



on your wavelength



# Regufoam®

## Vibration Isolation Technical Details



Regufoam in:  
Railway Station Sternschanze Ham-  
burg, Wisselord Studios Hilversum,  
Machine Foundations



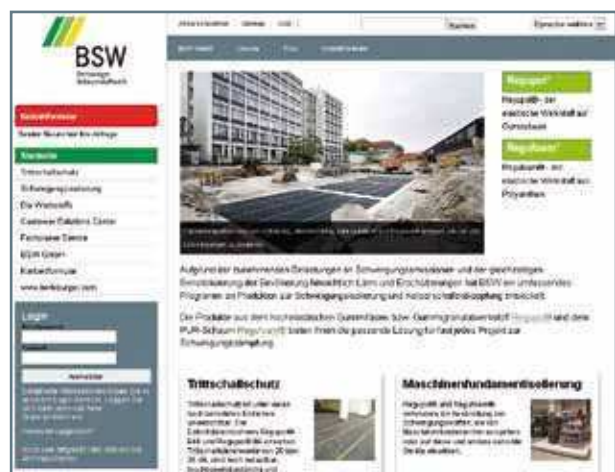


www.bsw-  
vibration-technology.  
com

## All Tools for the Download

You will find all documents and information which you need for making a decision, for calculation as well as the installation and application of the BSW vibration technology products, at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com). In a matter of seconds you can download technical datasheets, certificates and installation instructions, all in the required file formats.

Up to date information is provided on our website and in the PDF versions of this catalogue. The PDF versions are available for download on our website.



The website [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com) serves mainly as a planning basis for architectural acoustics and construction engineers. You must register to use the technical documents. BSW will send you your user name and password right away. Since being put up in January 2010, this website already has several hundred registered users.



Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)

**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.011 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.016 N/mm<sup>2</sup>

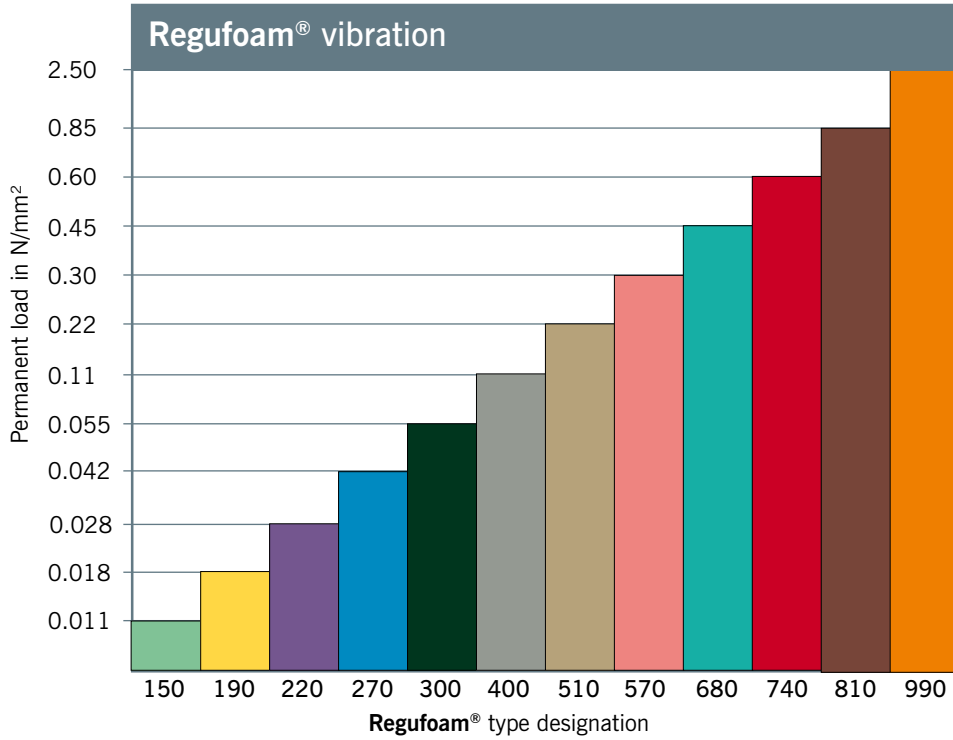
**Peak loads (rare, short-term loads)**

0.5 N/mm<sup>2</sup>

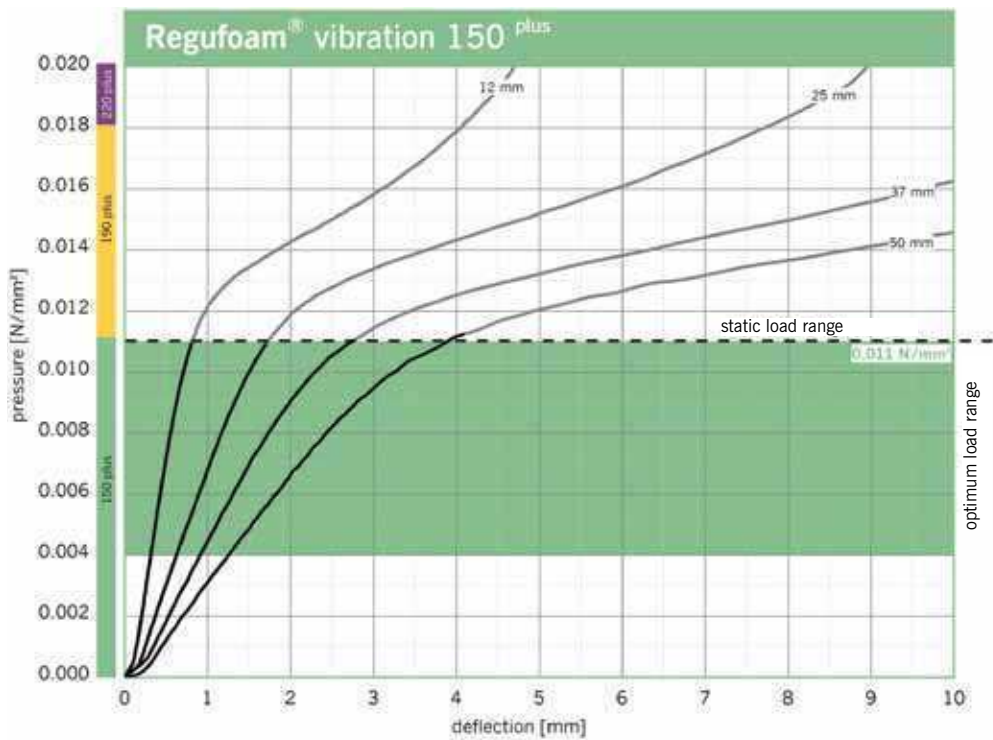


Static modulus of elasticity	Based on EN 826	0.06 - 0.16	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.15 - 0.38	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



Vibration Isolation

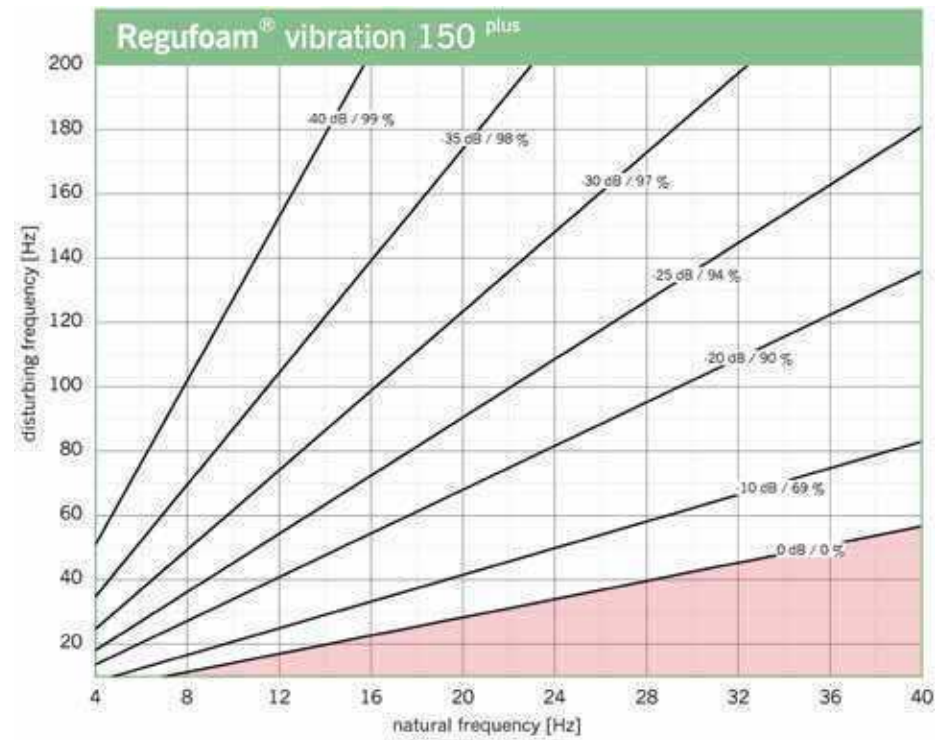
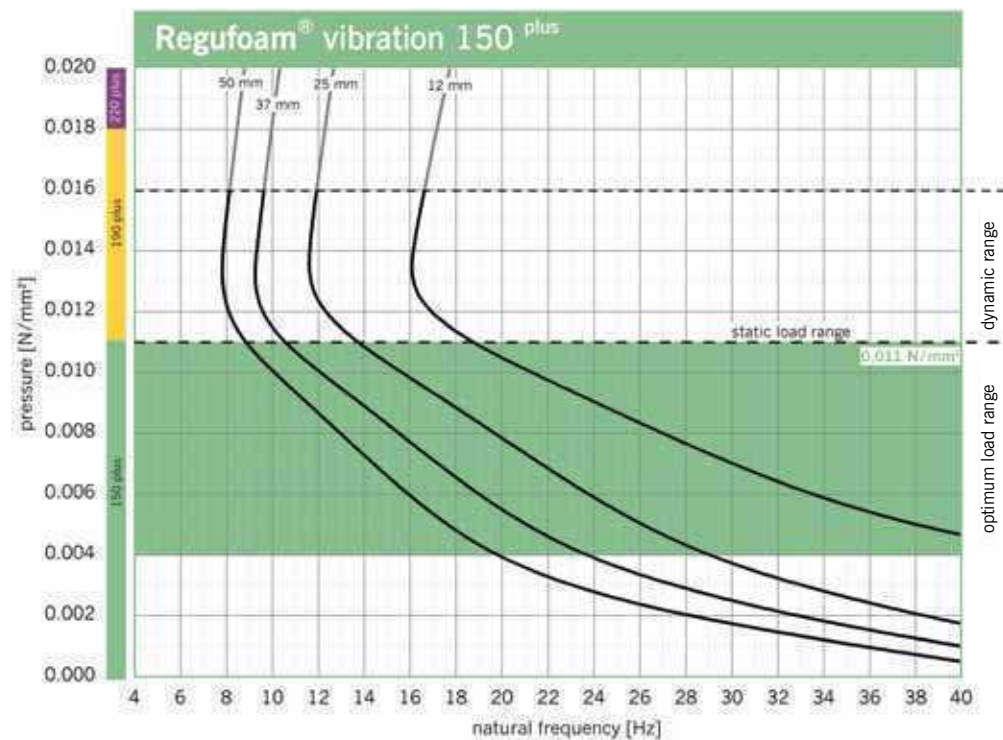


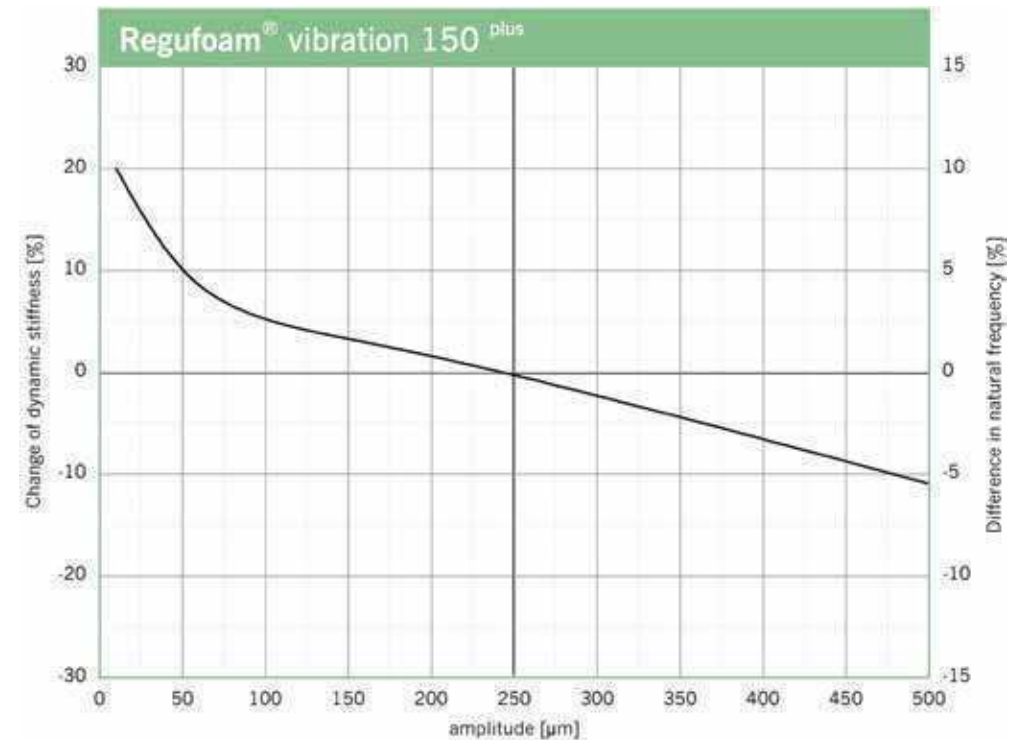
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 150 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

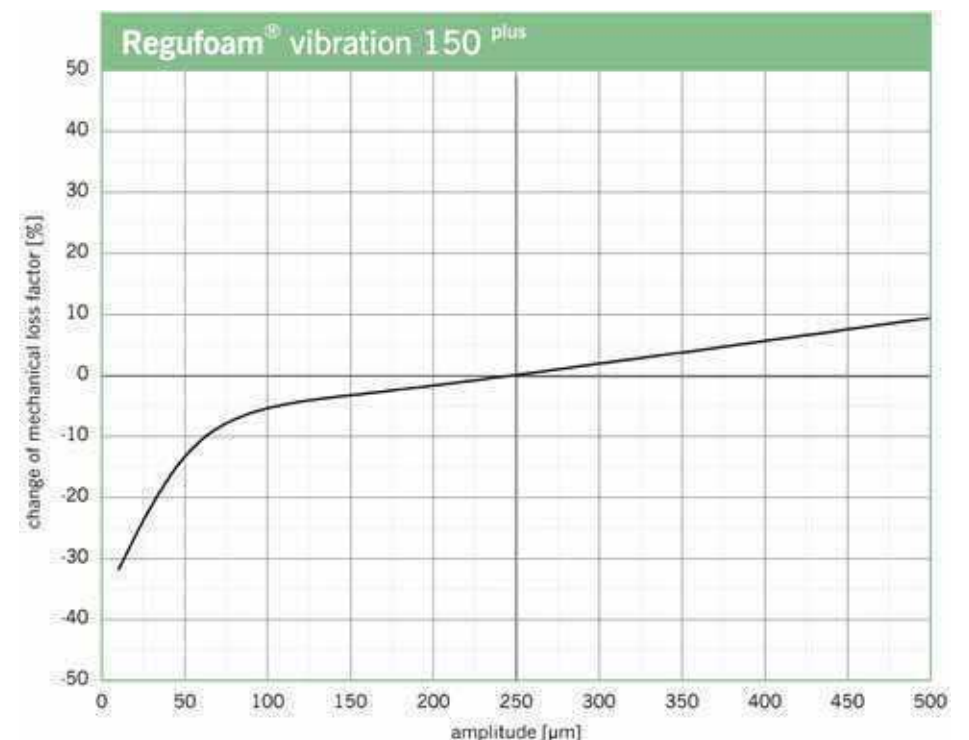


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 150 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude



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 mm x 300 mm 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 mm x 300 mm x 25 mm.



### Modulus of Elasticity

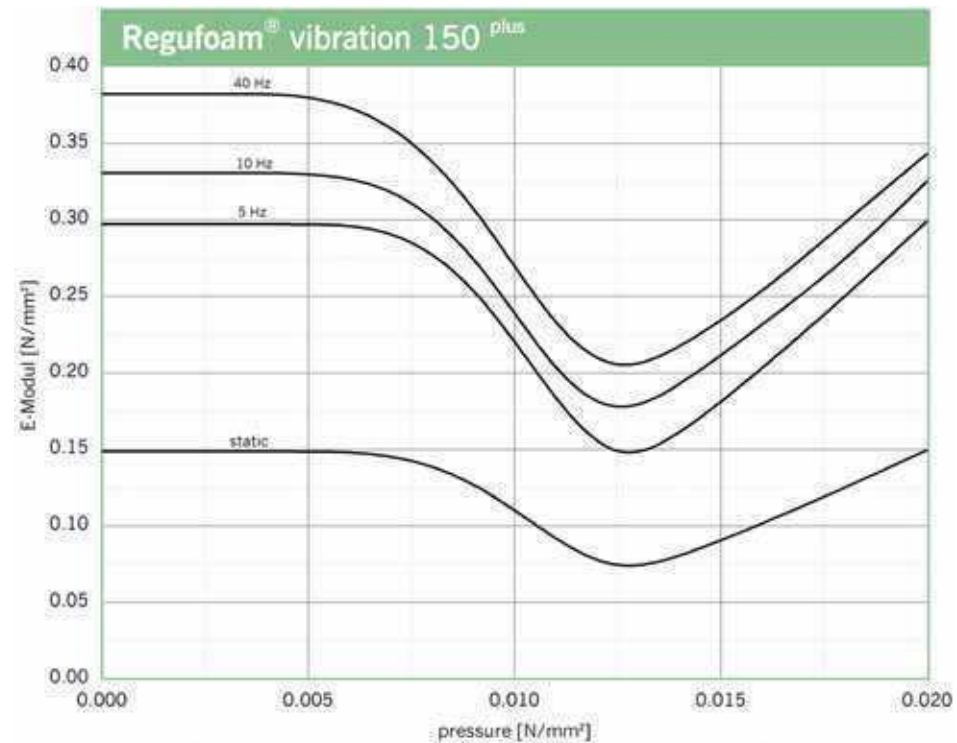


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

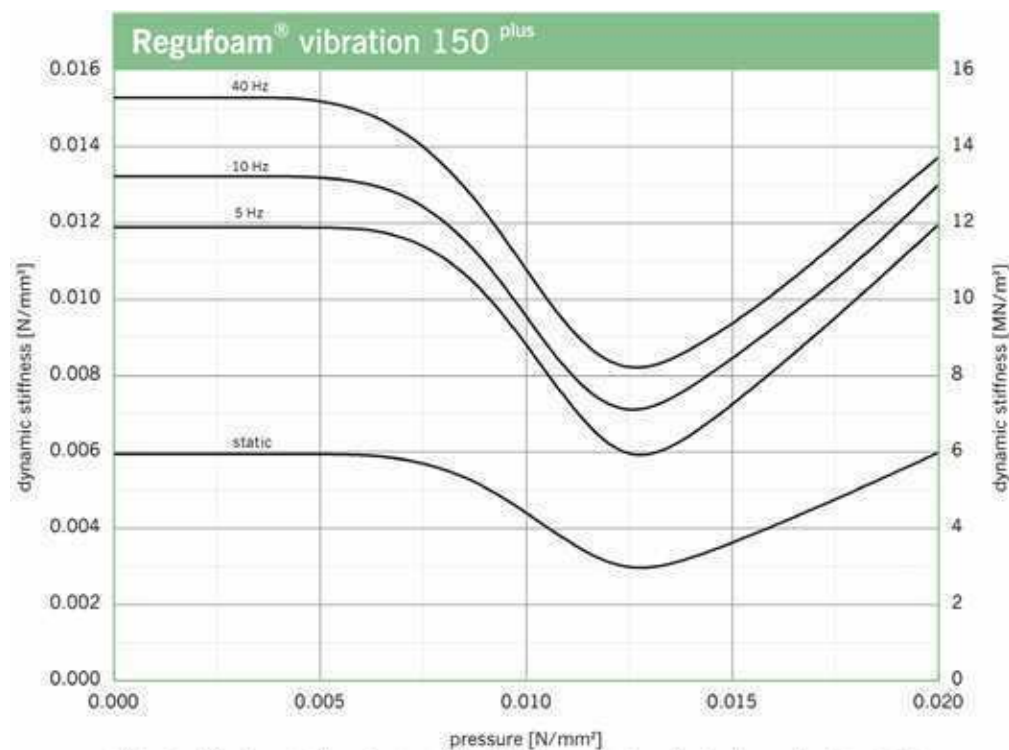
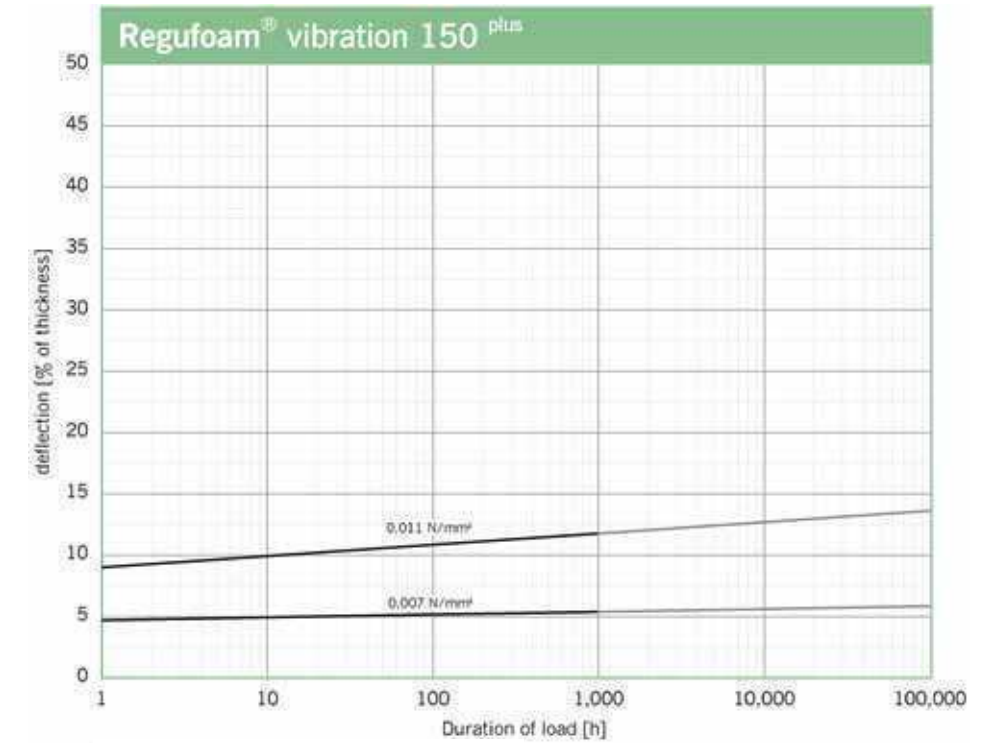


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

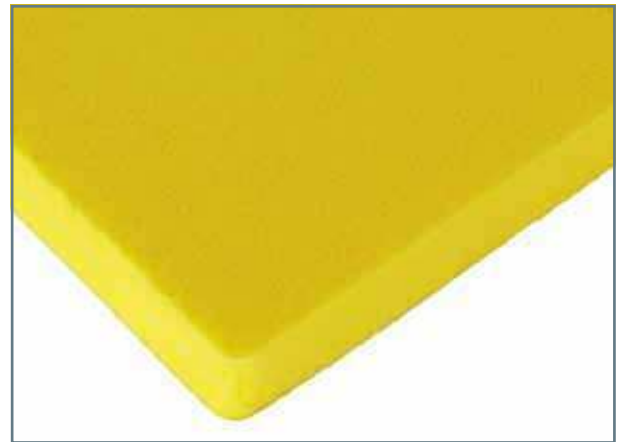
0.018 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.028 N/mm<sup>2</sup>

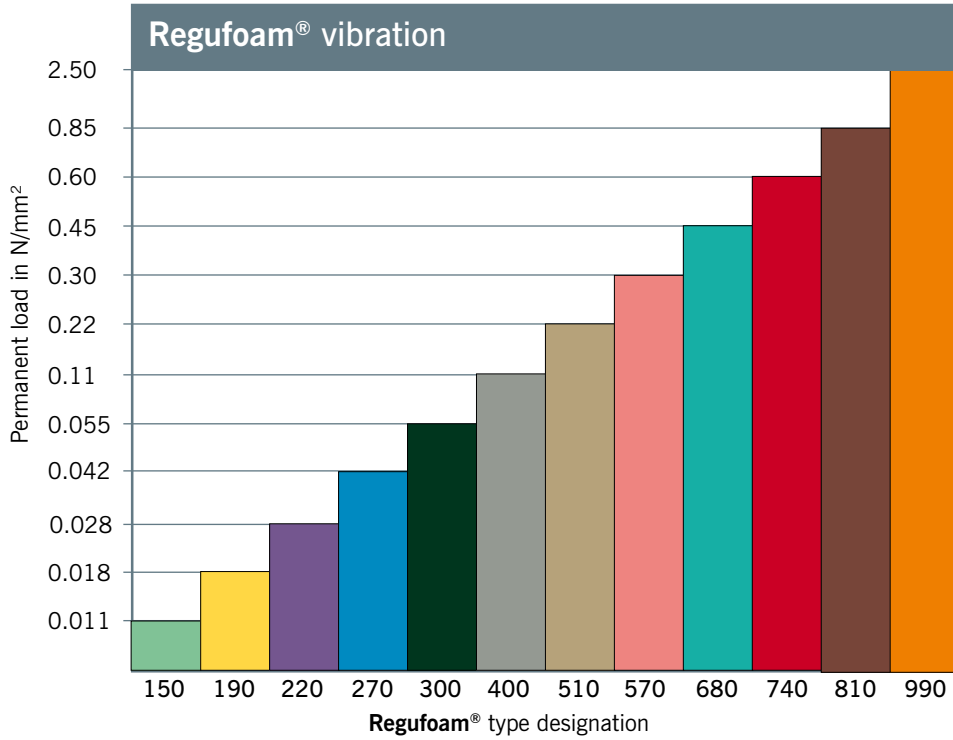
**Peak loads (rare, short-term loads)**

0.8 N/mm<sup>2</sup>

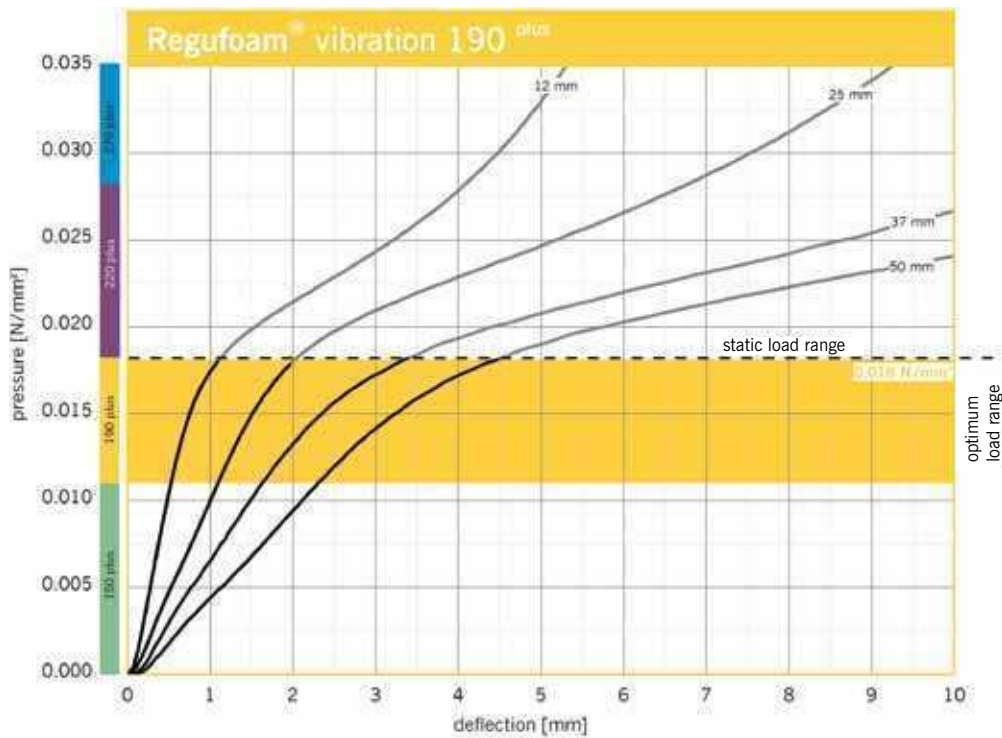


Static modulus of elasticity	Based on EN 826	0.1 - 0.25	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.25 - 0.55	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



### Vibration Isolation

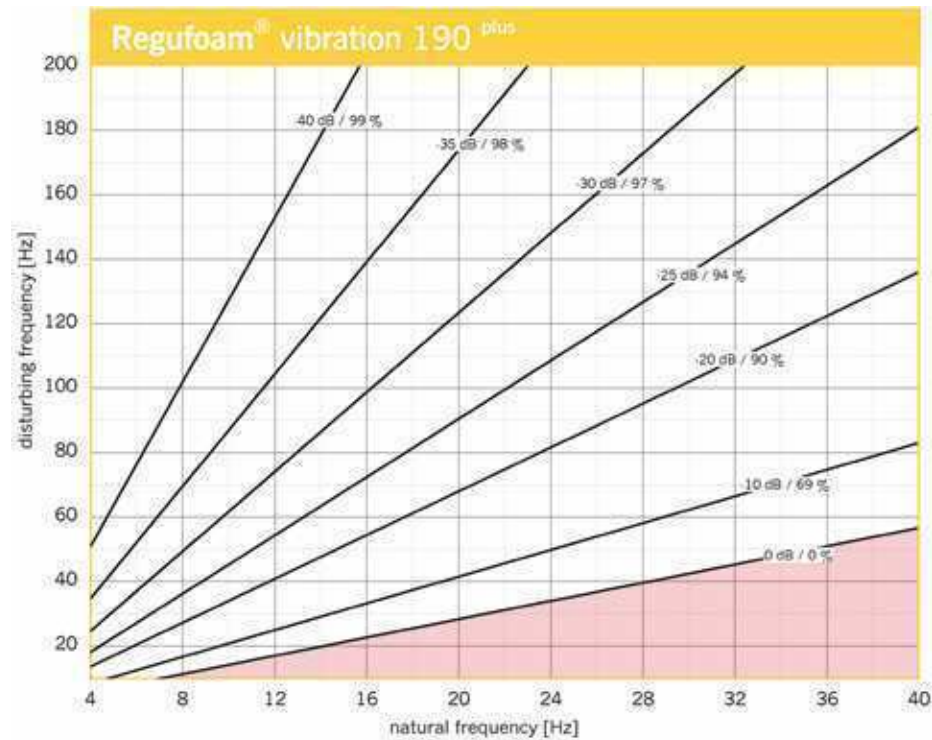
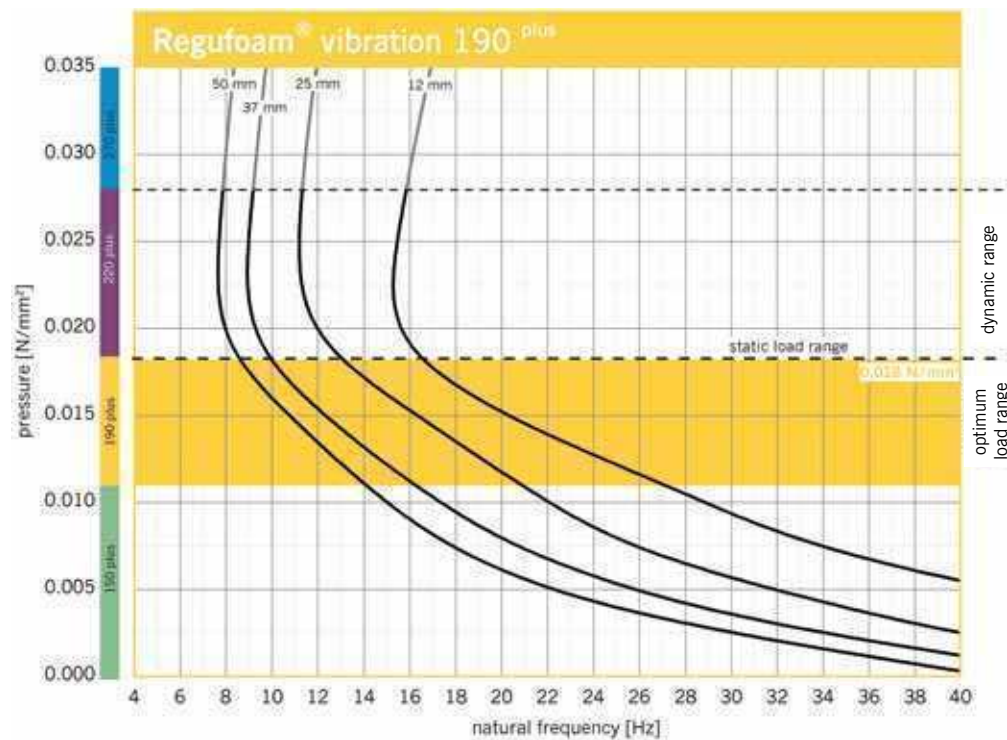


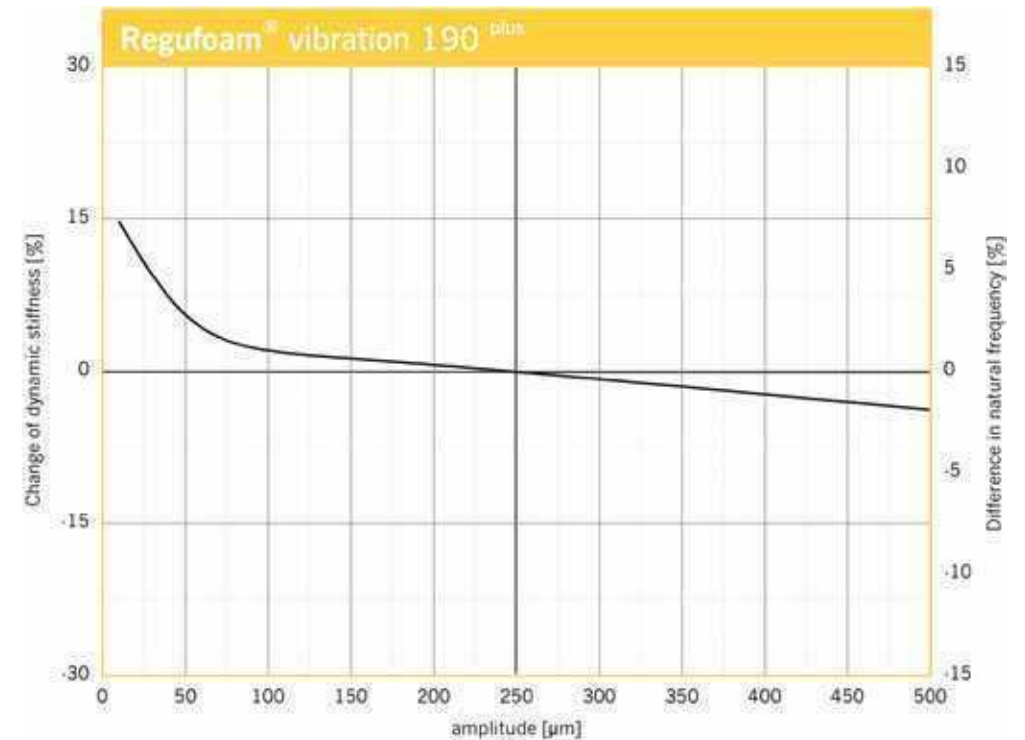
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 190 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

### Natural Frequency



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

### Influence of Amplitude



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/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm 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/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm x 25 mm.



### Modulus of Elasticity

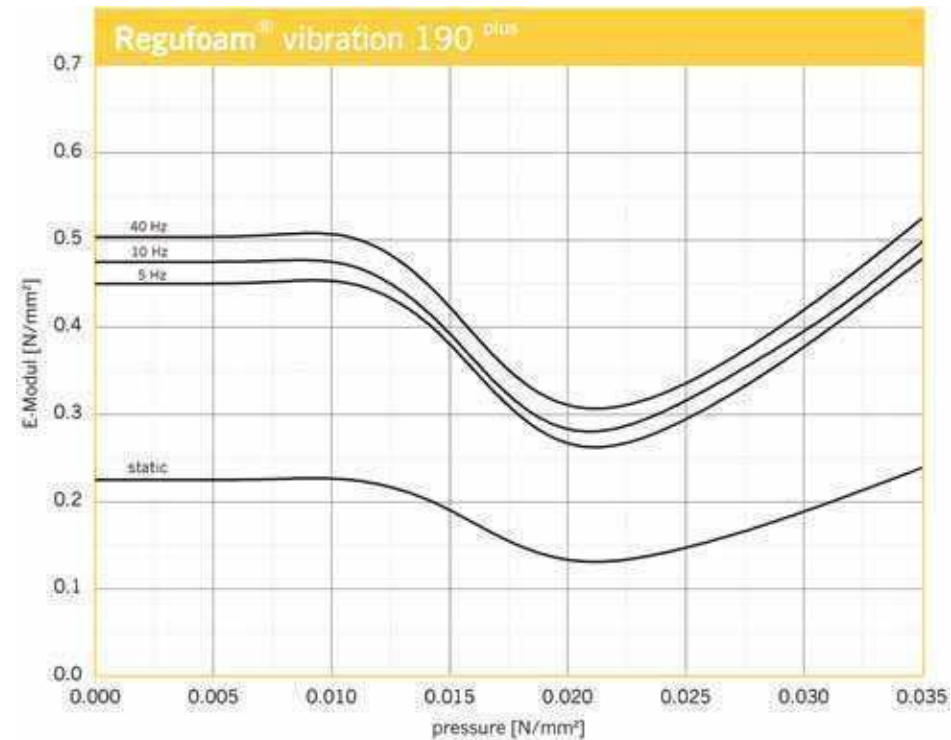


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

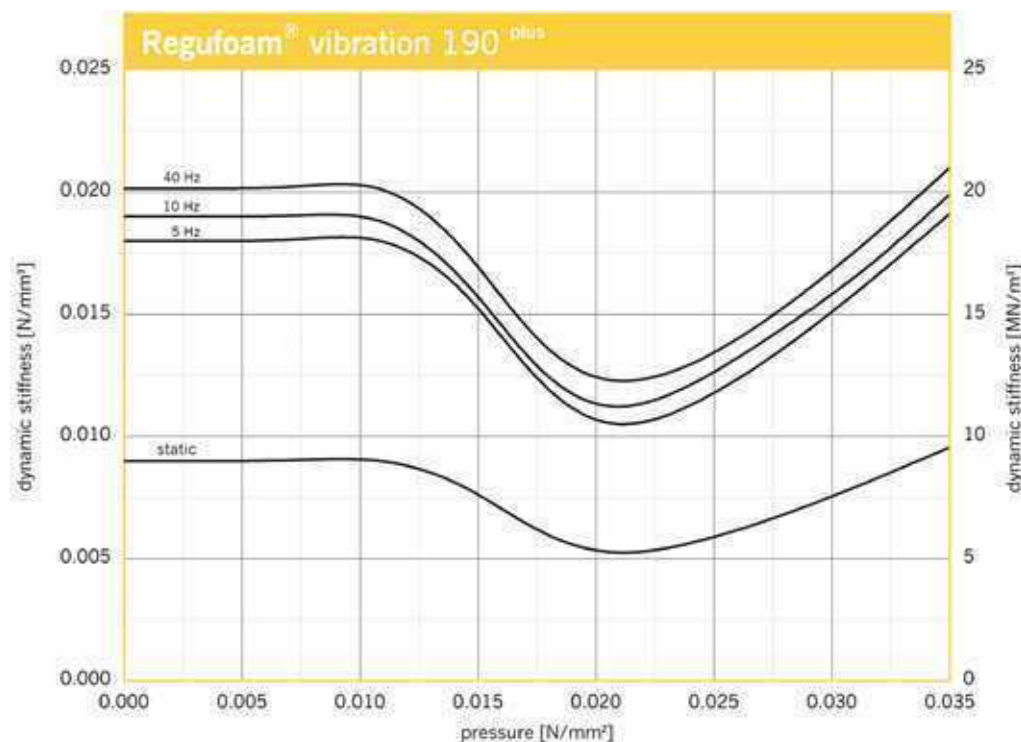
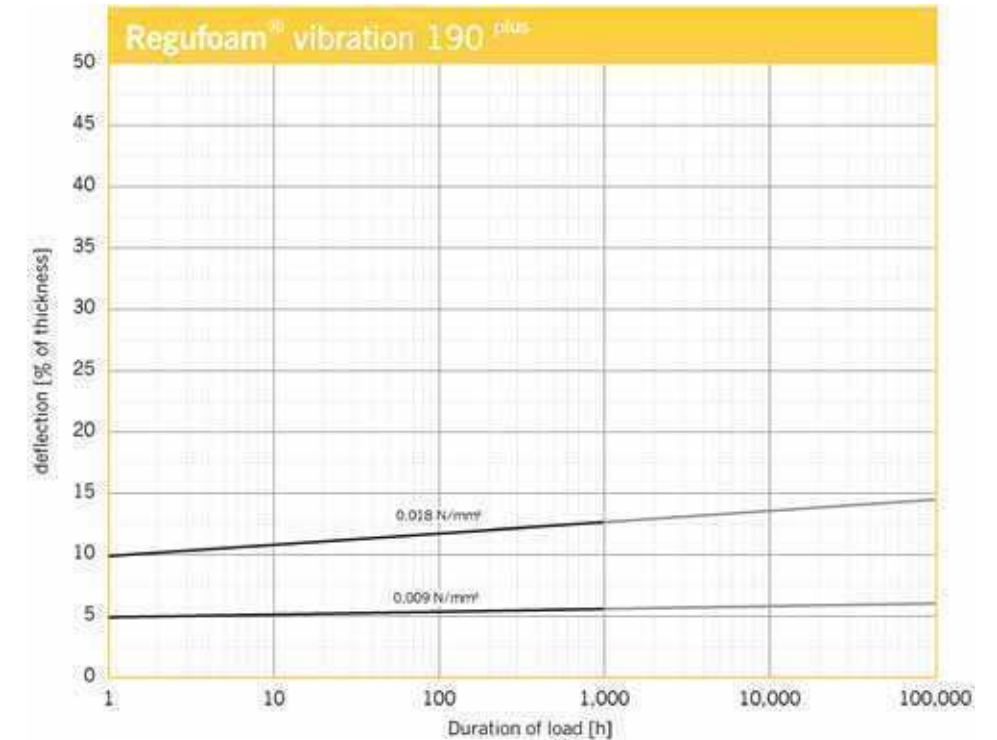


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.028 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.04 N/mm<sup>2</sup>

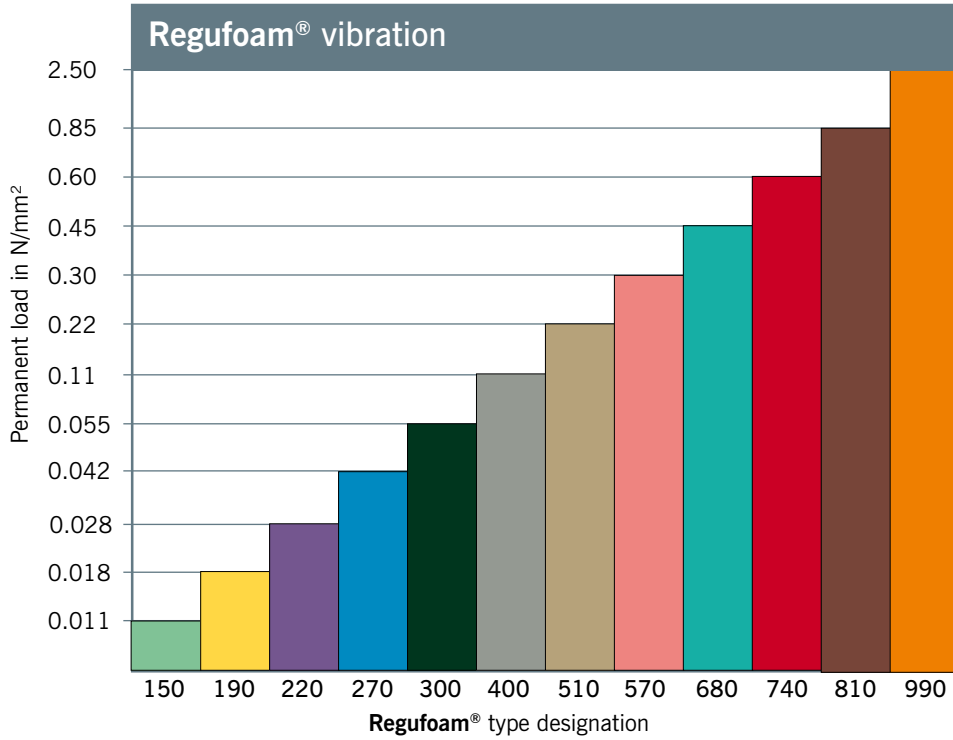
**Peak loads (rare, short-term loads)**

0.9 N/mm<sup>2</sup>

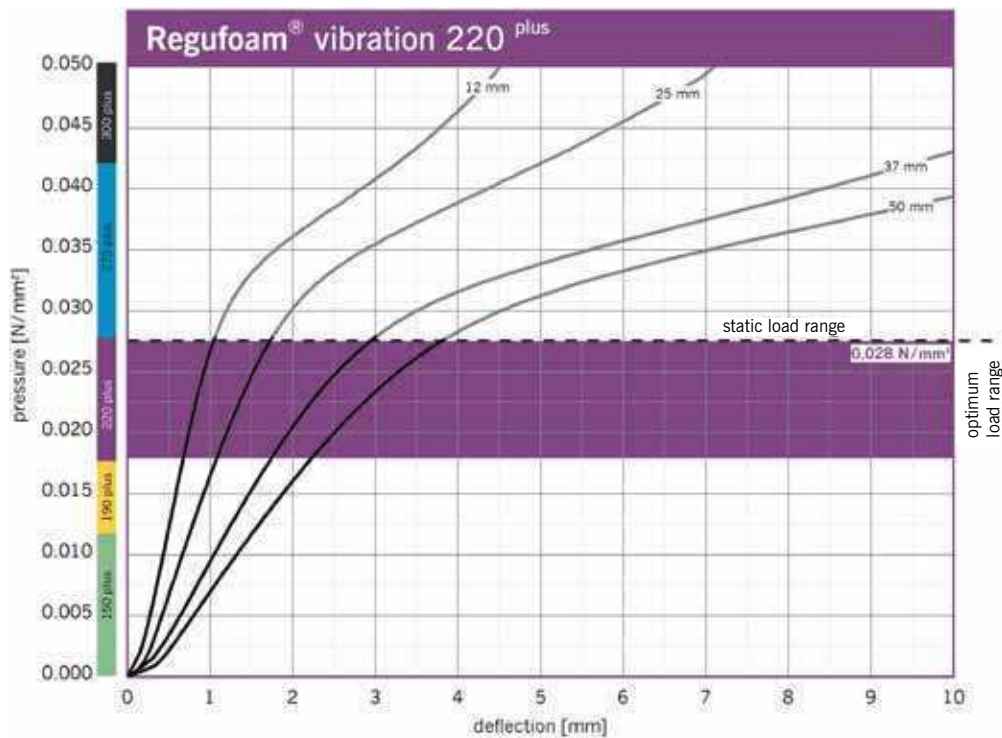


Static modulus of elasticity	Based on EN 826	0.15 - 0.35	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.35 - 0.75	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



Vibration Isolation

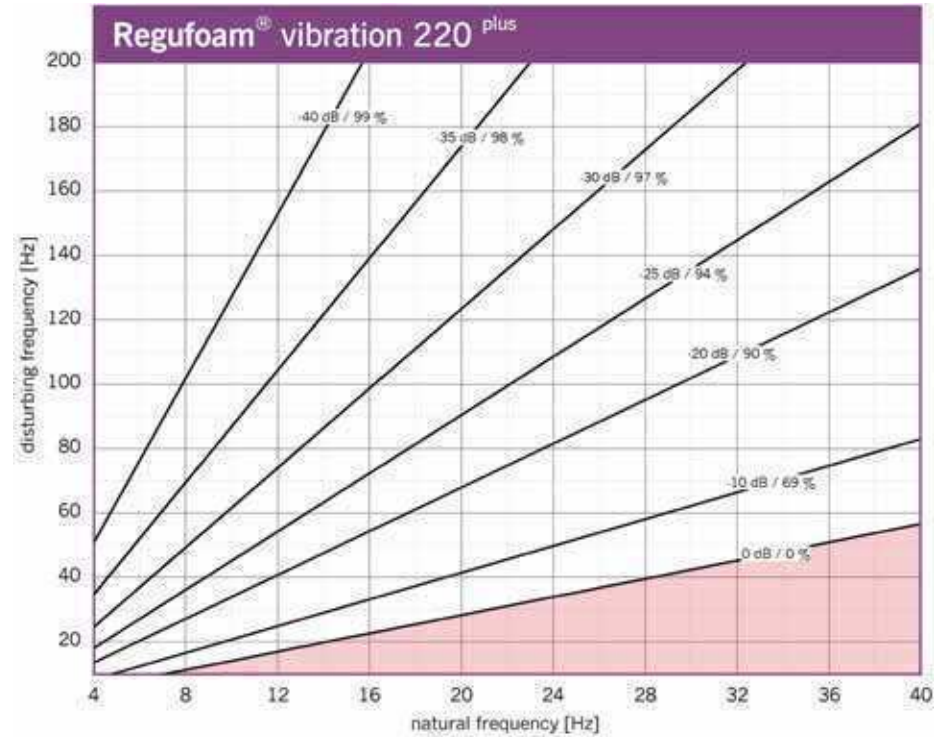
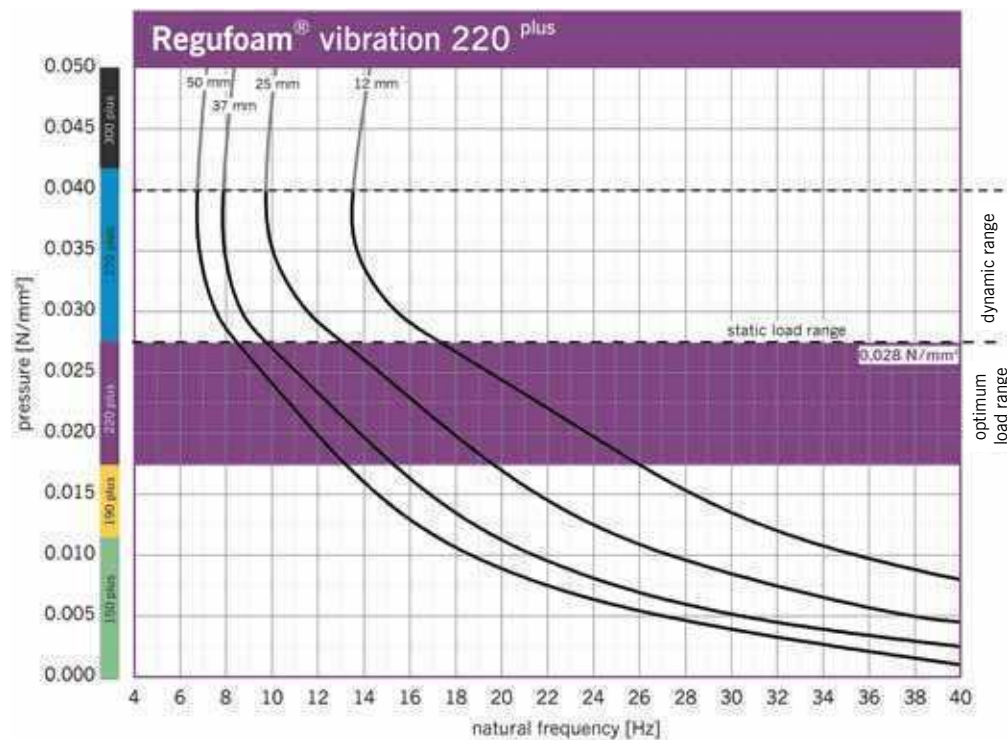


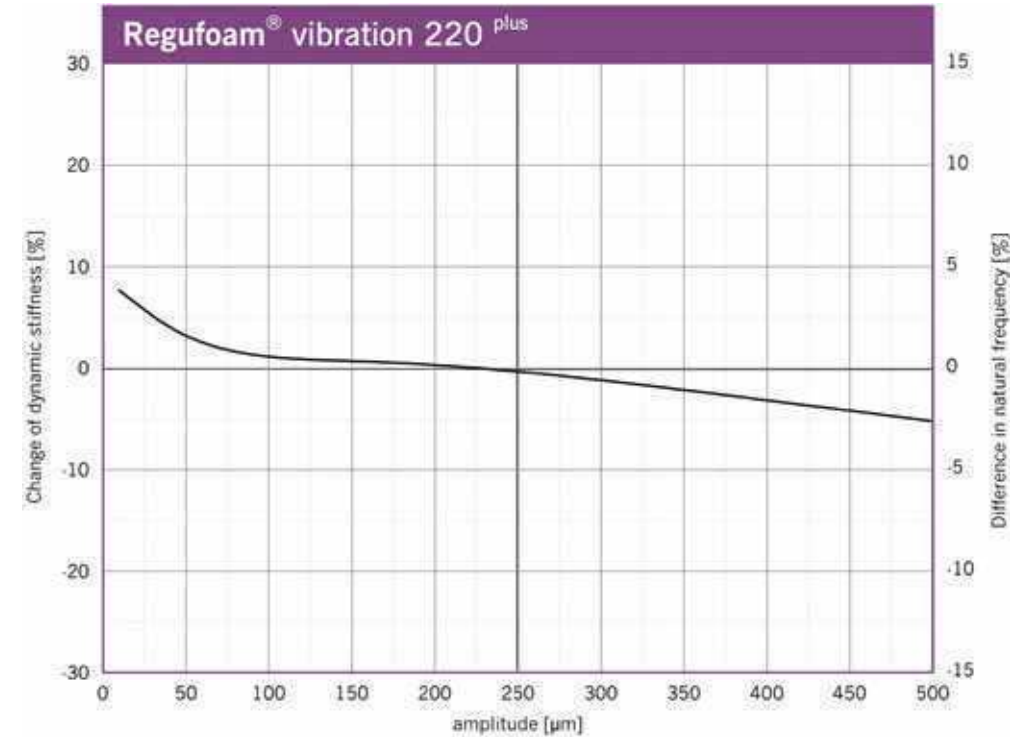
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 220 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

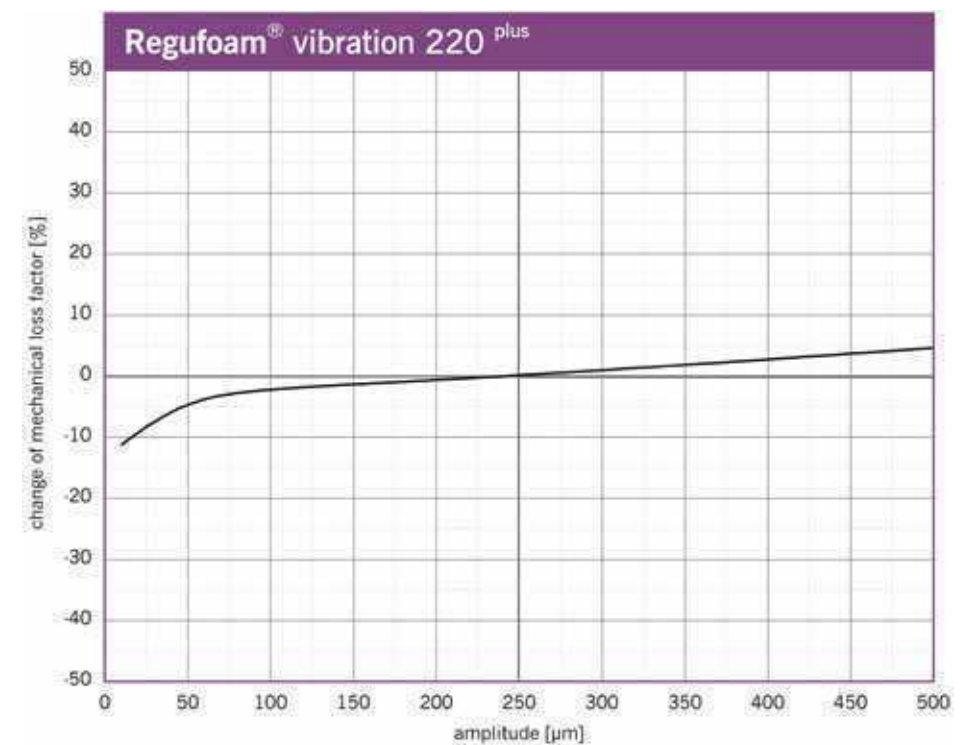


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 220 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude



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 mm x 300 mm 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 mm x 300 mm x 25 mm.



### Modulus of Elasticity

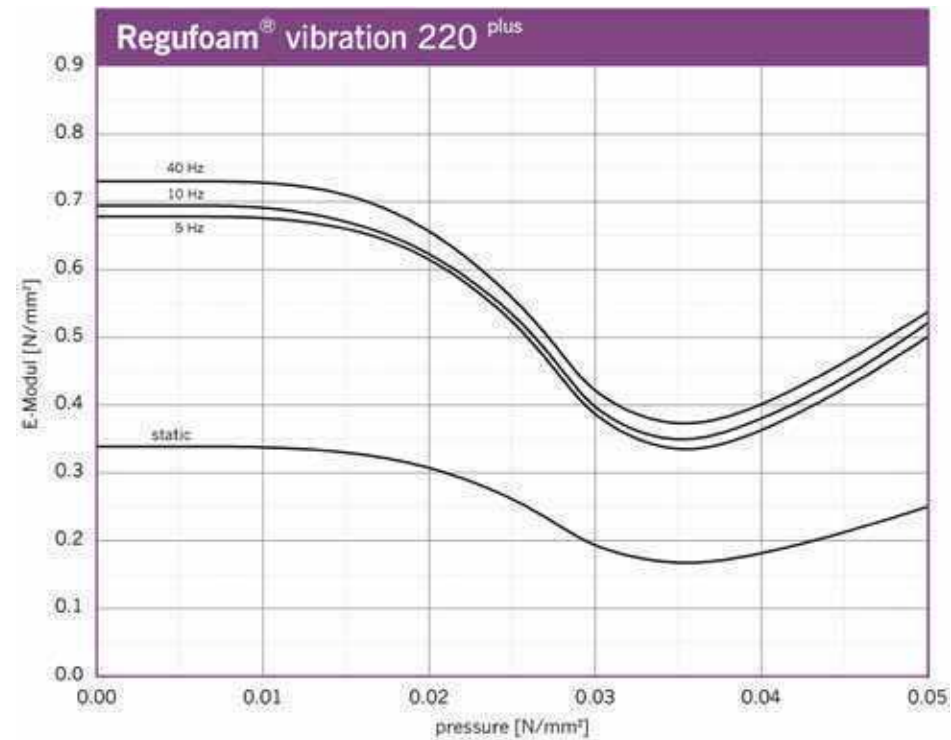


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

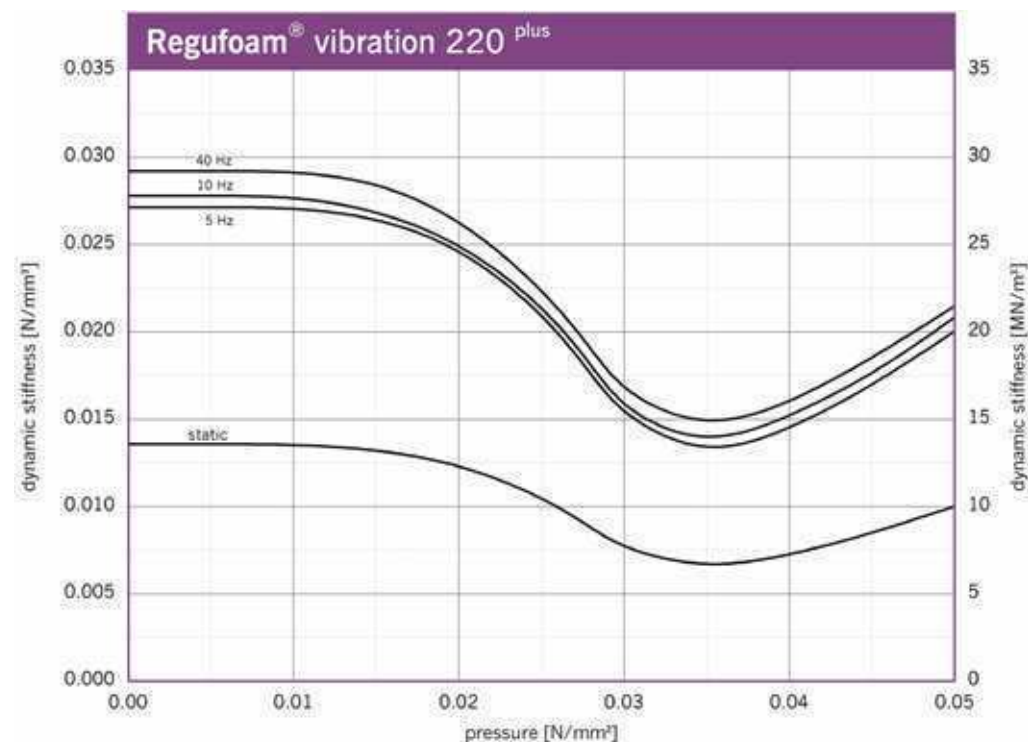
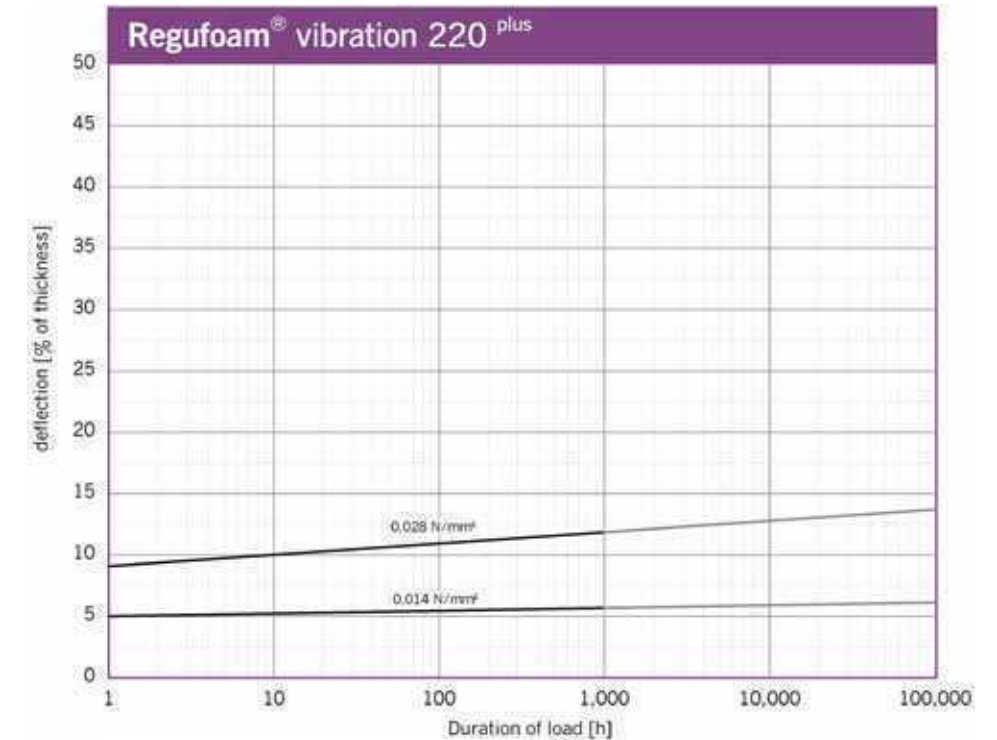


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

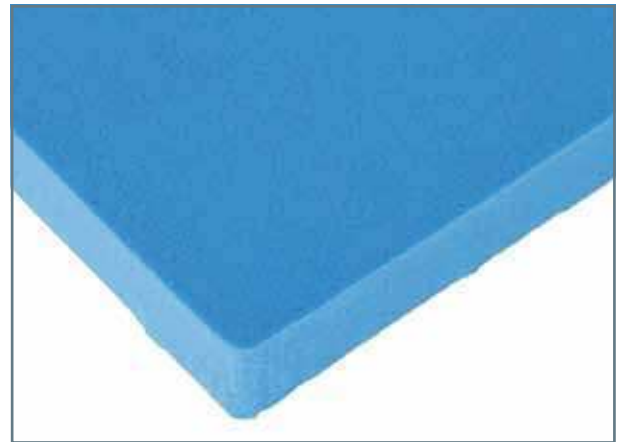
0.042 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.062 N/mm<sup>2</sup>

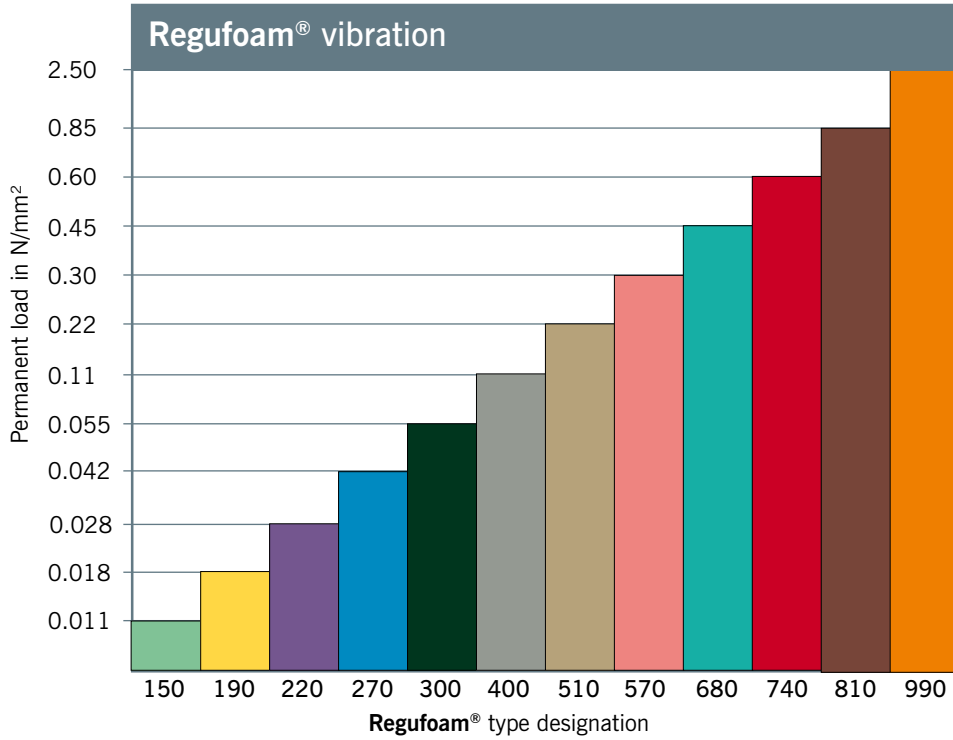
**Peak loads (rare, short-term loads)**

1.2 N/mm<sup>2</sup>

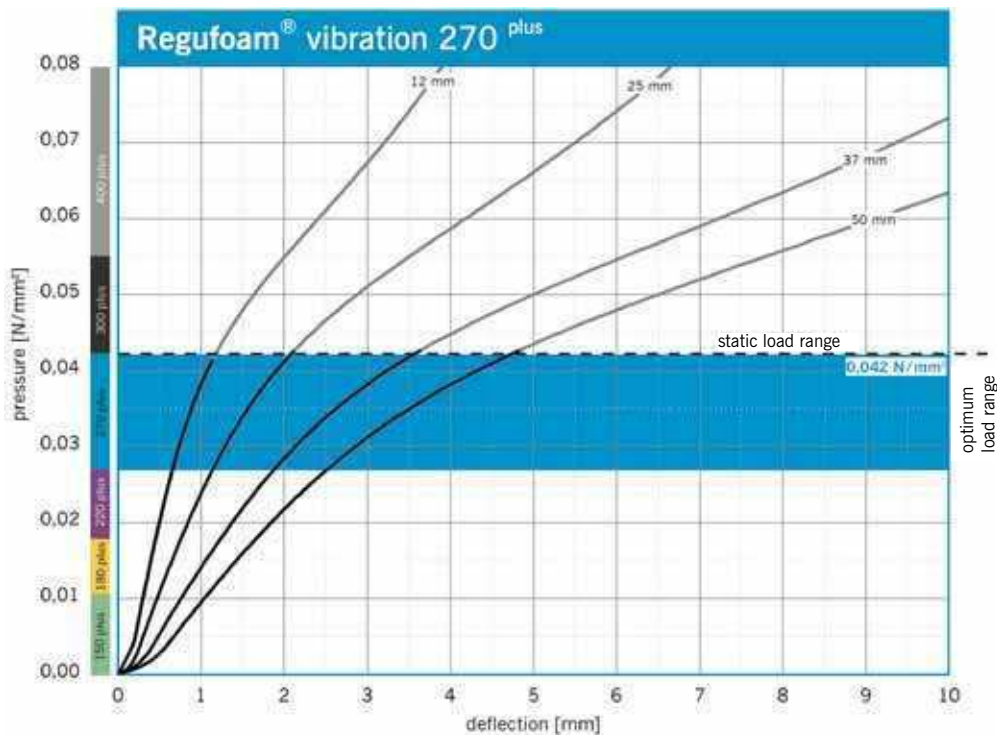


Static modulus of elasticity	Based on EN 826	0.25 - 0.45	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.60 - 1.05	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



### Vibration Isolation

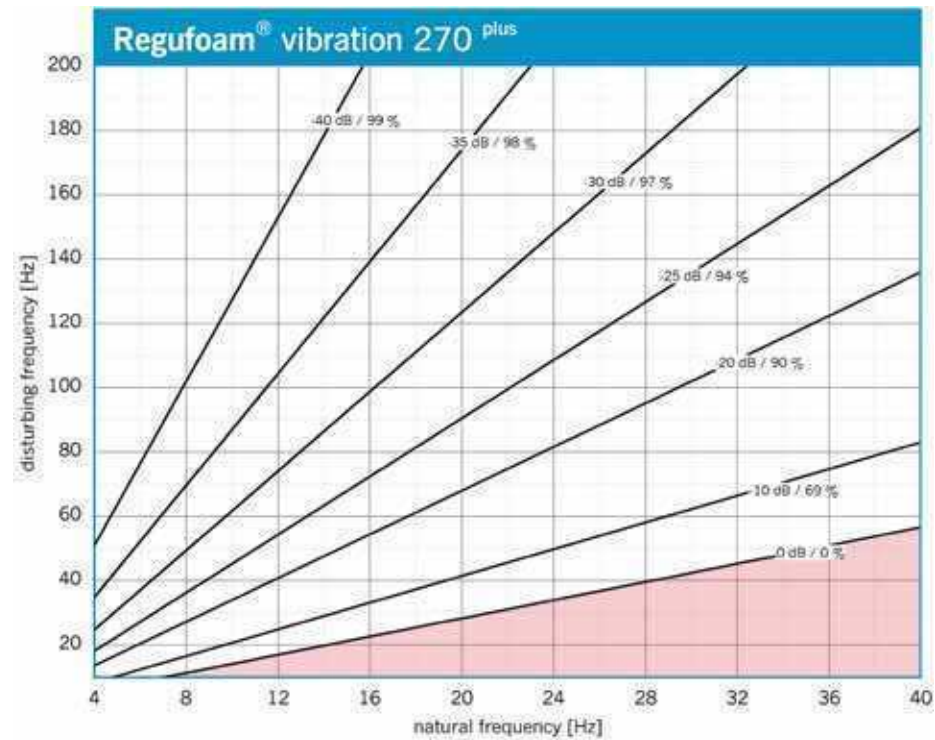
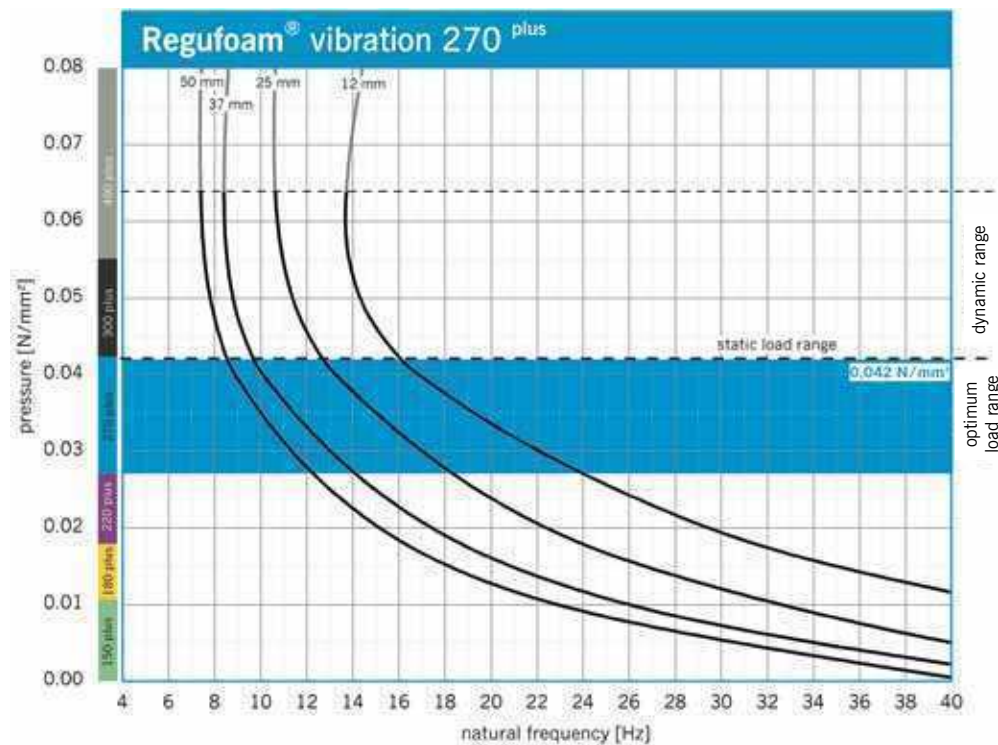


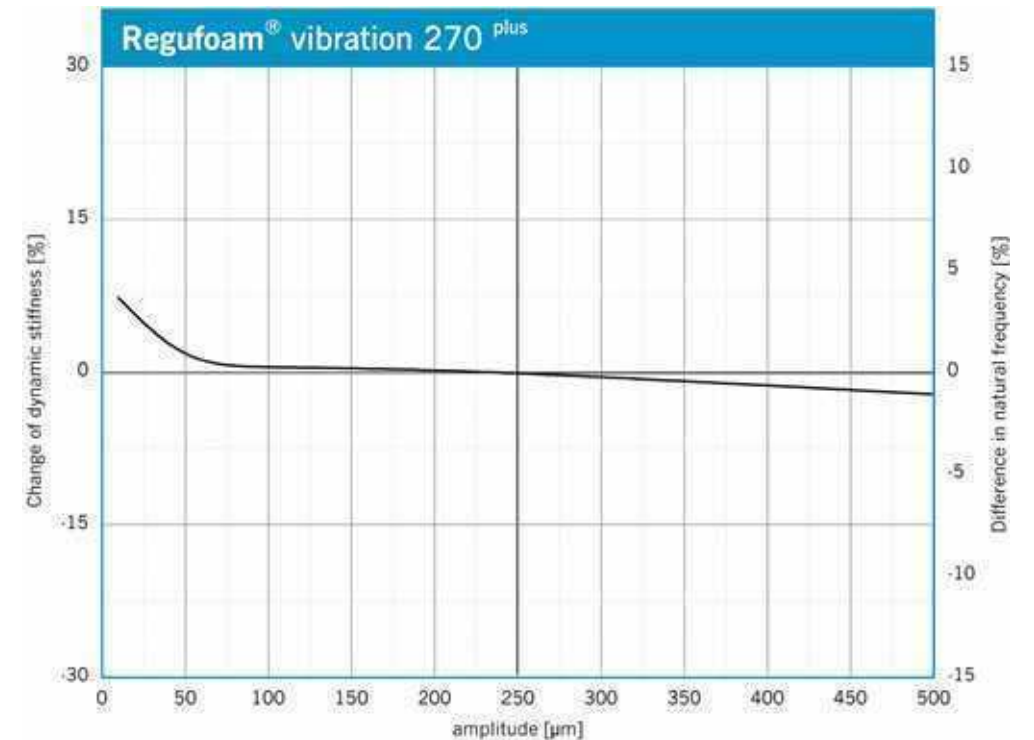
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 270 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

### Natural Frequency

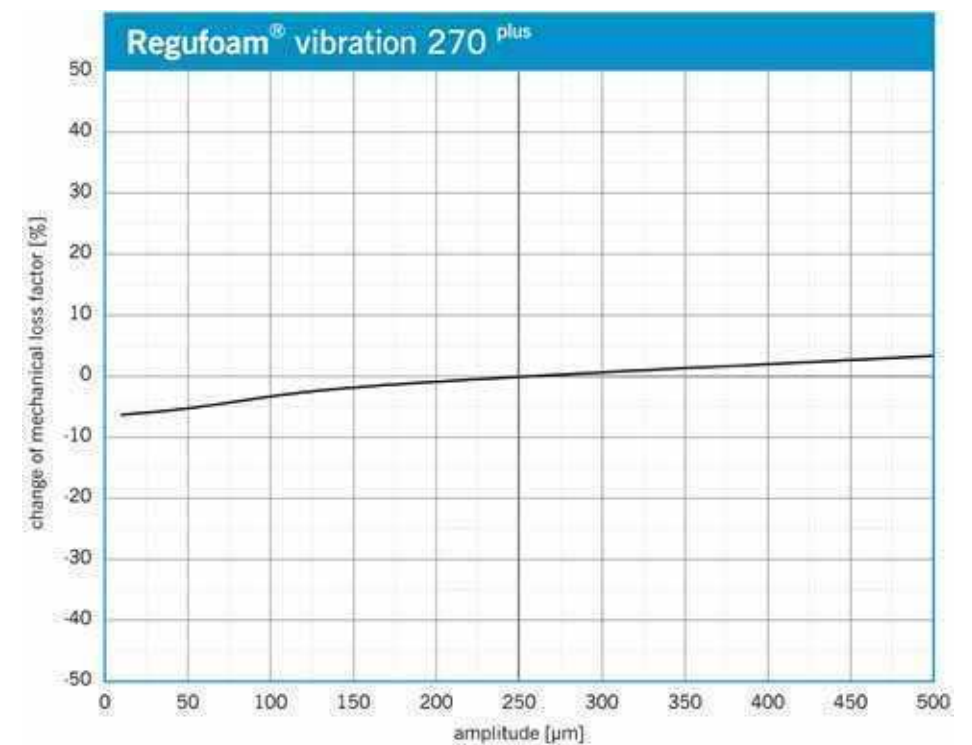


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 270 plus** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

### Influence of Amplitude



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/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm 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/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm x 25 mm.



### Modulus of Elasticity

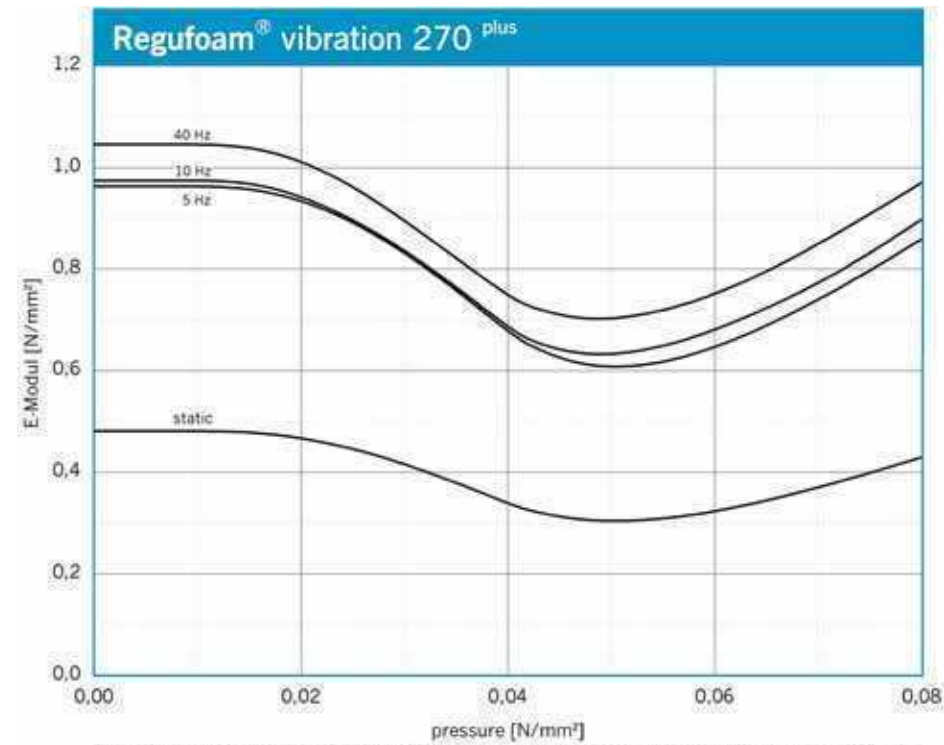


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

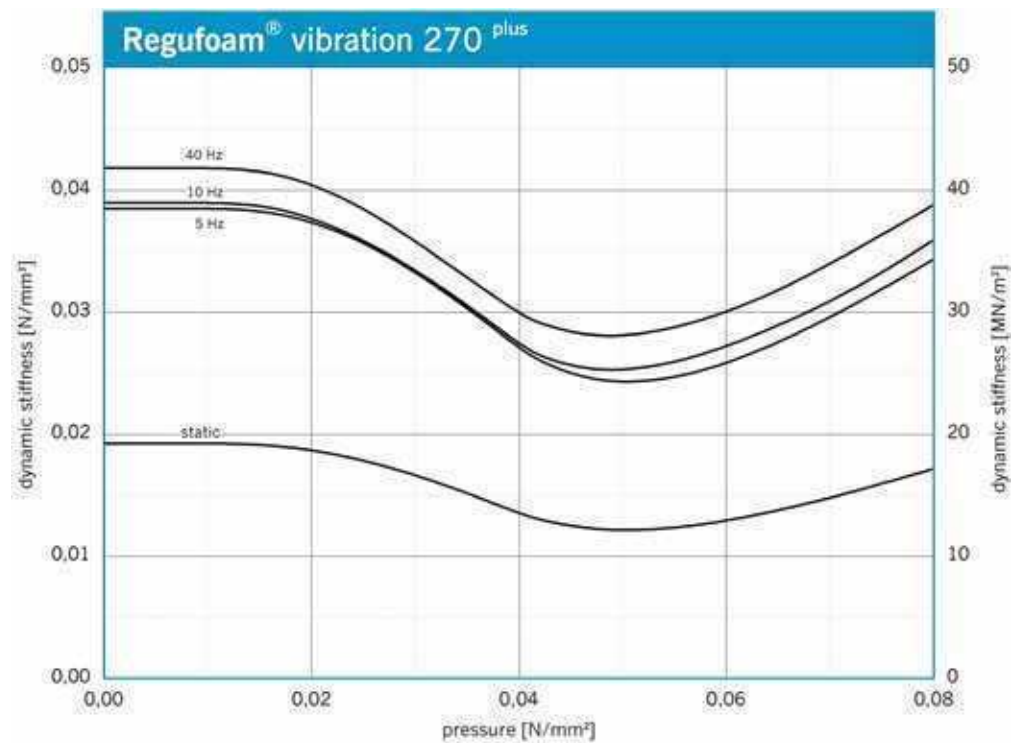
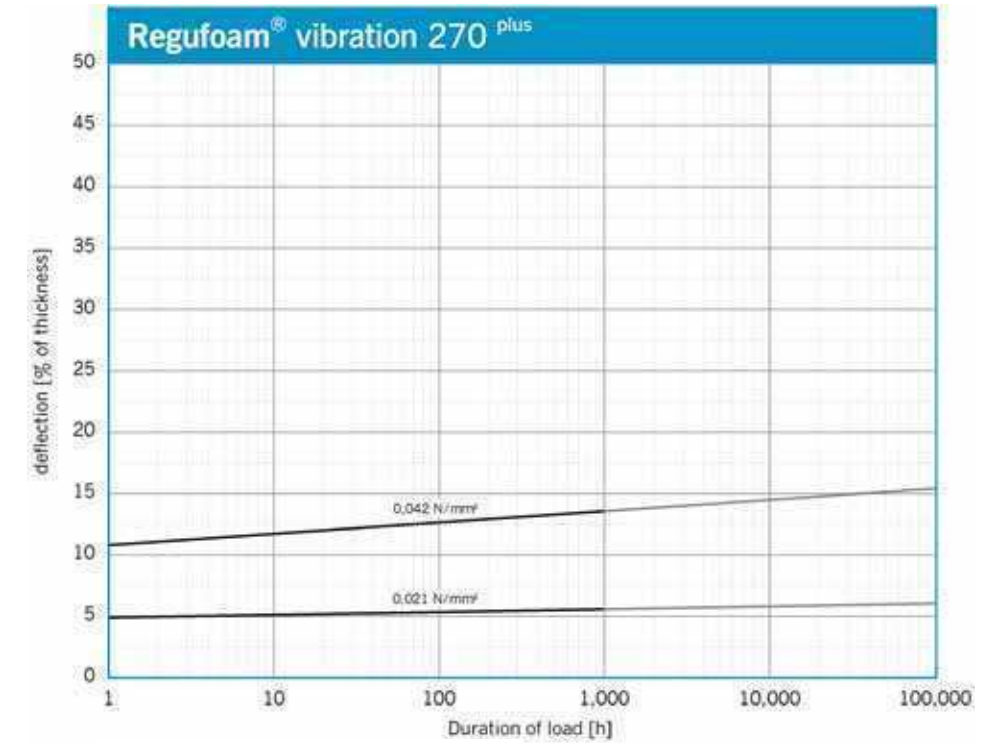


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.055 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.08 N/mm<sup>2</sup>

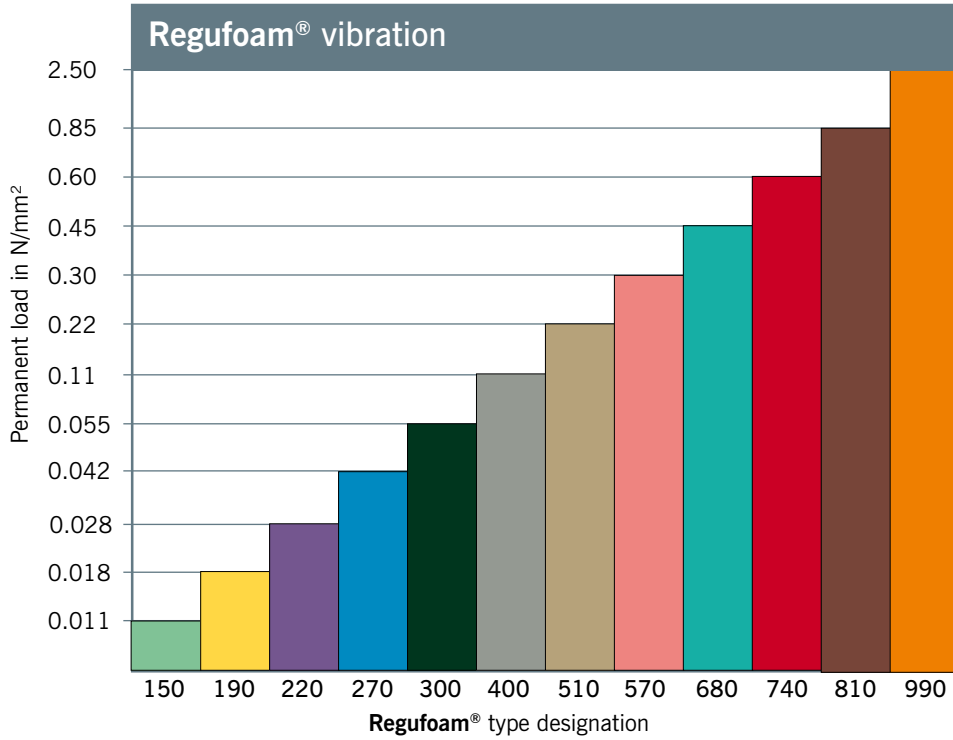
**Peak loads (rare, short-term loads)**

2 N/mm<sup>2</sup>

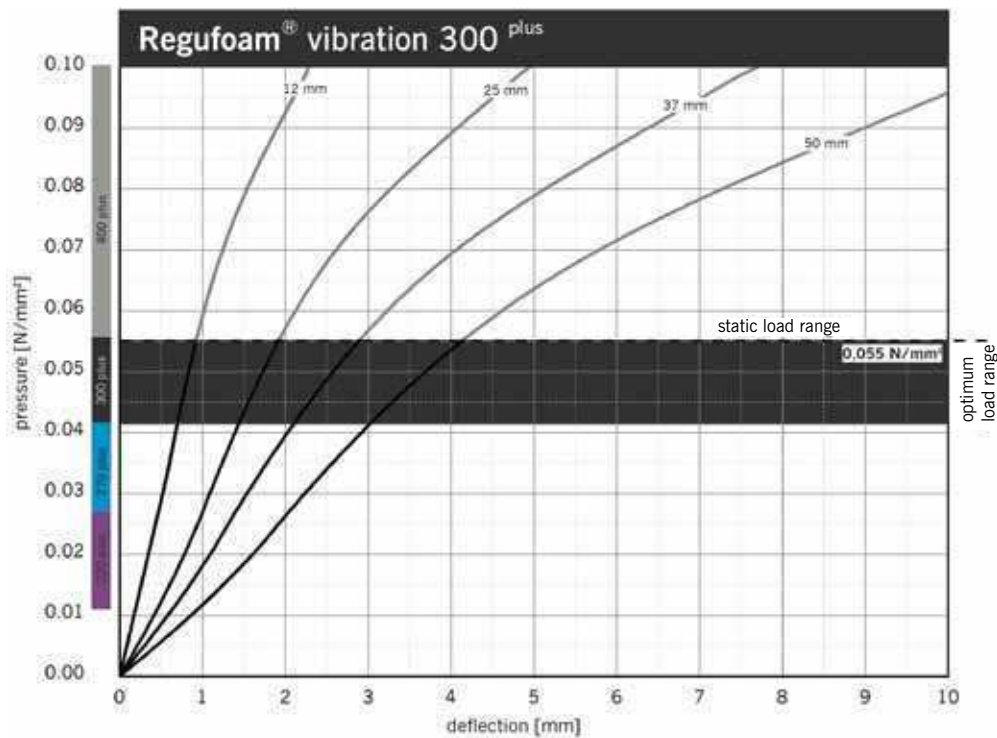


Static modulus of elasticity	Based on EN 826	0.35 - 0.58	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.68 - 1.25	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



### Vibration Isolation

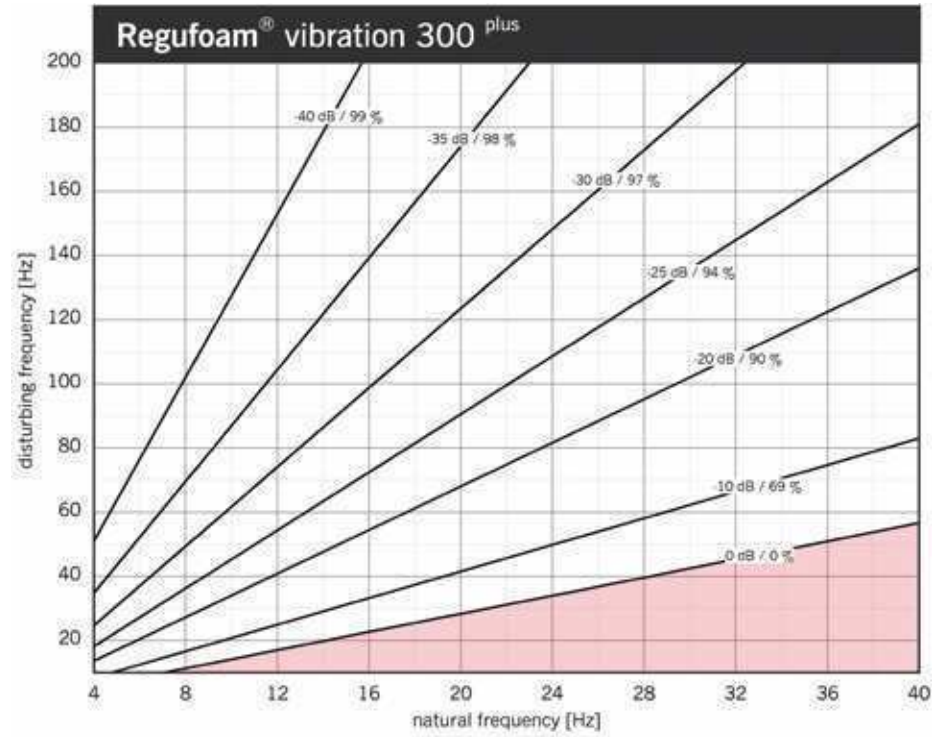
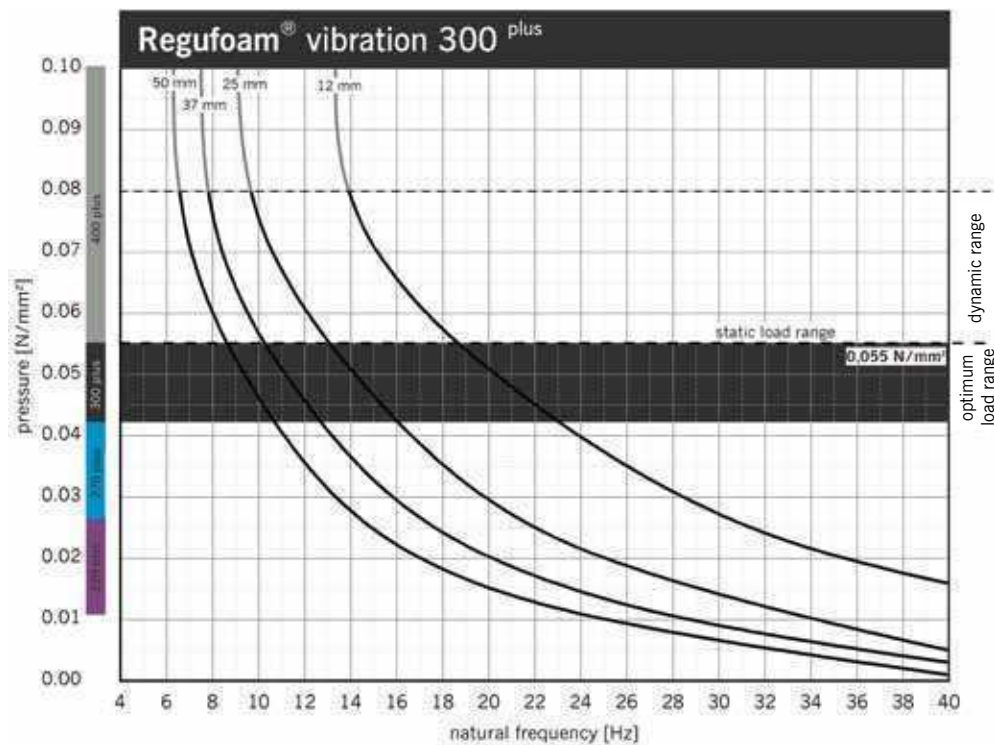


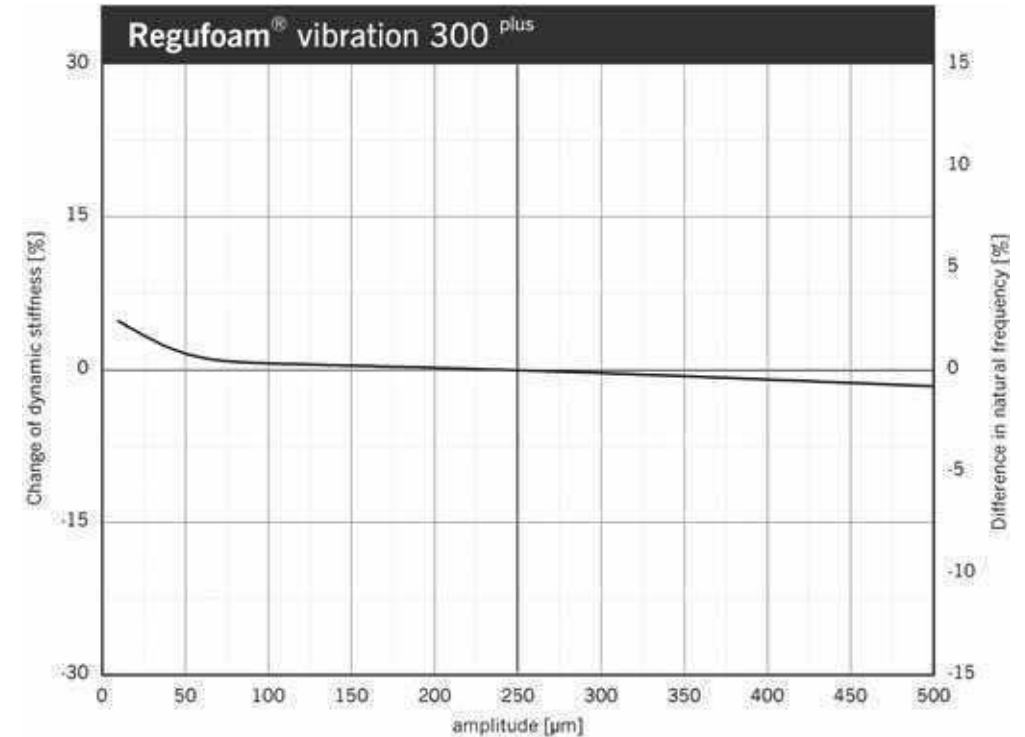
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 300 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

### Natural Frequency

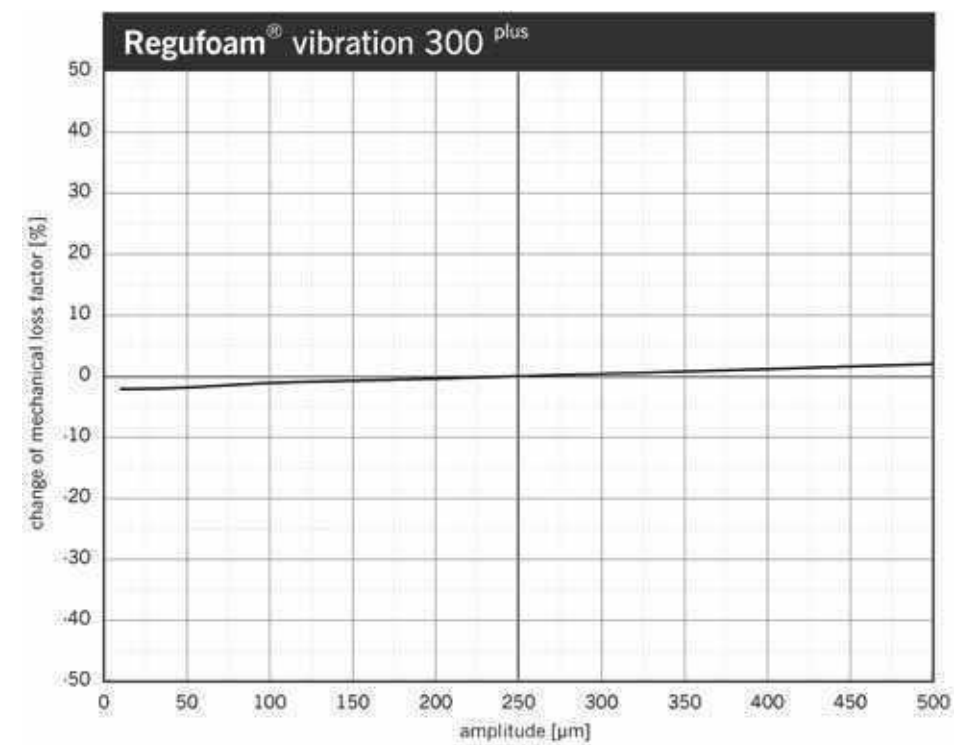


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 300 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

### Influence of Amplitude



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 mm x 300 mm 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 mm x 300 mm x 25 mm.



### Modulus of Elasticity

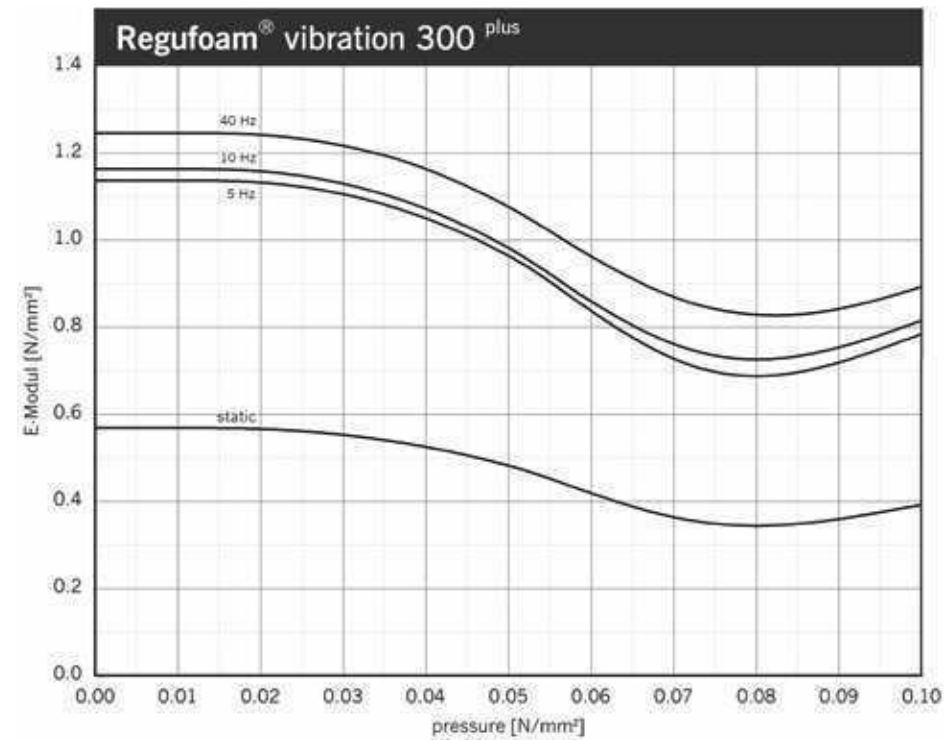


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

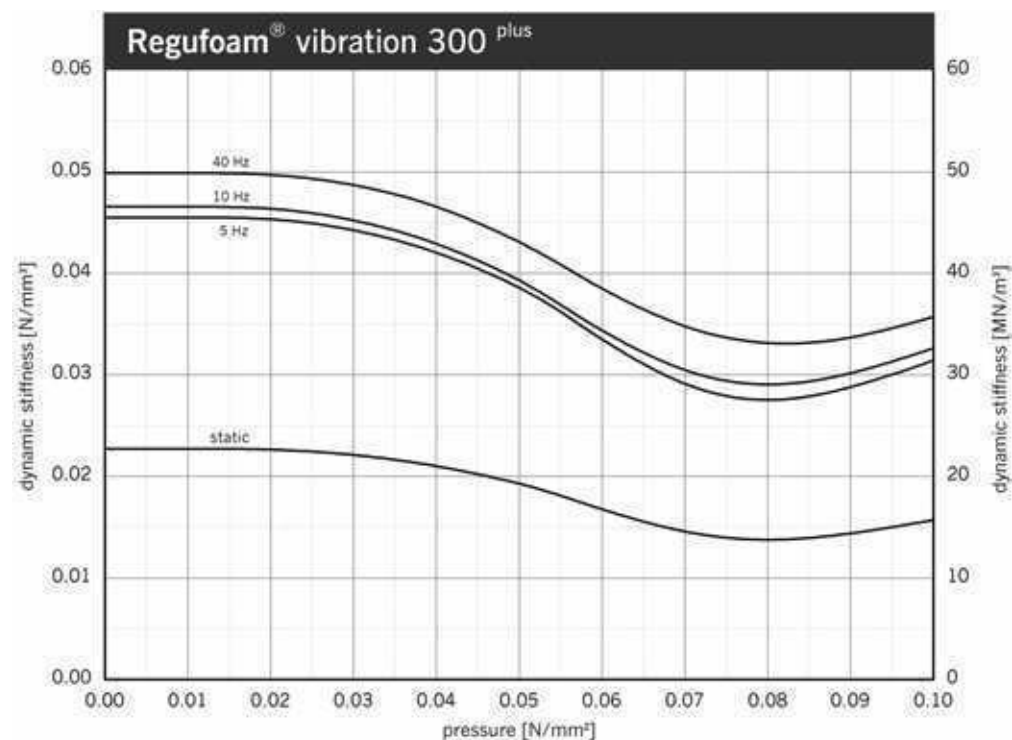
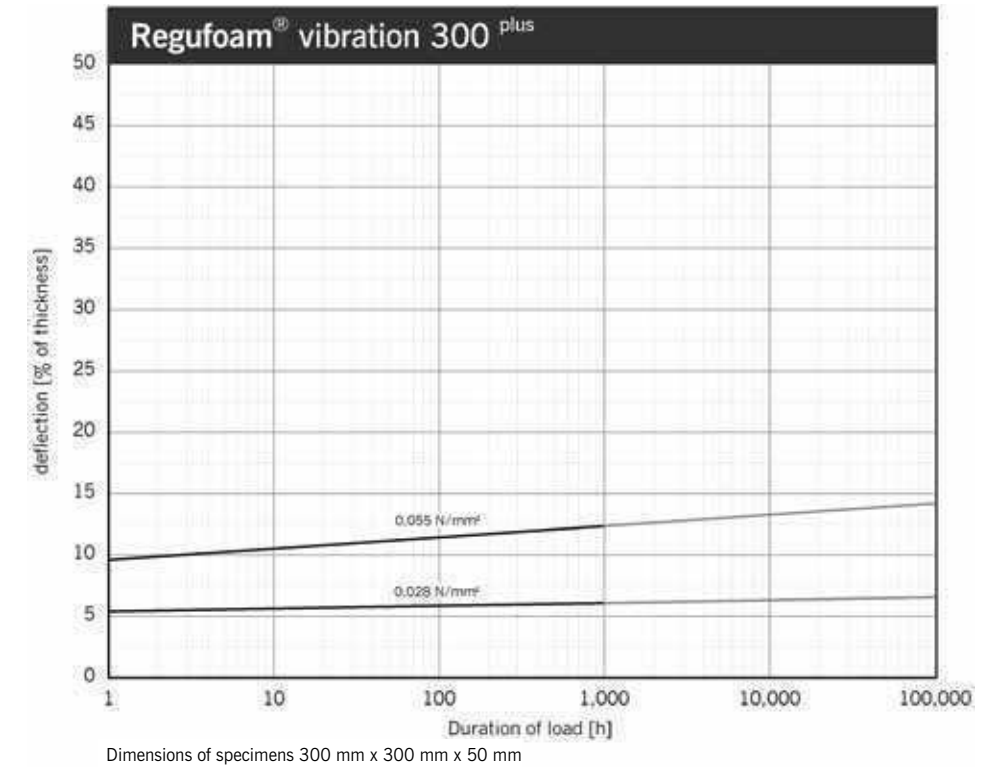


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.11 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.16 N/mm<sup>2</sup>

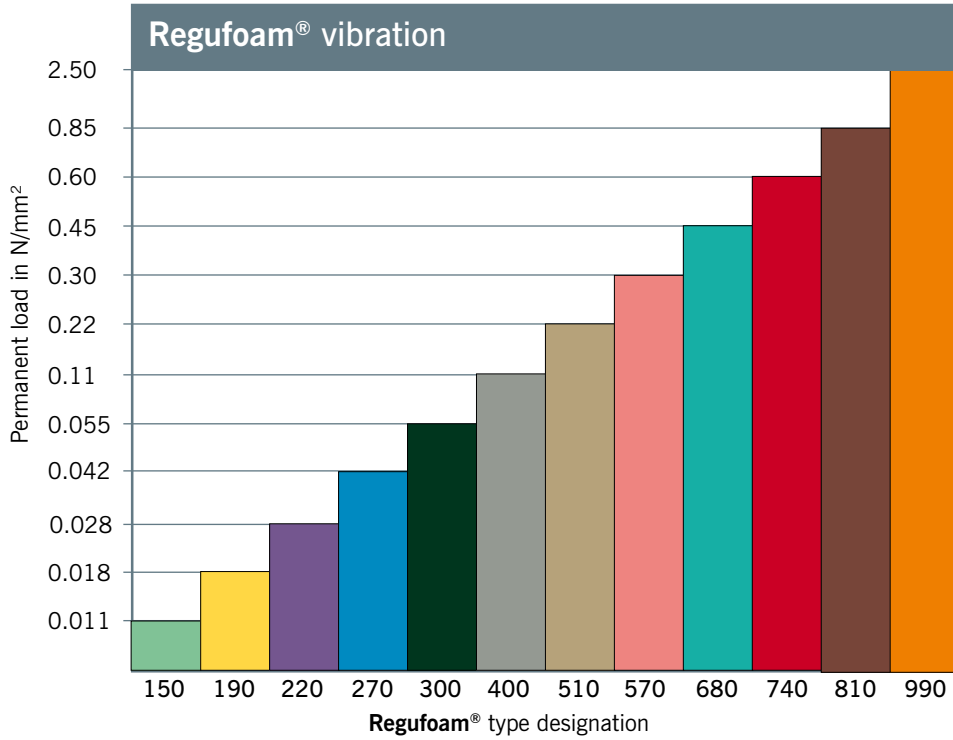
**Peak loads (rare, short-term loads)**

up to 3 N/mm<sup>2</sup>

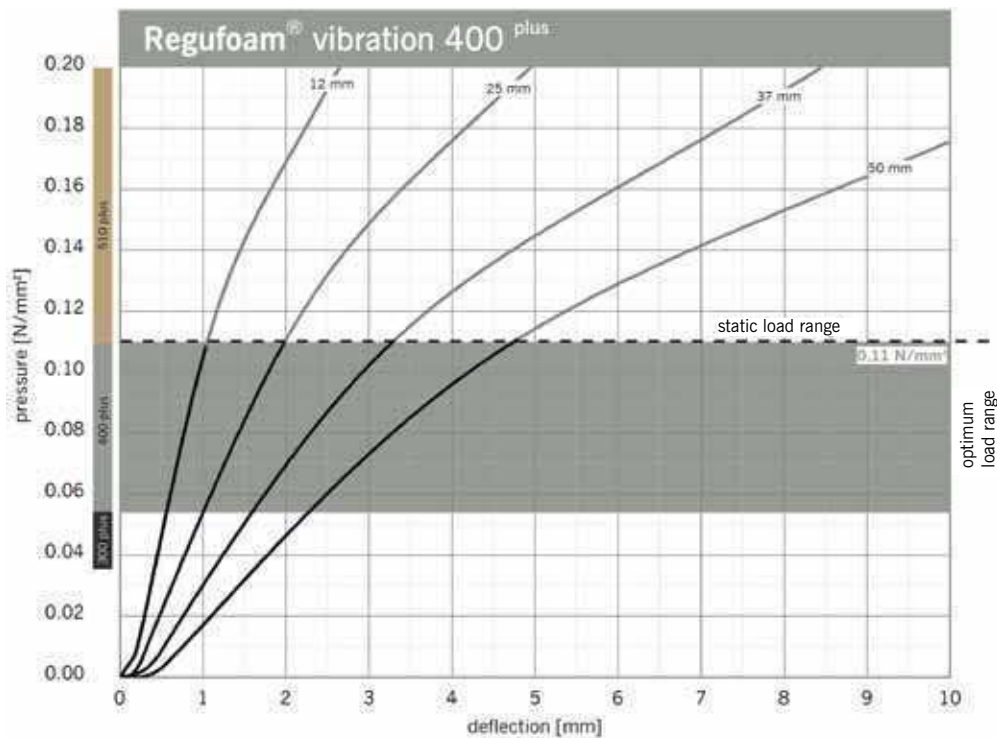


Static modulus of elasticity	Based on EN 826	0.6 - 1.0	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	1.2 - 2.0	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



### Vibration Isolation

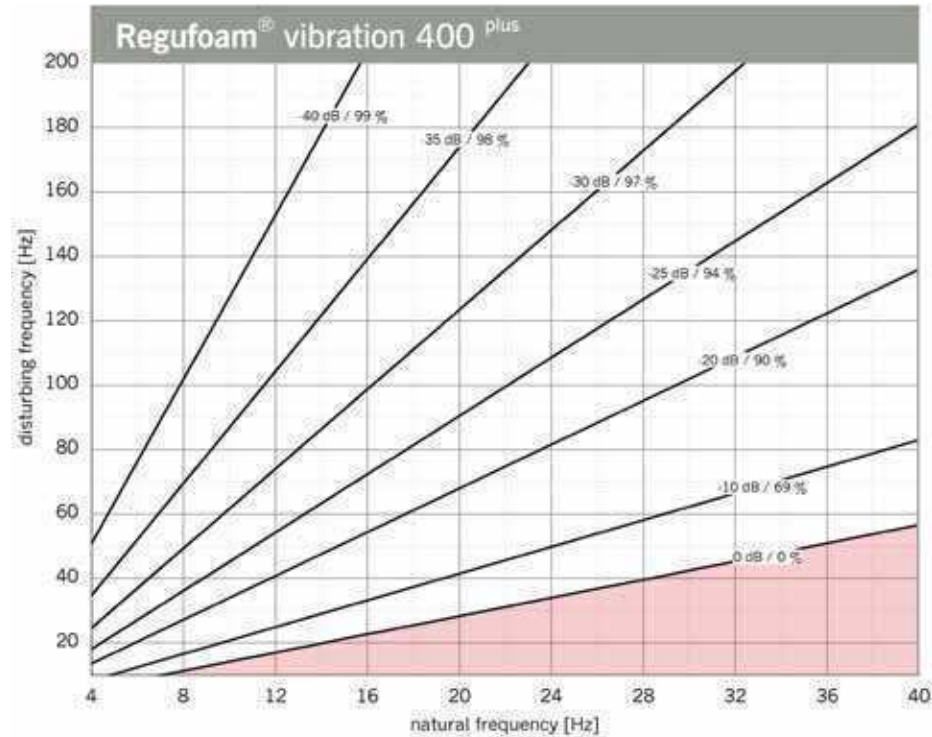
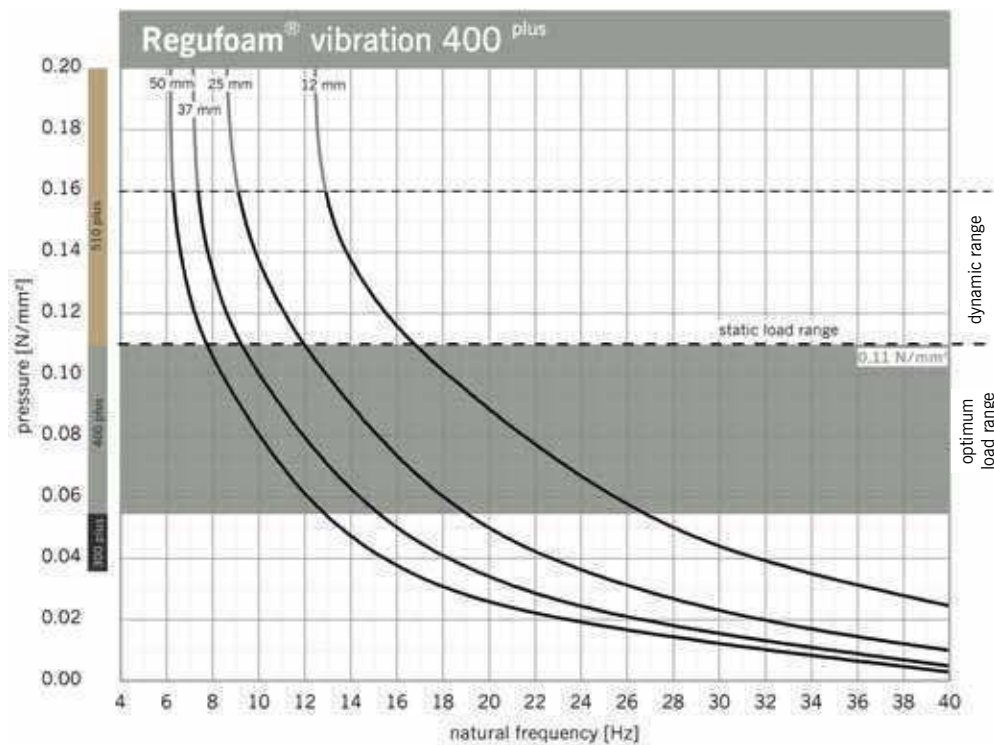


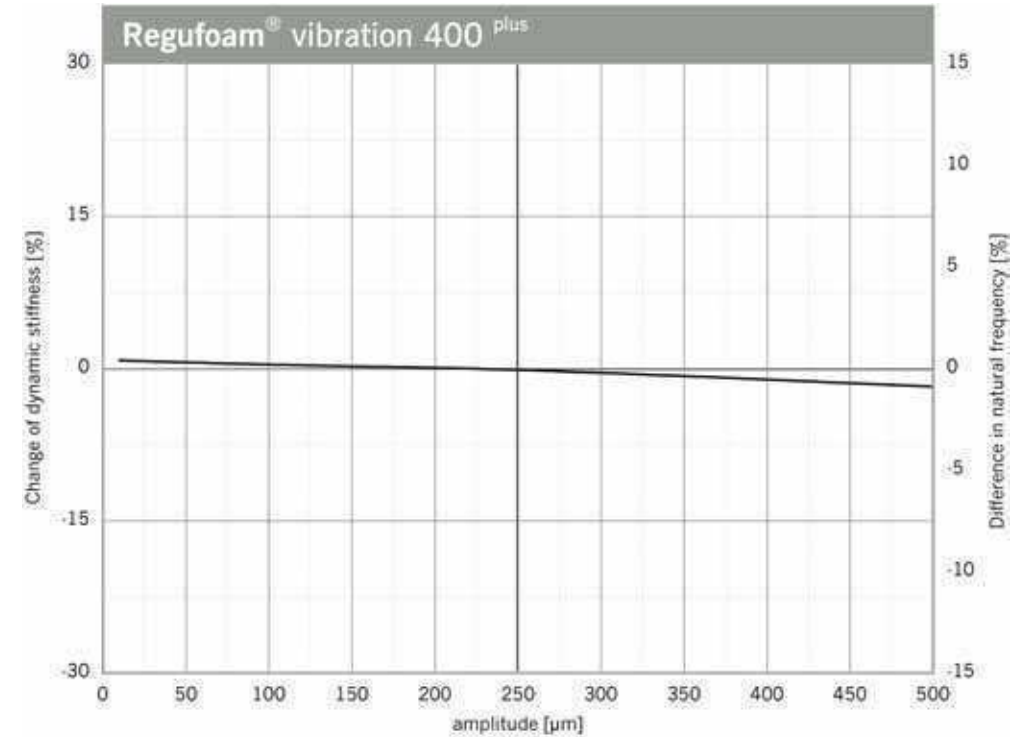
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 400 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

### Natural Frequency

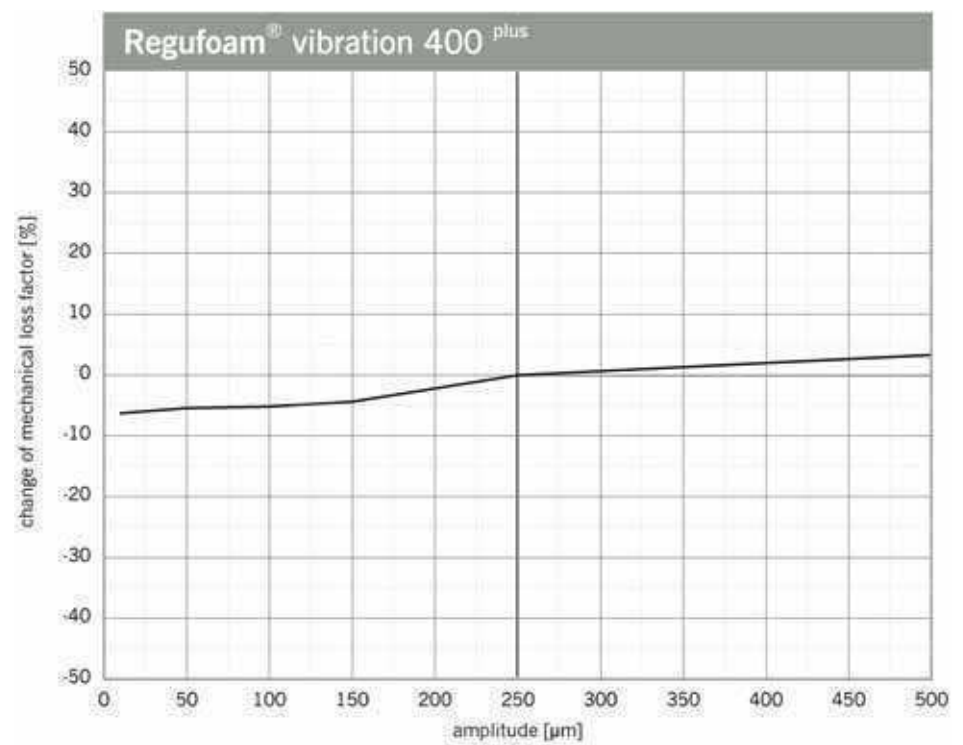


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 400 plus** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

### Influence of Amplitude



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 0.11 N/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm 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 0.11 N/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm x 25 mm.

### Modulus of Elasticity

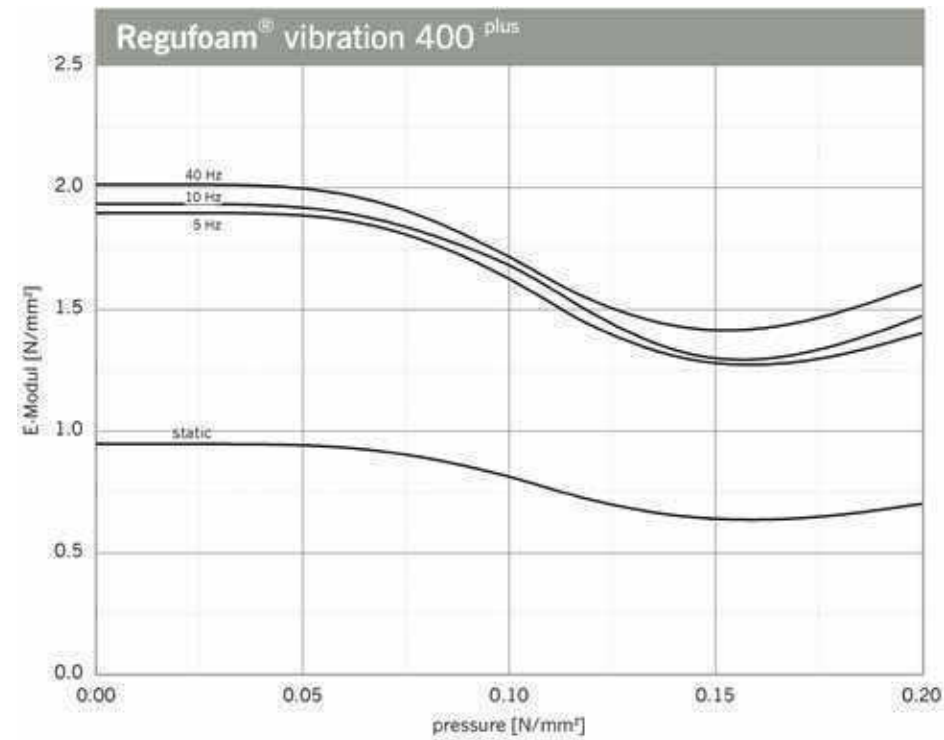


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

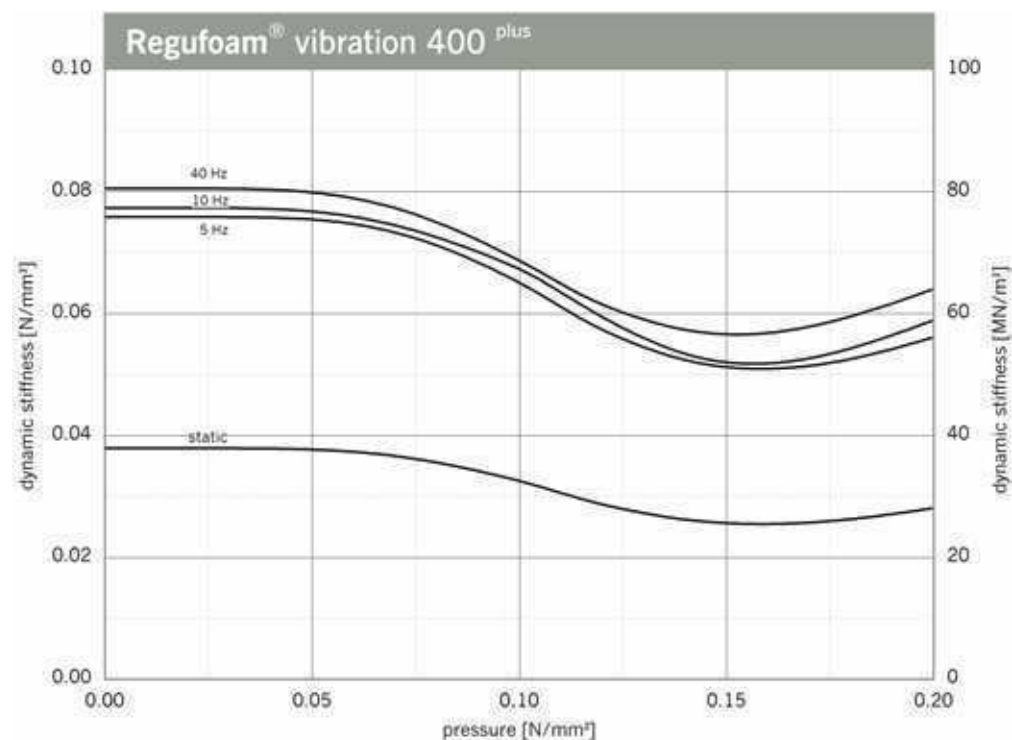
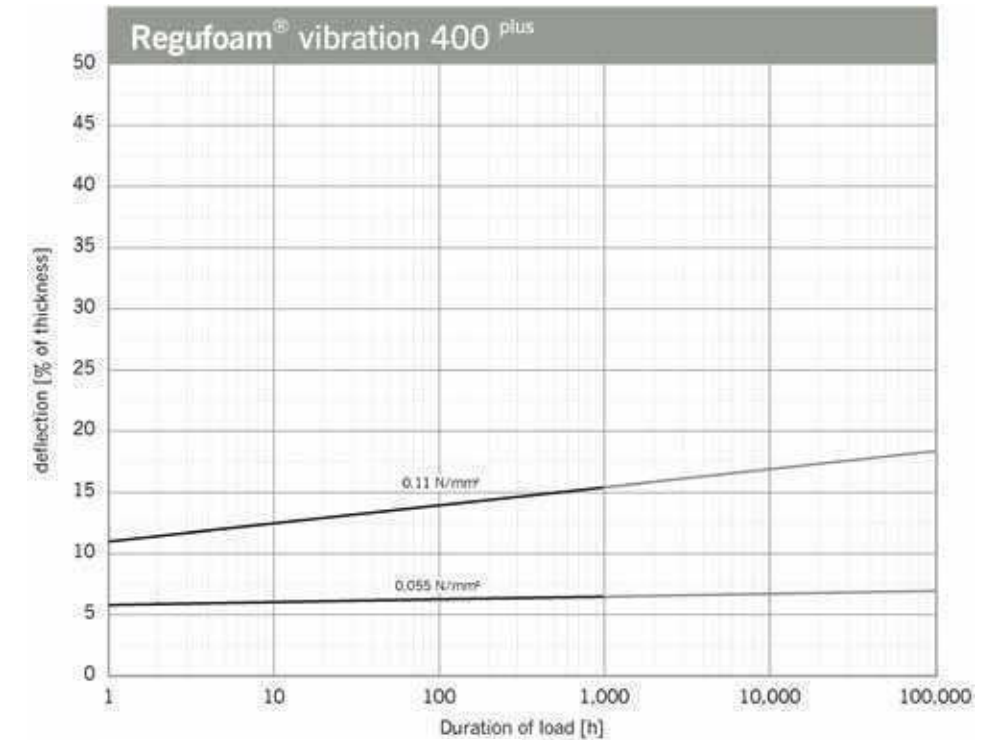


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.22 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.32 N/mm<sup>2</sup>

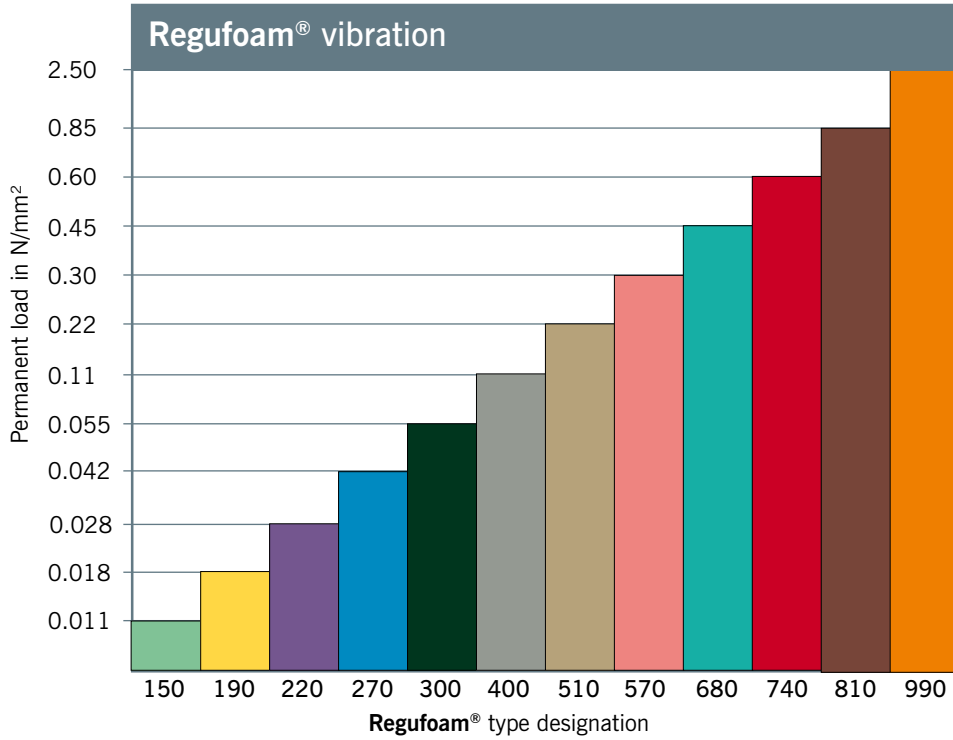
**Peak loads (rare, short-term loads)**

up to 4 N/mm<sup>2</sup>

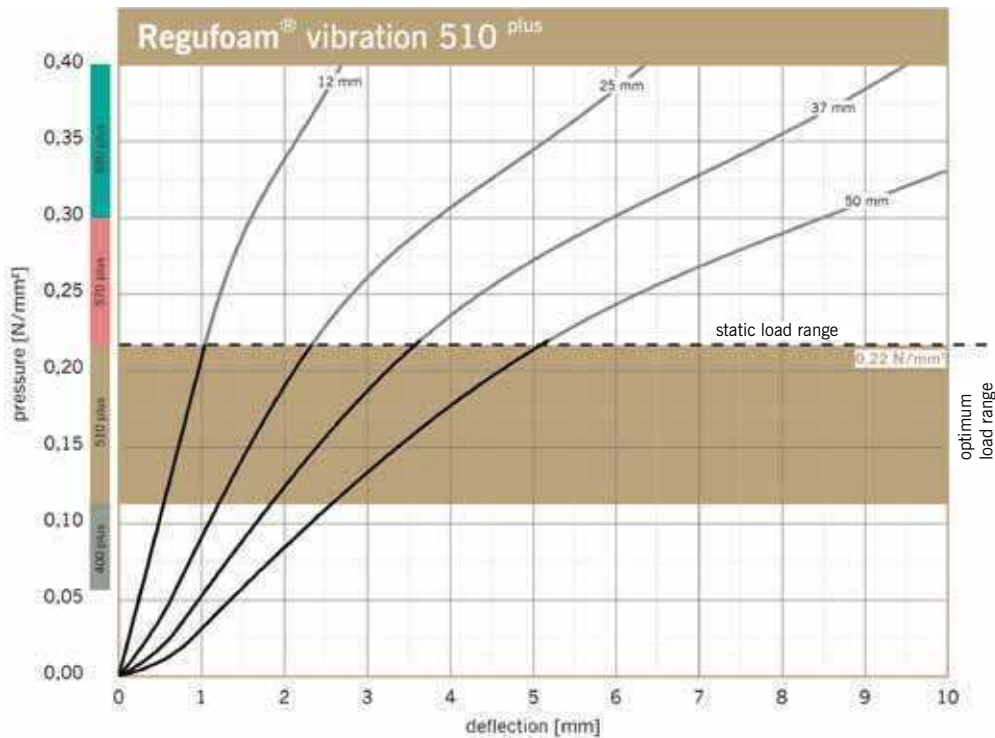


Static modulus of elasticity	Based on EN 826	1.1 - 1.7	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	2.2 - 3.7	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



### Vibration Isolation

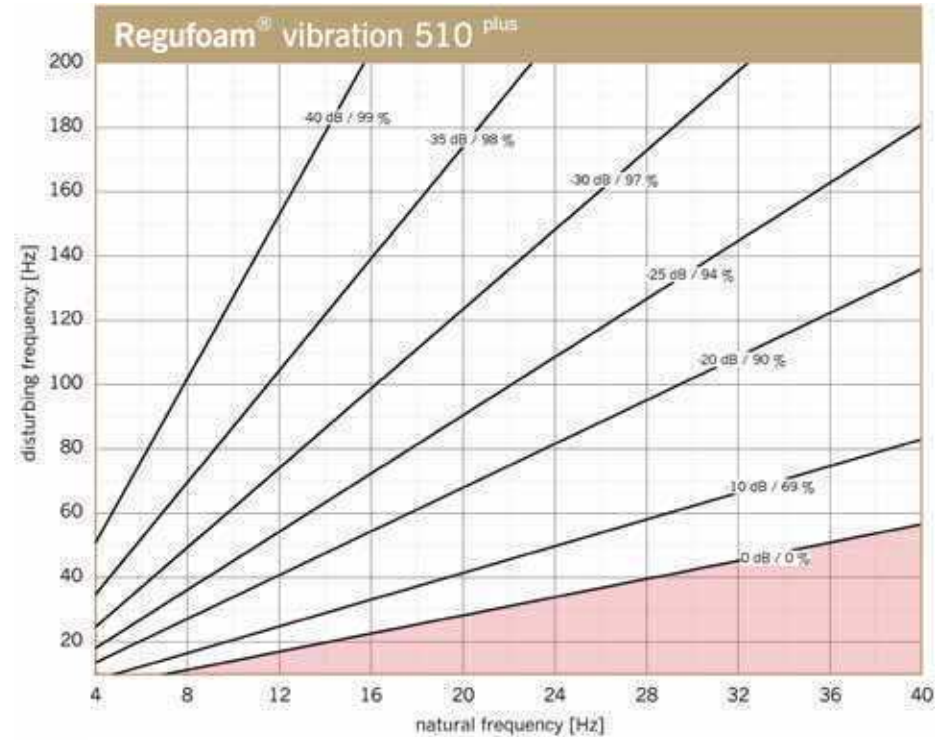
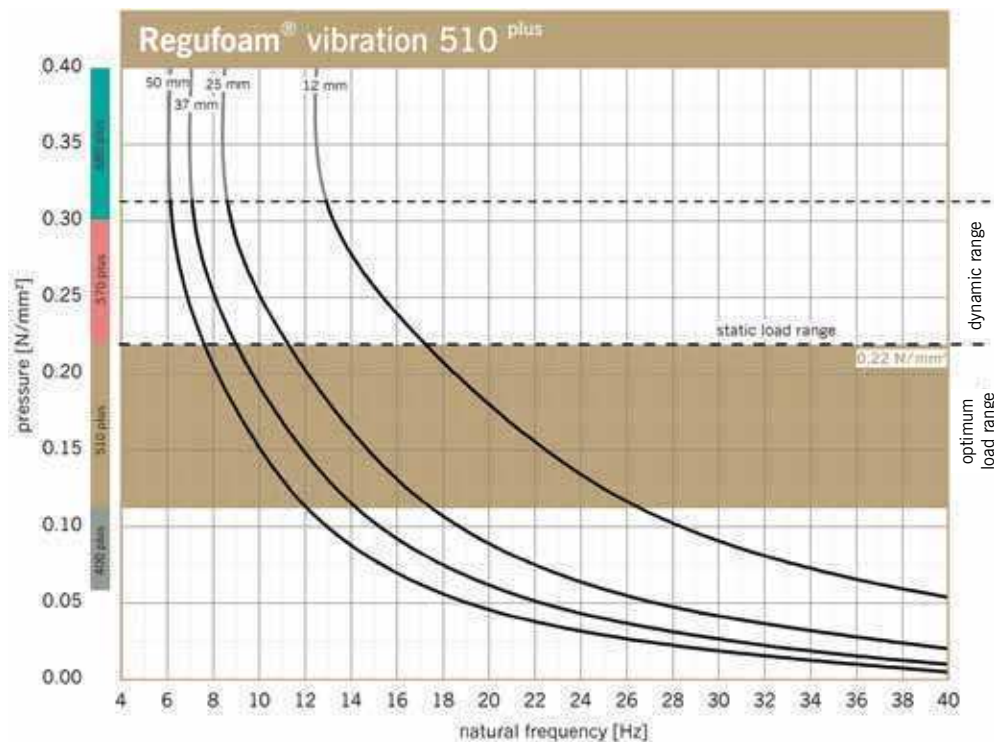


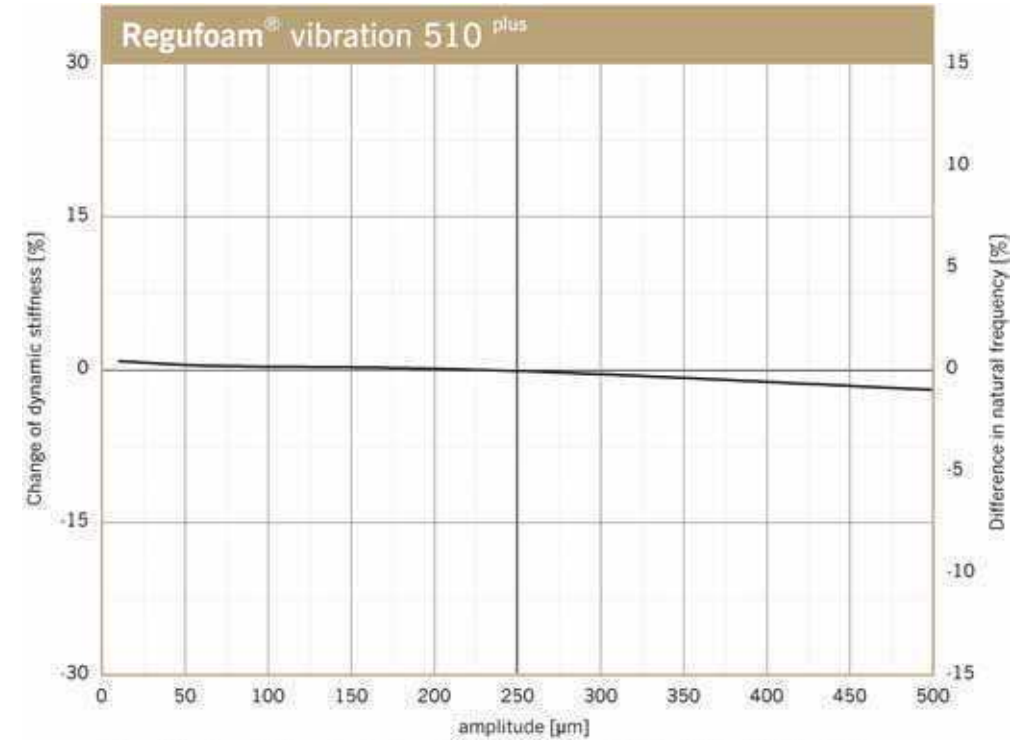
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 510 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

### Natural Frequency

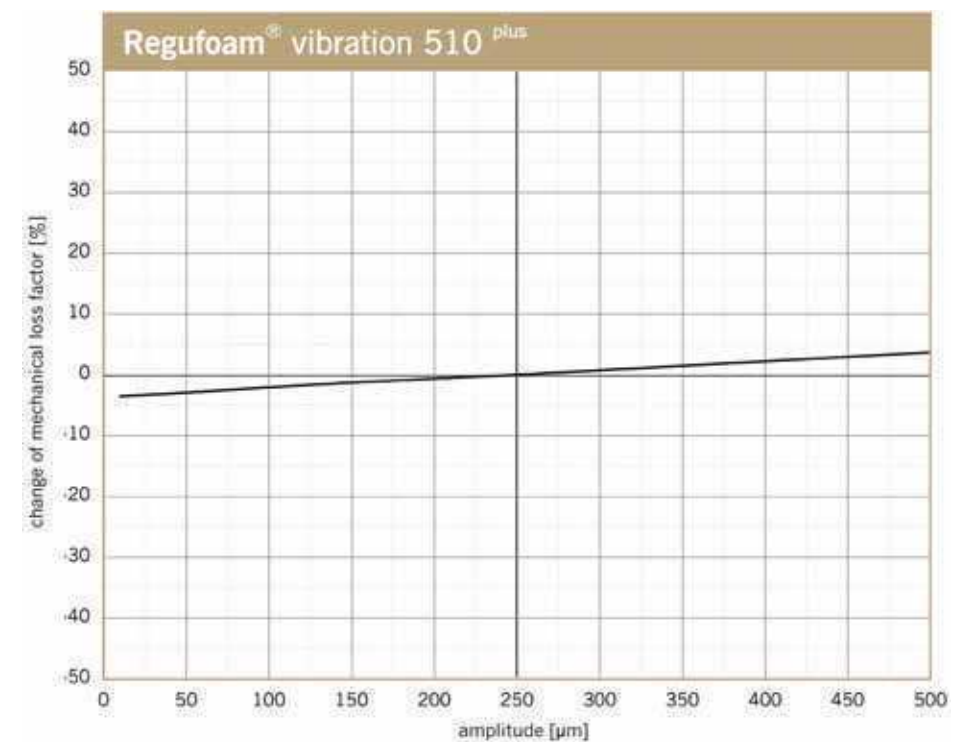


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 510 plus** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

### Influence of Amplitude



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 0.22 N/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm 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 0.22 N/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm x 25 mm.



### Modulus of Elasticity

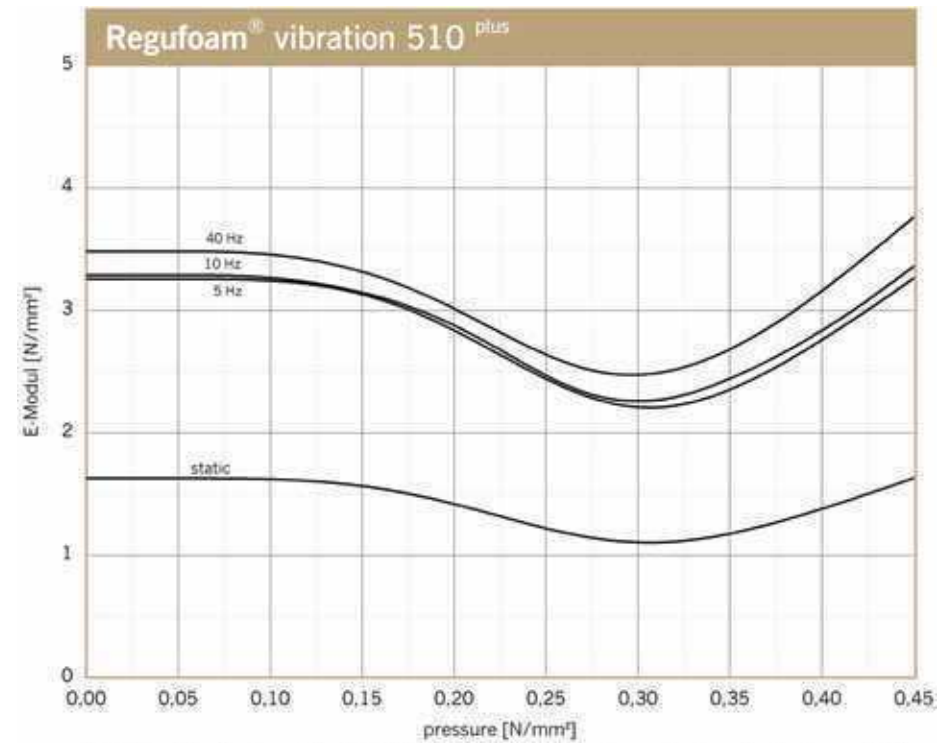


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

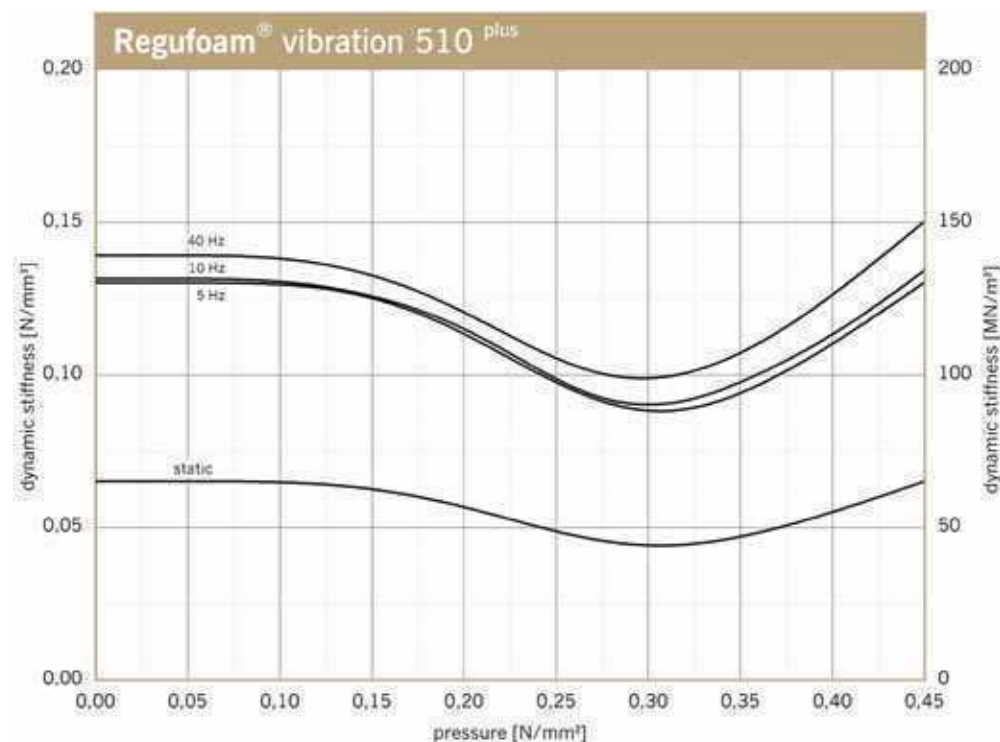
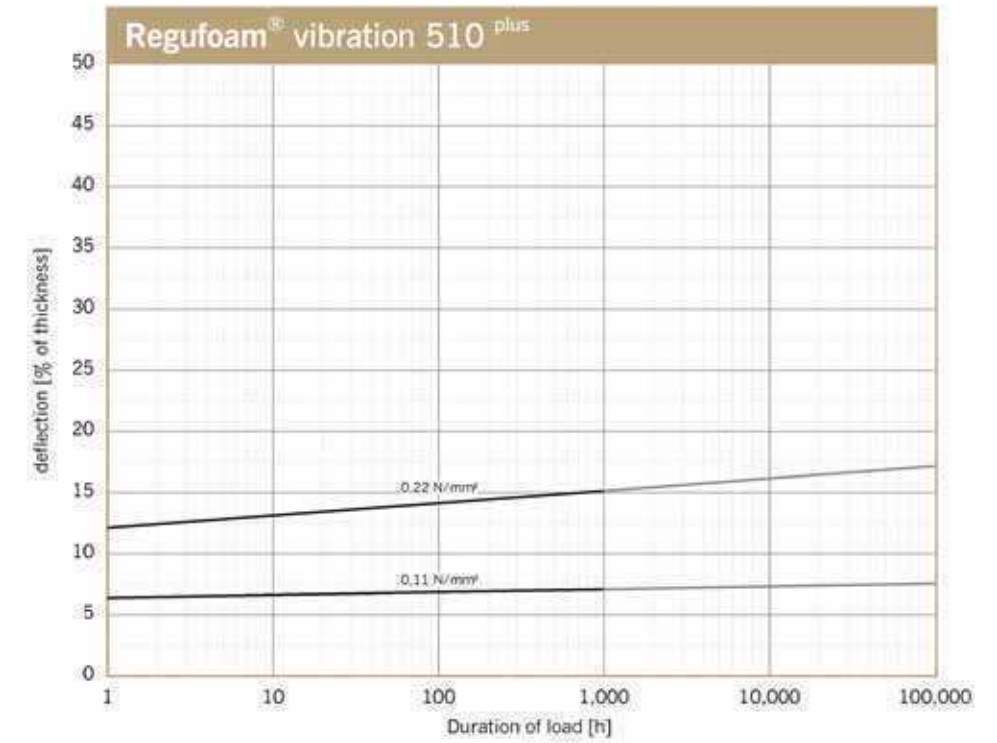


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.30 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.42 N/mm<sup>2</sup>

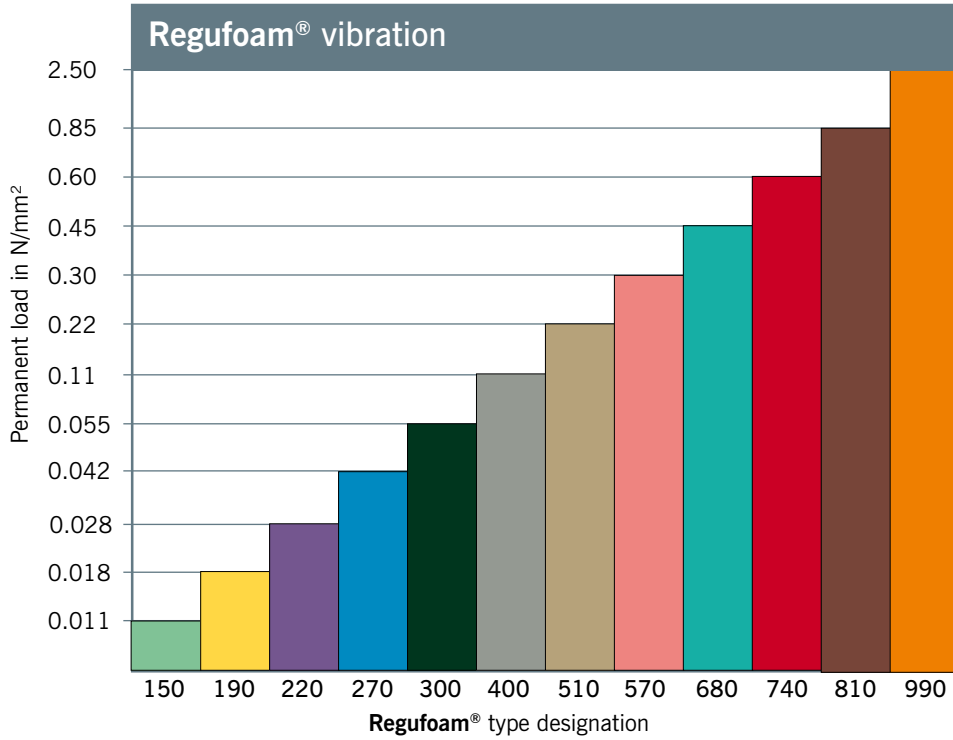
**Peak loads (rare, short-term loads)**

up to 4.5 N/mm<sup>2</sup>

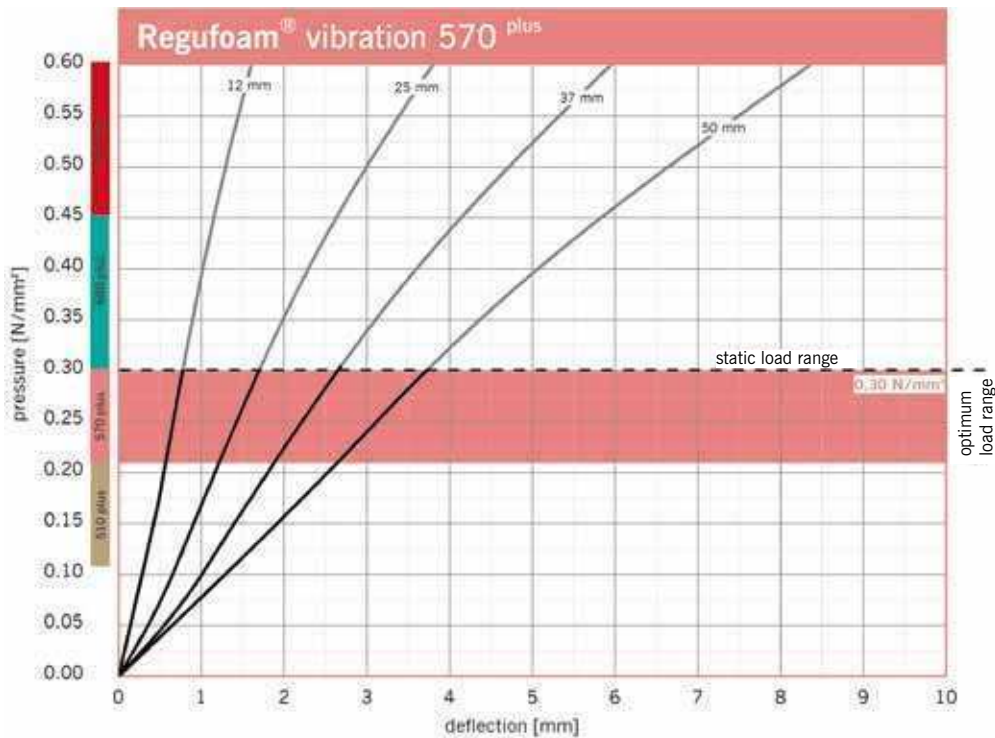


Static modulus of elasticity	Based on EN 826	2.6 - 2.7	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	5.1 - 6.3	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



Vibration Isolation

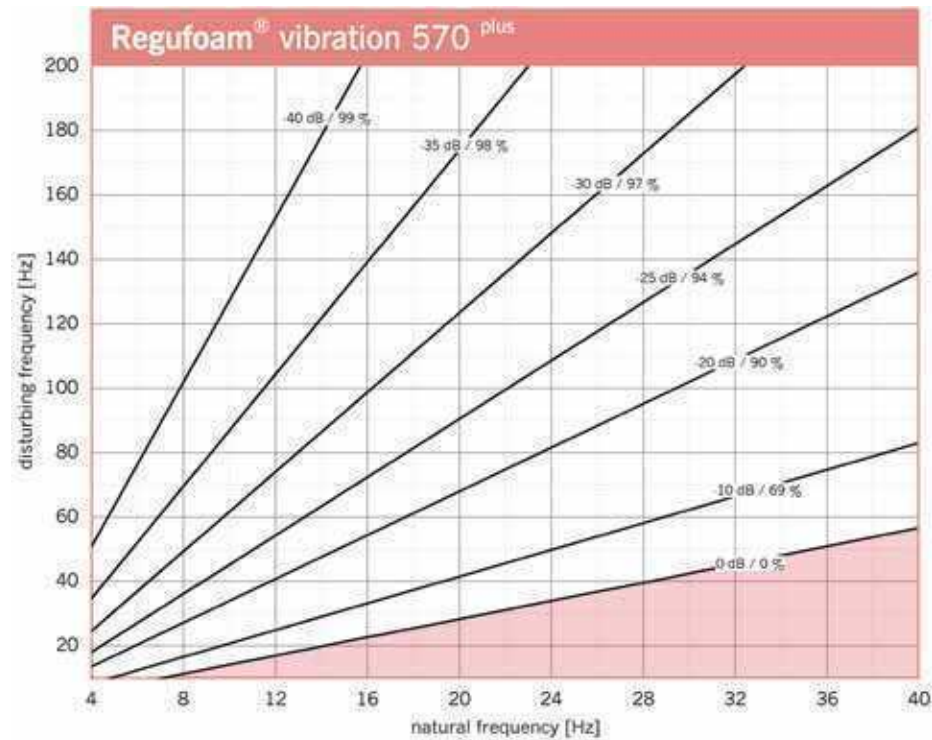
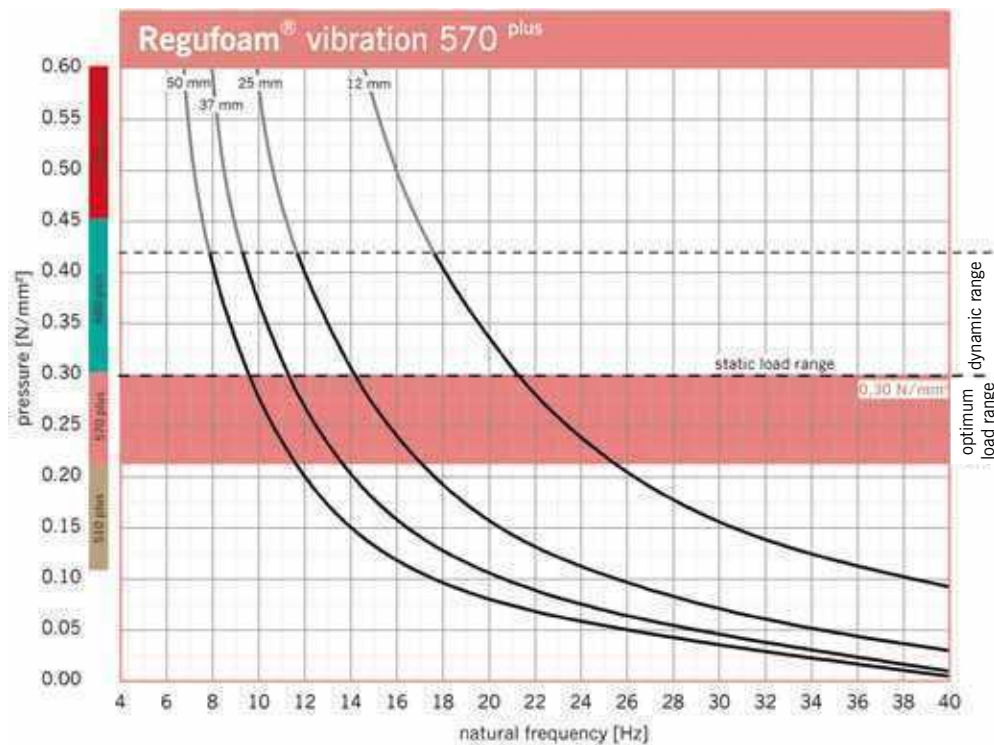


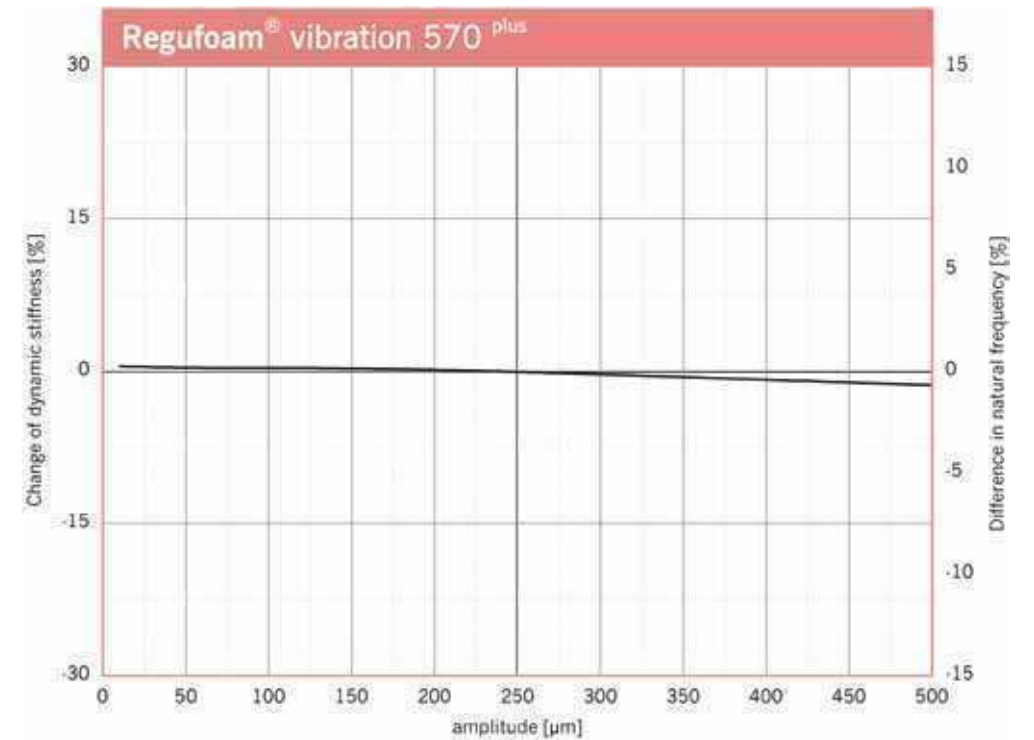
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 570 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

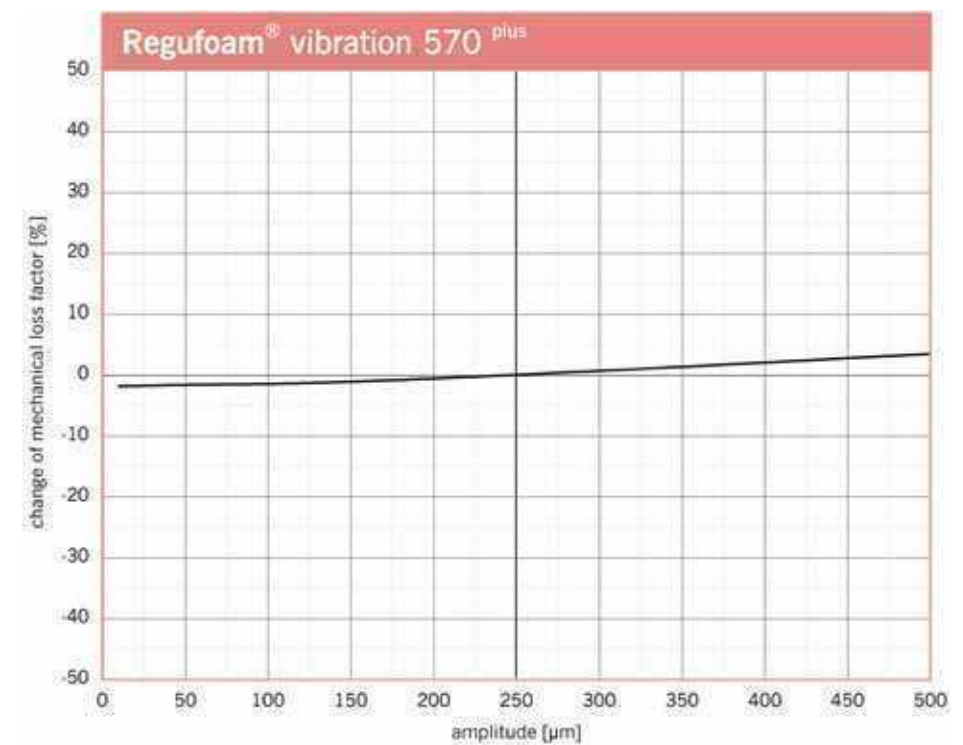


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 570 plus** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude



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 0.30 N/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm 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 0.30 N/mm<sup>2</sup>, dimensions of the specimens 300 mm x 300 mm x 25 mm.



### Modulus of Elasticity

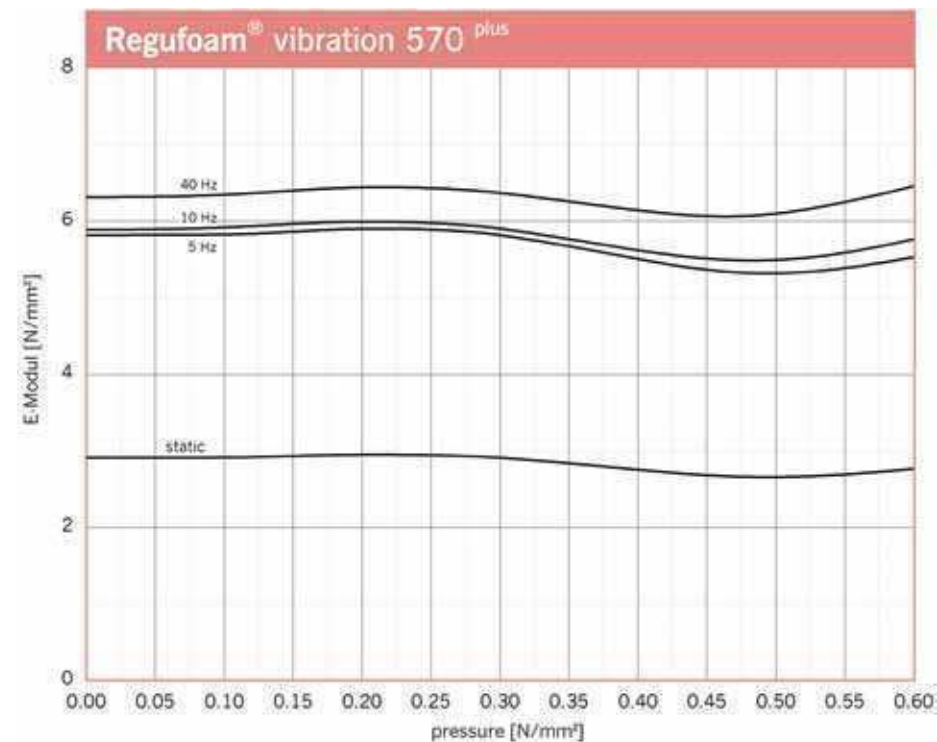


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

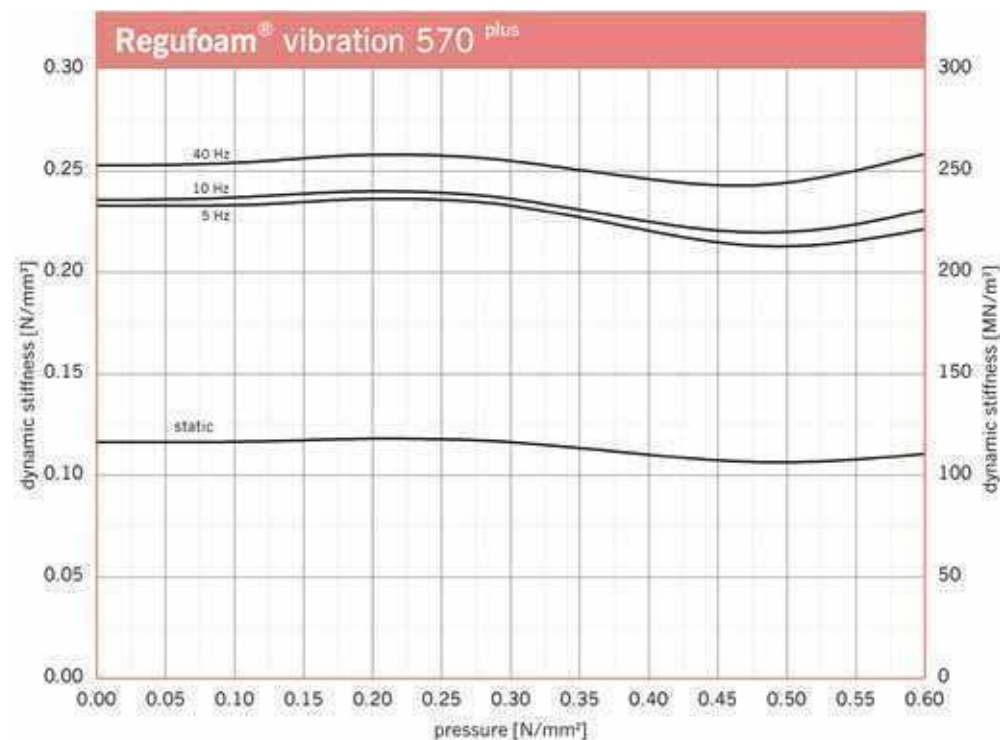
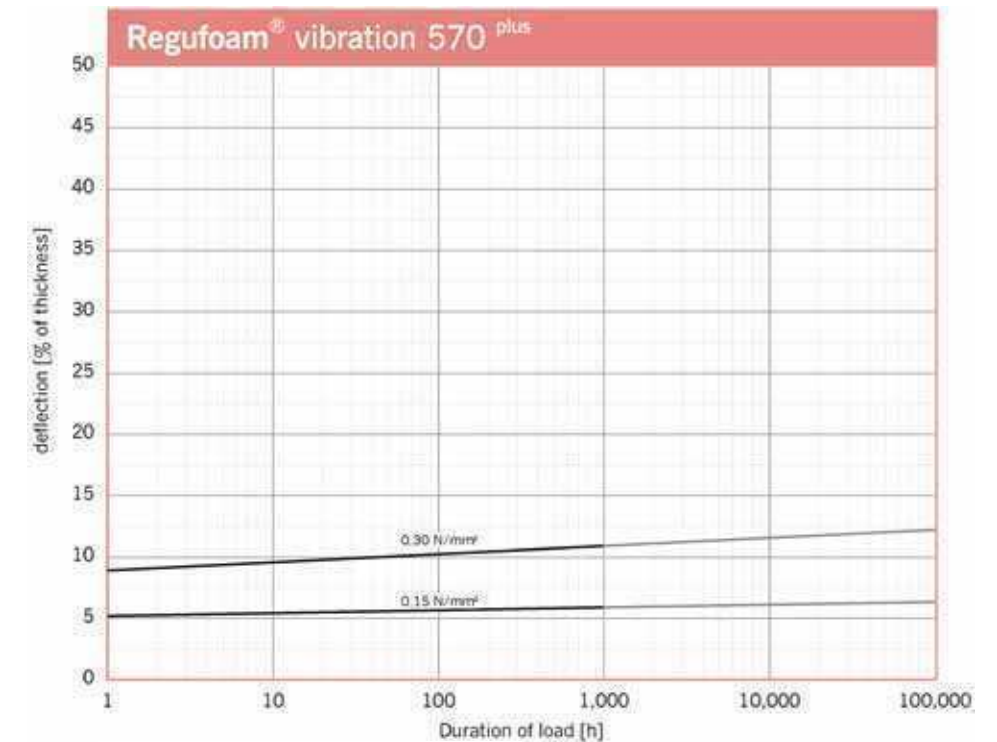


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

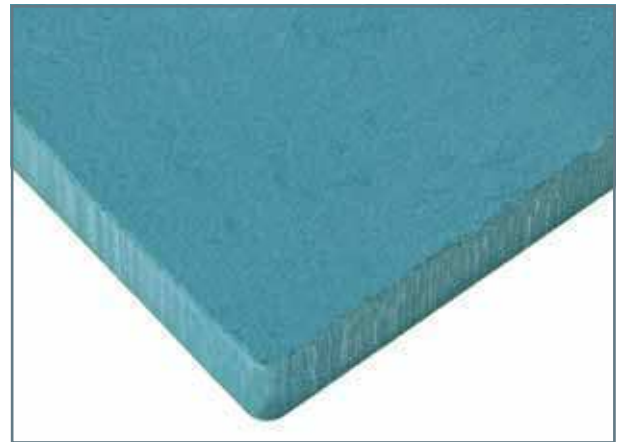
0.45 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.62 N/mm<sup>2</sup>

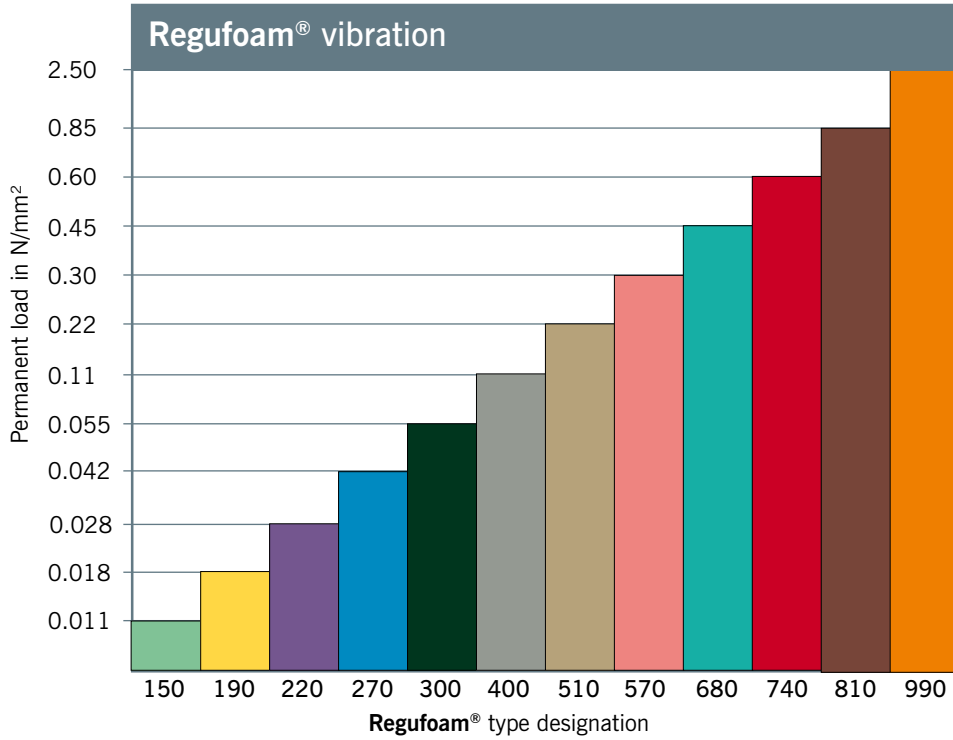
**Peak loads (rare, short-term loads)**

up to 5 N/mm<sup>2</sup>

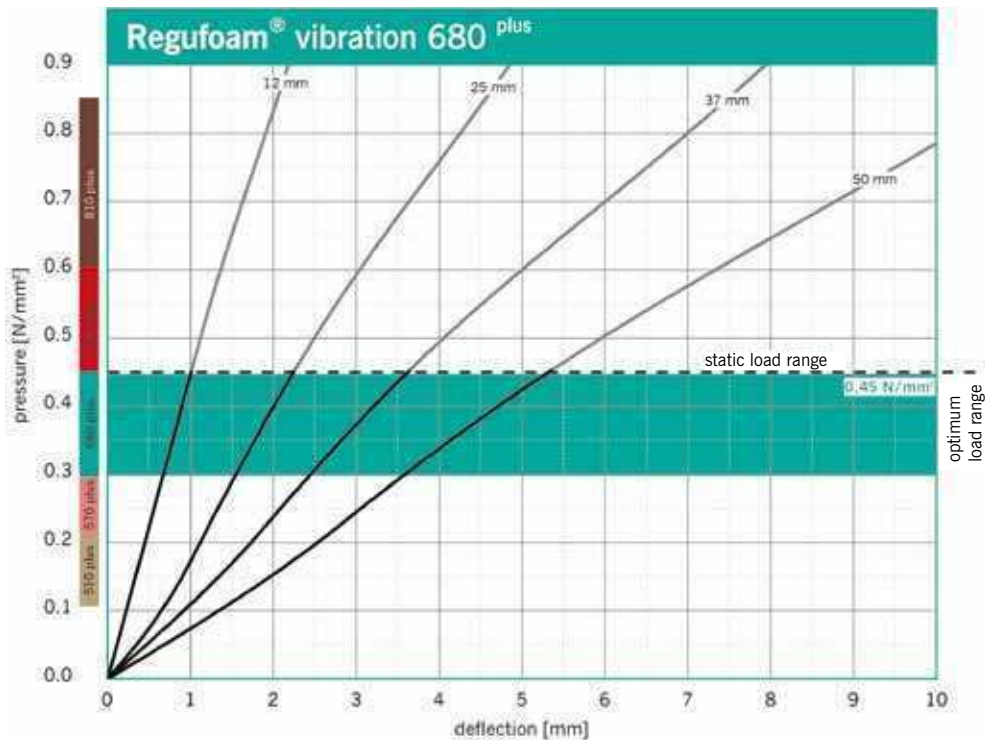


Static modulus of elasticity	Based on EN 826	2.0 - 2.9	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	6.8 - 10.0	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-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

## Load Ranges



## Load Deflection



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 mm x 300 mm.



Vibration Isolation

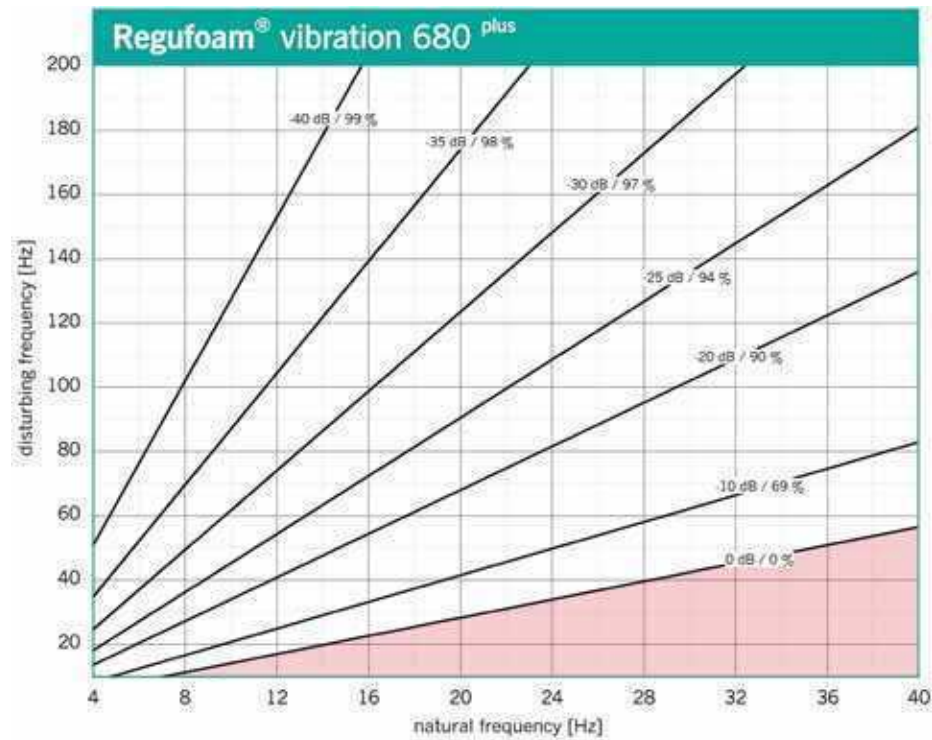
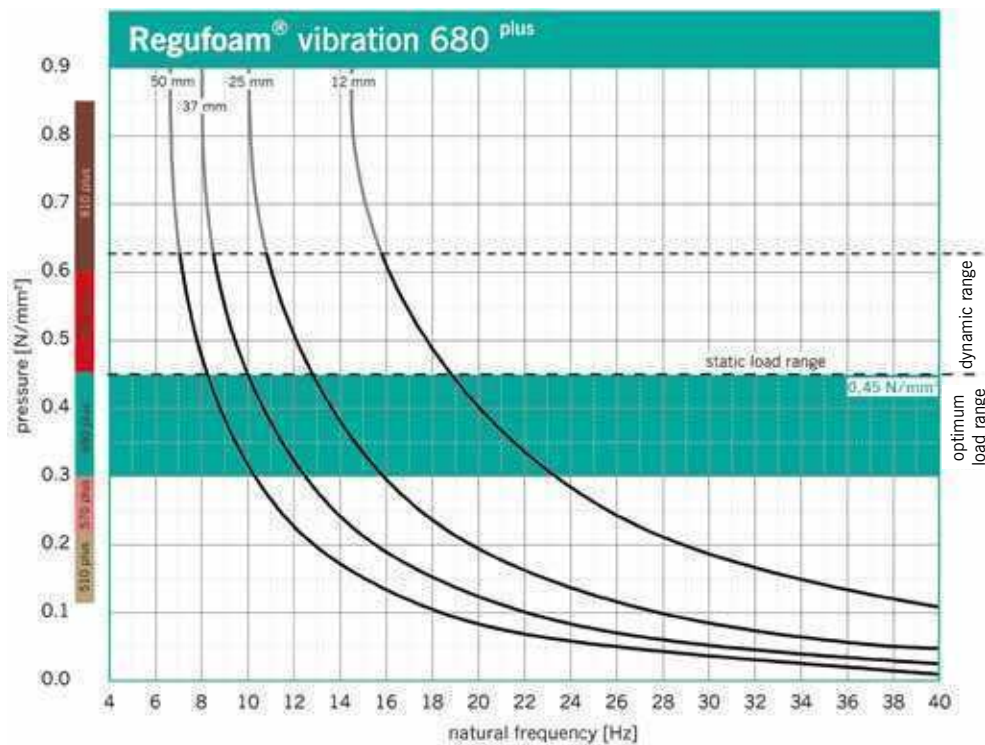


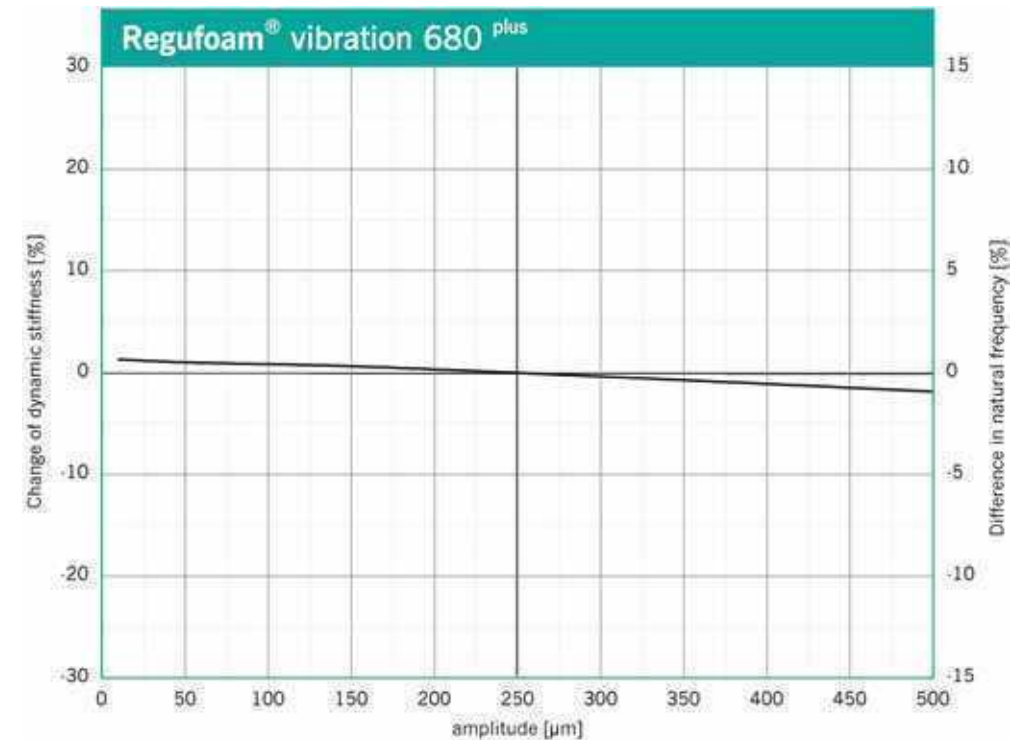
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 680 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

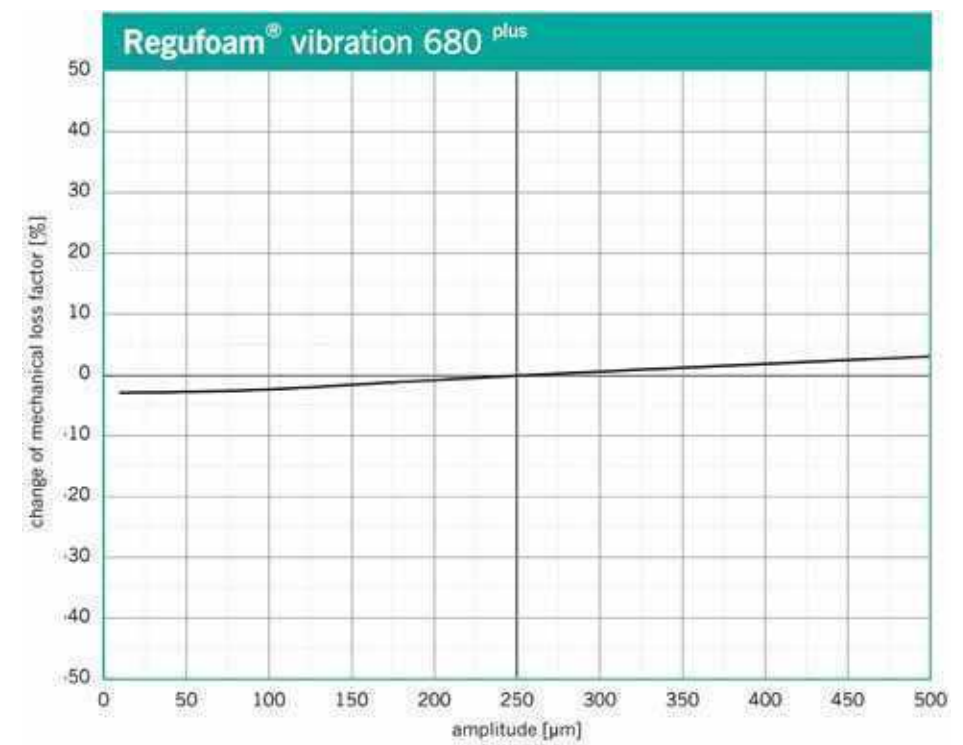


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 680 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude



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 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm 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 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.



### Modulus of Elasticity

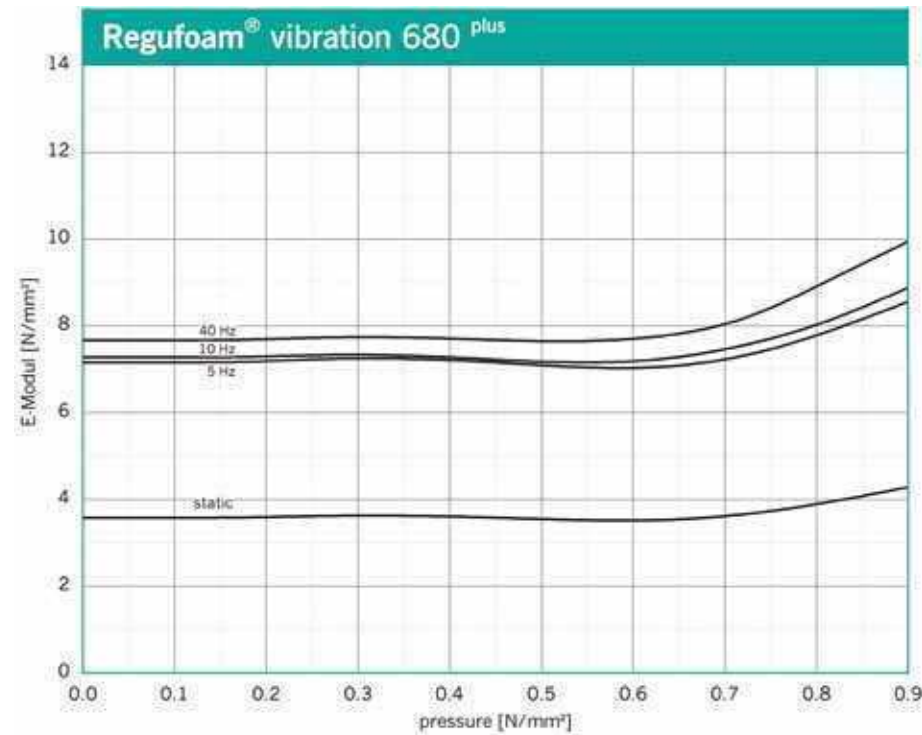


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

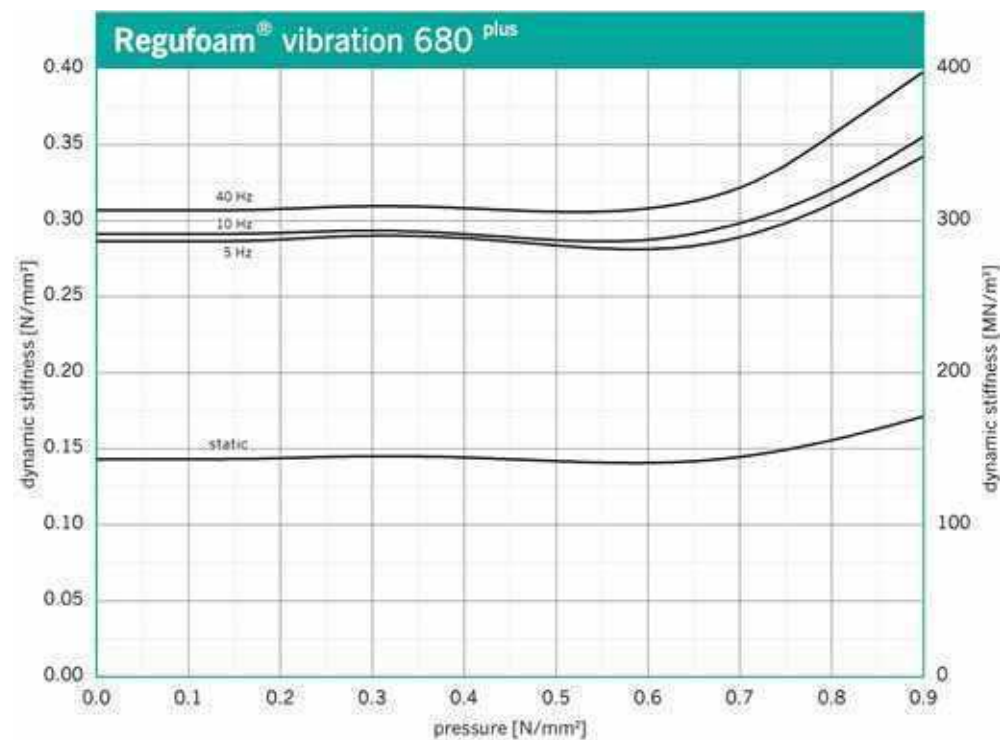
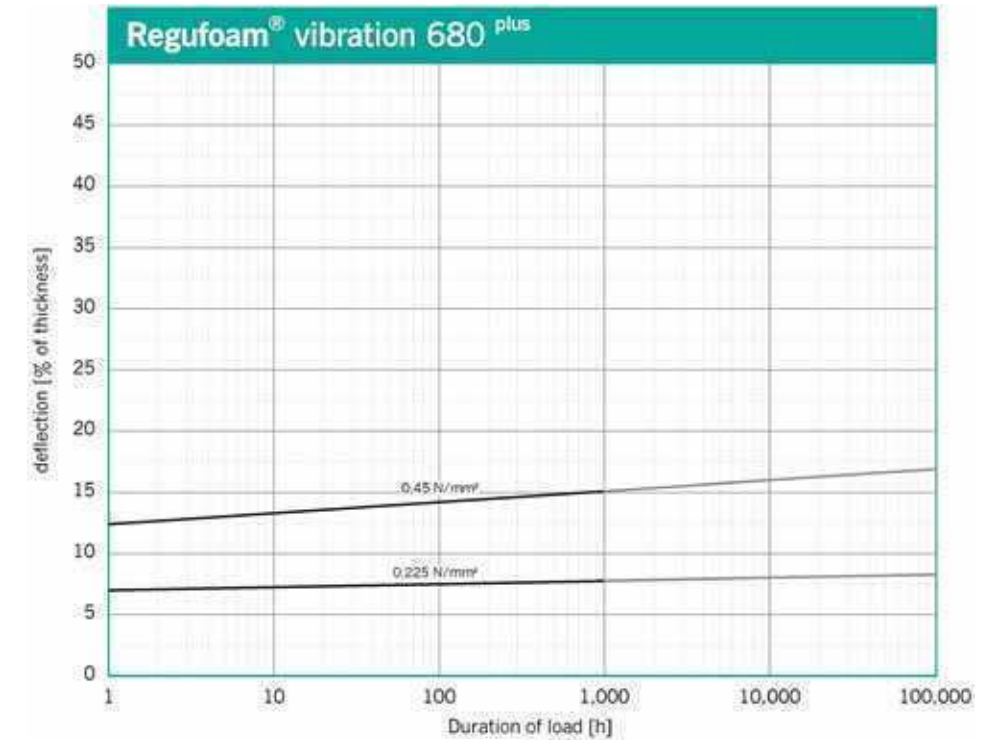


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

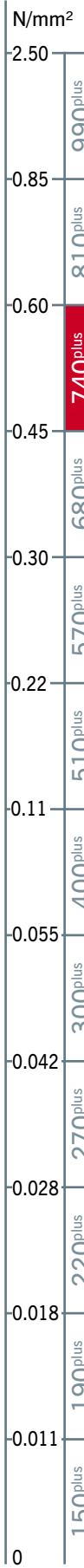
0.60 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 0.85 N/mm<sup>2</sup>

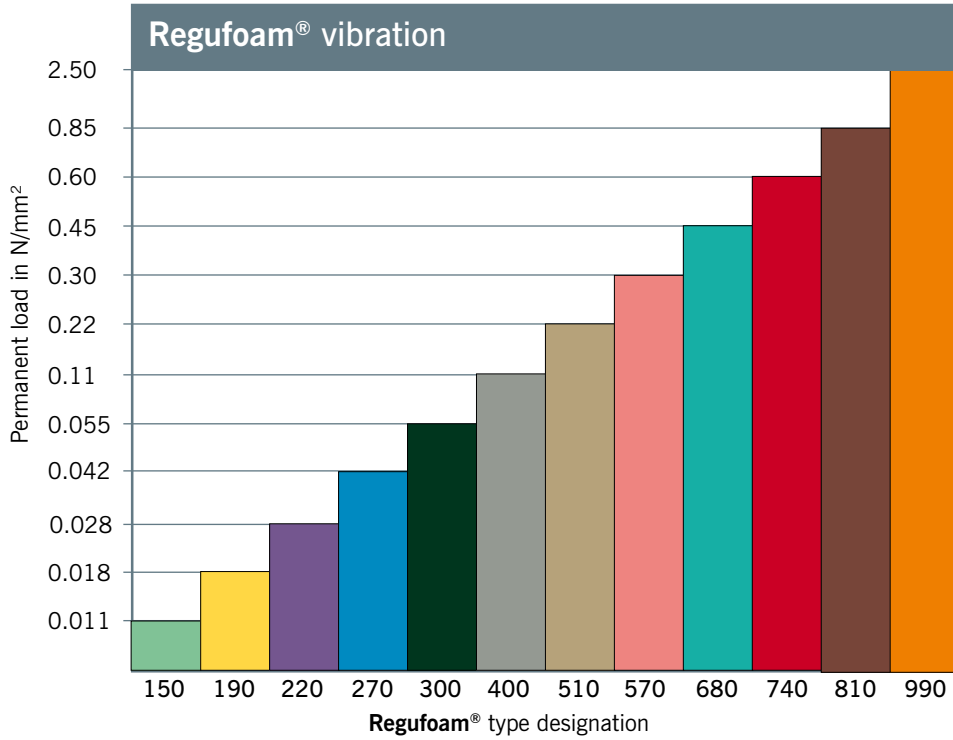
**Peak loads (rare, short-term loads)**

up to 6 N/mm<sup>2</sup>

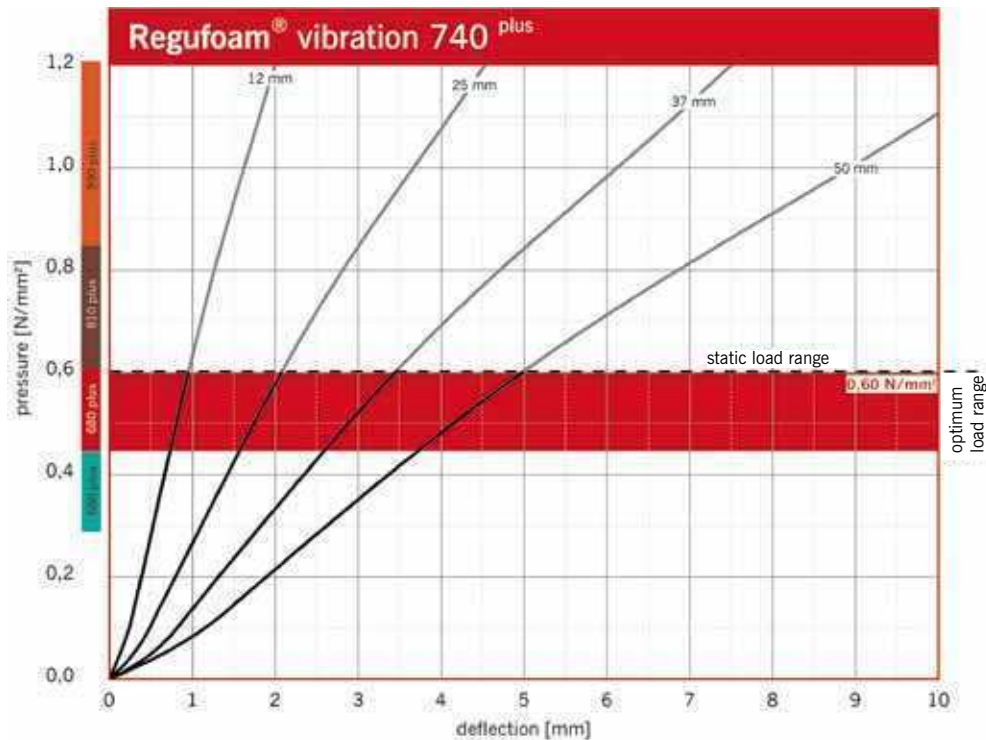


Static modulus of elasticity	Based on EN 826	4.3 - 5.9	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	7.9 - 13.0	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.7	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1050	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

## Load Ranges



## Load Deflection



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 mm x 250 mm.



Vibration Isolation

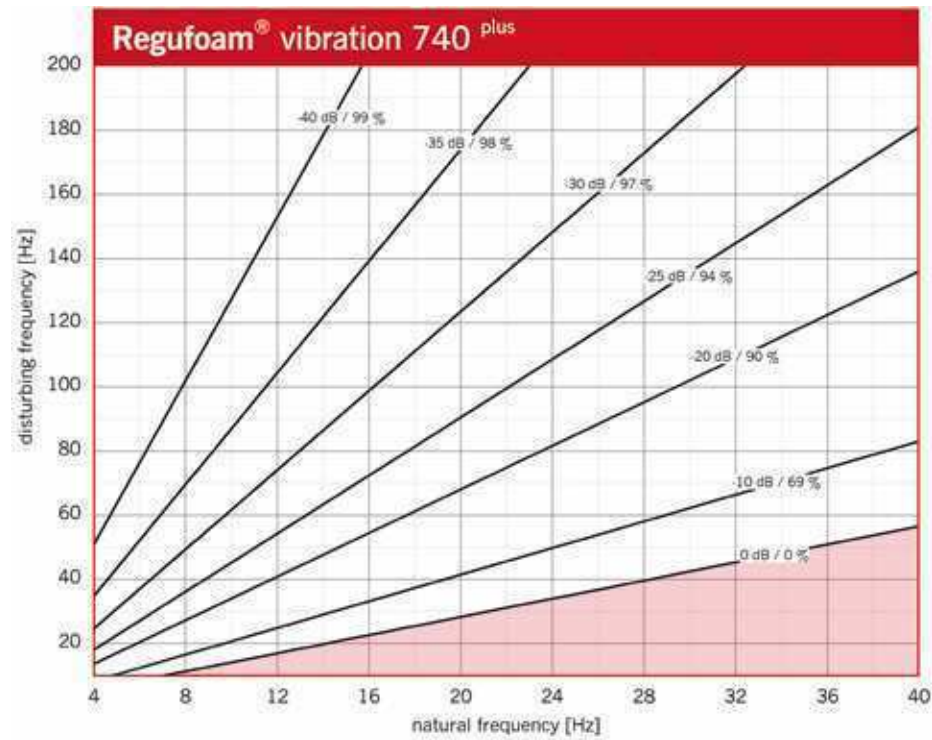
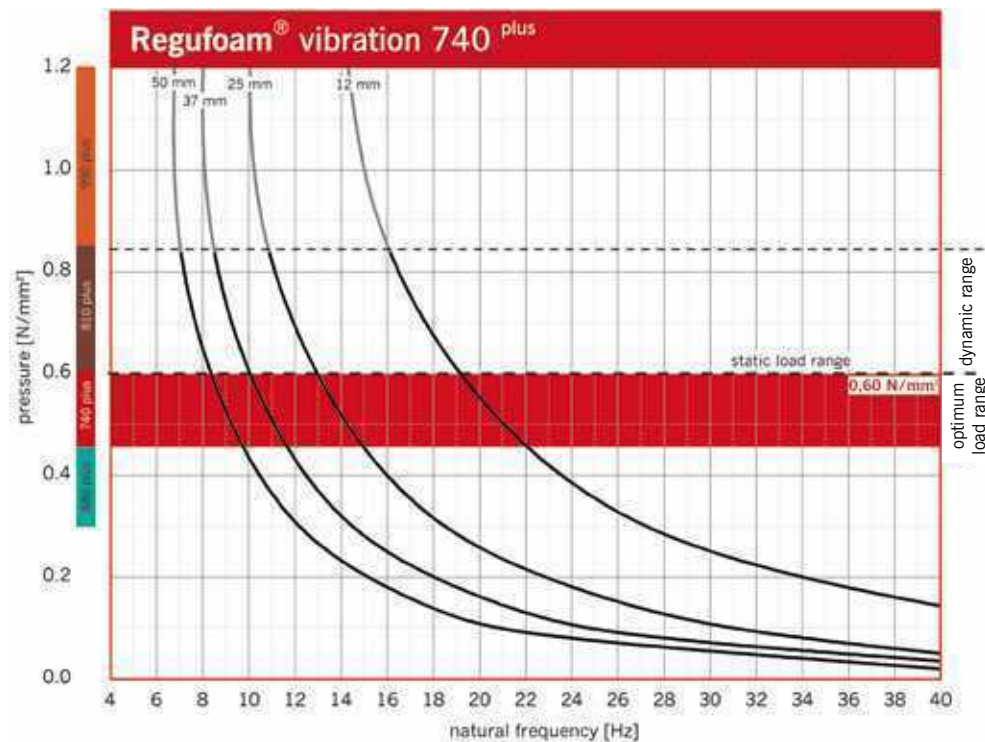


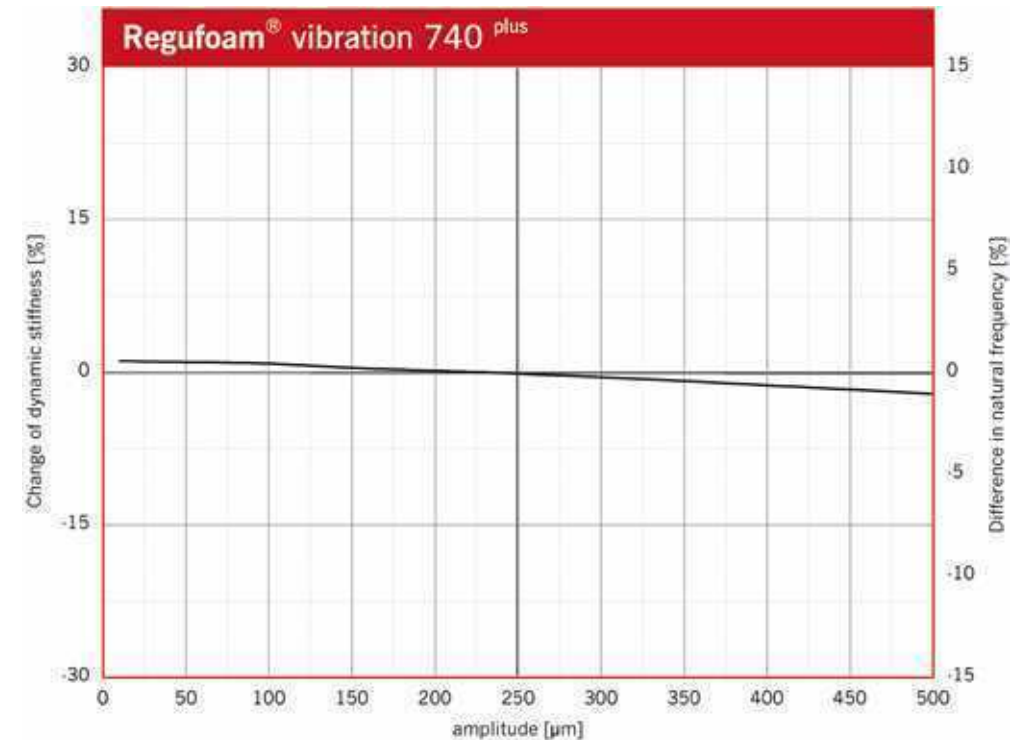
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 740 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

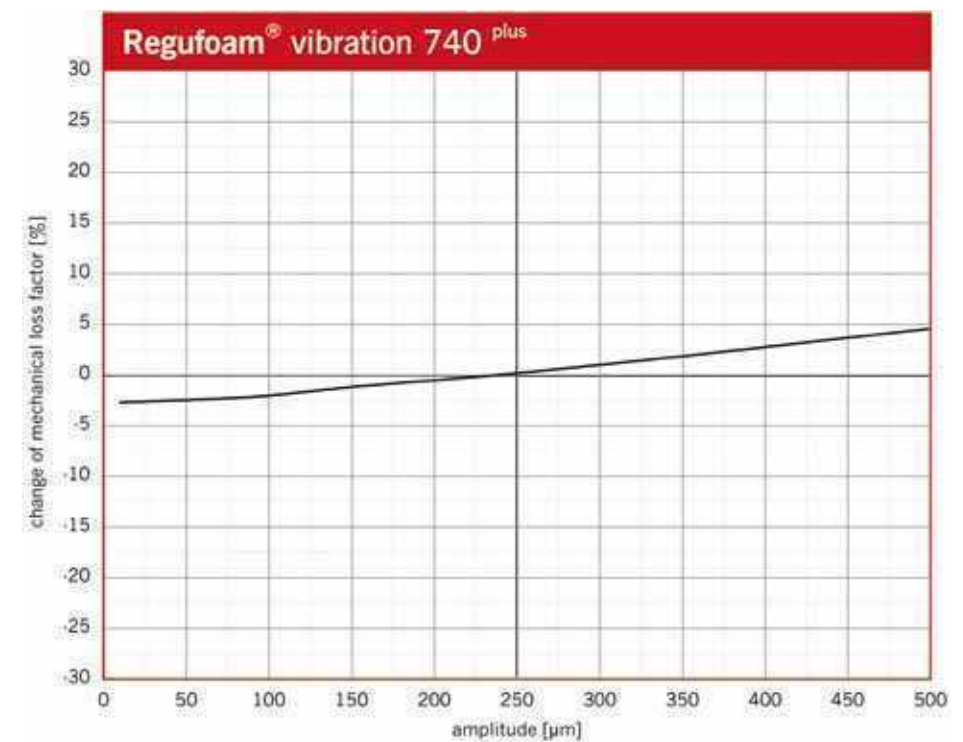


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 740 plus on a rigid base. Dimensions of test specimens 250 mm x 250 mm.

Influence of Amplitude



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 0.60 N/mm², dimensions of the specimens 250 mm x 250 mm 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 0.60 N/mm², dimensions of the specimens 250 mm x 250 mm x 50 mm.



### Modulus of Elasticity

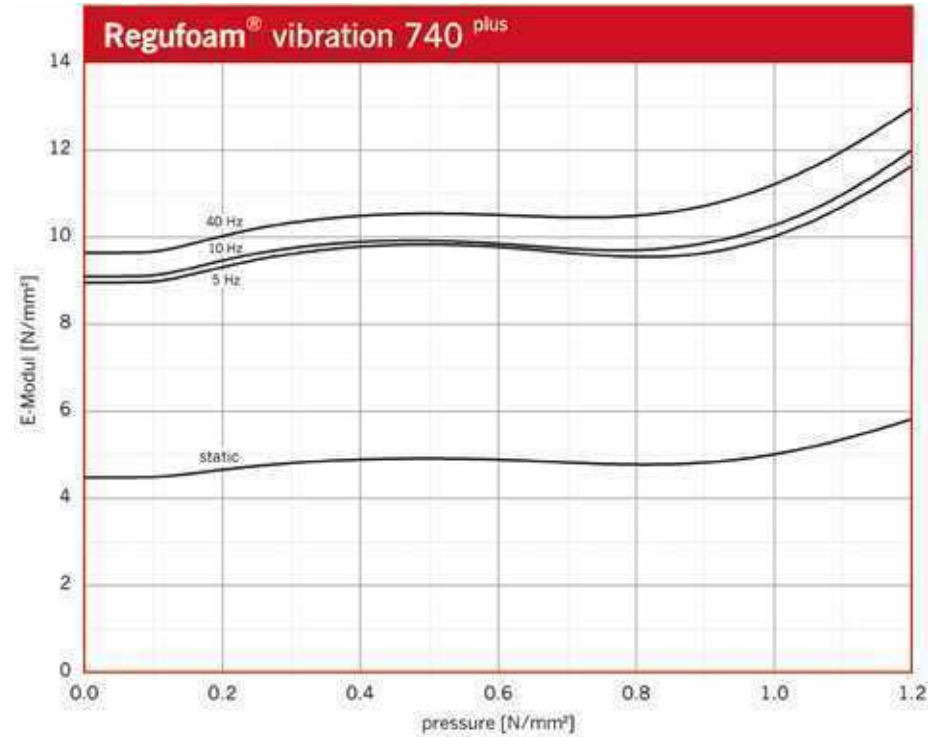


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 50 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Dynamic Stiffness

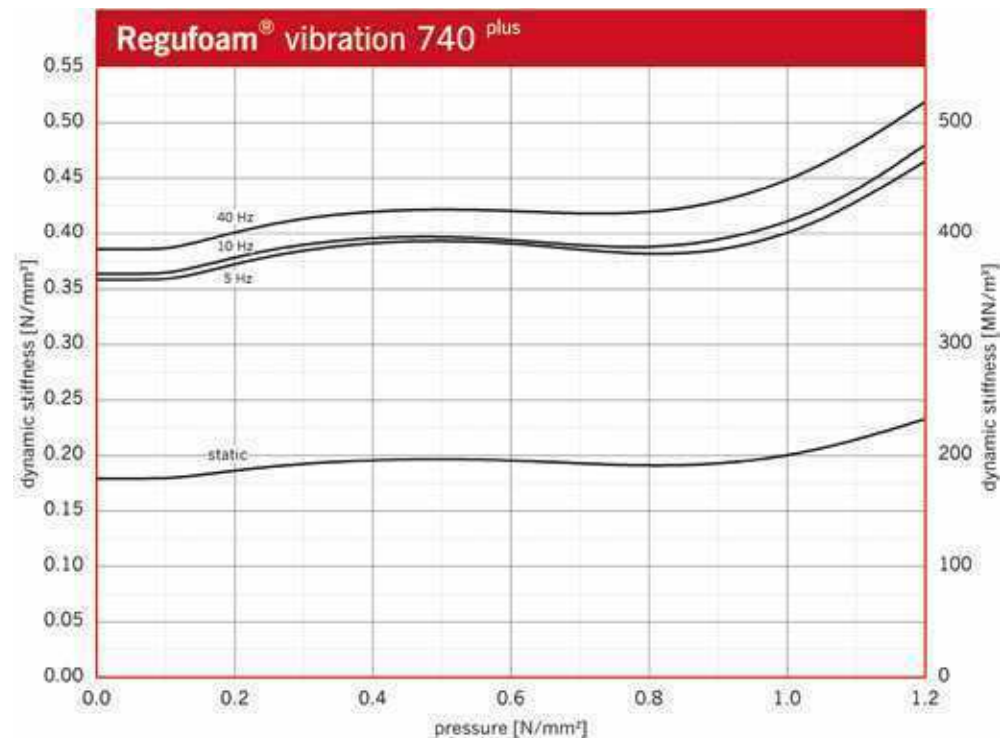
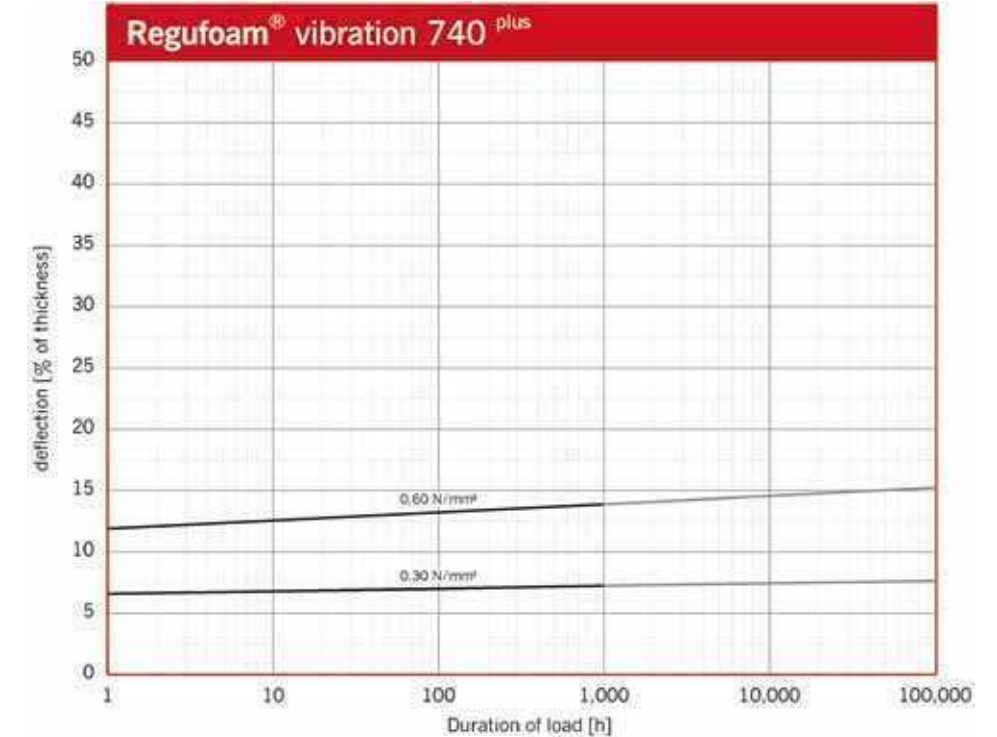


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 250 mm x 250 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

0.85 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 1.20 N/mm<sup>2</sup>

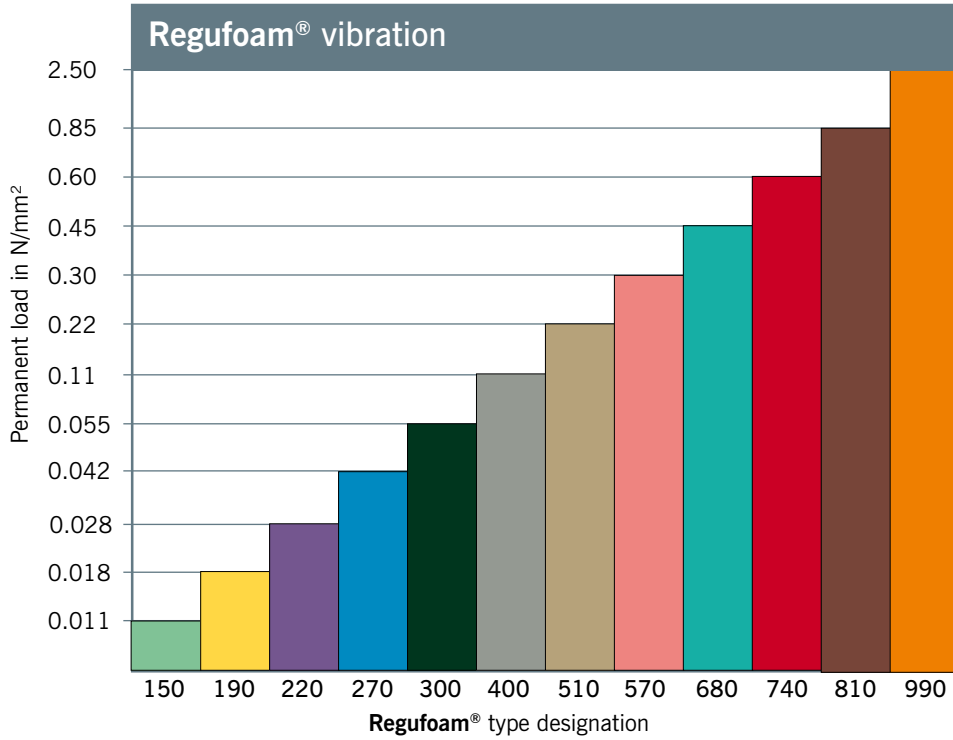
**Peak loads (rare, short-term loads)**

up to 7 N/mm<sup>2</sup>

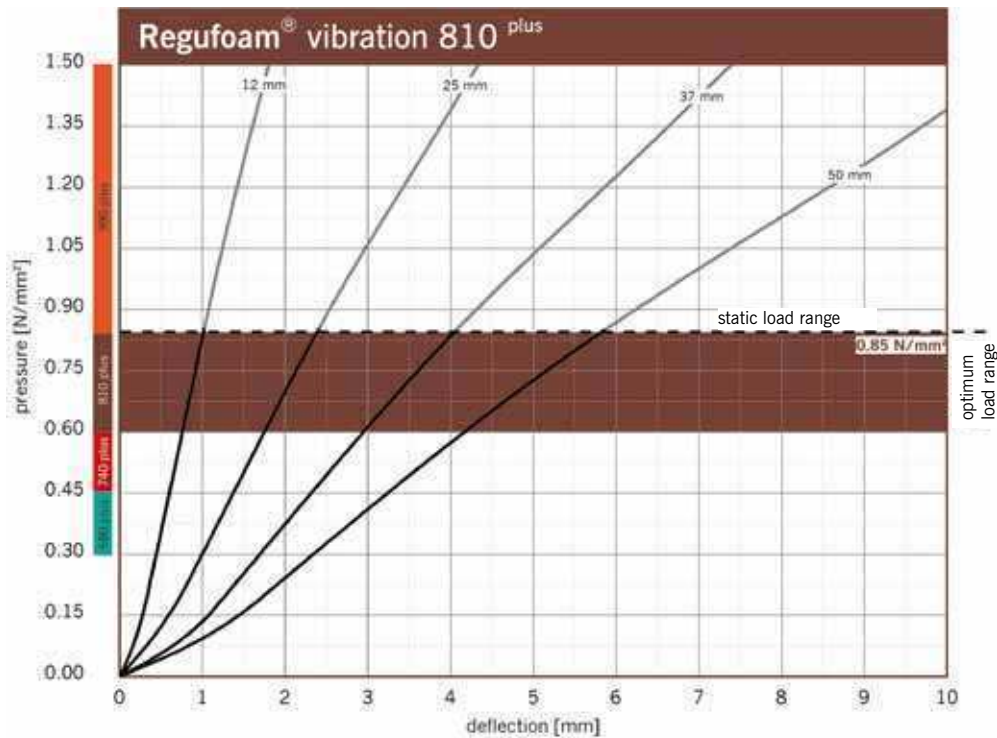


Static modulus of elasticity	Based on EN 826	5.8 - 7.2	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	11.0 - 16.5	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.75	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1241	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

## Load Ranges



## Load Deflection



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 mm x 250 mm.



Vibration Isolation

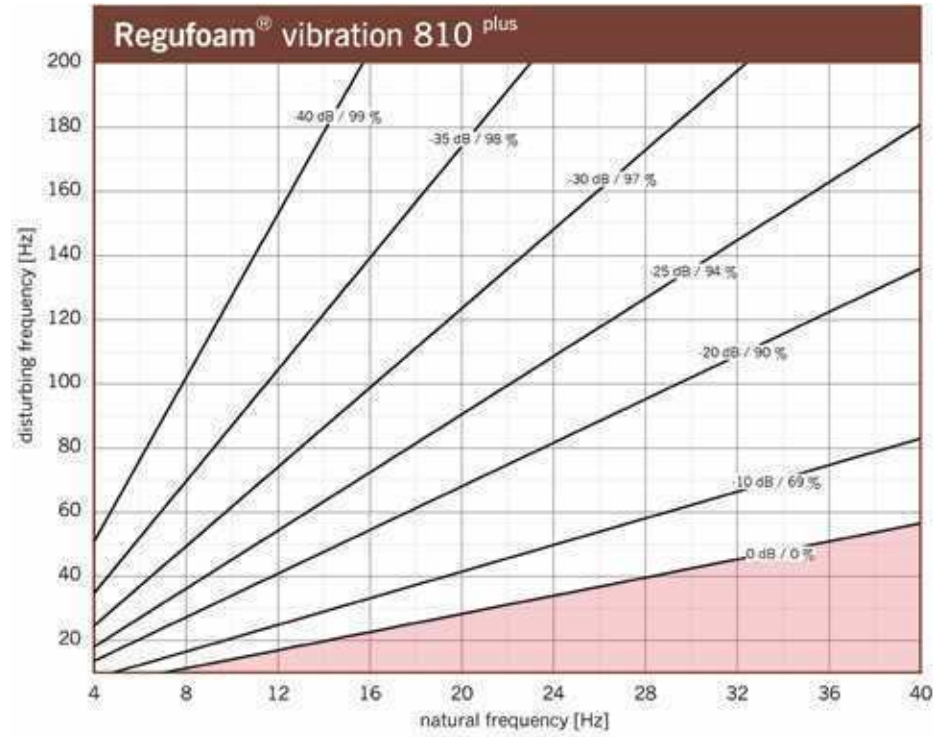
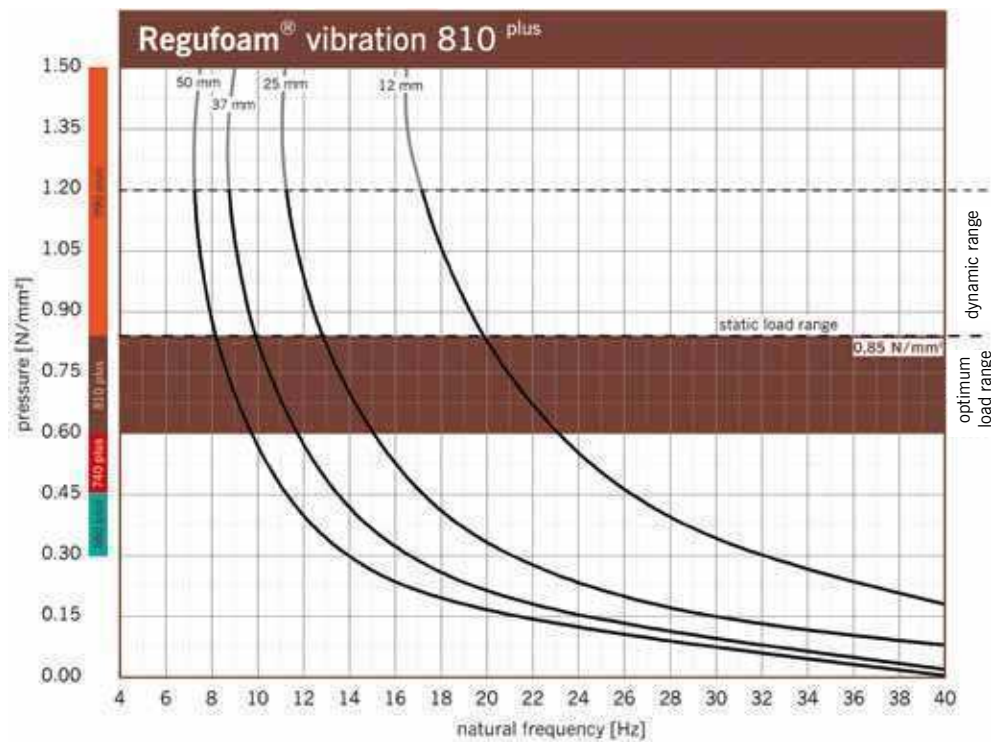


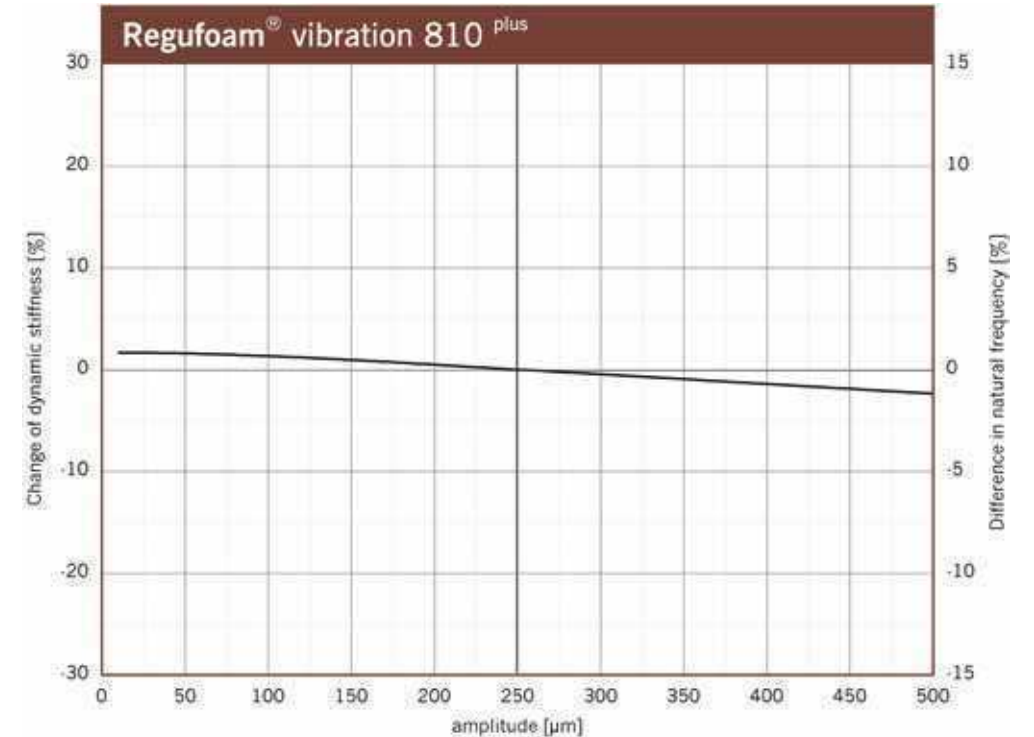
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 810 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

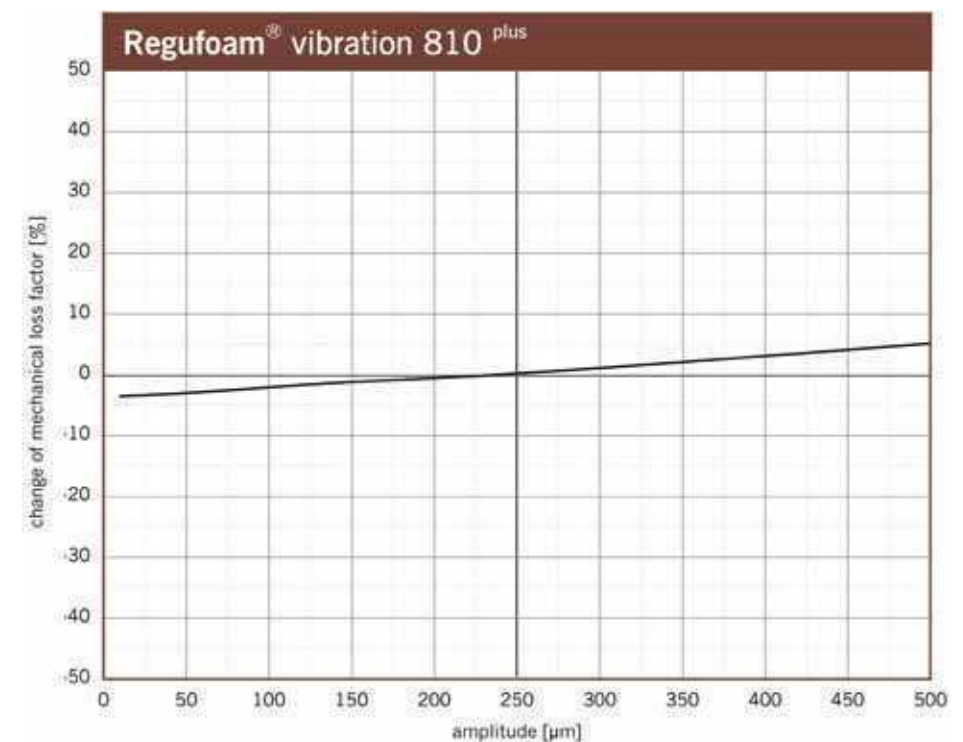


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 810 plus on a rigid base. Dimensions of test specimens 250 mm x 250 mm.

Influence of Amplitude



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 0.85 N/mm², dimensions of the specimens 250 mm x 250 mm 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 0.85 N/mm², dimensions of the specimens 250 mm x 250 mm x 25 mm.



### Modulus of Elasticity

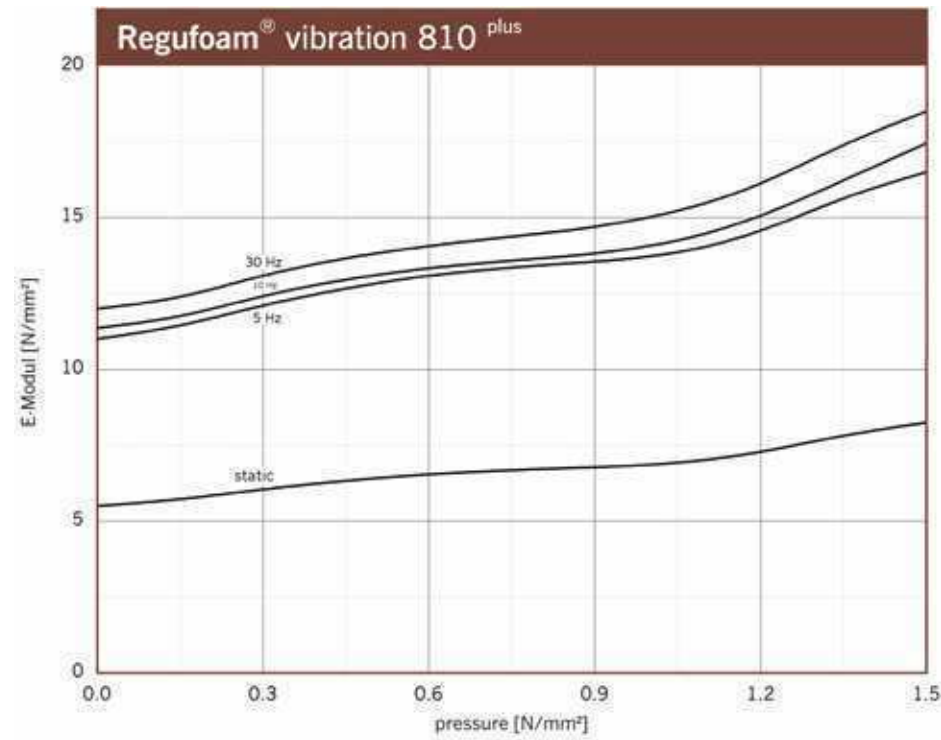


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 250 mm x 250 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

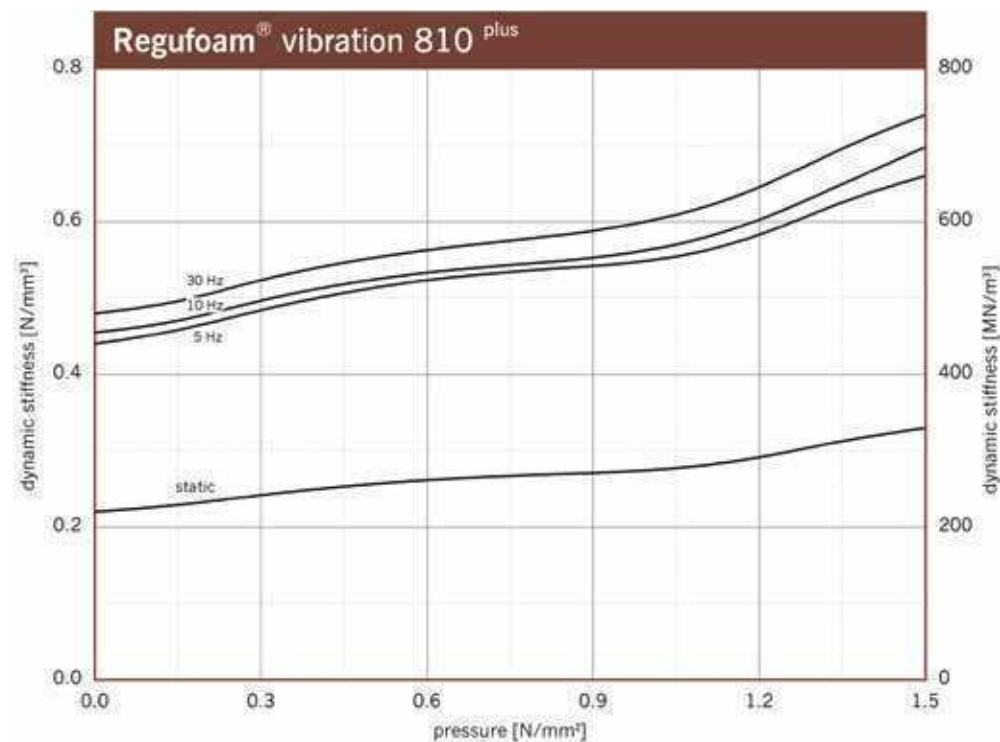
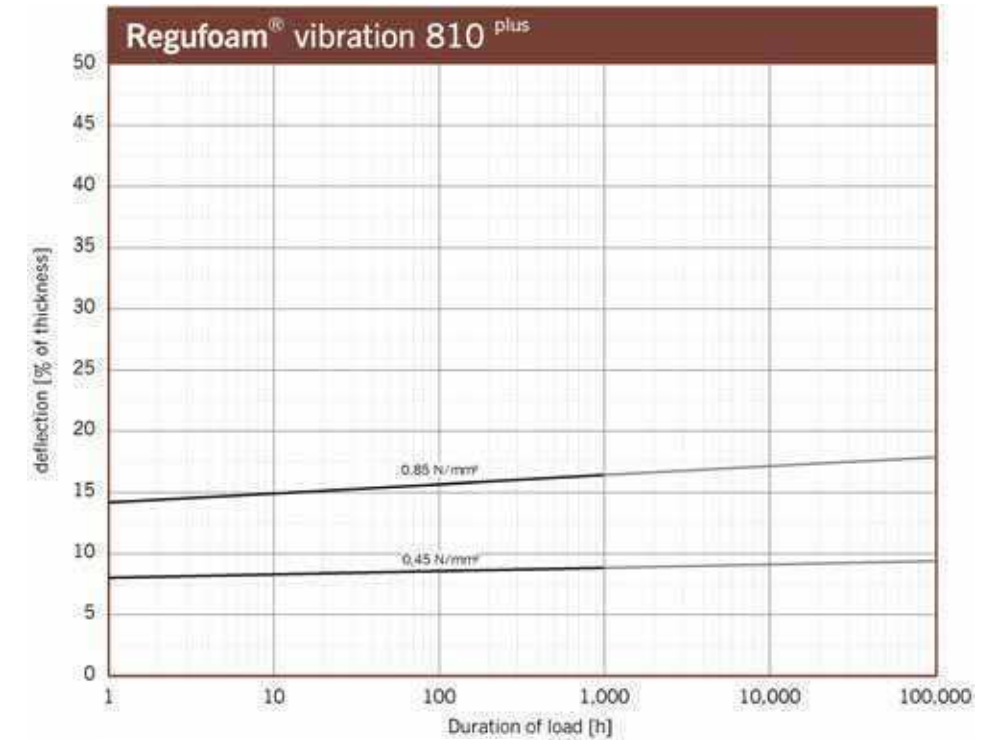


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 250 mm x 250 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 250 mm x 250 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)



**Standard forms of delivery, ex warehouse**

**Rolls**

Thickness: 12 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

**Continuous static load**

2.5 N/mm<sup>2</sup>

**Continuous and variable loads/operating load range**

0 to 3.5 N/mm<sup>2</sup>

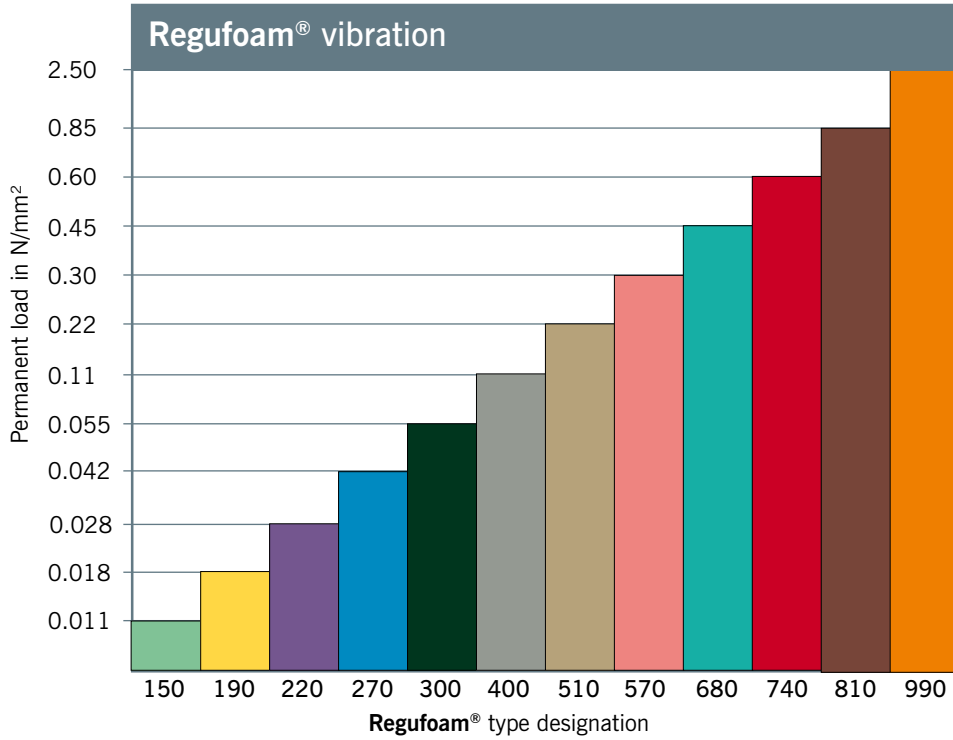
**Peak loads (rare, short-term loads)**

up to 8.0 N/mm<sup>2</sup>

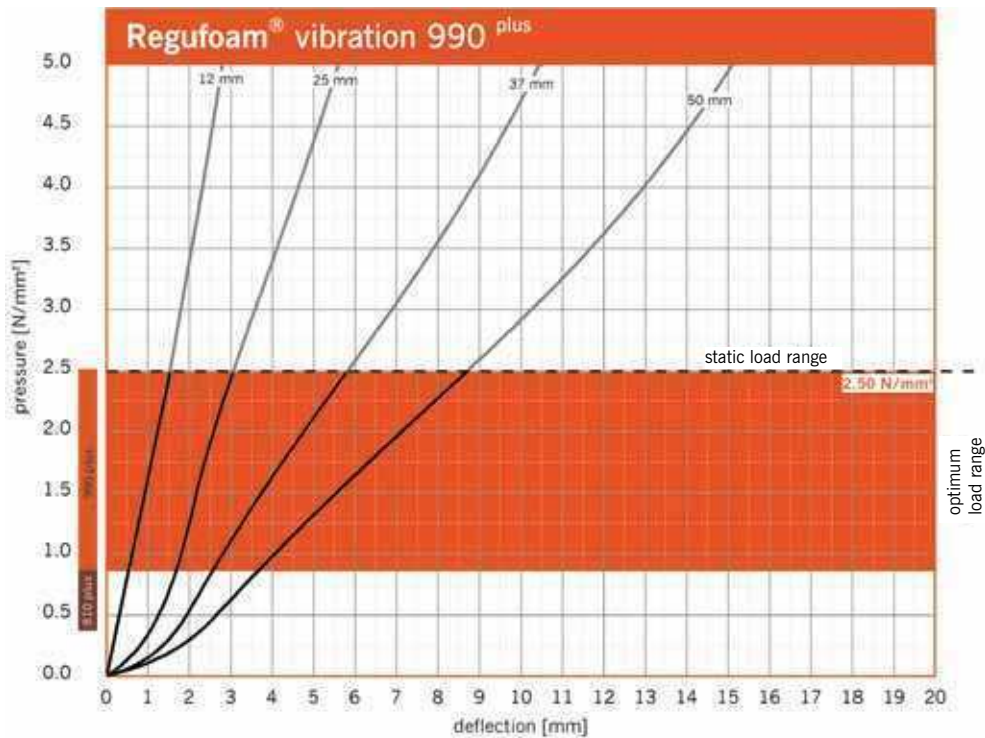


Static modulus of elasticity	Based on EN 826	20.0 - 78.0	N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	41.0 - 160.0	N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss 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 <sup>2</sup>	
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
Sliding friction	BSW-laboratory BSW-laboratory	0.5 0.6	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	3640	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

## Load Ranges



## Load Deflection



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 mm x 125 mm.



### Vibration Isolation

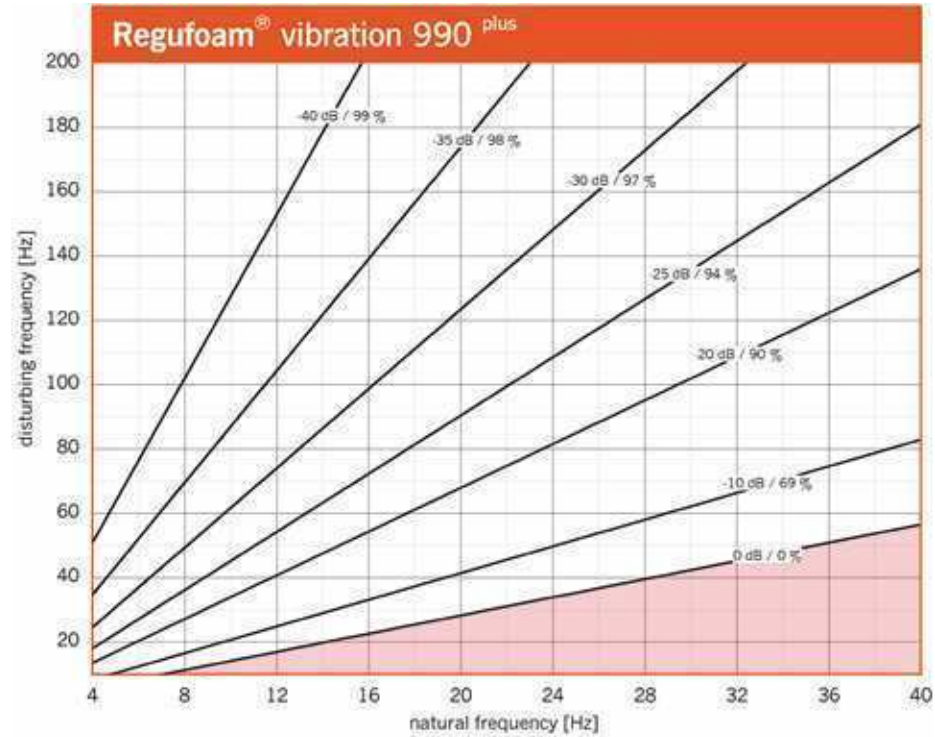
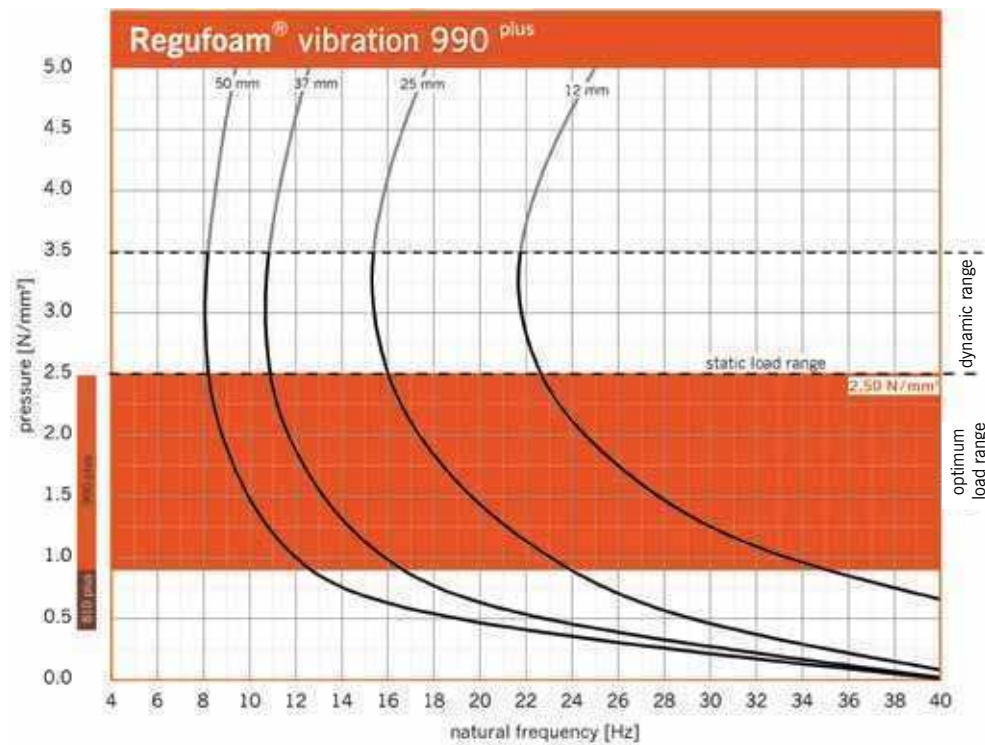


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 990 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

### Natural Frequency



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



### Modulus of Elasticity

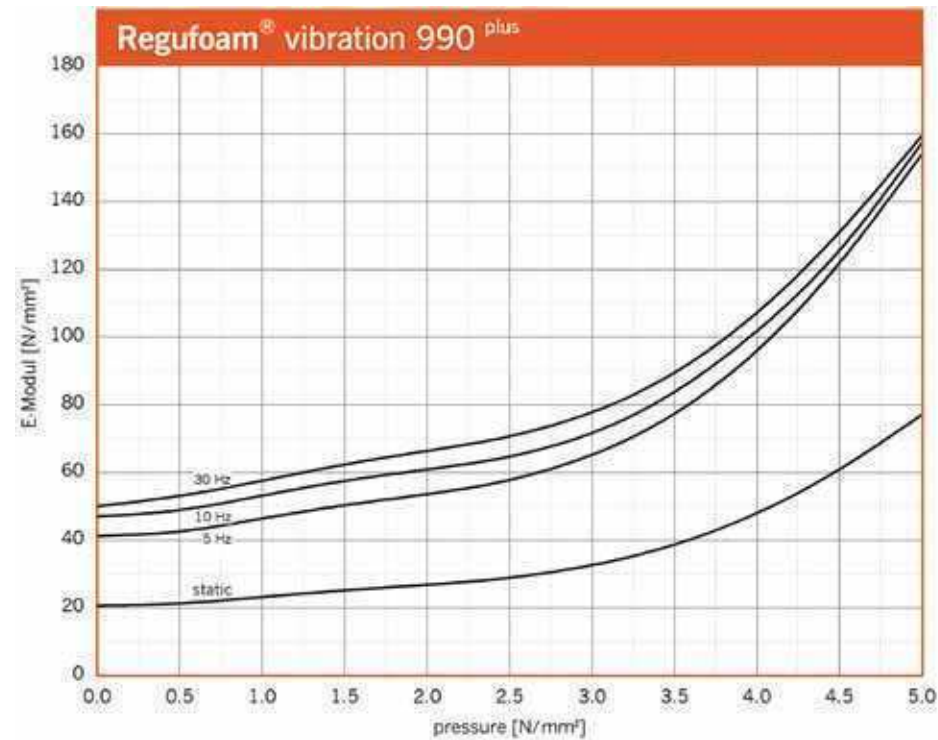


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 125 mm x 125 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

### Dynamic Stiffness

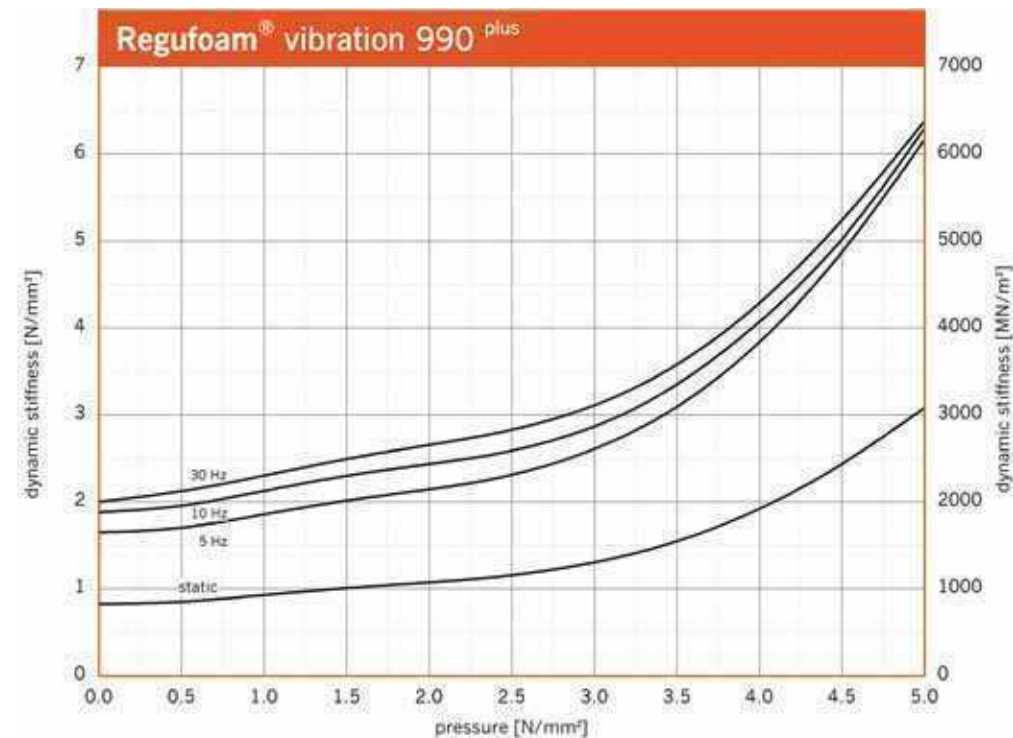
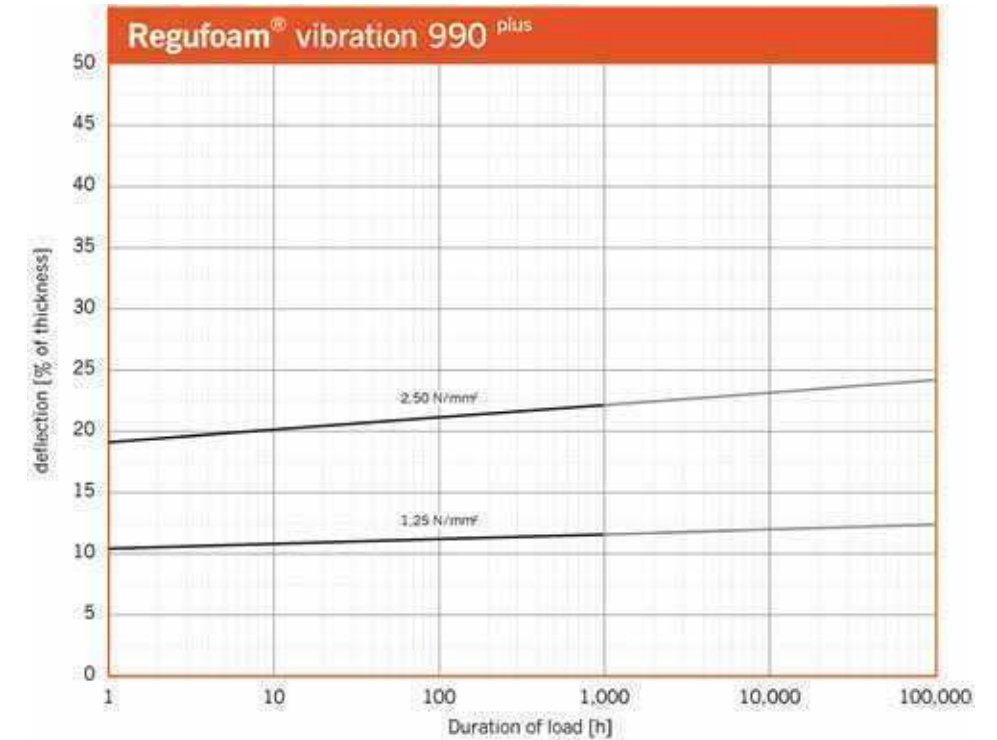


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.10 mm. Dimensions of specimens 125 mm x 125 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test



Dimensions of specimens 125 mm x 125 mm 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.bsw-vibration-technology.com](http://www.bsw-vibration-technology.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.

Contact: Steffen Blecher, Phone: +49 2751 803-126 • [s.blecher@berleburger.de](mailto:s.blecher@berleburger.de);  
 Florian Sassmannshausen, Phone: +49 2751 803-230 • [f.sassmannshausen@berleburger.de](mailto:f.sassmannshausen@berleburger.de) •  
 Downloads at [www.bsw-vibration-technology.com](http://www.bsw-vibration-technology.com)

