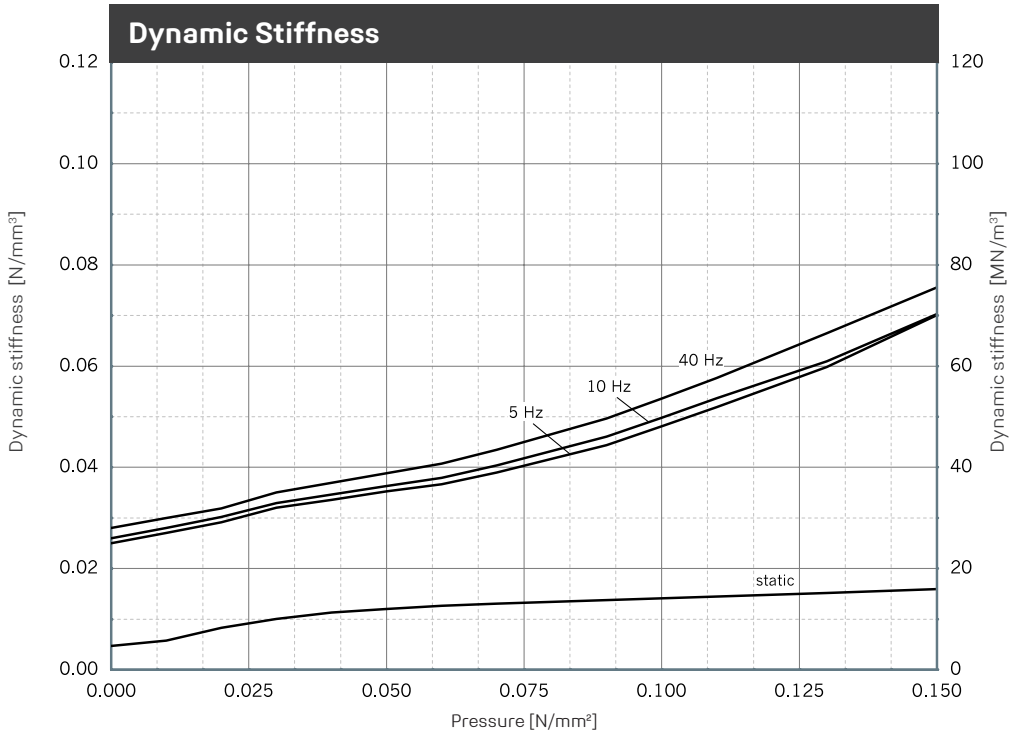
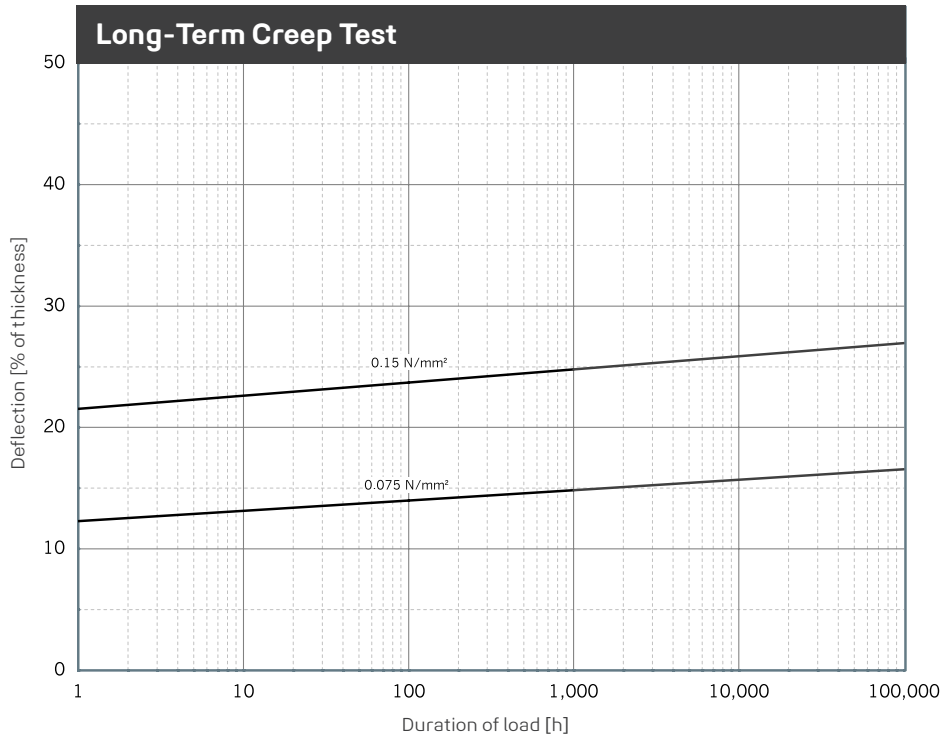


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 480



Dimensions of specimens 300 x 300 x 60 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 550

Forms of delivery, ex warehouse

Rolls
Thickness: 15 mm
Length: 10,000 mm, special lengths available
Width: 1,250 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting, self-adhesive versions possible

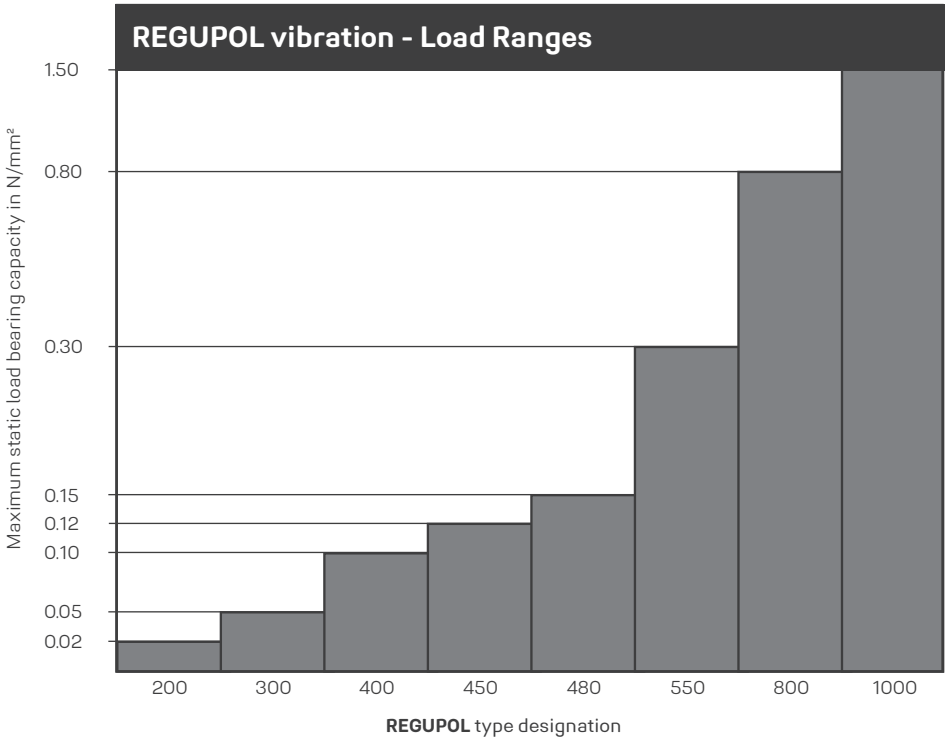
Technical Details

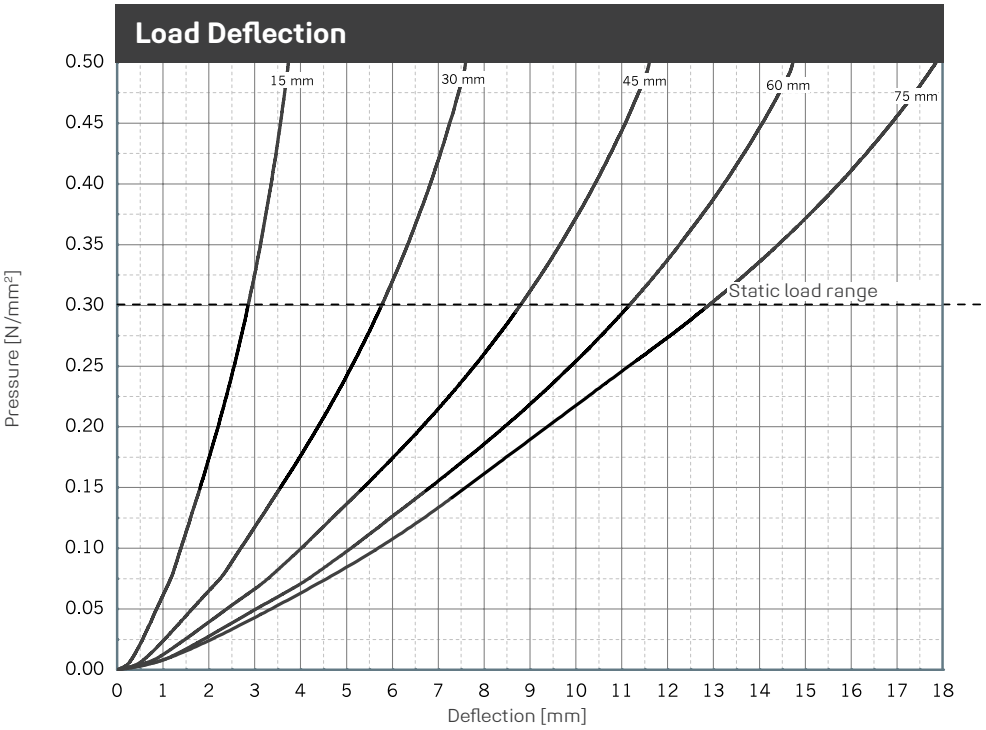
Maximum static load bearing capacity
0.300 N/mm²

Rare, short term peak loads
up to 0.400 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.5 - 1.7 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	2.5 - 7.0 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.16	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.4 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.6 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	65 %	
Tear resistance	Based on DIN ISO 34-1	5.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	415 kPa	Compressive stress at 25 % deformation test specimen h = 60 mm
Rebound elasticity	Based on DIN EN ISO 8307	36 %	dependent on thickness, test specimen h = 60 mm
Force reduction	DIN EN 14904	65 %	dependent on thickness, test specimen h = 60 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 550





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 x 300 mm.

REGUPOL VIBRATION 550

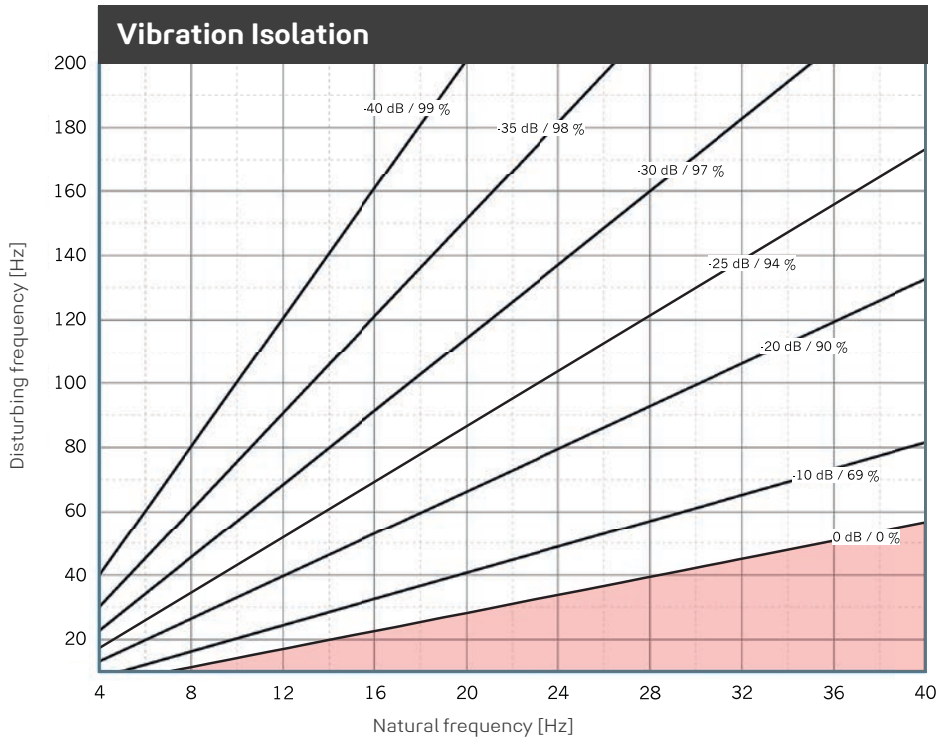
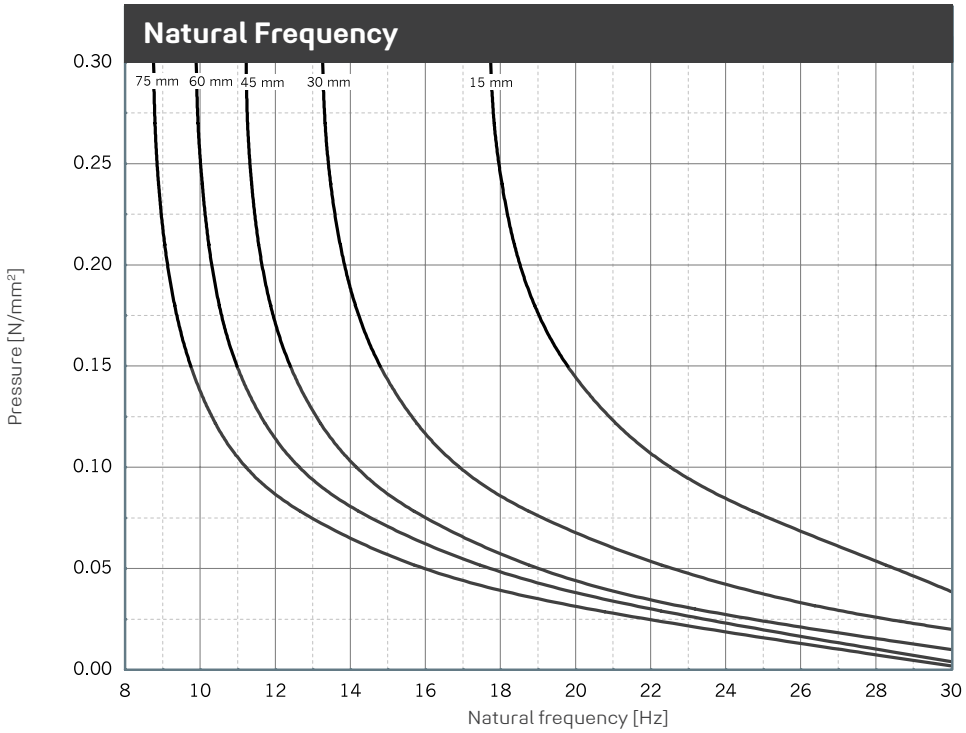
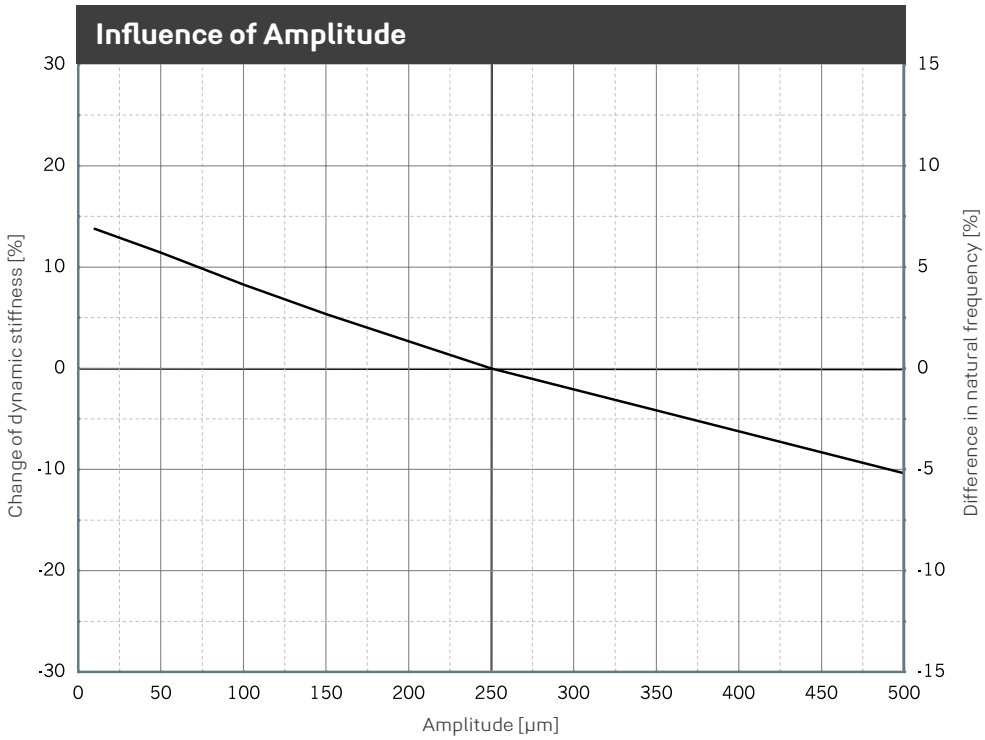


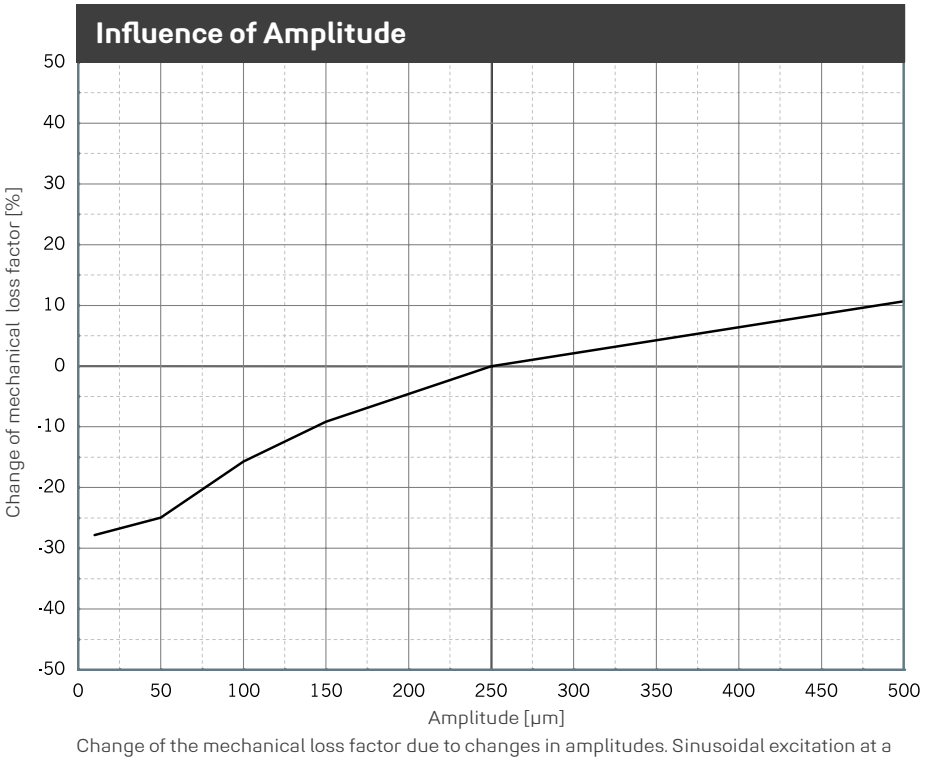
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 550.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 550** on a rigid base. Dimensions of test specimens 300 x 300 mm.



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.25 N/mm², dimensions of the specimens 300 x 300 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.25 N/mm², dimensions of the specimens 300 x 300 x 60 mm.

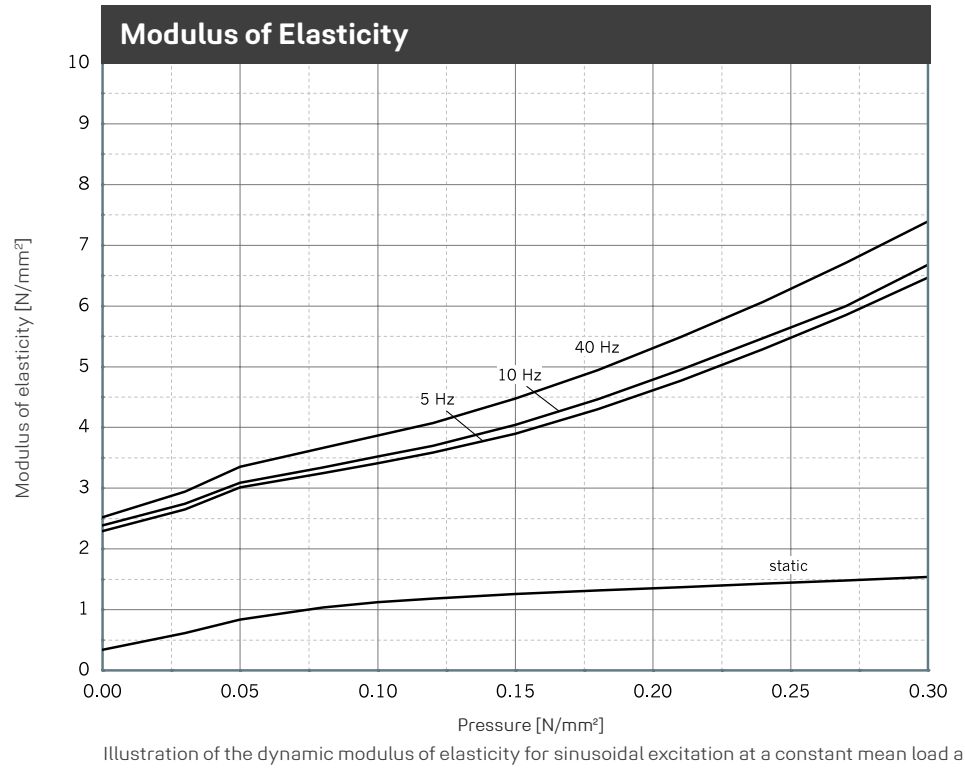


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

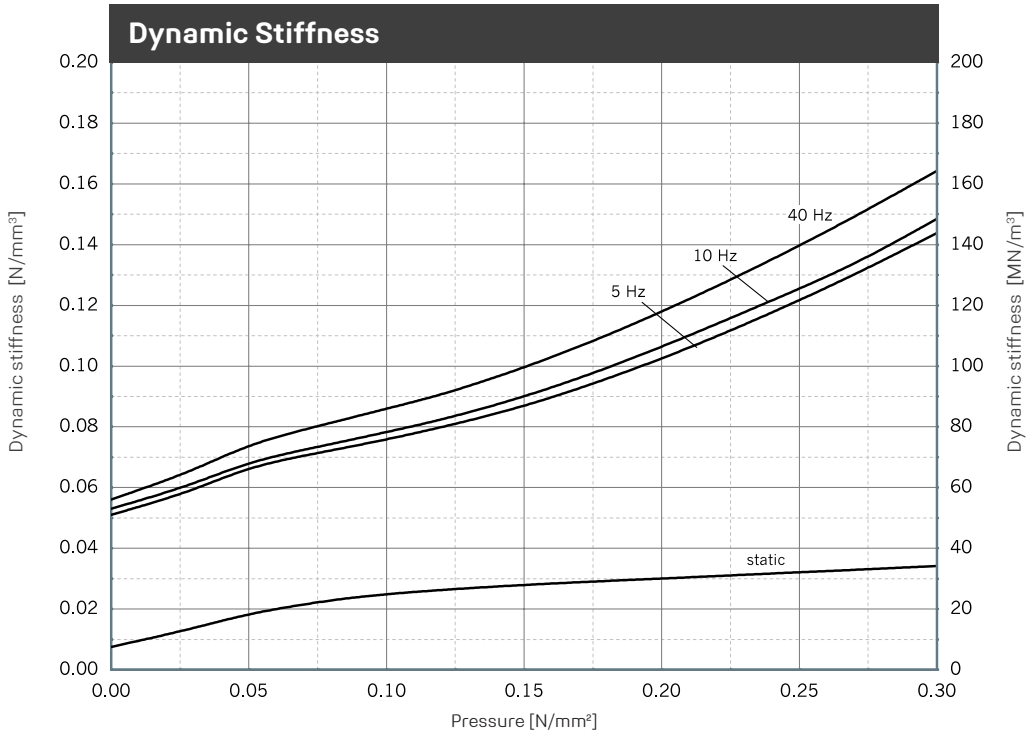
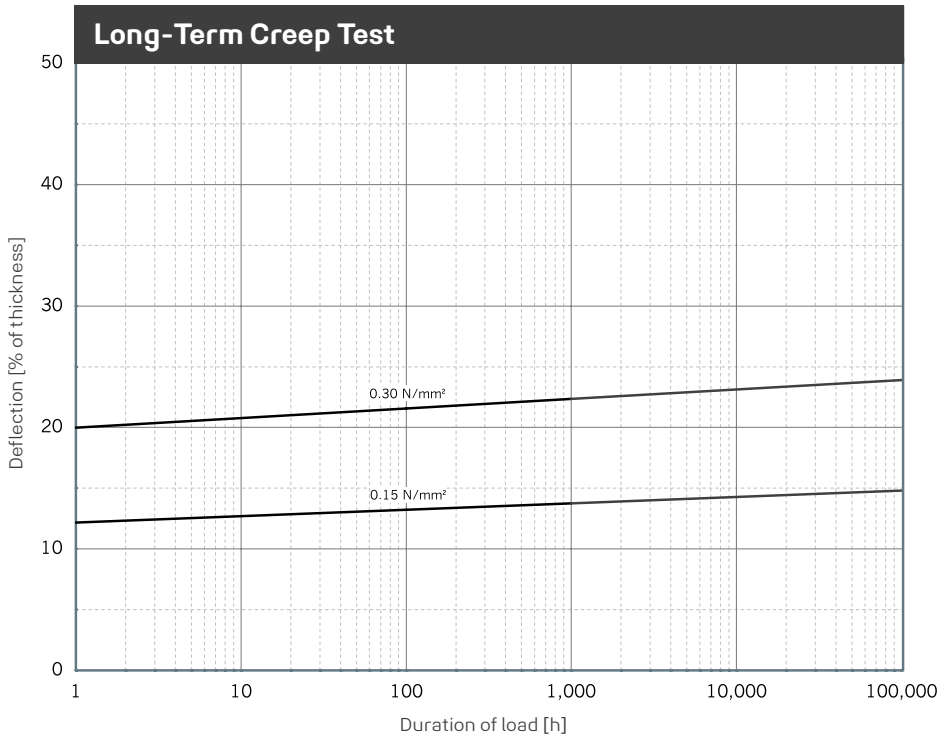


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 550



Dimensions of specimens 300 x 300 x 60 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 800

Forms of delivery, ex warehouse

Rolls
Thickness: 10 mm
Length: 8,000 mm, special lengths available
Width: 1,250 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting, self-adhesive versions possible

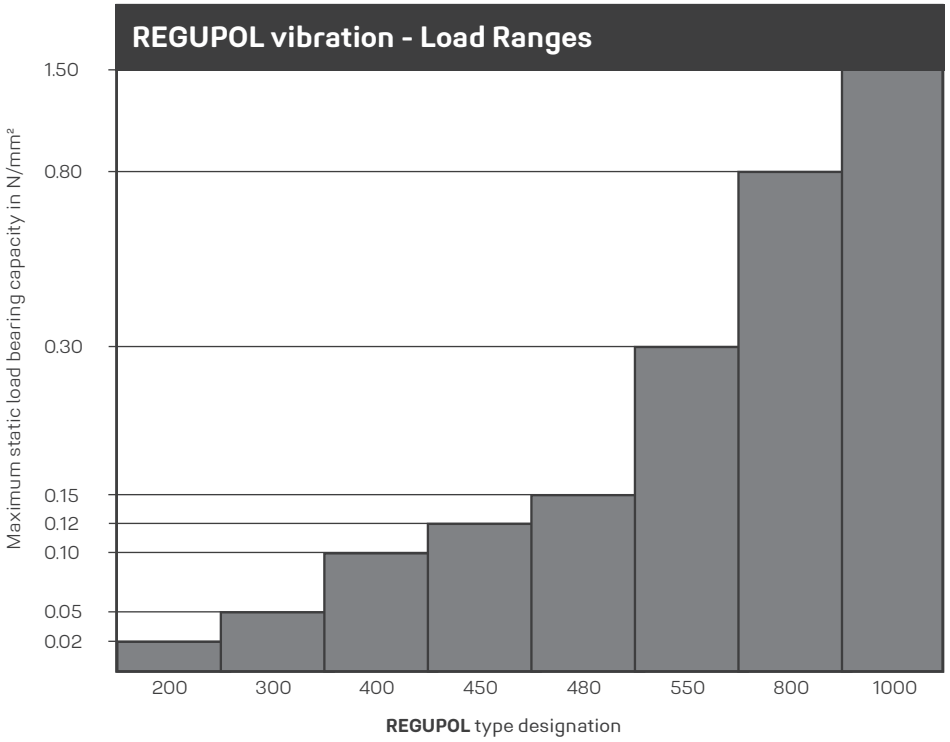
Technical Details

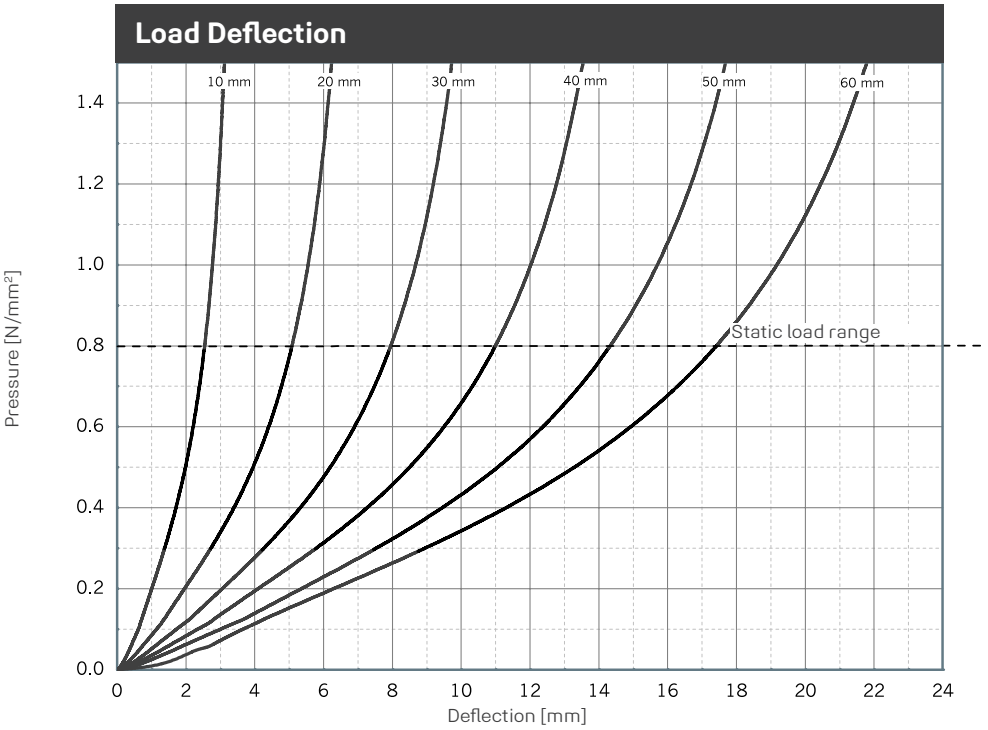
Maximum static load bearing capacity
0.800 N/mm²

Rare, short term peak loads
up to 1.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	1.2 - 2.9 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	3.6 - 18.2 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.18	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.7 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.9 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	70 %	
Tear resistance	Based on DIN ISO 34-1	8.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.7 0.8	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	545 kPa	Compressive stress at 25 % deformation test specimen h = 60 mm
Rebound elasticity	Based on DIN EN ISO 8307	30 %	dependent on thickness, test specimen h = 60 mm
Force reduction	DIN EN 14904	61 %	dependent on thickness, test specimen h = 60 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 800





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 x 250 mm.

REGUPOL VIBRATION 800

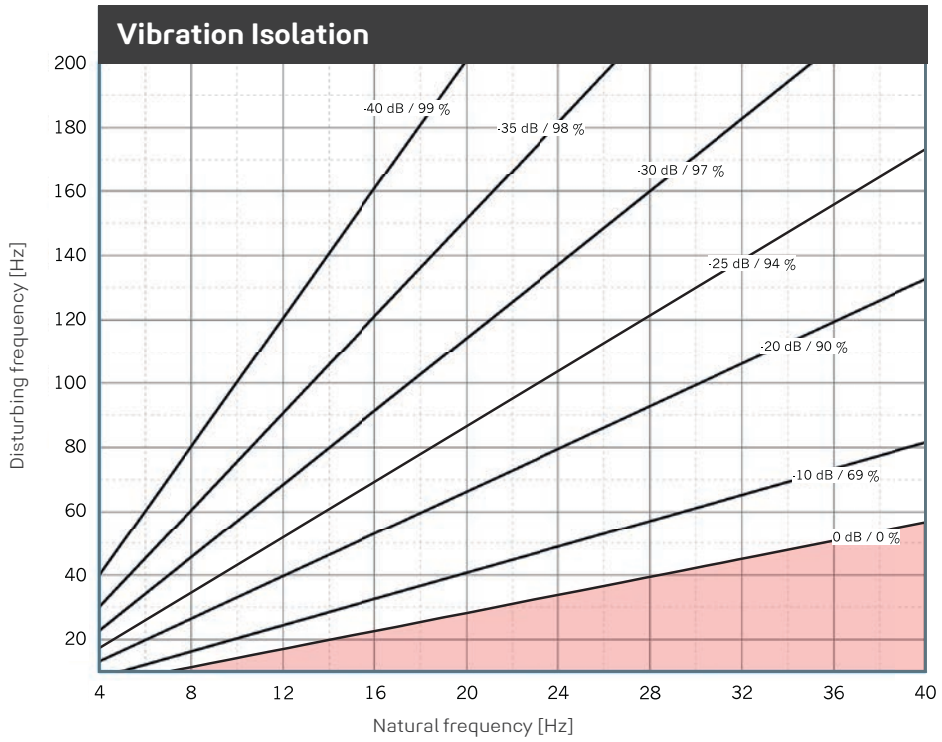
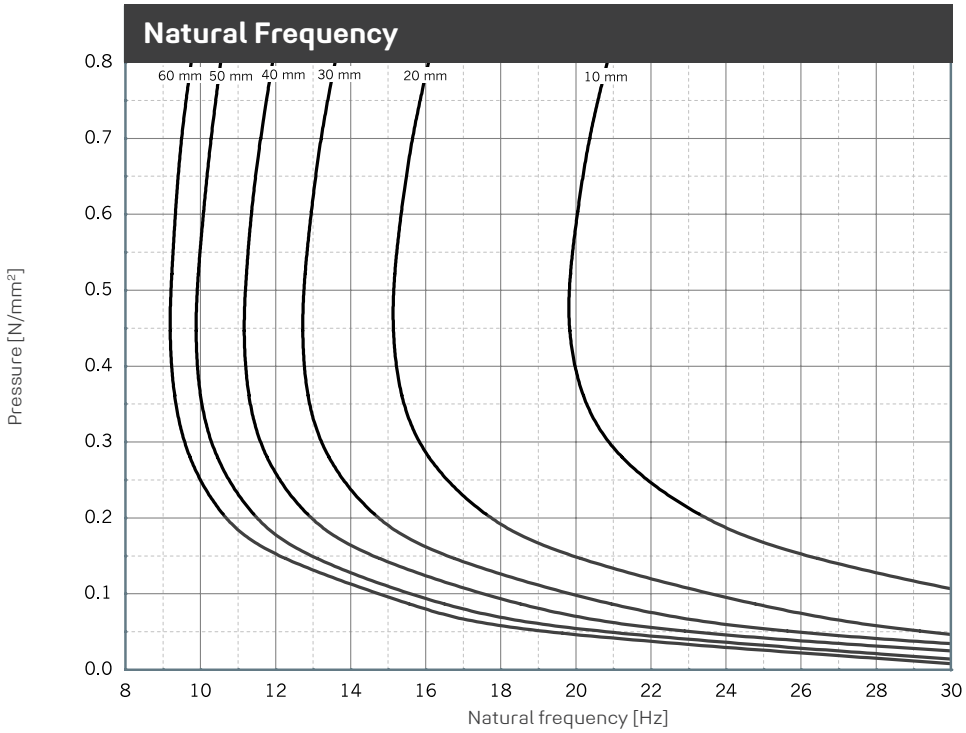
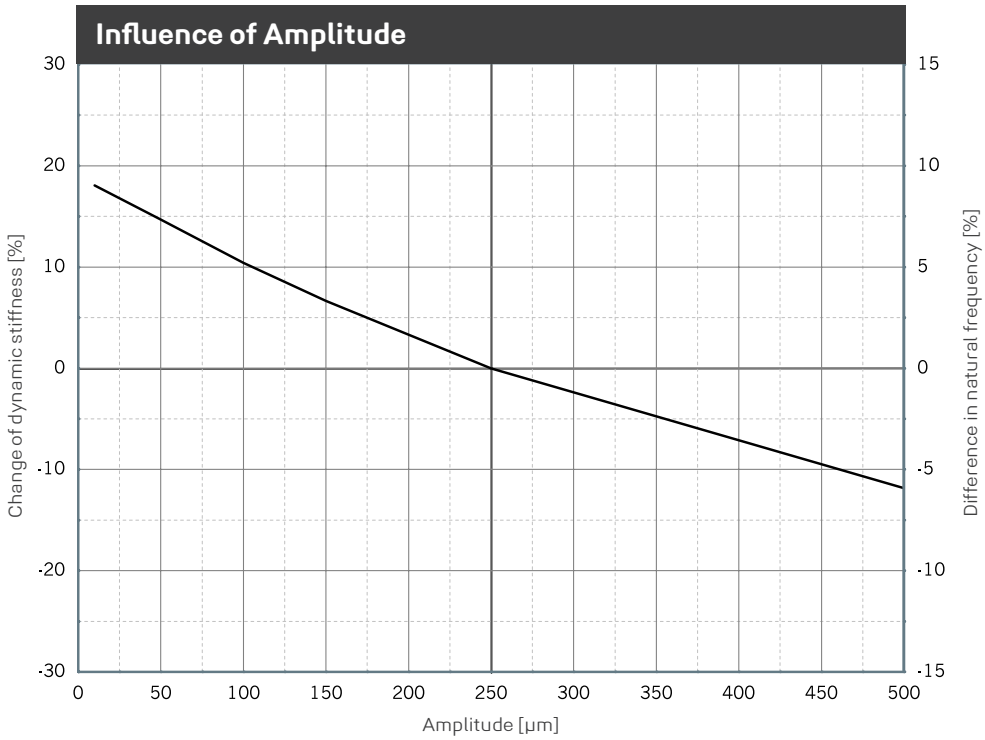


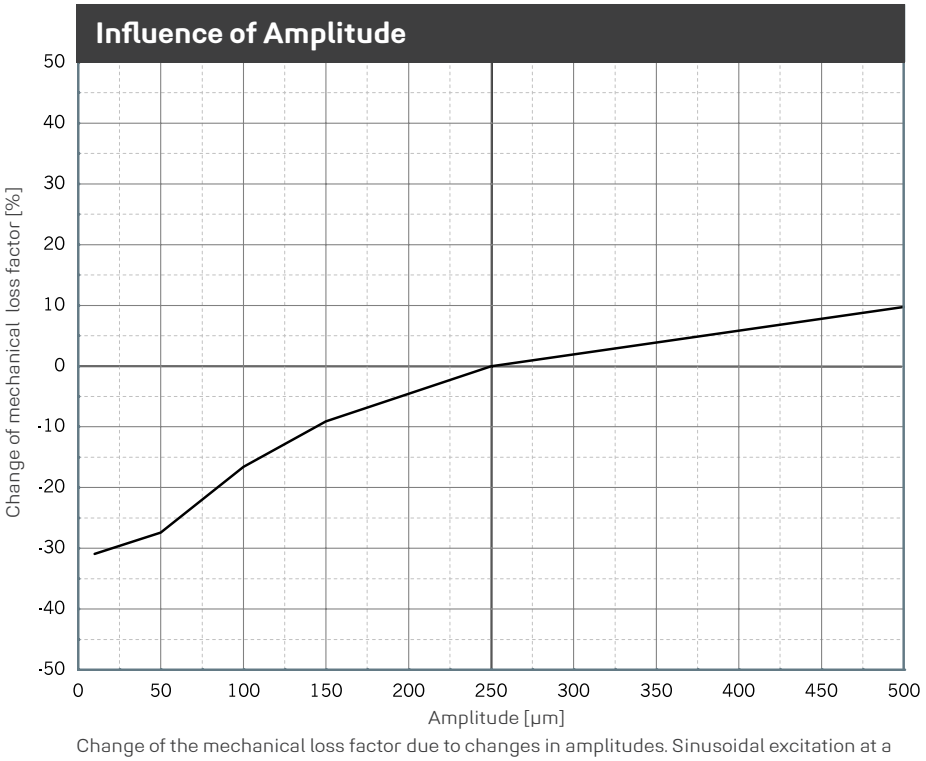
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 800.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 800** on a rigid base. Dimensions of test specimens 250 x 250 mm.



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.80 N/mm², dimensions of the specimens 250 x 250 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.80 N/mm², dimensions of the specimens 250 x 250 x 60 mm.

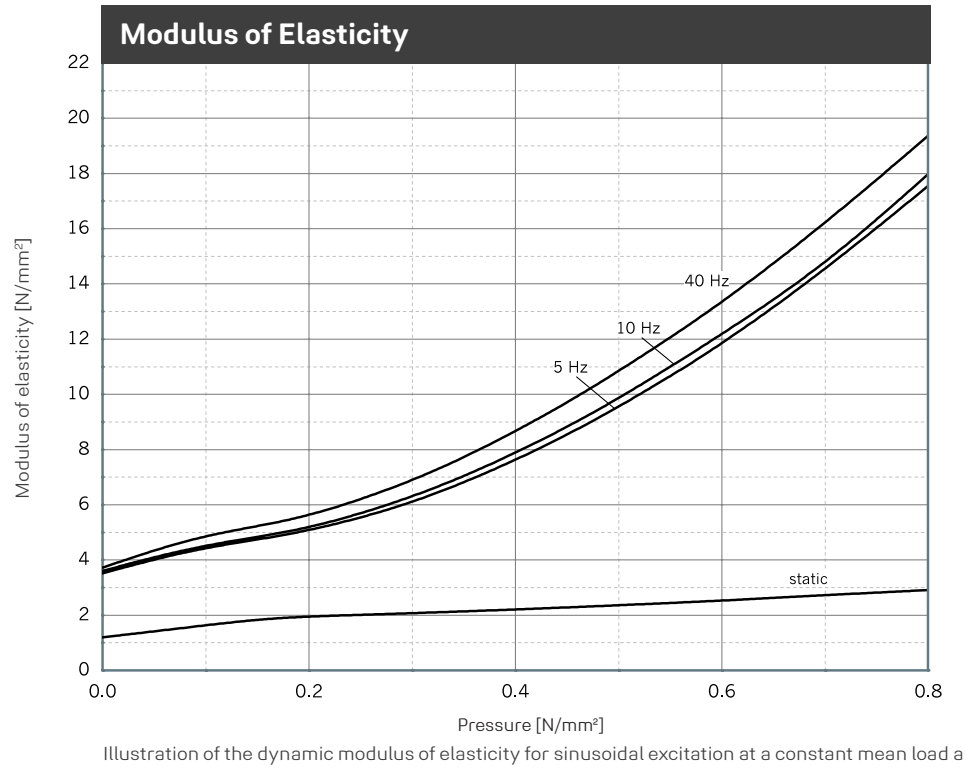


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 x 250 x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

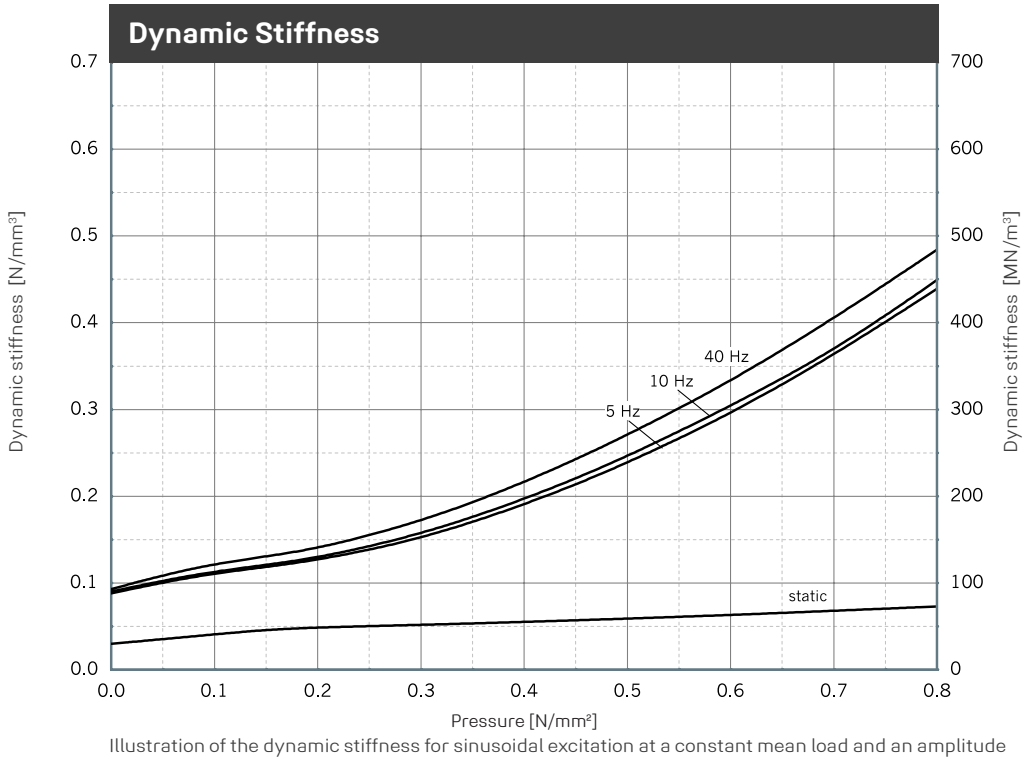
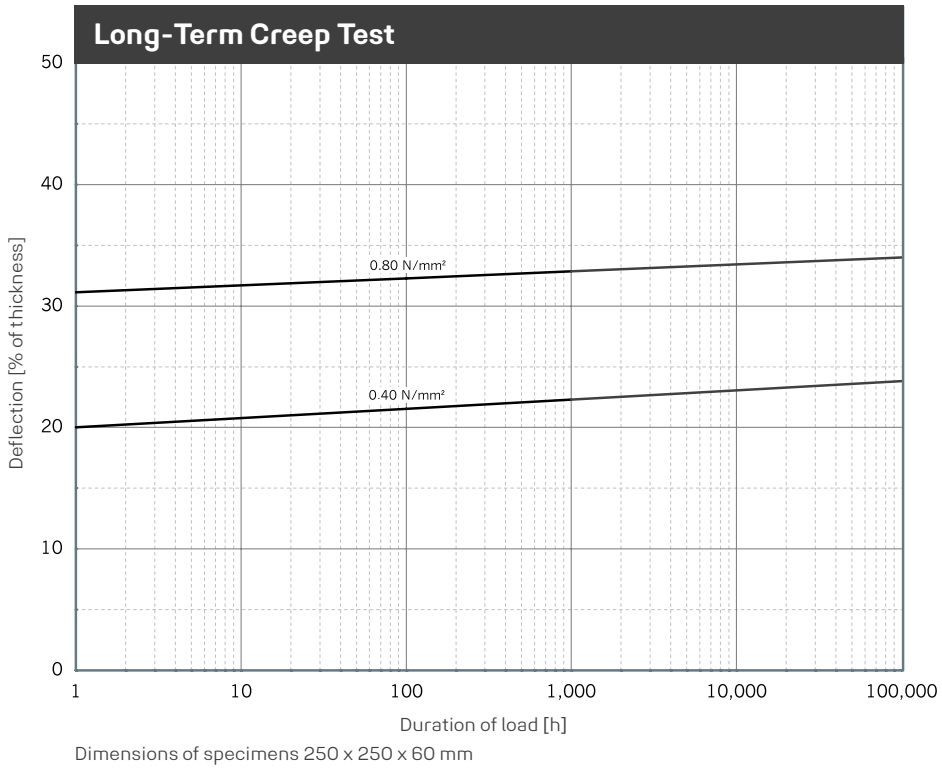


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 x 250 x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 800



Dimensions of specimens 250 x 250 x 60 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

REGUPOL VIBRATION 1000

Forms of delivery, ex warehouse

Rolls
Thickness: 10 mm
Length: 8,000 mm, special lengths available
Width: 1,250 mm

Stripping/Plates
On request: Die-cutting, water-jet cutting, self-adhesive versions possible

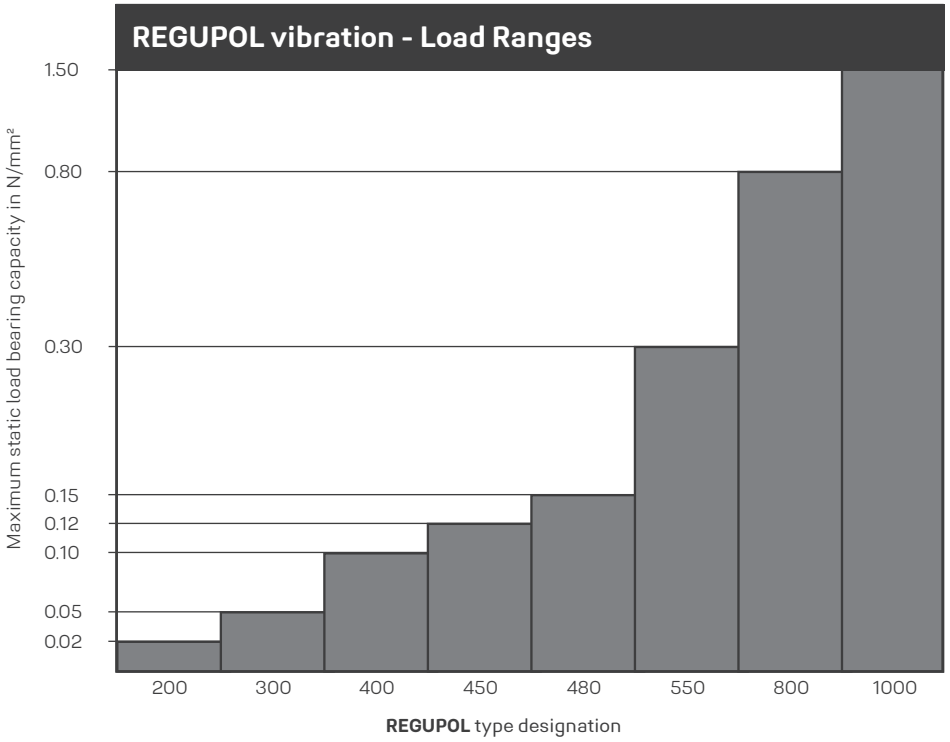
Technical Details

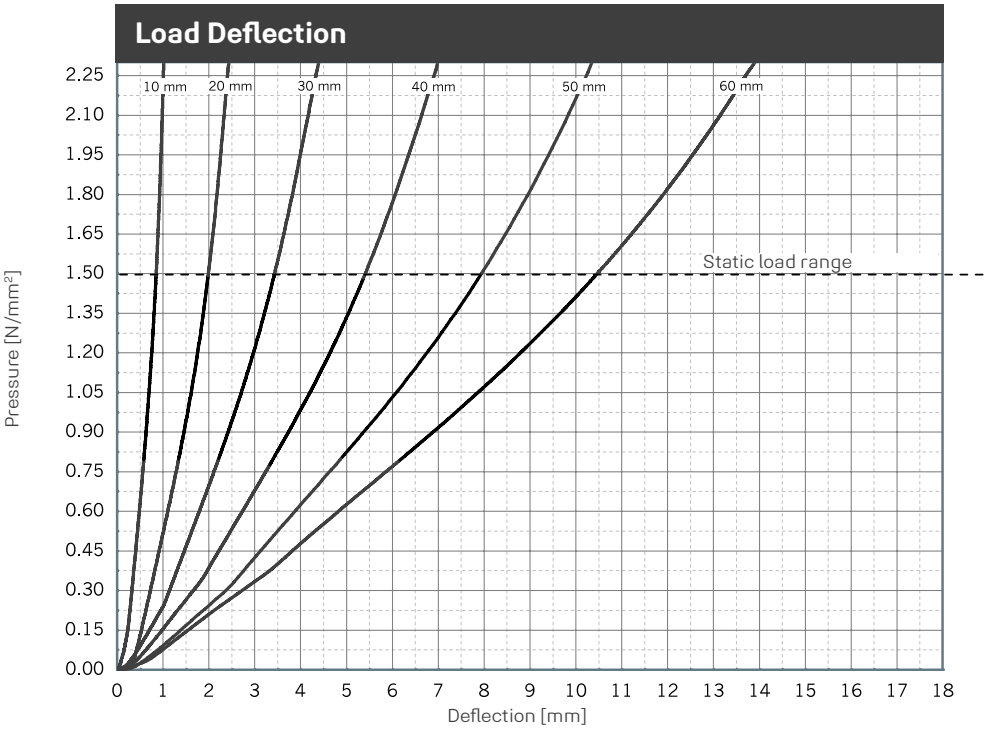
Maximum static load bearing capacity
1.500 N/mm²

Rare, short term peak loads
up to 1.750 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	4.0 - 11.0 N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	15.0 - 45.0 N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.16	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.9 %	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	2.3 N/mm²	
Elongation at break	Based on DIN EN ISO 1798	110 %	
Tear resistance	Based on DIN ISO 34-1	15.0 N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	Normal flammability acceptable fire behaviour
Sliding friction	REGUPOL-laboratory REGUPOL-laboratory	0.6 0.7	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1 650 kPa	Compressive stress at 25 % deformation test specimen h = 60 mm
Rebound elasticity	Based on DIN EN ISO 8307	37 %	dependent on thickness, test specimen h = 60 mm
Force reduction	DIN EN 14904	45 %	dependent on thickness, test specimen h = 60 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	

REGUPOL VIBRATION 1000





Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 200 x 200 mm.

REGUPOL VIBRATION 1000

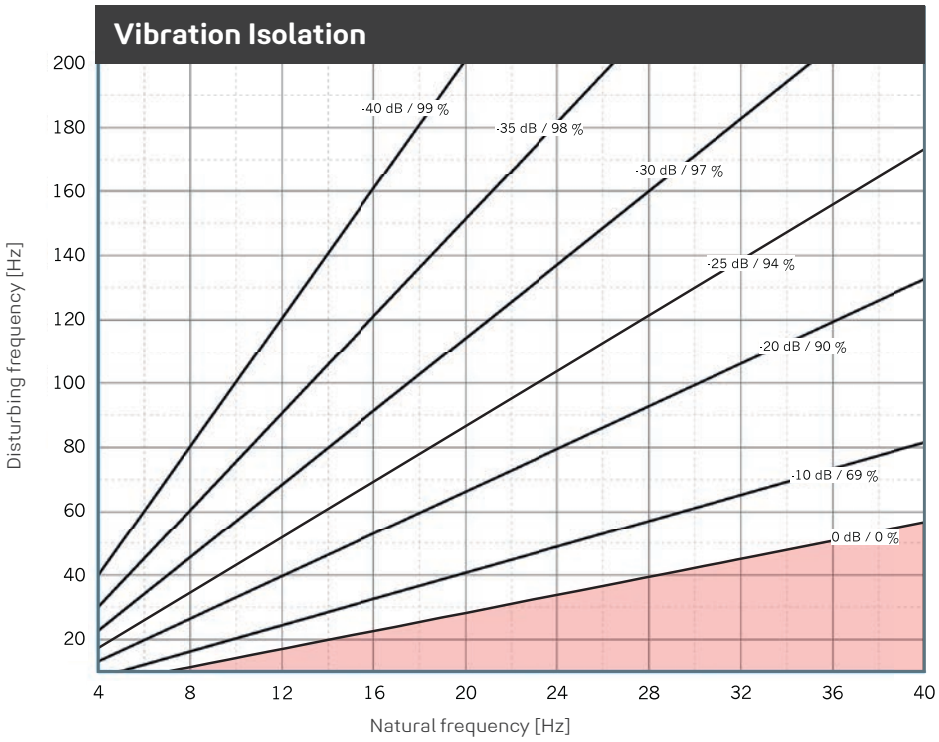
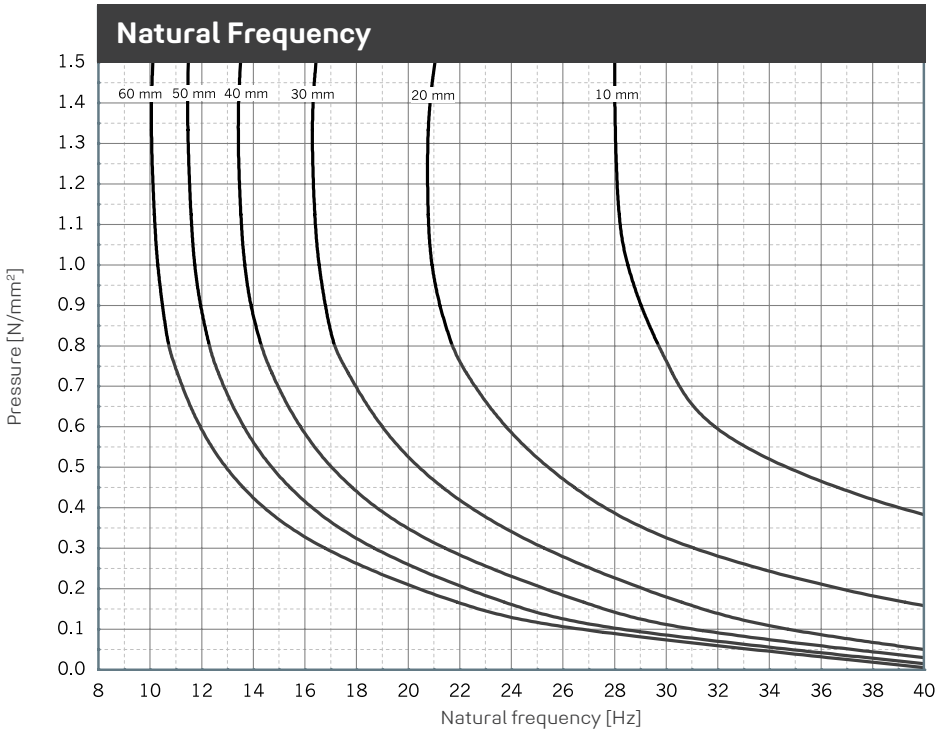
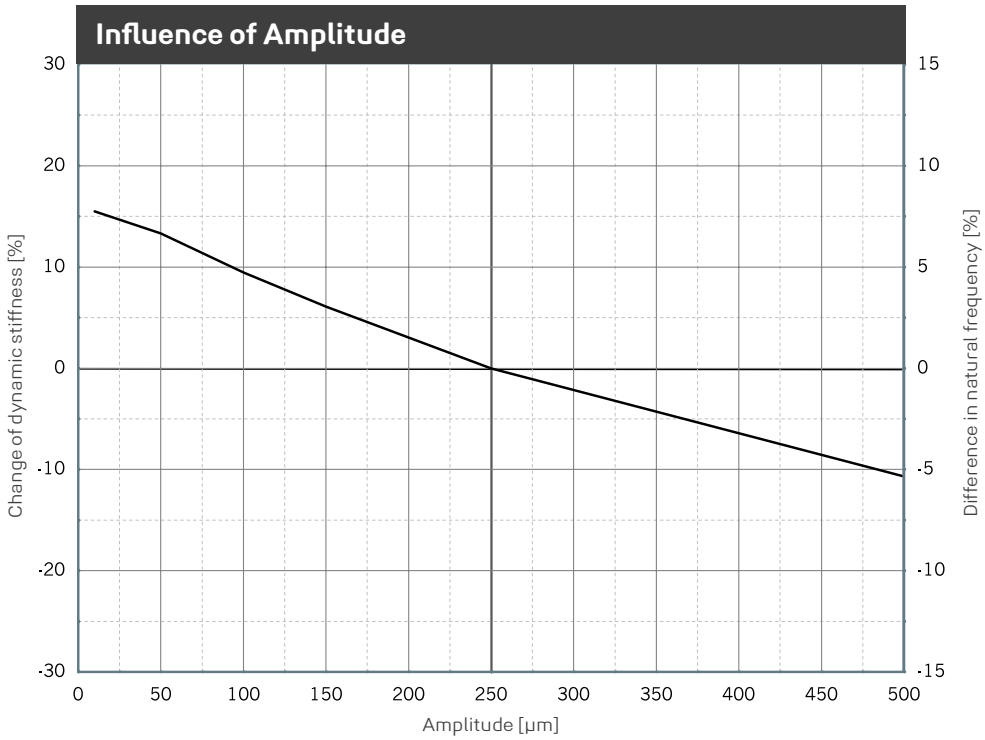


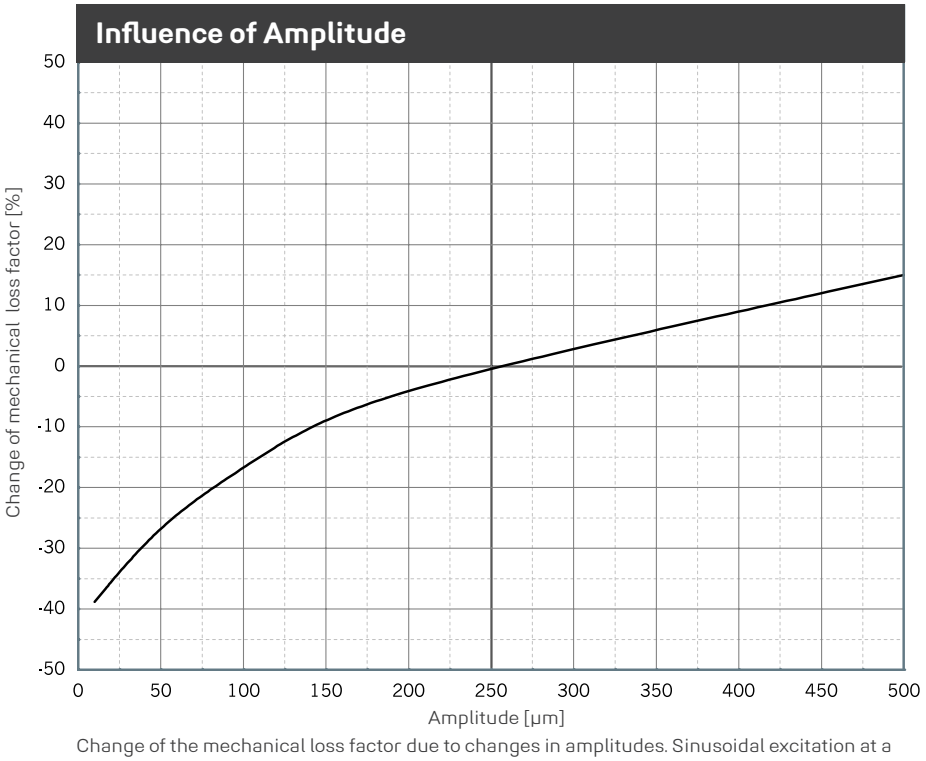
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 1000.** Parameter: power transmission (insertion loss) in dB, isolation factor in %.



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 1000** on a rigid base. Dimensions of test specimens 200 x 200 mm.



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 1.50 N/mm², dimensions of the specimens 200 x 200 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 1.50 N/mm², dimensions of the specimens 200 x 200 x 60 mm.

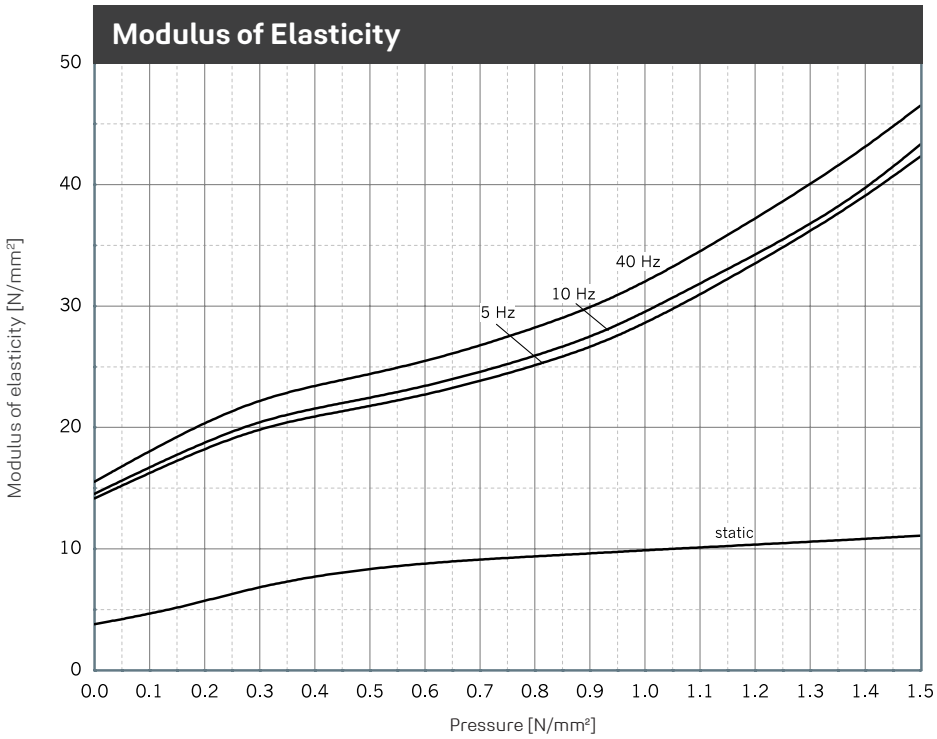


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 x 200 x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

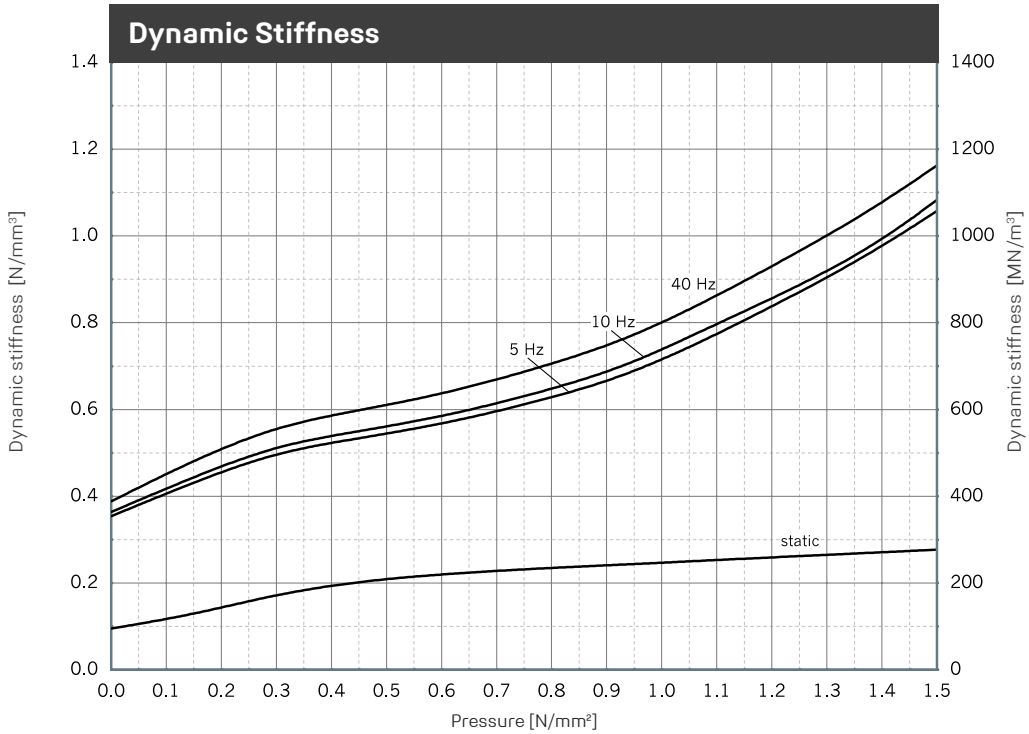
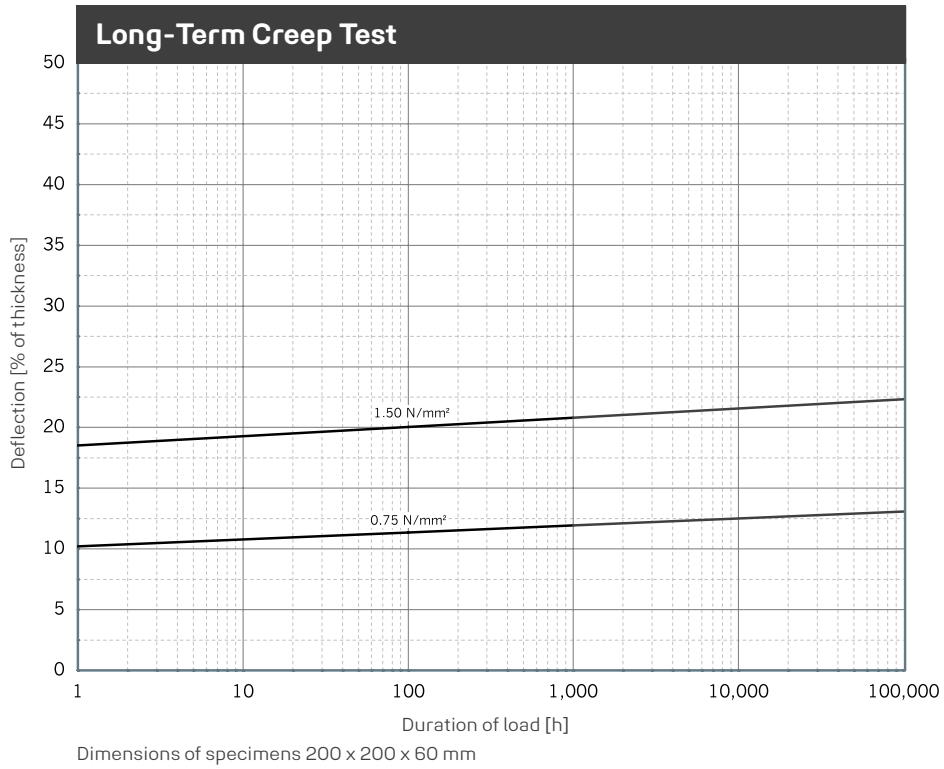


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 x 200 x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

REGUPOL VIBRATION 1000



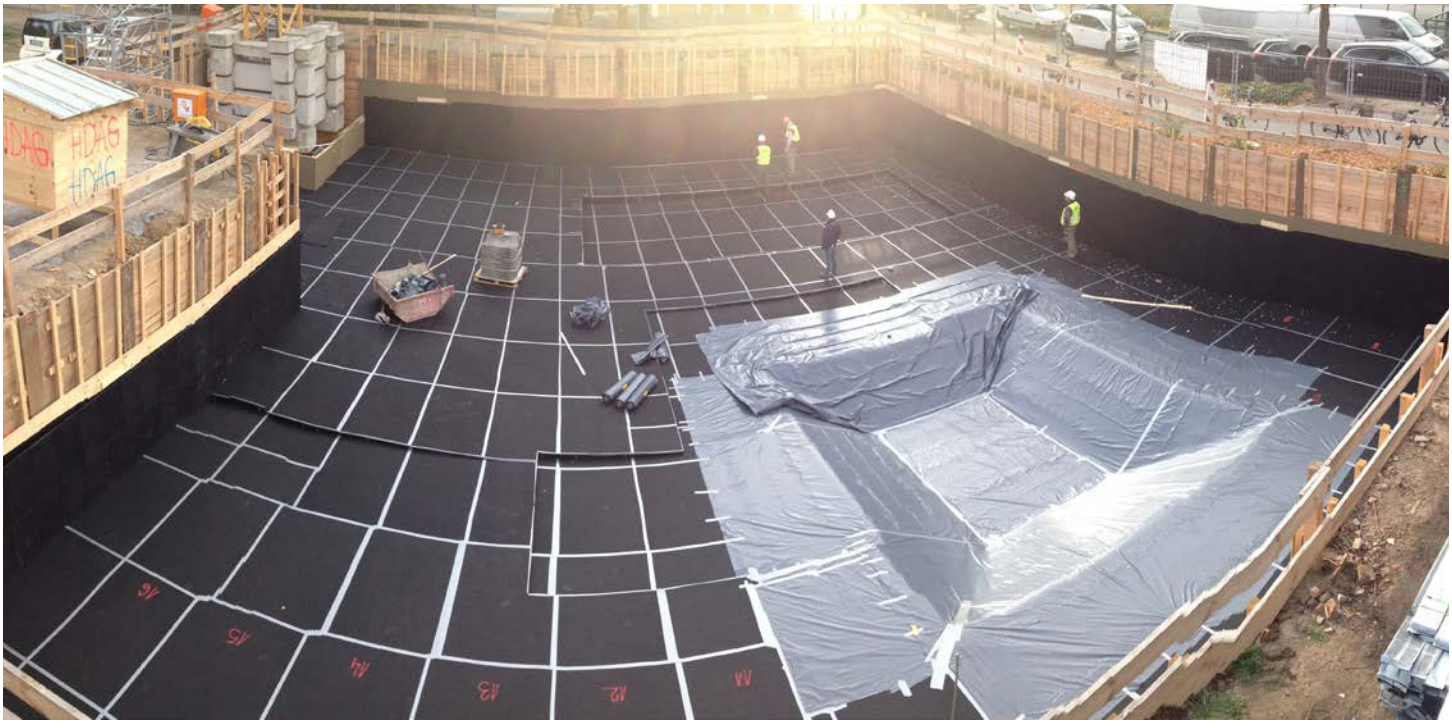
Dimensions of specimens 200 x 200 x 60 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www. berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.


HDAG
HDAG
A6
A5
A4
A3
A2
A1


ZUBLIN
WEMO
0800/511 8110

REGUPOL BSW GmbH
Am Hilgenacker 24
57319 Bad Berleburg
phone +49 2751 803 0
info@regupol.de

REGUPOL America LLC
REGUPOL Australia Pty. Ltd.
REGUPOL Acoustics Middle East FZE
REGUPOL Schweiz AG
REGUPOL Zebra Athletics LLC
BSW Shanghai CO. LTD.

www.regupol.com

REG TD AK EN 032021
Online Version March 2021