

TECHNICAL DETAILS

REGUFOAM

VIBRATION PLUS



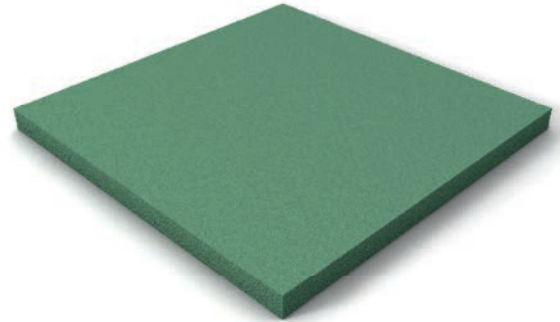
Forms of delivery, ex warehouse

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

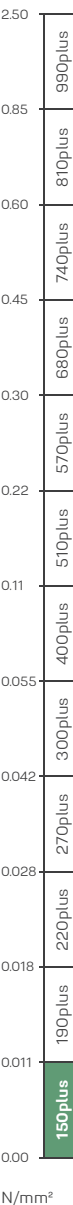
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.016 N/mm²

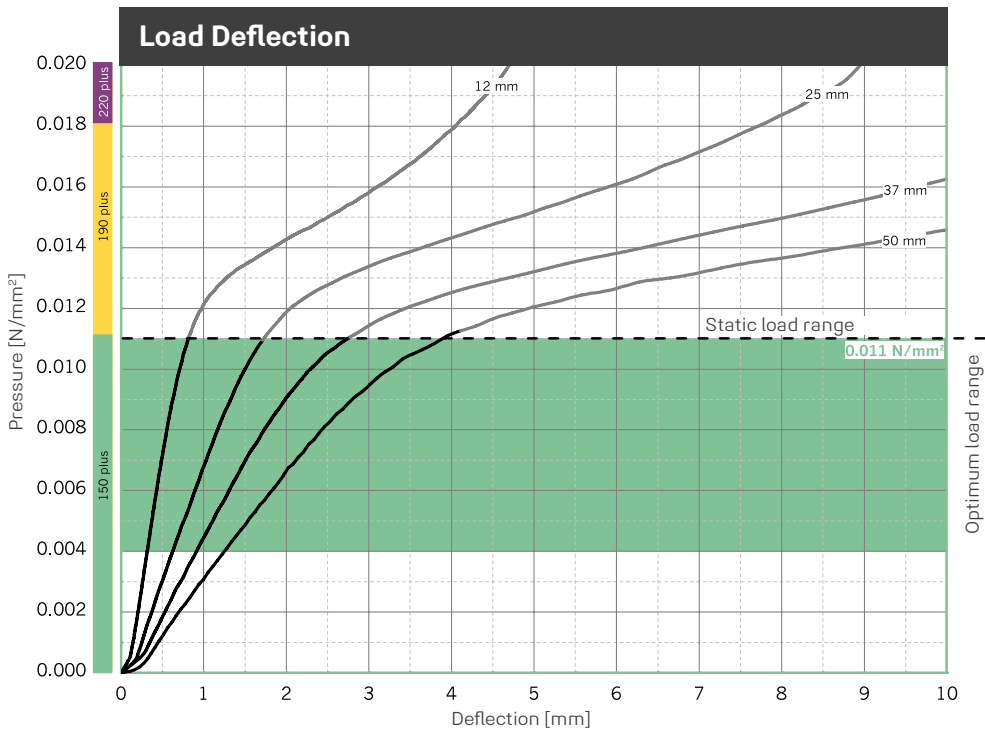
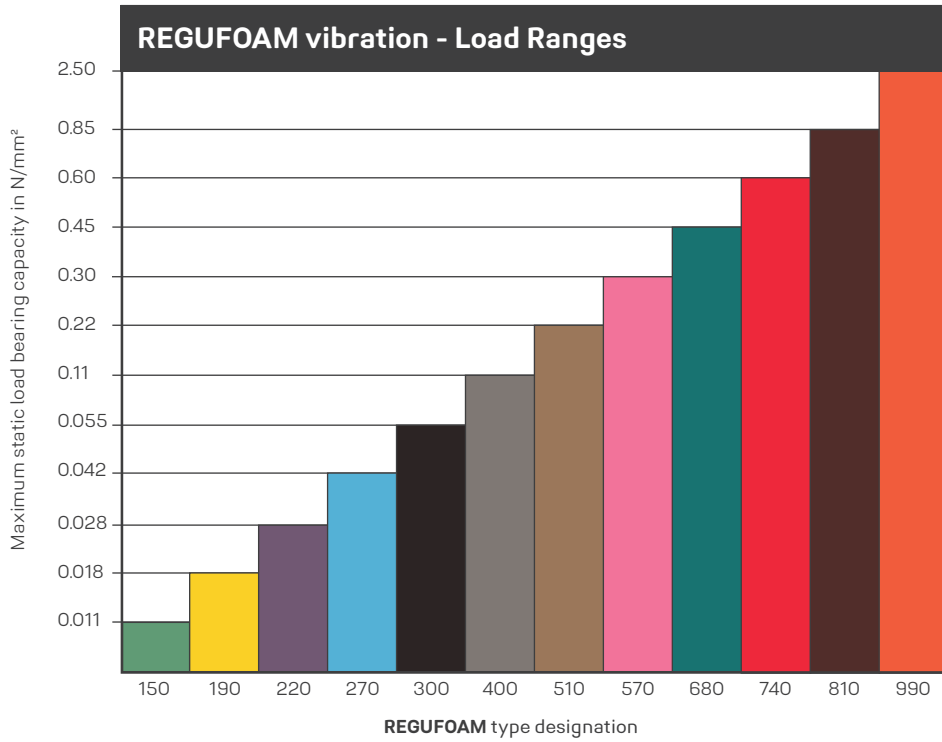
Rare, short term peak loads

up to 0.500 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.06 - 0.16 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.15 - 0.38 N/mm ²	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/mm ²	
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

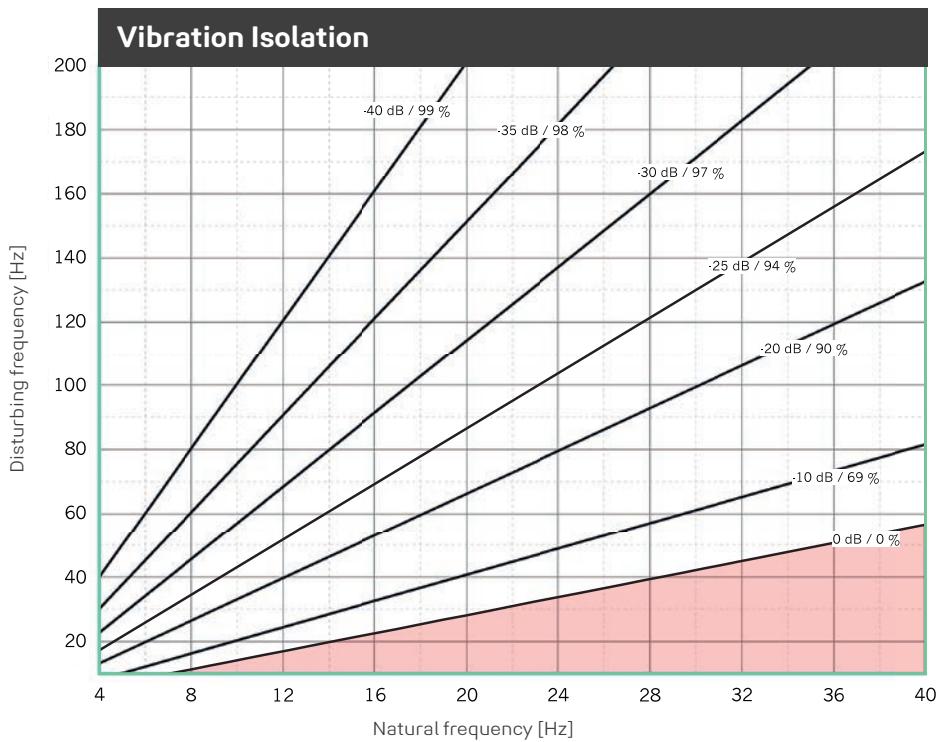
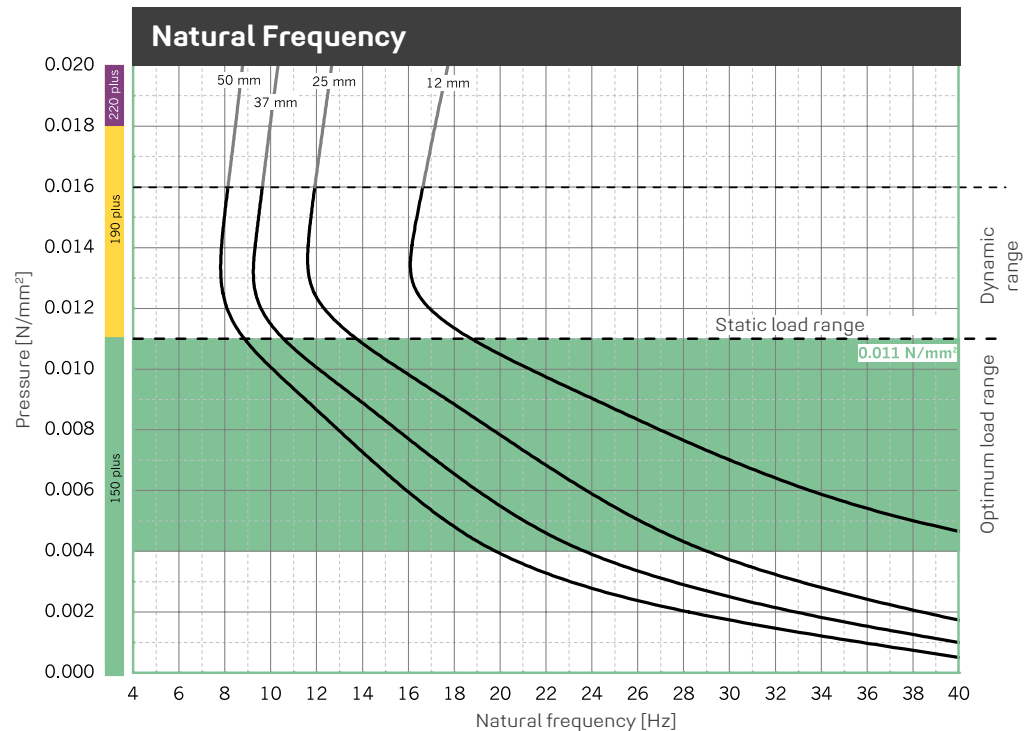
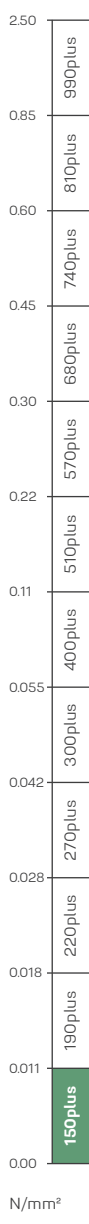


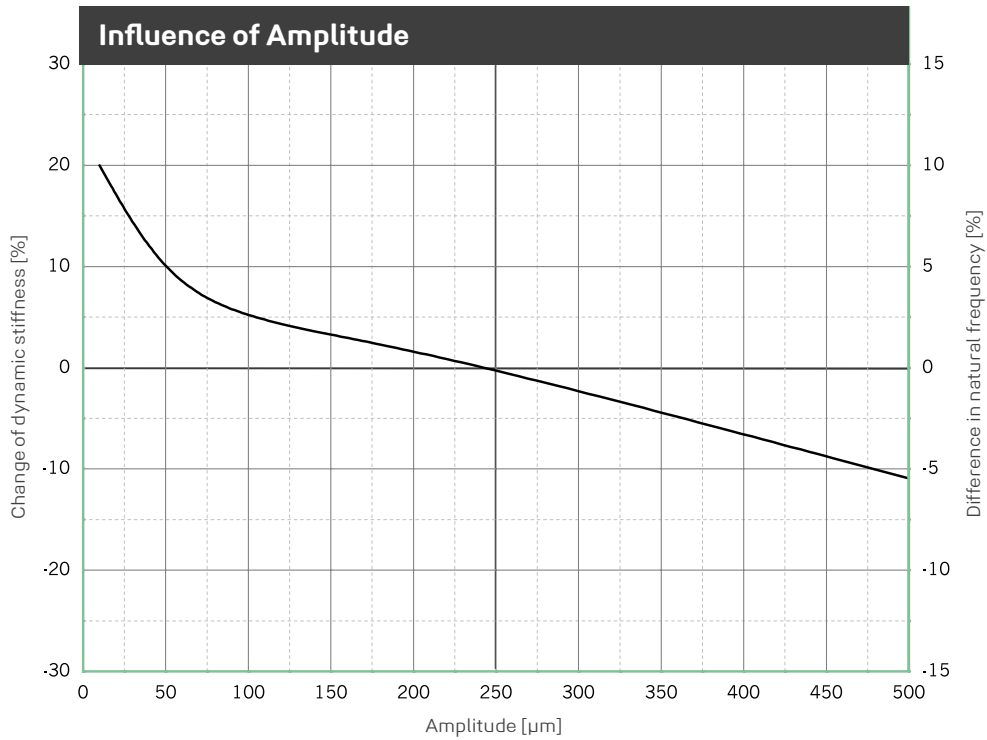
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 150plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



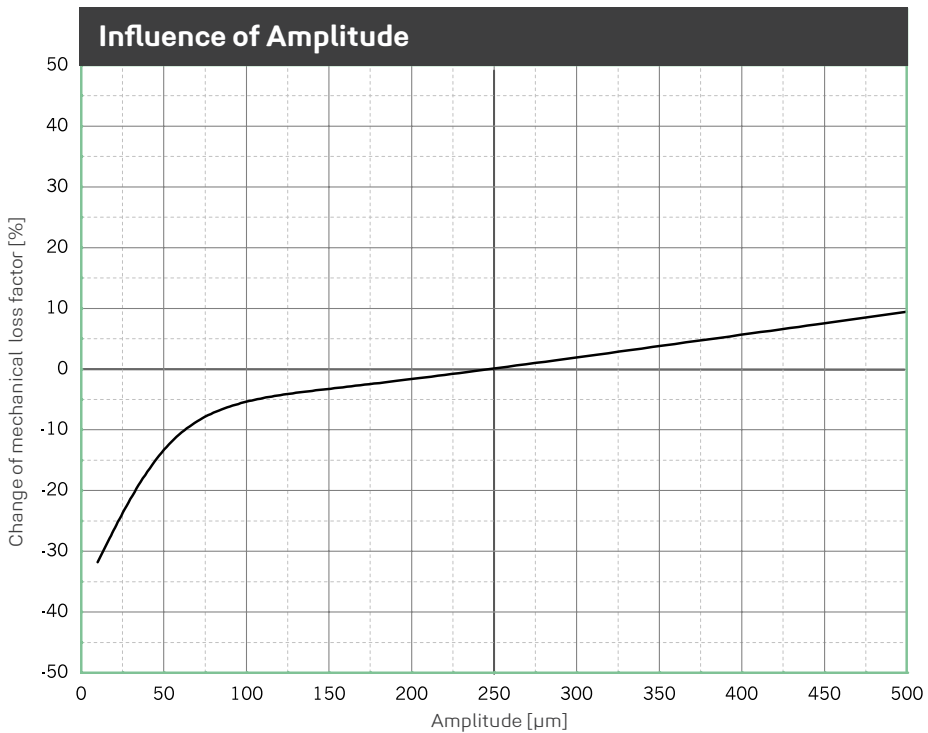
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 150plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.



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

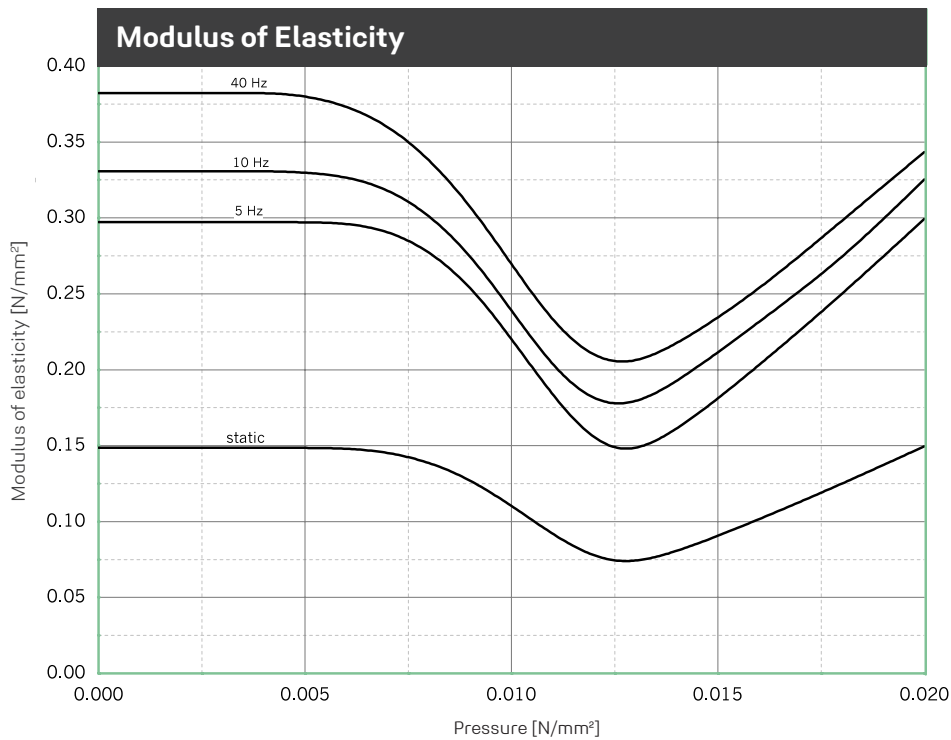


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens $300 \times 300 \times 25$ mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

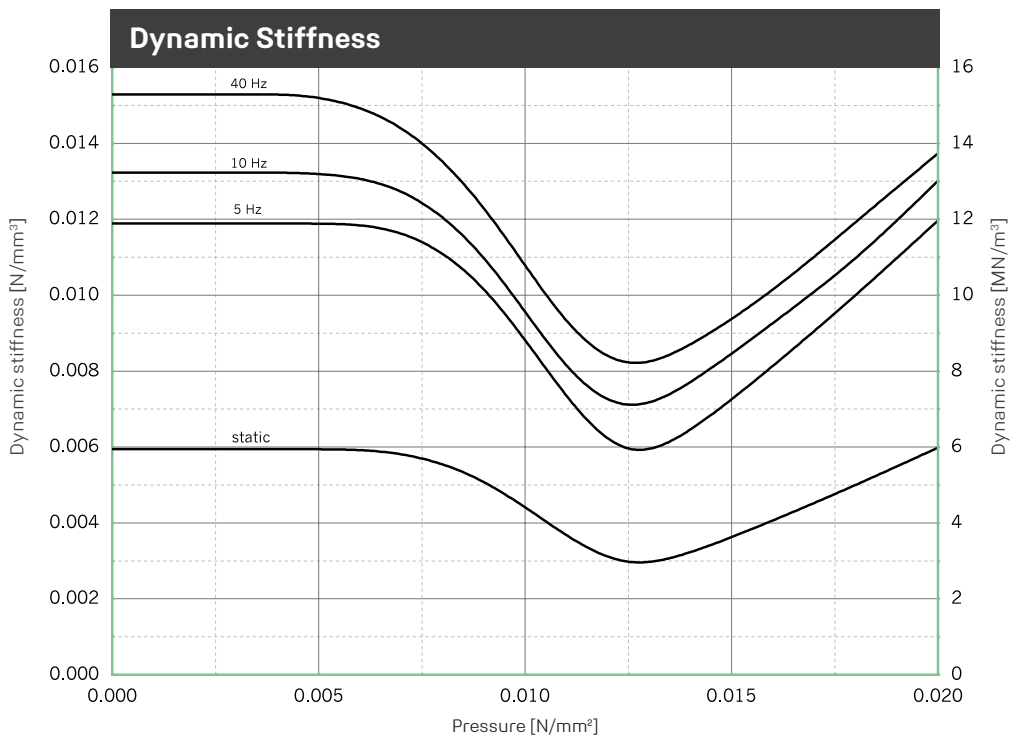
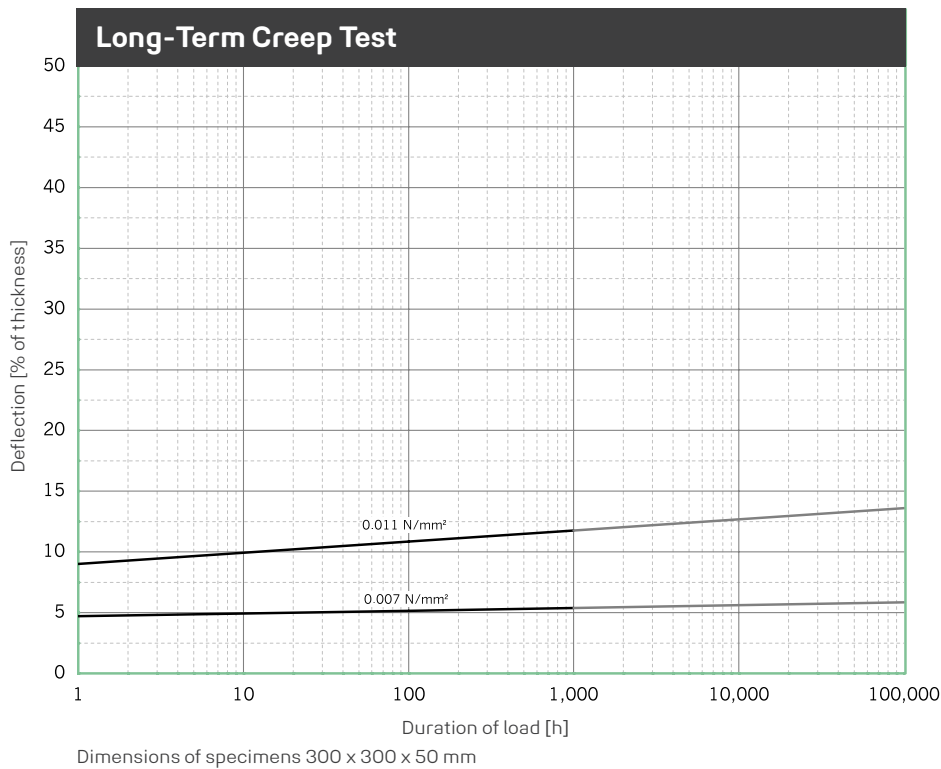


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens $300 \times 300 \times 25$ mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.000	

N/mm²

REGUFOAM VIBRATION 150PLUS



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.

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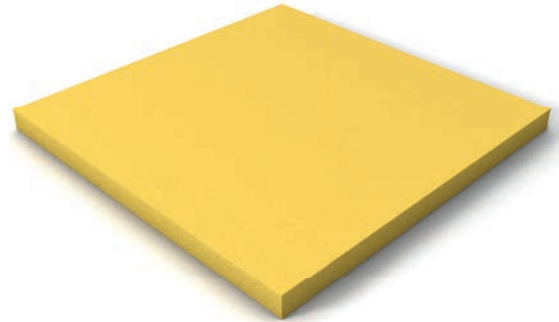
Forms of delivery, ex warehouse

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

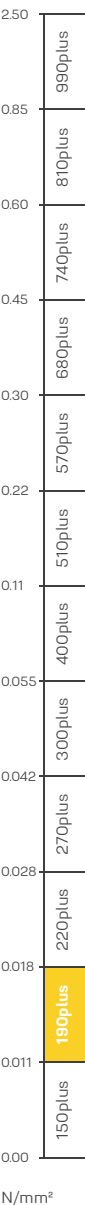
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.028 N/mm²

Rare, short term peak loads

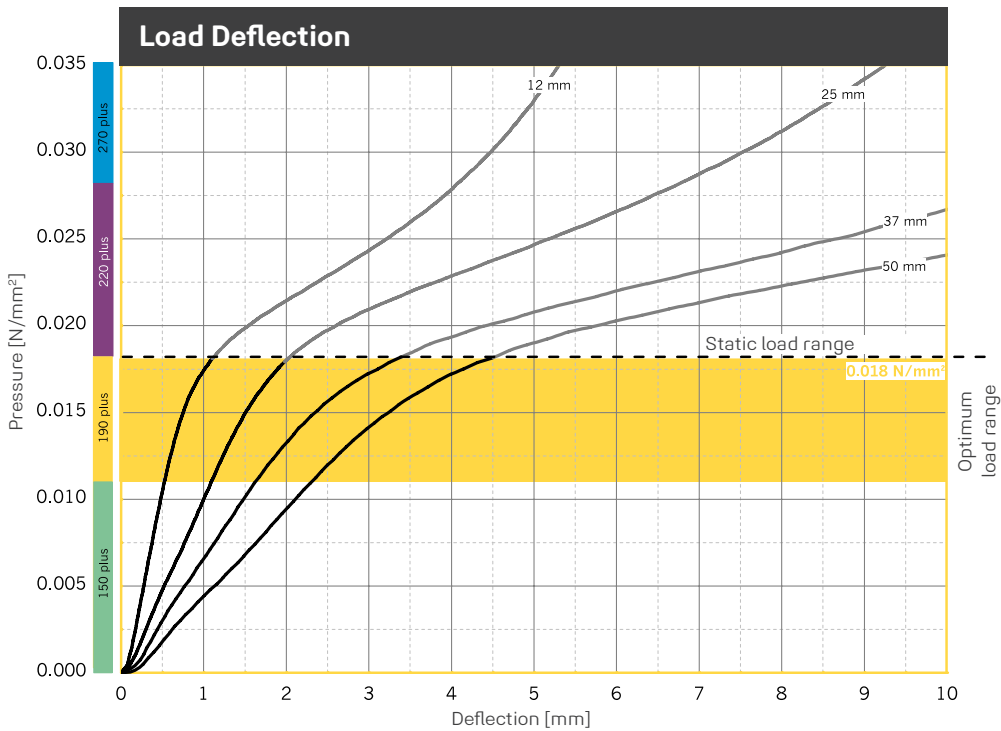
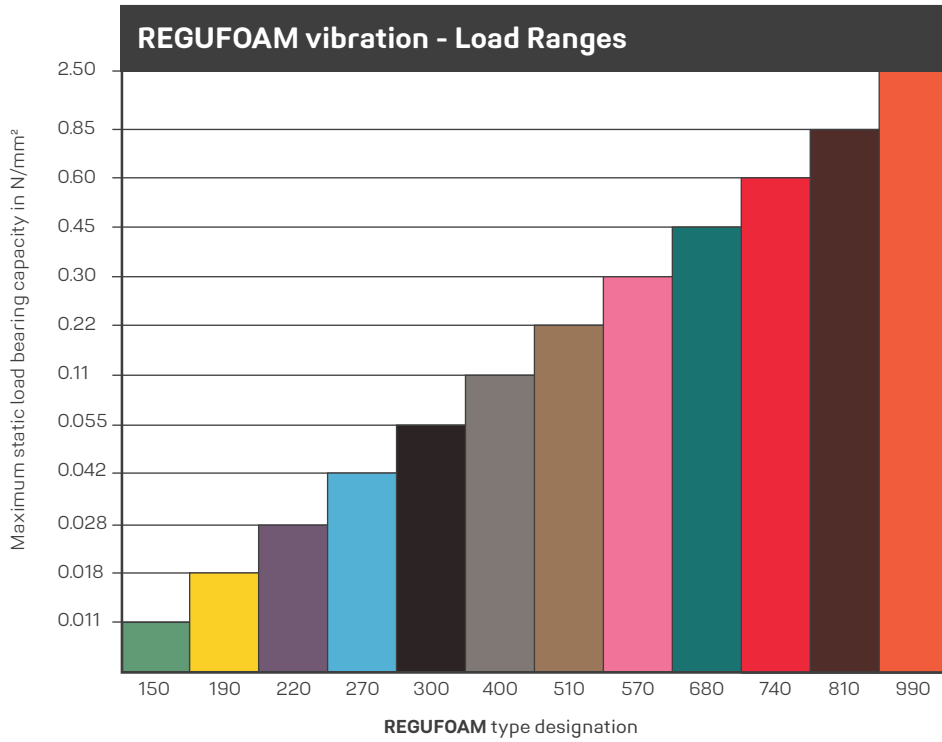
up to 0.800 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.10 - 0.25 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.25 - 0.55 N/mm ²	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/mm ²	
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



N/mm²

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

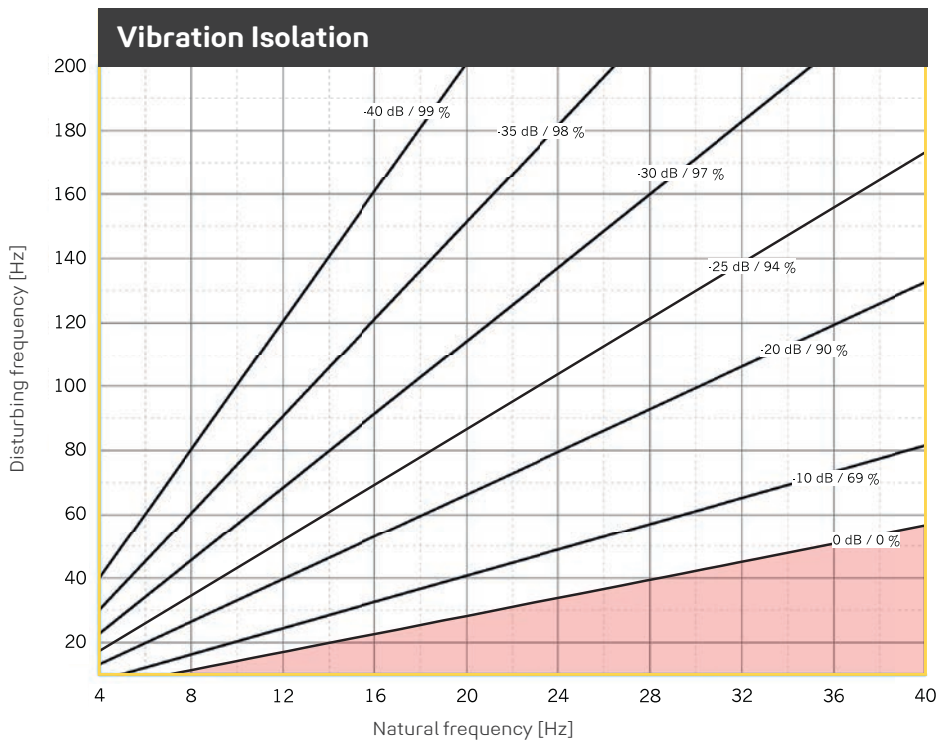
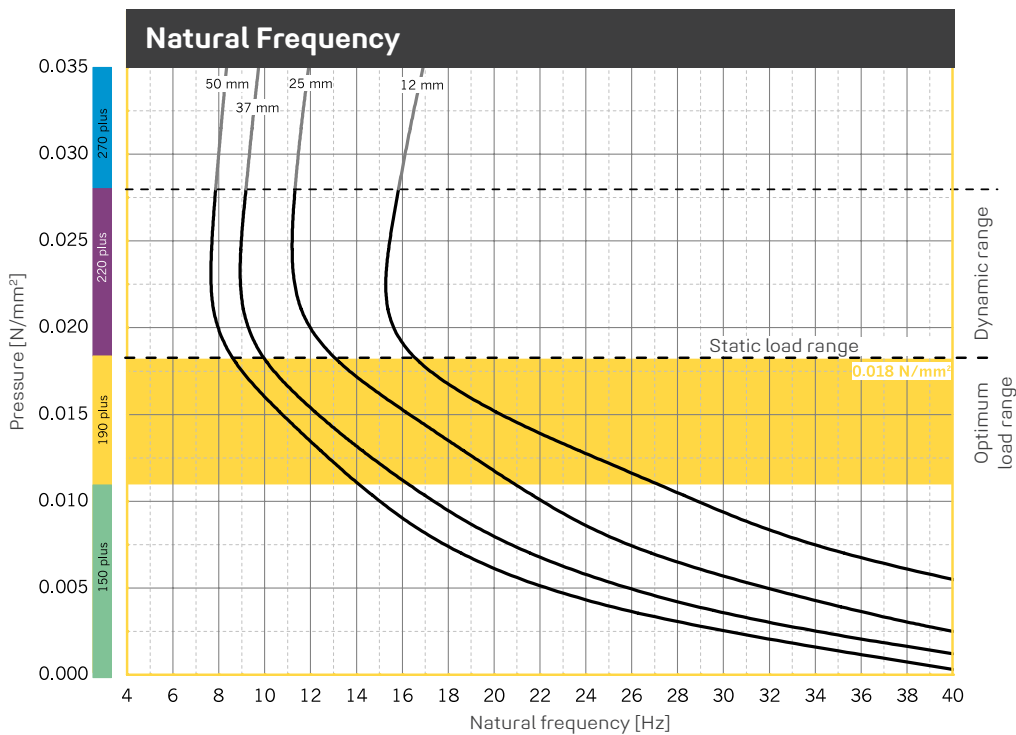


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 190plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

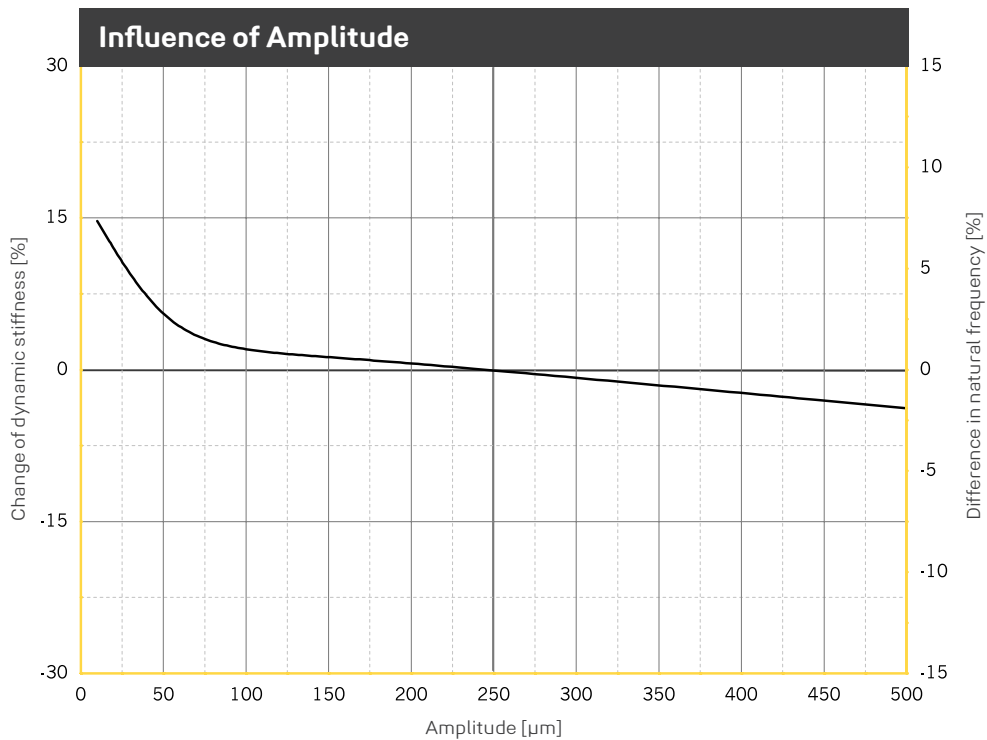


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 190plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

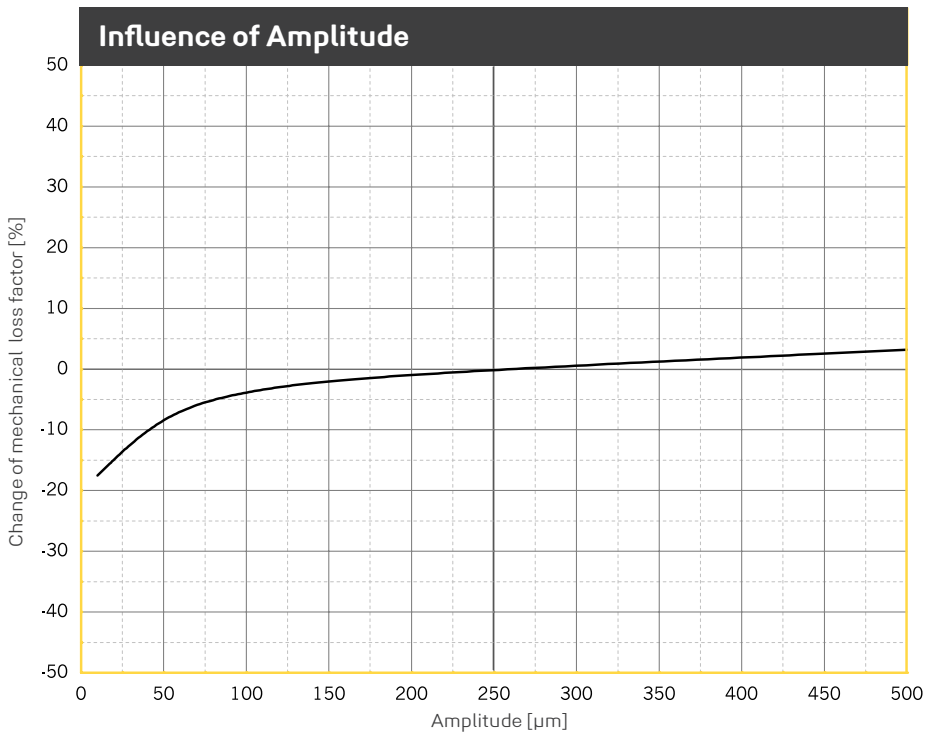
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

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

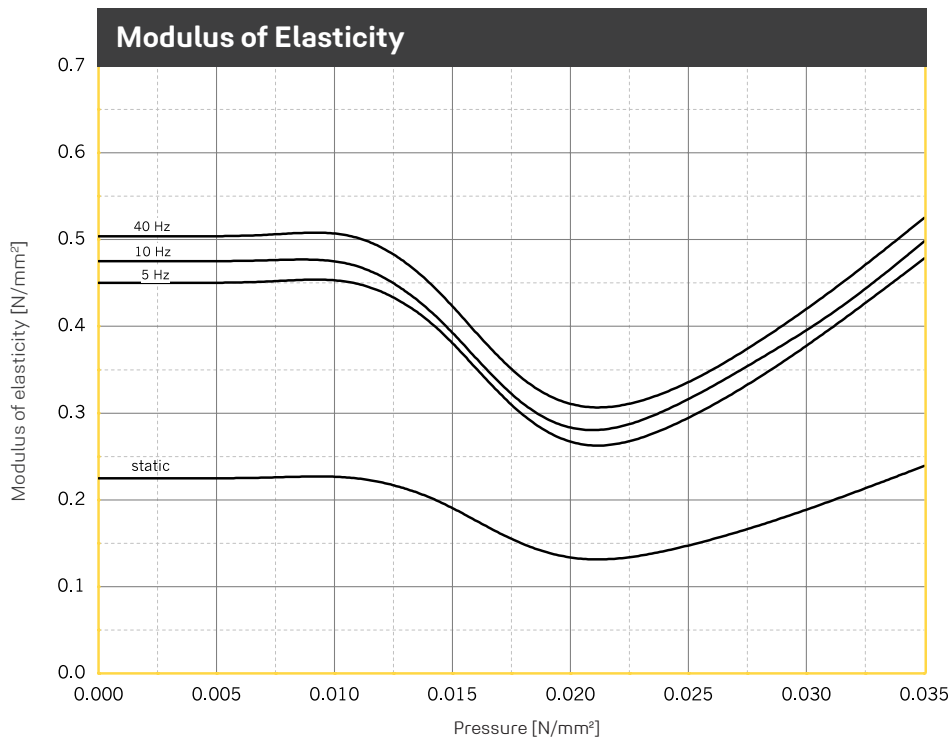


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens $300 \times 300 \times 25$ mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

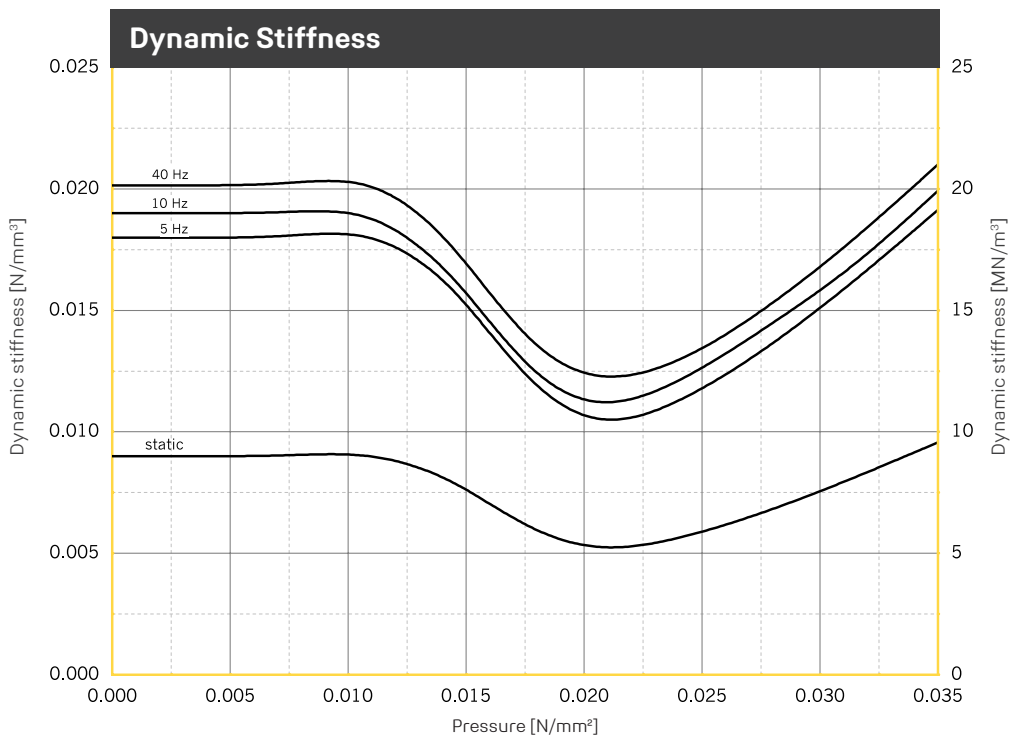
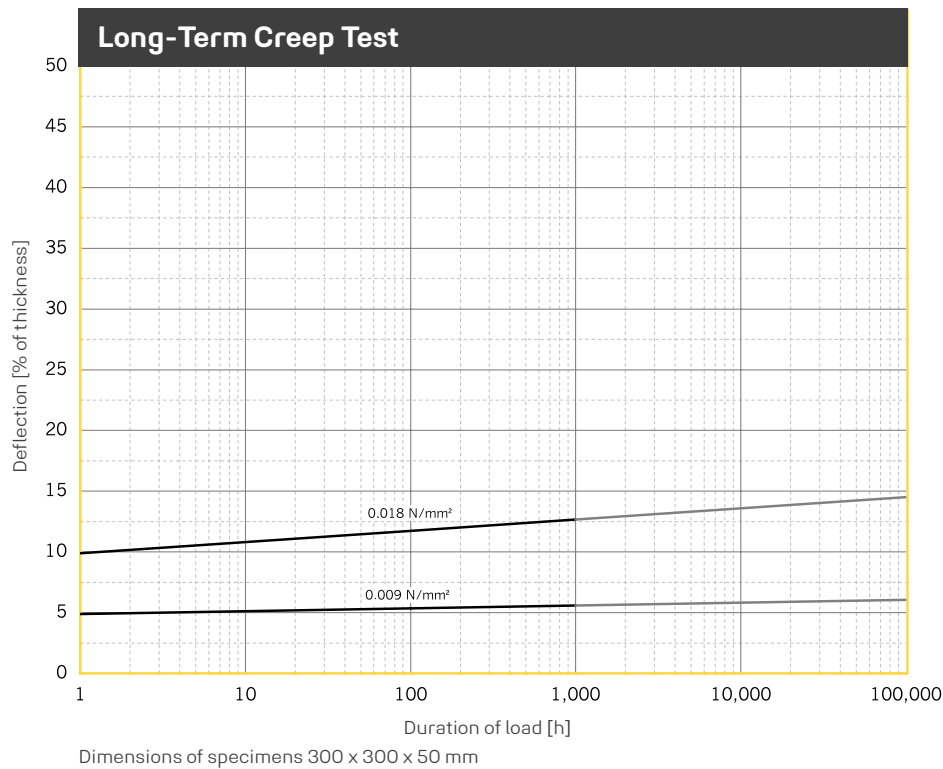


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens $300 \times 300 \times 25$ mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 190PLUS



Exclusion of Liability

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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.

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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

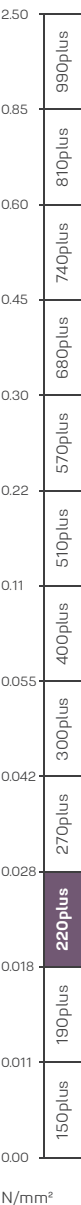
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.040 N/mm²

Rare, short term peak loads

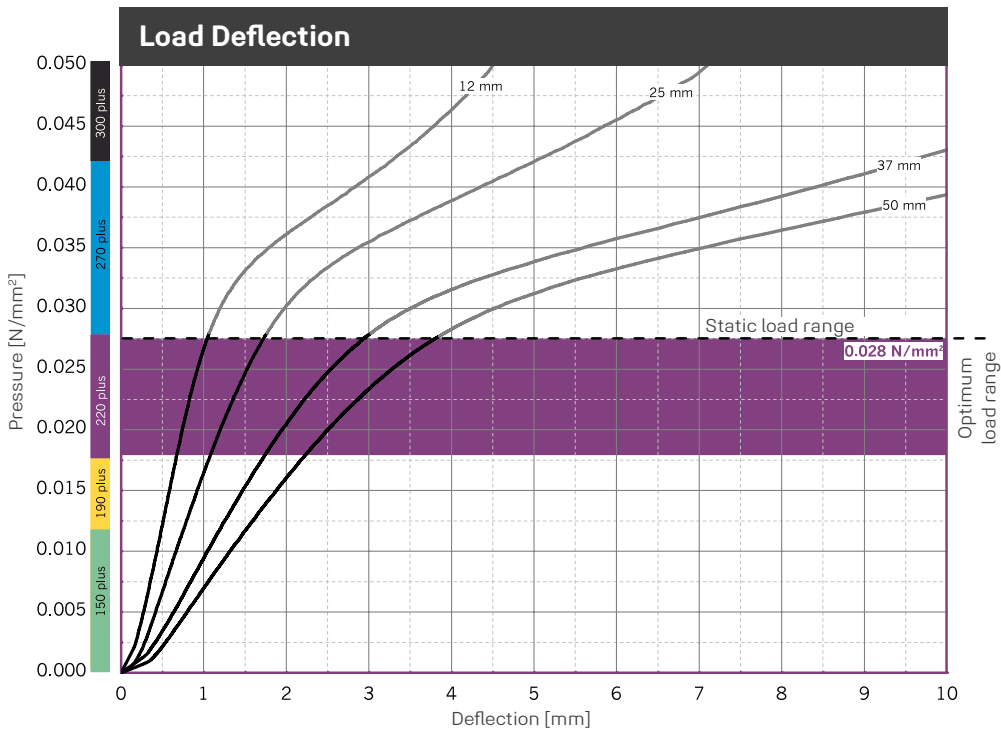
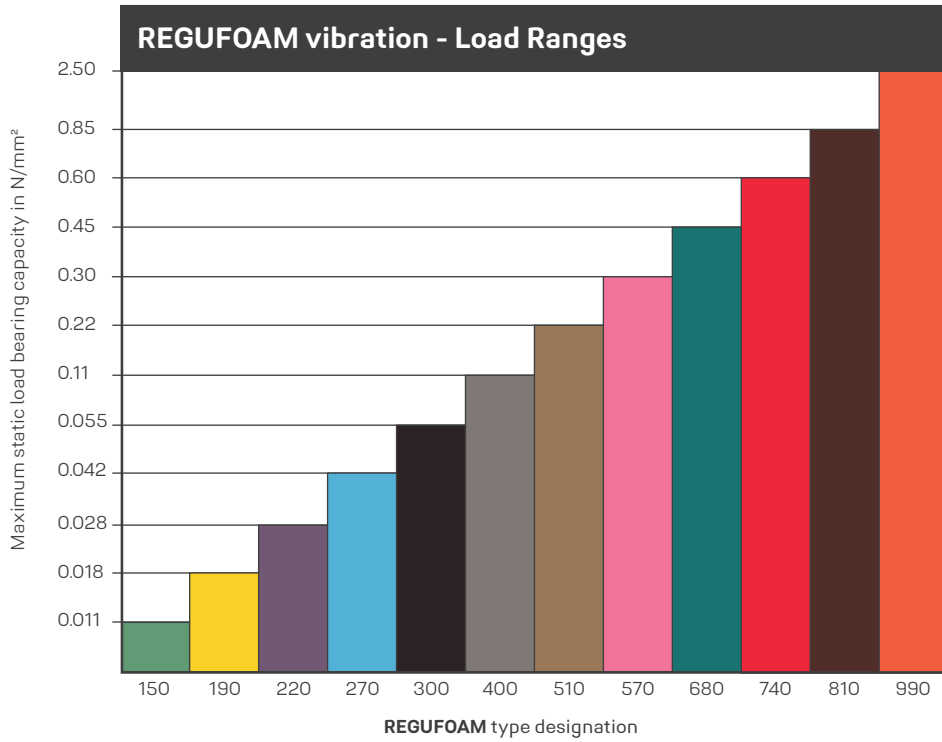
up to 0.900 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.15 - 0.35 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.35 - 0.72 N/mm ²	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/mm ²	
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



N/mm²

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

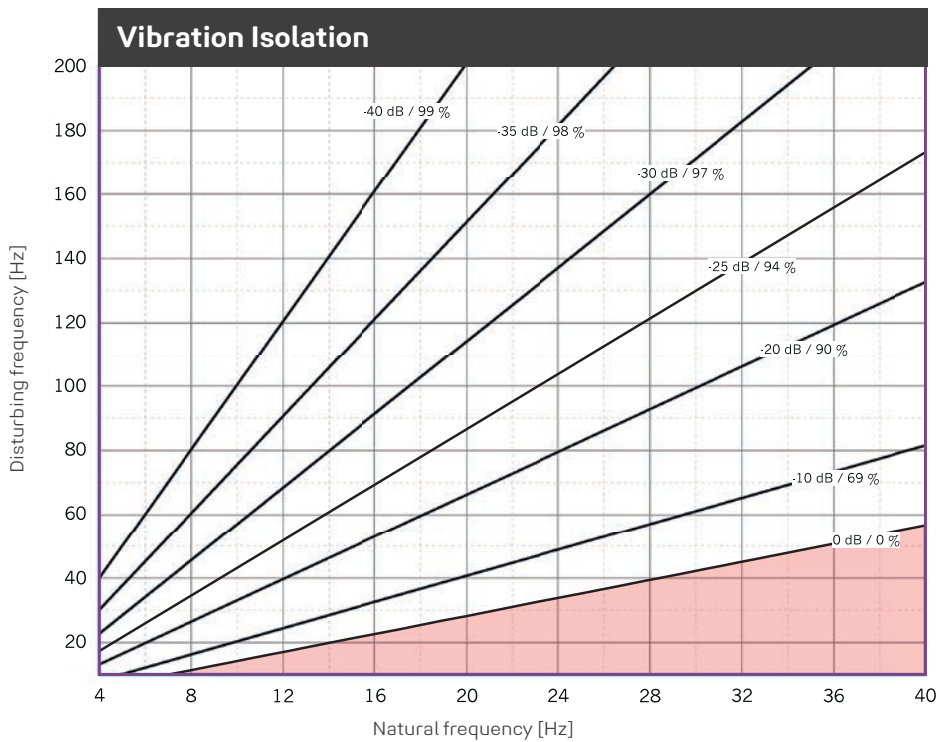
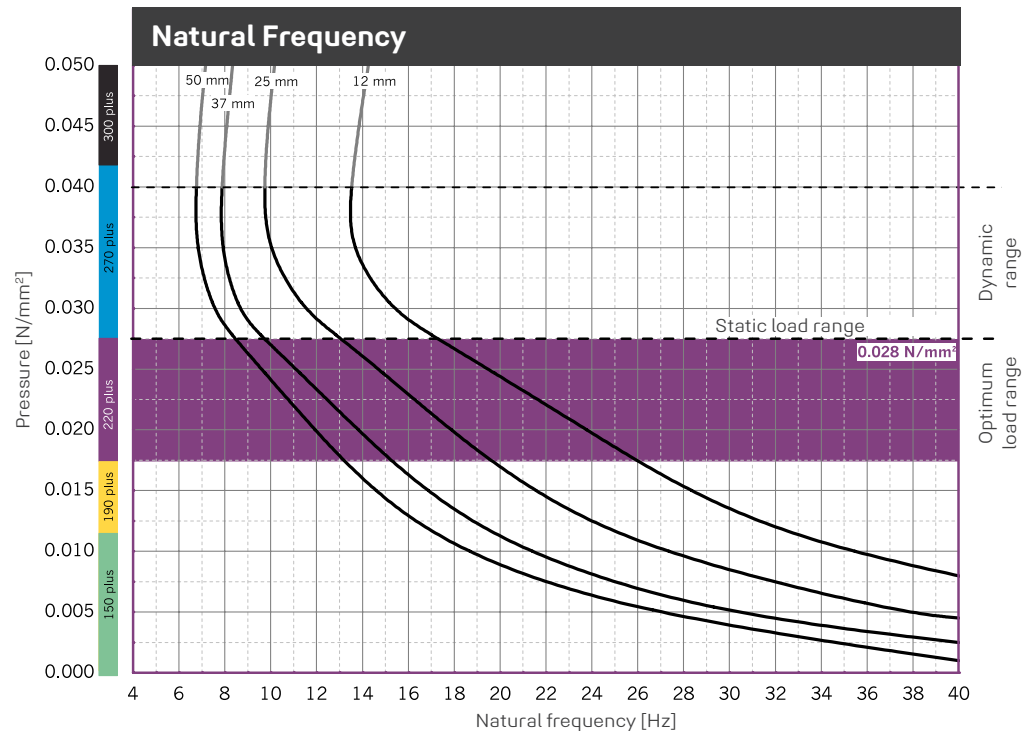
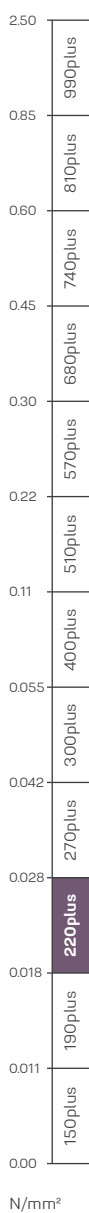


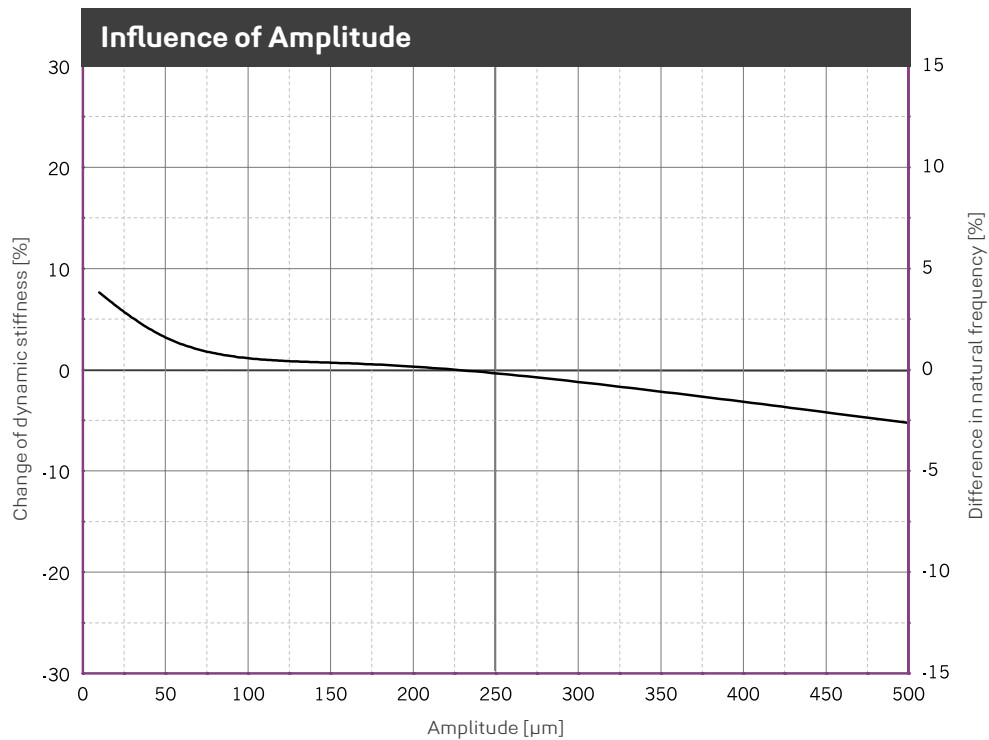
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 220plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



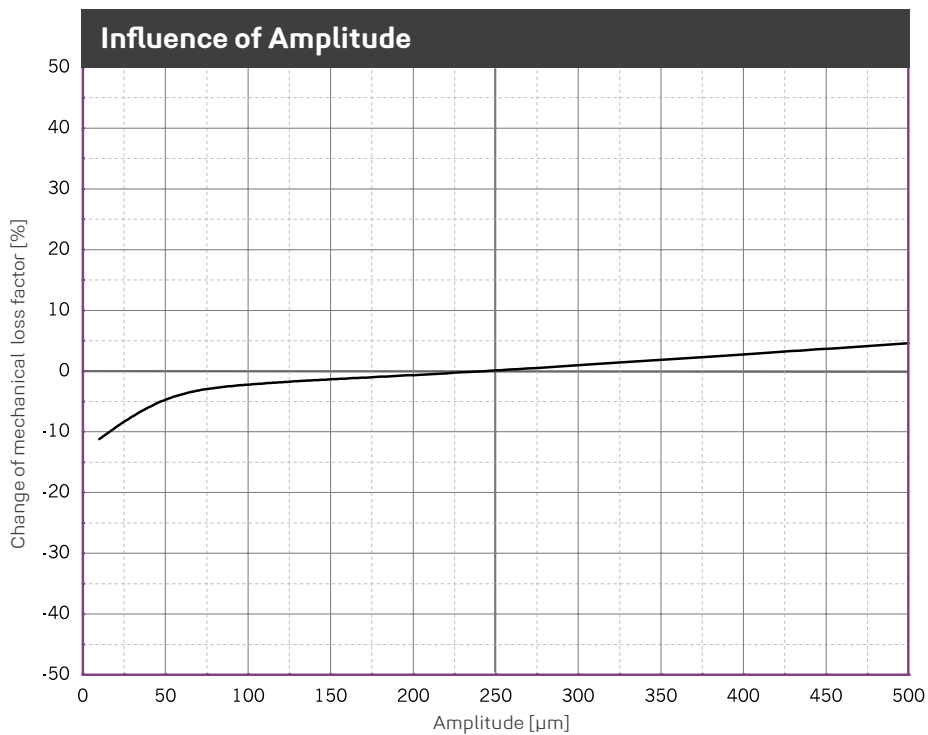
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 220plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.



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

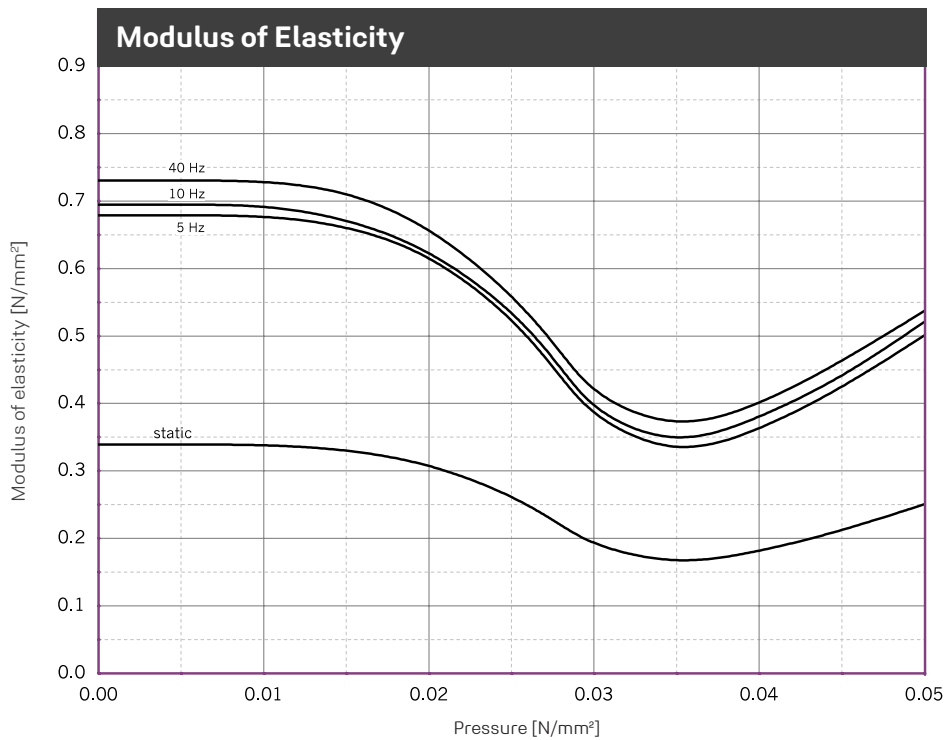


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

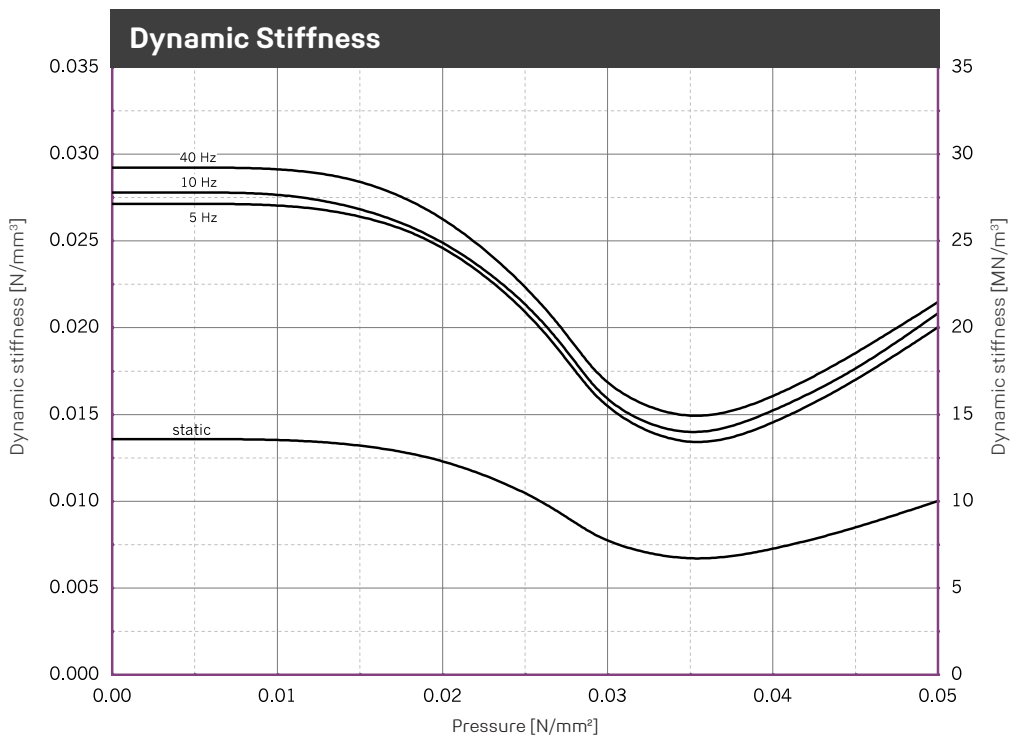
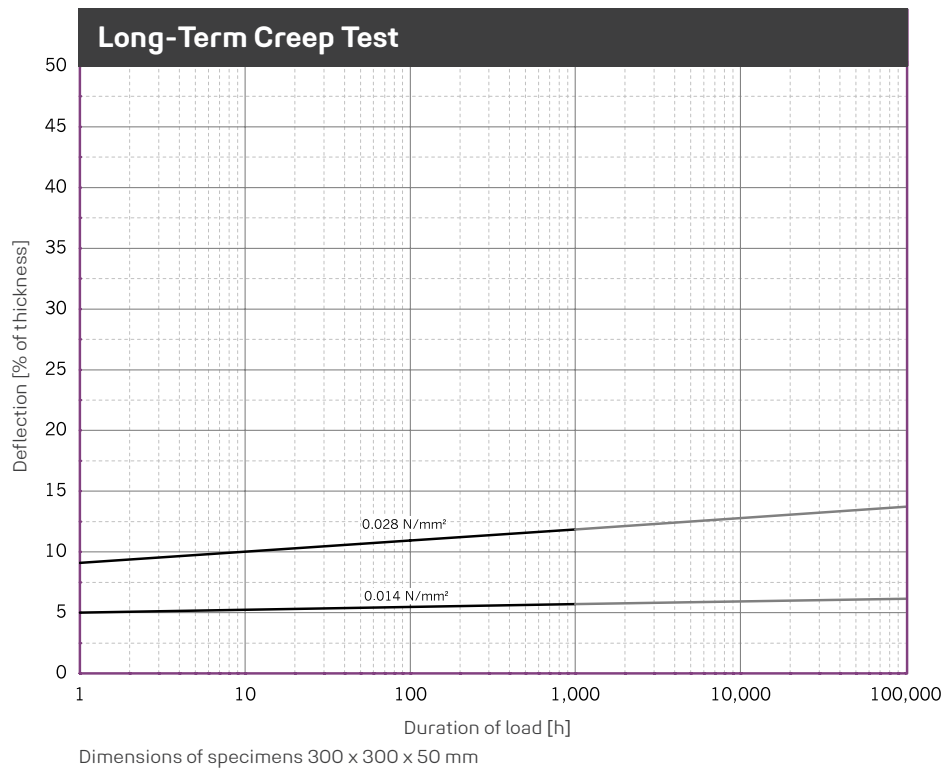


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 220PLUS



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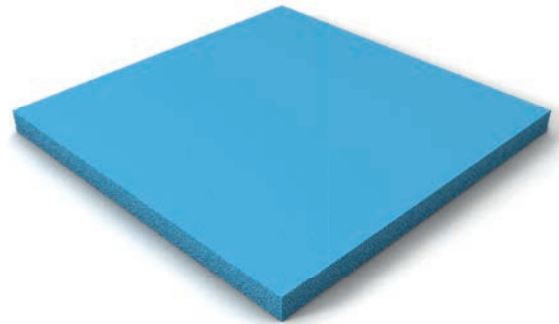
Forms of delivery, ex warehouse

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

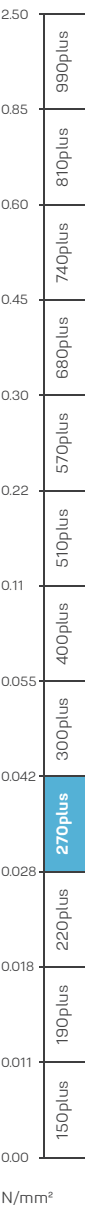
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.062 N/mm²

Rare, short term peak loads

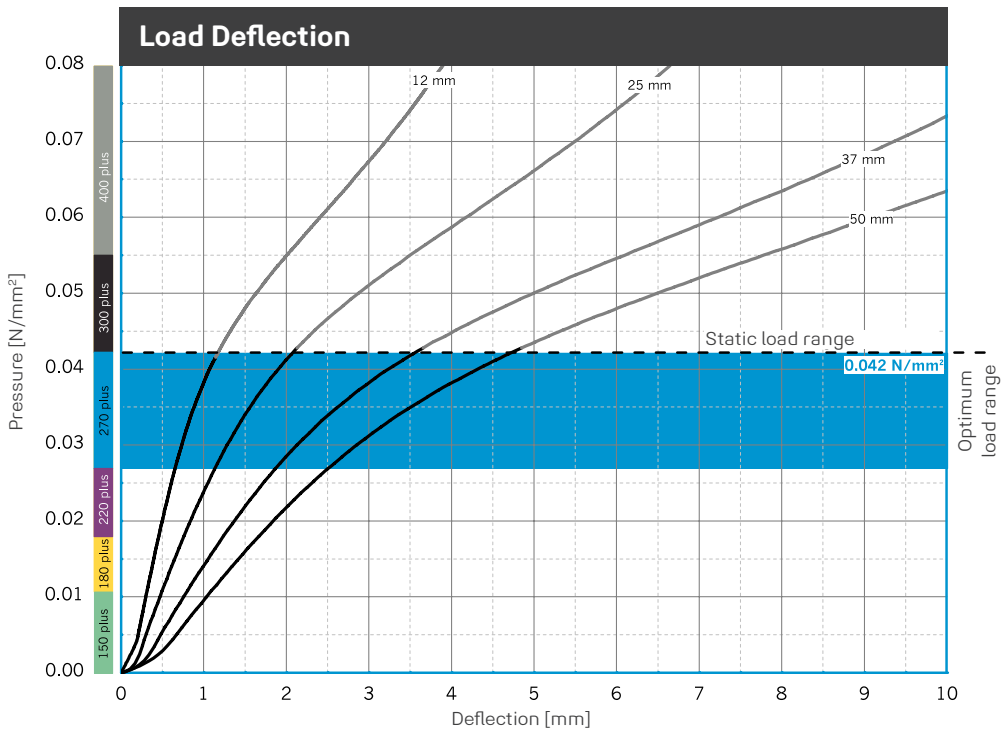
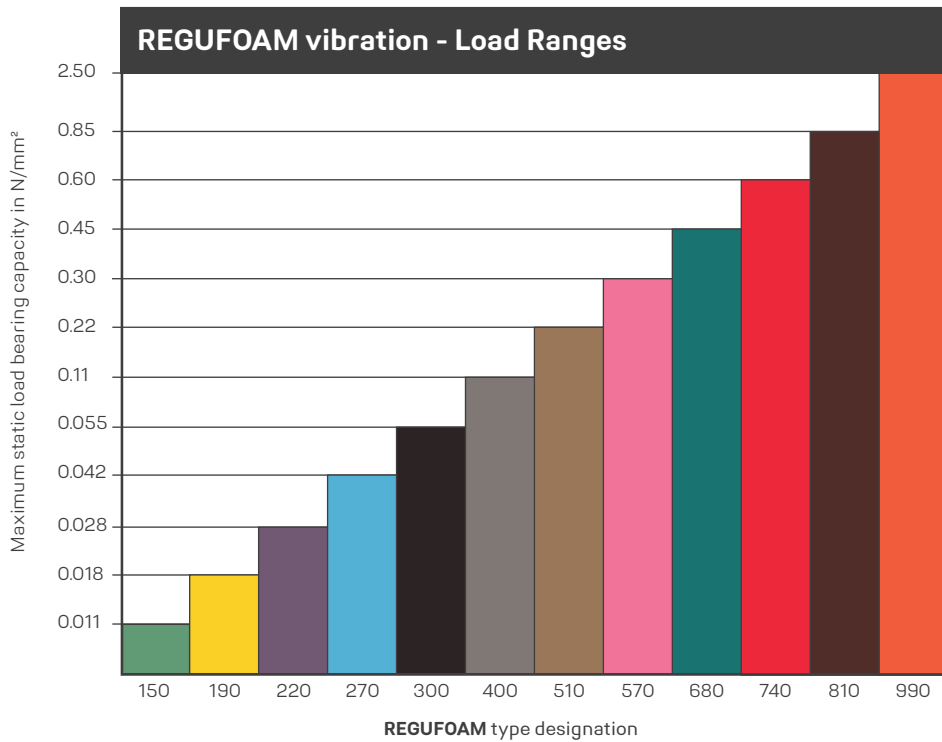
up to 1.200 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.25 - 0.45 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.60 - 1.05 N/mm ²	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/mm ²	
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



N/mm²

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

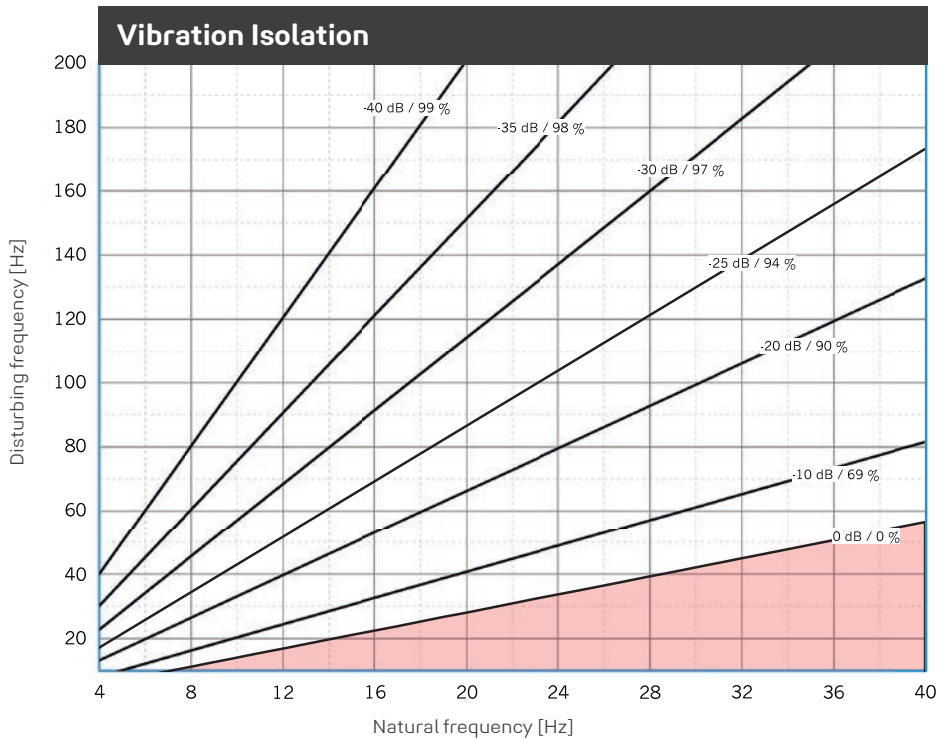
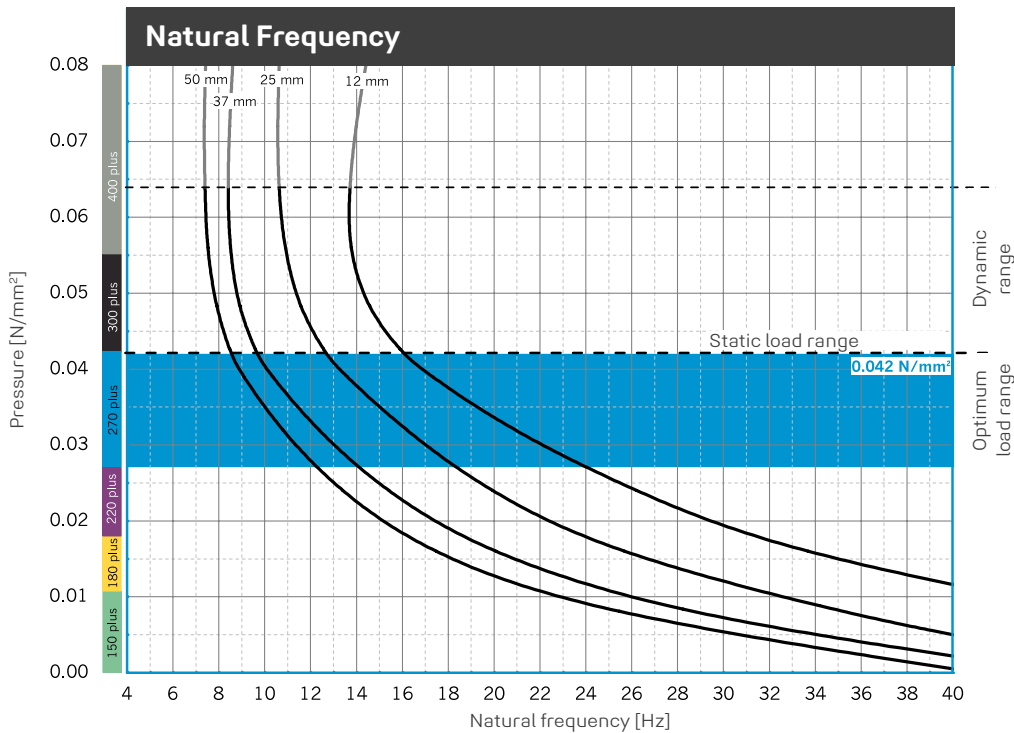


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 270plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

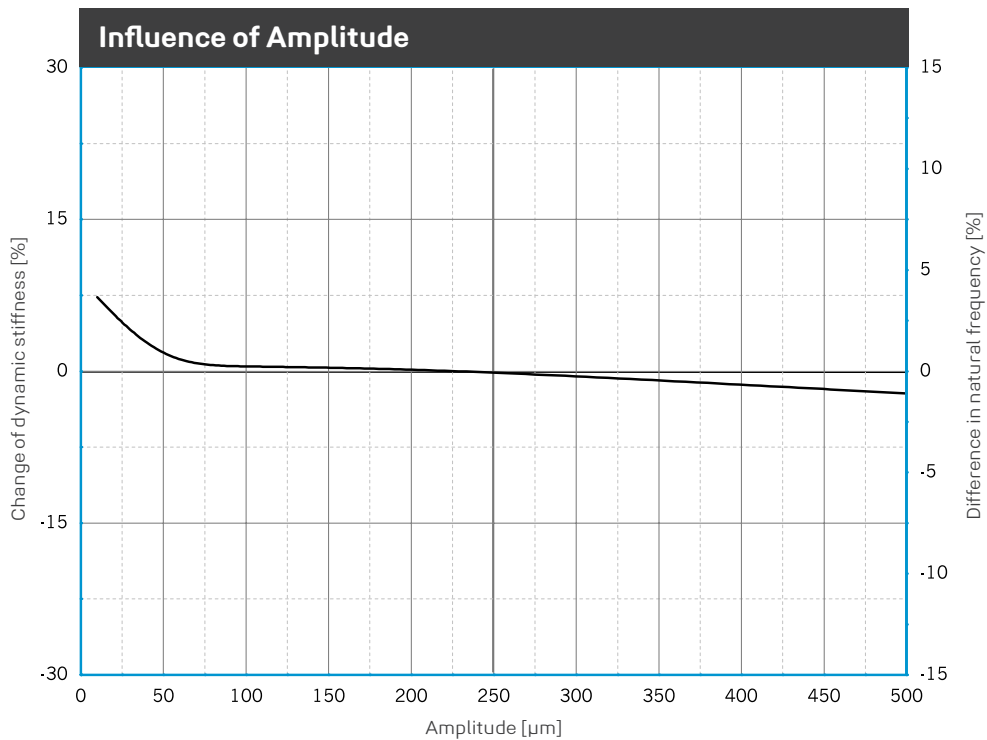


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 270plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

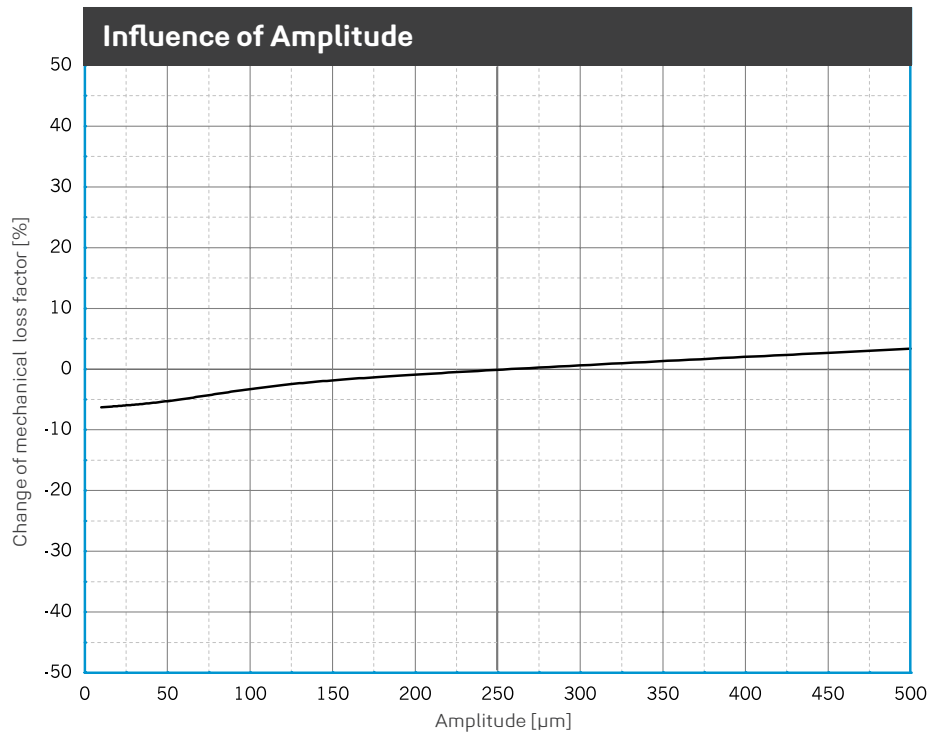
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

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

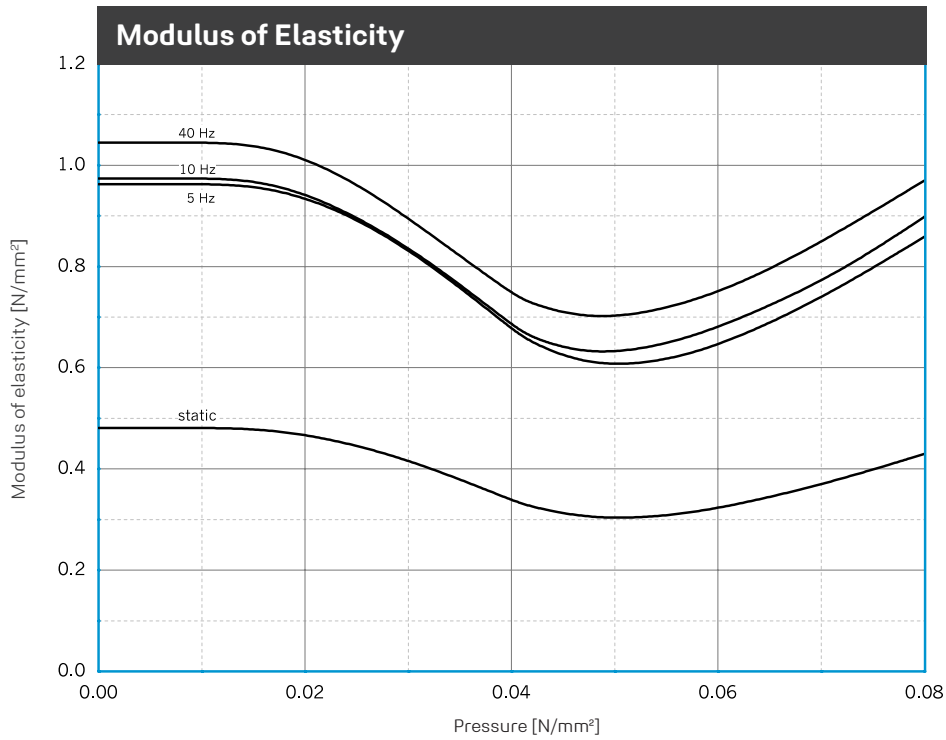


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

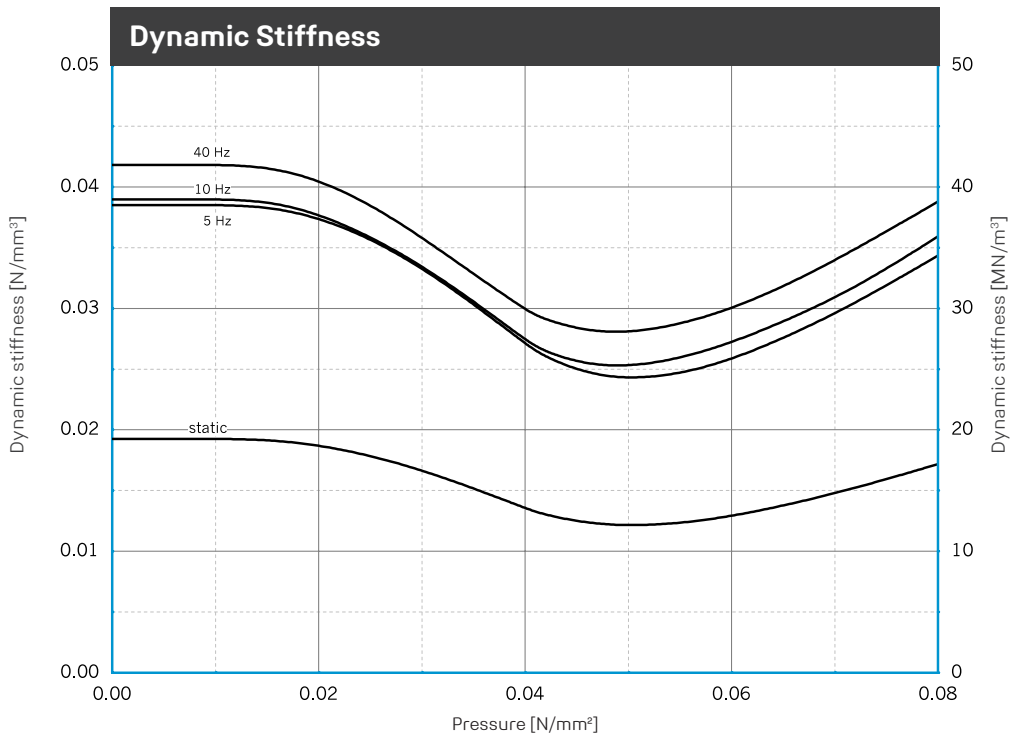
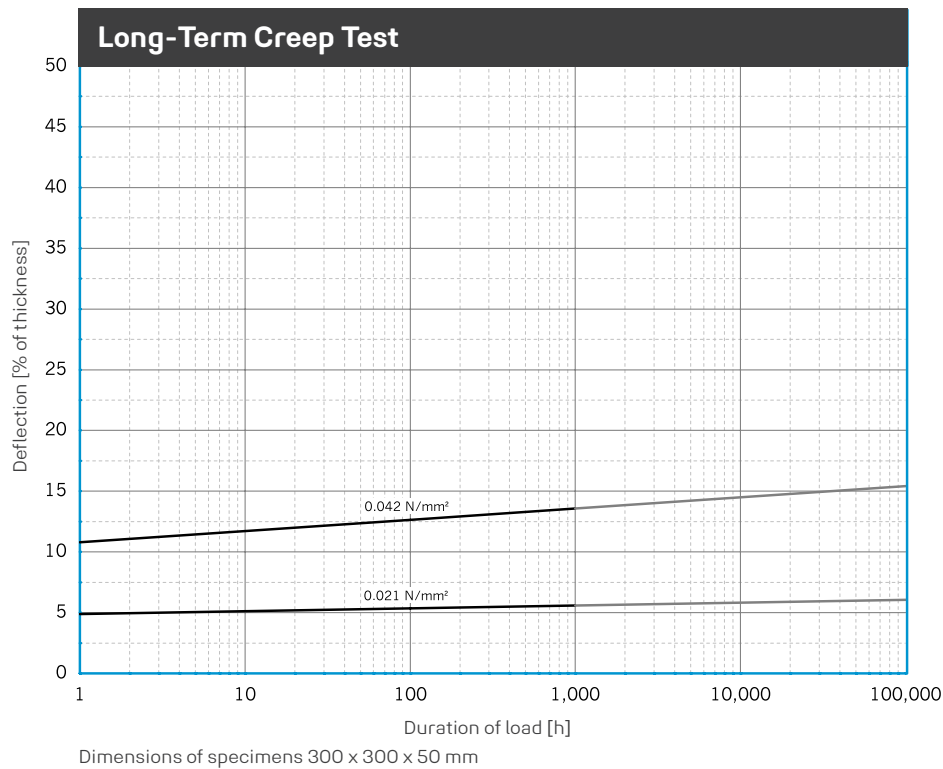


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 270PLUS



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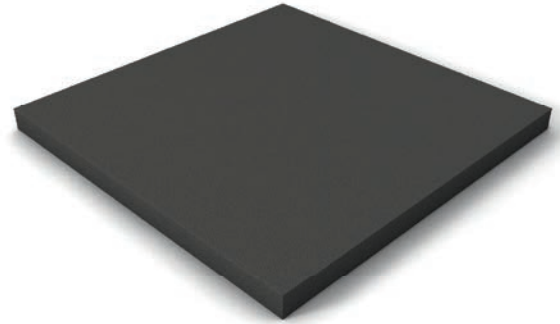
Forms of delivery, ex warehouse

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

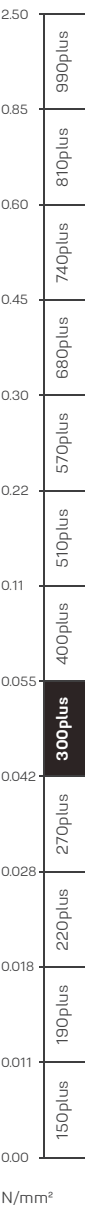
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.080 N/mm²

Rare, short term peak loads

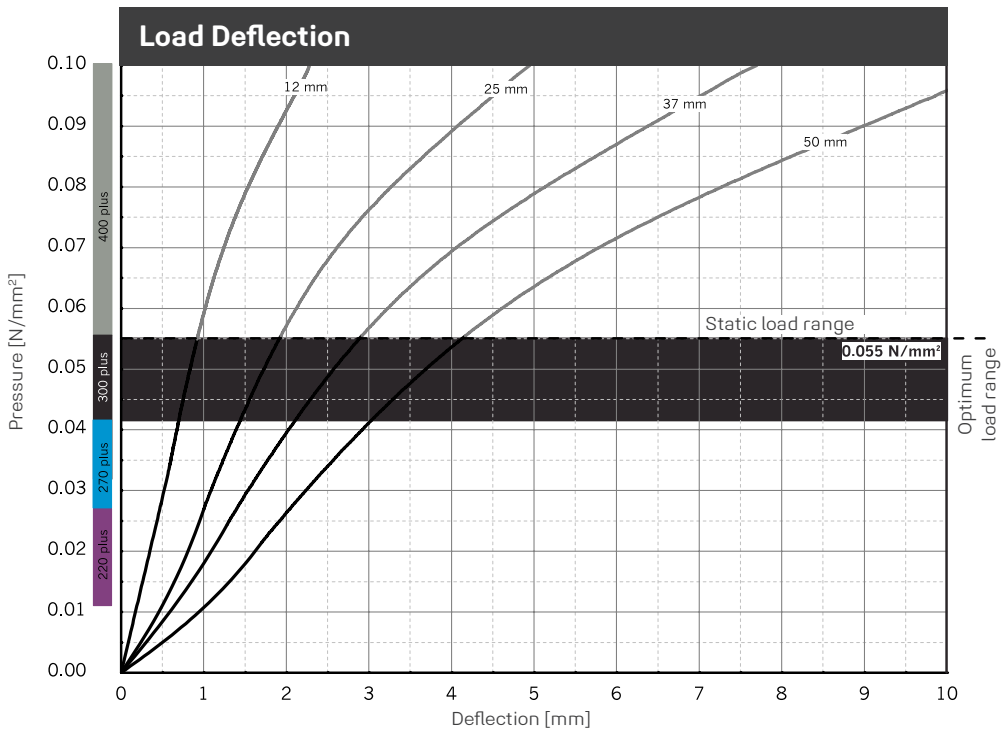
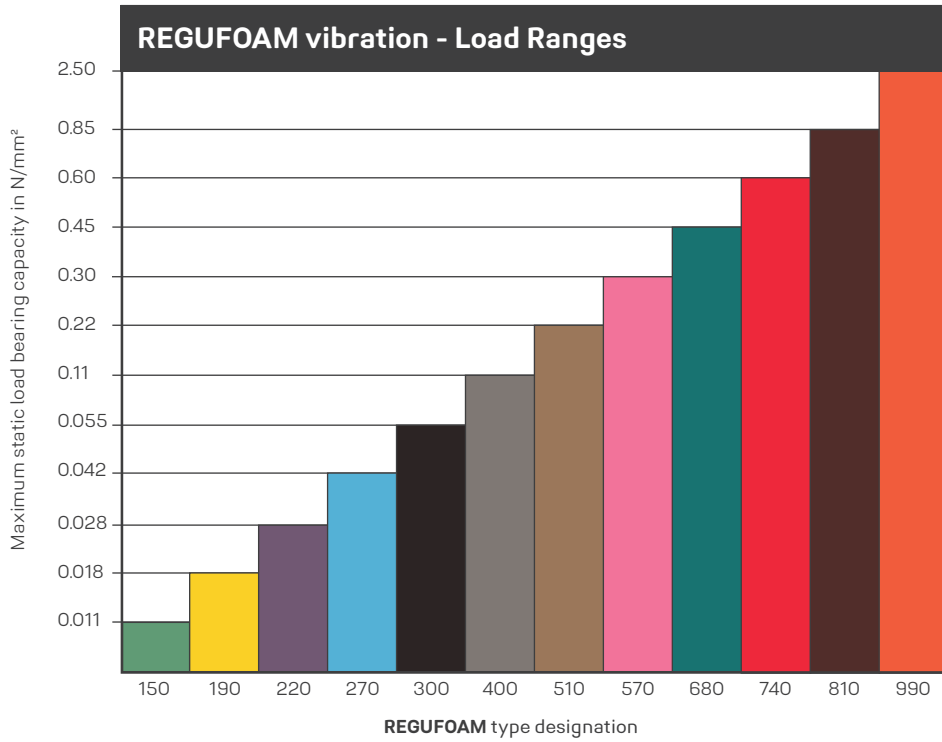
up to 2.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.35 - 0.58 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.68 - 1.25 N/mm ²	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/mm ²	
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



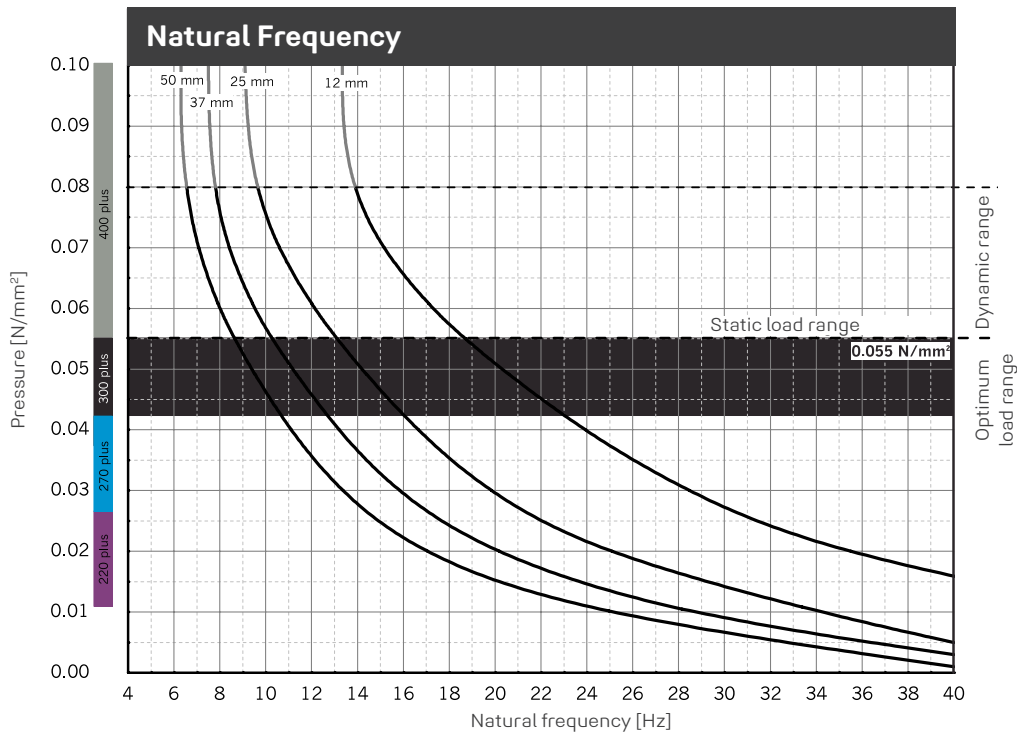
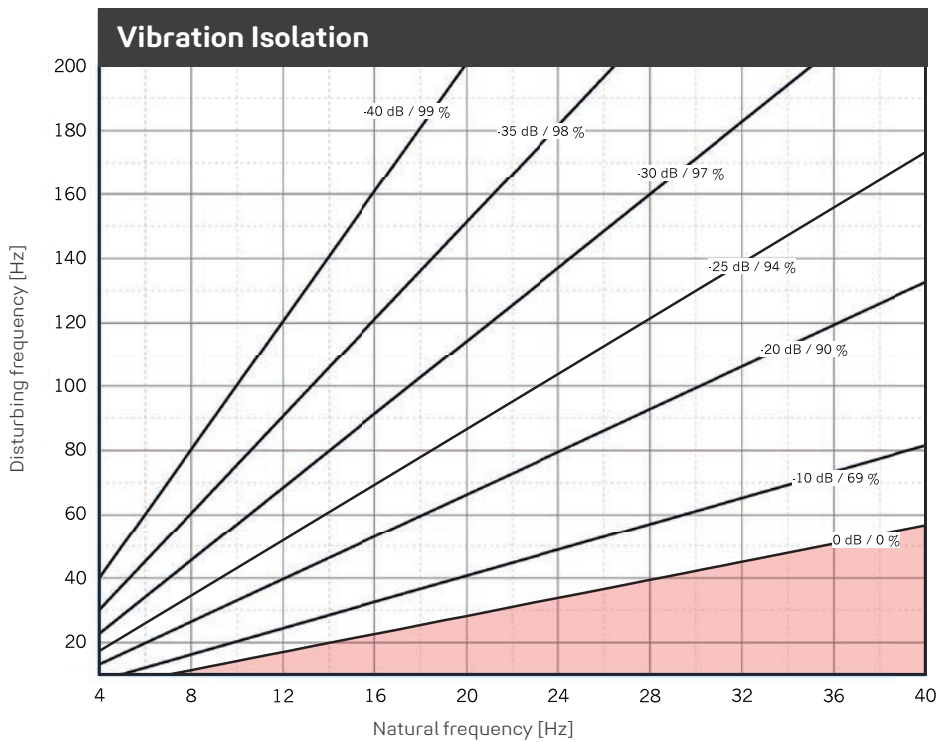
N/mm²

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

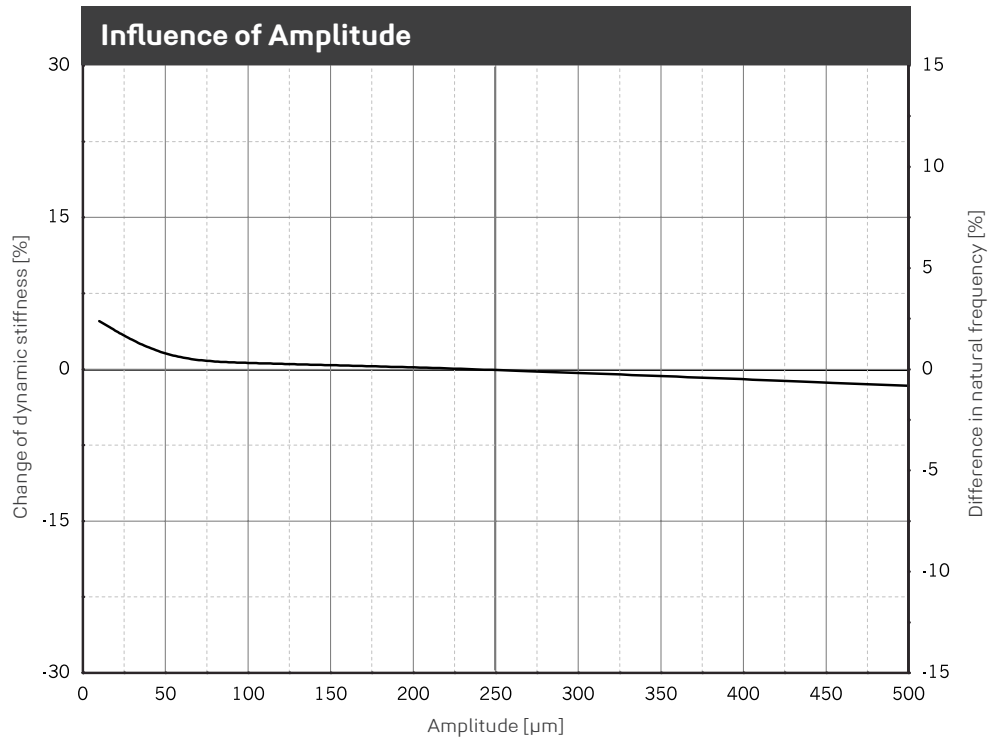


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 300plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

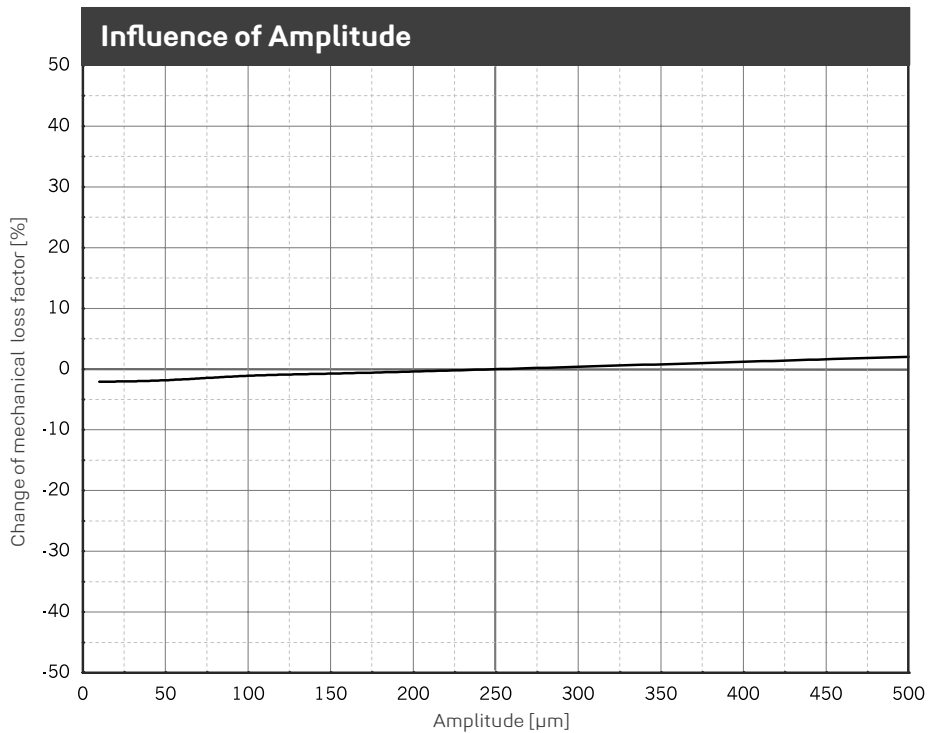
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

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

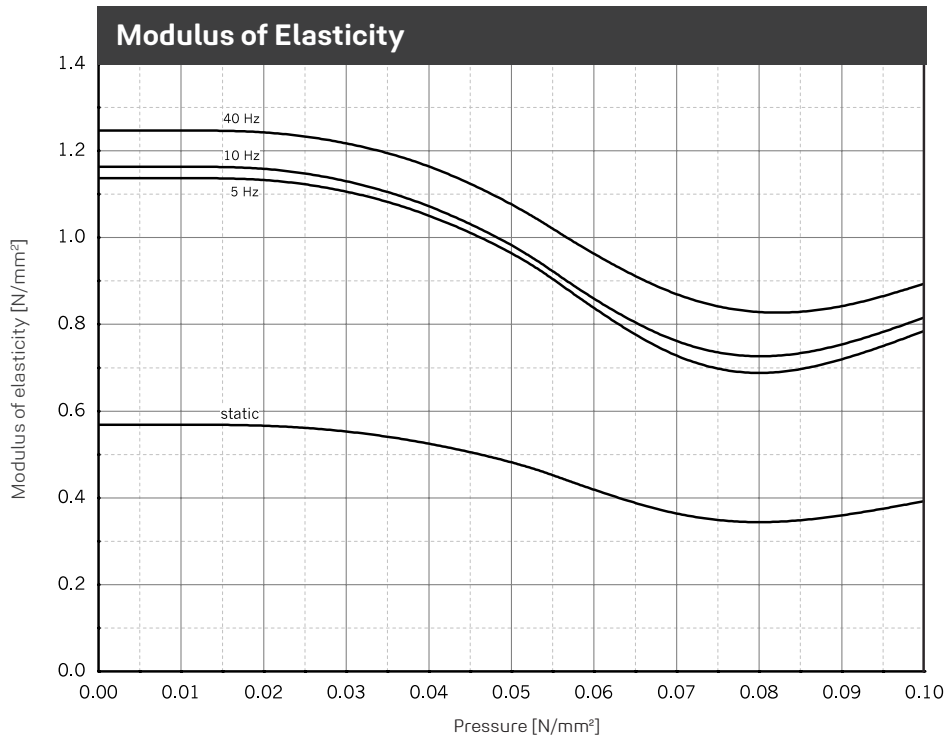


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

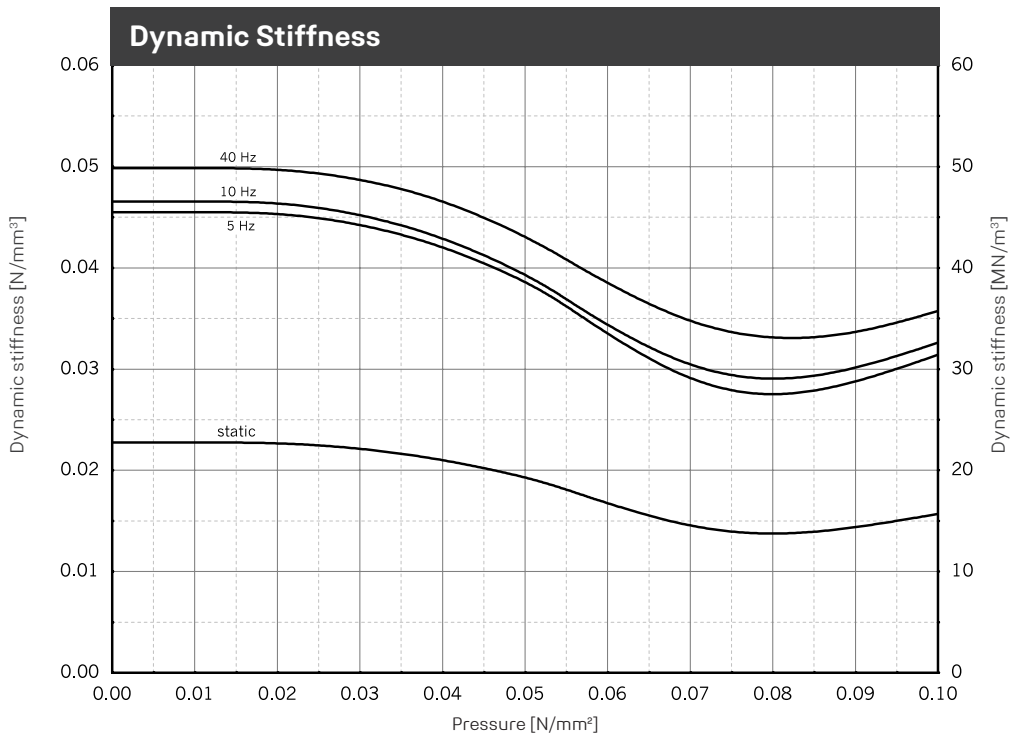
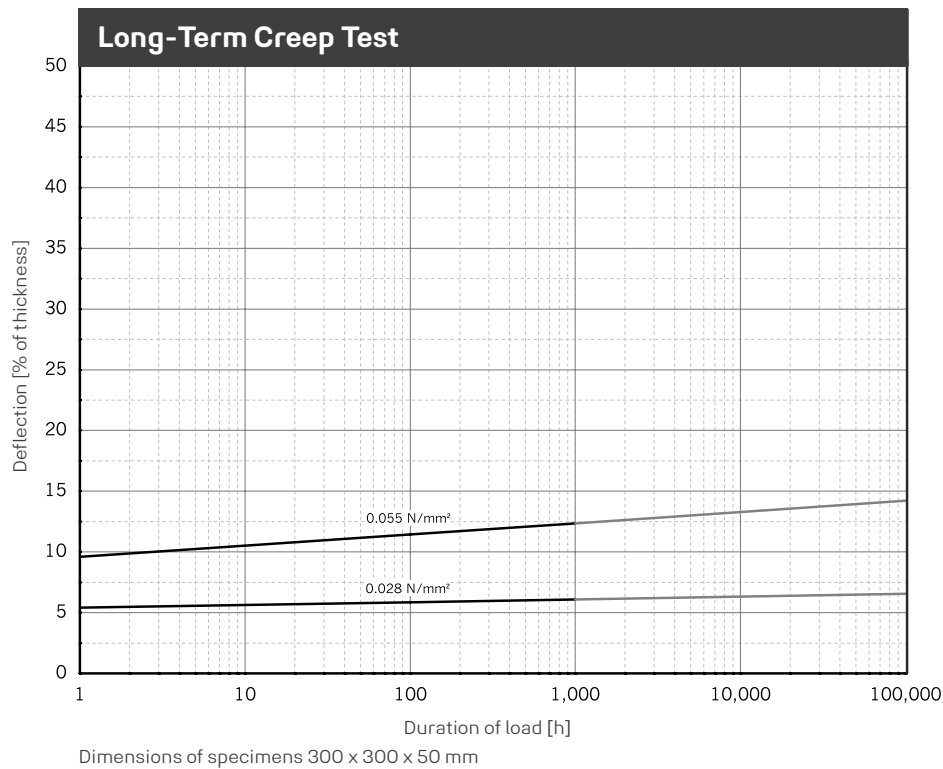


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	620plus
0.22	570plus
0.11	510plus
0.055	400plus
0.042	300plus
0.028	270plus
0.018	220plus
0.011	190plus
0.001	150plus
N/mm ²	

REGUFOAM VIBRATION 300PLUS



Exclusion of Liability

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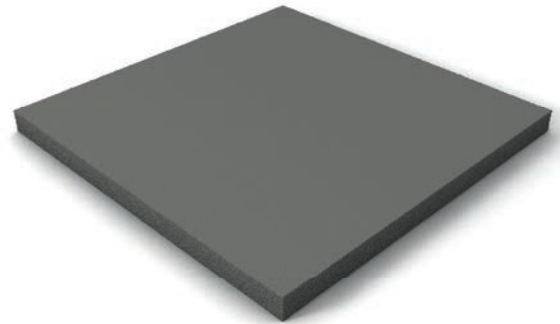
Forms of delivery, ex warehouse

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

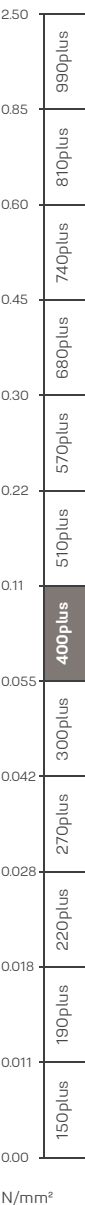
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.160 N/mm²

Rare, short term peak loads

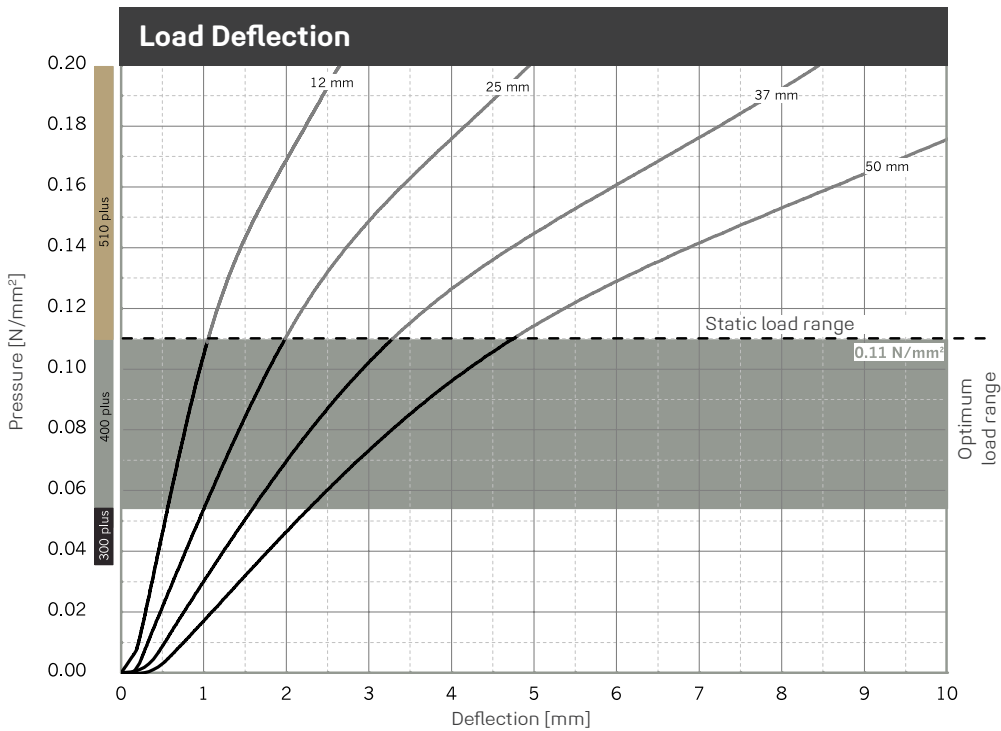
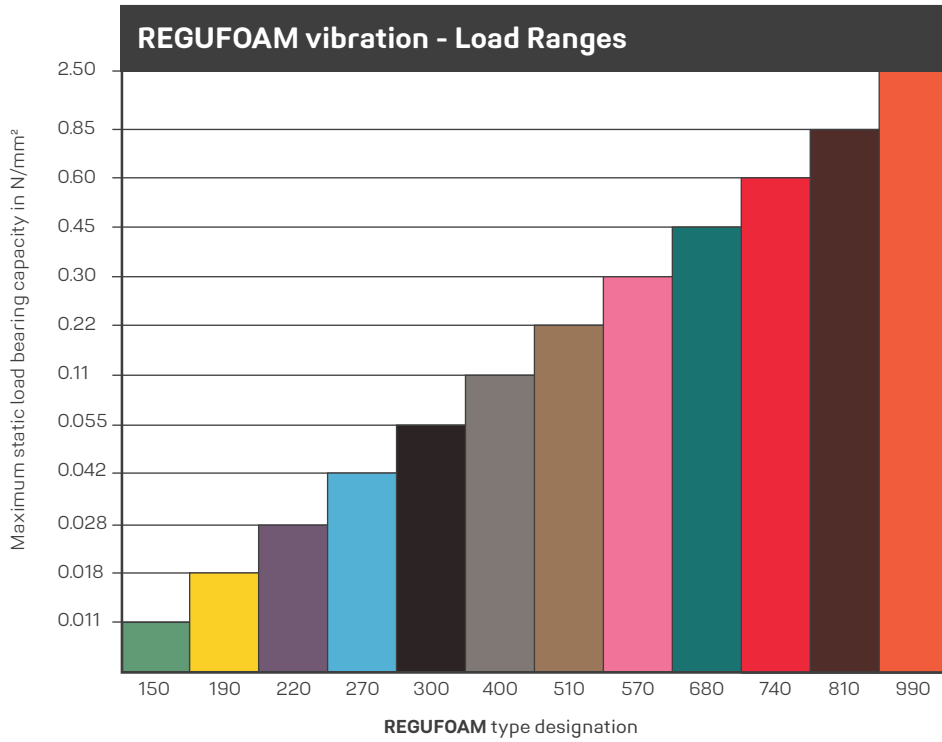
up to 3.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	0.6 - 1.0 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	1.2 - 2.0 N/mm ²	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/mm ²	
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



N/mm²

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

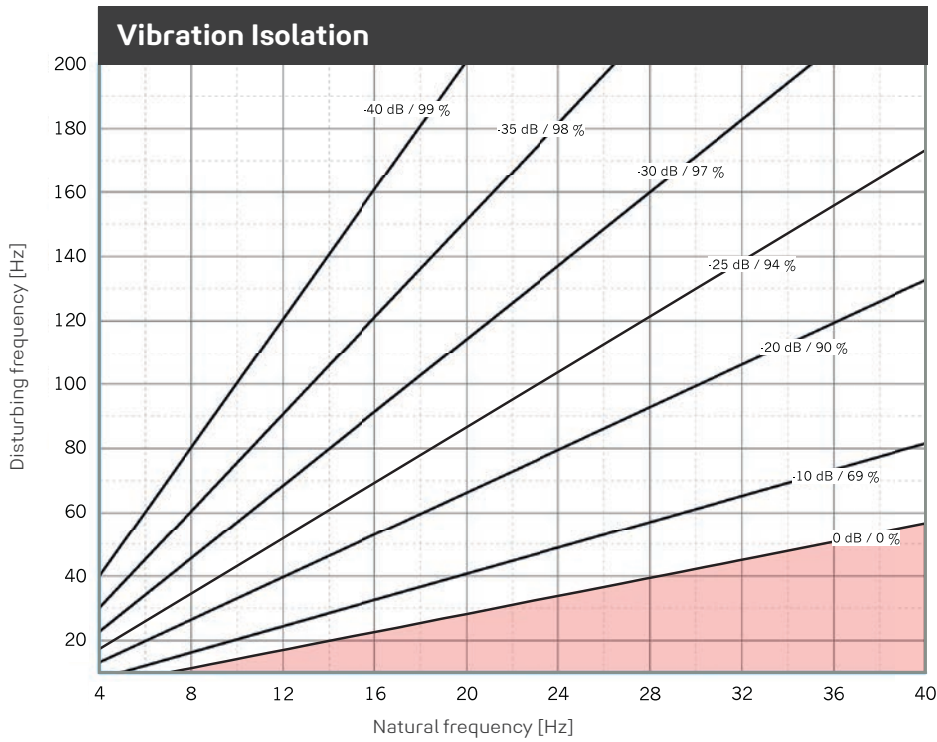
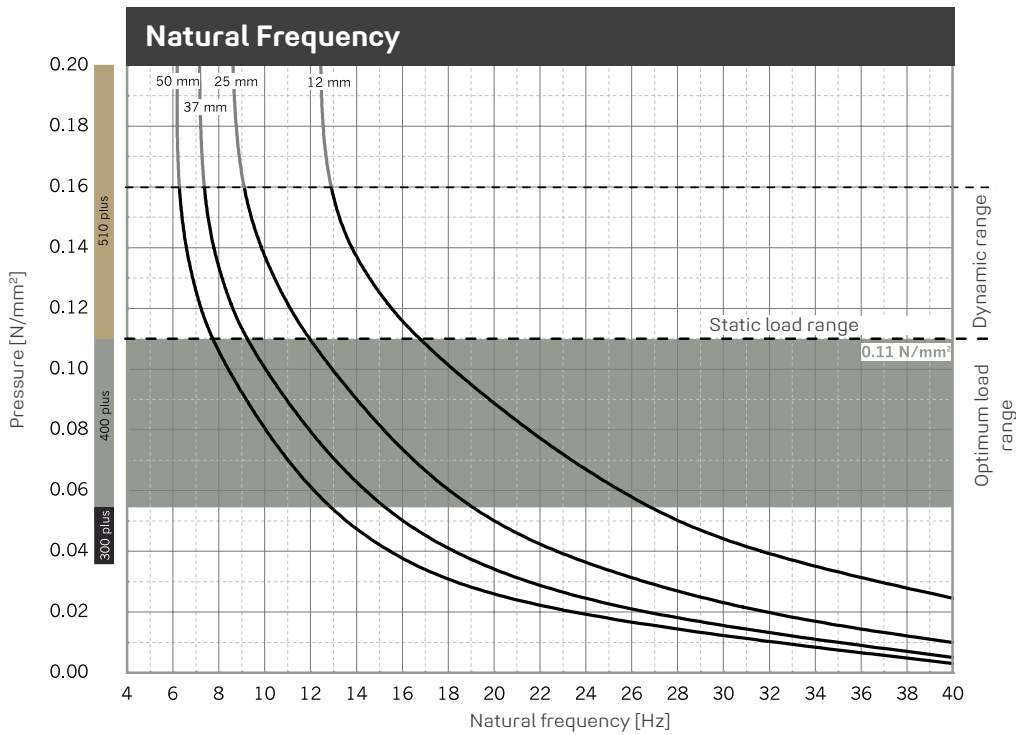


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 400plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

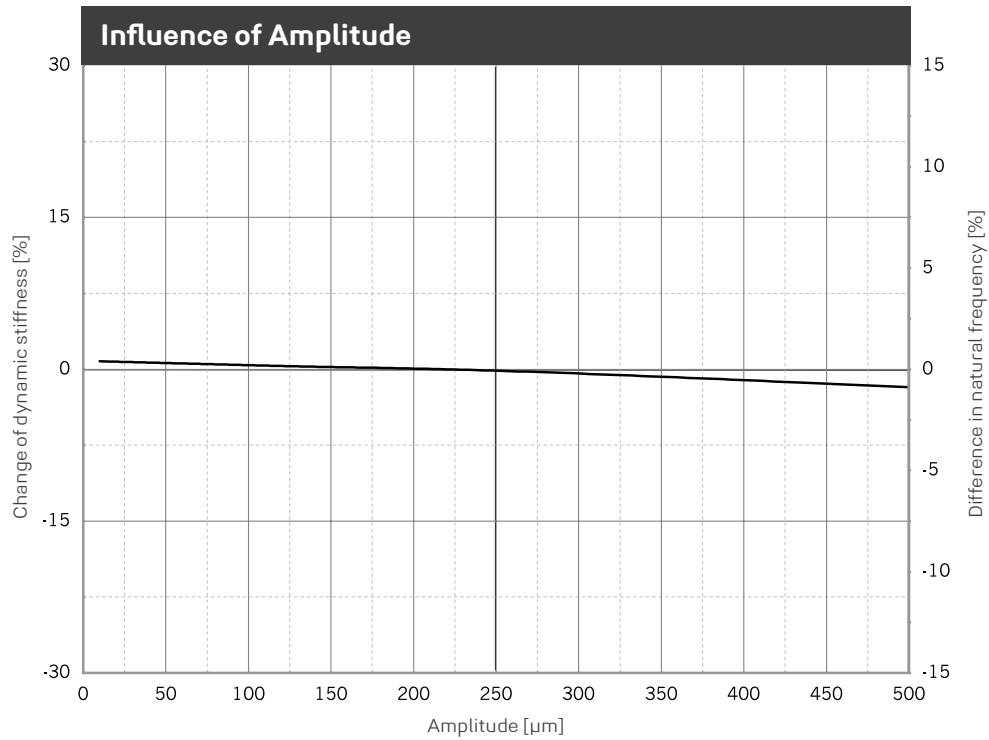


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 400plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

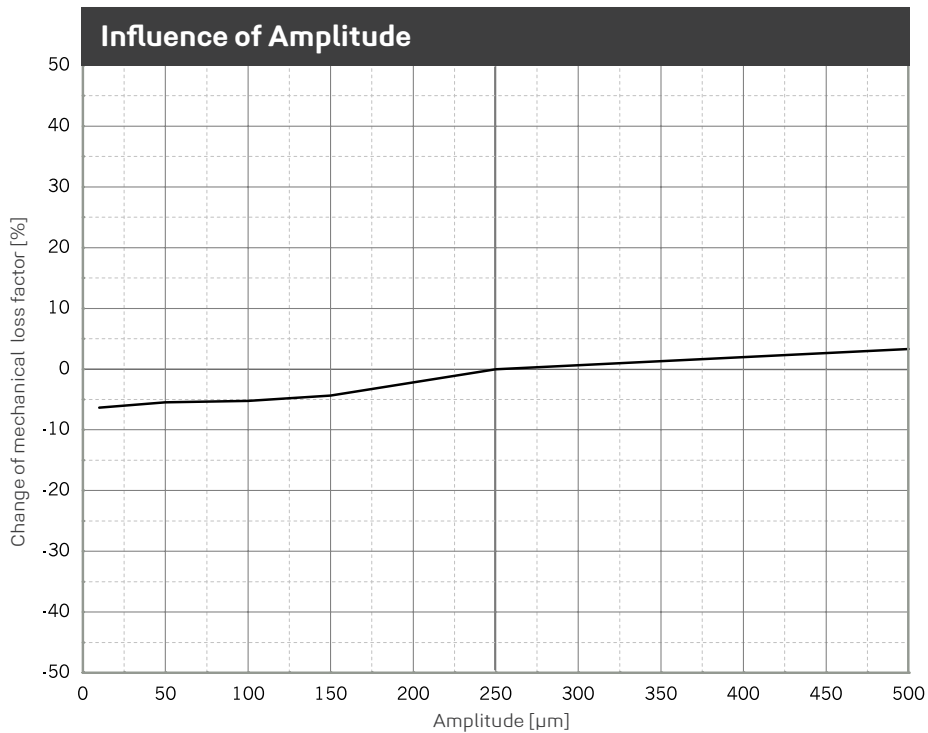
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	610plus
0.22	570plus
0.11	510plus
0.055	400plus
0.042	300plus
0.028	270plus
0.018	220plus
0.011	190plus
0.00	150plus

N/mm²

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

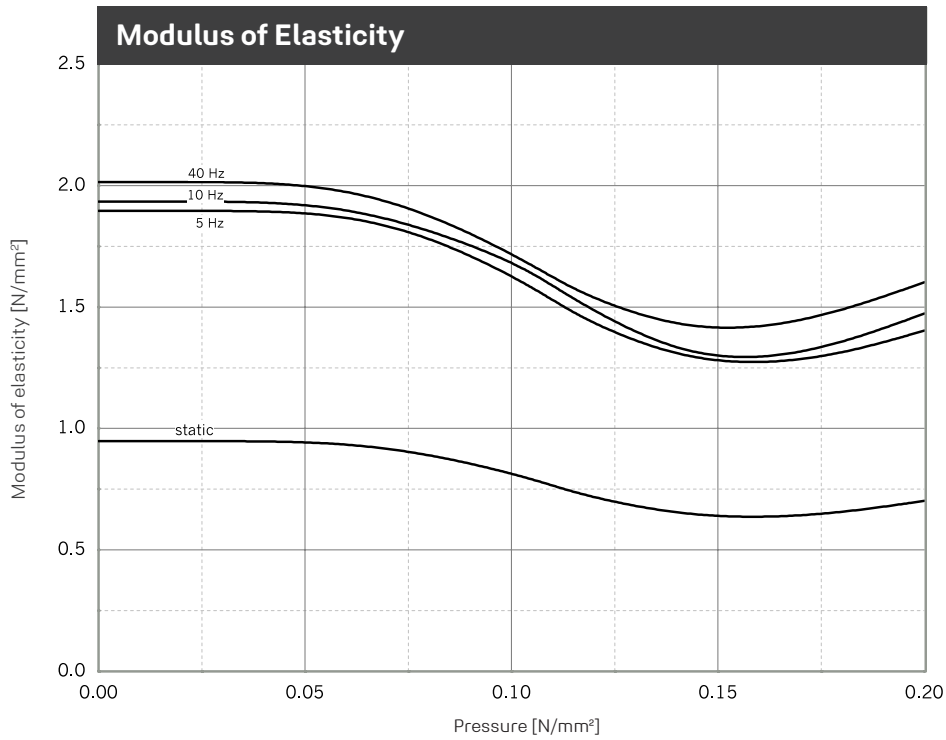


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

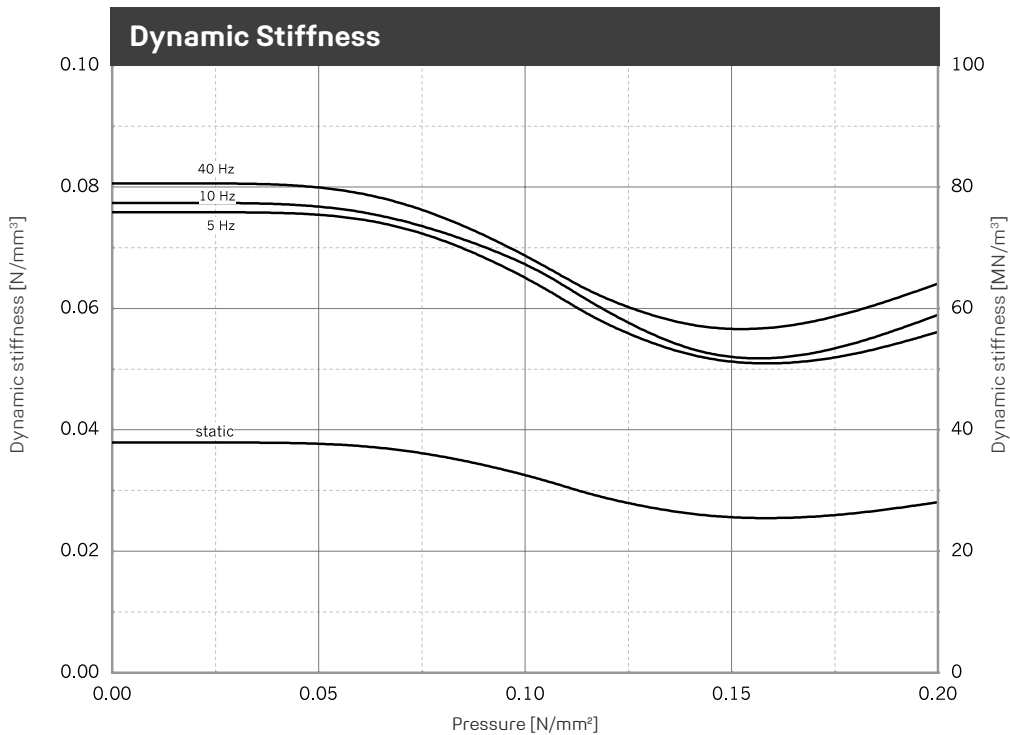
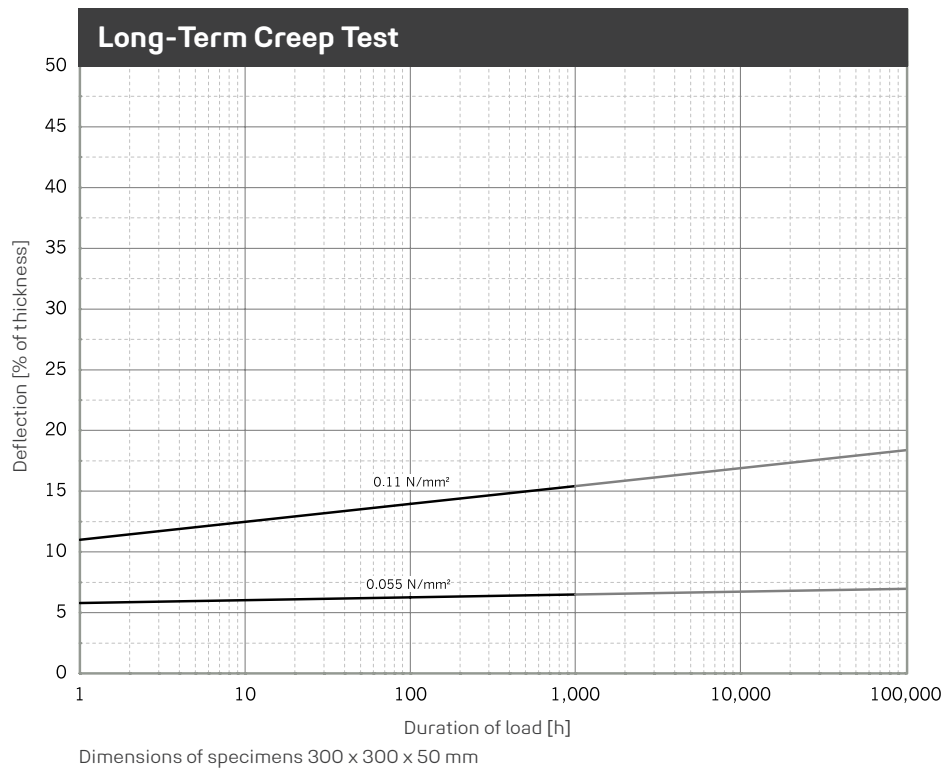


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 400PLUS



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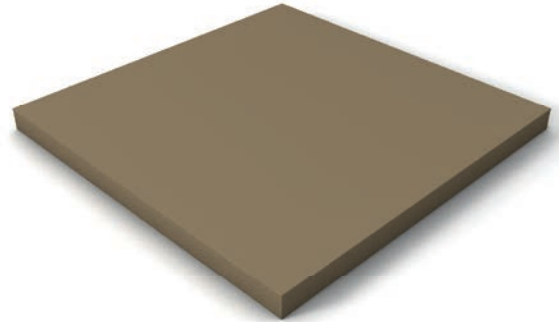
Forms of delivery, ex warehouse

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

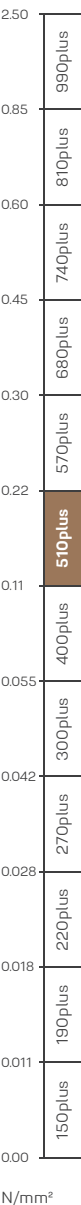
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.320 N/mm²

Rare, short term peak loads

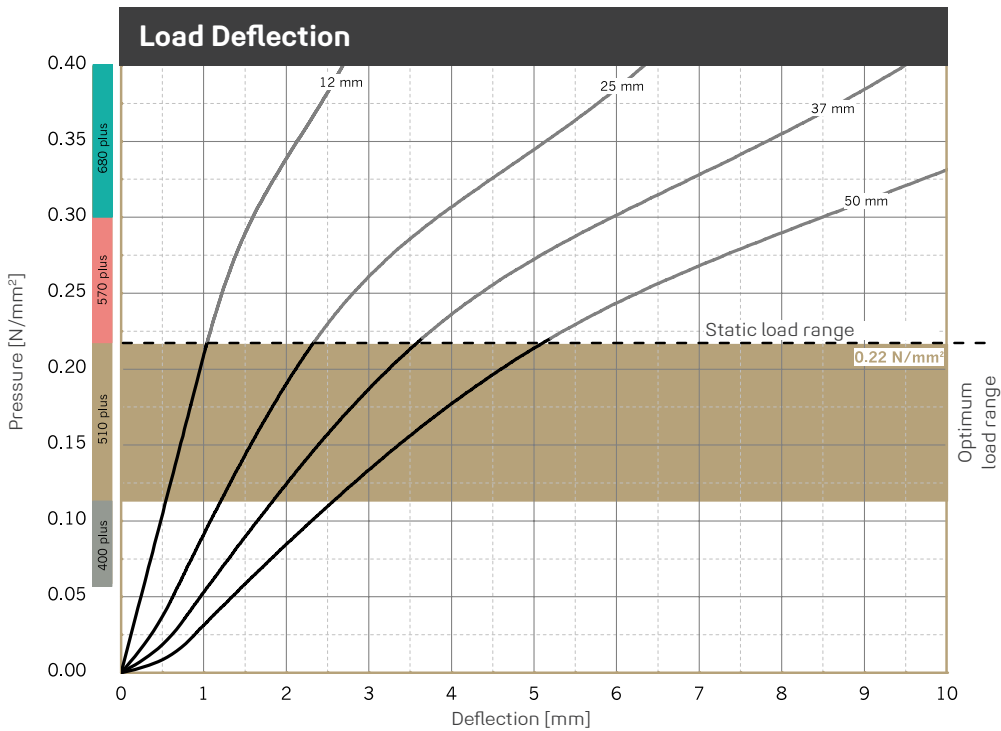
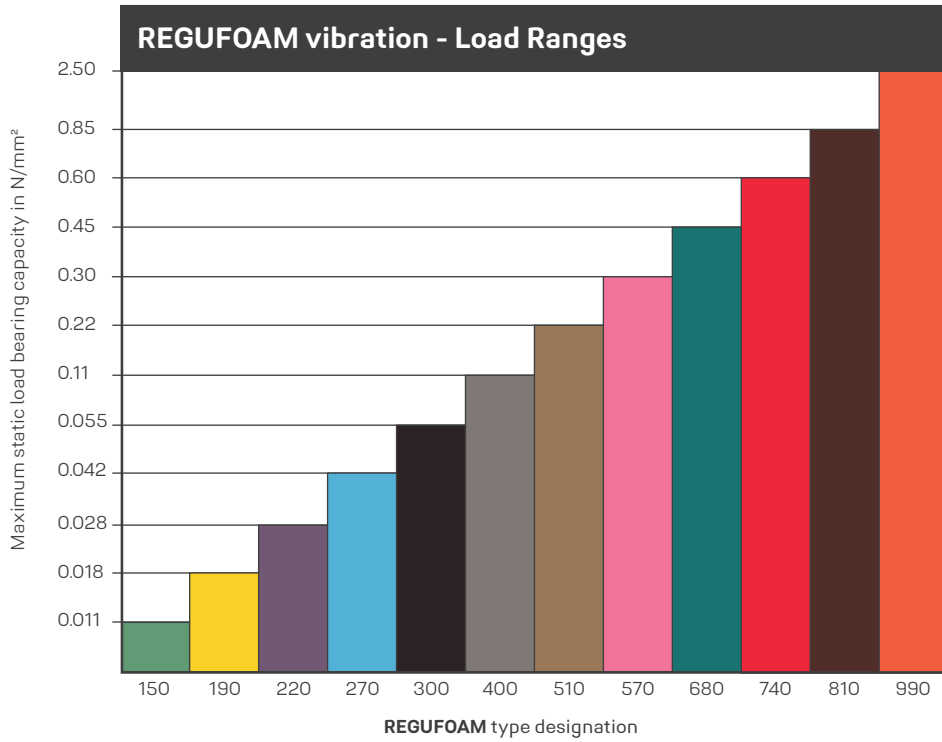
up to 4.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	1.1 - 1.7 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	2.2 - 3.7 N/mm ²	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/mm ²	
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



N/mm²

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

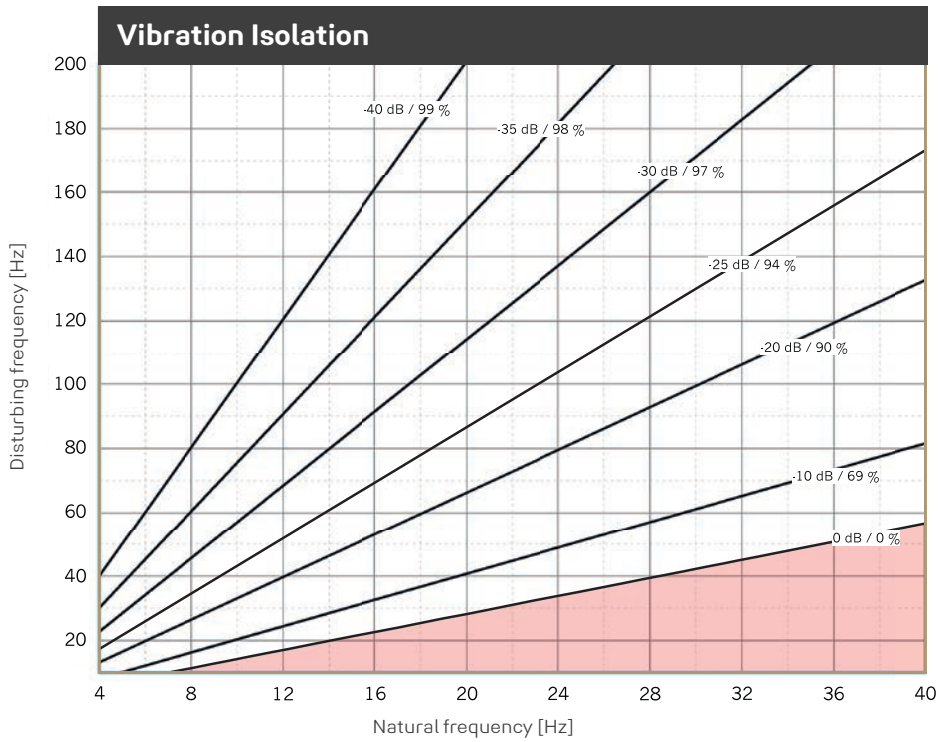
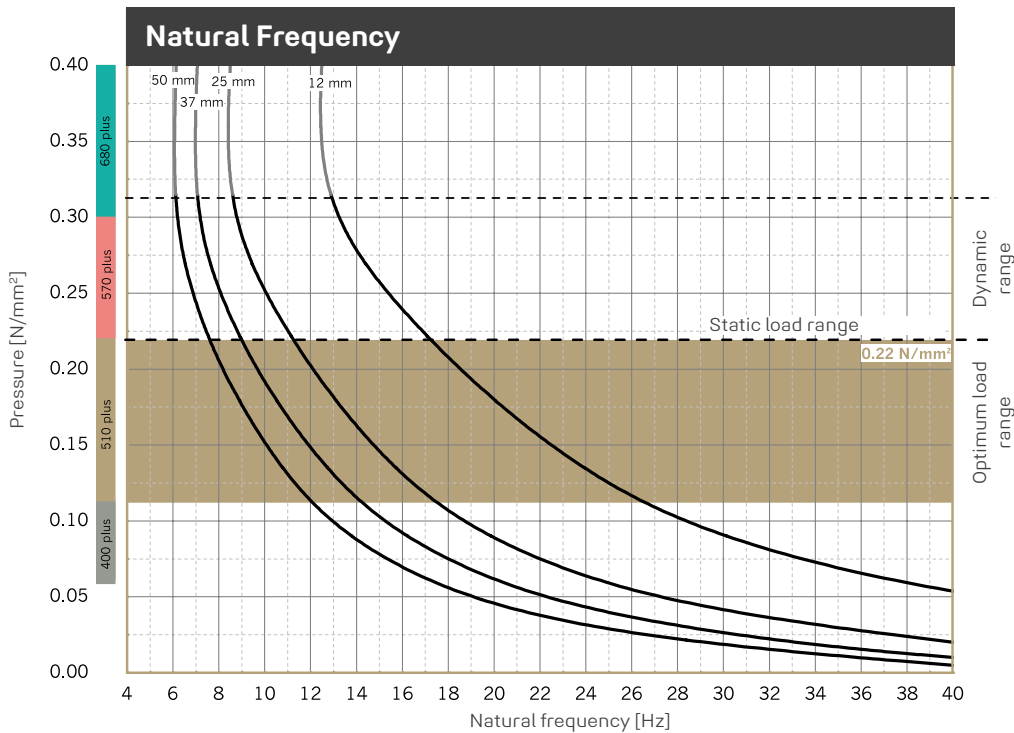


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 510plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

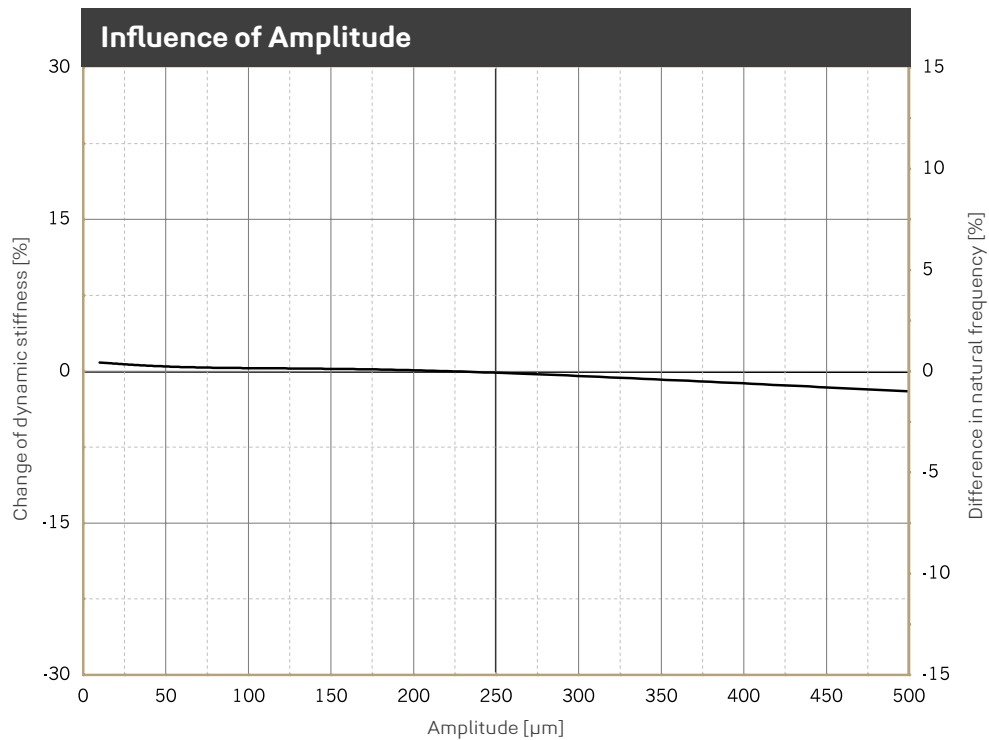


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 510plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

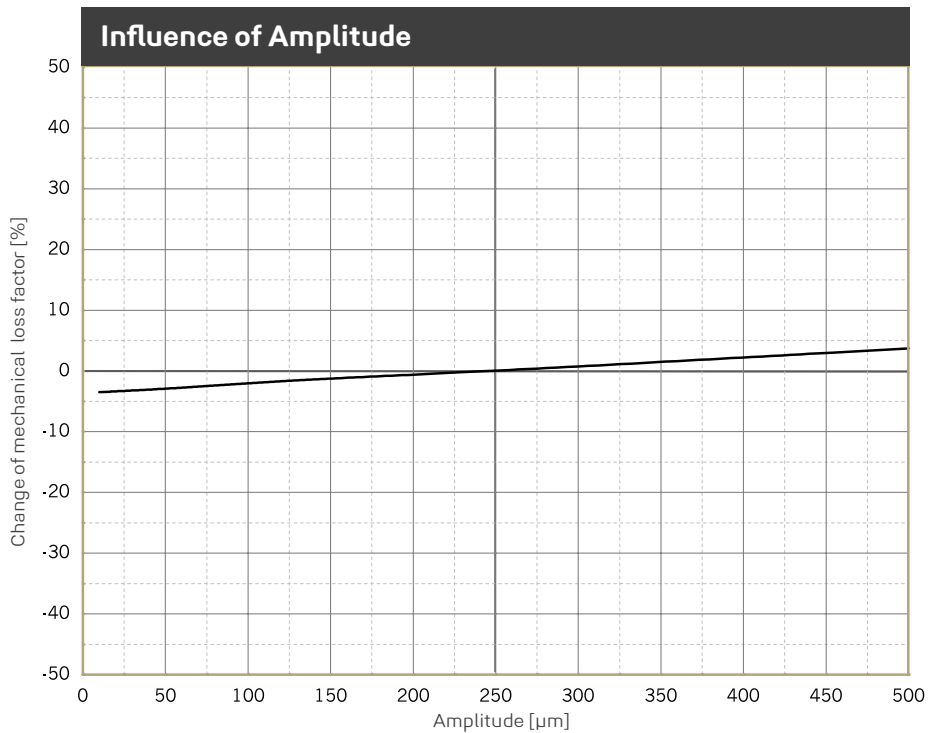
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

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

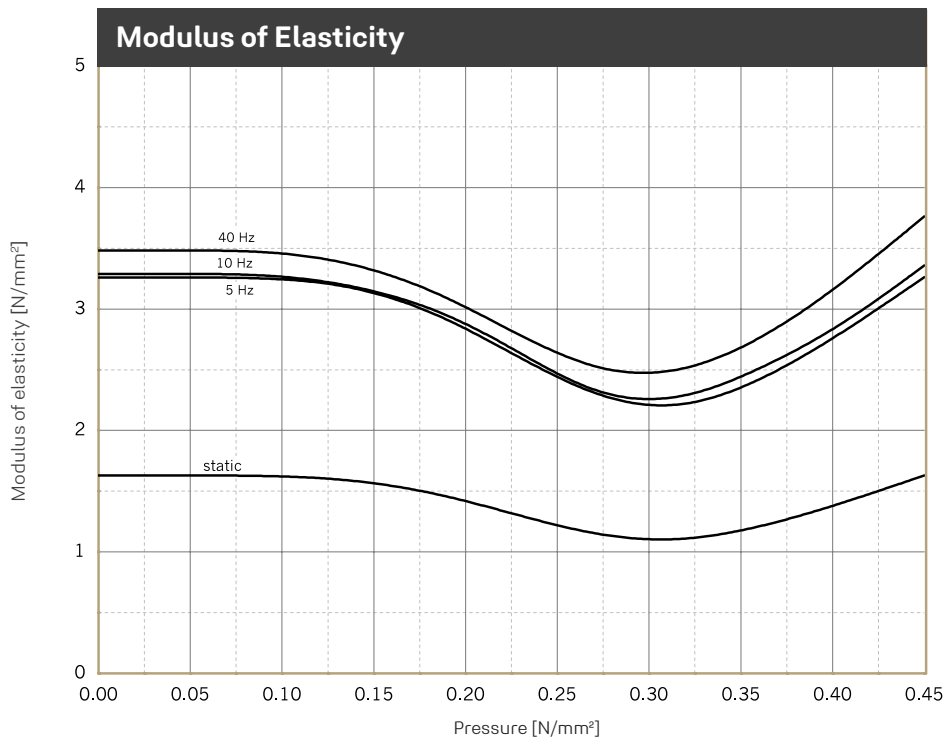


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

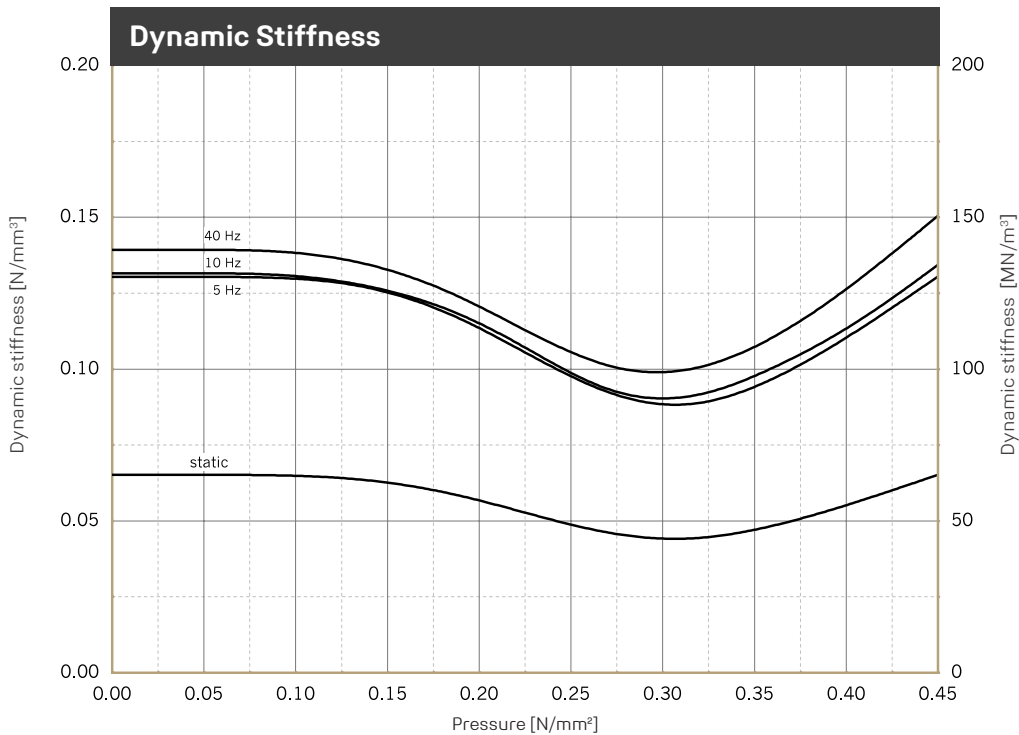
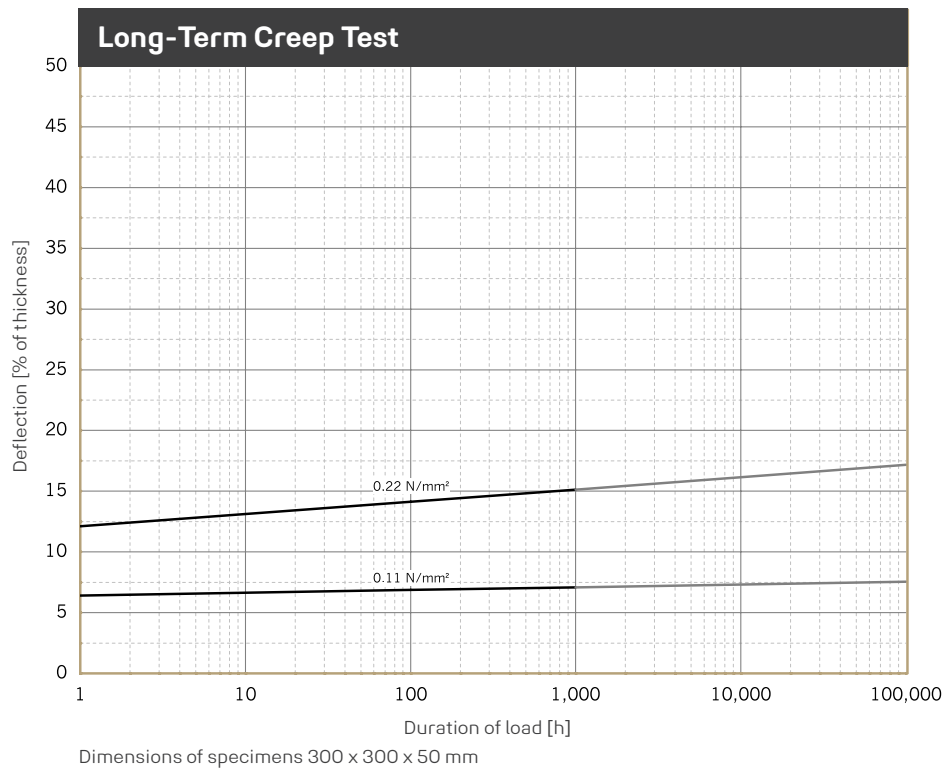


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 510PLUS



Exclusion of Liability

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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

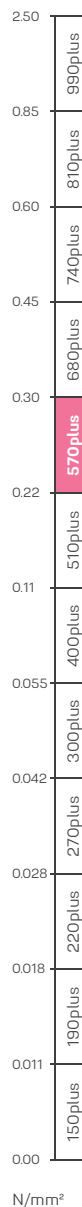
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.420 N/mm²

Rare, short term peak loads

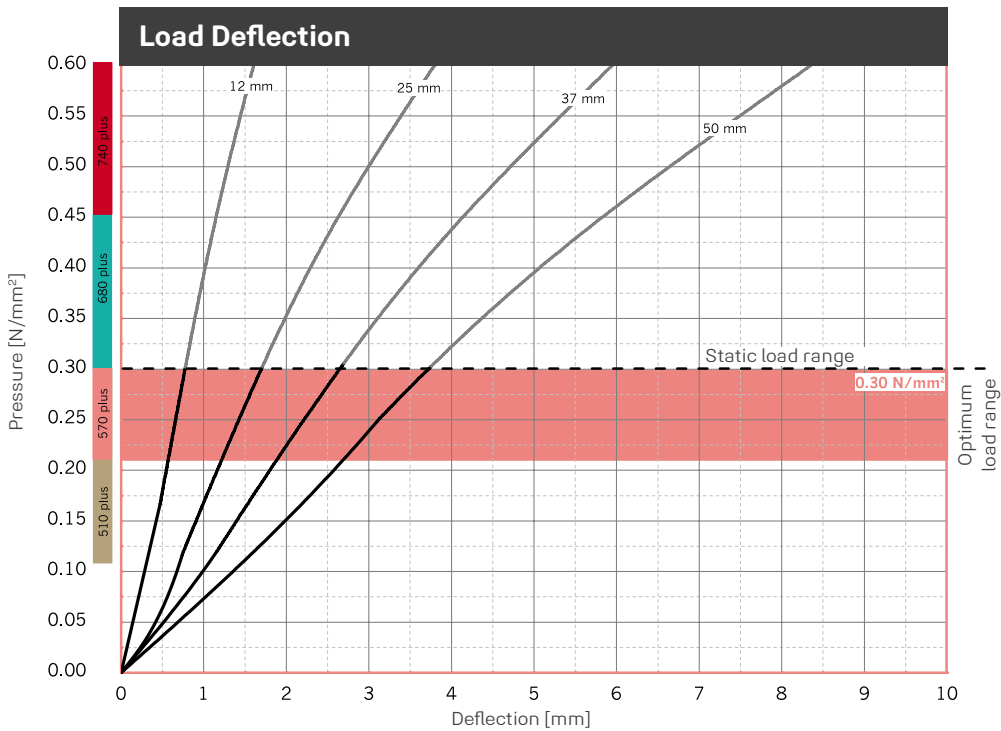
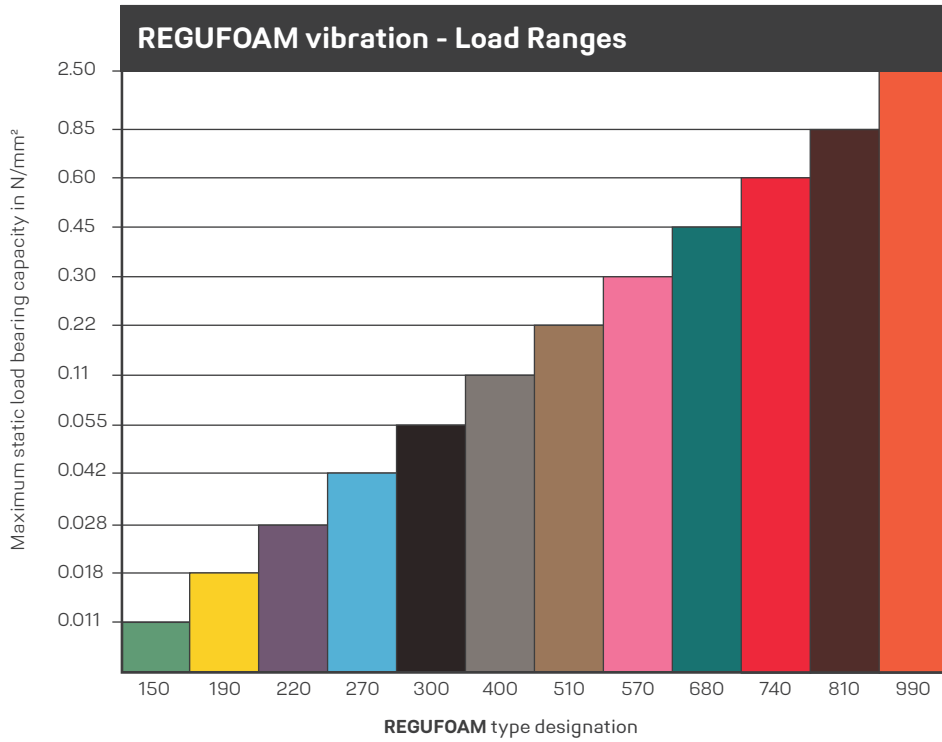
up to 4.500 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	2.6 - 2.9 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	5.3 - 6.5 N/mm ²	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/mm ²	
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



N/mm²

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

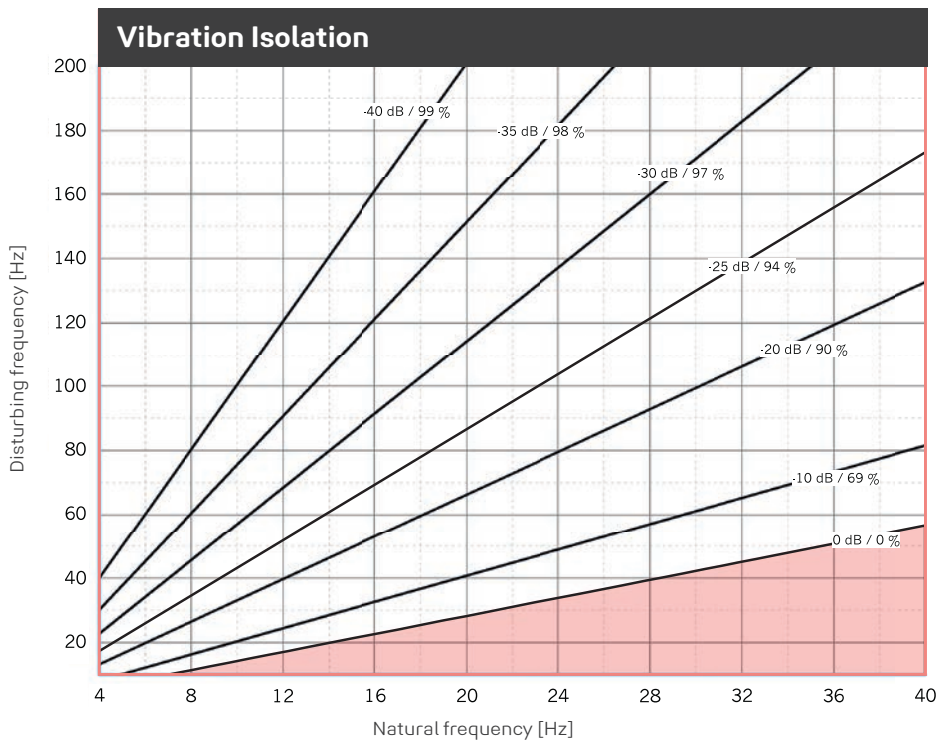
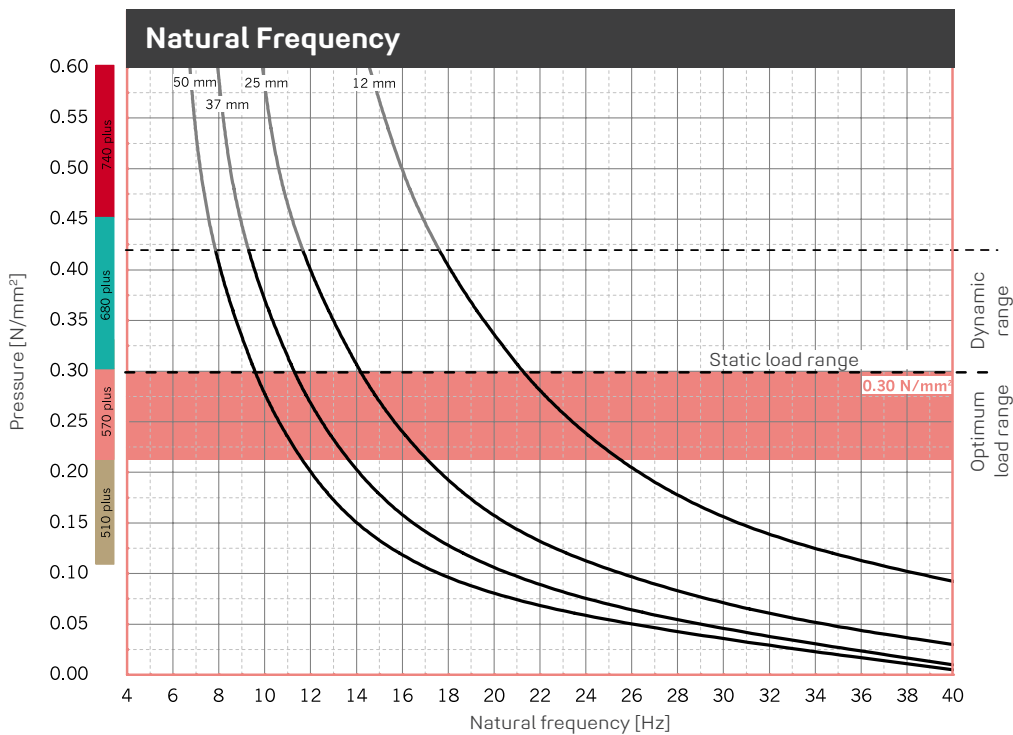
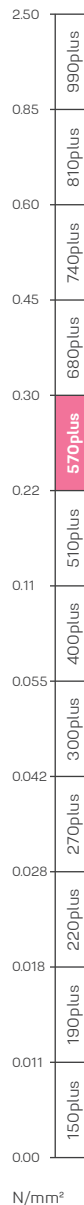


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 570plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

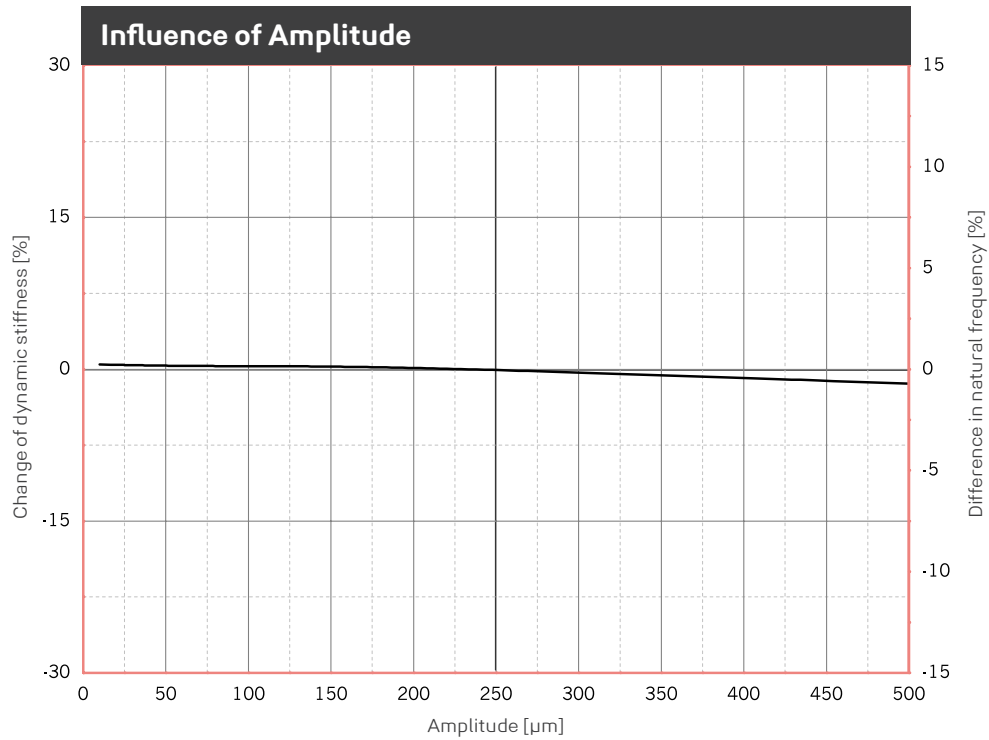


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 570plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

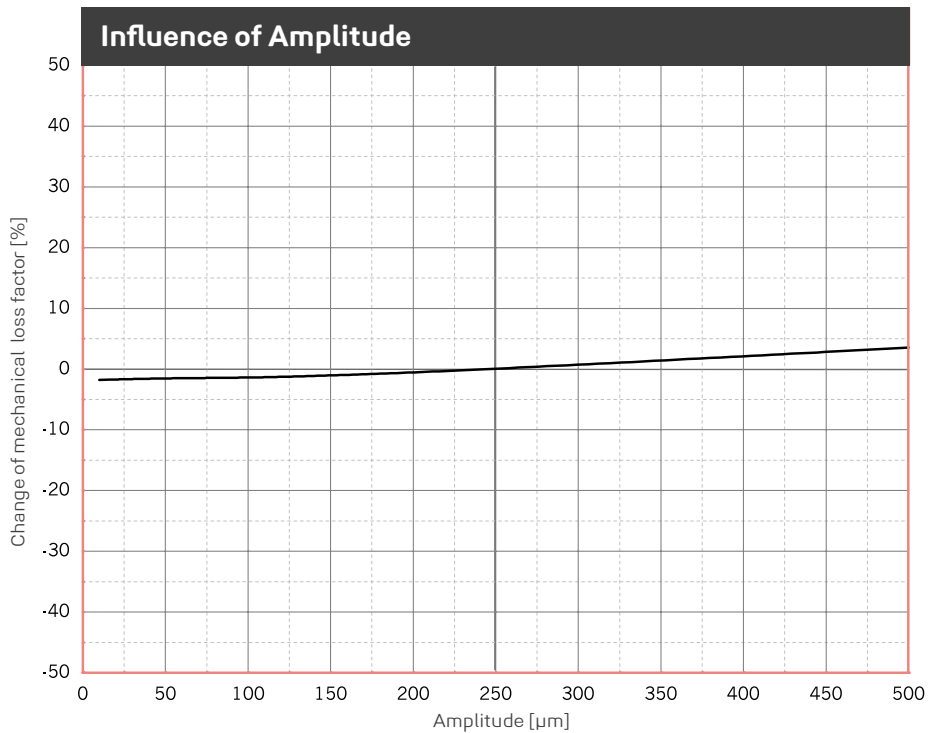


N/mm²

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

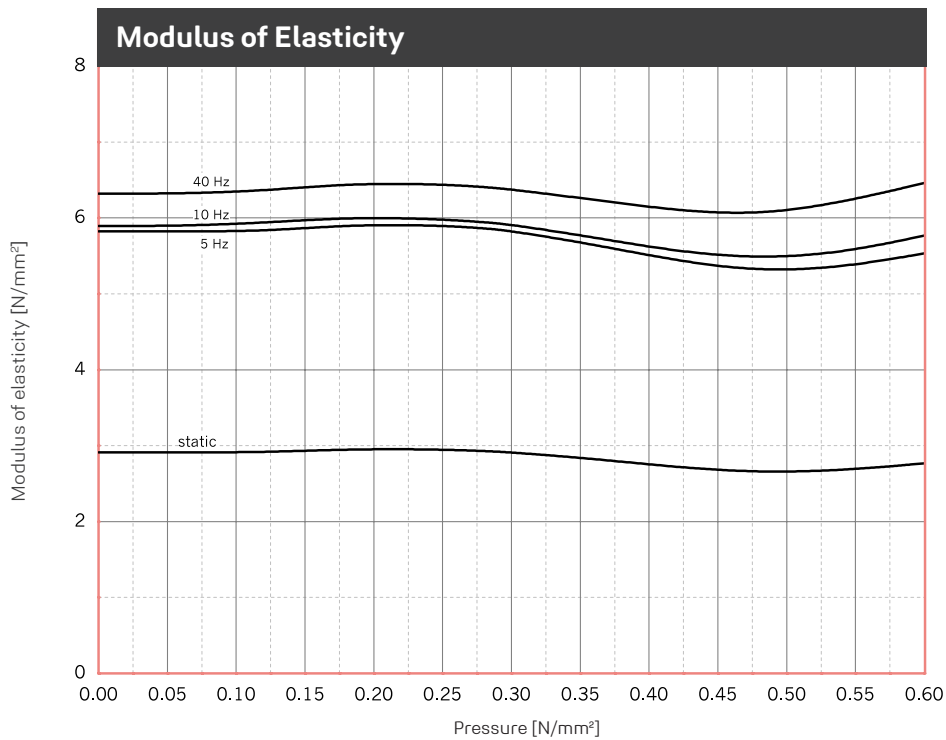


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens $300 \times 300 \times 25$ mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

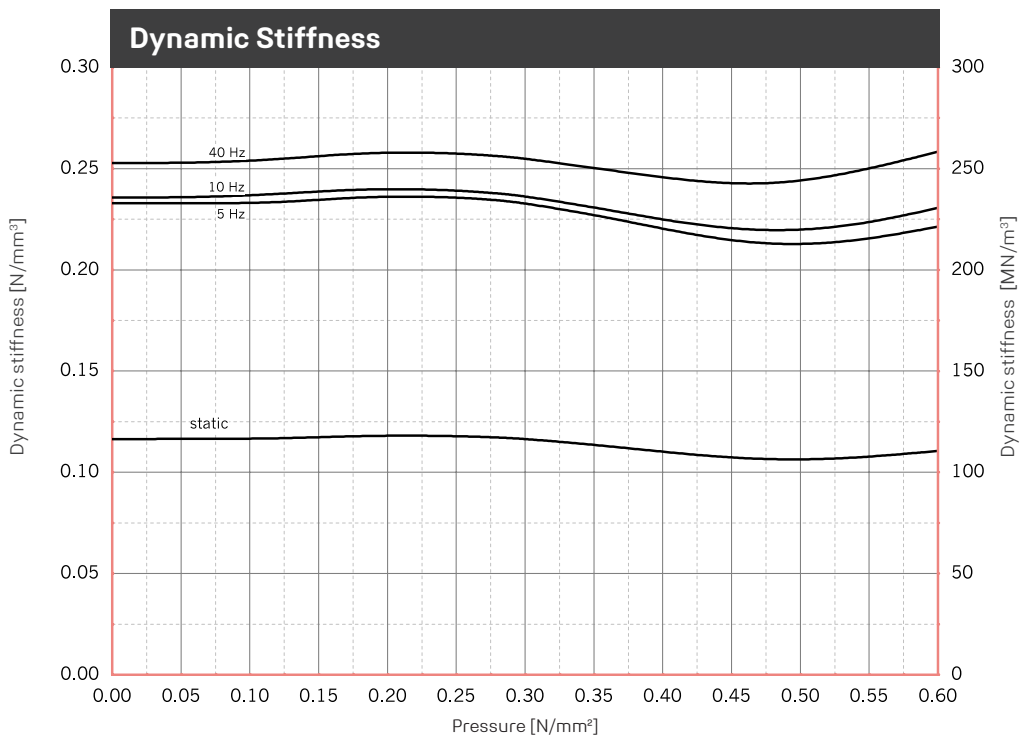
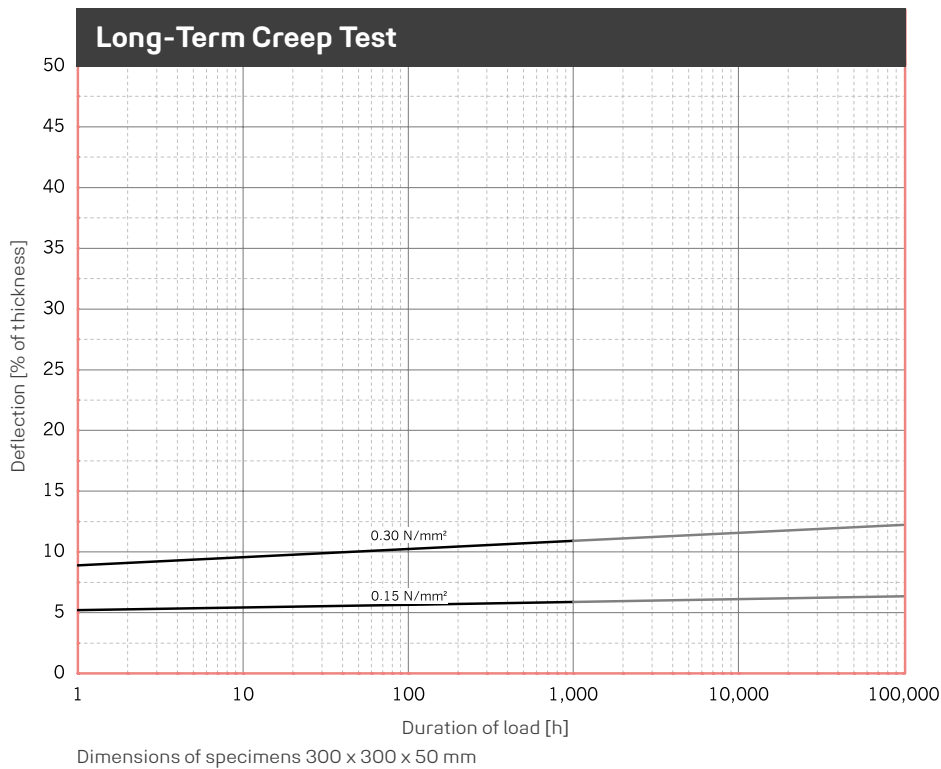


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens $300 \times 300 \times 25$ mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 570PLUS



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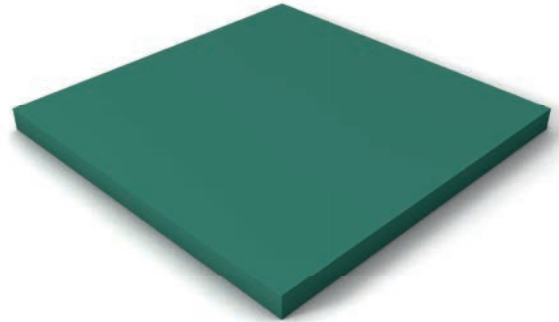
Forms of delivery, ex warehouse

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

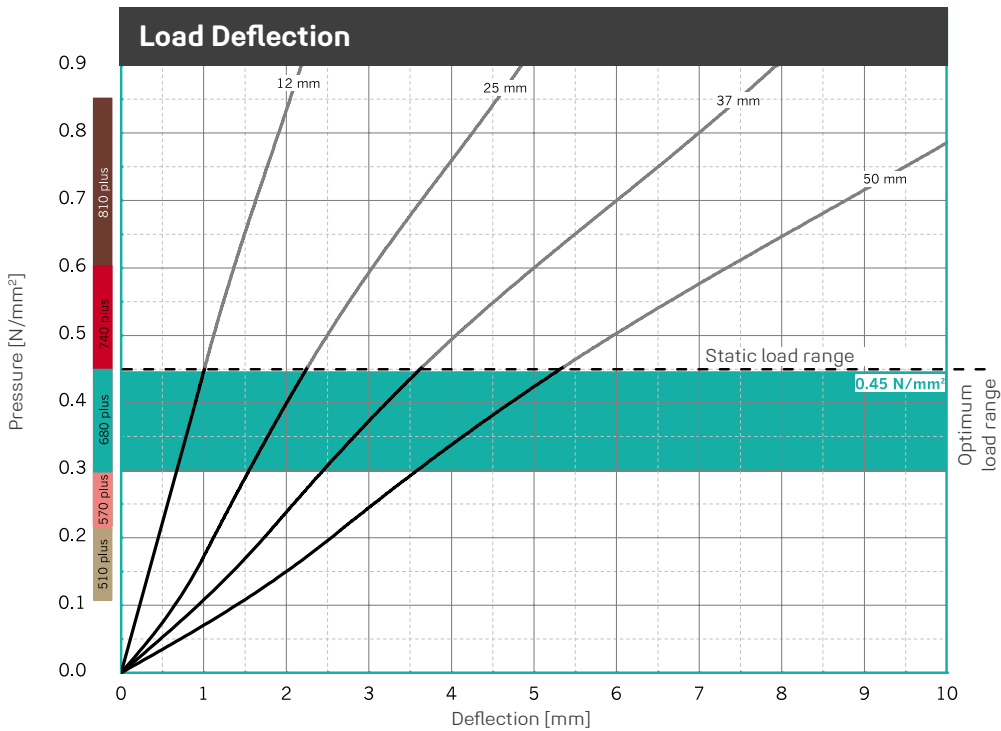
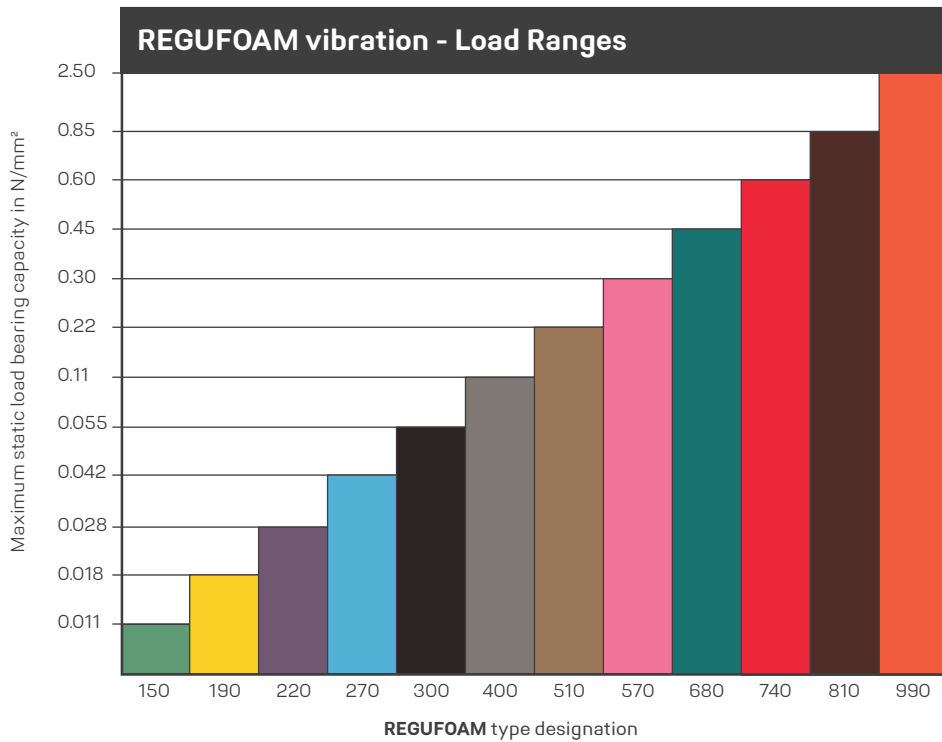
up to 5.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	3.8 - 4.1 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	7.0 - 10.0 N/mm ²	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/mm ²	
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



N/mm²

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

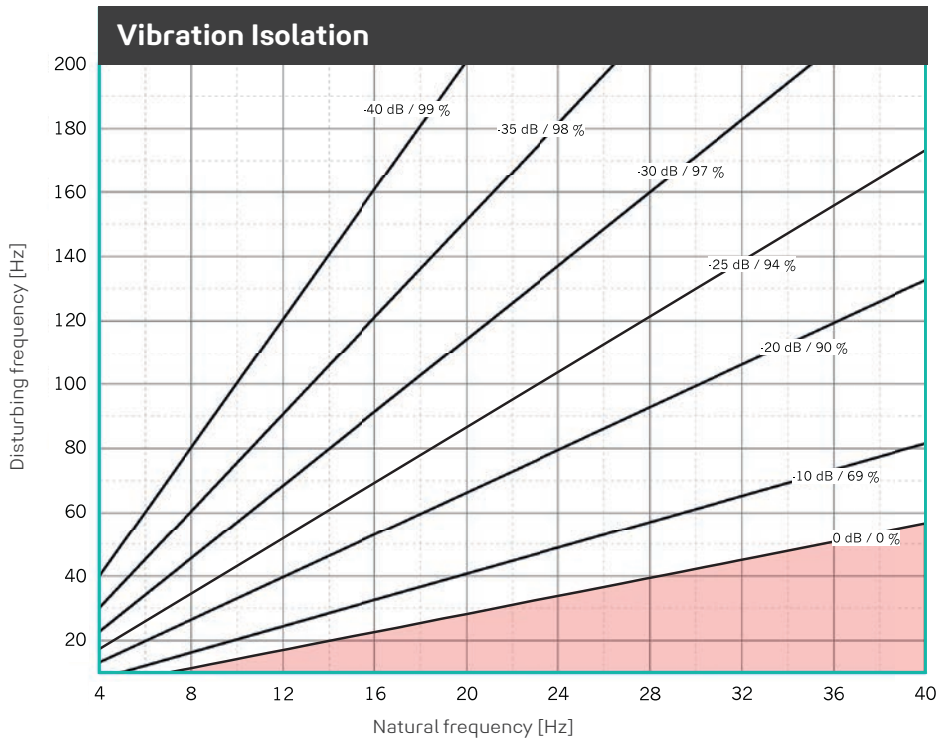
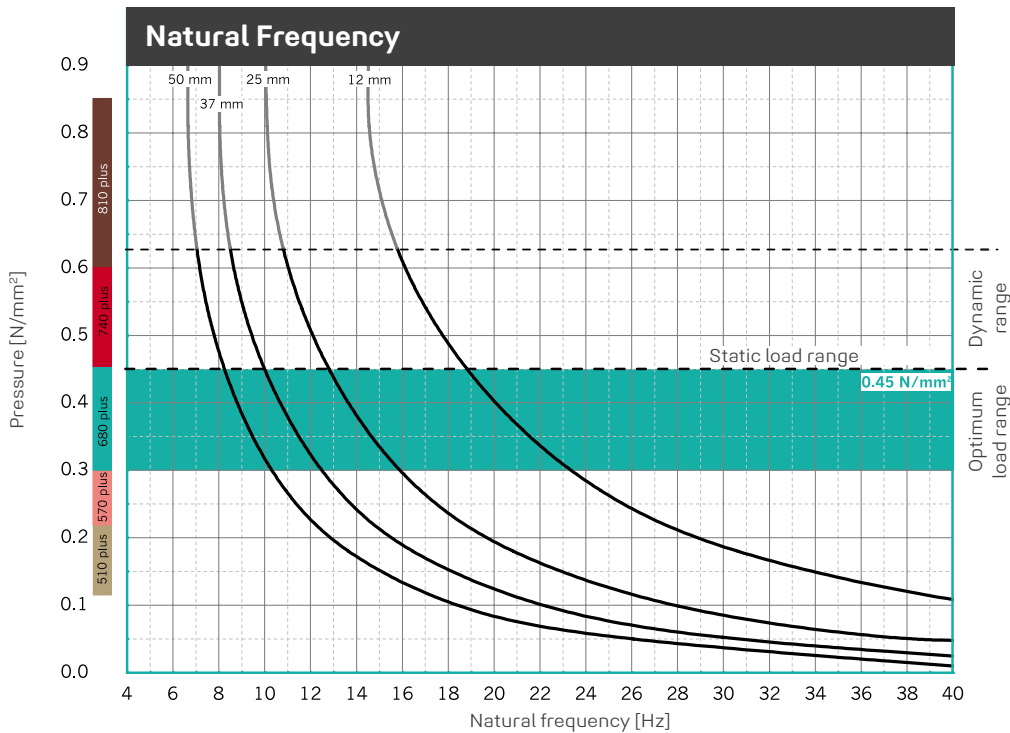


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 680plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

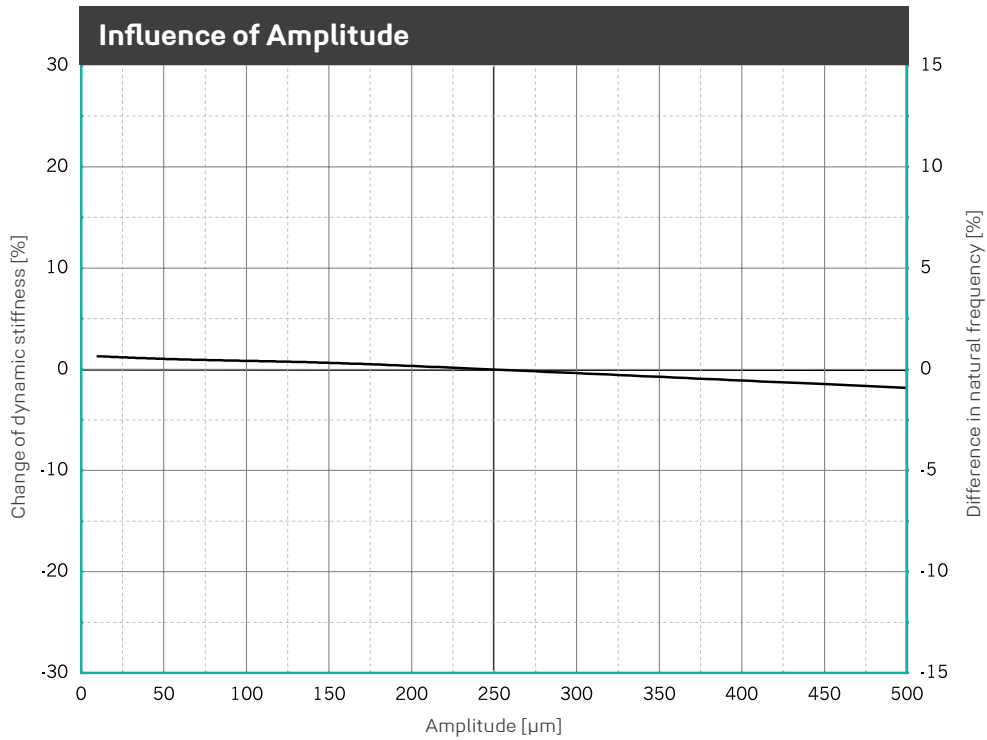


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 680plus** on a rigid base. Dimensions of test specimens 300 x 300 mm.

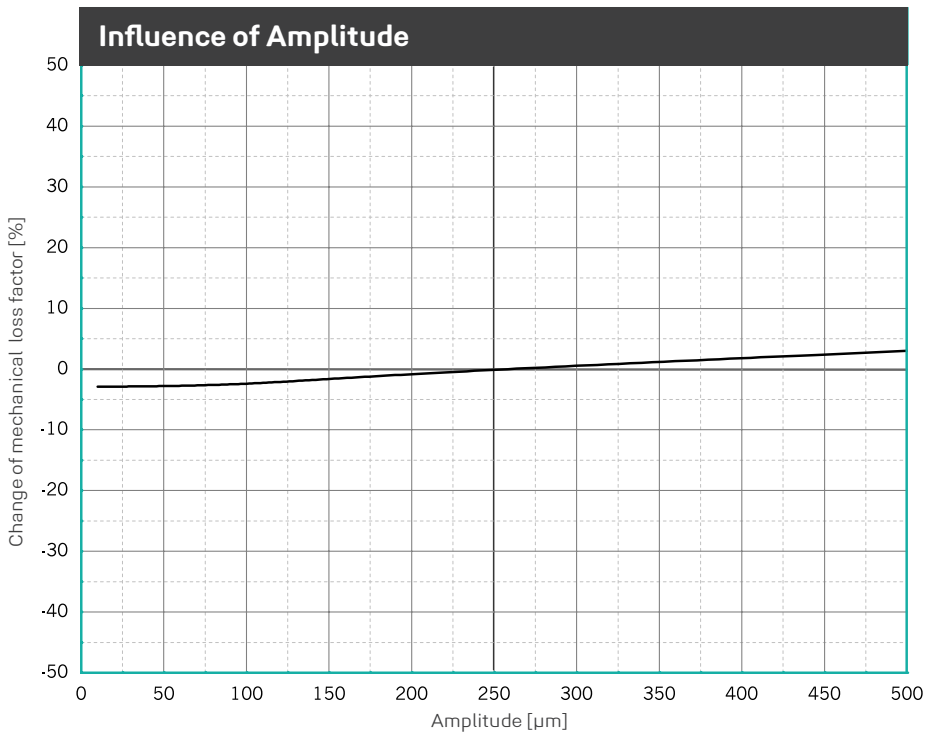
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

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

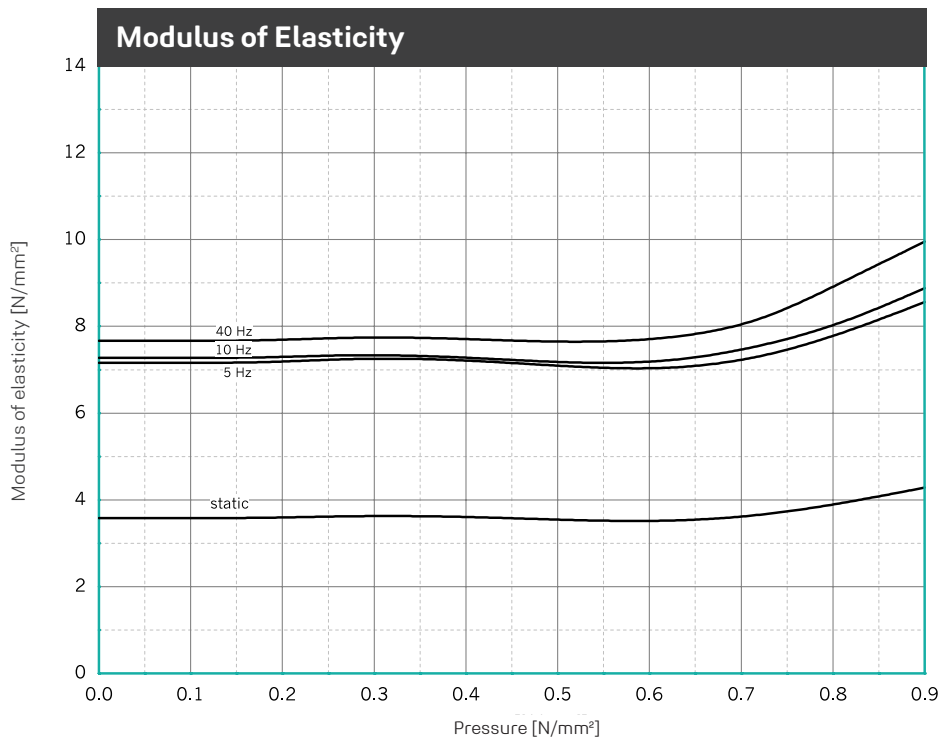


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

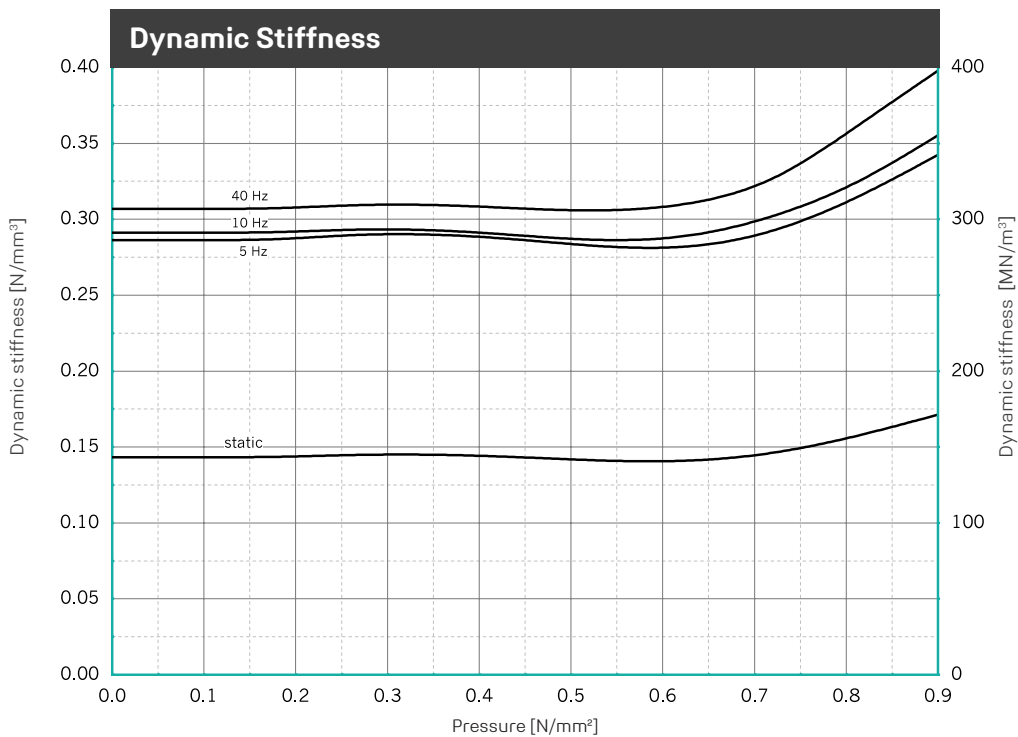
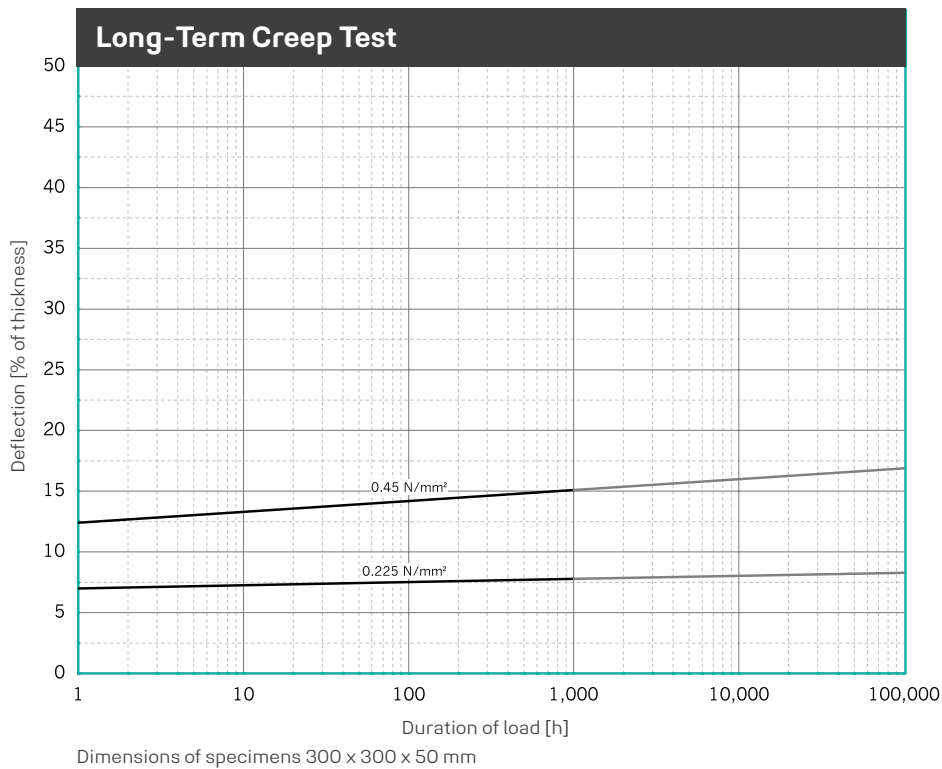


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 680PLUS



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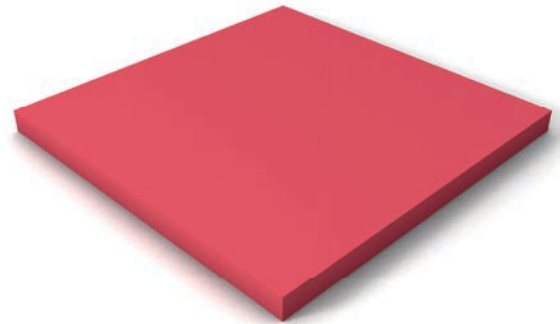
Forms of delivery, ex warehouse

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

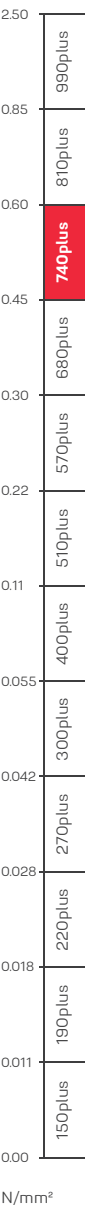
Maximum dynamic load bearing capacity for intermitted loadings

0 to 0.850 N/mm²

Rare, short term peak loads

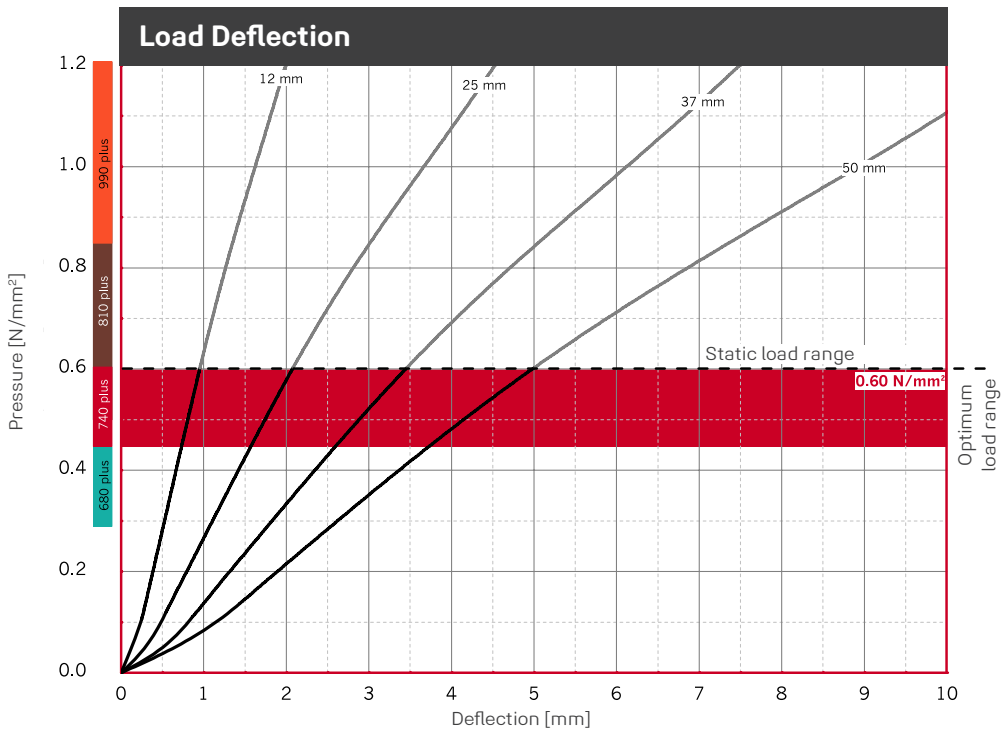
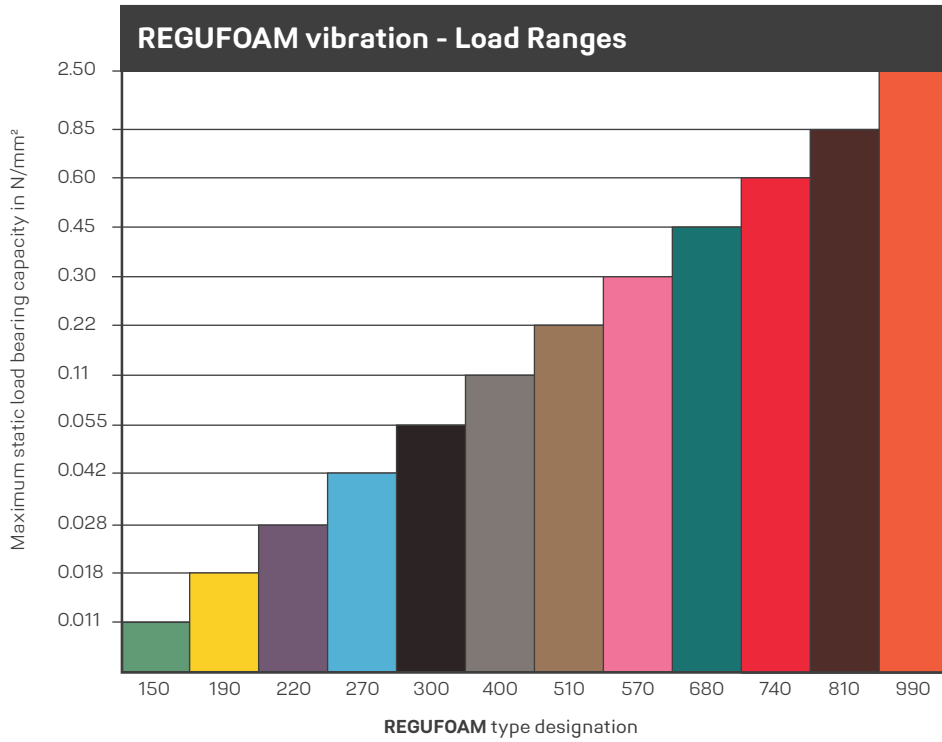
up to 6.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	4.3 - 5.9 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	8.9 - 13.0 N/mm ²	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/mm ²	
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



N/mm²

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

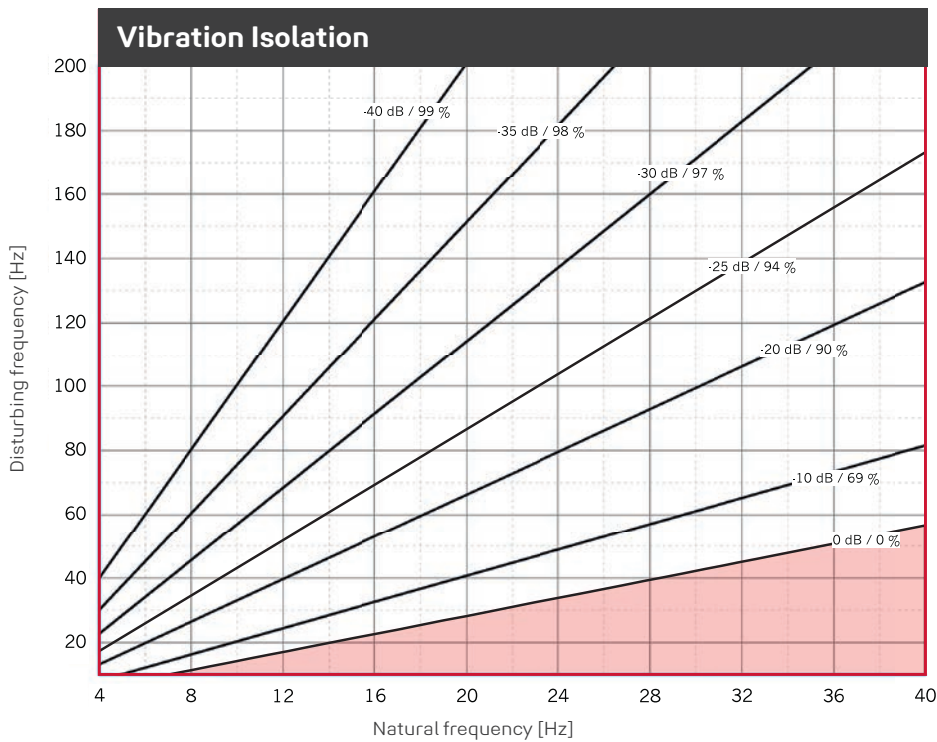
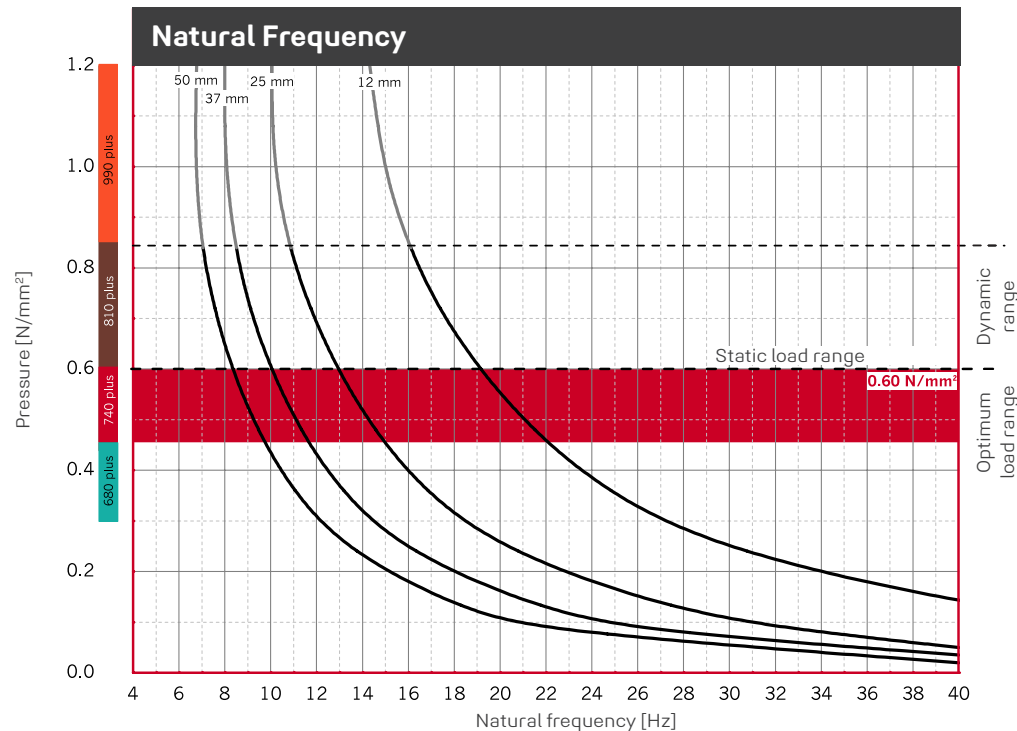


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 740plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

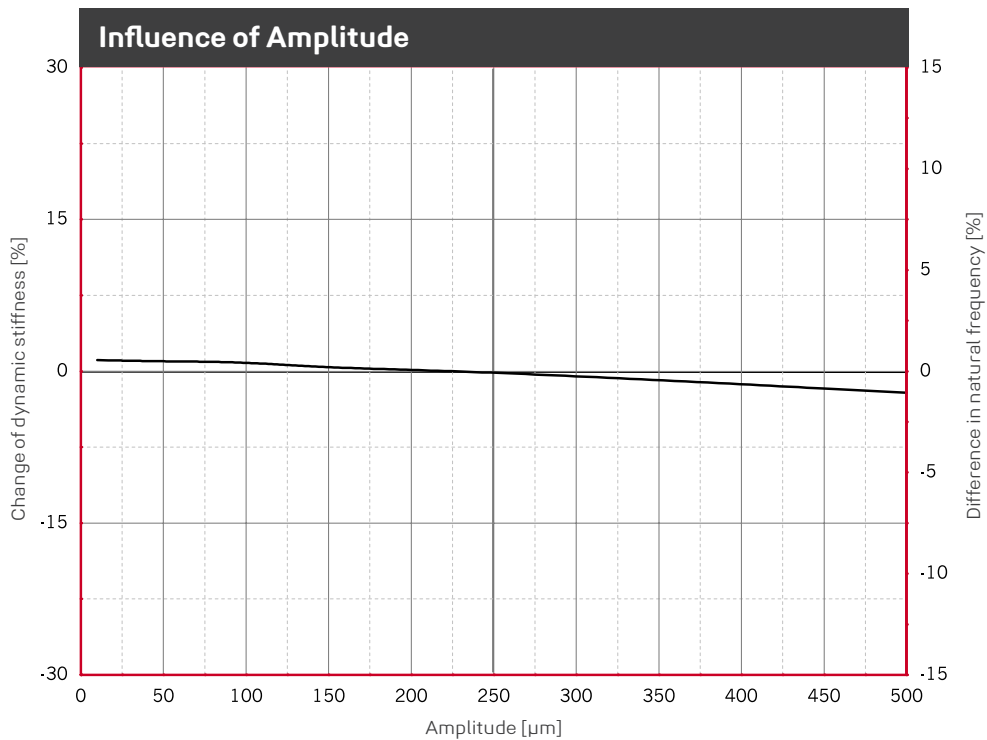


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 740plus** on a rigid base. Dimensions of test specimens 250 x 250 mm.

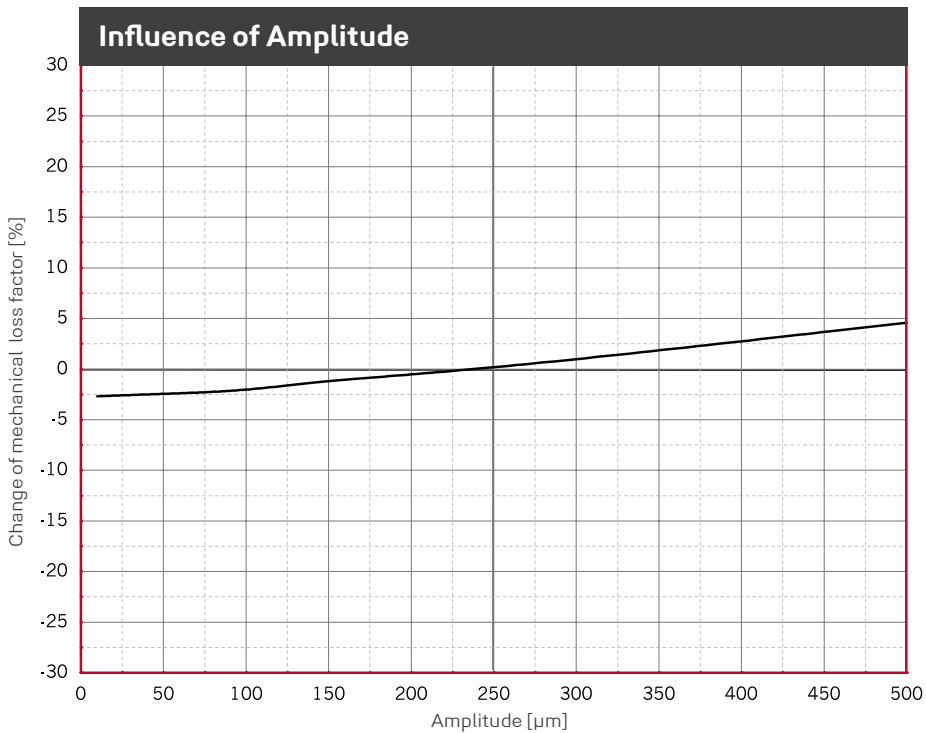
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	150plus

N/mm²

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

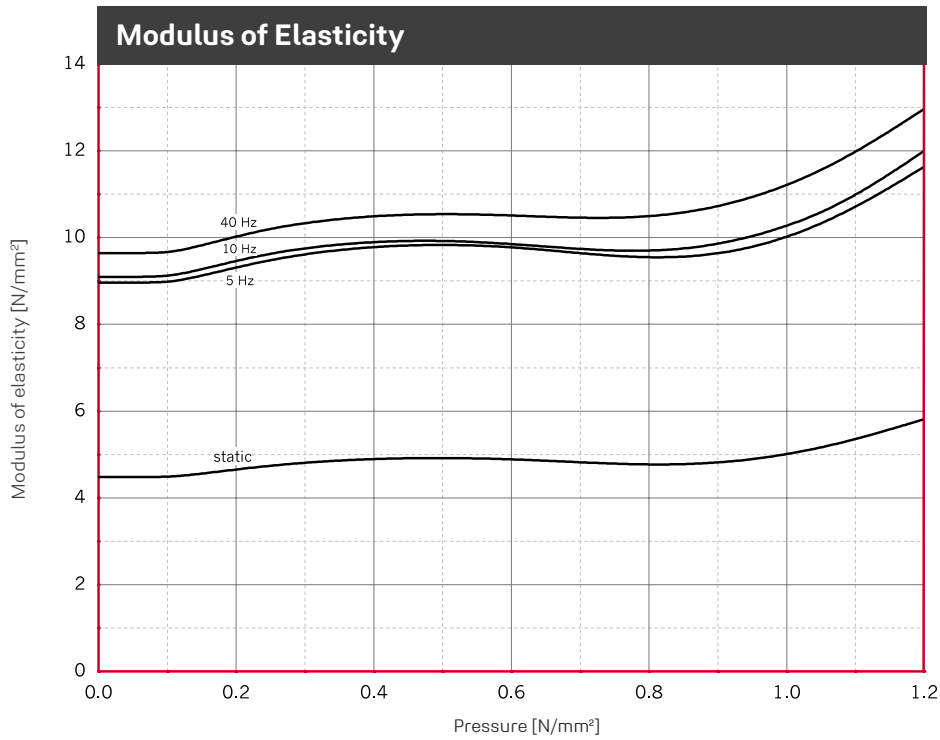


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 x 250 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

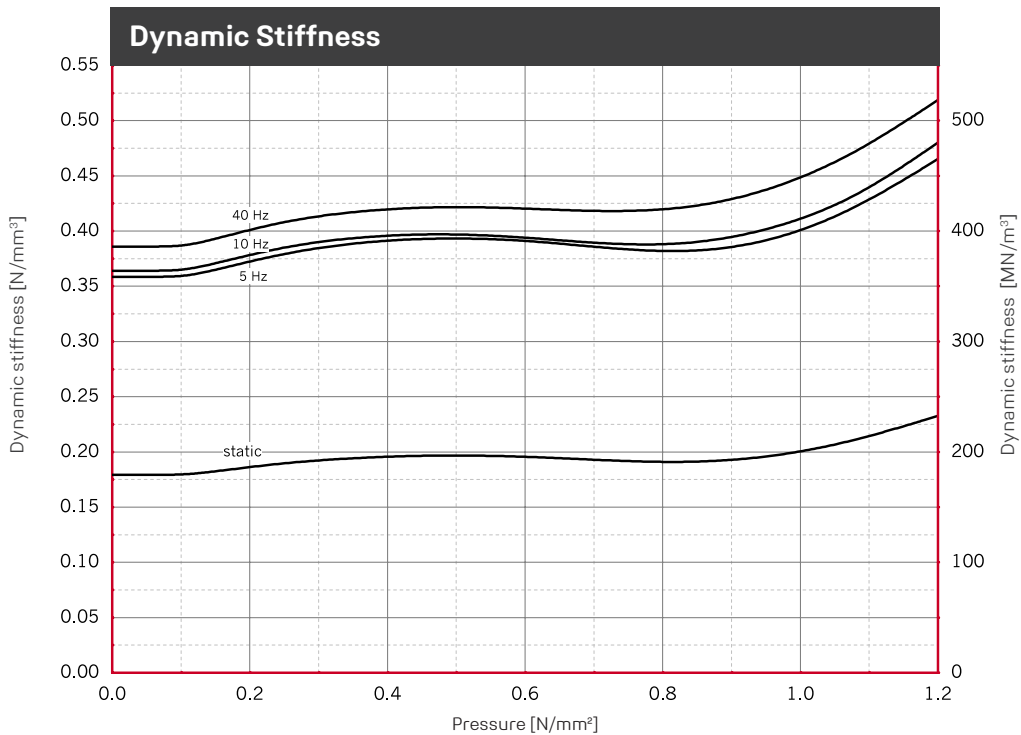
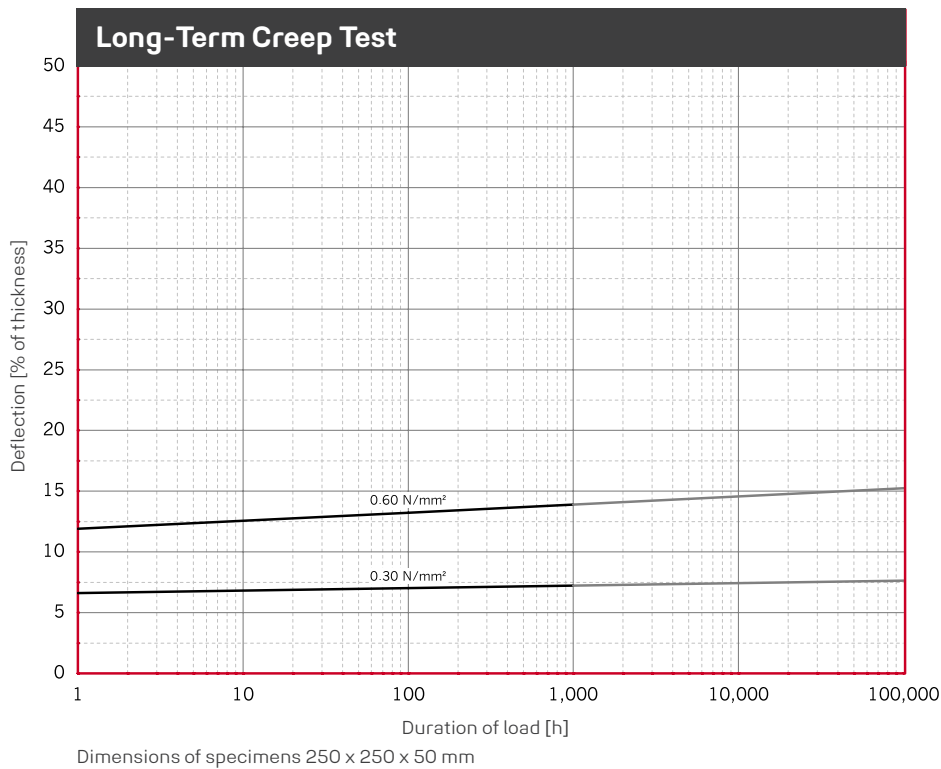


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 x 250 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 740PLUS



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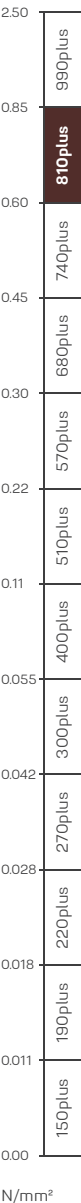
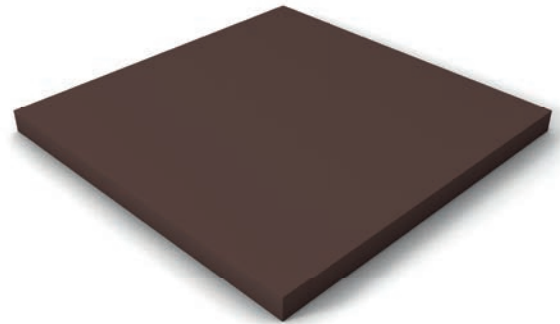
Forms of delivery, ex warehouse

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

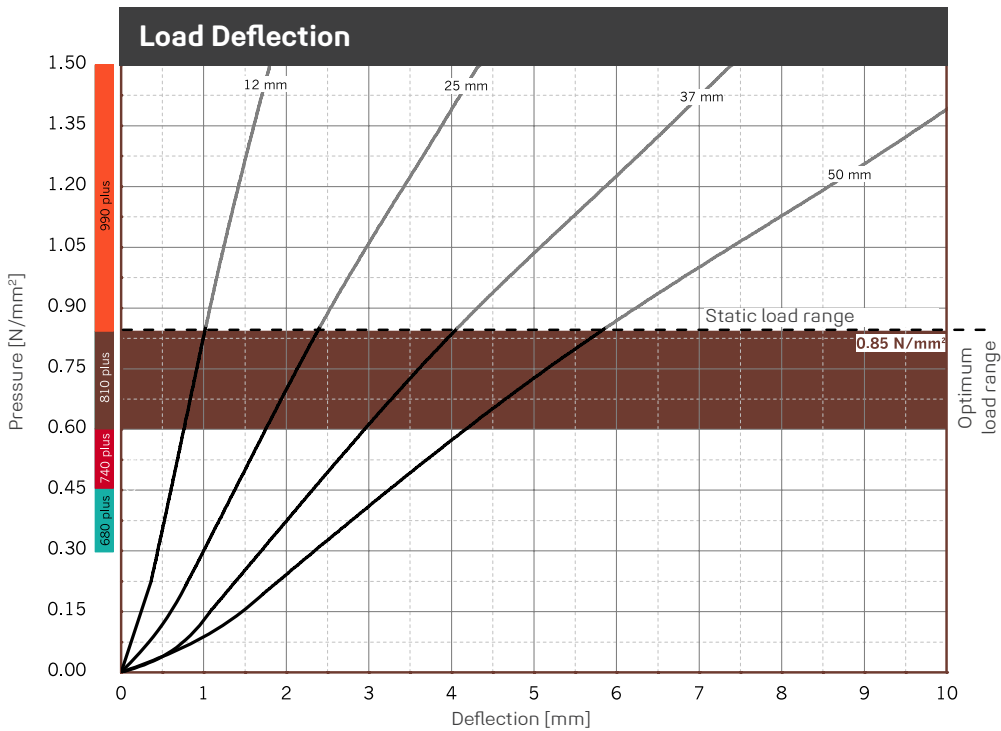
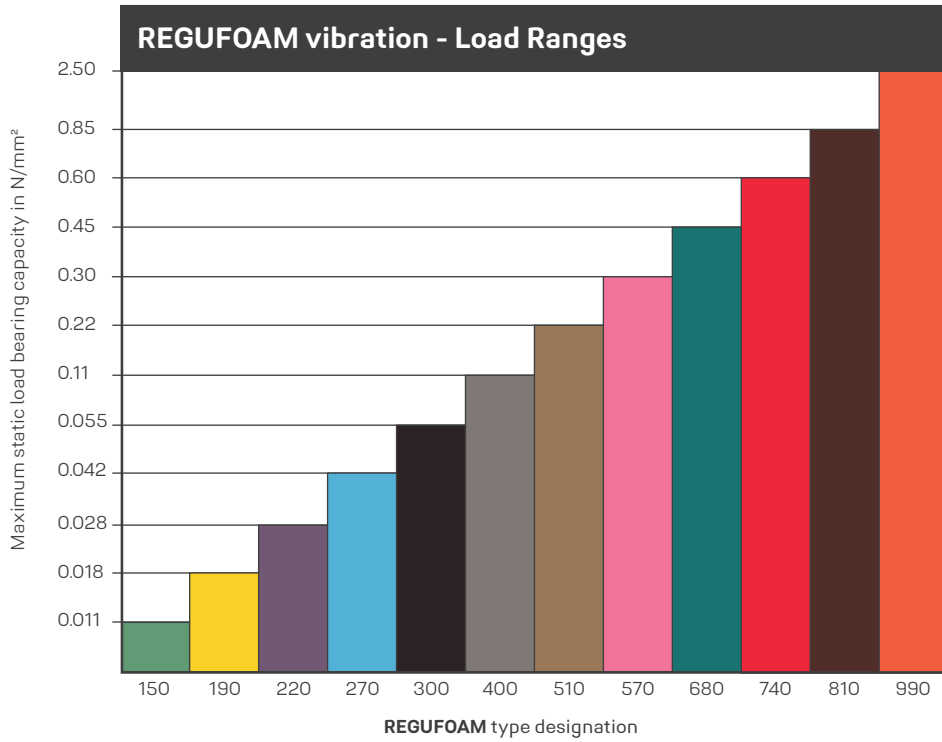
0 to 1.200 N/mm²

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/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	11.0 - 16.5 N/mm ²	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/mm ²	
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

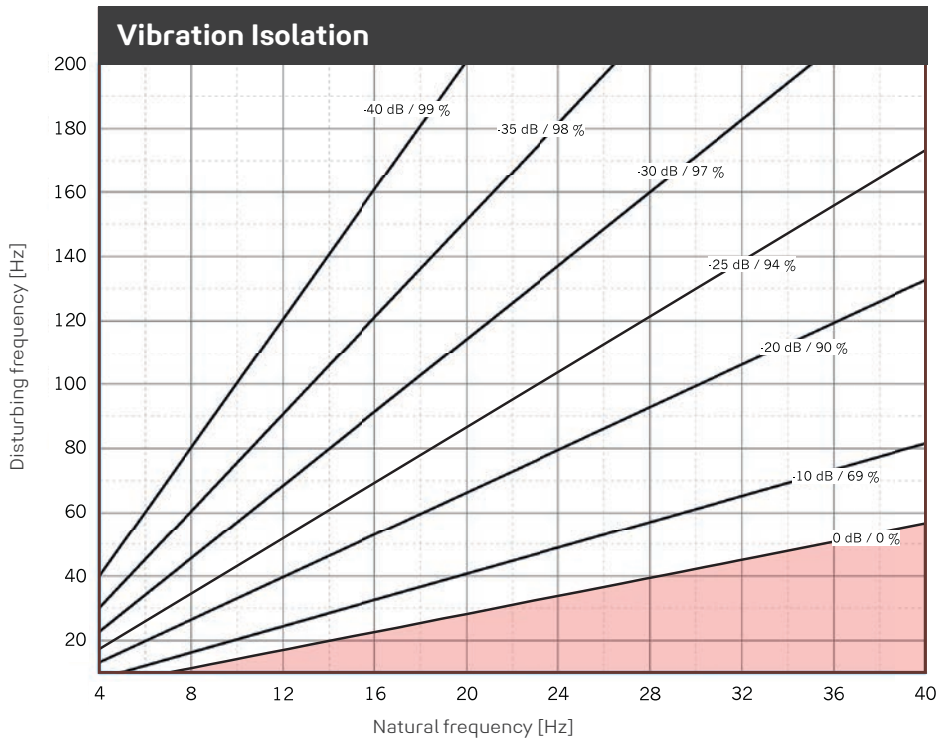
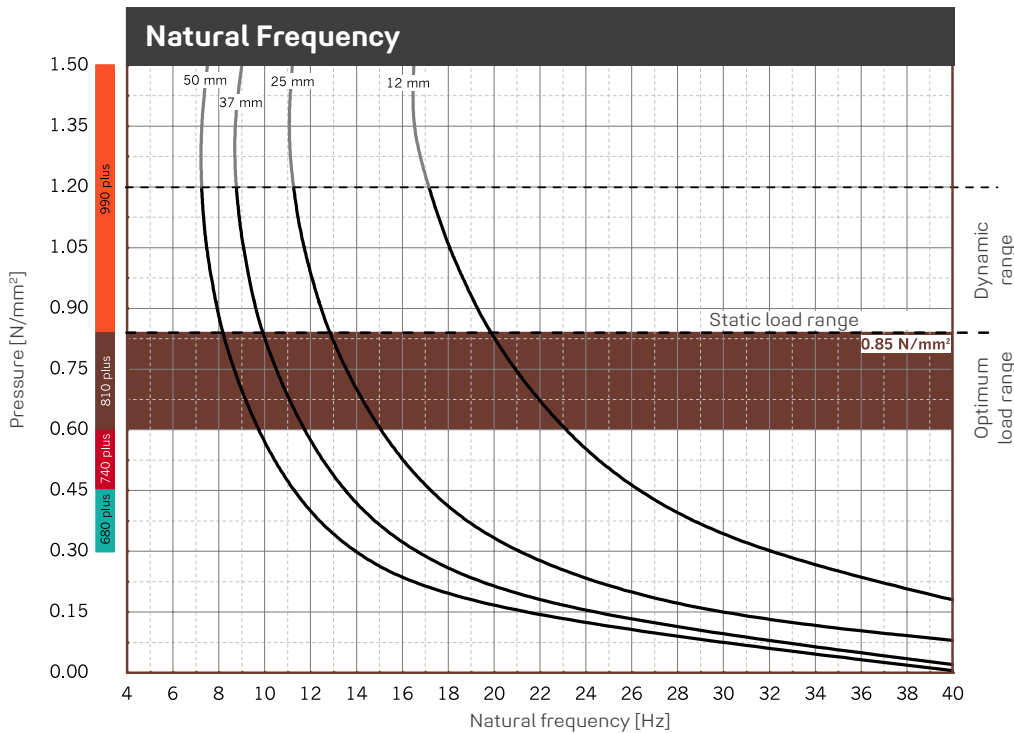


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 810plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

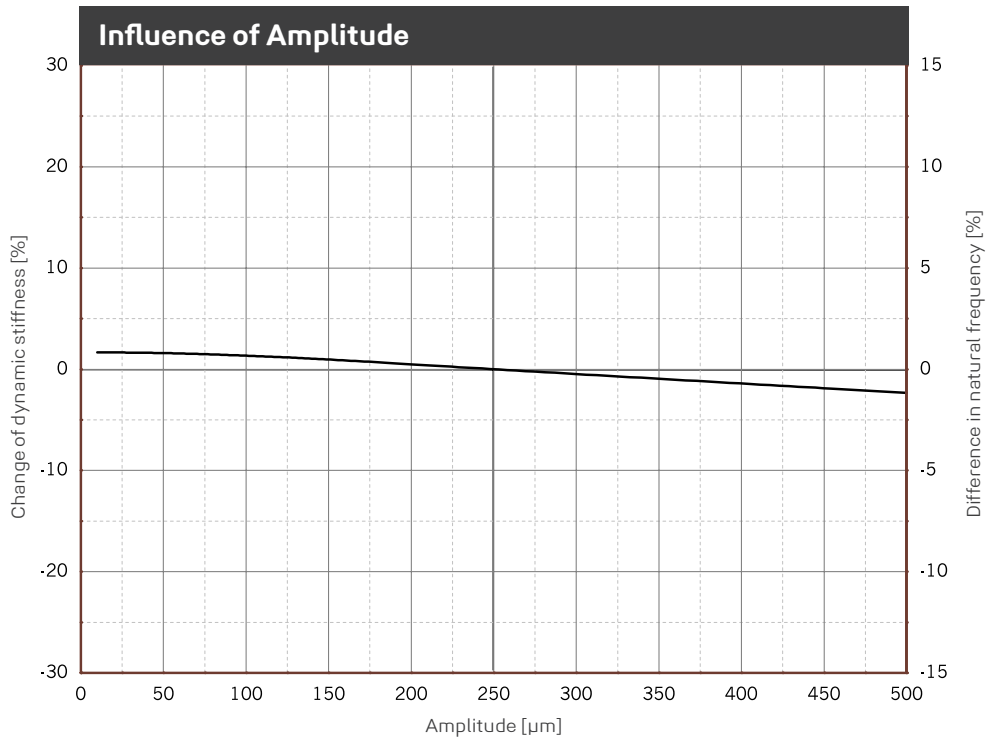


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUFOAM vibration 810plus** on a rigid base. Dimensions of test specimens 250 x 250 mm.

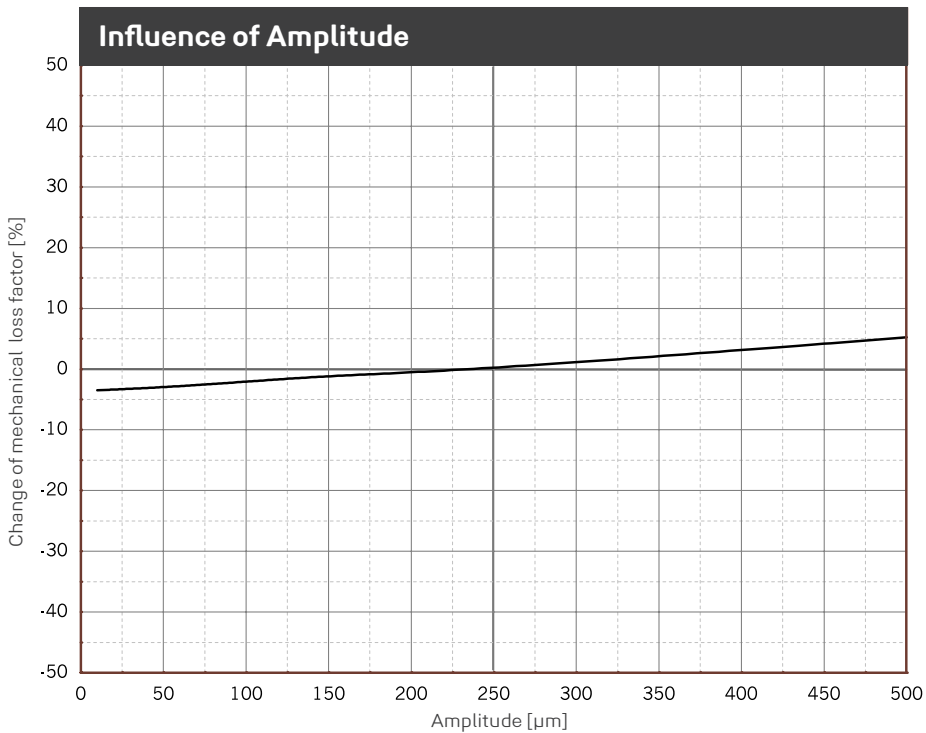
250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

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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.

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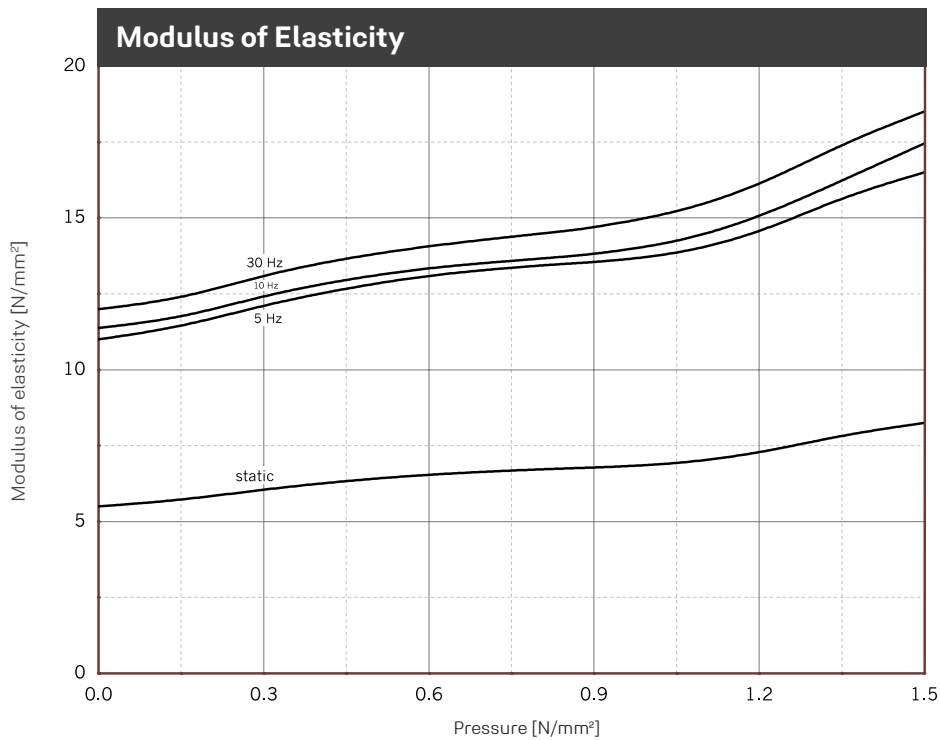


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 250 x 250 x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

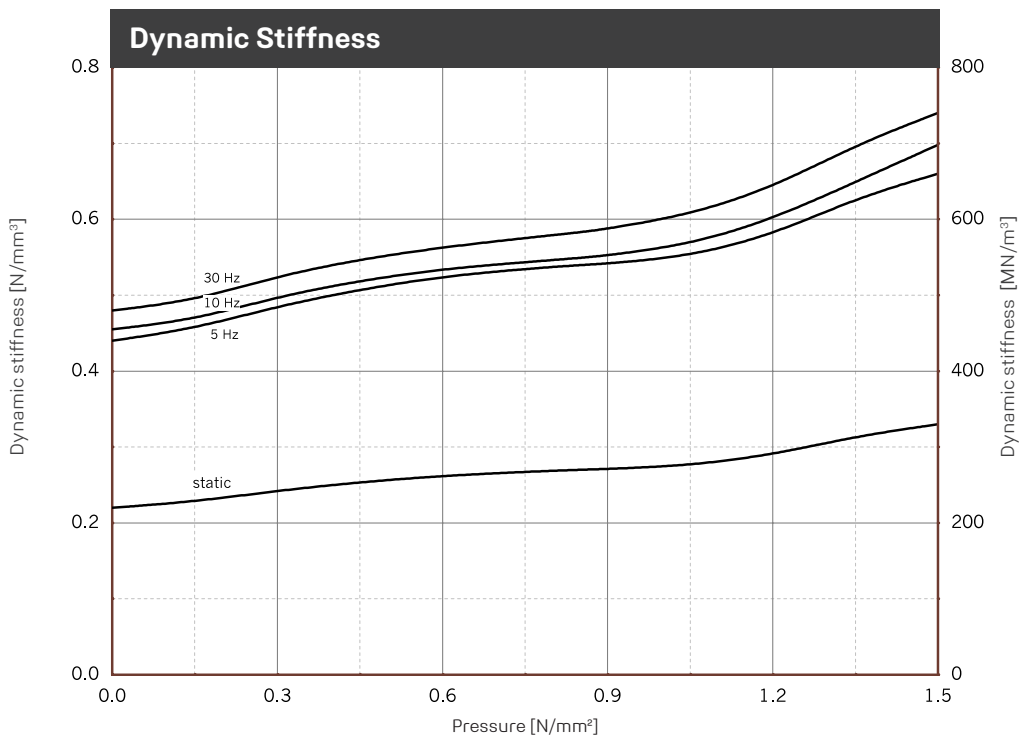
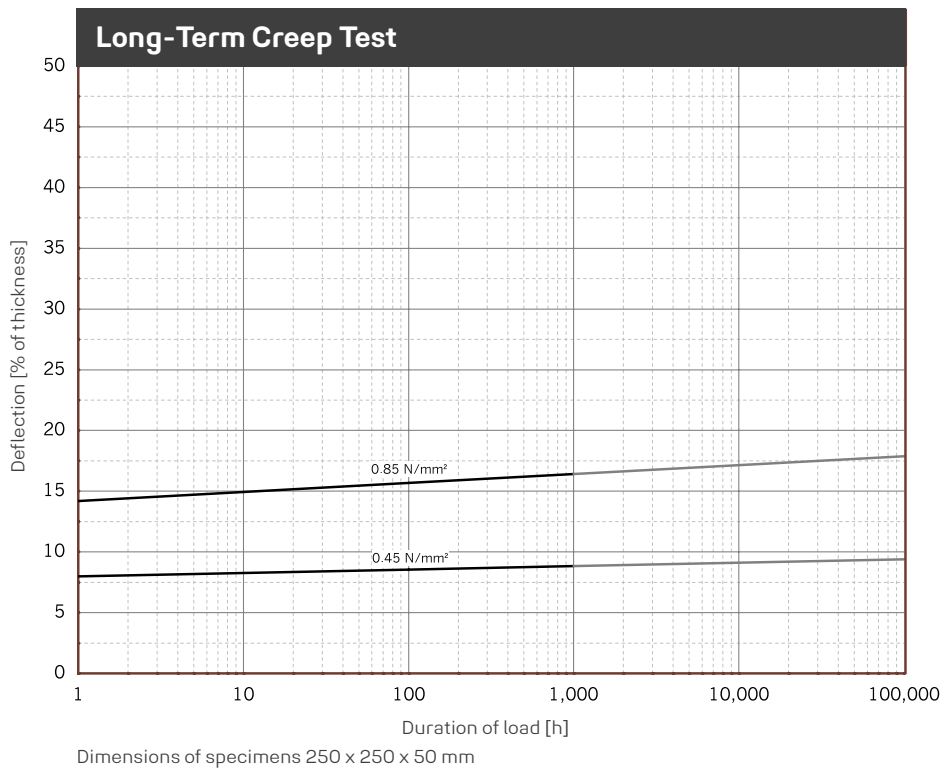


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 250 x 250 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 810PLUS



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.

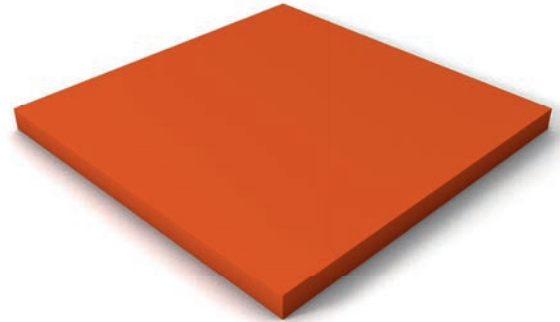
Forms of delivery, ex warehouse

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

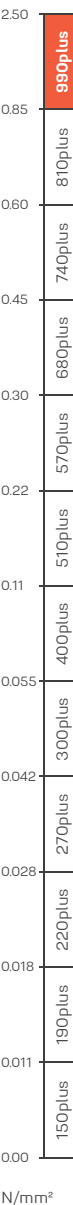
Maximum dynamic load bearing capacity for intermitted loadings

0 to 3.500 N/mm²

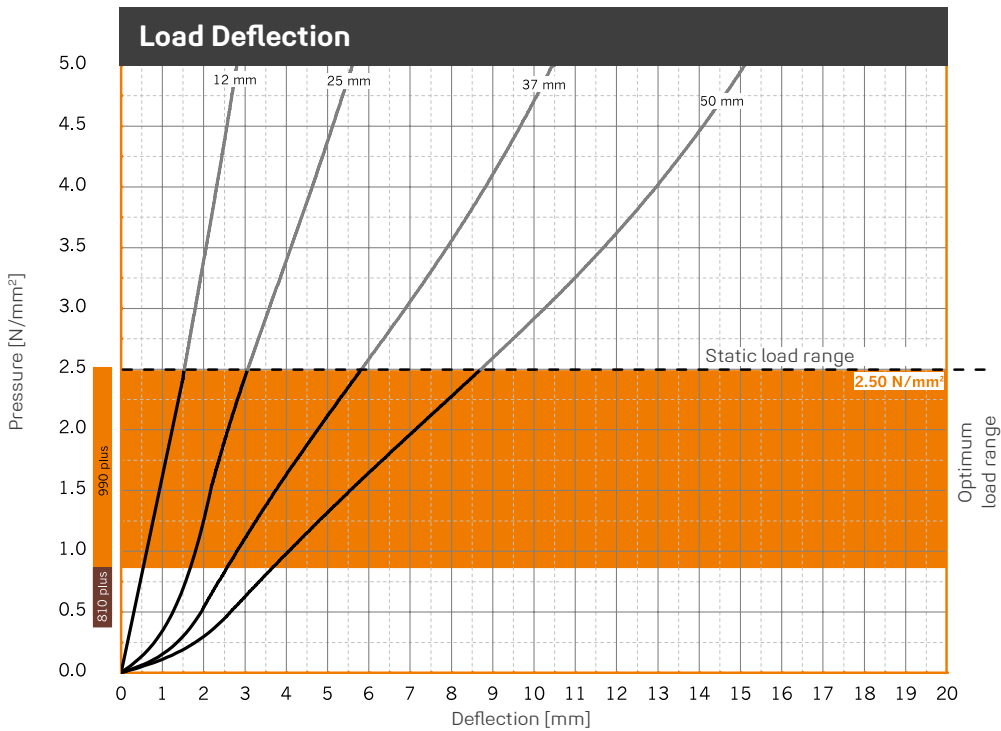
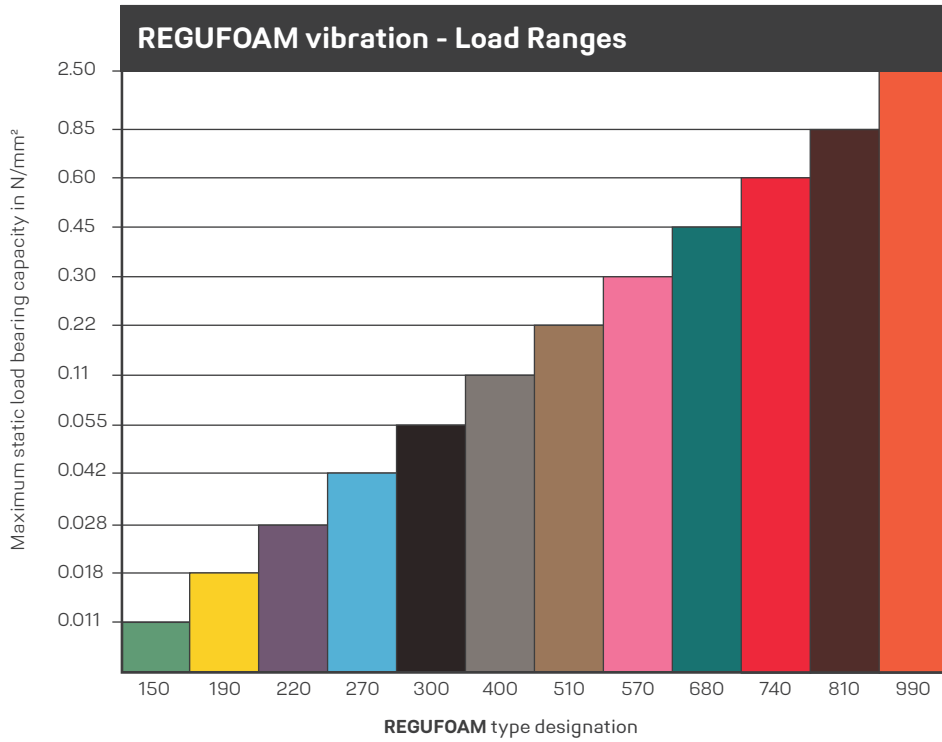
Rare, short term peak loads

up to 8.000 N/mm²

Physical property	Norm	Result	Comment
Static modulus of elasticity	Based on EN 826	20.0 - 78.0 N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	41.0 - 160.0 N/mm ²	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/mm ²	
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



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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.

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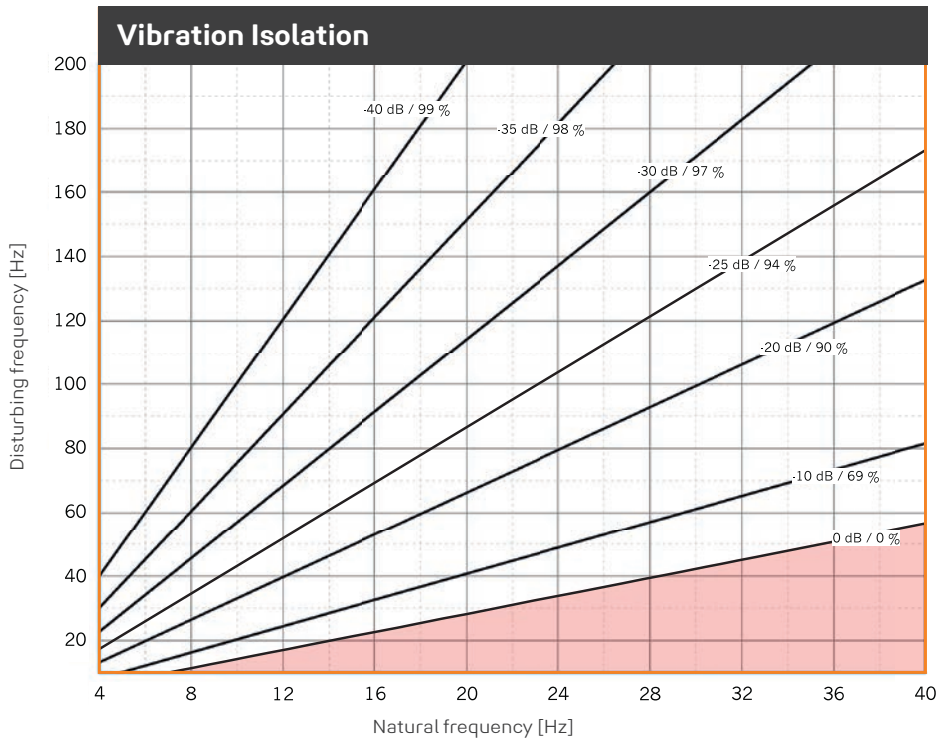
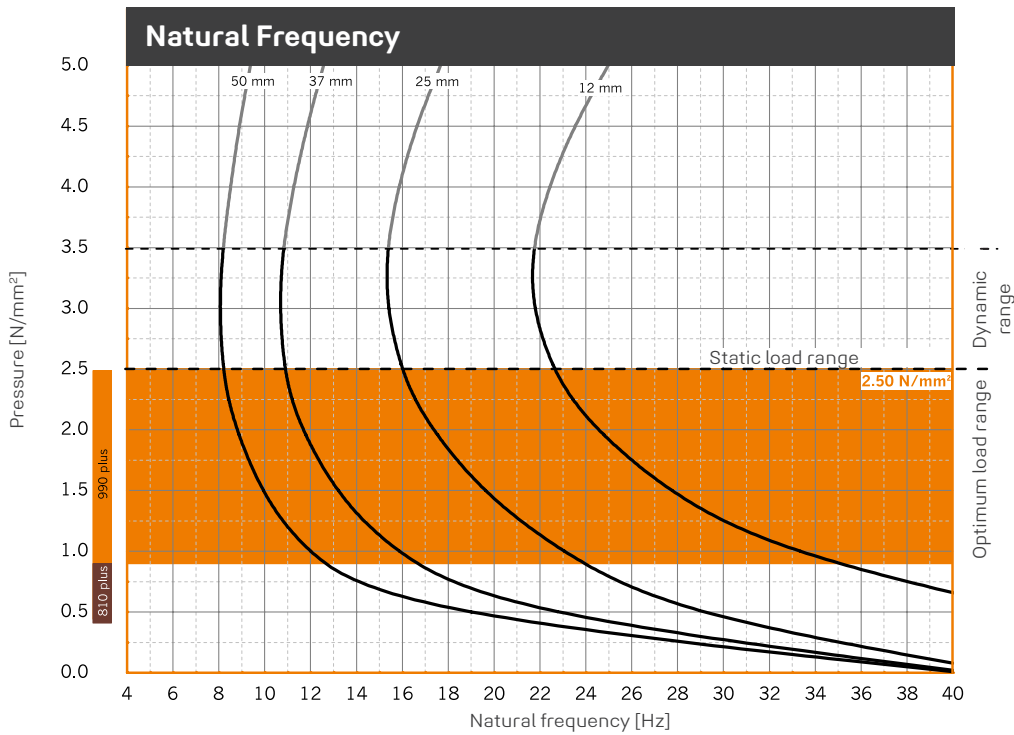


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUFOAM vibration 990plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



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.

250	990plus
0.85	810plus
0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm²

REGUFOAM VIBRATION 990PLUS

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

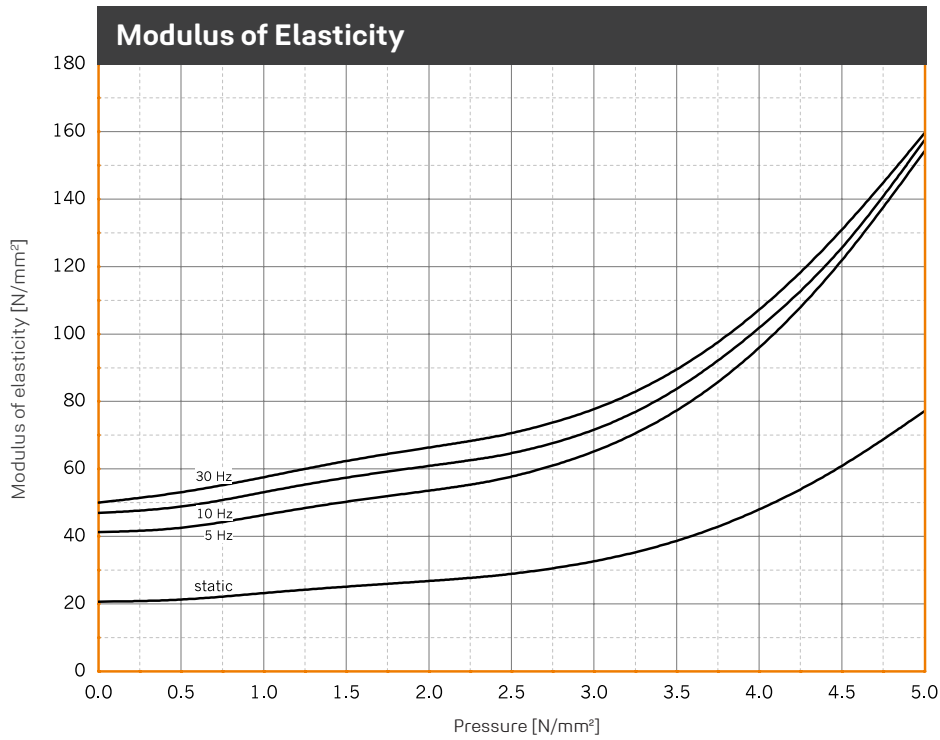


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens $125 \times 125 \times 25$ mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

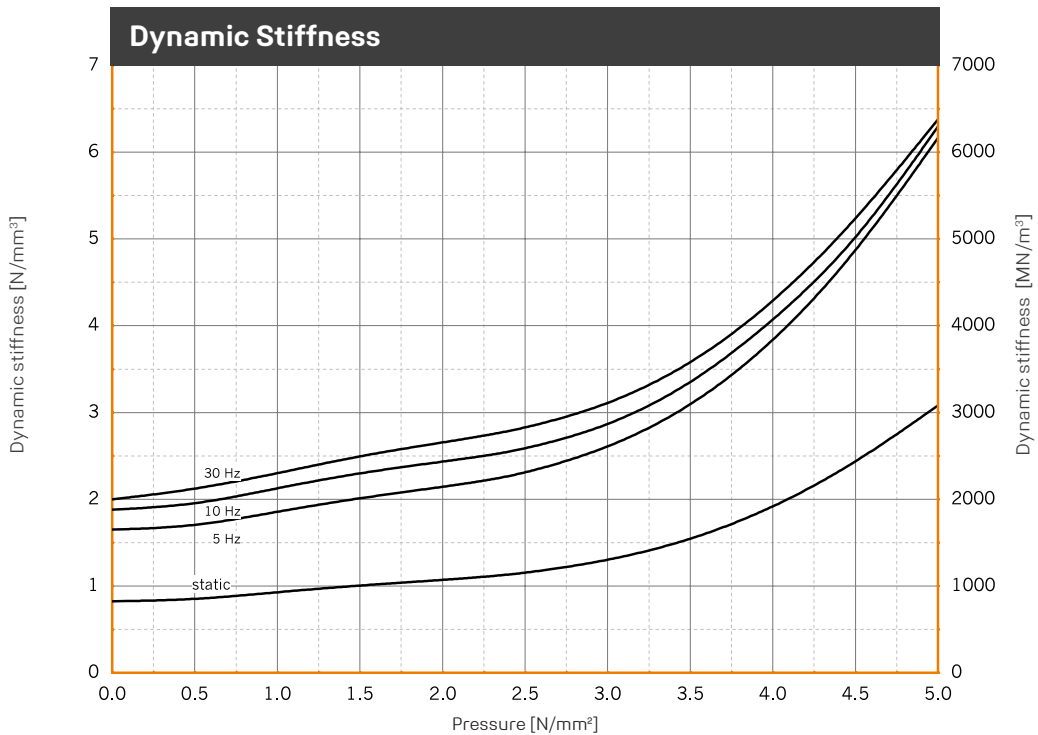
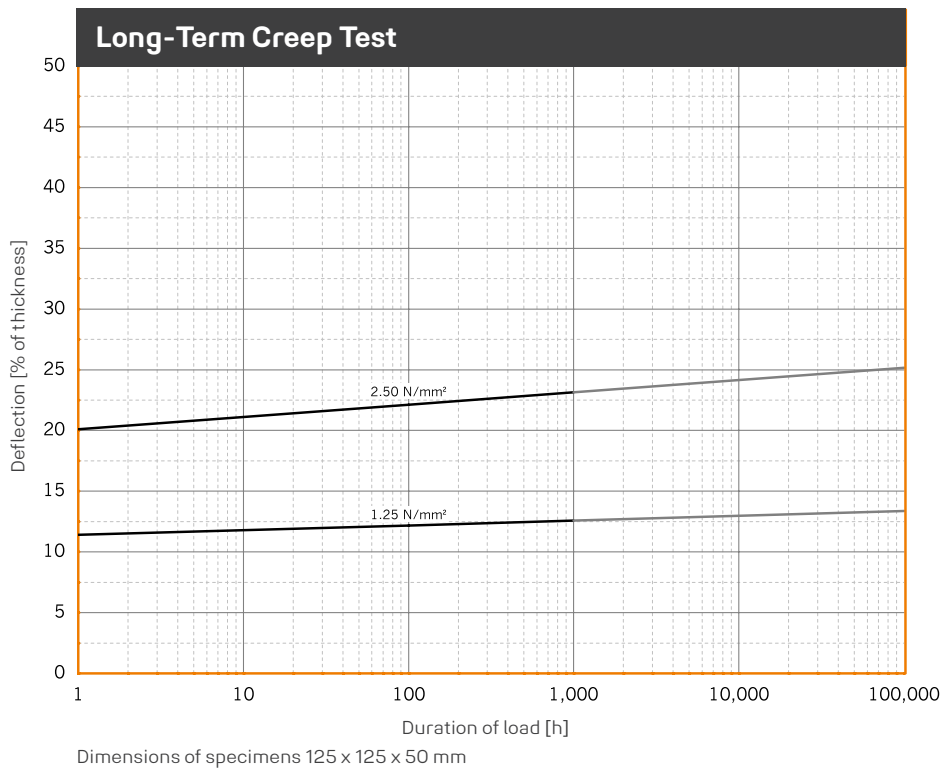


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens $125 \times 125 \times 25$ mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

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0.60	740plus
0.45	680plus
0.30	570plus
0.22	510plus
0.11	400plus
0.055	300plus
0.042	270plus
0.028	220plus
0.018	190plus
0.011	150plus
0.00	

N/mm^2

REGUFOAM VIBRATION 990PLUS



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BSW Shanghai CO. LTD.

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