

# TECHNICAL DETAILS

# REGUPOL VIBRATION





## Forms of delivery

### Rolls, ex warehouse

Thickness: 17 mm, dimpled  
 Length: 10,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

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

### Rare, short term peak loads

up to 0.050 N/mm<sup>2</sup>

### Certification

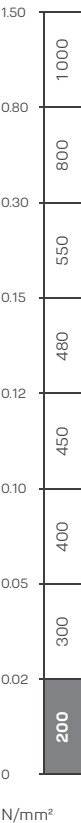
**Cradle to Cradle Certified®** is a registered trademark of the Cradle to Cradle Products Innovation Institute.



The material must be carefully and permanently protected against moisture during transport, storage, processing and use. Wet material may not be used.

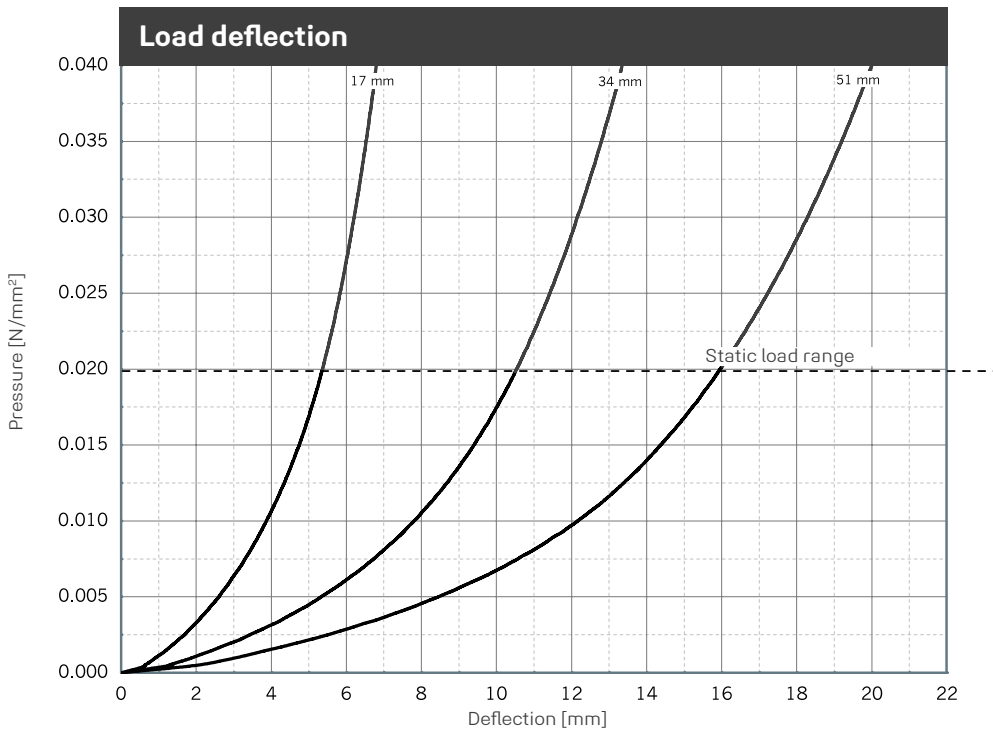
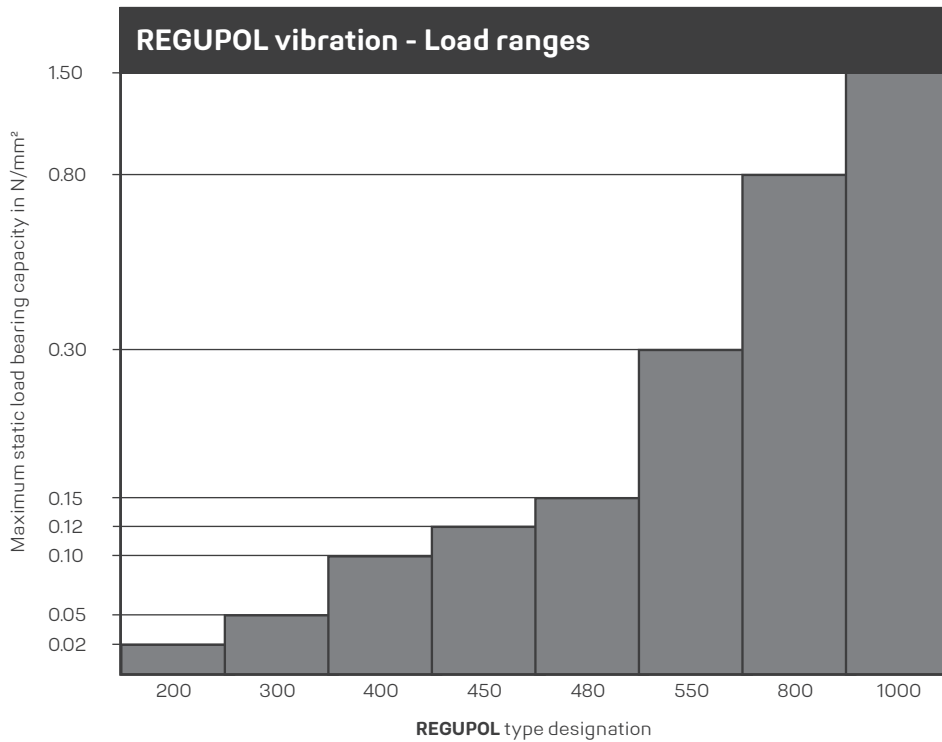


REGUPOL vibration 200 is Cradle to Cradle Certified® at the Bronze level.



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

# REGUPOL VIBRATION 200



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

# REGUPOL VIBRATION 200

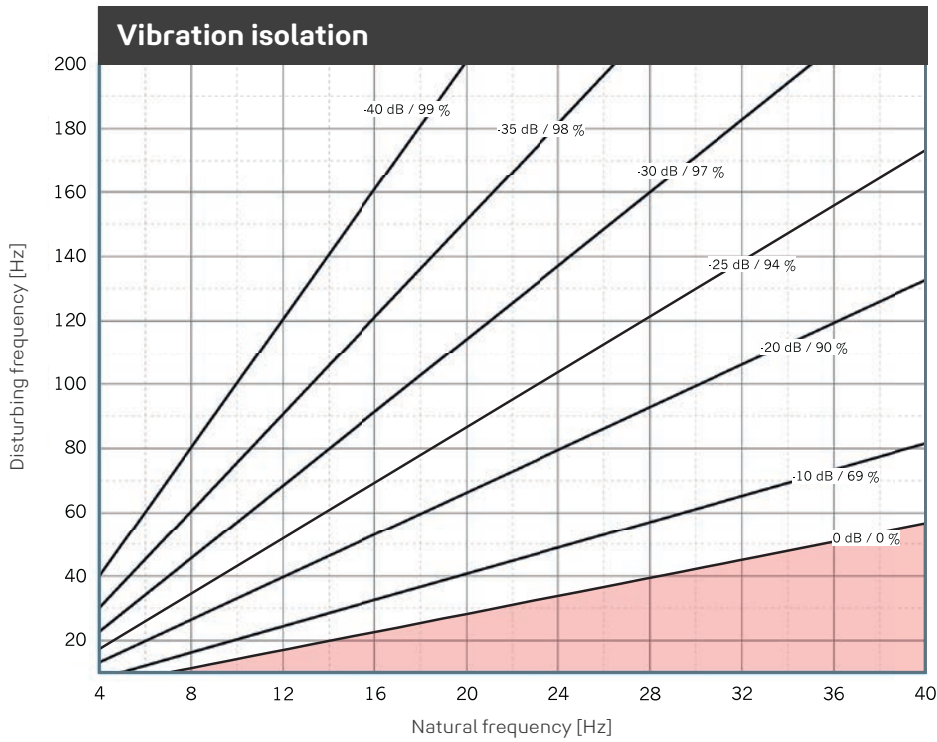
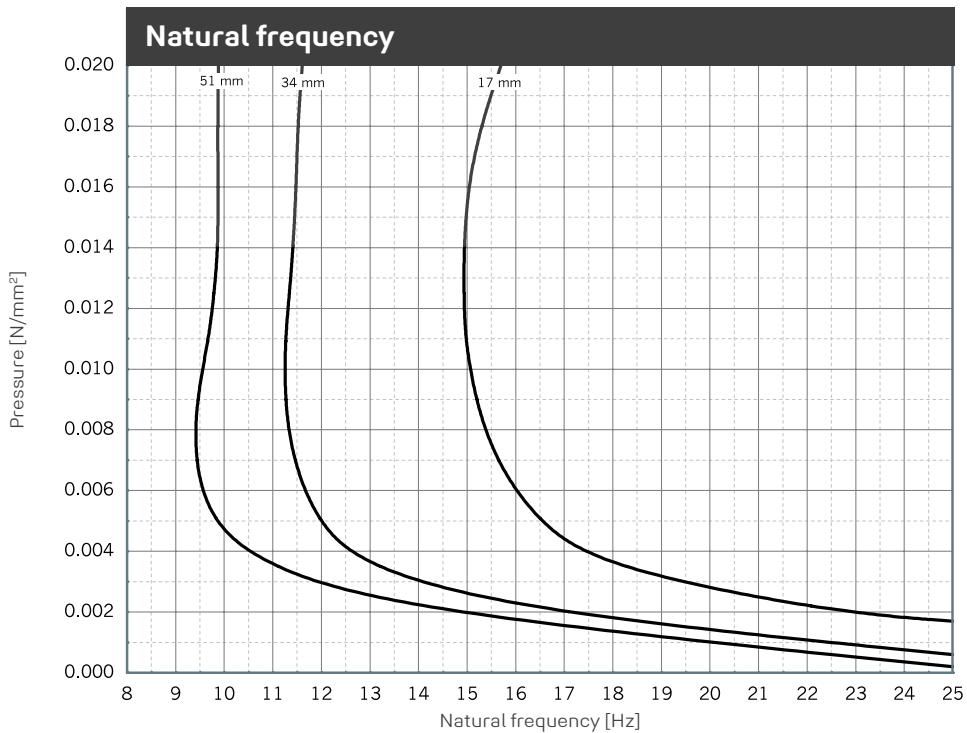


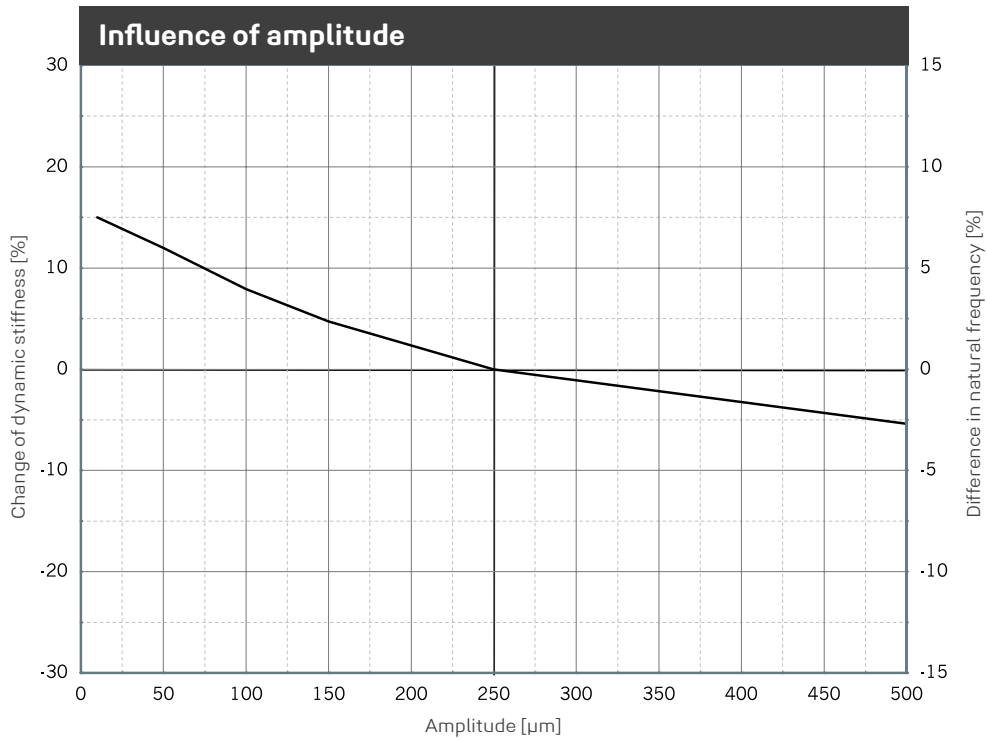
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 200**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



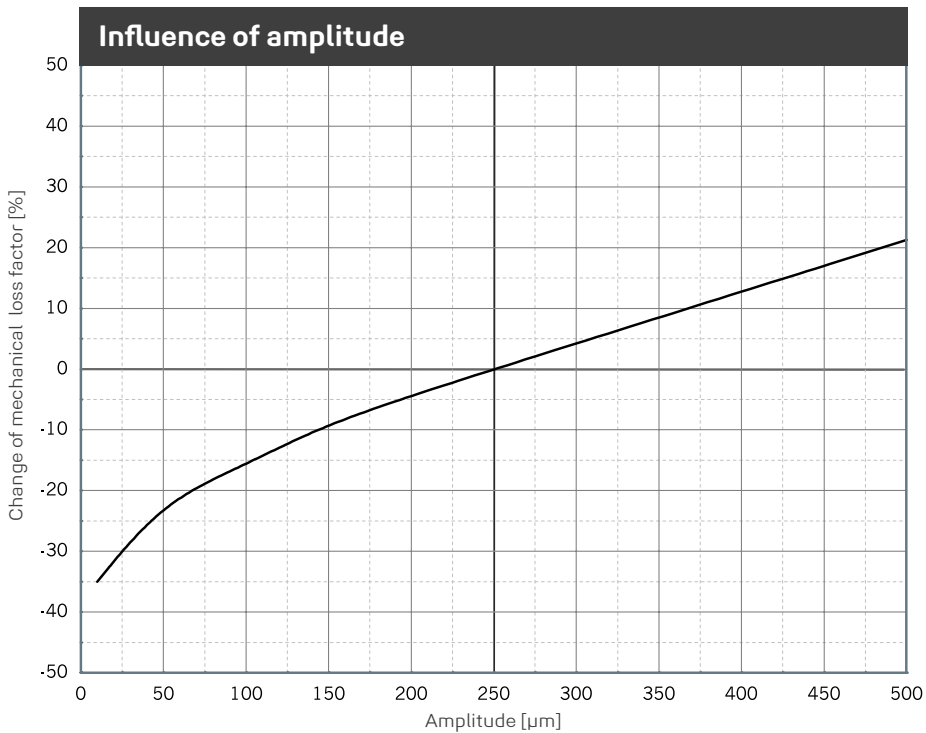
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 200** on a rigid base. Dimensions of test specimens 300 x 300 mm.



# REGUPOL VIBRATION 200



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/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 51 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.011 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 51 mm.

# REGUPOL VIBRATION 200

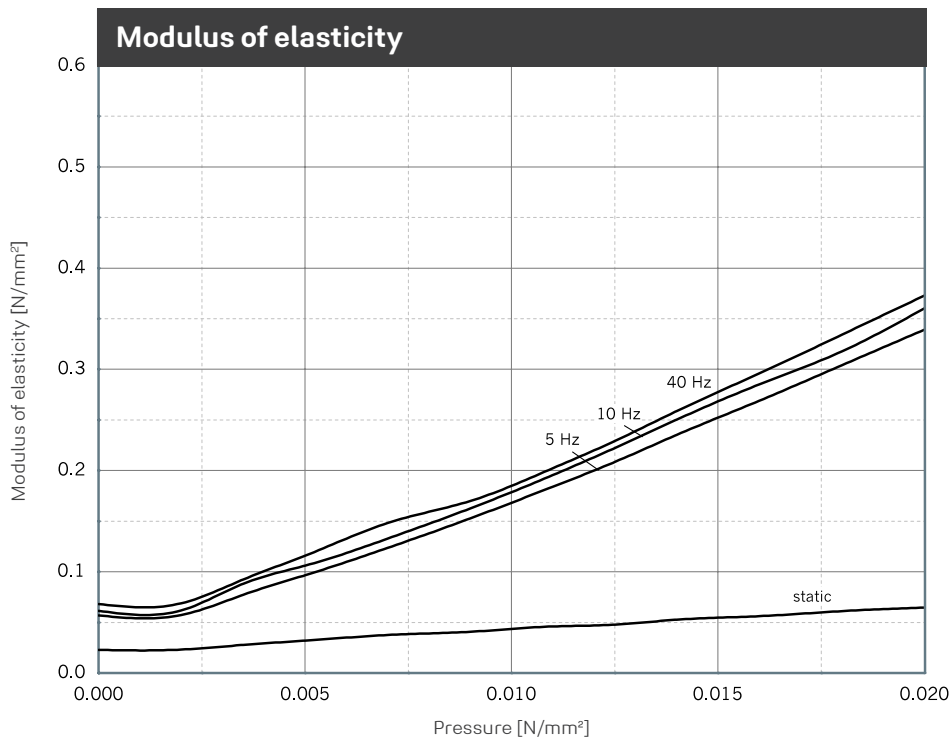


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 34$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

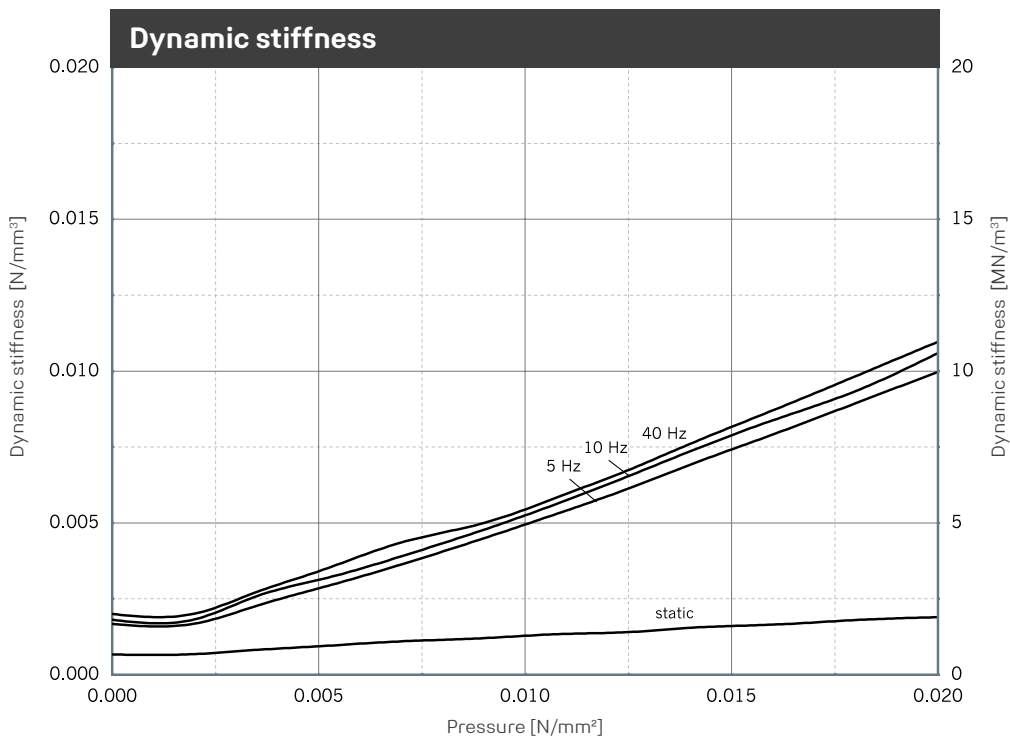
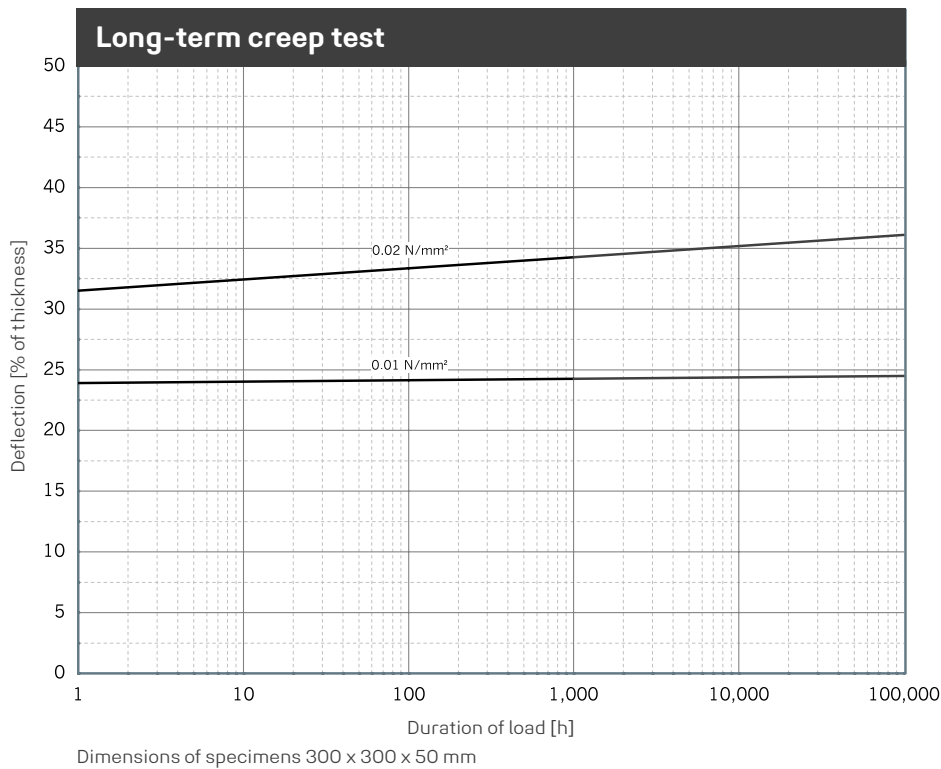


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 34$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 200



## 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.regupol.com](http://www.regupol.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

### Rolls, ex warehouse

Thickness: 17 mm, dimpled  
 Length: 10,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

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

### Rare, short term peak loads

up to 0.080 N/mm<sup>2</sup>

### Certification

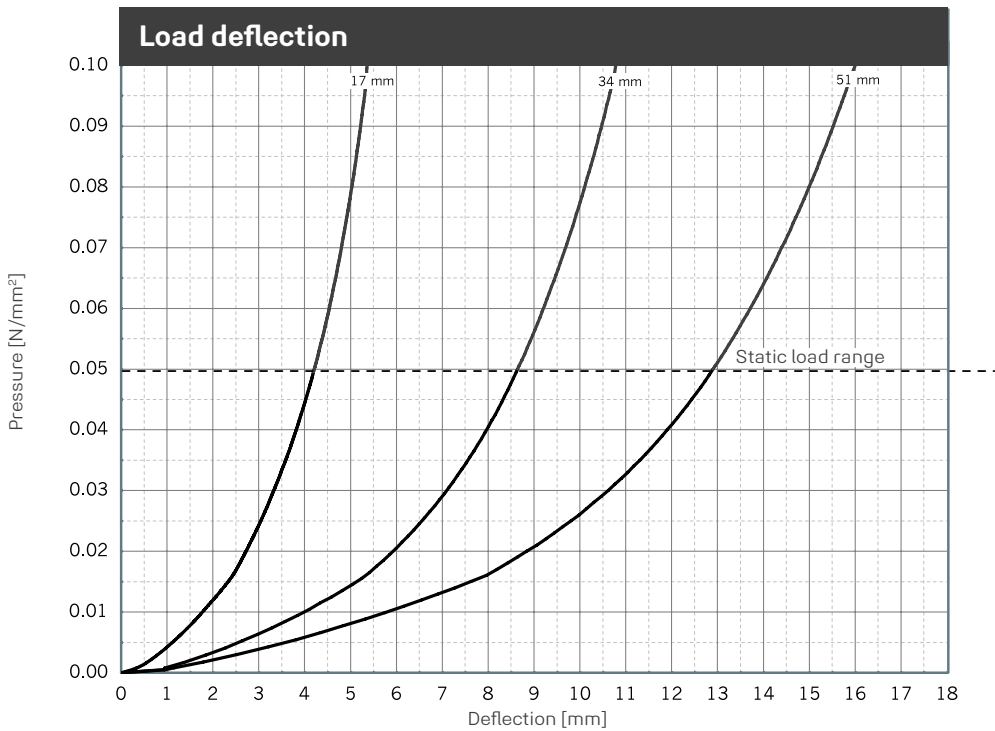
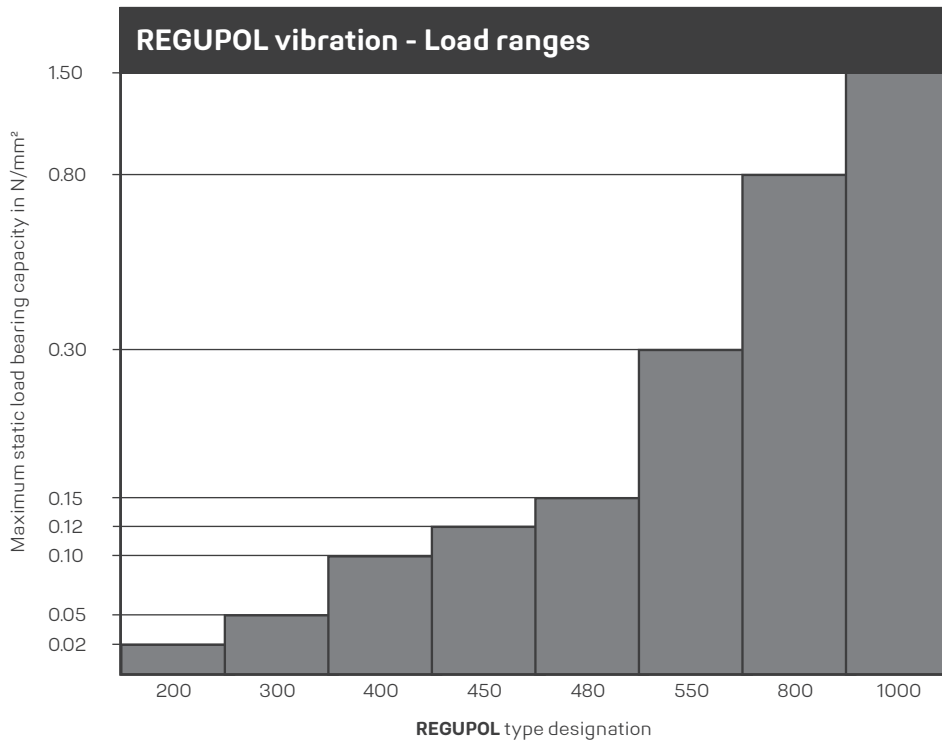
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REGUPOL vibration 300 is Cradle to Cradle Certified® at the Bronze level.

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

# REGUPOL VIBRATION 300



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

# REGUPOL VIBRATION 300

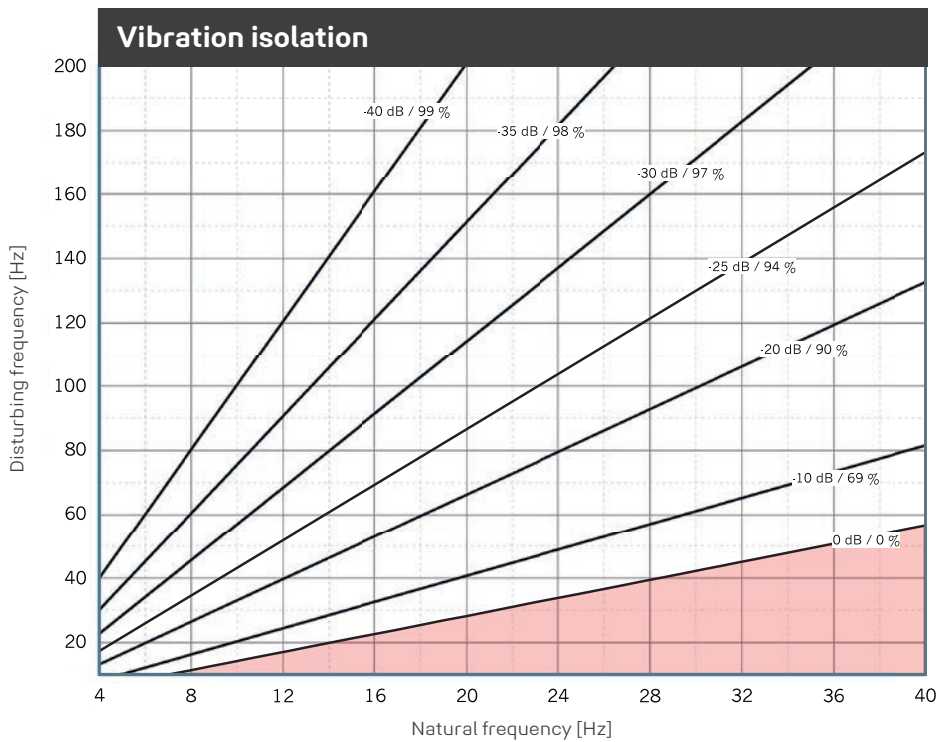
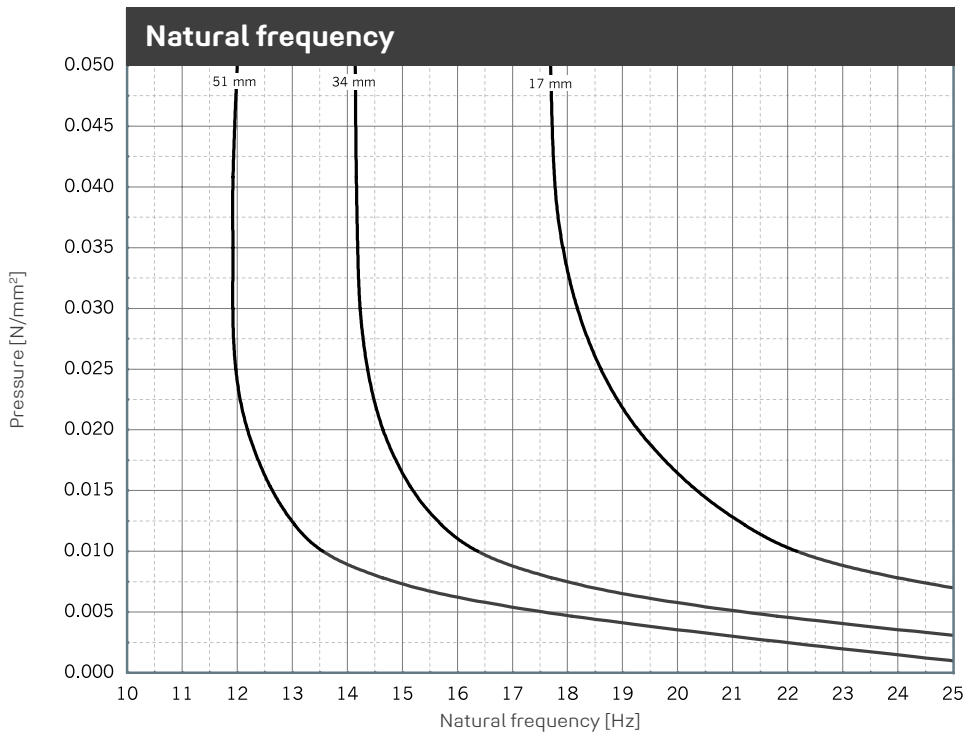
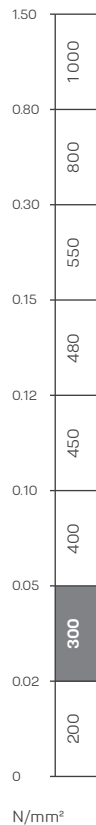


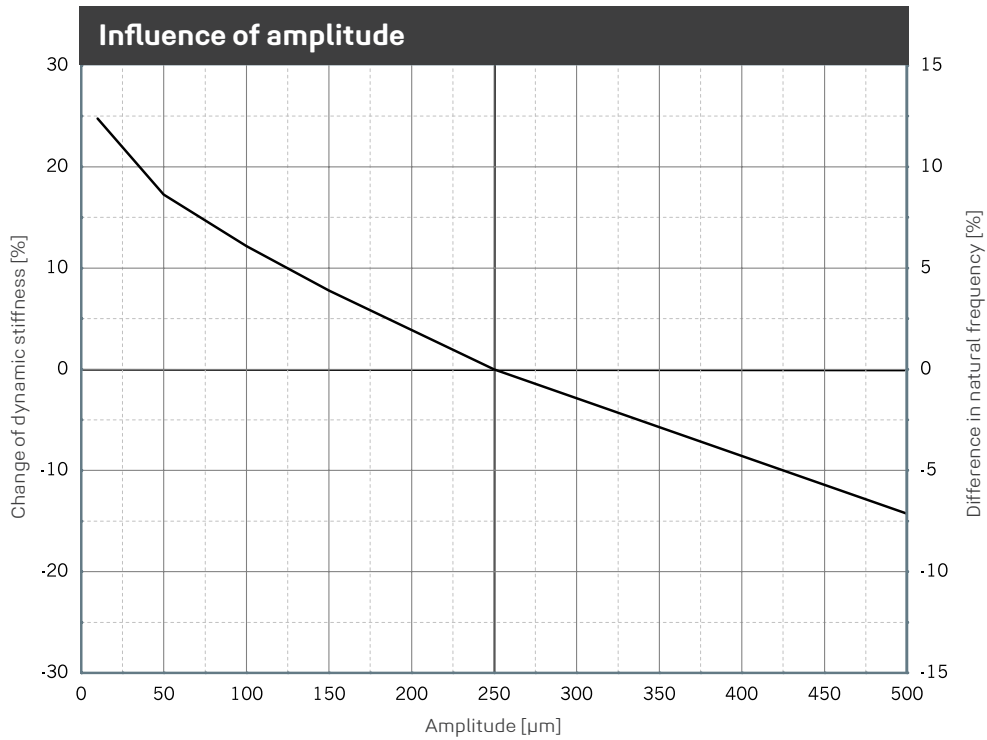
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 300**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



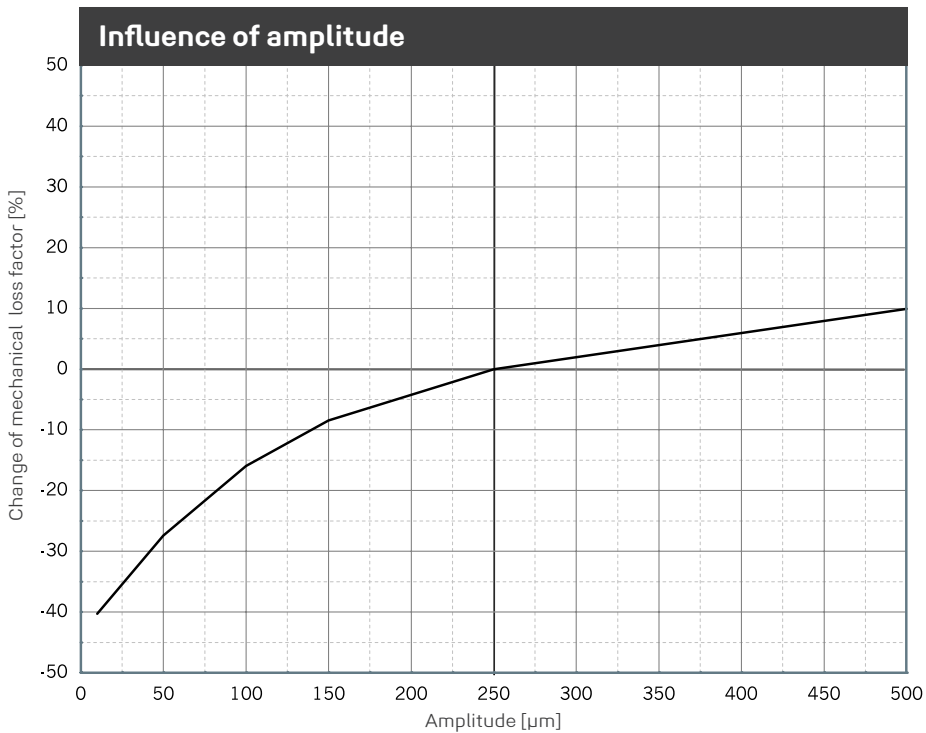
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 300** on a rigid base. Dimensions of test specimens 300 x 300 mm.



# REGUPOL VIBRATION 300



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.05 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 51 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.05 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 51 mm.

# REGUPOL VIBRATION 300

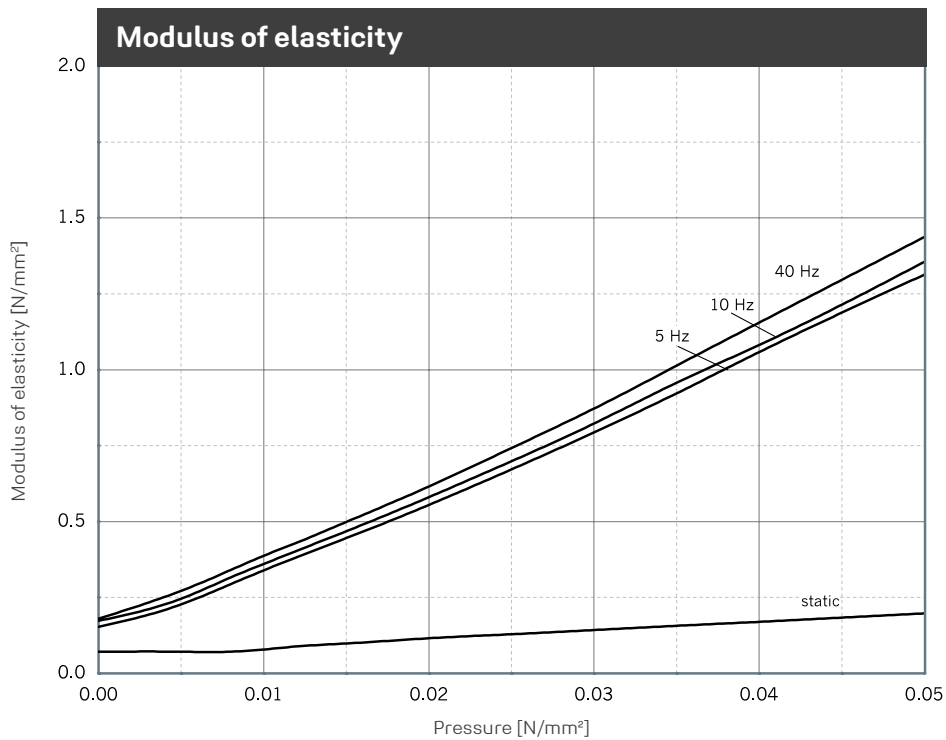


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 34$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

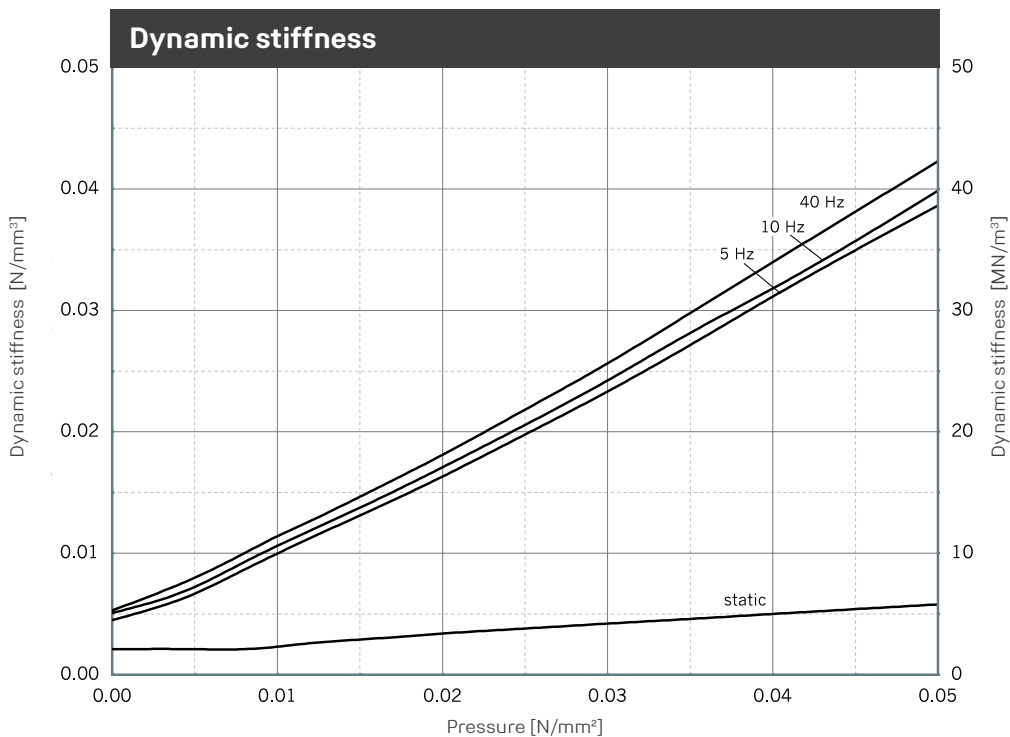
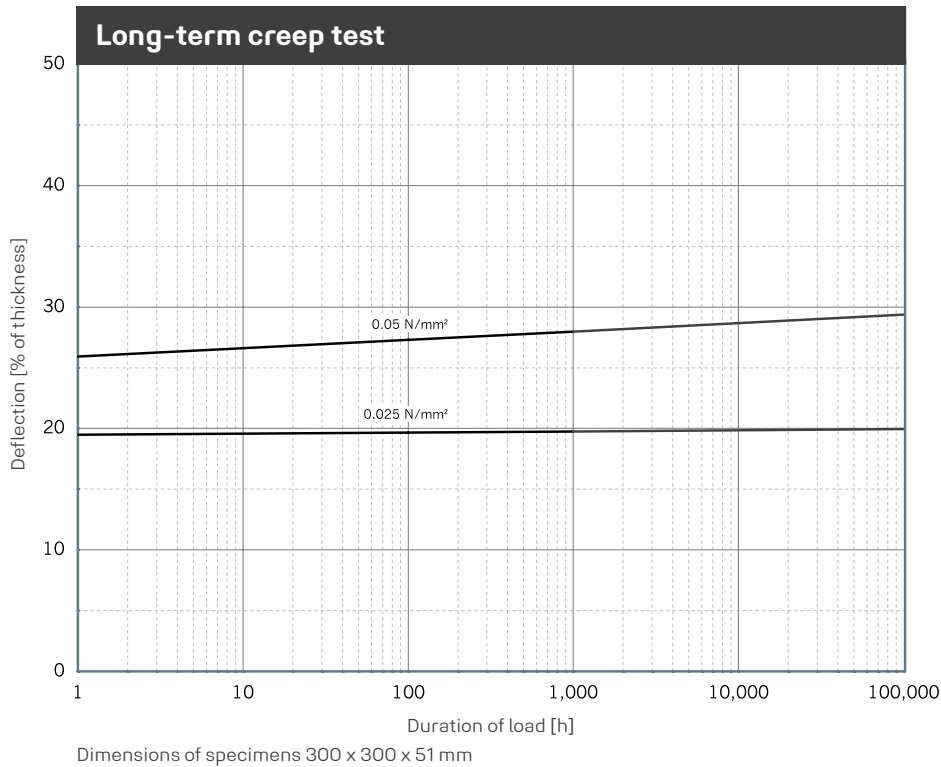


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 34$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 300



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## Forms of delivery

### Rolls, ex warehouse

Thickness: 15 mm, dimpled  
 Length: 10,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

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

### Rare, short term peak loads

up to 0.150 N/mm<sup>2</sup>

### Certification

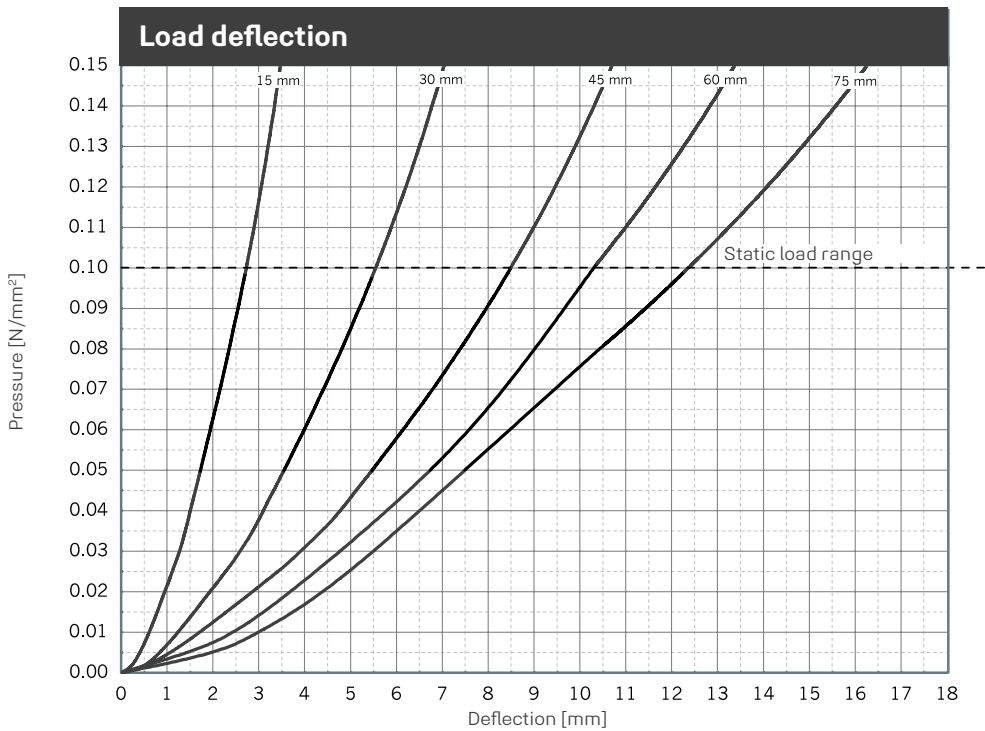
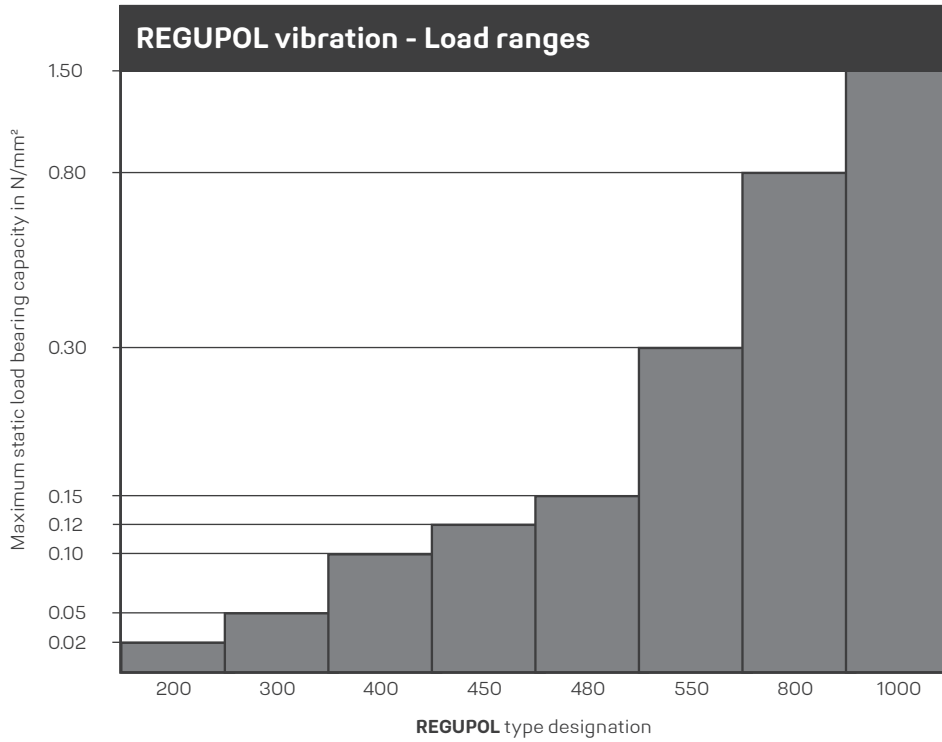
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REGUPOL vibration 400 is Cradle to Cradle Certified® at the Bronze level.

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

# REGUPOL VIBRATION 400



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

# REGUPOL VIBRATION 400

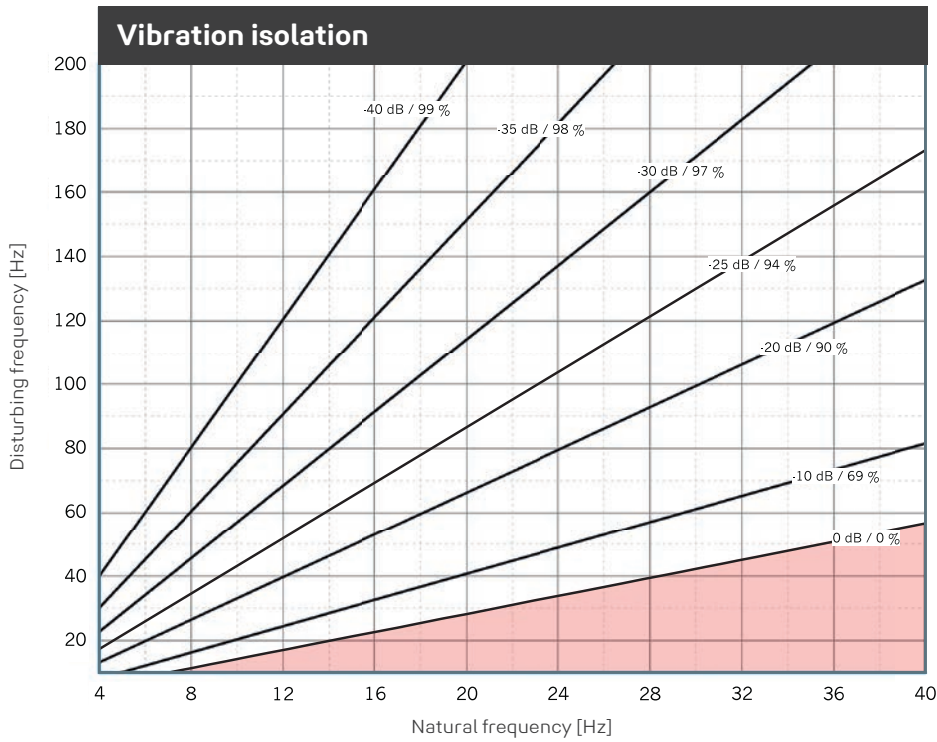
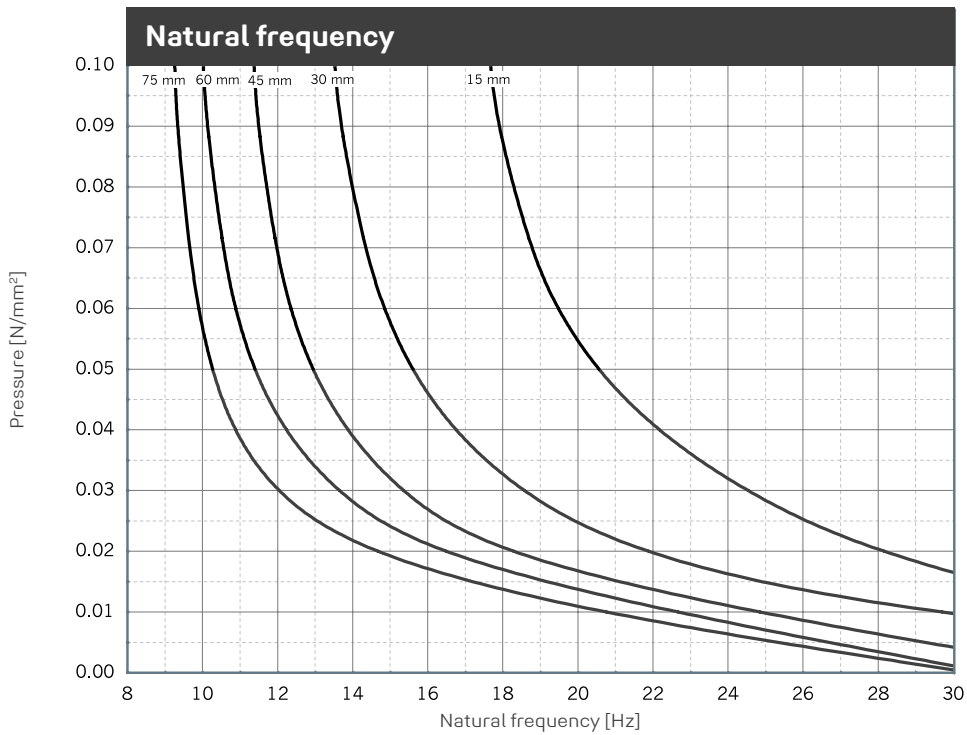


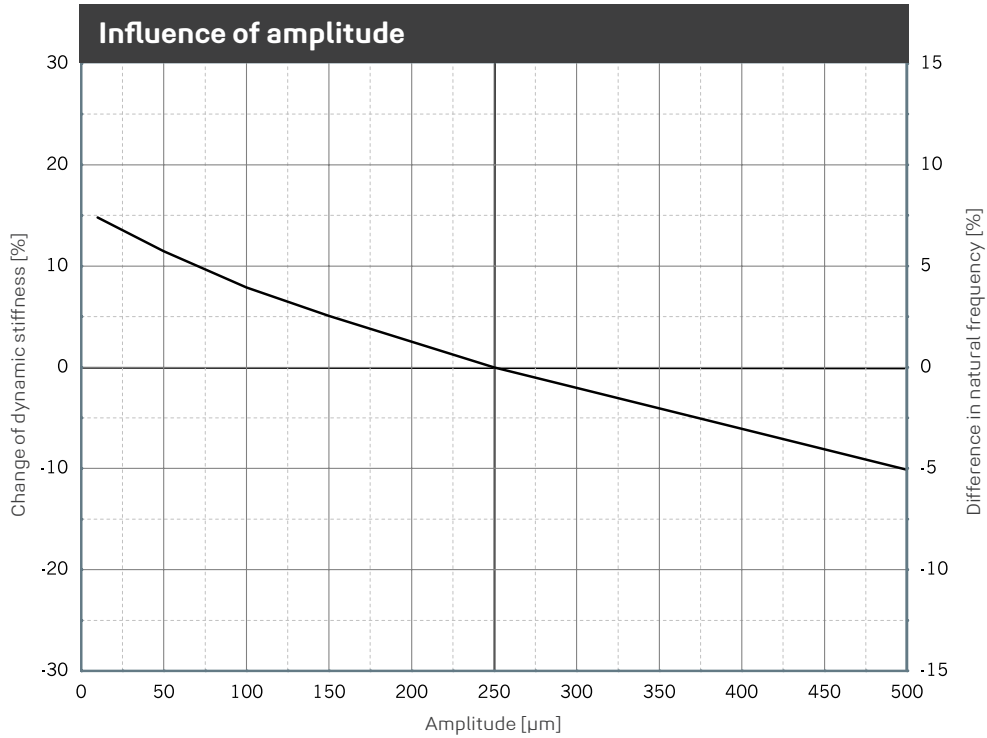
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 400**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



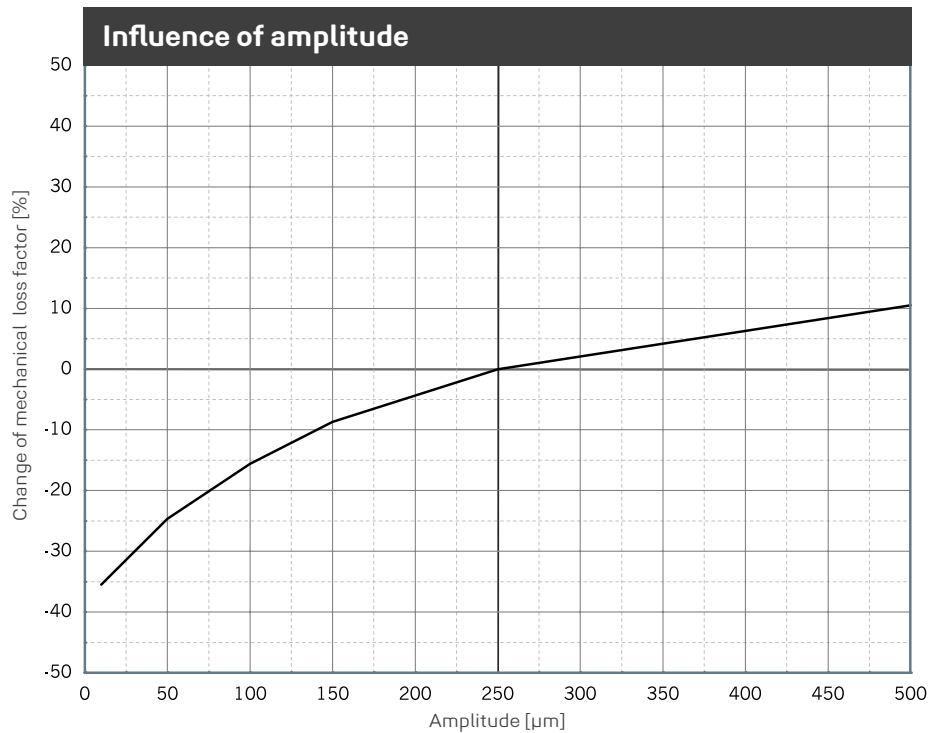
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 400** on a rigid base. Dimensions of test specimens 300 x 300 mm.



# REGUPOL VIBRATION 400



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 60 mm.

# REGUPOL VIBRATION 400

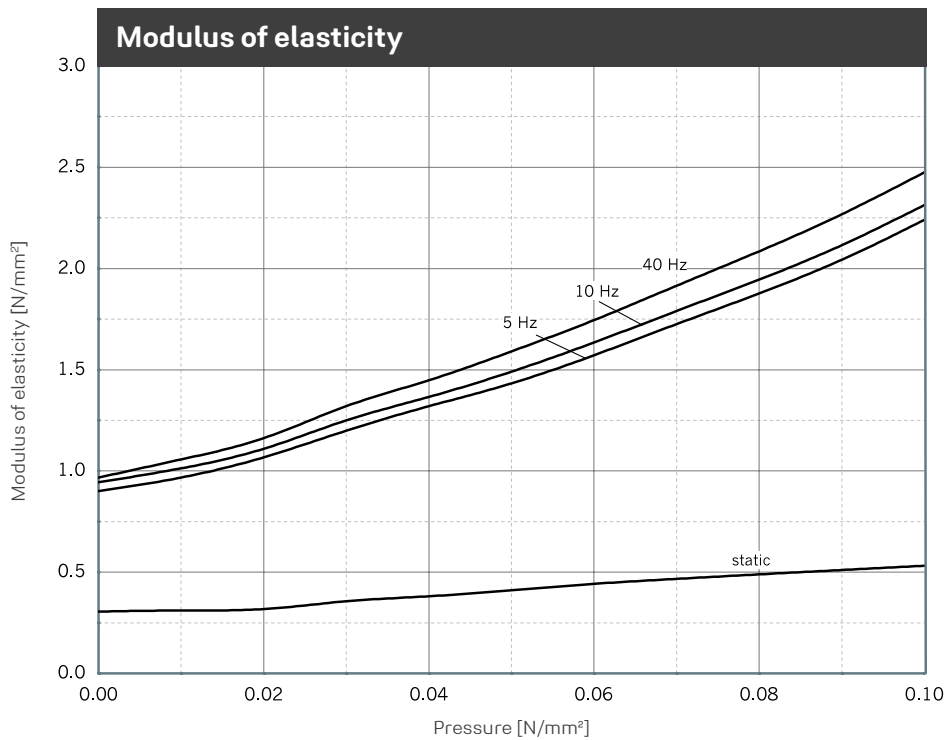


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 45$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

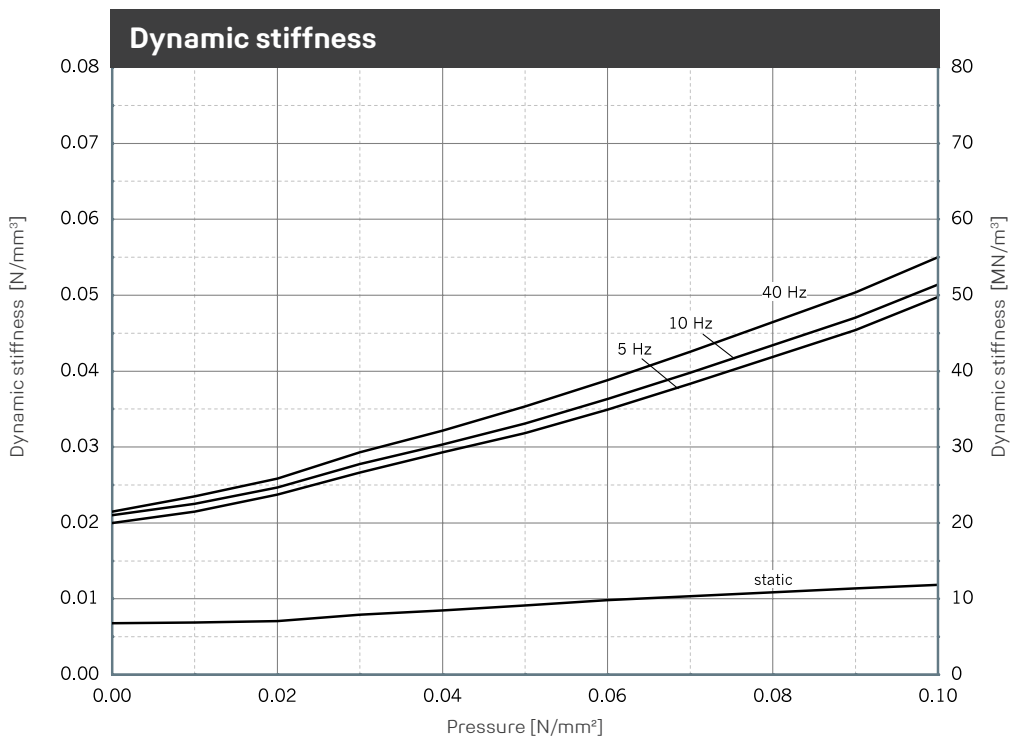
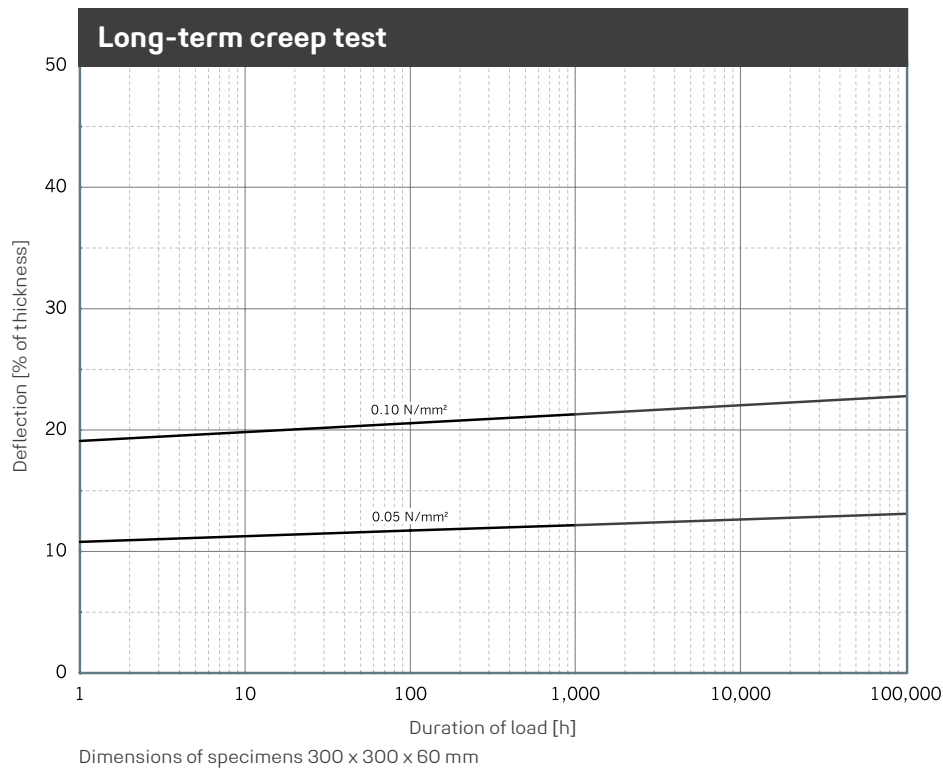


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 45$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 400



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## Forms of delivery

### Sheets, ex warehouse

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

Customized thicknesses available on request.

## Technical details

### Maximum static load bearing capacity

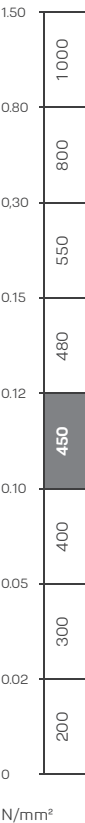
0.120 N/mm<sup>2</sup>

### Rare, short term peak loads

up to 0.180 N/mm<sup>2</sup>

### Certification

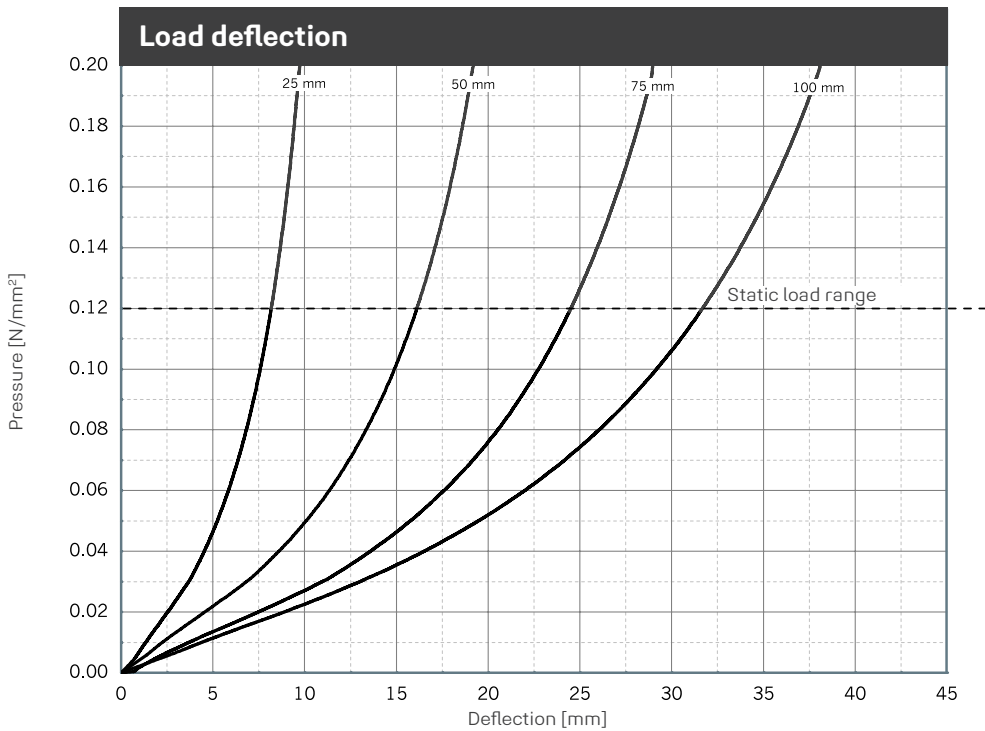
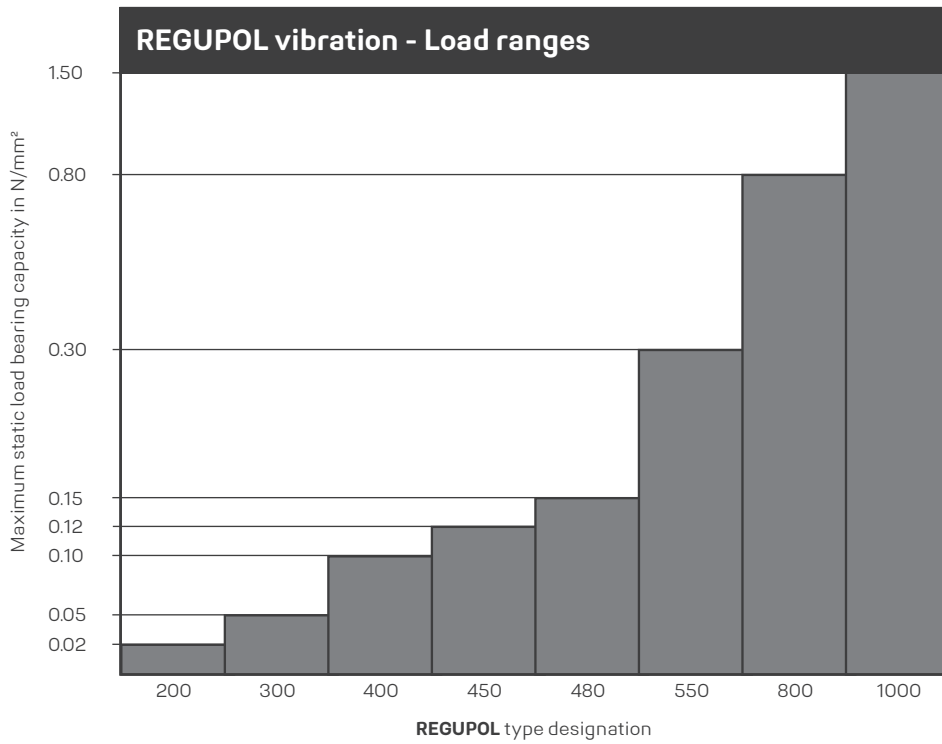
**Cradle to Cradle Certified**<sup>®</sup> is a registered trademark of the Cradle to Cradle Products Innovation Institute.



REGUPOL vibration 450 is Cradle to Cradle Certified<sup>®</sup> at the Bronze level.

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

# REGUPOL VIBRATION 450



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

# REGUPOL VIBRATION 450

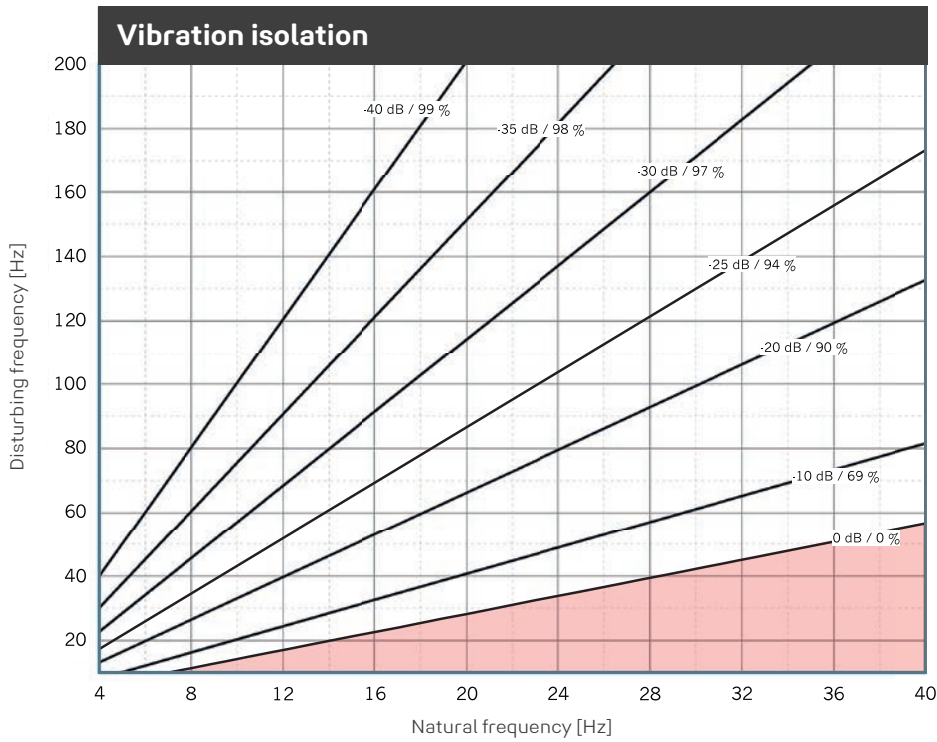
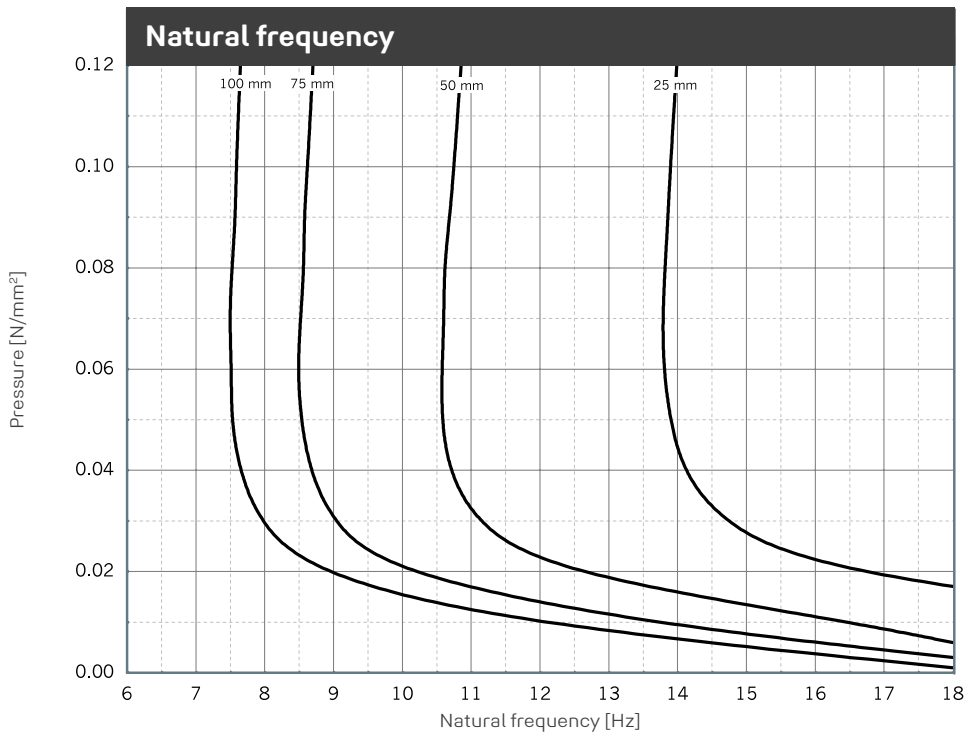


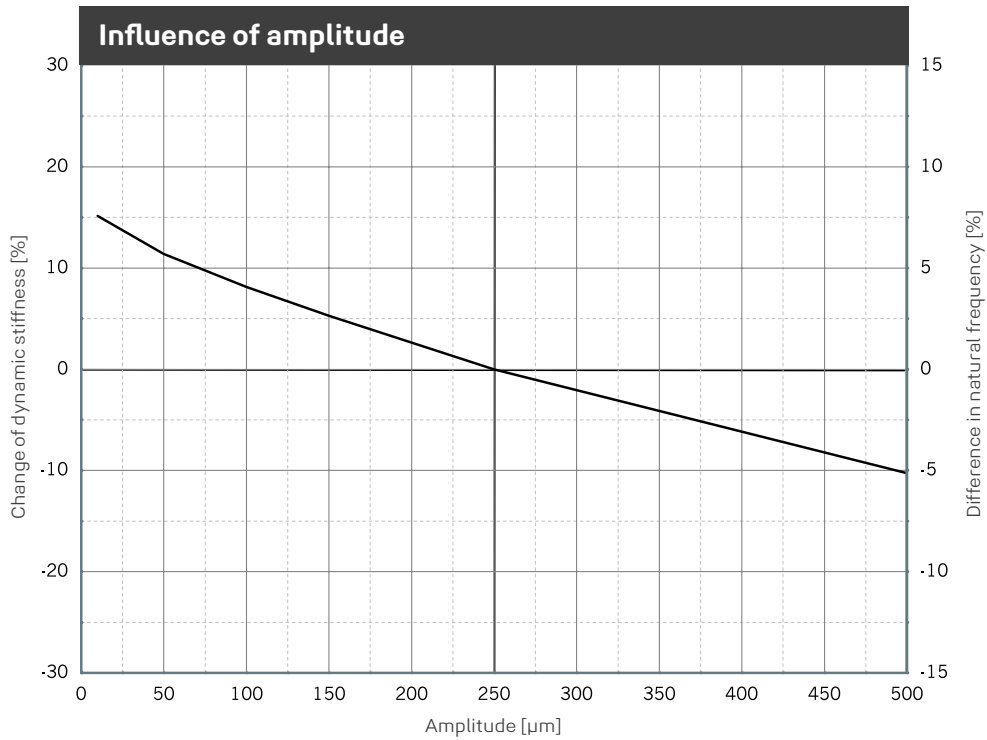
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 450**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



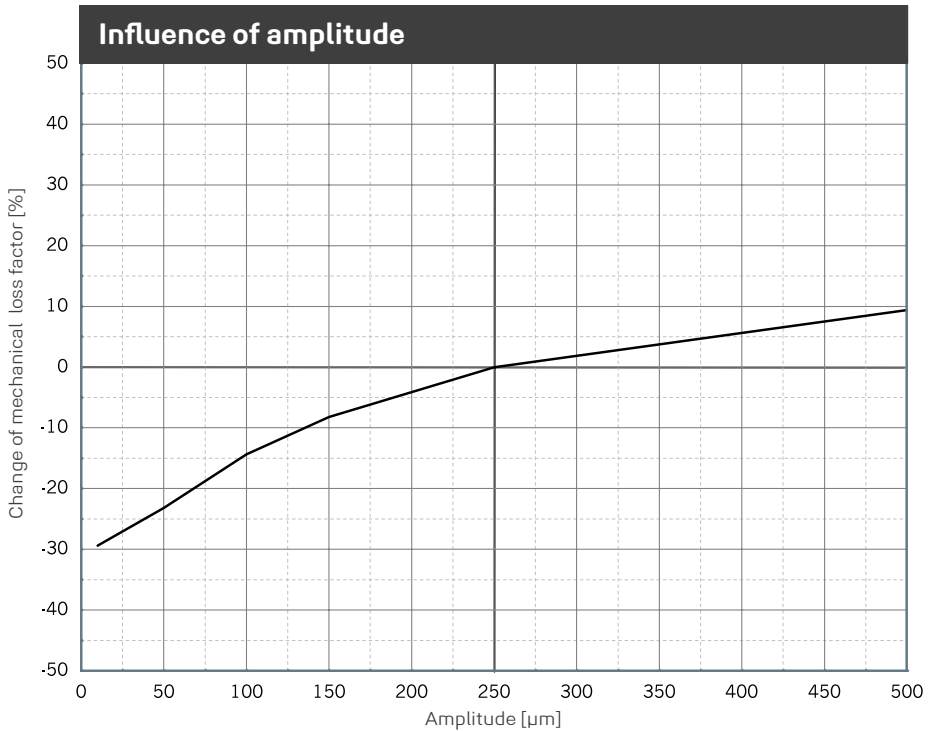
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 450** on a rigid base. Dimensions of test specimens 300 x 300 mm.



# REGUPOL VIBRATION 450



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 50 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 50 mm.

# REGUPOL VIBRATION 450

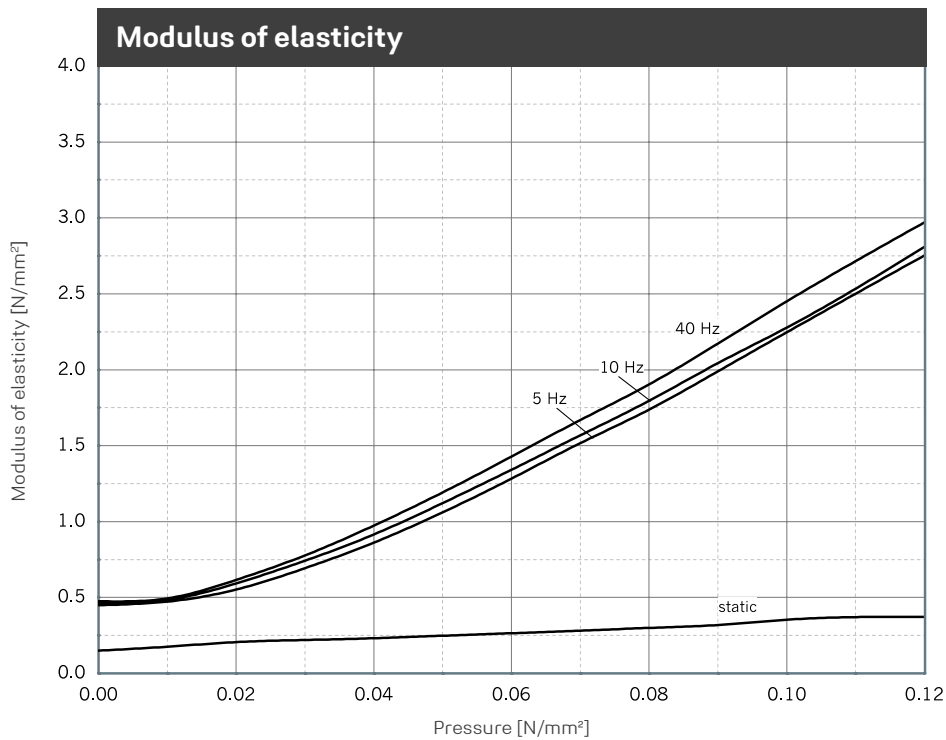


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 50$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

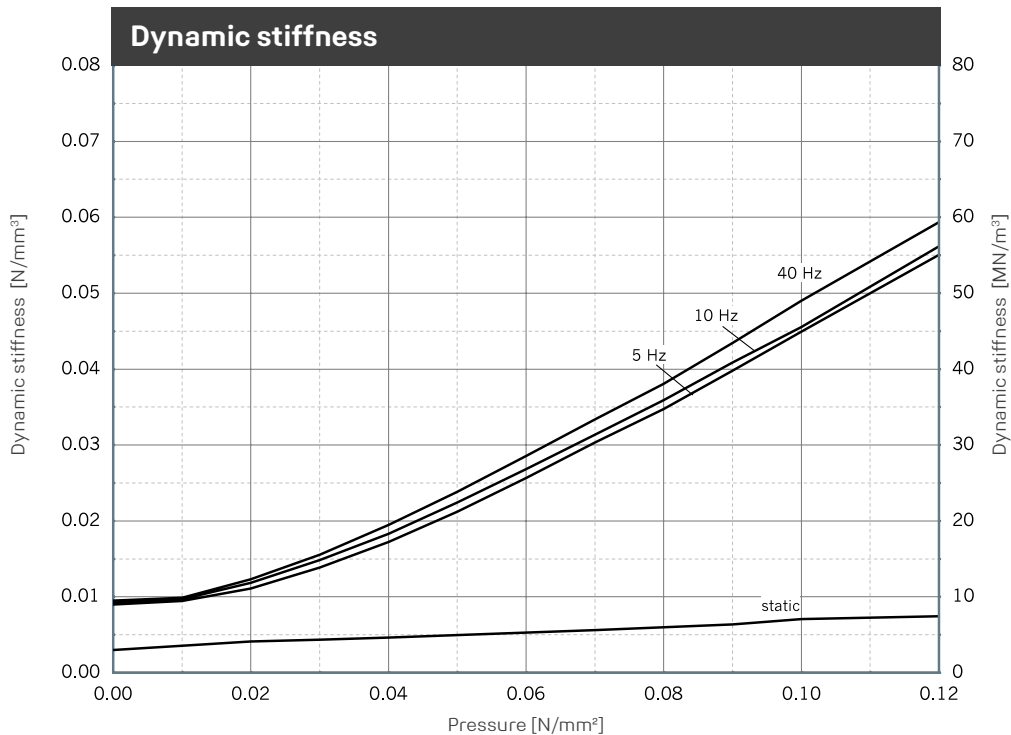
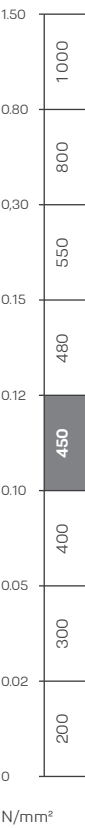
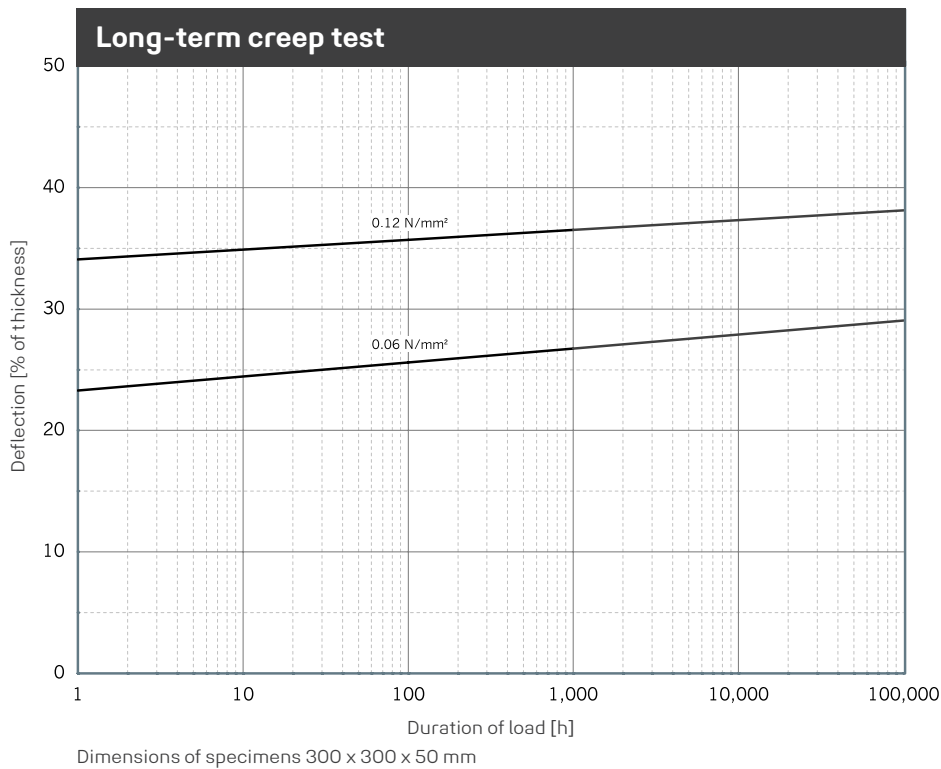


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 50$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 450



## Exclusion of Liability

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## Forms of delivery

### Rolls, ex warehouse

Thickness: 15 mm  
 Length: 10,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

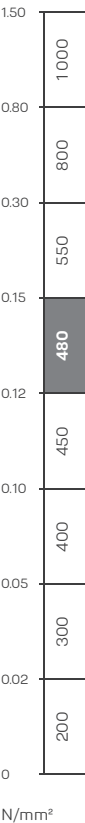
0.150 N/mm<sup>2</sup>

### Rare, short term peak loads

up to 0.250 N/mm<sup>2</sup>

### Certification

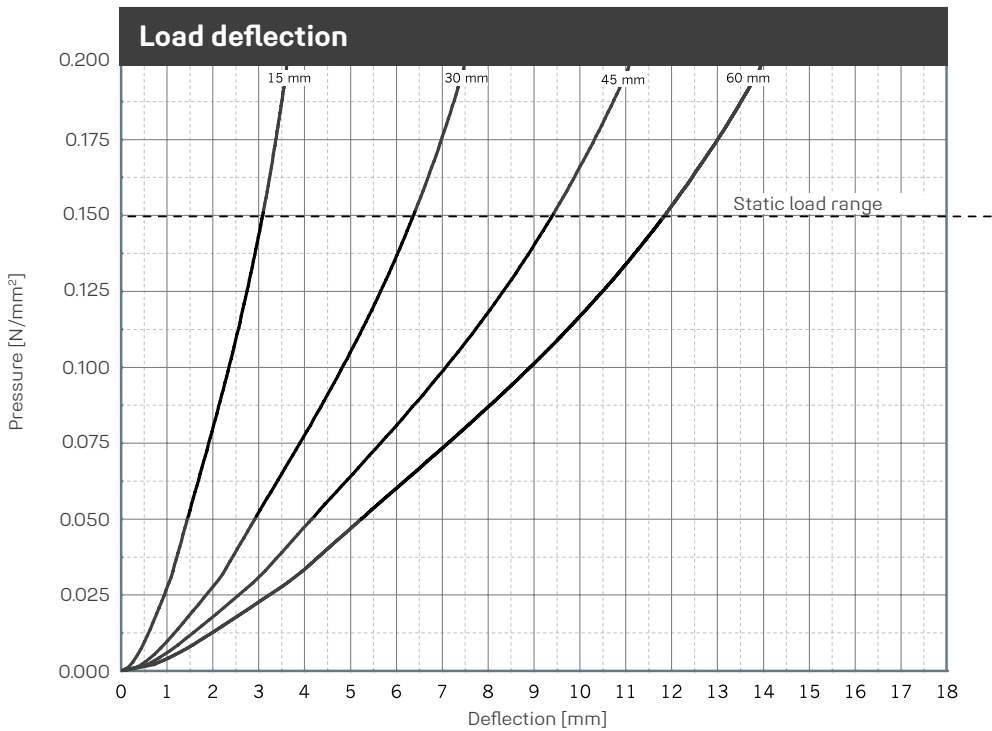
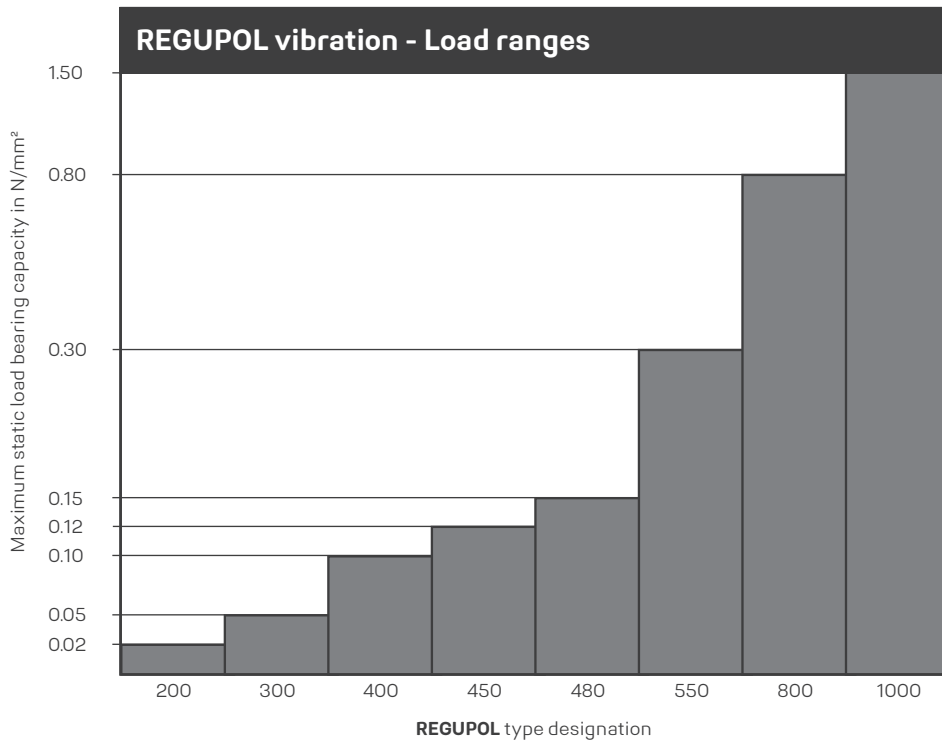
**Cradle to Cradle Certified**<sup>®</sup> is a registered trademark of the Cradle to Cradle Products Innovation Institute.



REGUPOL vibration 480 is Cradle to Cradle Certified<sup>®</sup> at the Bronze level.

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

# REGUPOL VIBRATION 480



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

# REGUPOL VIBRATION 480

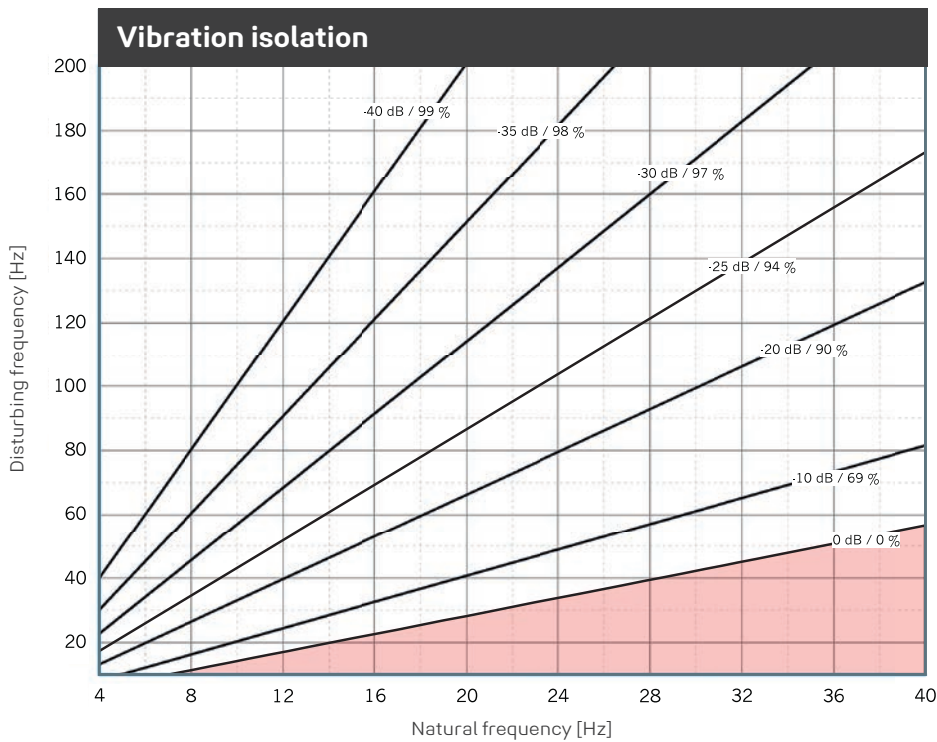
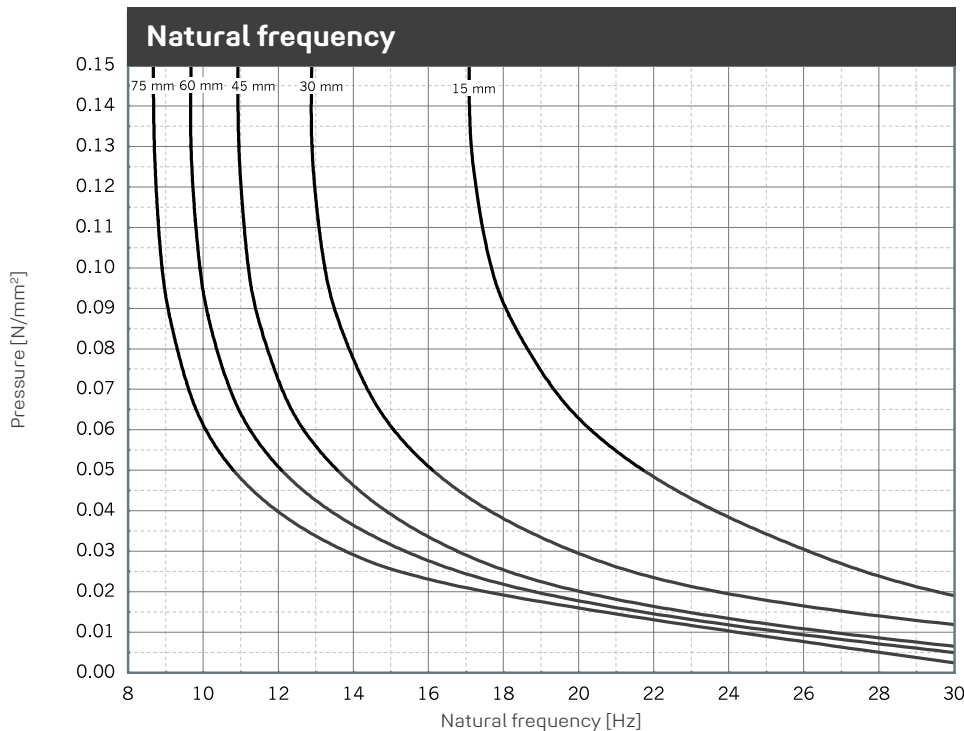
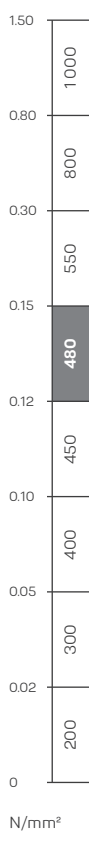


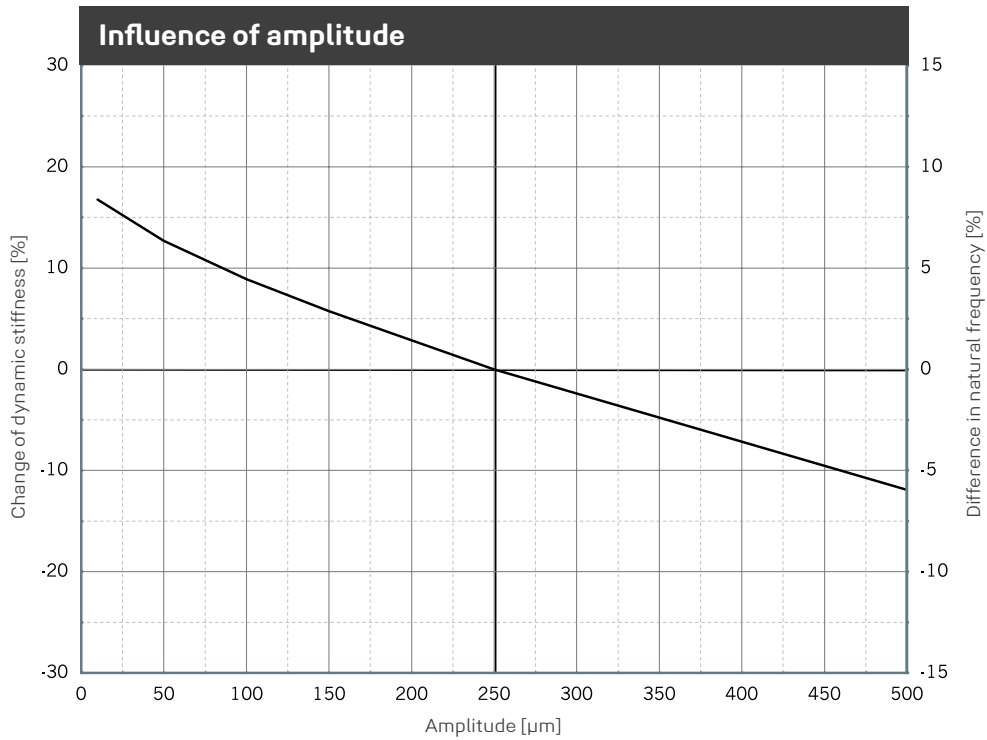
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 480**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



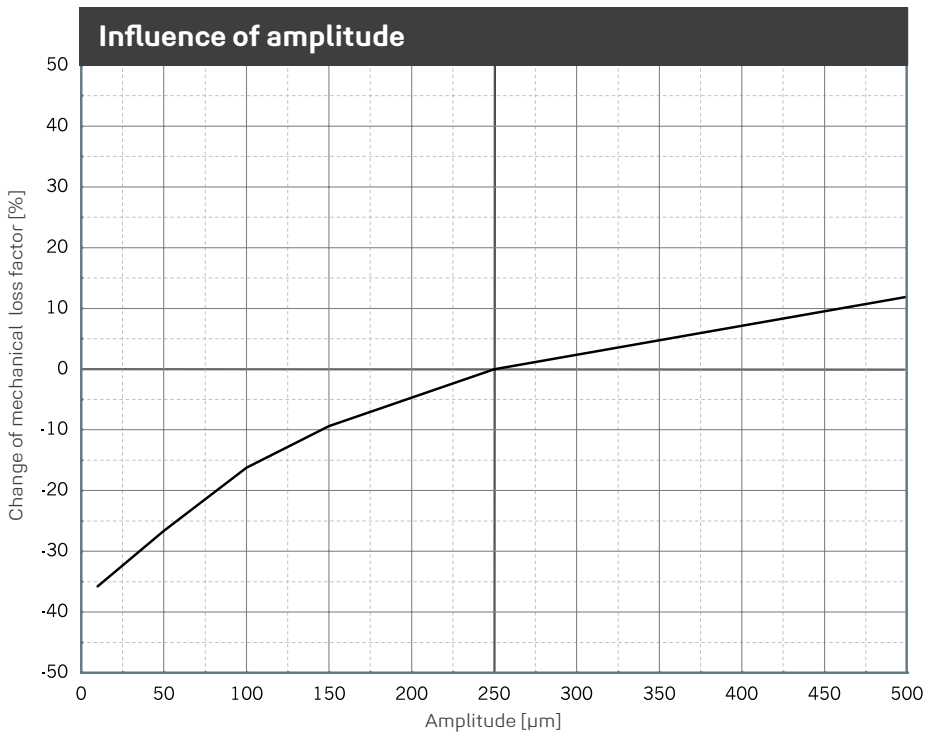
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 480** on a rigid base. Dimensions of test specimens 300 x 300 mm.



# REGUPOL VIBRATION 480



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 60 mm.

# REGUPOL VIBRATION 480

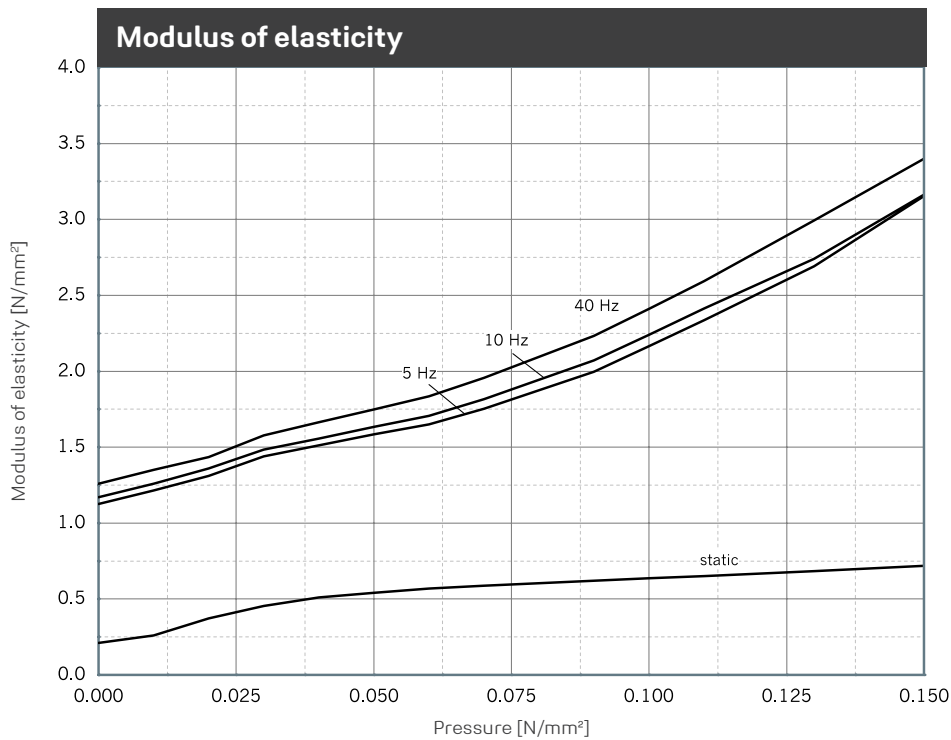


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 45$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

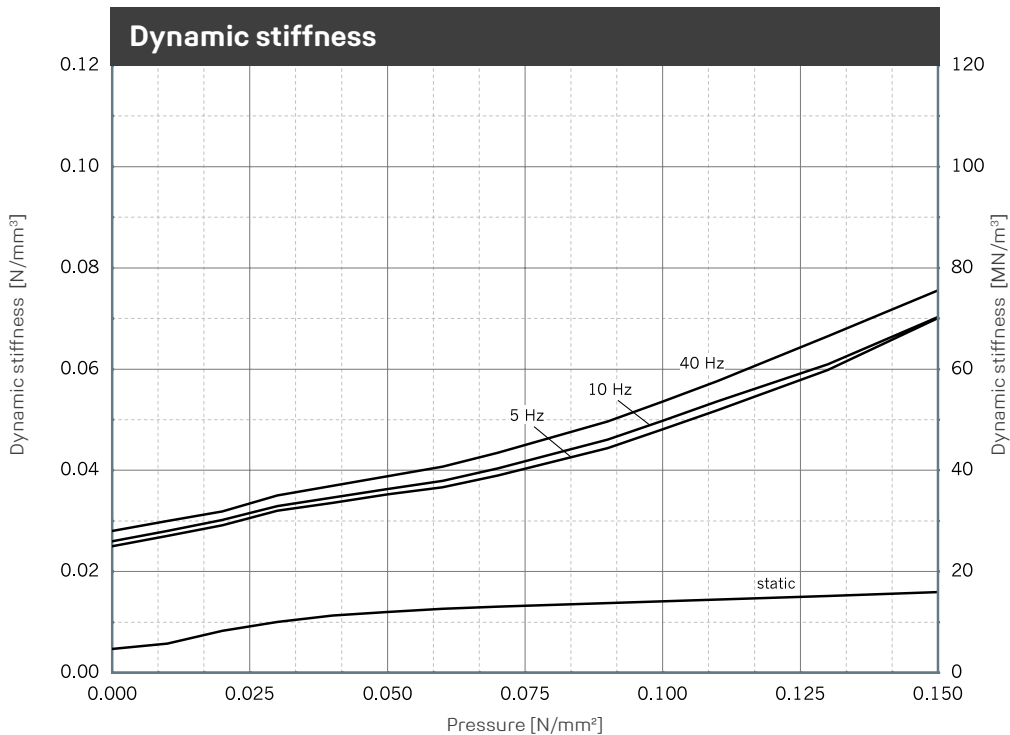
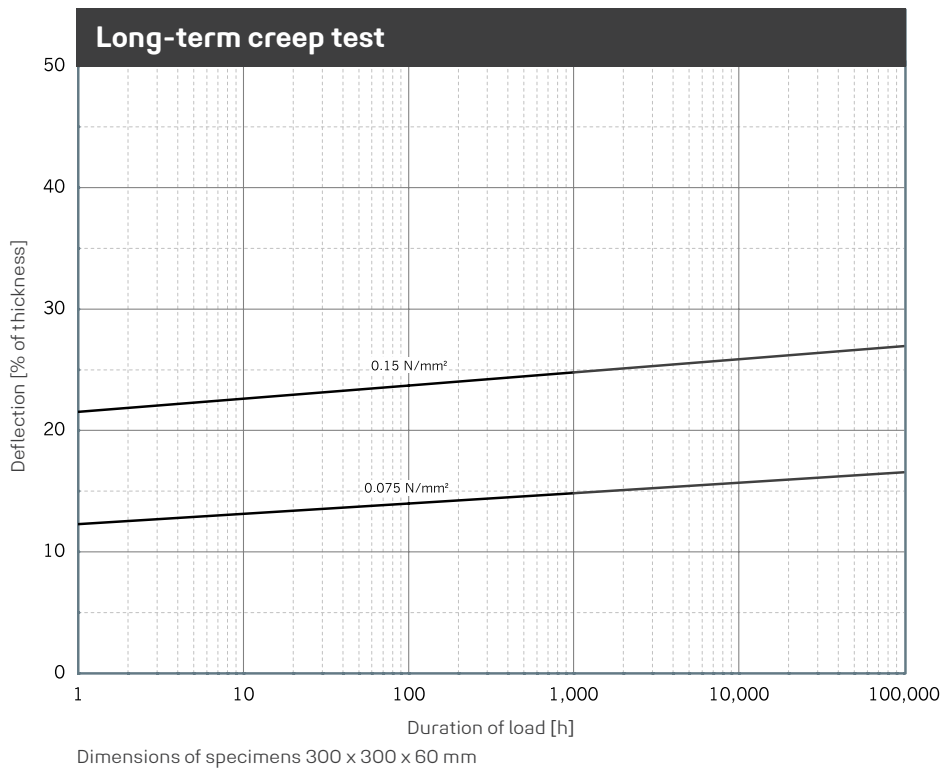


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 45$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 480



## Exclusion of Liability

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## Forms of delivery

### Rolls, ex warehouse

Thickness: 15 mm  
 Length: 10,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

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

### Rare, short term peak loads

up to 0.400 N/mm<sup>2</sup>

### Certification

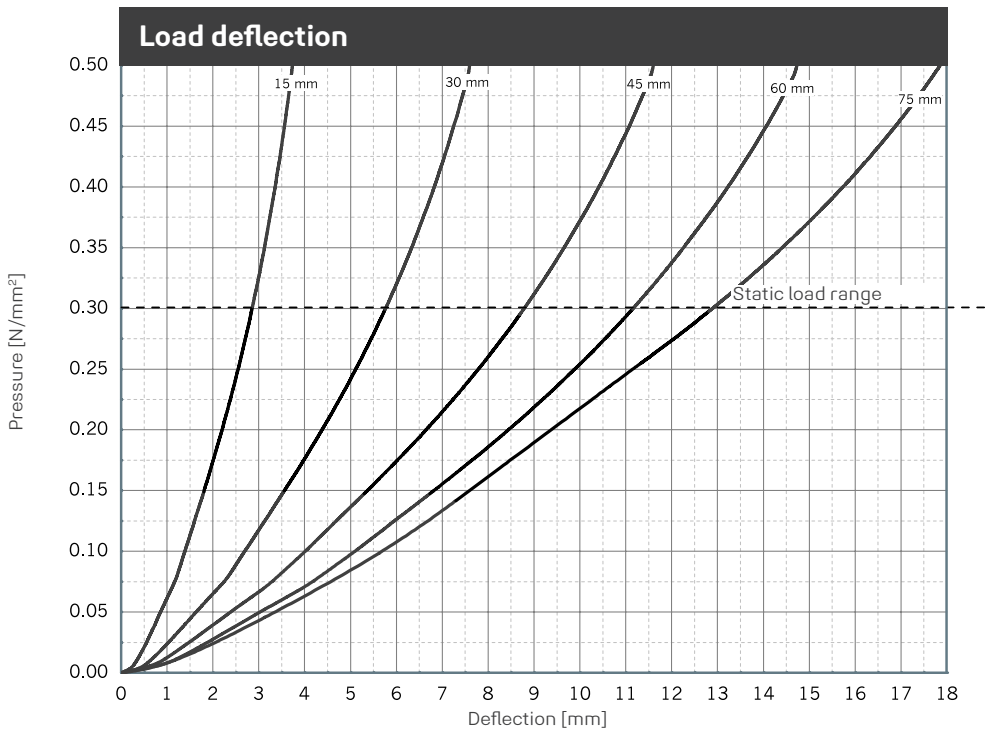
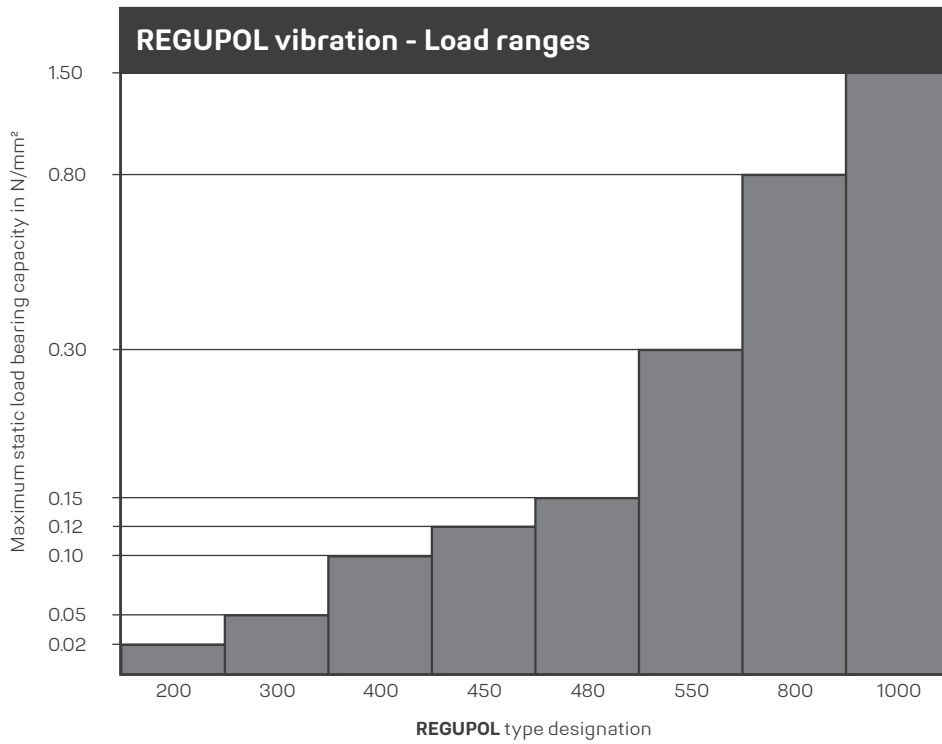
**Cradle to Cradle Certified®** is a registered trademark of the Cradle to Cradle Products Innovation Institute.



REGUPOL vibration 550 is Cradle to Cradle Certified® at the Bronze level.

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

# REGUPOL VIBRATION 550



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

# REGUPOL VIBRATION 550

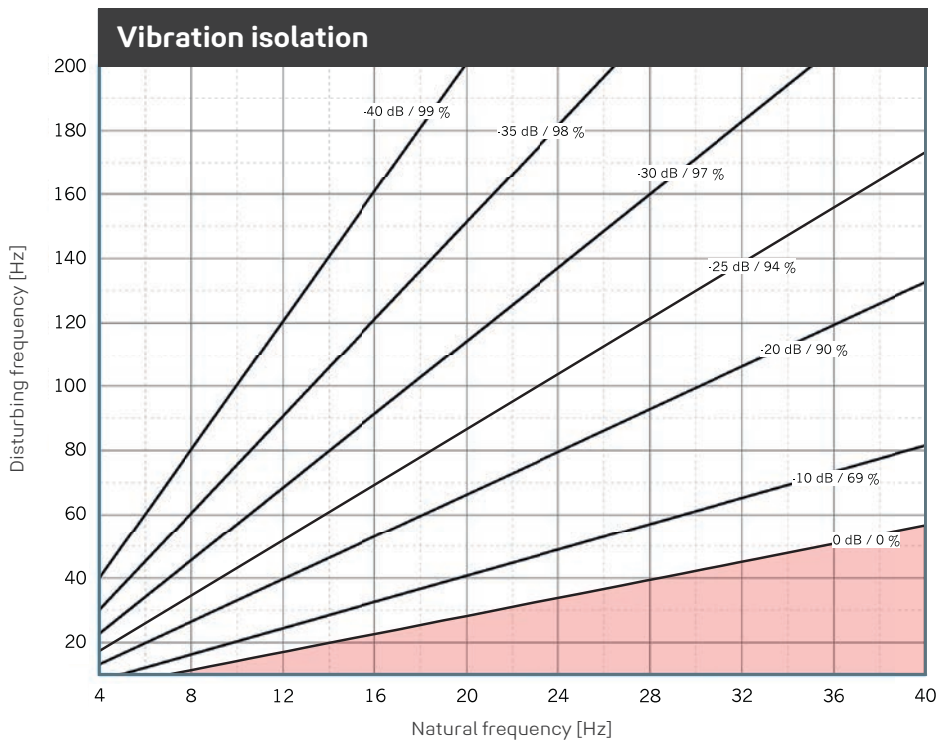
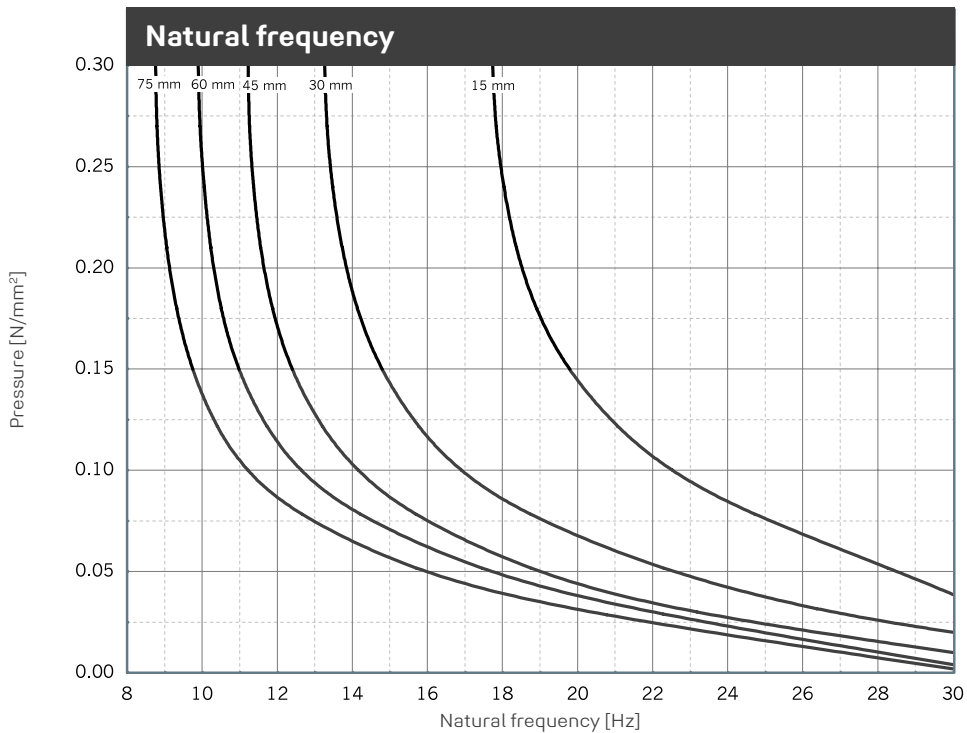
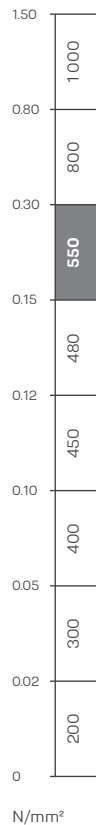


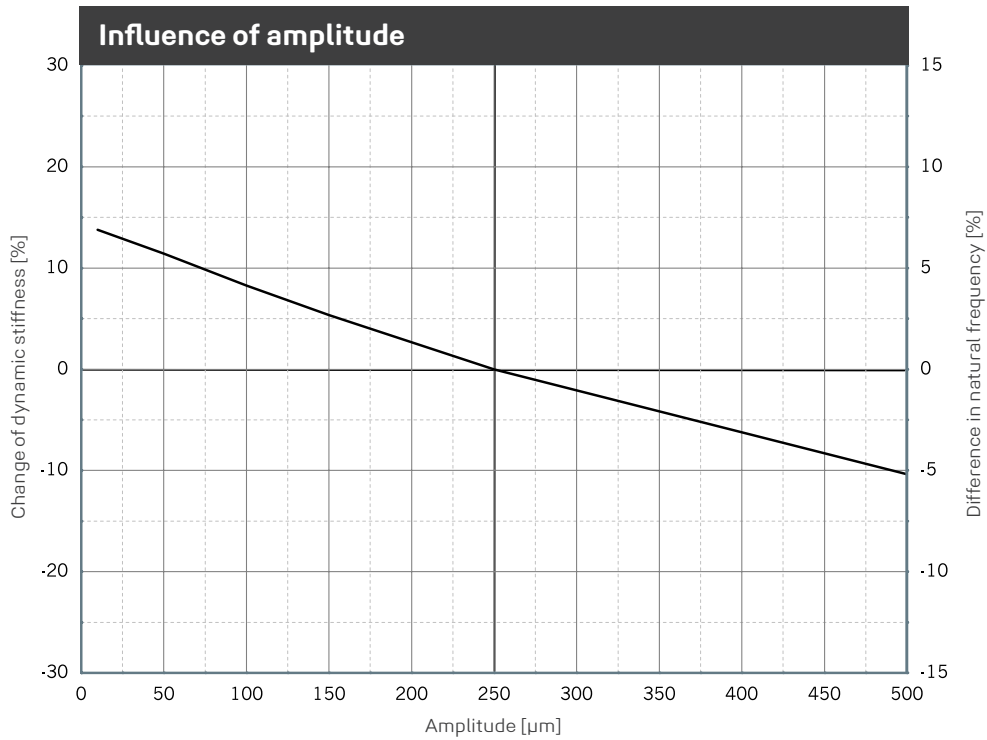
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 550**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



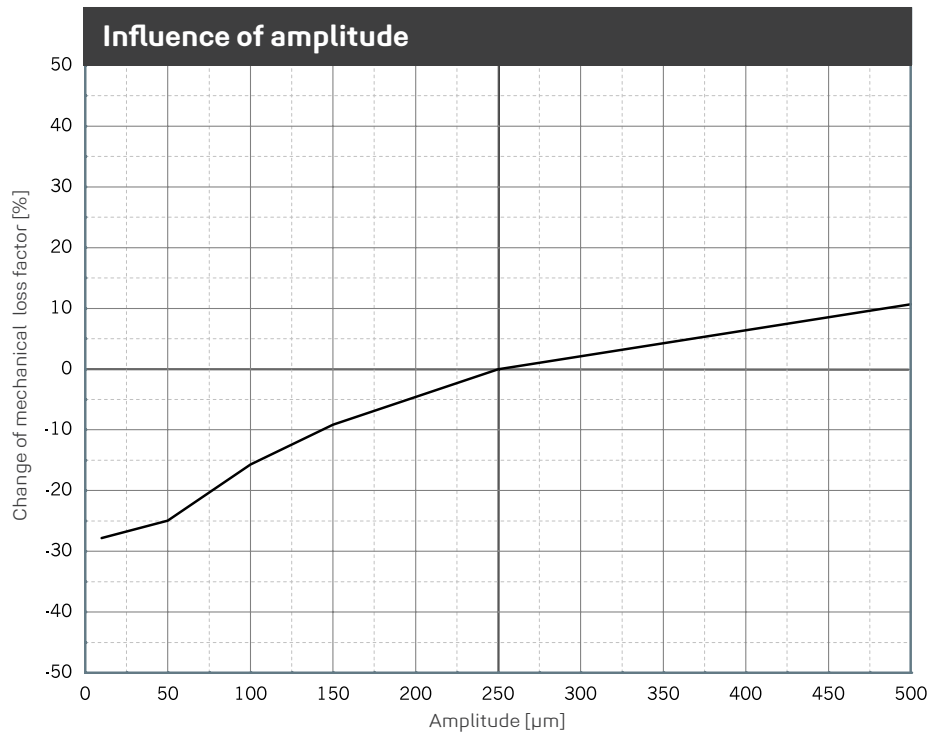
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 550** on a rigid base. Dimensions of test specimens 300 x 300 mm.



# REGUPOL VIBRATION 550



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.25 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.25 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 60 mm.

# REGUPOL VIBRATION 550

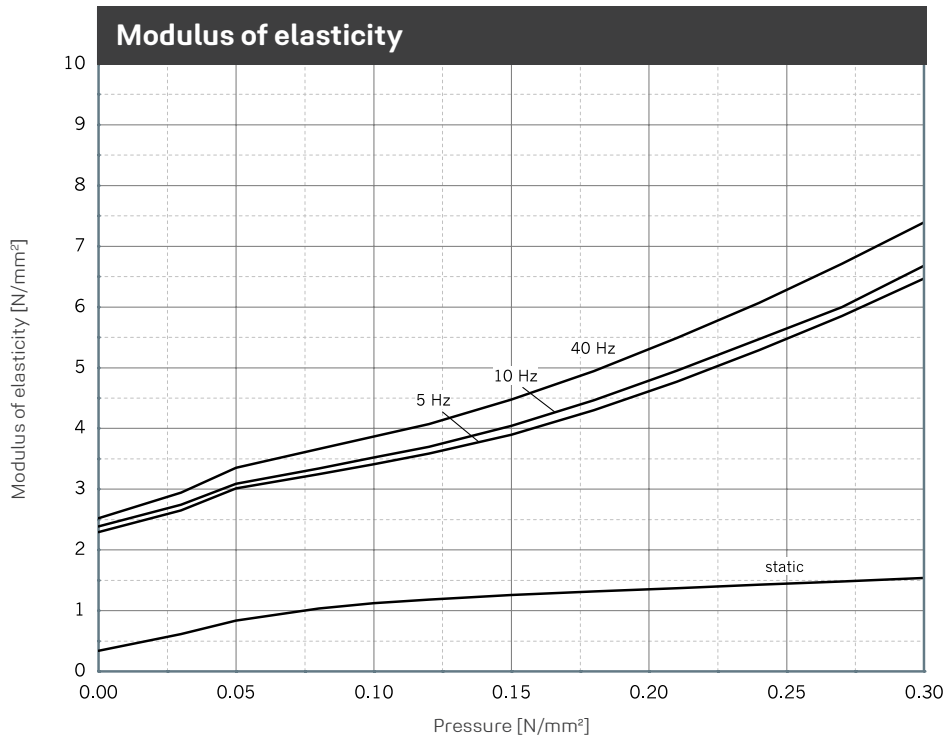


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 45$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

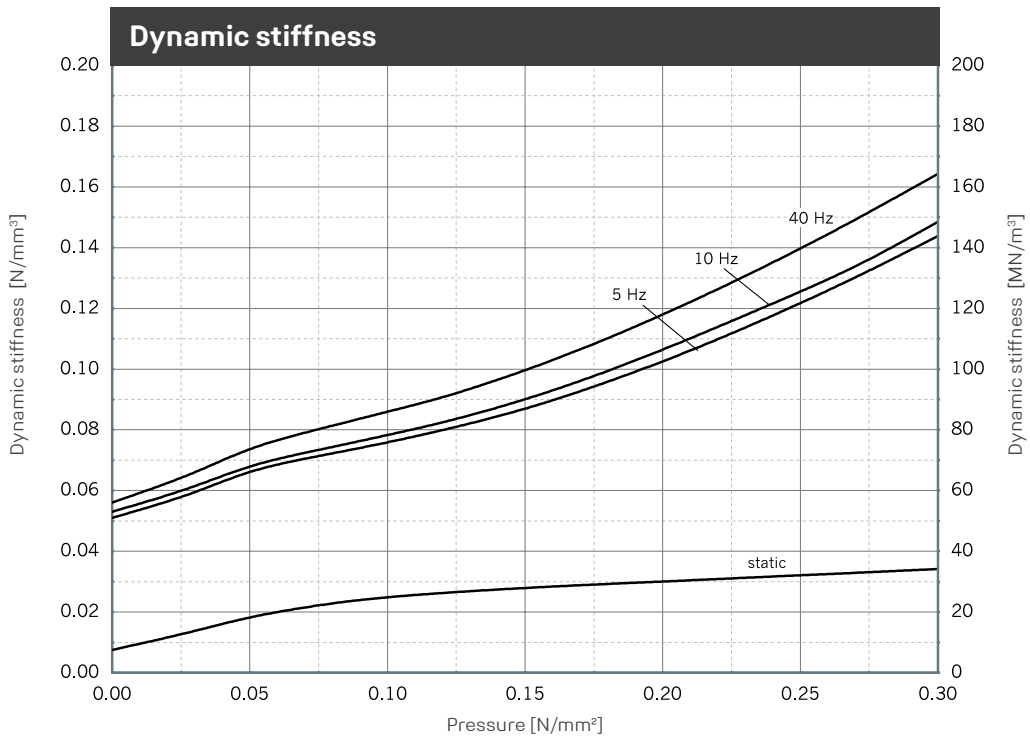
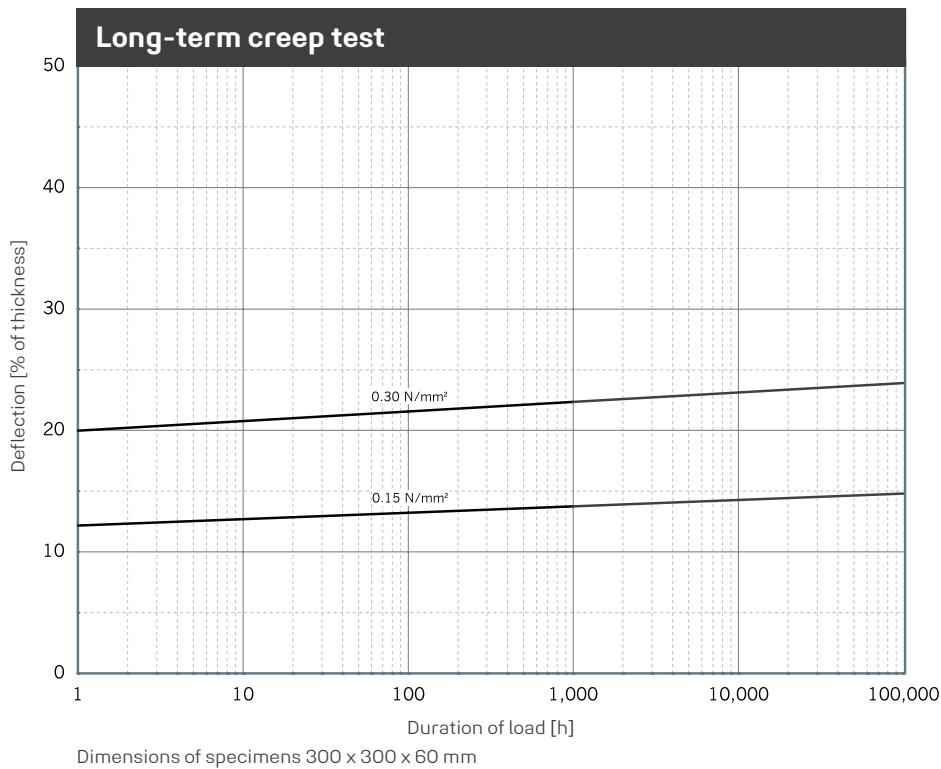


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $300 \times 300 \times 45$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 550



## Exclusion of Liability

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## Forms of delivery

### Rolls, ex warehouse

Thickness: 10 mm  
 Length: 8,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

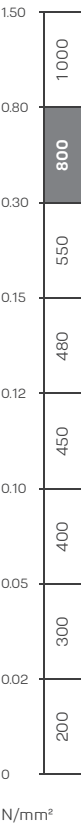
0.800 N/mm<sup>2</sup>

### Rare, short term peak loads

up to 1.000 N/mm<sup>2</sup>

### Certification

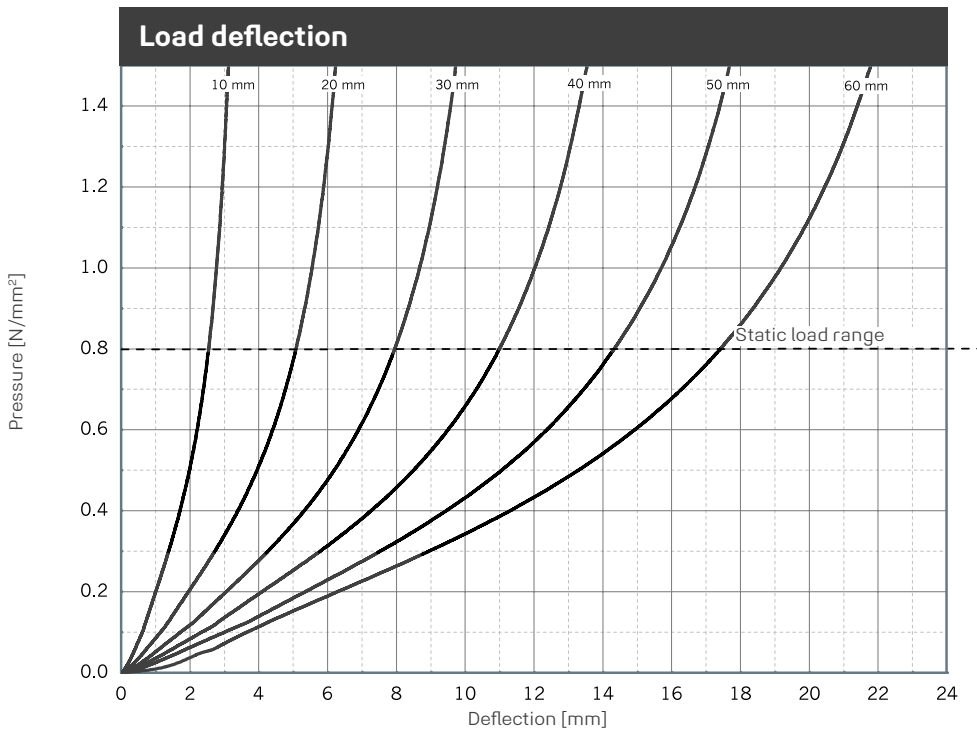
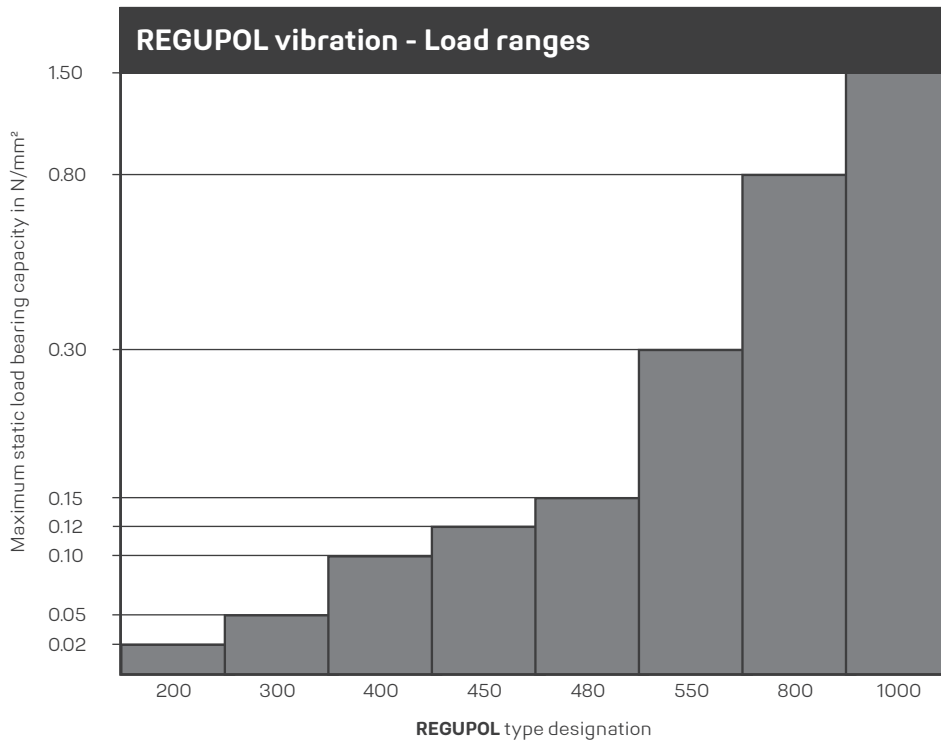
**Cradle to Cradle Certified®** is a registered trademark of the Cradle to Cradle Products Innovation Institute.



REGUPOL vibration 800 is Cradle to Cradle Certified® at the Bronze level.

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

# REGUPOL VIBRATION 800



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

# REGUPOL VIBRATION 800

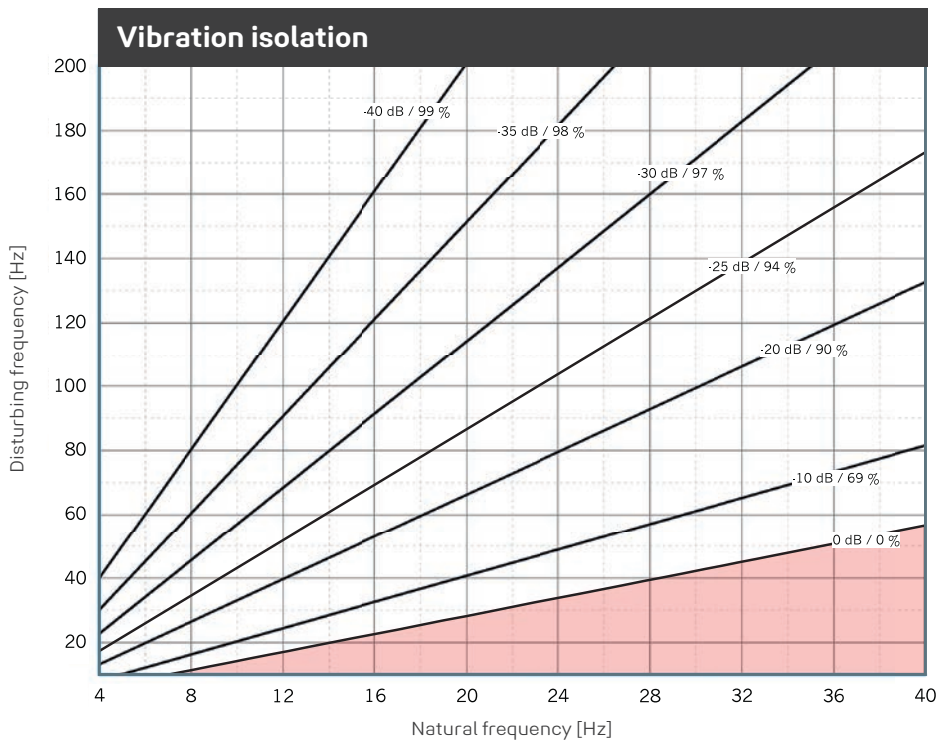
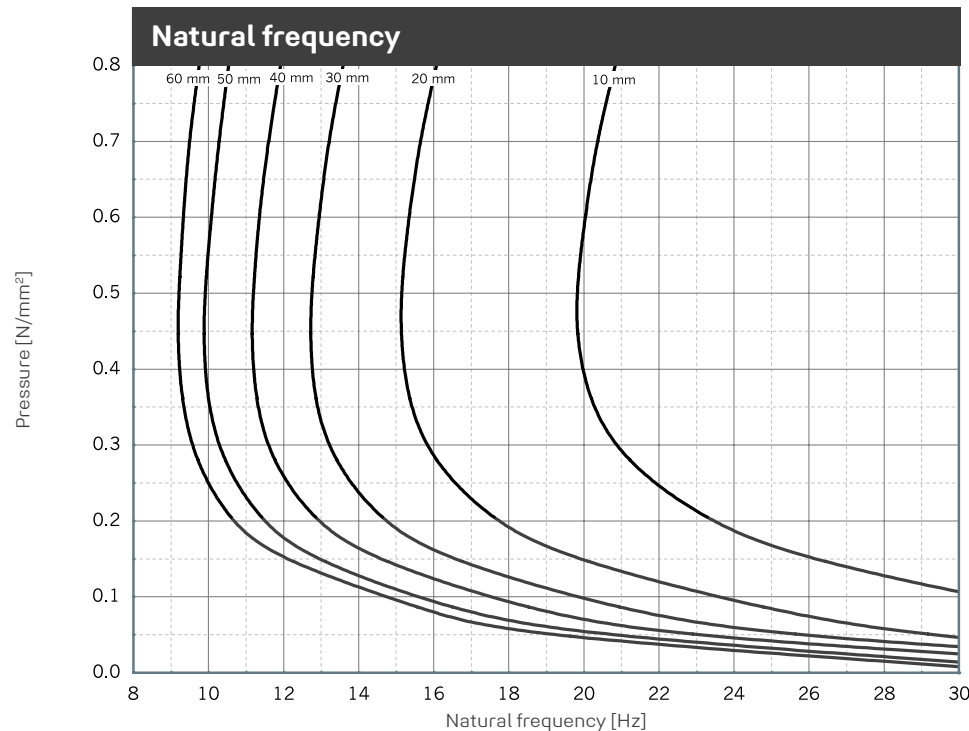


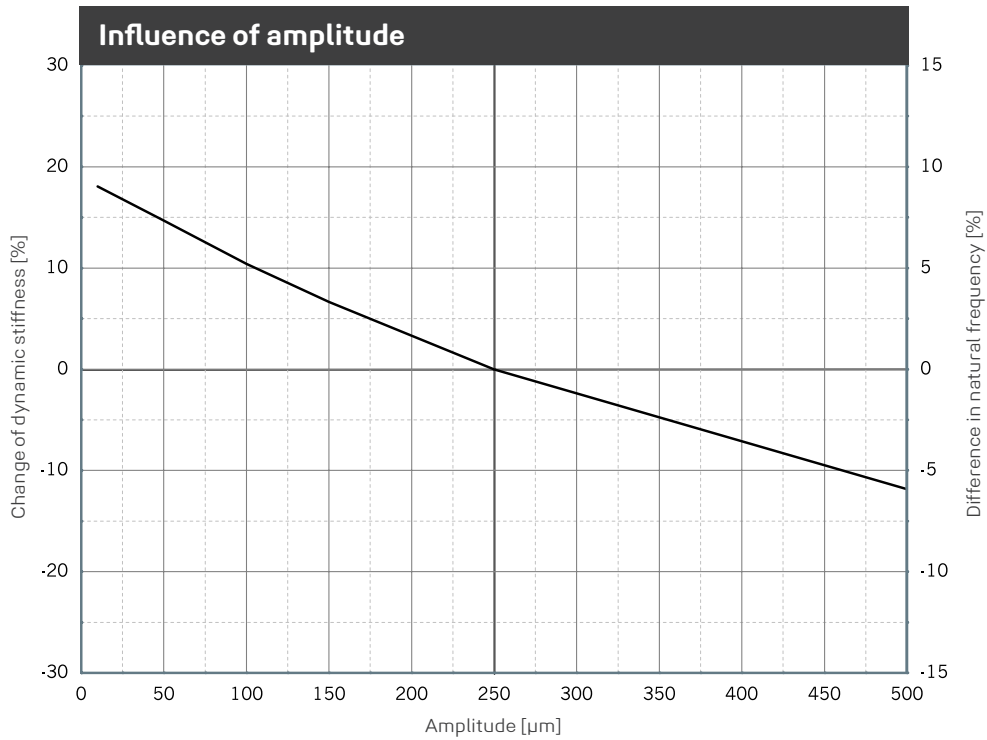
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 800**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



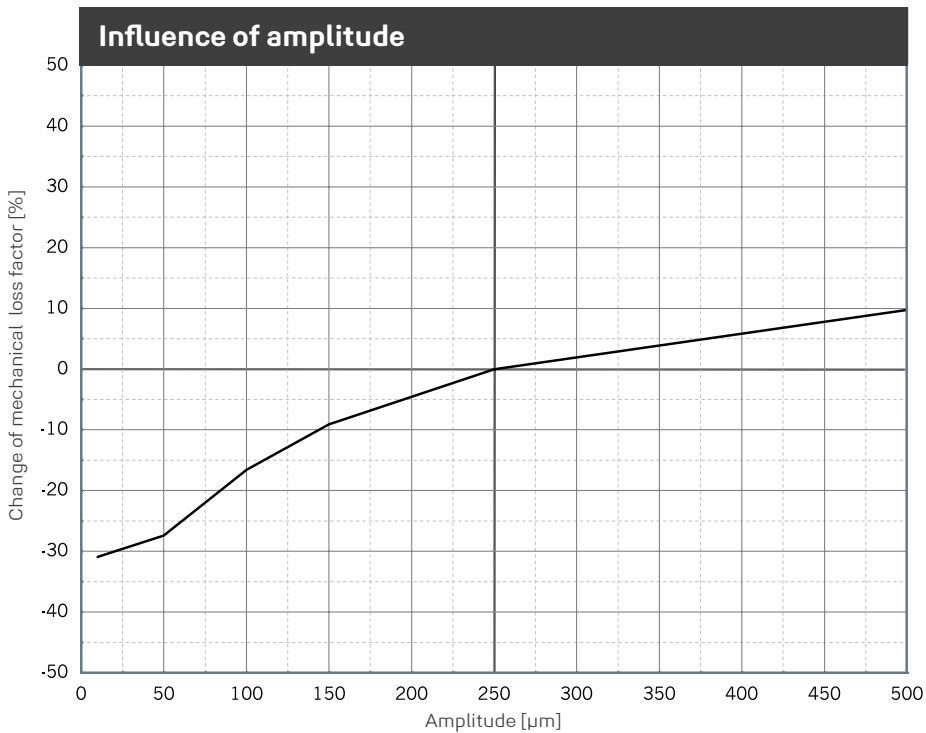
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 800** on a rigid base. Dimensions of test specimens 250 x 250 mm.



# REGUPOL VIBRATION 800



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.80 N/mm<sup>2</sup>, dimensions of the specimens 250 x 250 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.80 N/mm<sup>2</sup>, dimensions of the specimens 250 x 250 x 60 mm.

# REGUPOL VIBRATION 800

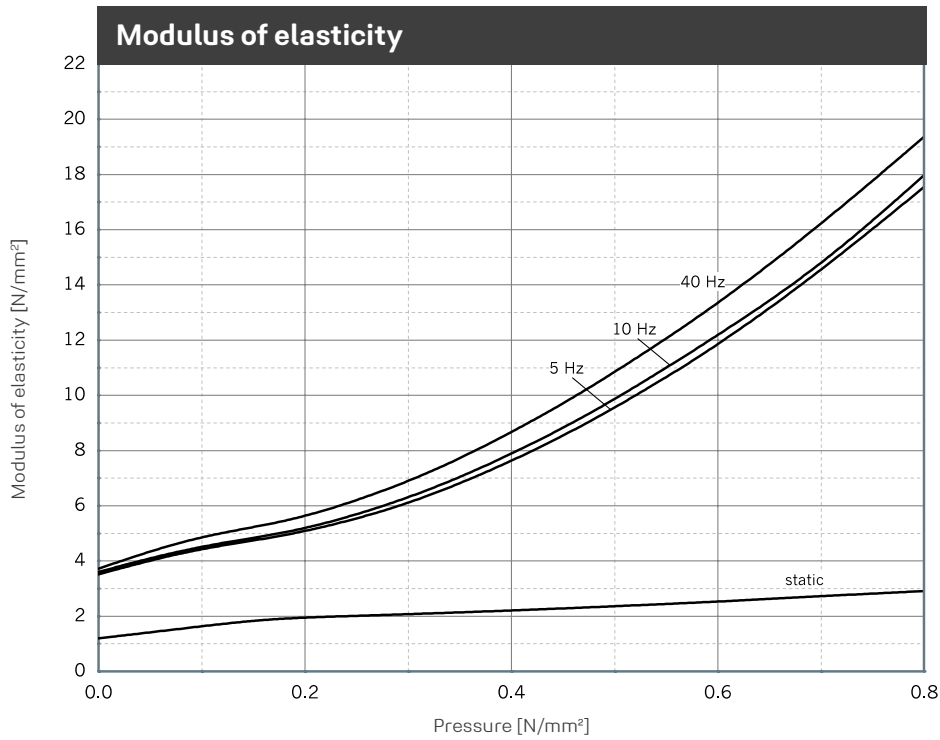


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $250 \times 250 \times 40$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

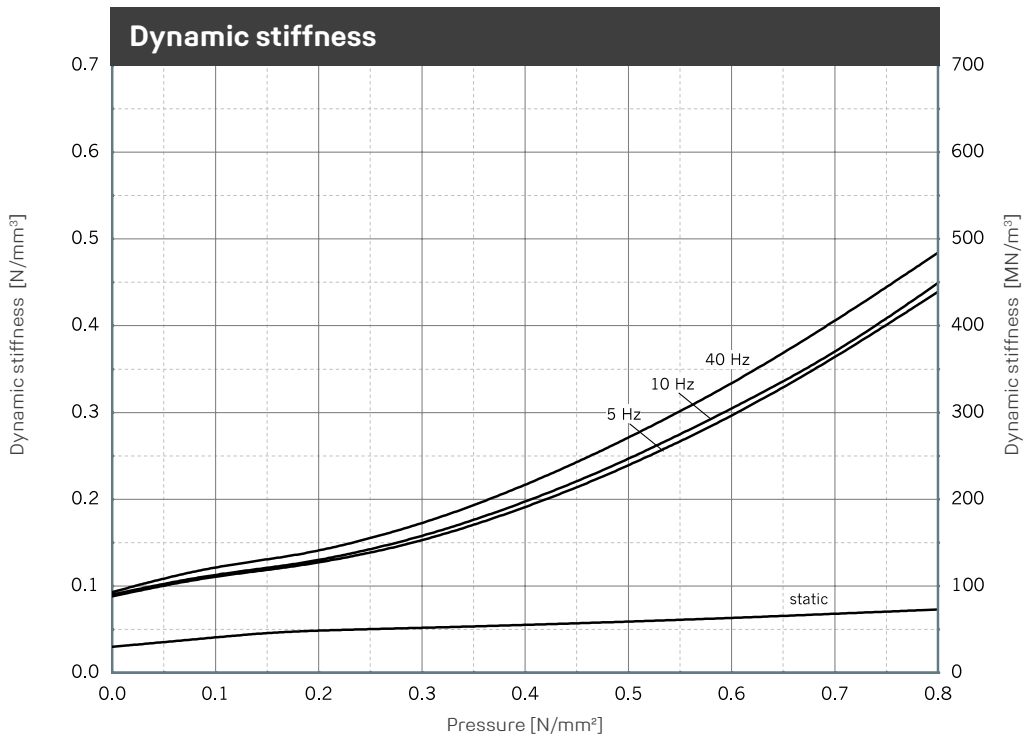
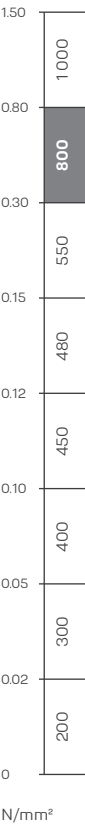
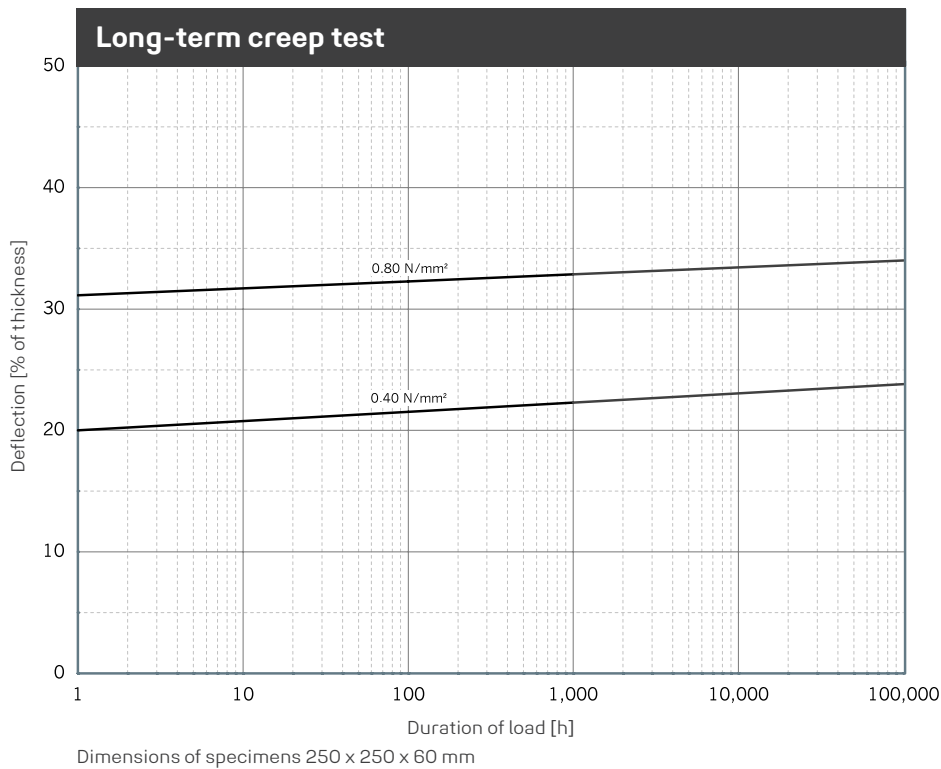


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $250 \times 250 \times 40$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 800



## Exclusion of Liability

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## Forms of delivery

### Rolls, ex warehouse

Thickness: 10 mm  
 Length: 8,000 mm  
 Width: 1,250 mm

Customized strips and pads, self-adhesive versions and special roll lengths available on request.

## Technical details

### Maximum static load bearing capacity

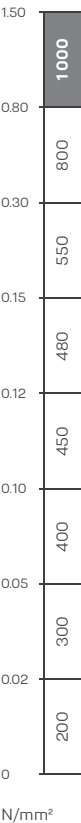
1.500 N/mm<sup>2</sup>

### Rare, short term peak loads

up to 1.750 N/mm<sup>2</sup>

### Certification

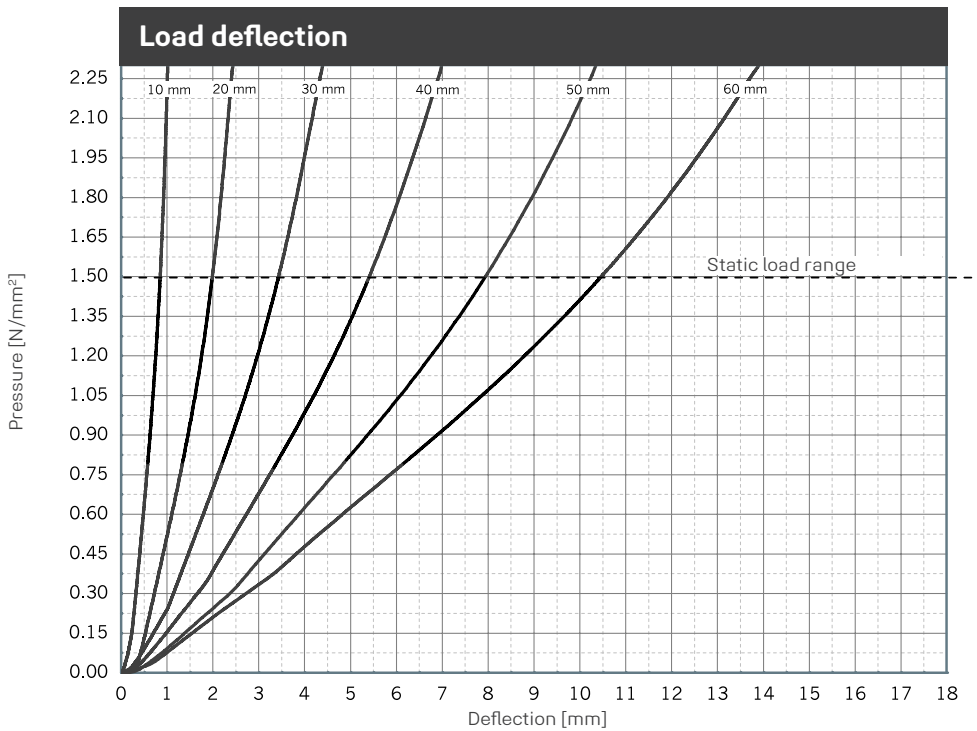
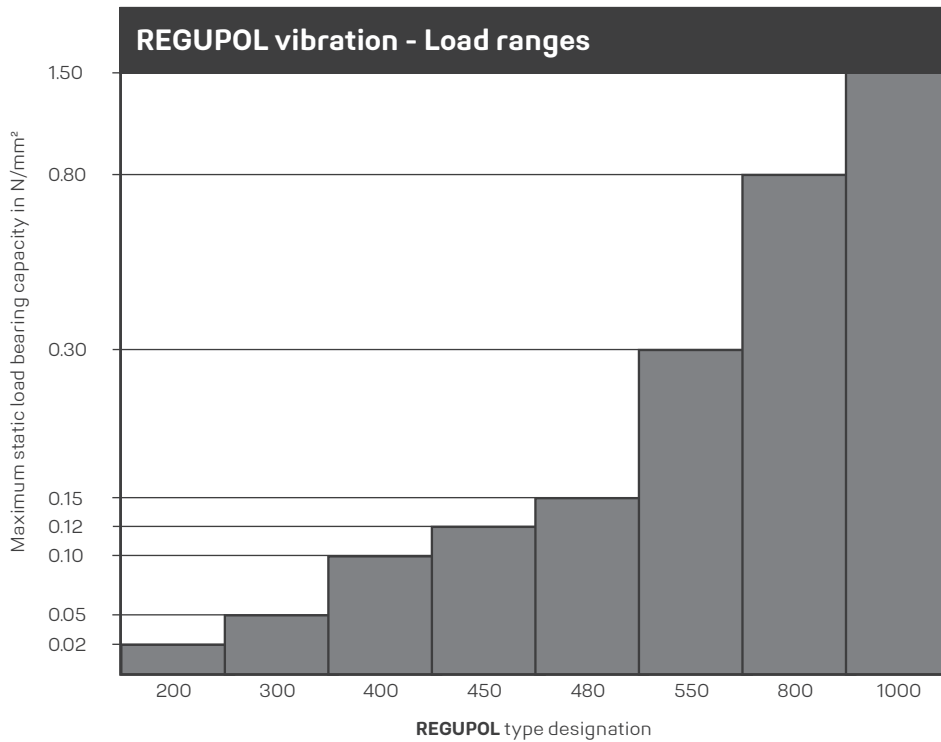
**Cradle to Cradle Certified®** is a registered trademark of the Cradle to Cradle Products Innovation Institute.



REGUPOL vibration 1000 is Cradle to Cradle Certified® at the Bronze level.

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

# REGUPOL VIBRATION 1000



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

# REGUPOL VIBRATION 1000

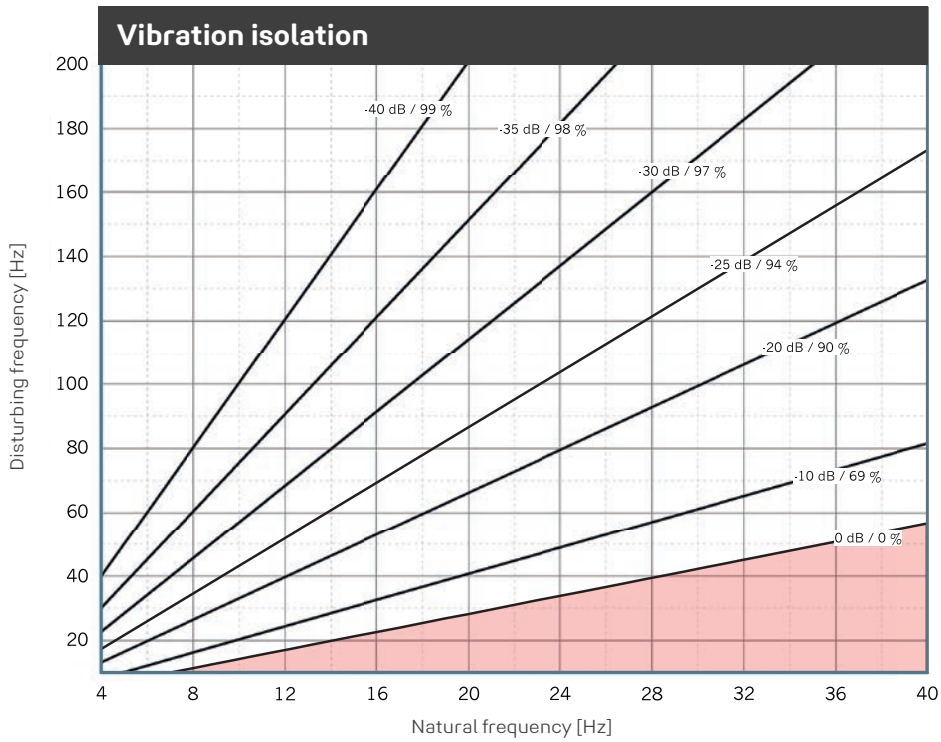
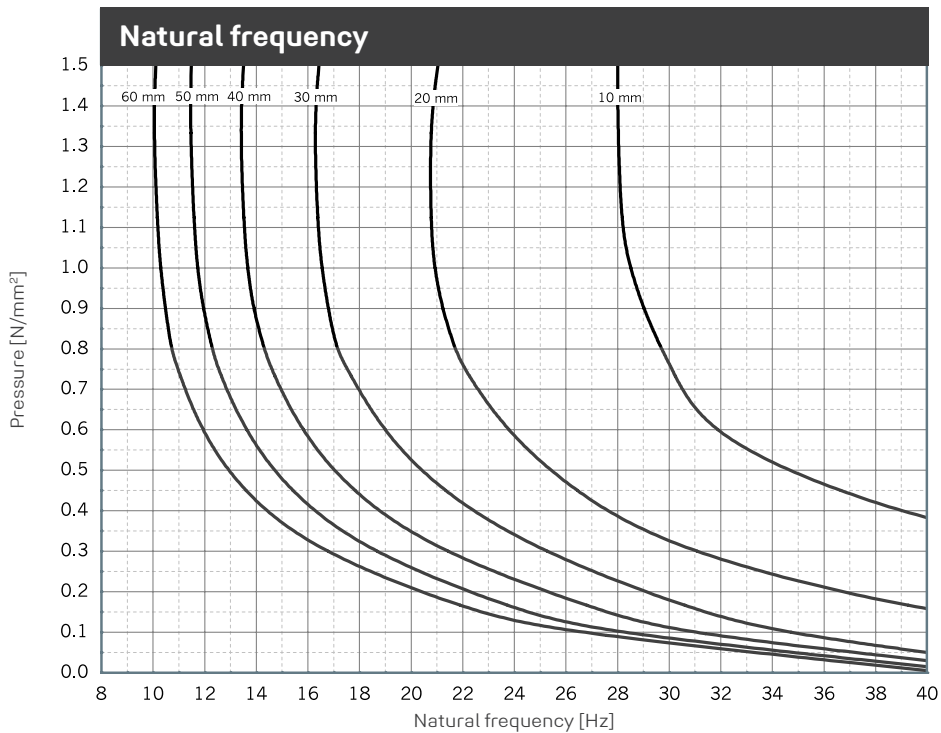


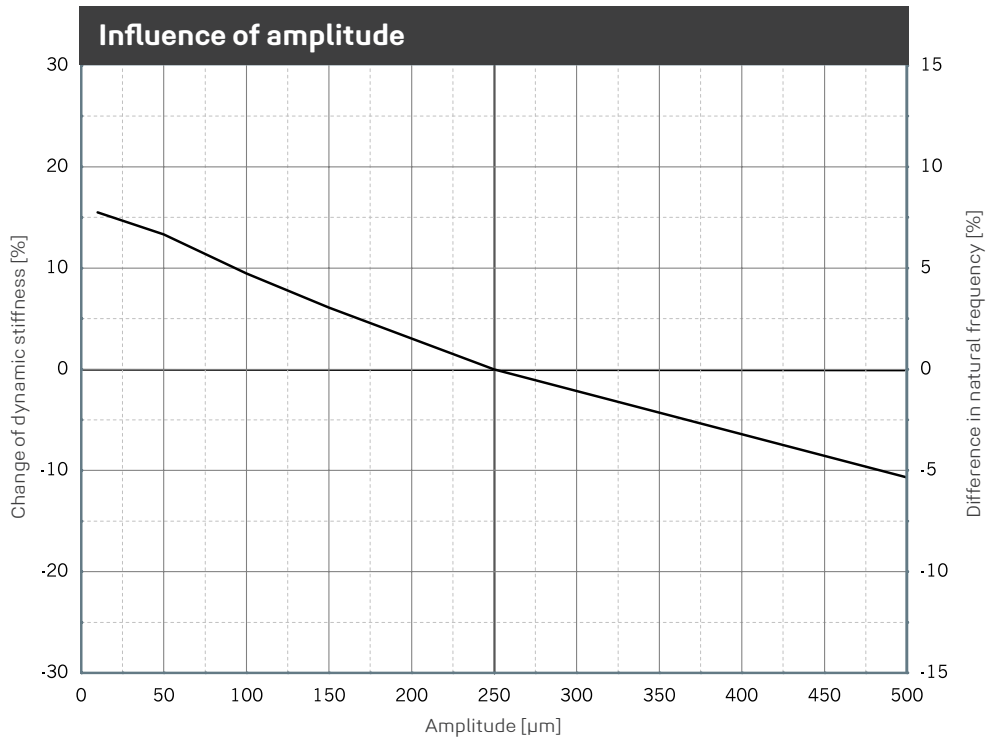
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **REGUPOL vibration 1000**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.



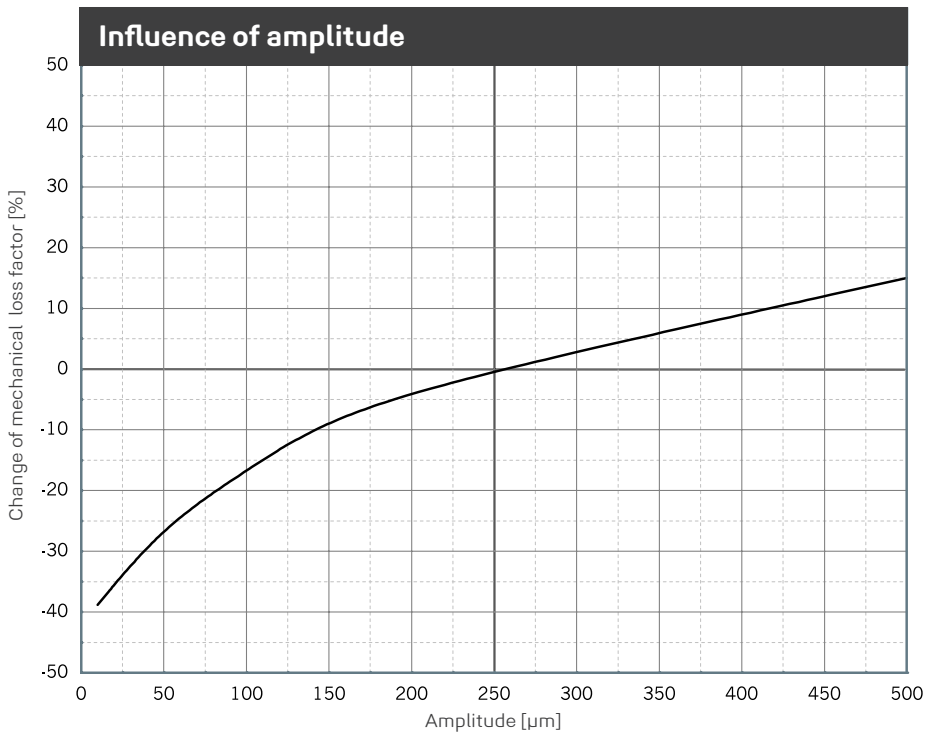
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **REGUPOL vibration 1000** on a rigid base. Dimensions of test specimens 200 x 200 mm.



# REGUPOL VIBRATION 1000



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 1.50 N/mm<sup>2</sup>, dimensions of the specimens 200 x 200 x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 1.50 N/mm<sup>2</sup>, dimensions of the specimens 200 x 200 x 60 mm.

# REGUPOL VIBRATION 1000

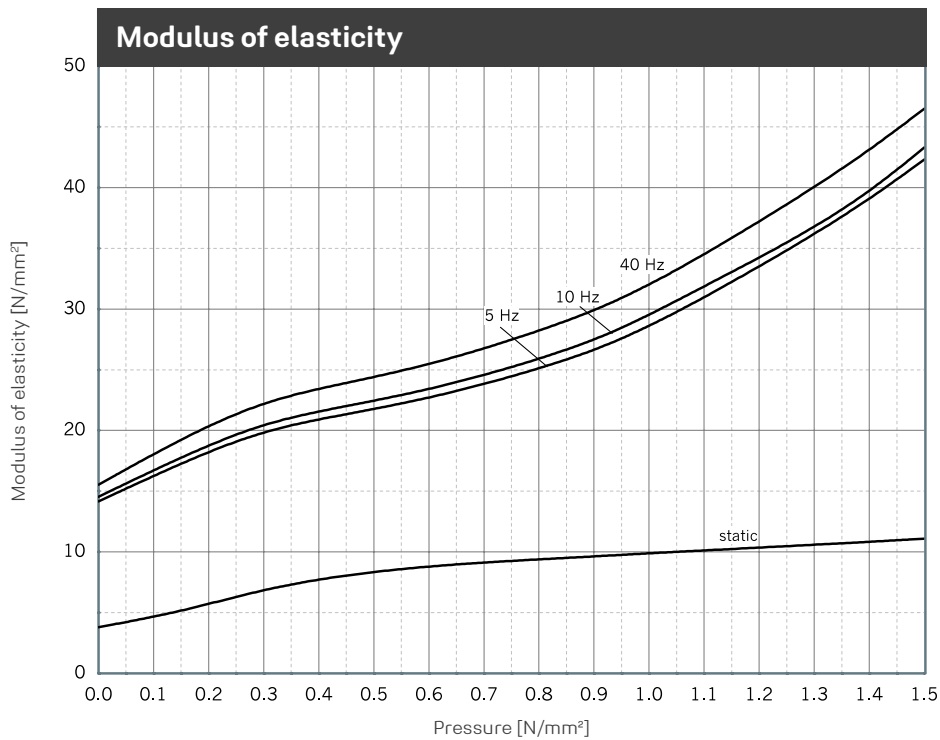


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $200 \times 200 \times 40$  mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance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

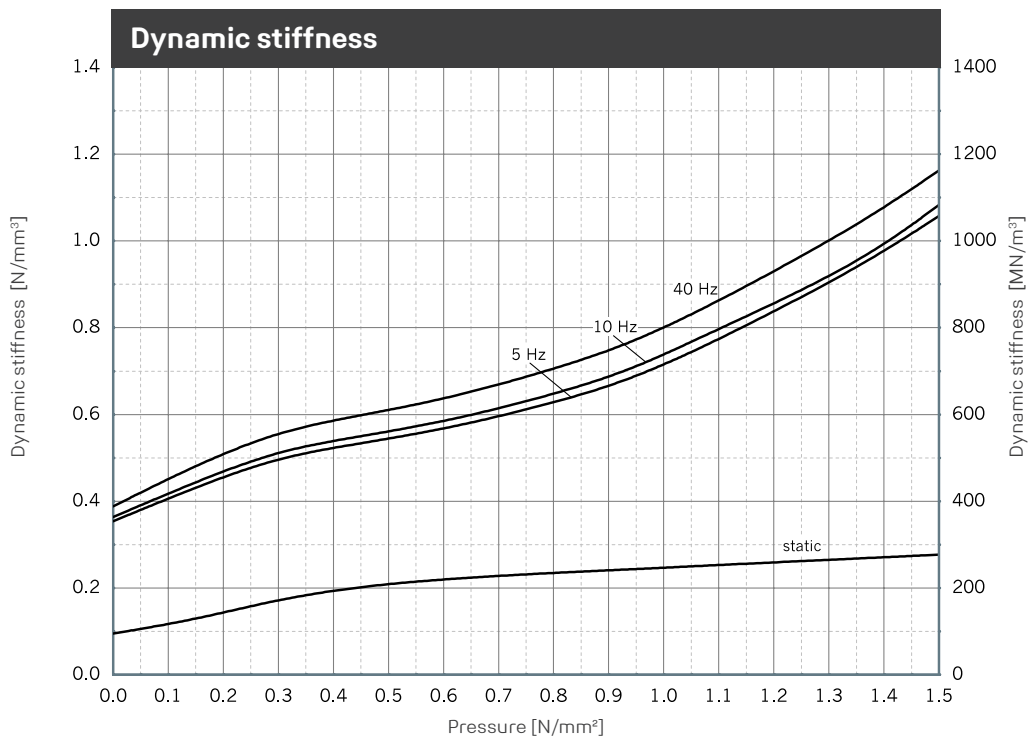
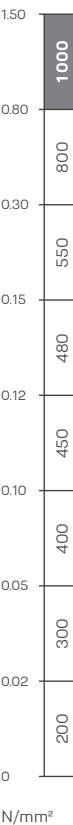
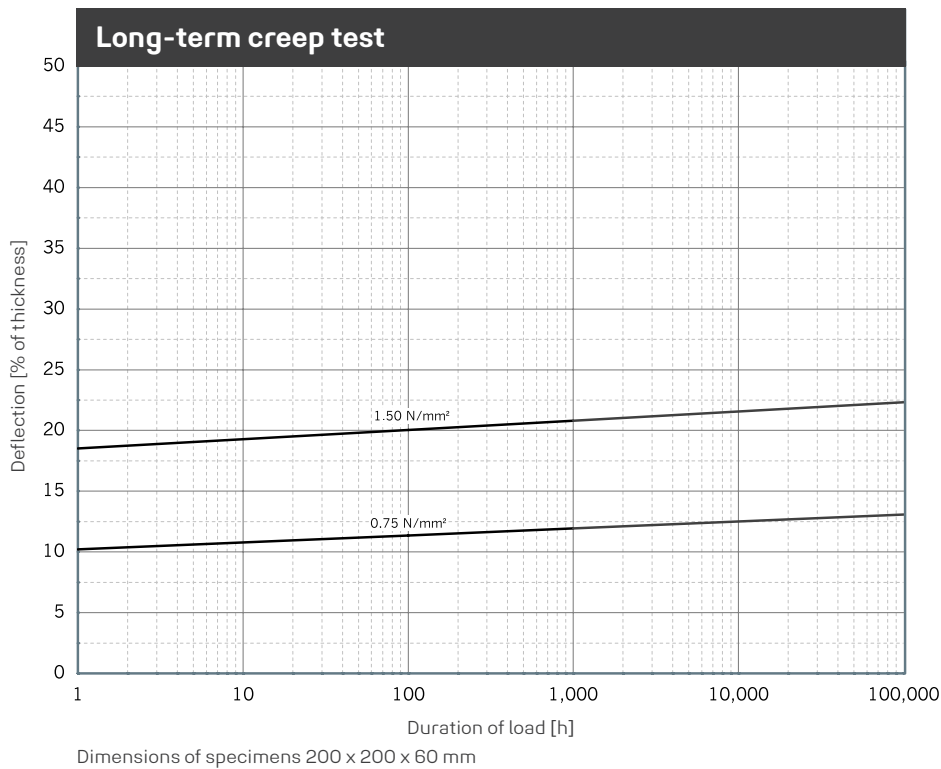


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of  $\pm 0.25$  mm. Dimensions of specimens  $200 \times 200 \times 40$  mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



# REGUPOL VIBRATION 1000



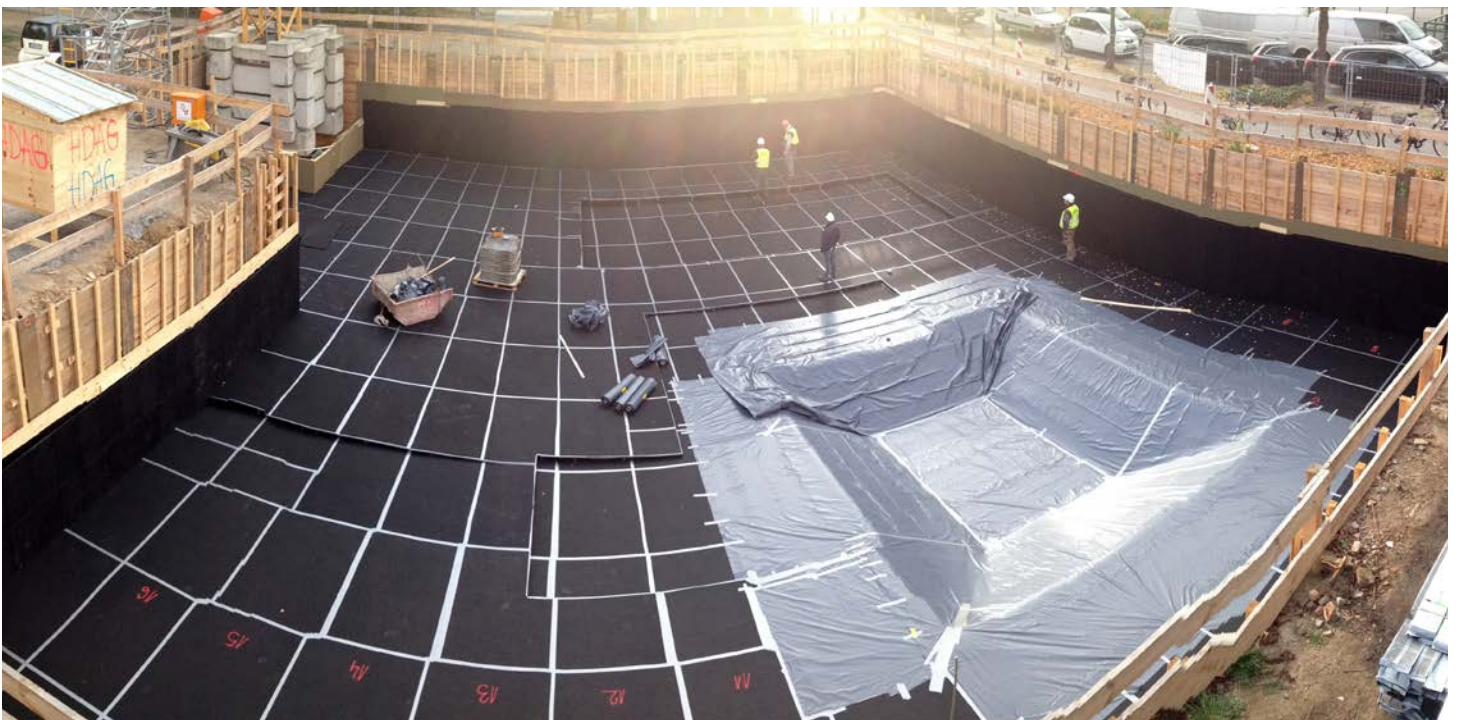
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**REGUPOL Germany GmbH & Co. KG**

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

**REGUPOL America LLC**

**REGUPOL Australia Pty. Ltd.**

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