 on your wavelength



Regupol®

Vibration Isolation Technical Details



Regupol® in:
Palaisquartier Frankfurt, Imtech
Arena Hamburg, Mainova Headof-
fice Frankfurt



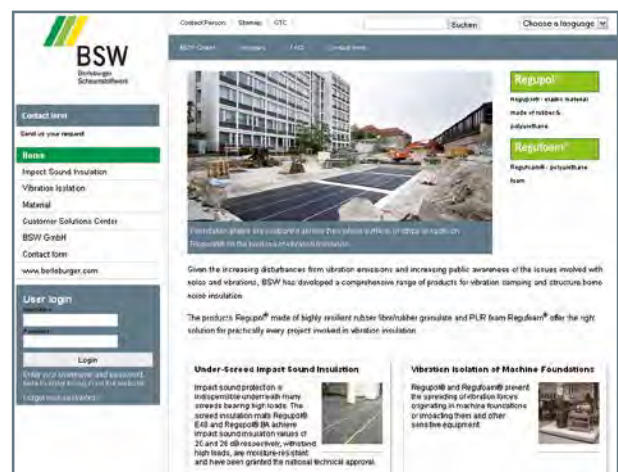


www.bsw-
vibration-technology.
com

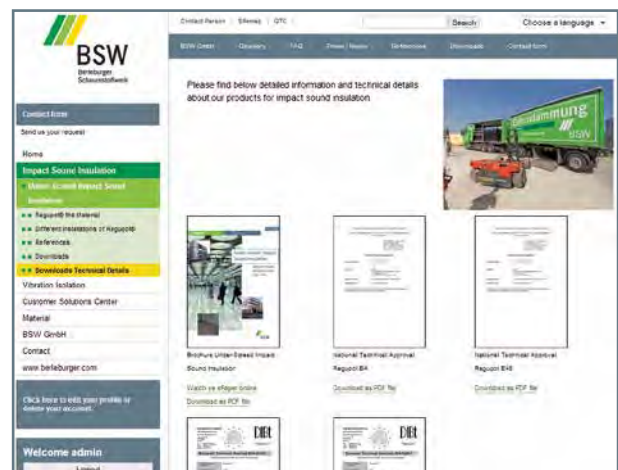
All Tools for the Download

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. 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 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;
 Florian Sassmannshausen, Phone: +49 2751 803-230 • f.sassmannshausen@berleburger.de •
 Downloads at www.bsw-vibration-technology.com

Standard forms of delivery, ex warehouse

Rolls

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

Stripping/Plates

On request
 Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.02 N/mm²

Continuous and variable loads/operating load range

0.05 N/mm²

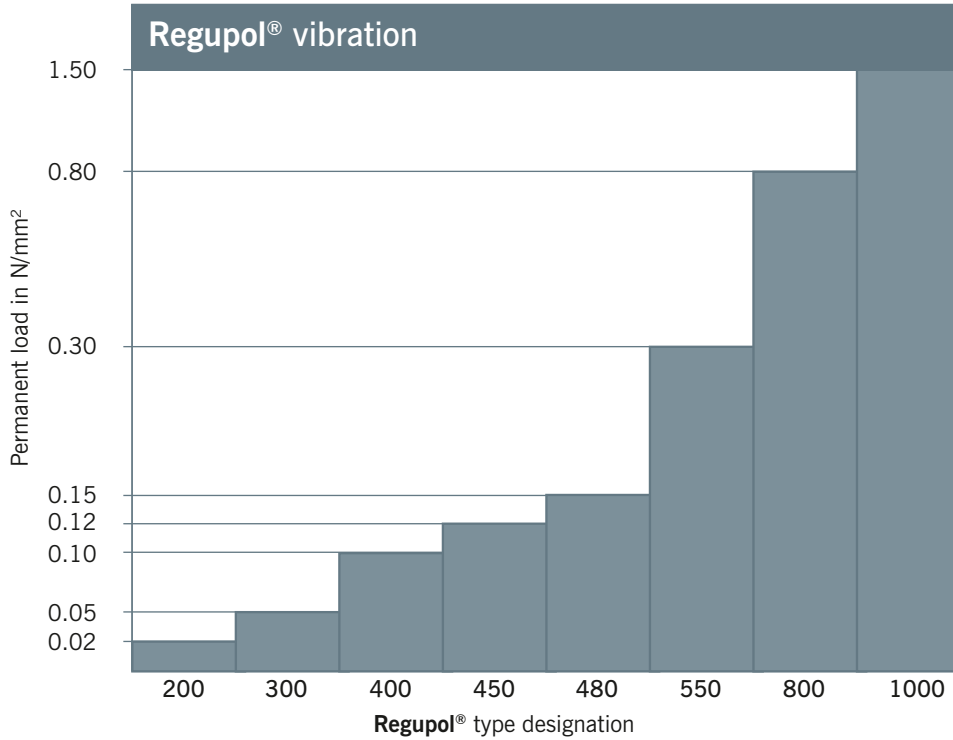
Protect the material permanently against moisture.



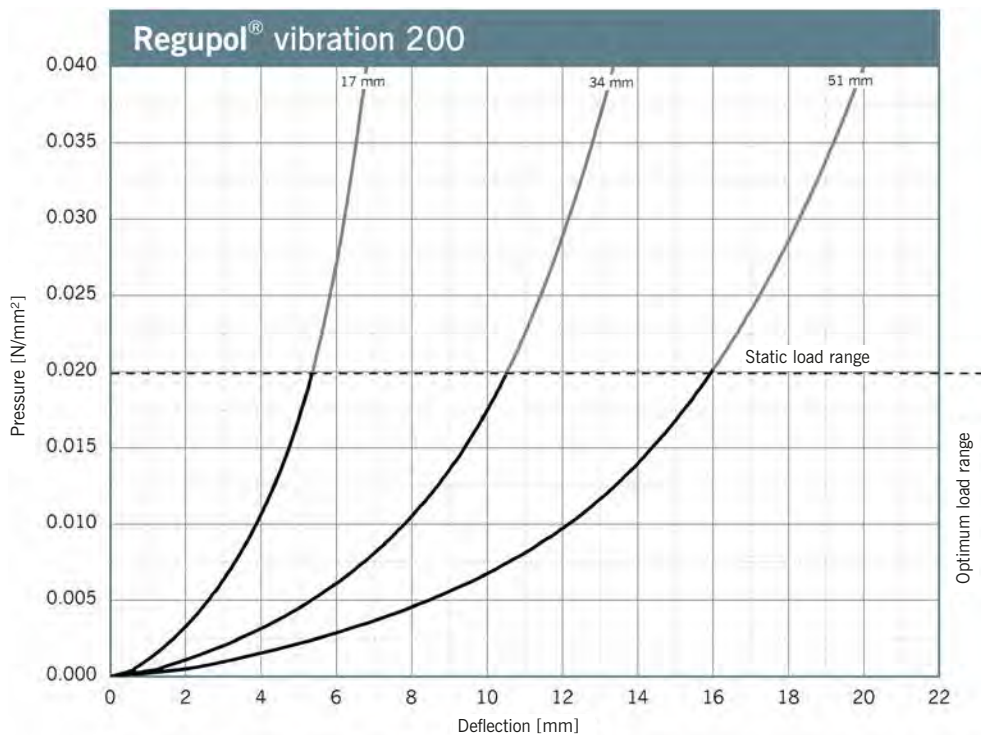
Static modulus of elasticity	Based on EN 826	0.02 - 0.08	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.05 - 0.38	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.22	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	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 ²	
Elongation at break	Based on DIN EN ISO 1798	40	%	
Tear resistance	Based on DIN ISO 34-1	1.0	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
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
Rebound elasticity	Based on DIN EN ISO 8307	14	%	dependent on thickness, test specimen h = 25 mm
Force reduction	DIN EN 14904	73	%	dependent on thickness, test specimen h = 25 mm



Load Ranges

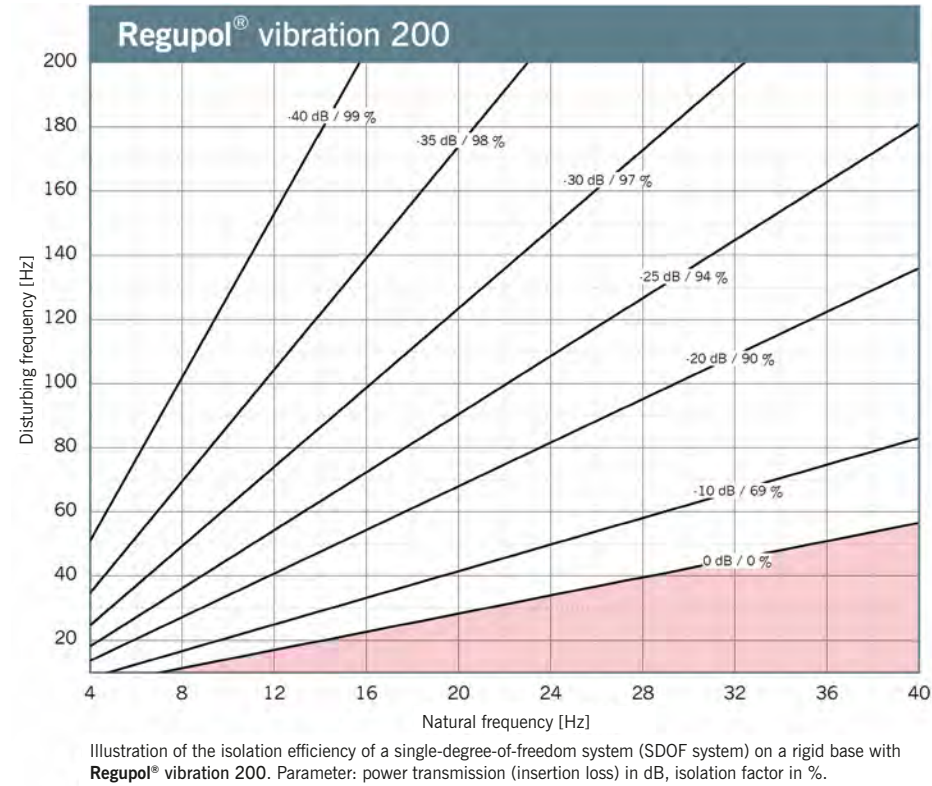


Load Deflection

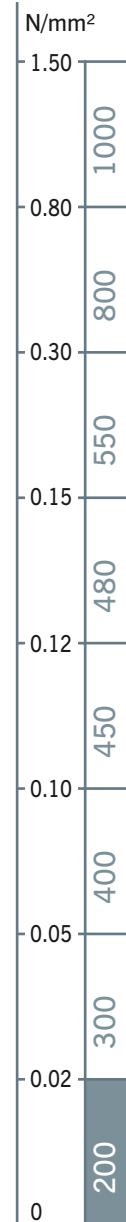
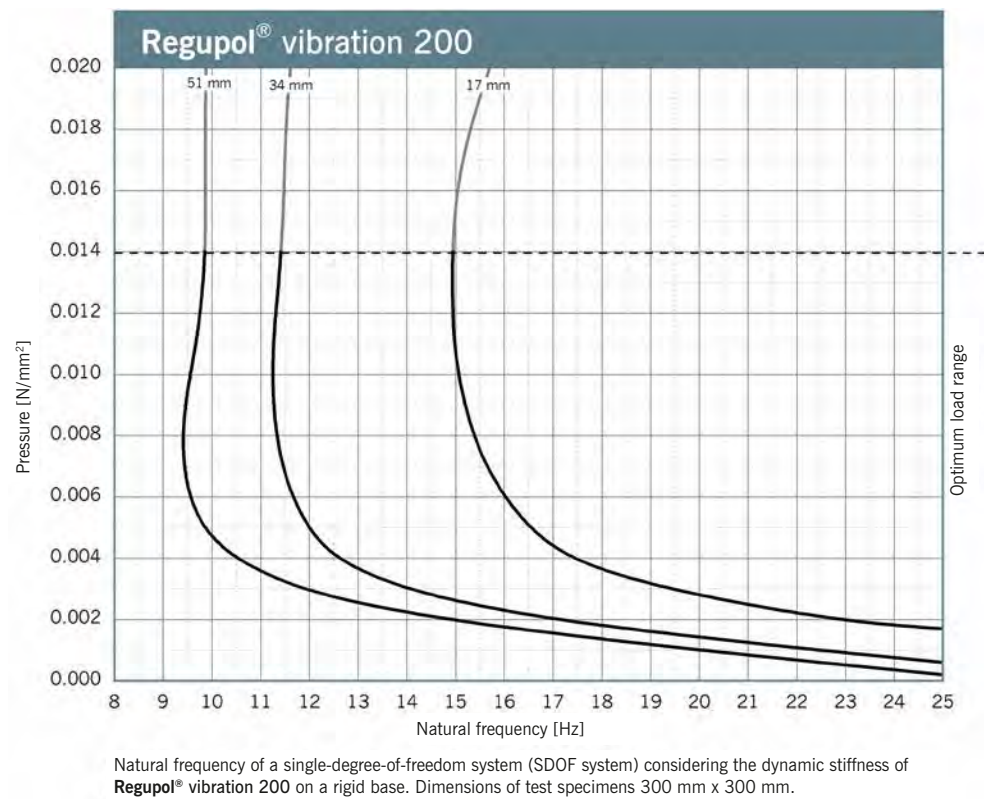


Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

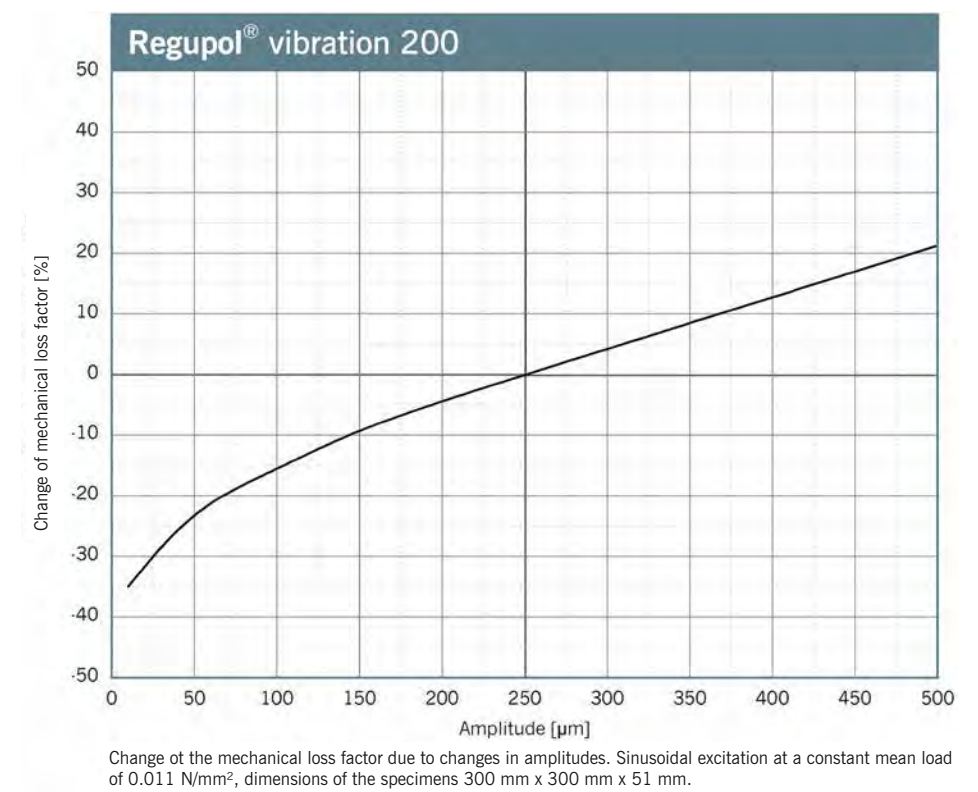
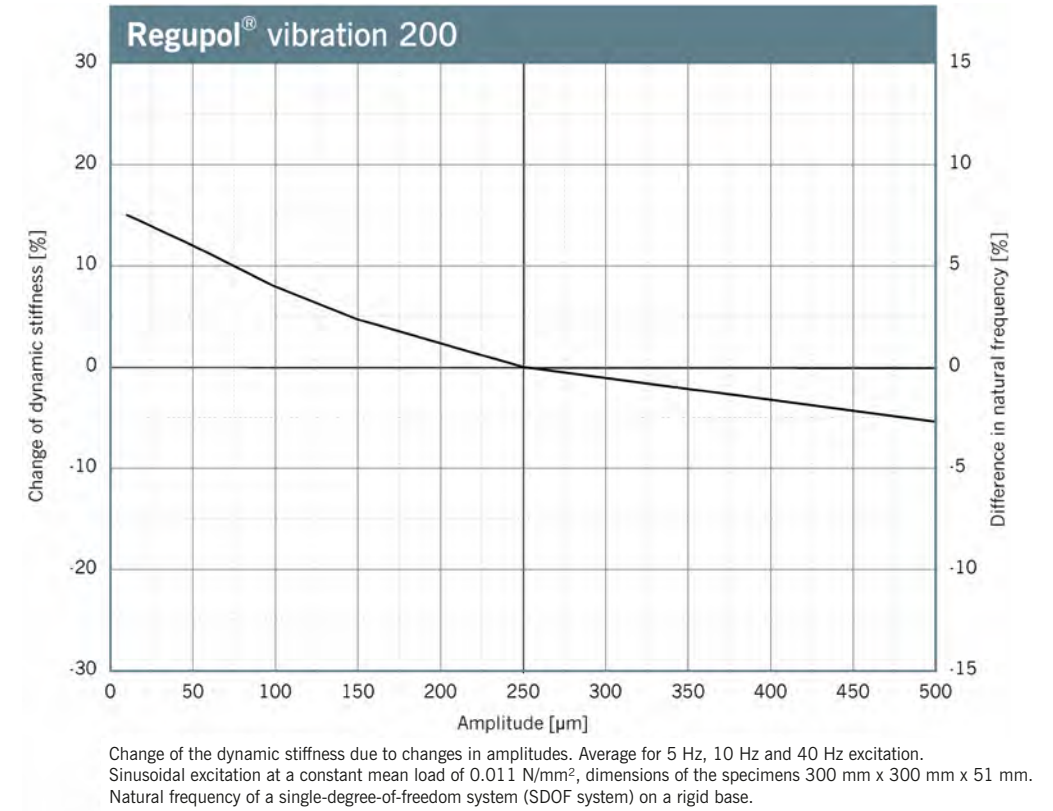
Vibration Isolation



Natural Frequency



Influence of Amplitude



Modulus of Elasticity

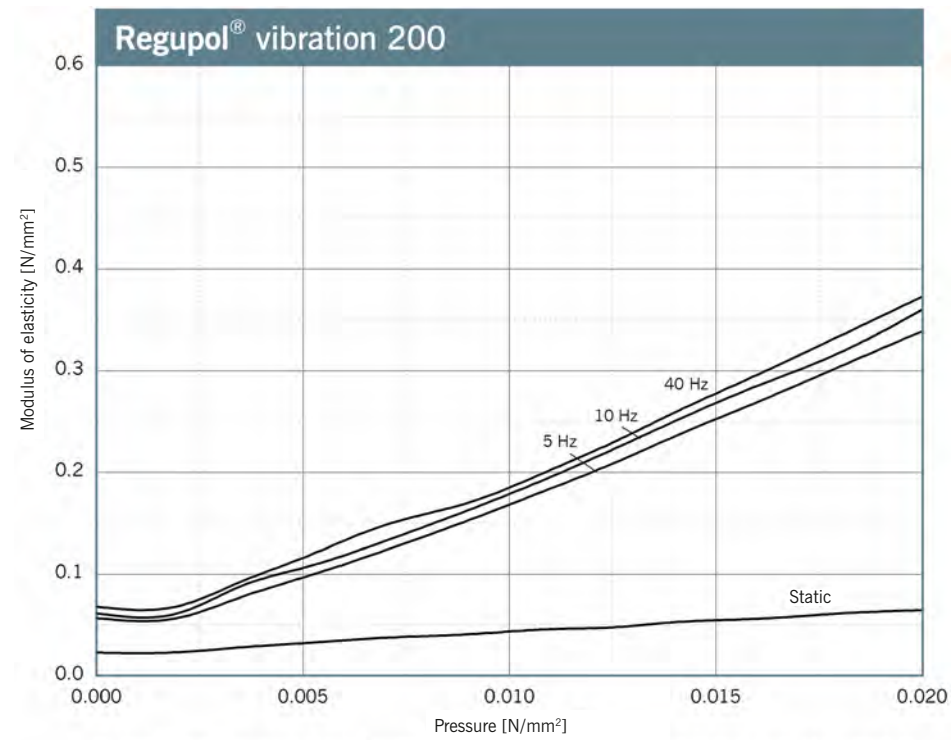


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 34 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

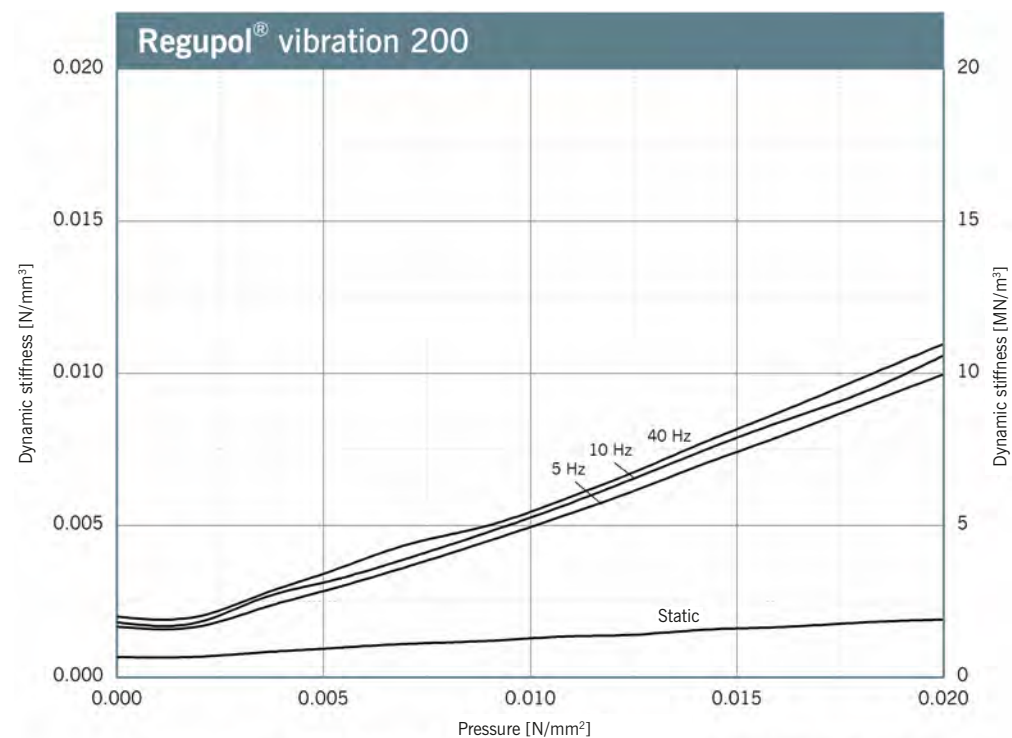
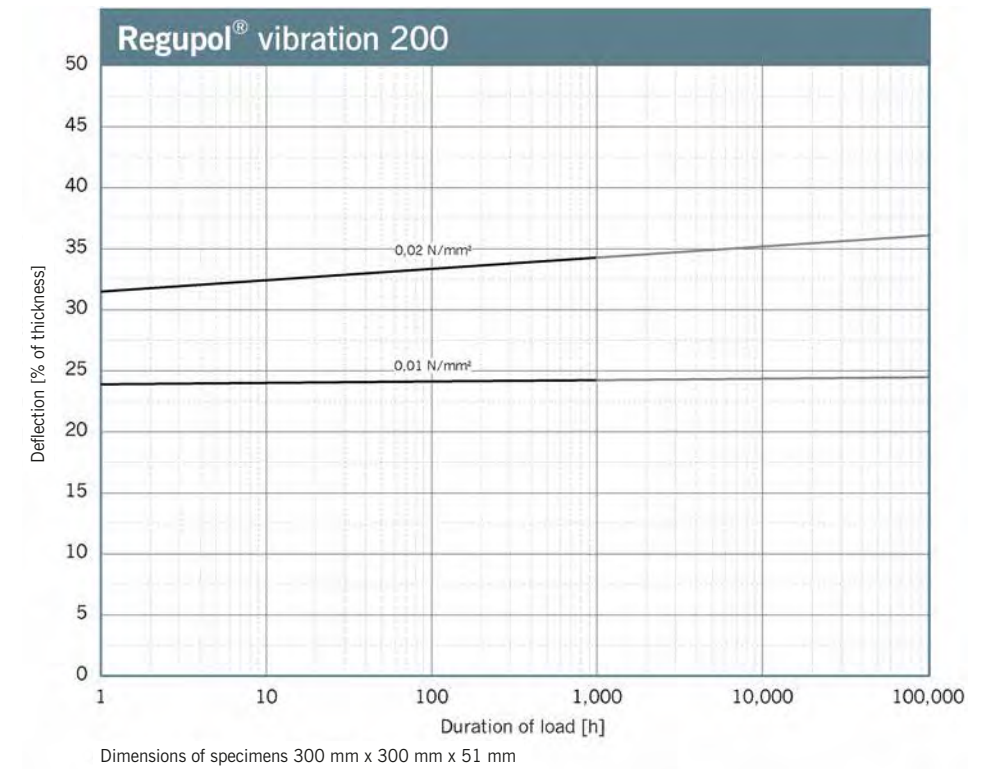


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 34 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm x 51 mm

Exclusion of Liability

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Standard forms of delivery, ex warehouse

Rolls

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

Stripping/Plates

On request
 Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.05 N/mm²

Continuous and variable loads/operating load range

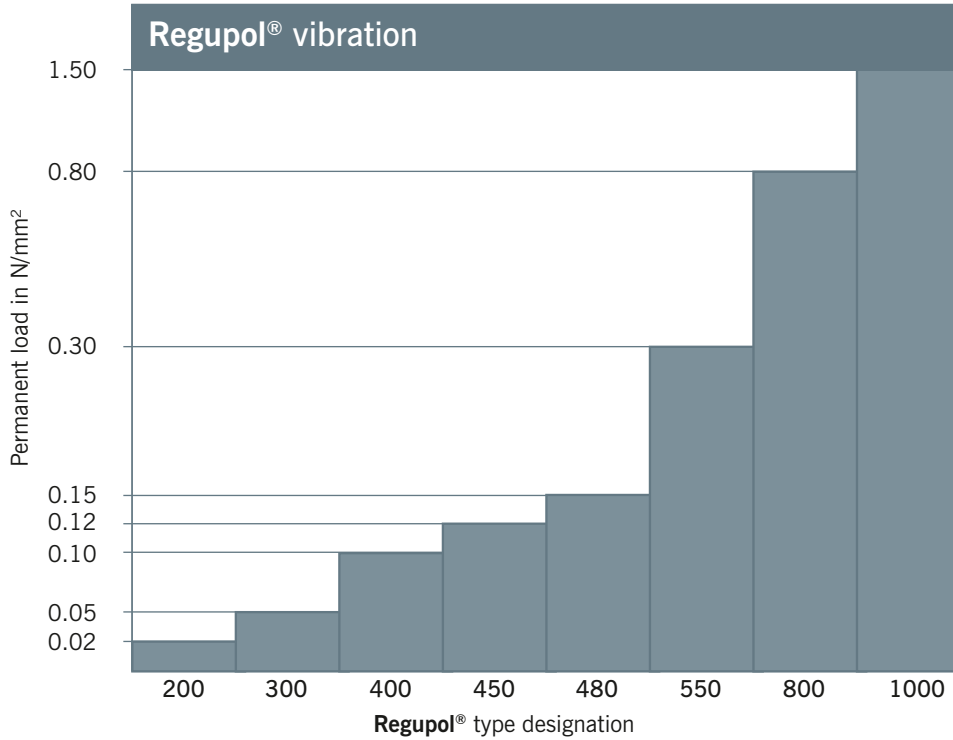
0.08 N/mm²



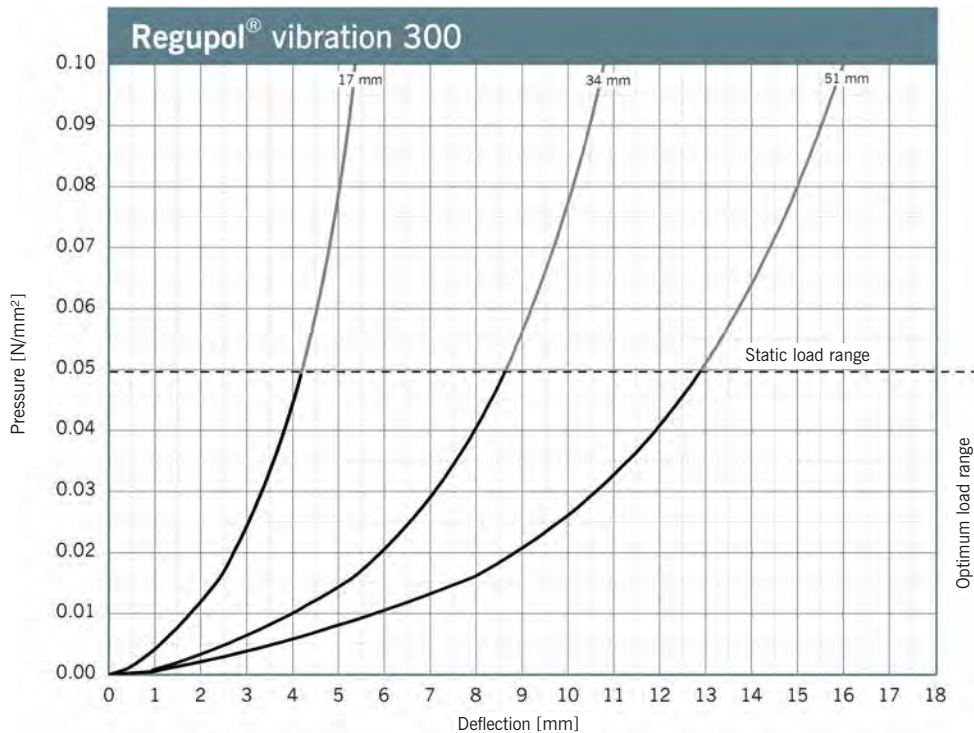
Static modulus of elasticity	Based on EN 826	0.1 - 0.2	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.2 - 1.4	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.18	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	1.6	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.30	N/mm ²	
Elongation at break	Based on DIN EN ISO 1798	55	%	
Tear resistance	Based on DIN ISO 34-1	2.1	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	[-]	



Load Ranges

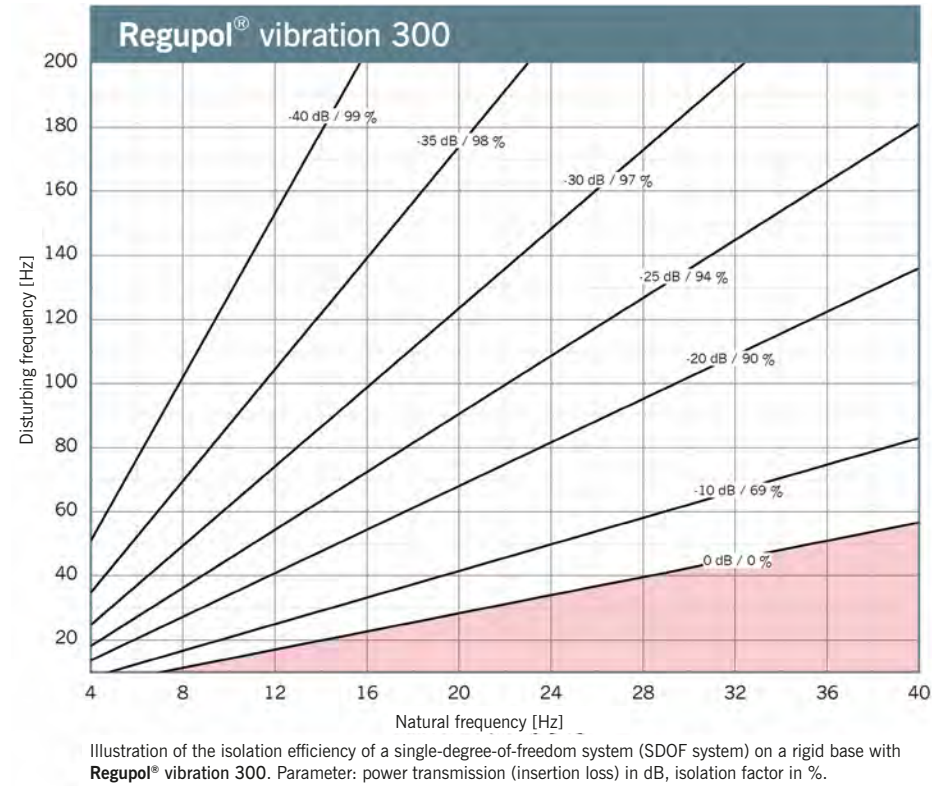


Load Deflection

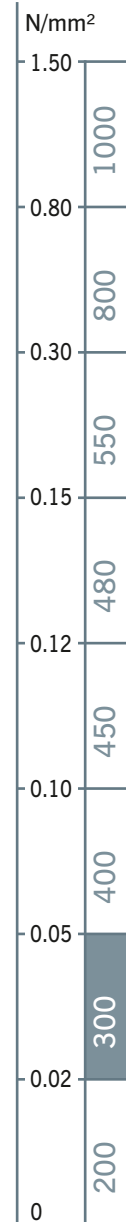
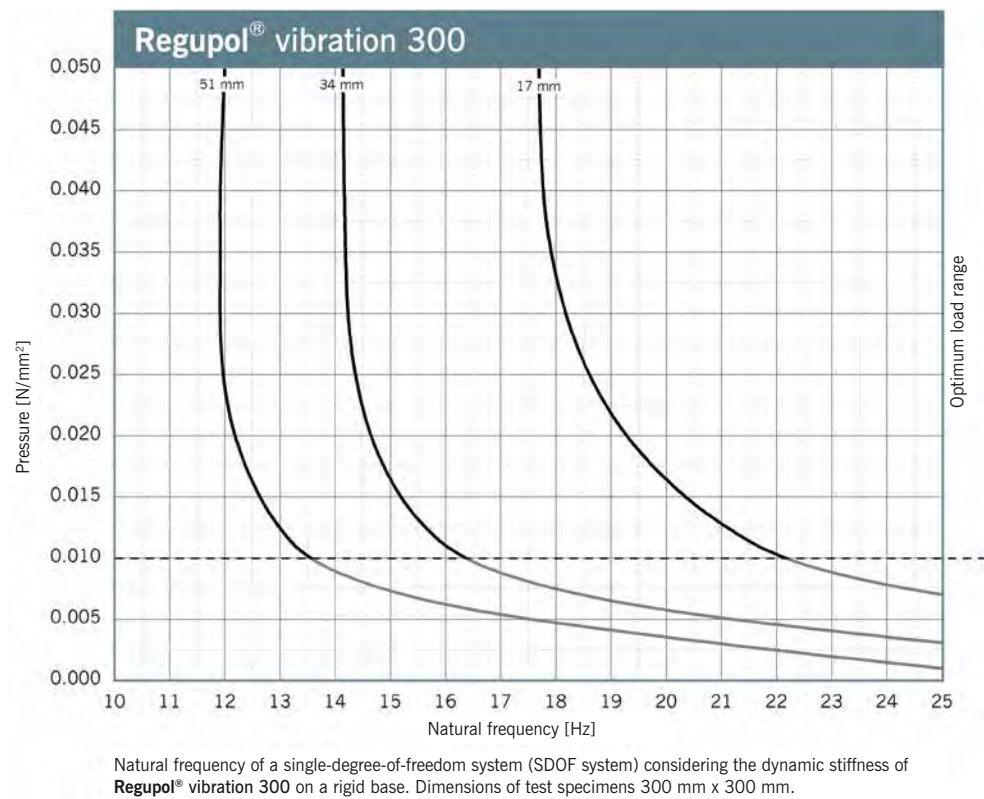


Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

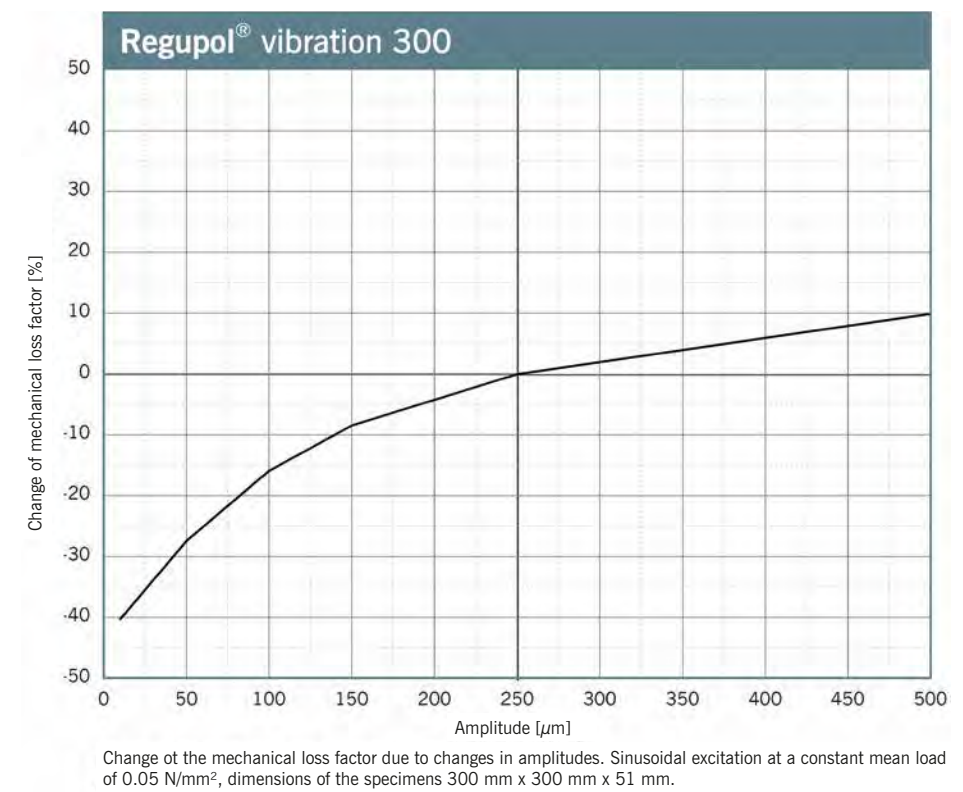
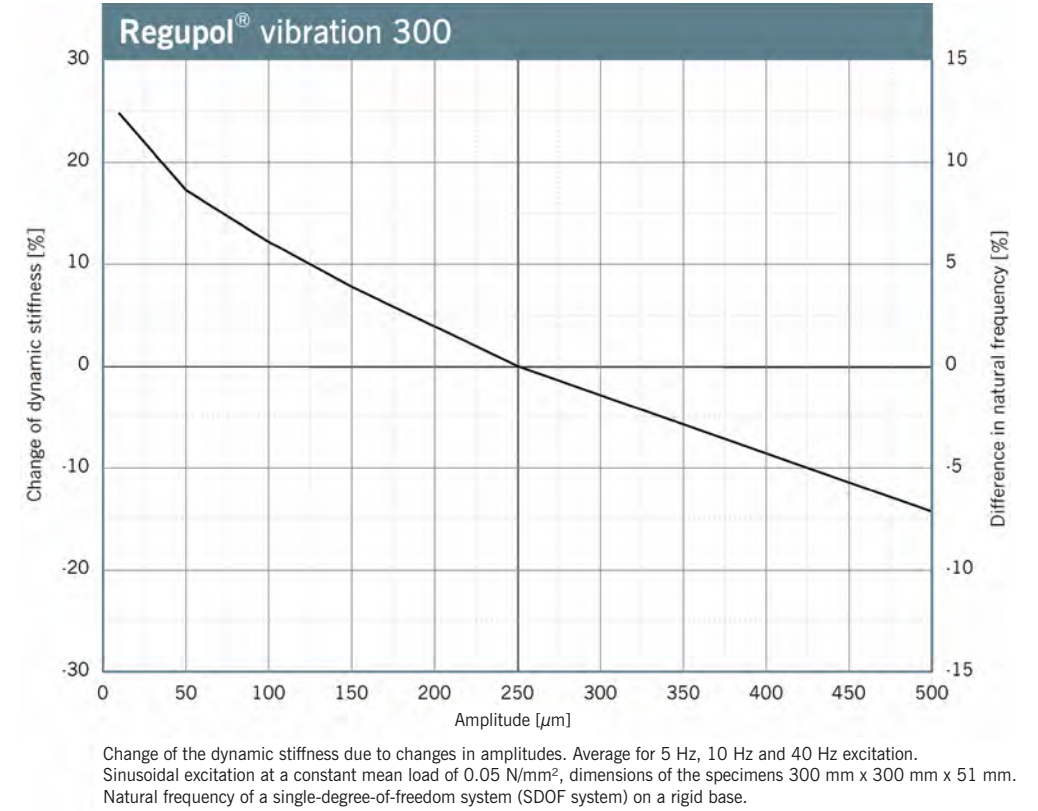
Vibration Isolation



Natural Frequency



Influence of Amplitude



Modulus of Elasticity

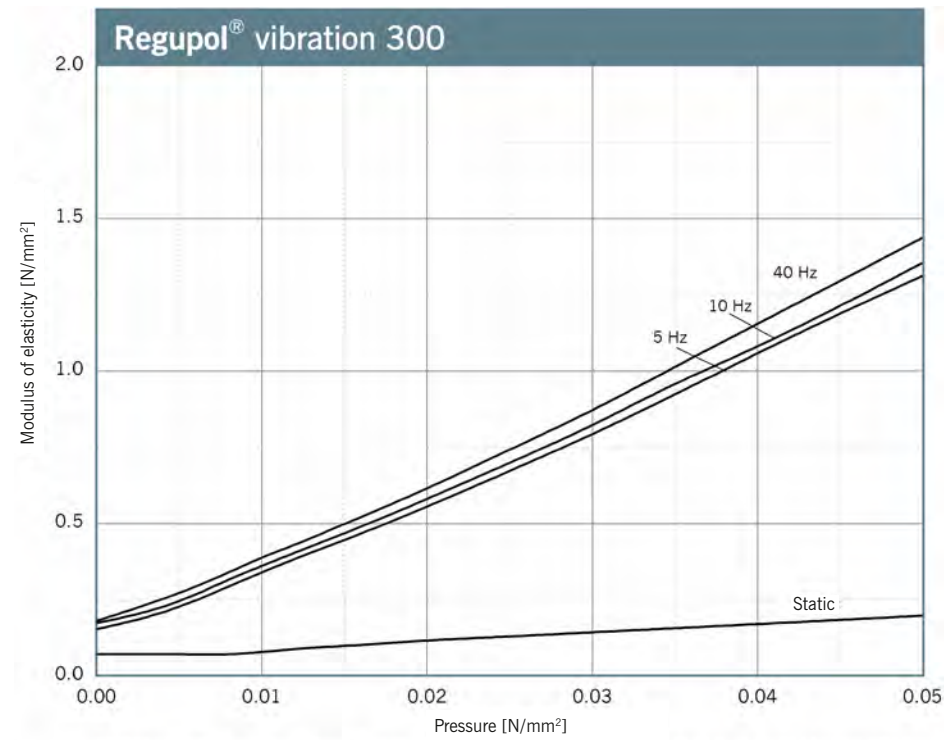


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 34 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

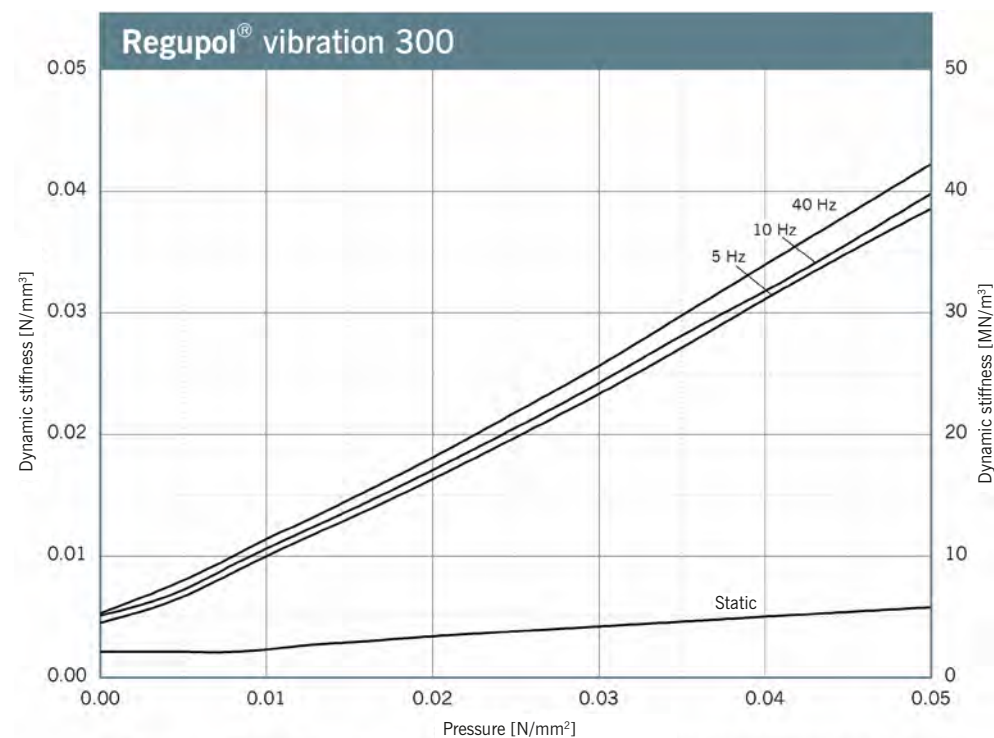
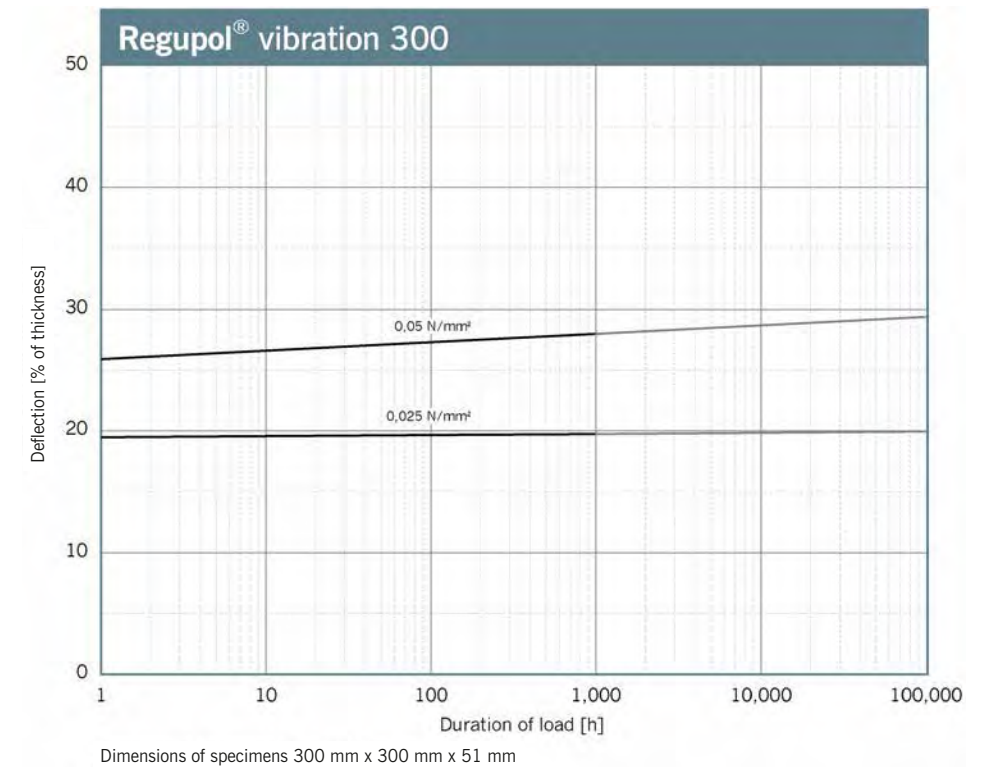


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 34 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm x 51 mm

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Standard forms of delivery, ex warehouse

Rolls

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

Stripping/Plates

On request
 Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.10 N/mm²

Continuous and variable loads/operating load range

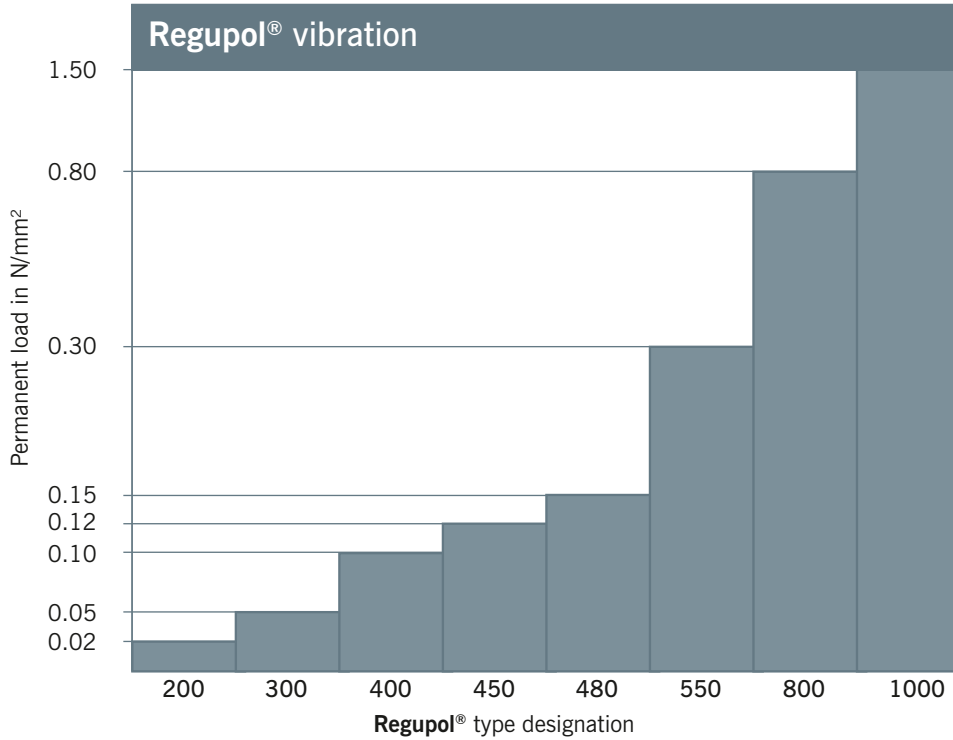
0.15 N/mm²



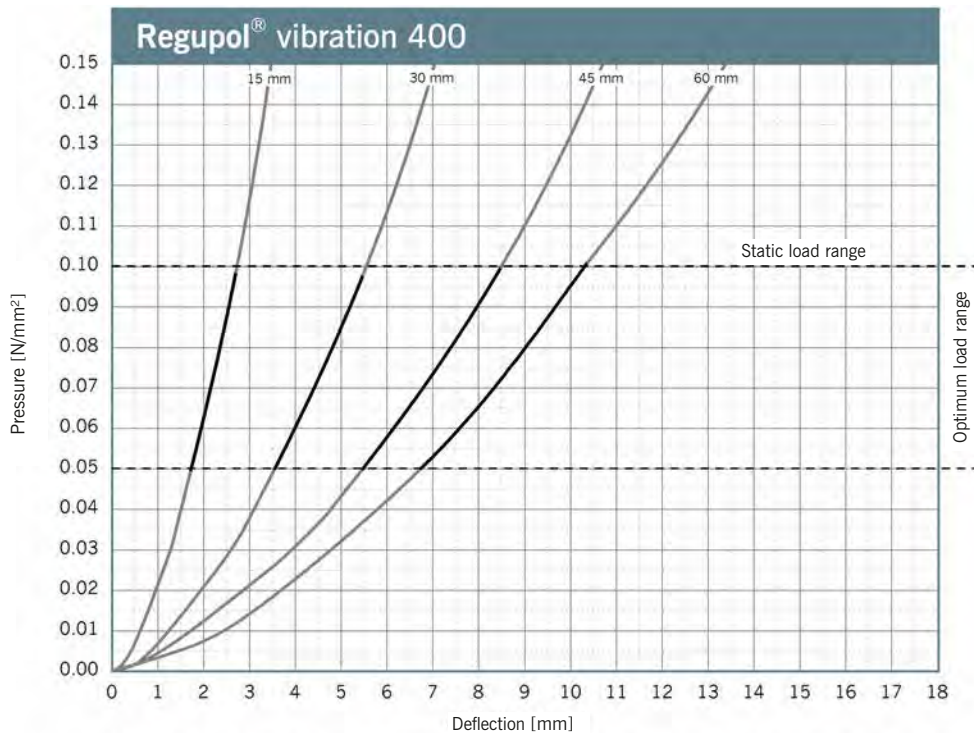
Static modulus of elasticity	Based on EN 826	0.3 - 0.55	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.9 - 2.4	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.17	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	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 ²	
Elongation at break	Based on DIN EN ISO 1798	55	%	
Tear resistance	Based on DIN ISO 34-1	3.2	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	[-]	



Load Ranges

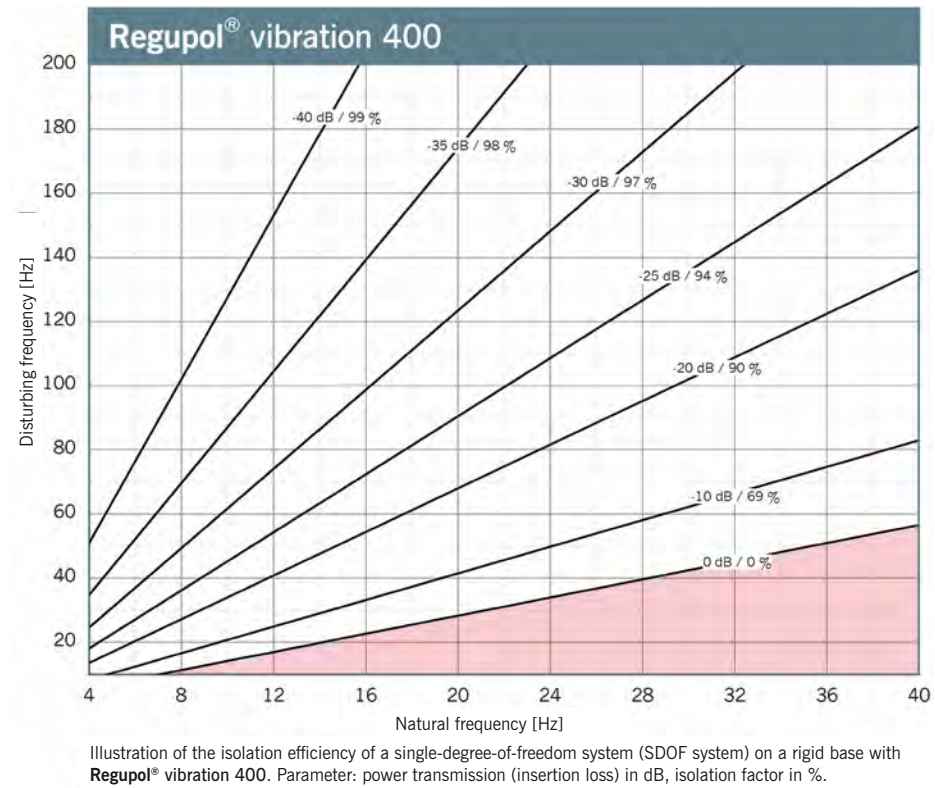


Load Deflection

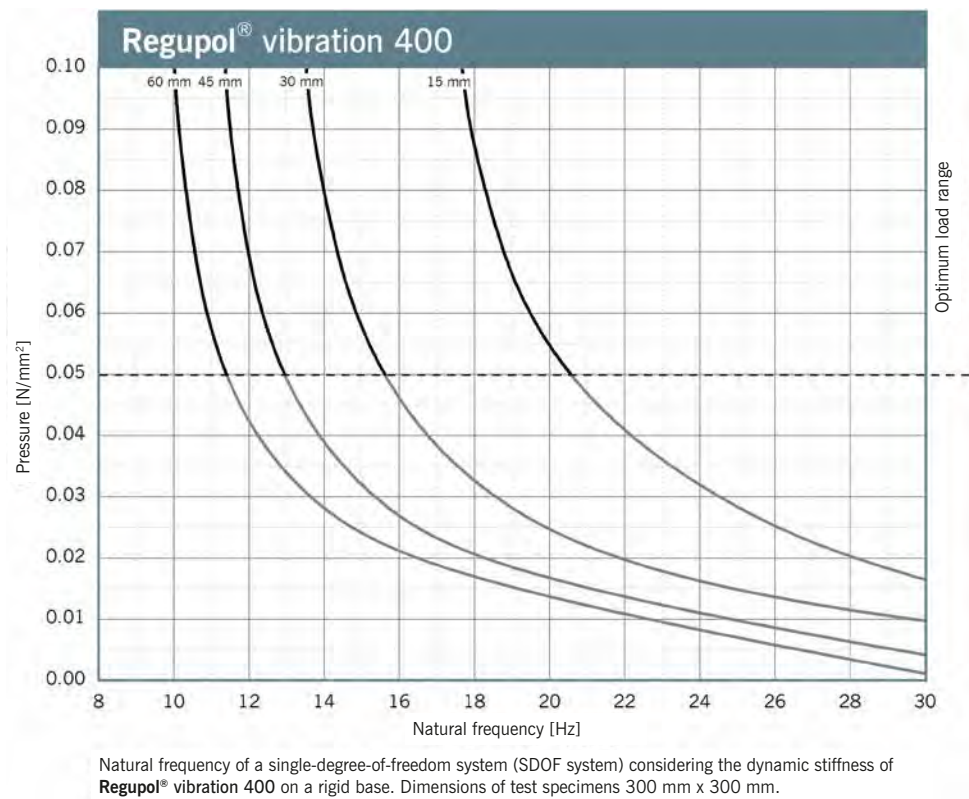


Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

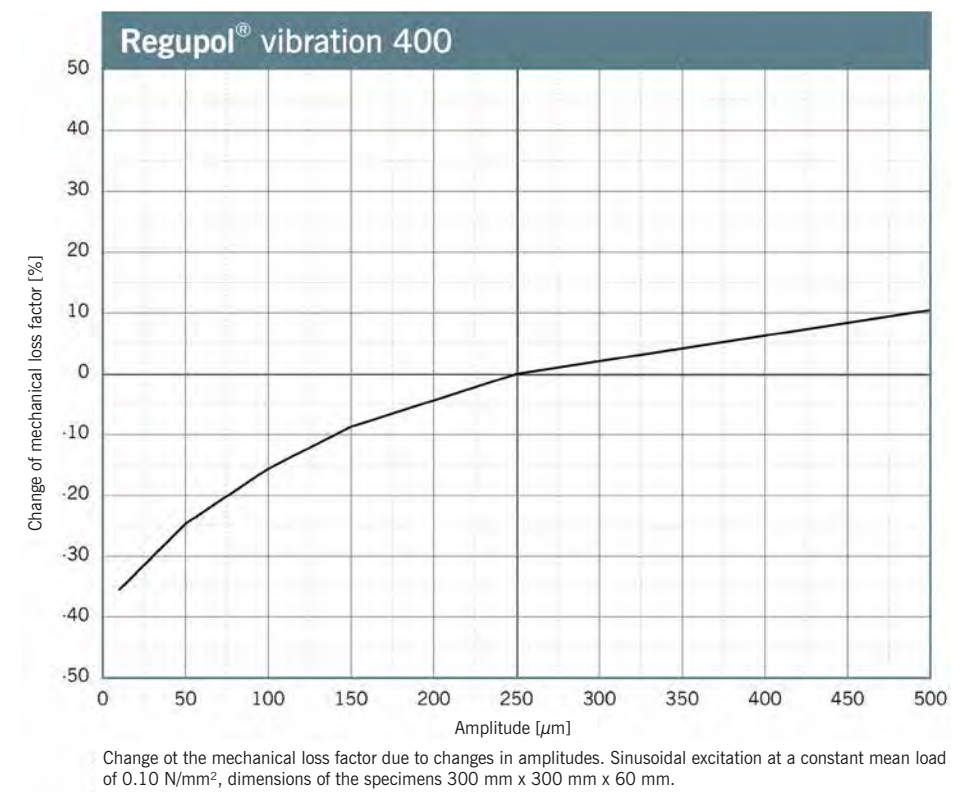
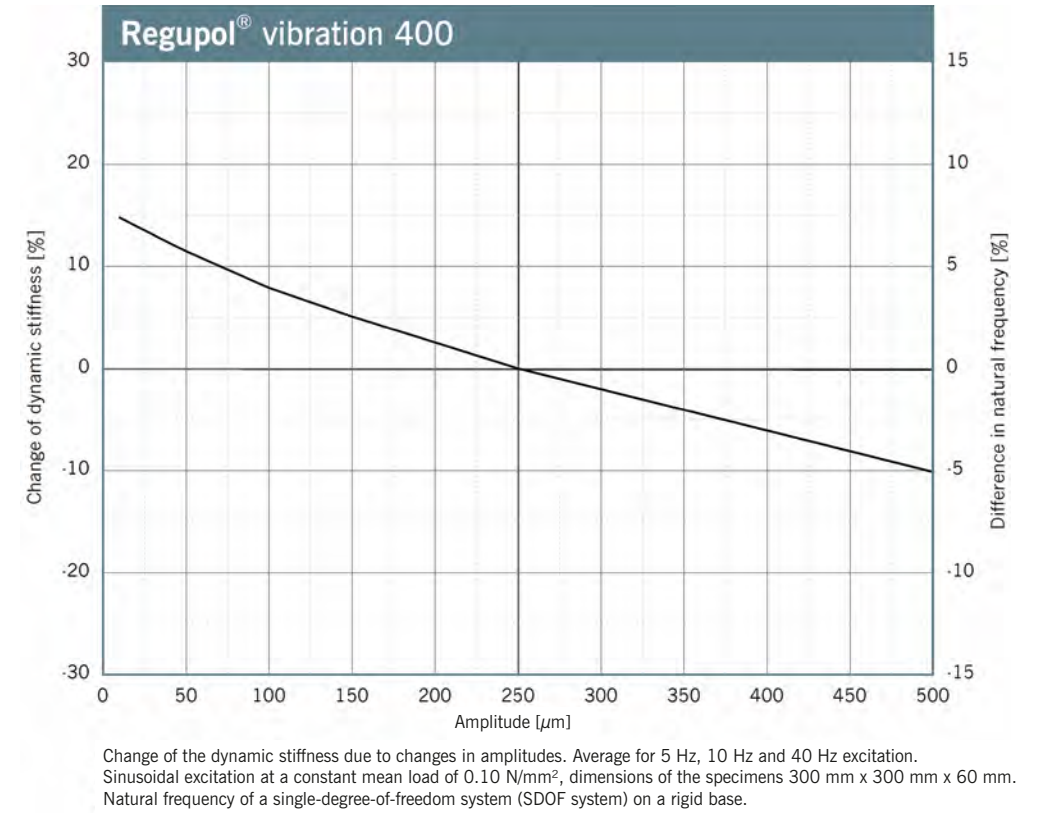
Vibration Isolation



Natural Frequency



Influence of Amplitude



Modulus of Elasticity

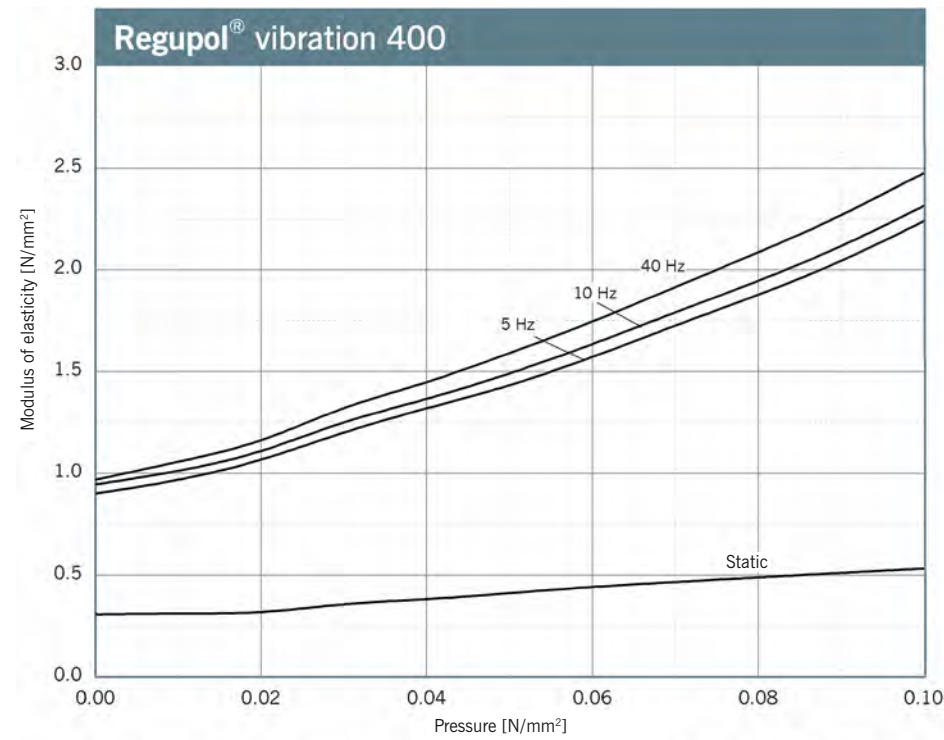


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

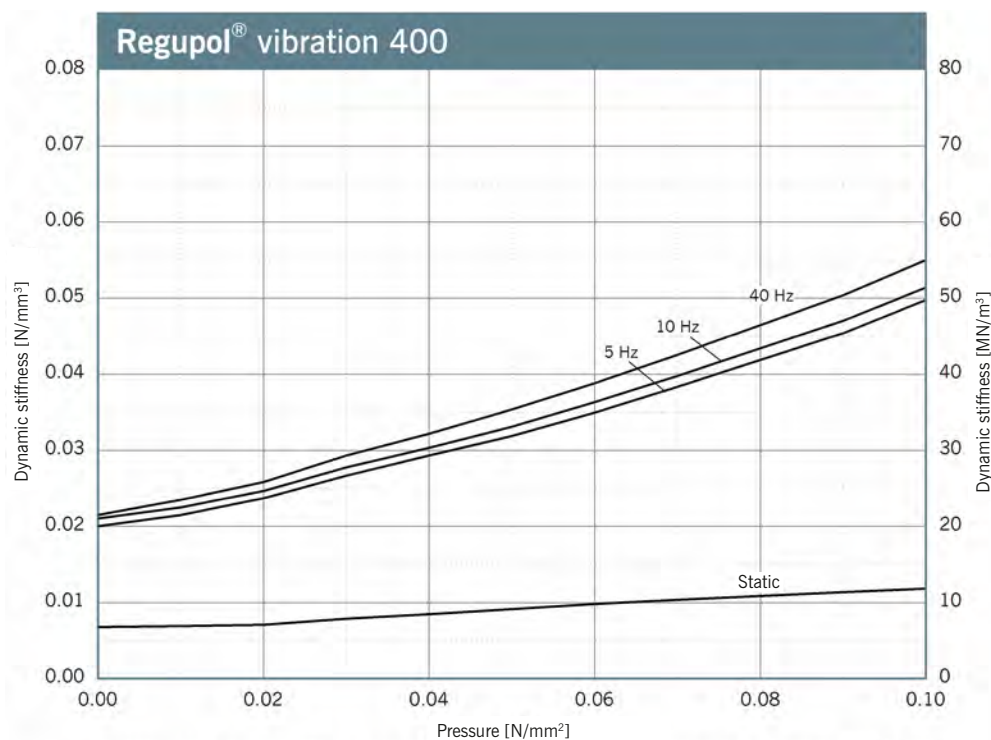
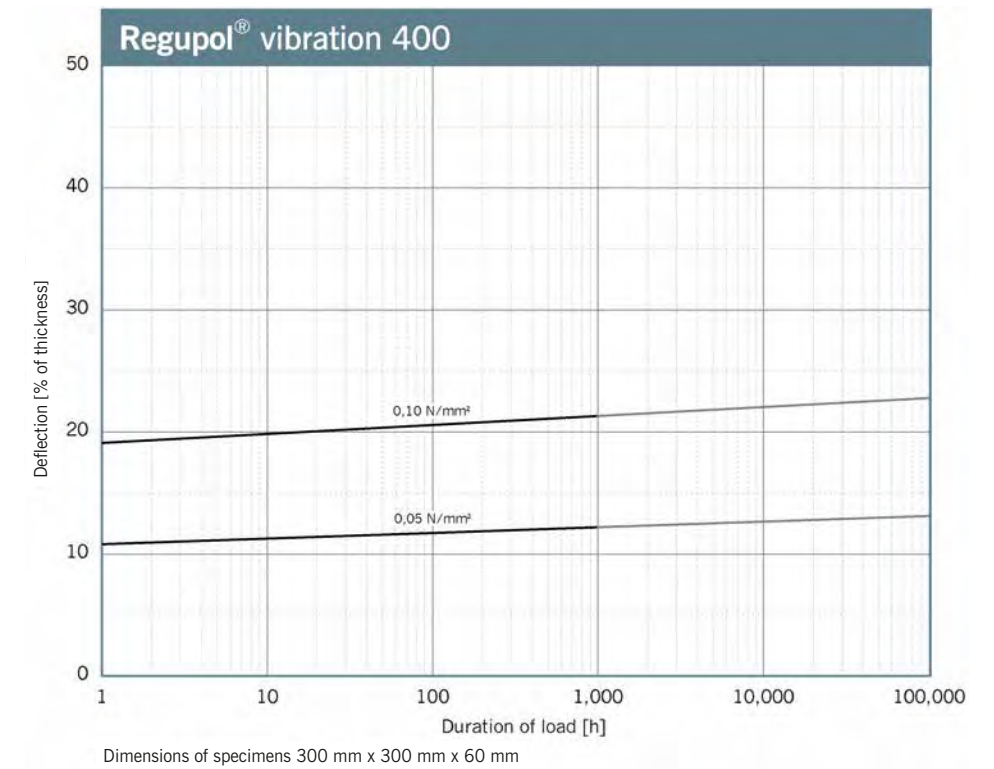


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm x 60 mm

Exclusion of Liability

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Standard forms of delivery, ex warehouse

Plates

Thickness: 50 mm, special thickness available
 Length: 1,000 mm
 Width: 500 mm

Continuous static load

0.12 N/mm²

Continuous and variable loads/operating load range

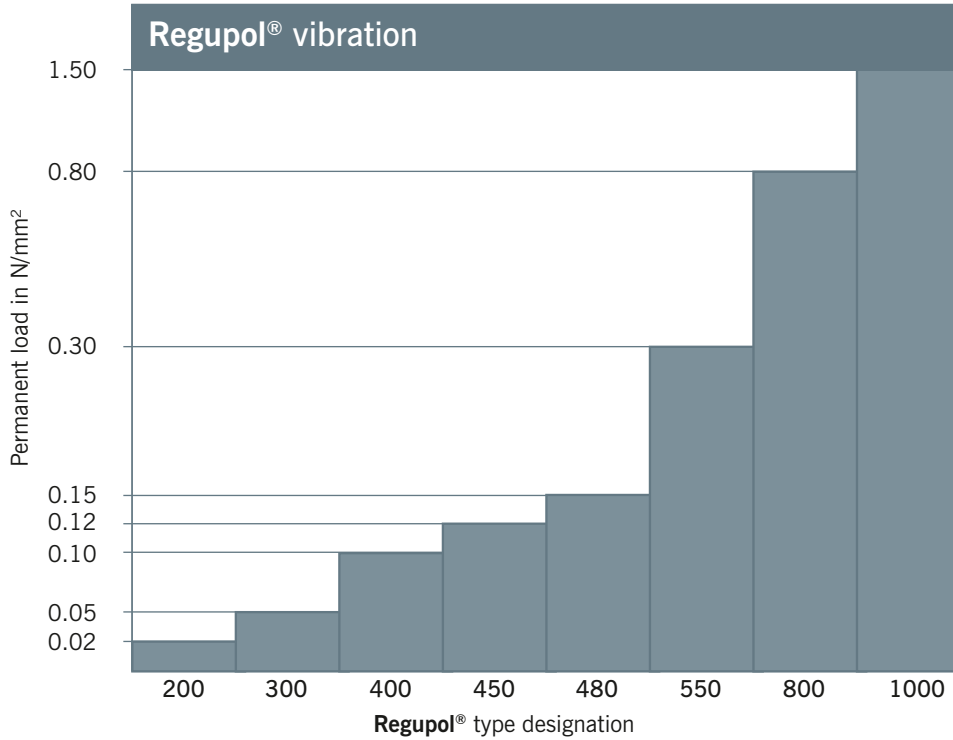
0.18 N/mm²



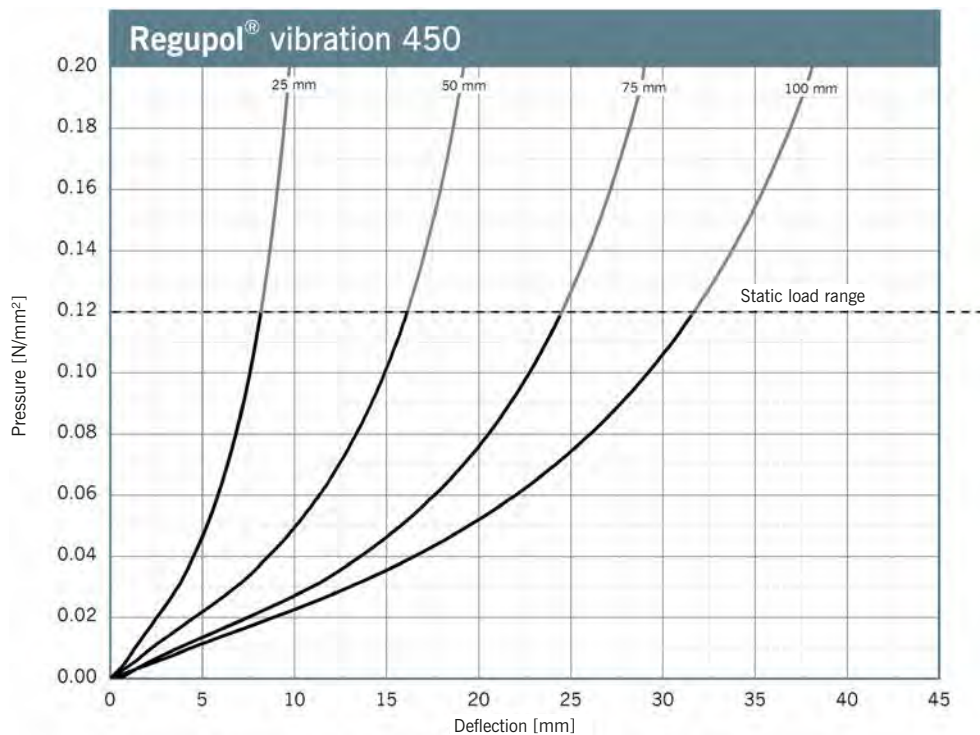
Static modulus of elasticity	Based on EN 826	0.2 - 0.4	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.45 - 2.7	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.2	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	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 ²	
Elongation at break	Based on DIN EN ISO 1798	40	%	
Tear resistance	Based on DIN ISO 34-1	1.9	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	[-]	



Load Ranges

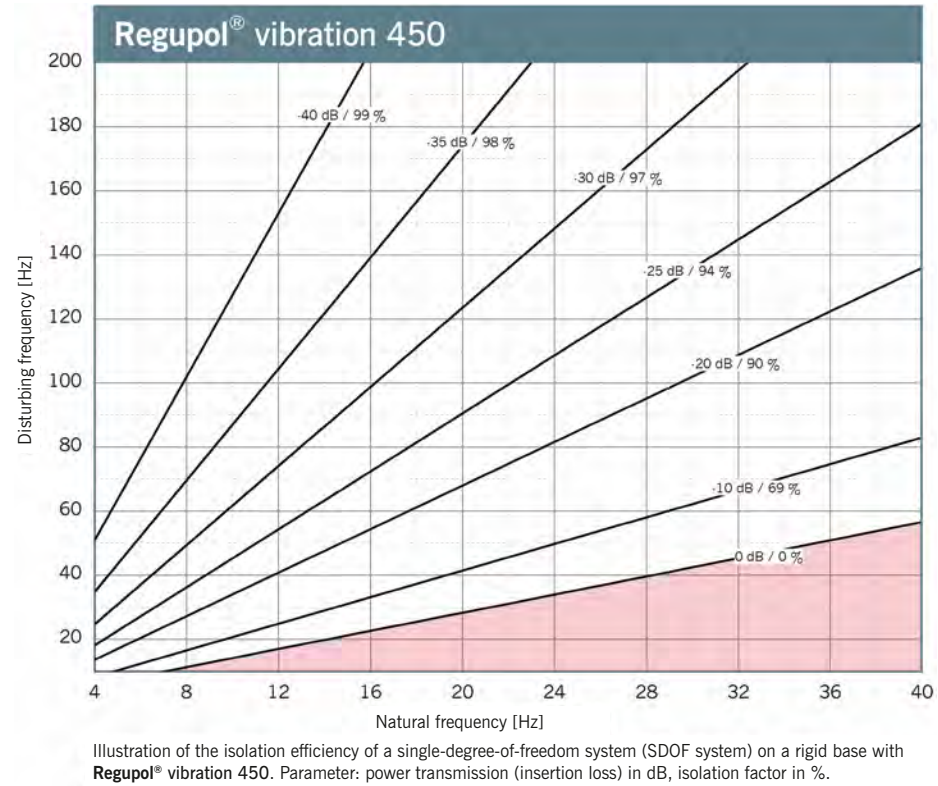


Load Deflection

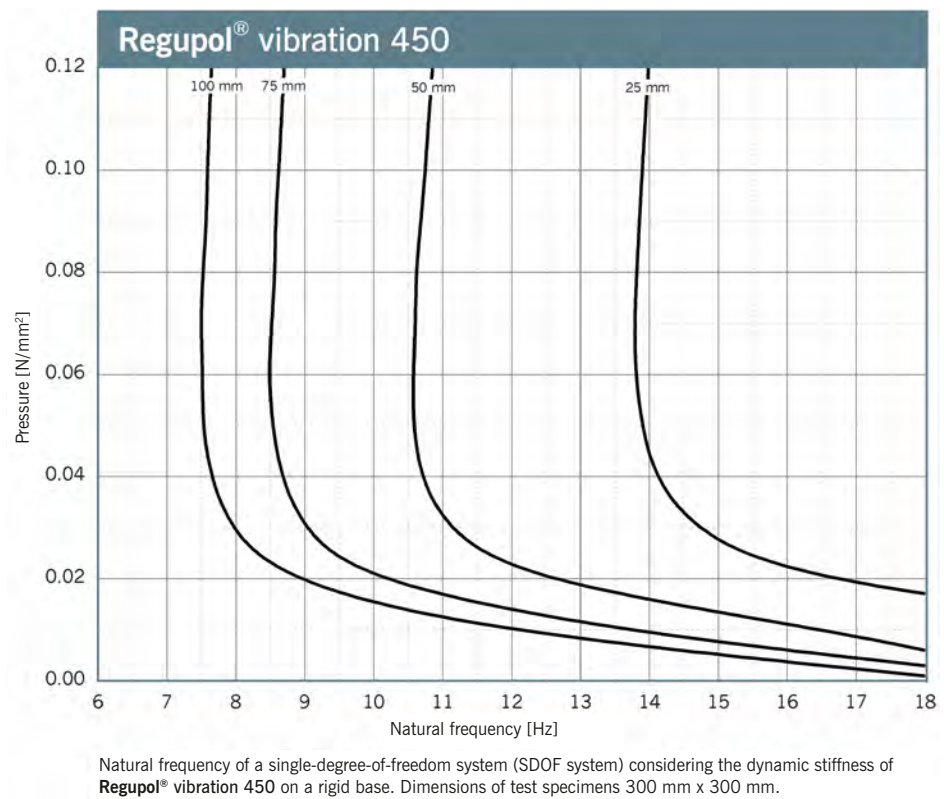


Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

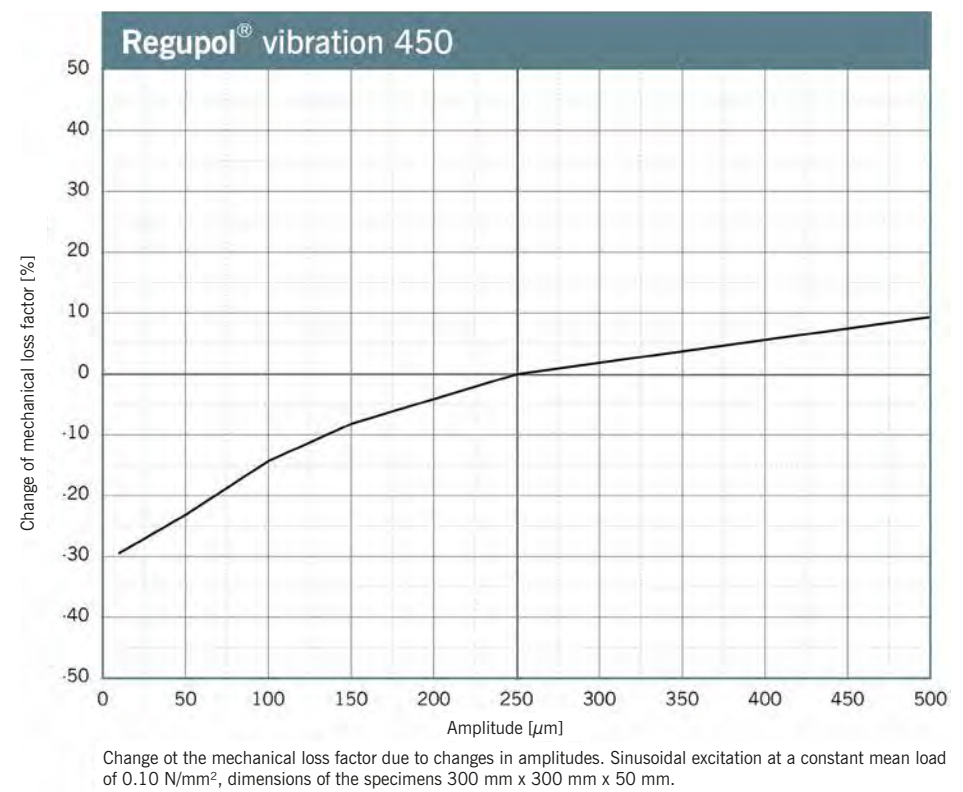
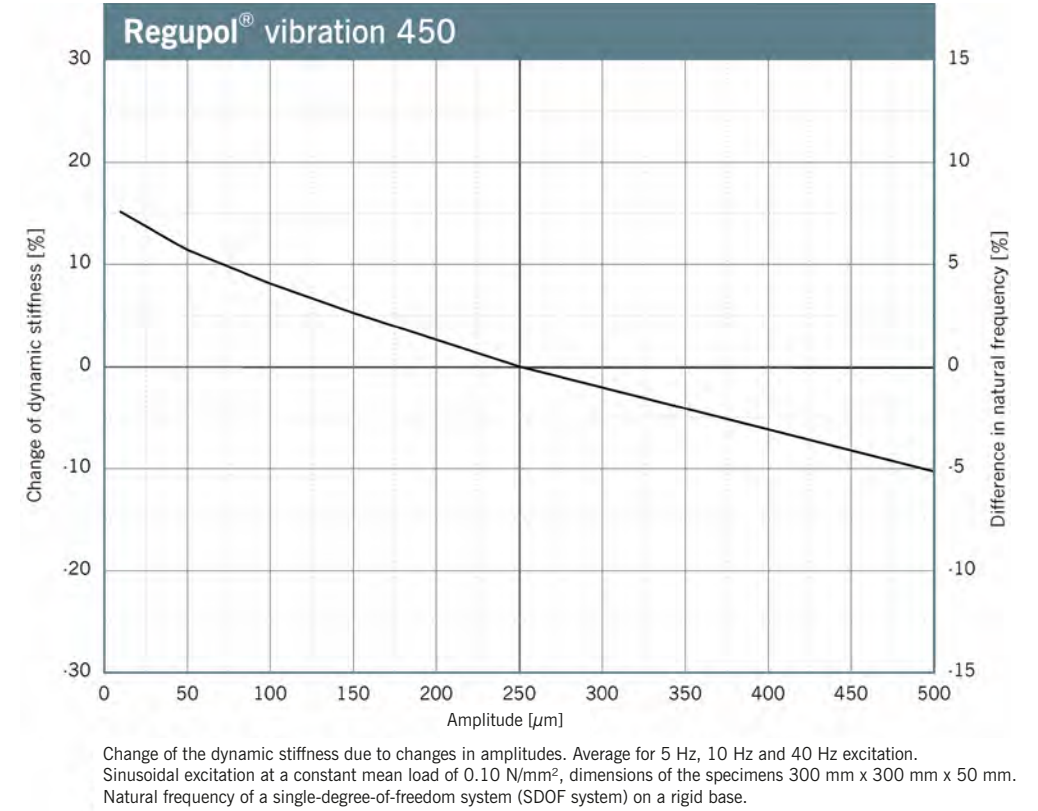
Vibration Isolation



Natural Frequency



Influence of Amplitude



Modulus of Elasticity

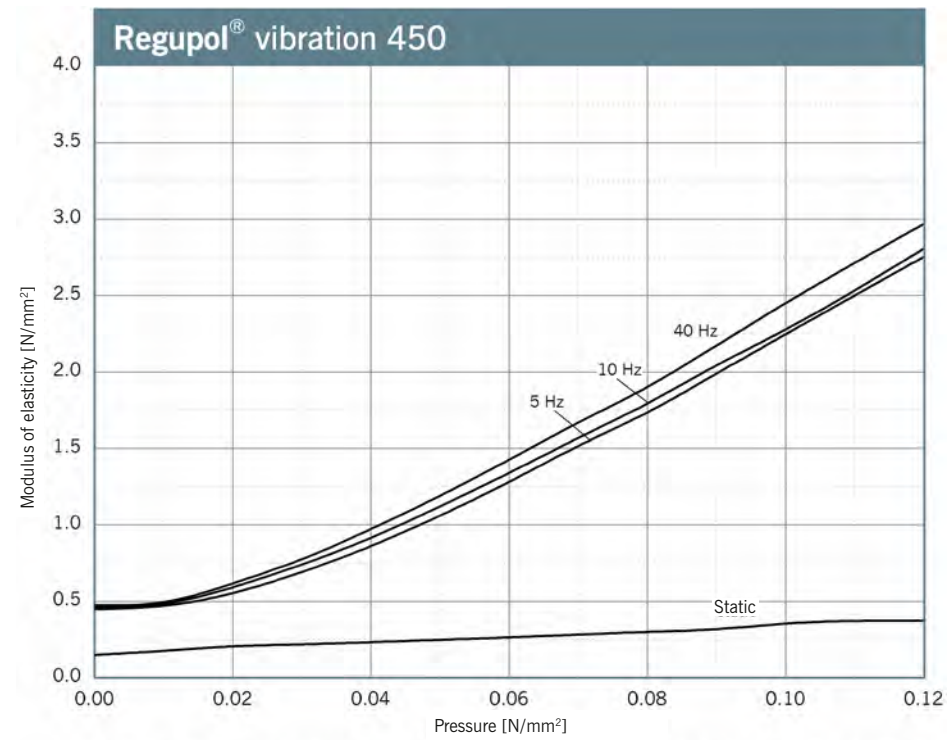


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 50 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

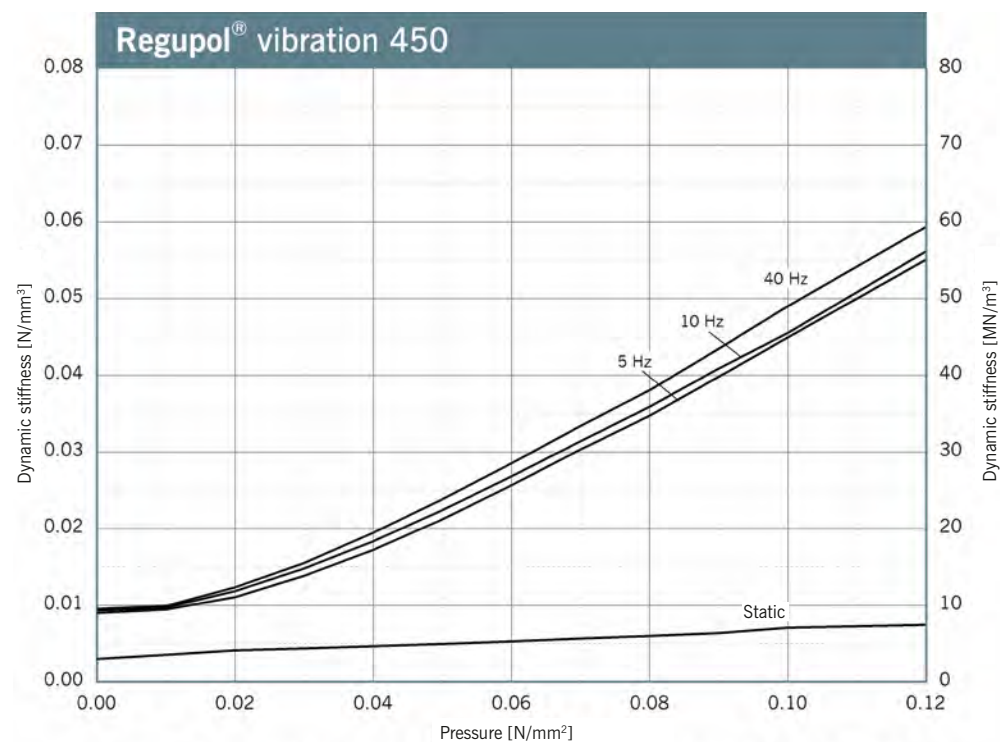
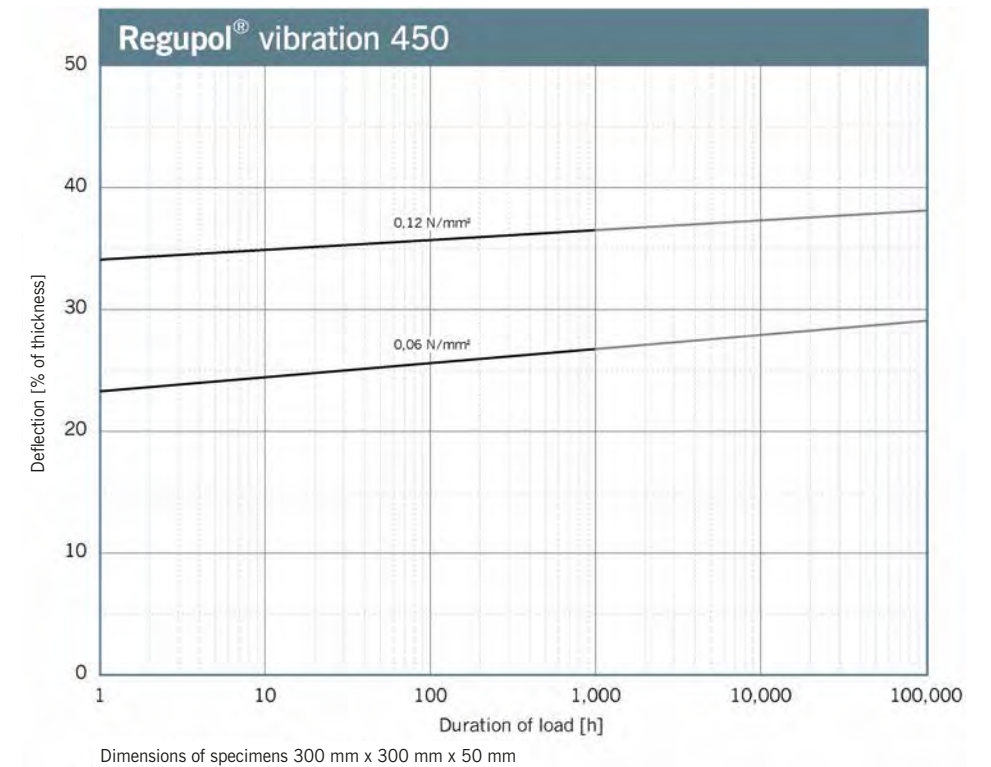


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 50 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



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Standard forms of delivery, ex warehouse

Rolls

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 Width: 1,250 mm

Stripping/Plates

On request
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Continuous static load

0.15 N/mm²

Continuous and variable loads/operating load range

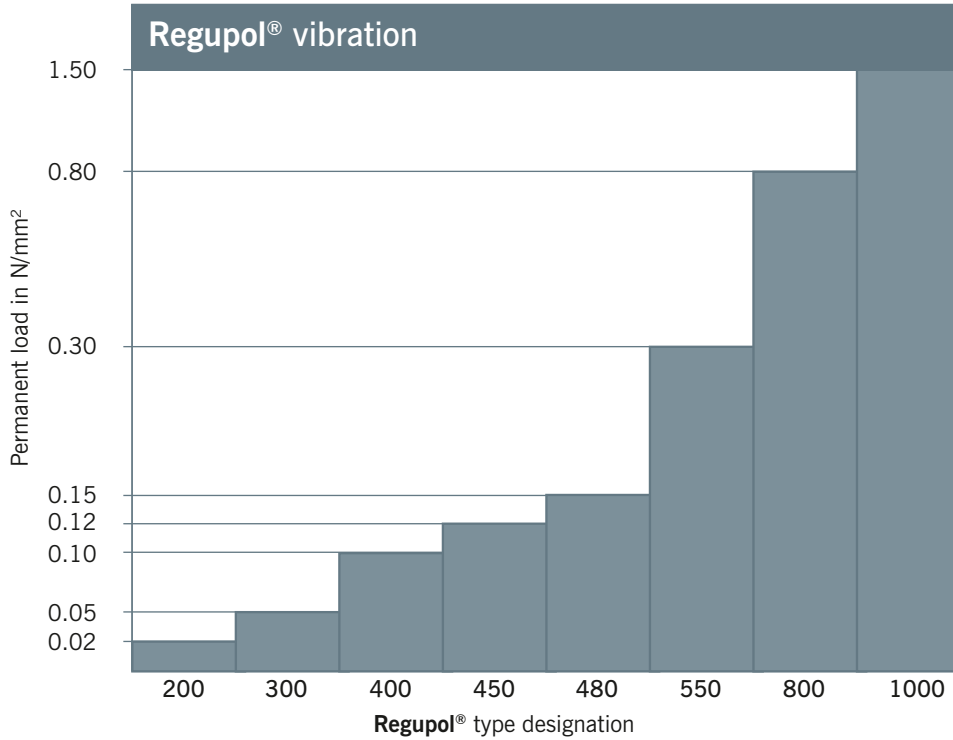
0.25 N/mm²



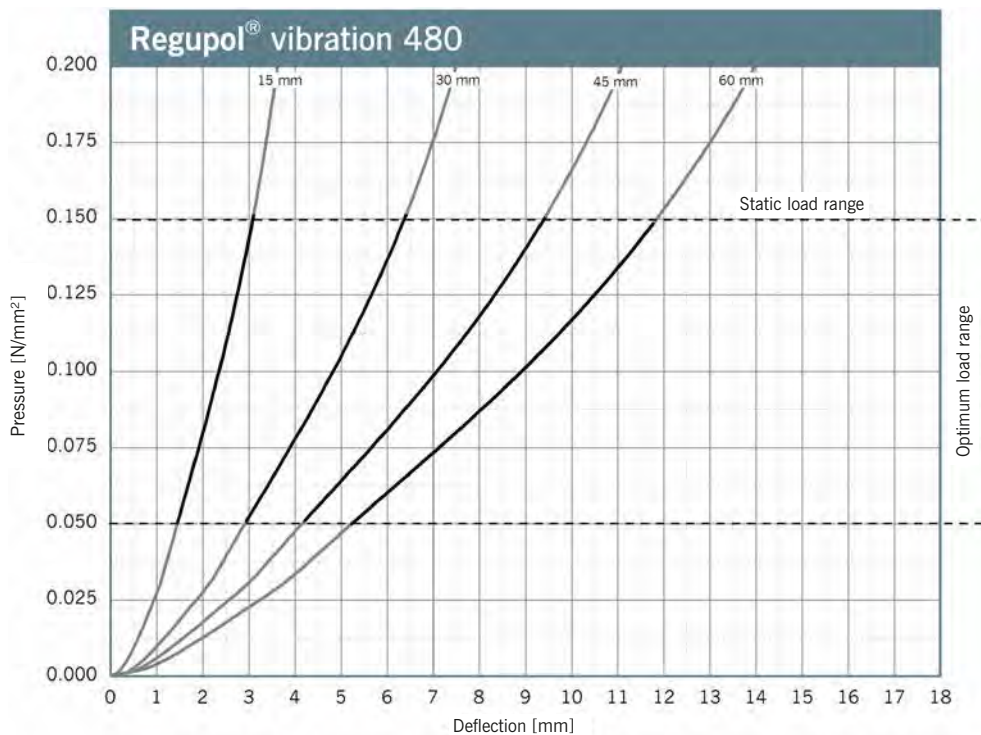
Static modulus of elasticity	Based on EN 826	0.25 - 0.8	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	1.2 - 3.3	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.17	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.0	%	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 ²	
Elongation at break	Based on DIN EN ISO 1798	55	%	
Tear resistance	Based on DIN ISO 34-1	4.5	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	[-]	



Load Ranges

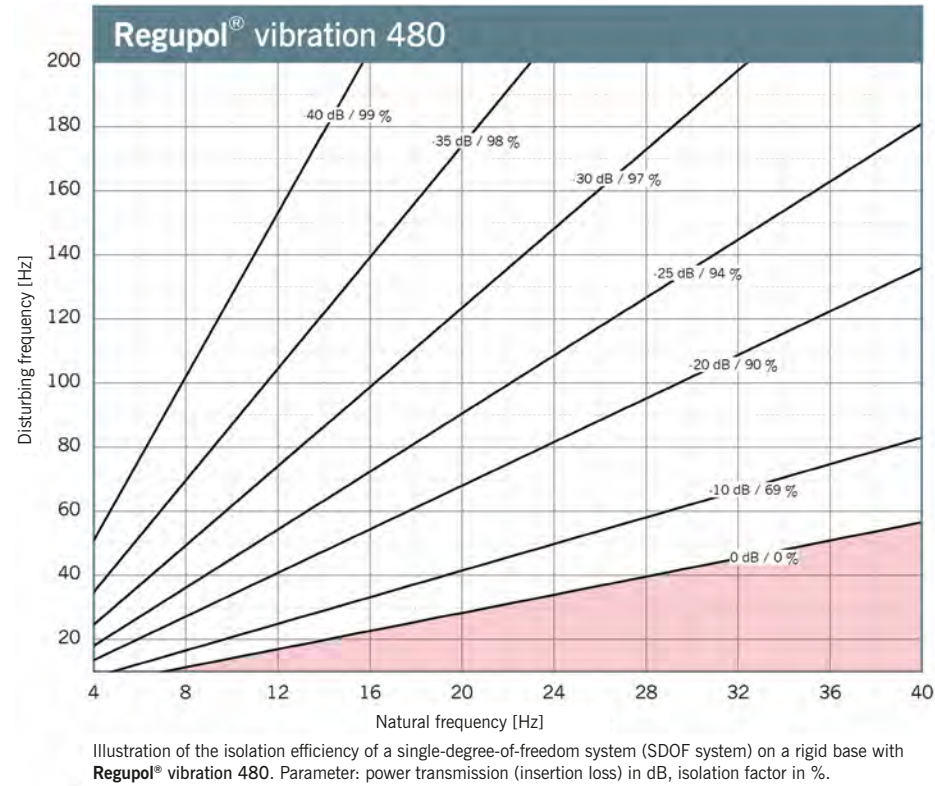


Load Deflection

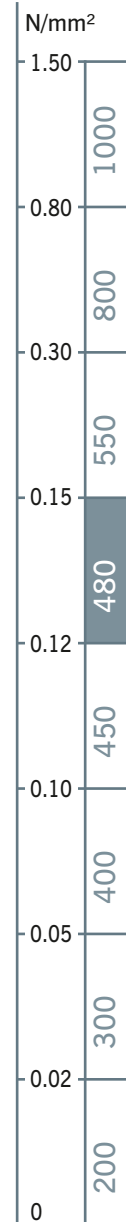
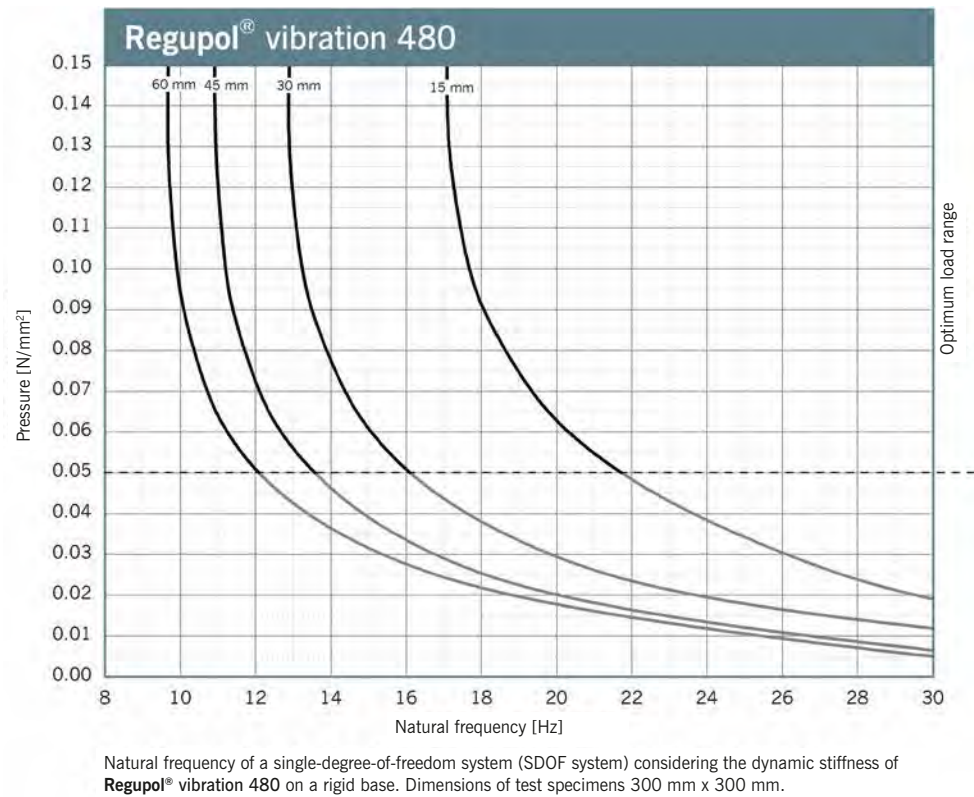


Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

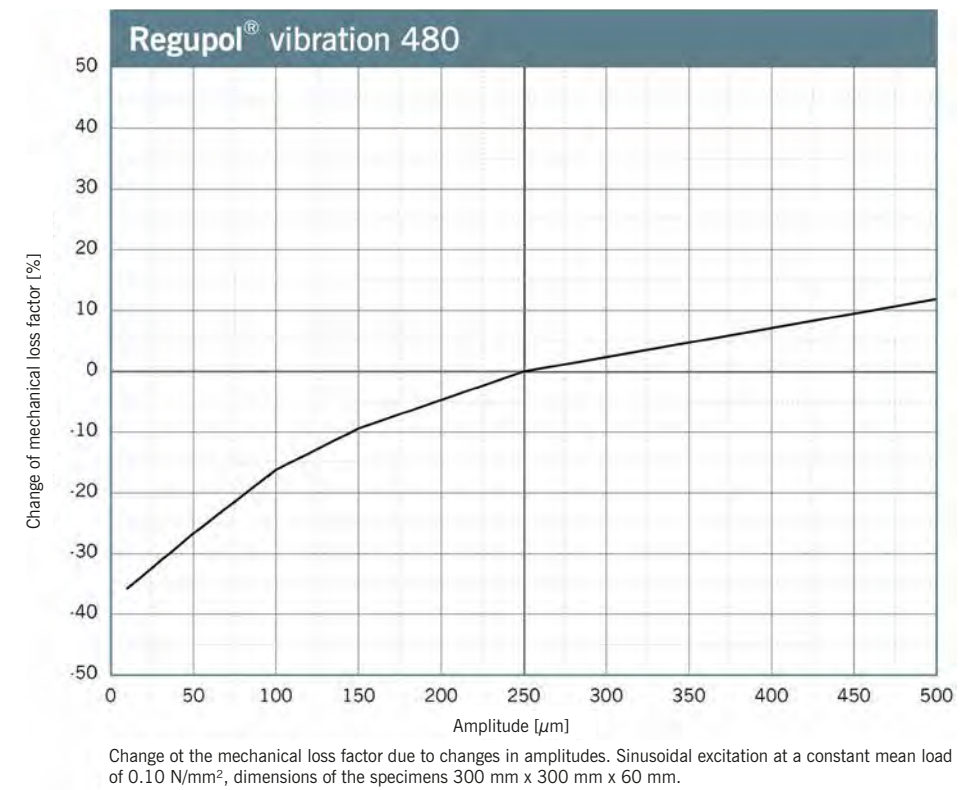
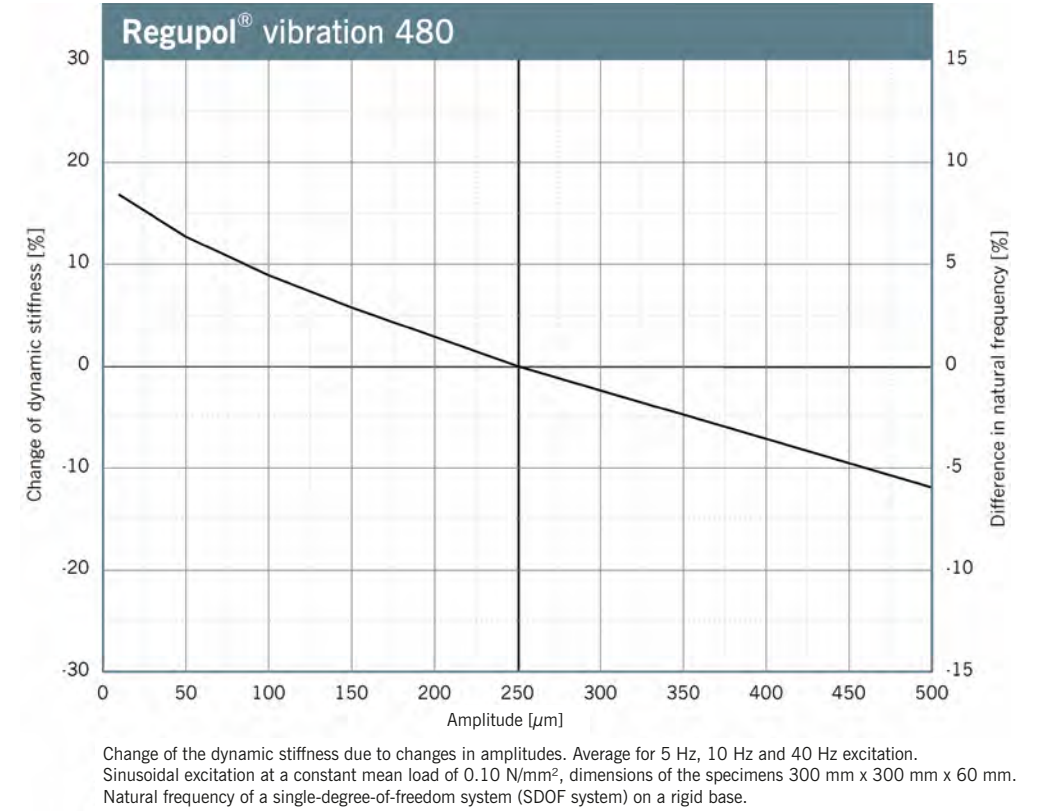
Vibration Isolation



Natural Frequency



Influence of Amplitude



Modulus of Elasticity

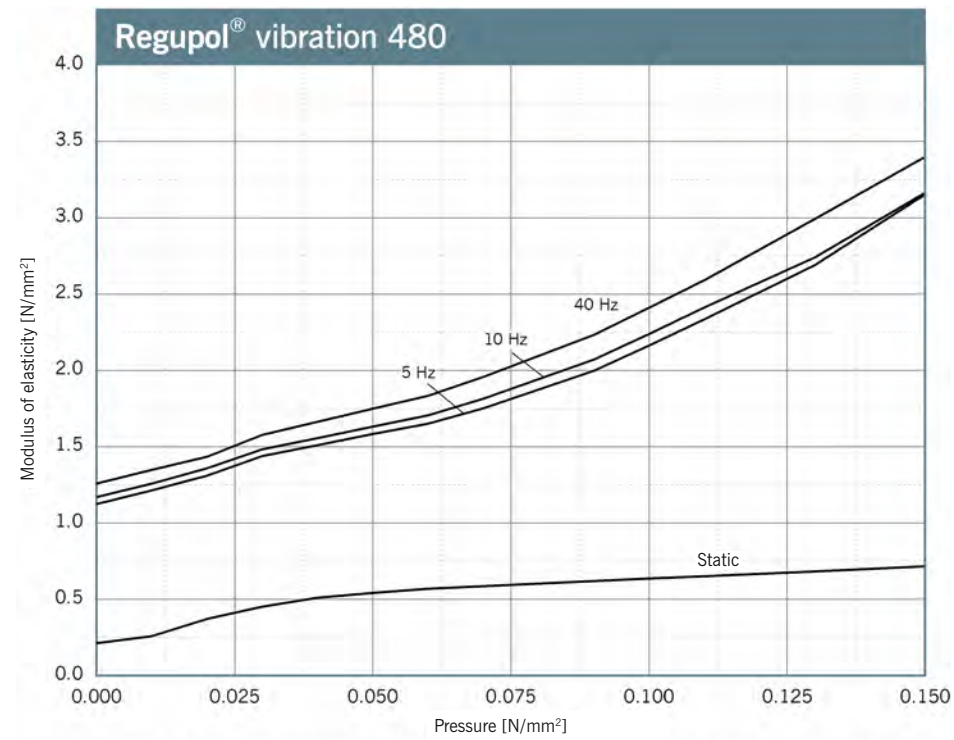


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

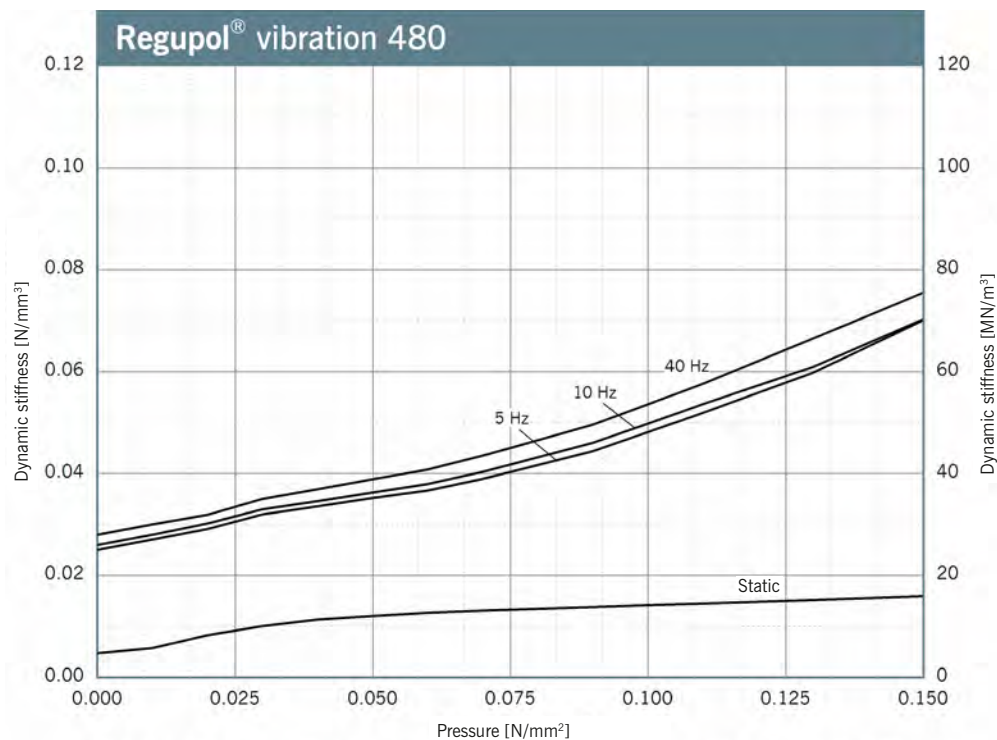
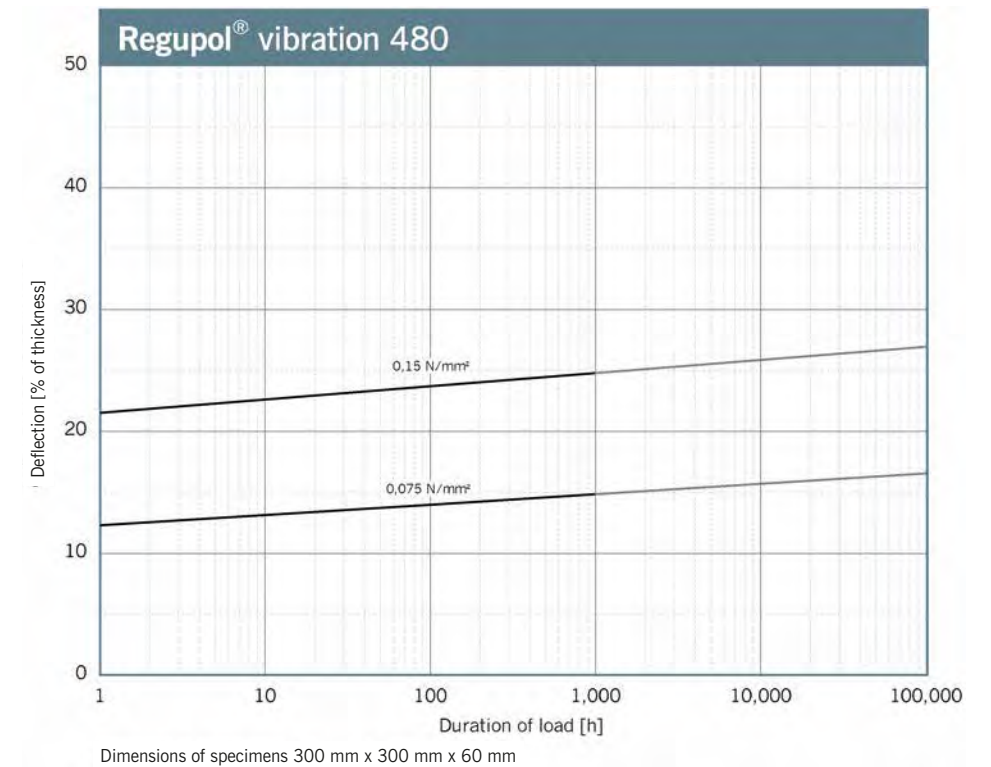


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Exclusion of Liability

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 Florian Sassmannshausen, Phone: +49 2751 803-230 • f.sassmannshausen@berleburger.de •
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Standard forms of delivery, ex warehouse

Rolls

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

Stripping/Plates

On request
 Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.30 N/mm²

Continuous and variable loads/operating load range

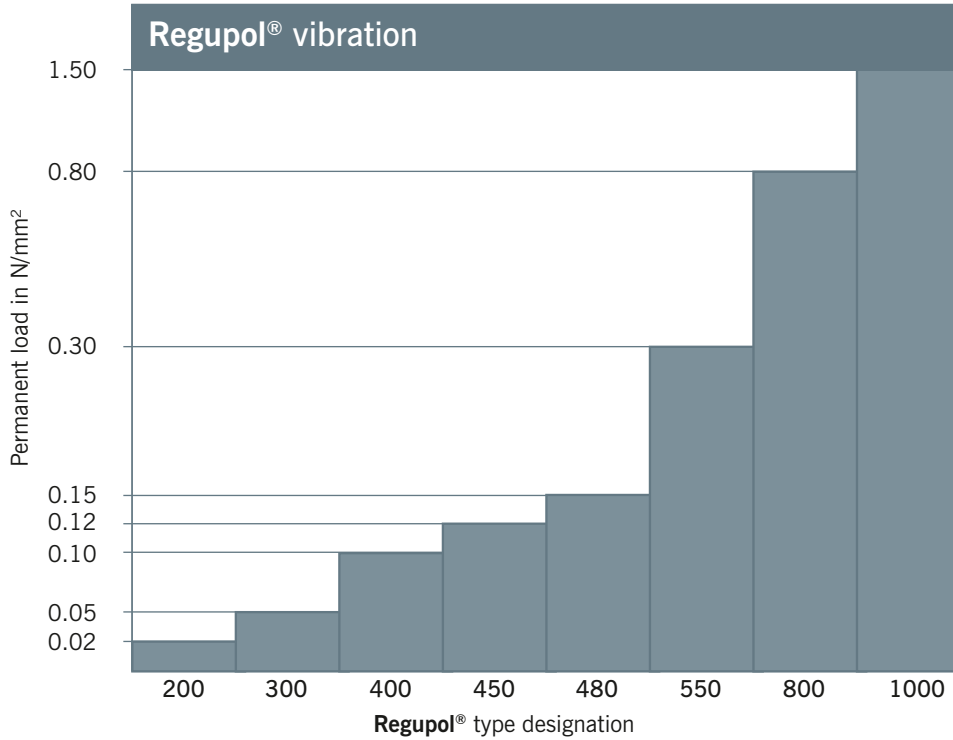
0.40 N/mm²



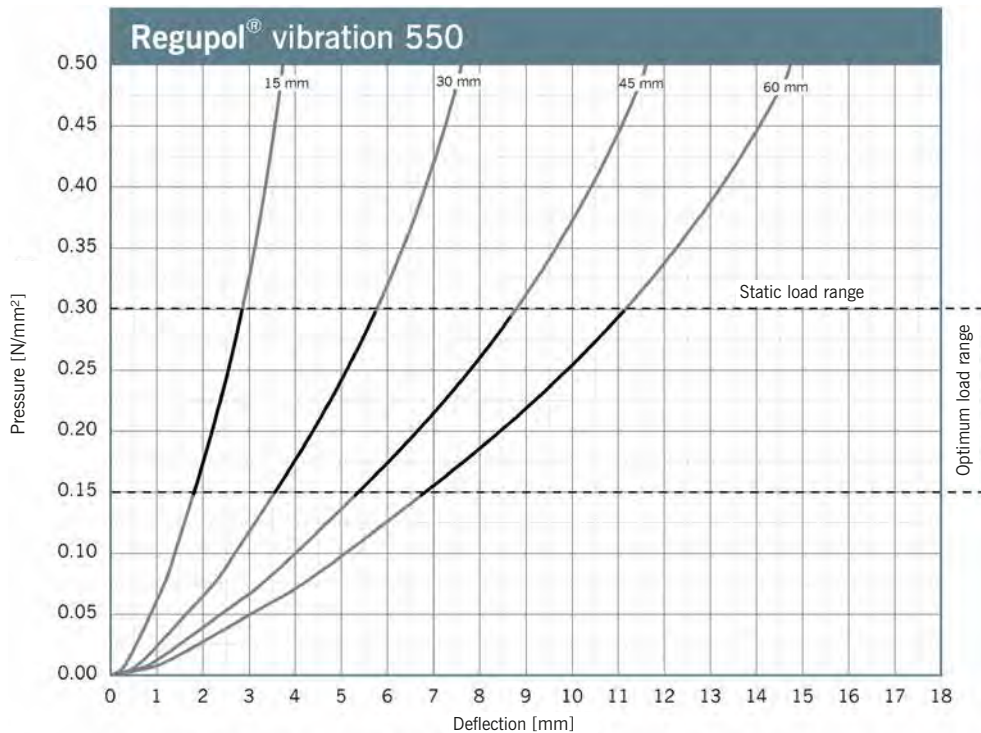
Static modulus of elasticity	Based on EN 826	0.5 - 1.7	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	2.5 - 7.0	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.16	[-]	Load-, 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 ²	
Elongation at break	Based on DIN EN ISO 1798	65	%	
Tear resistance	Based on DIN ISO 34-1	5.0	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	[-]	



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

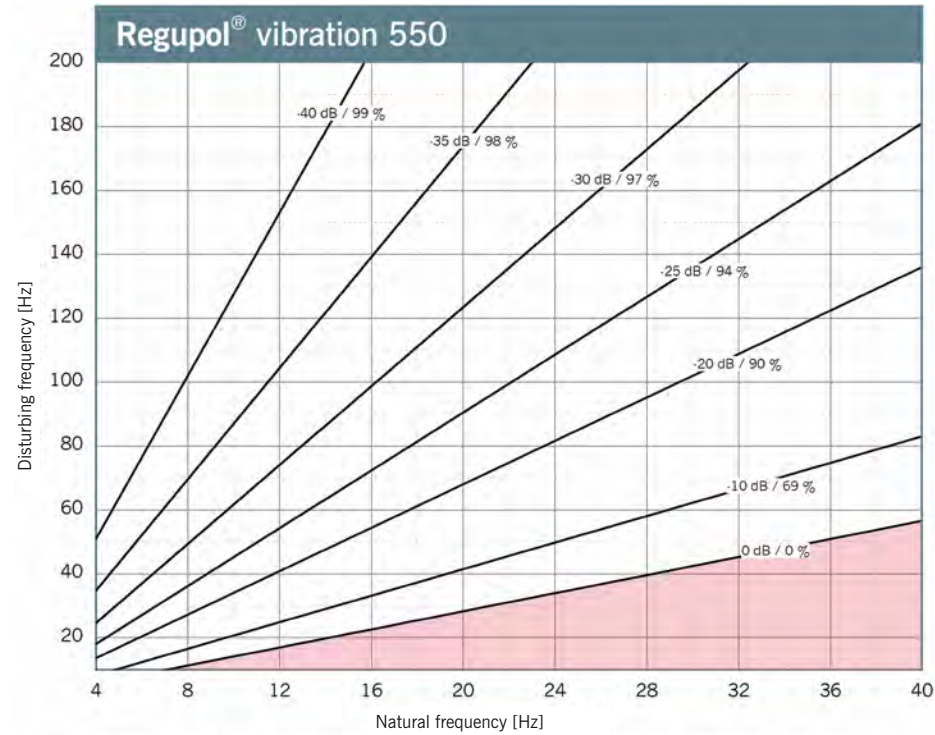
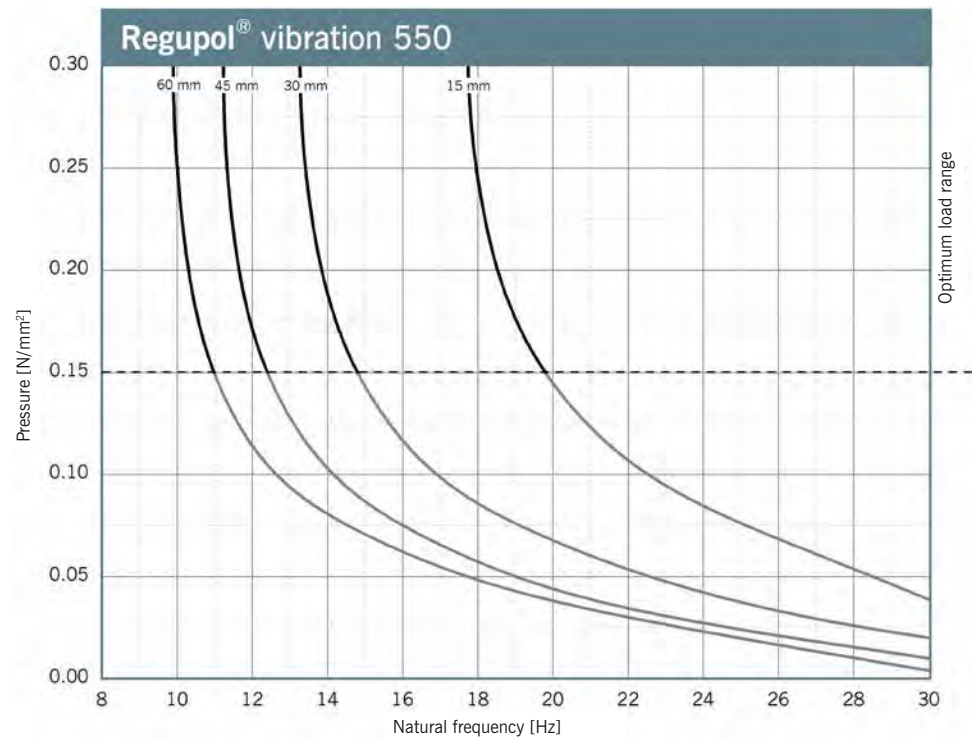


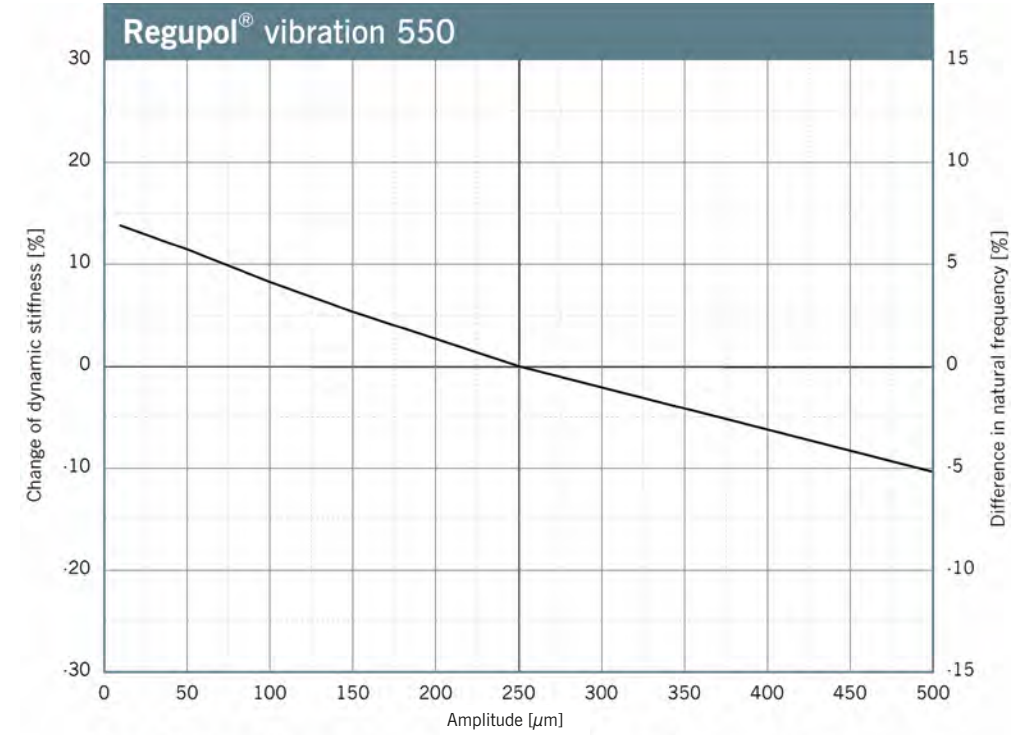
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 550. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

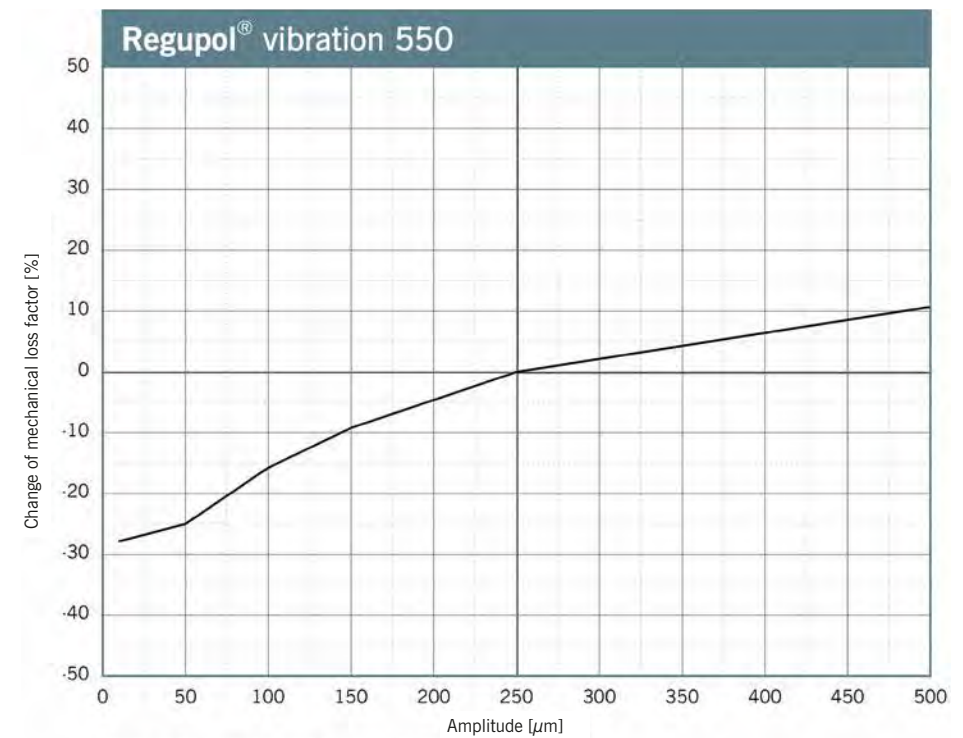
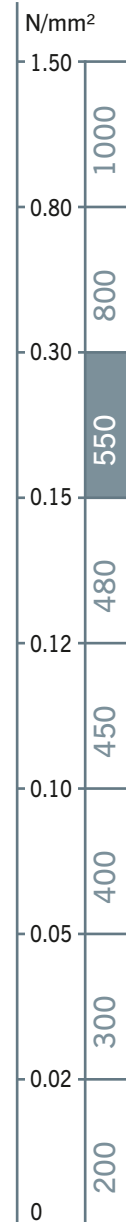


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 550 on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

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 0.25 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



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

Modulus of Elasticity

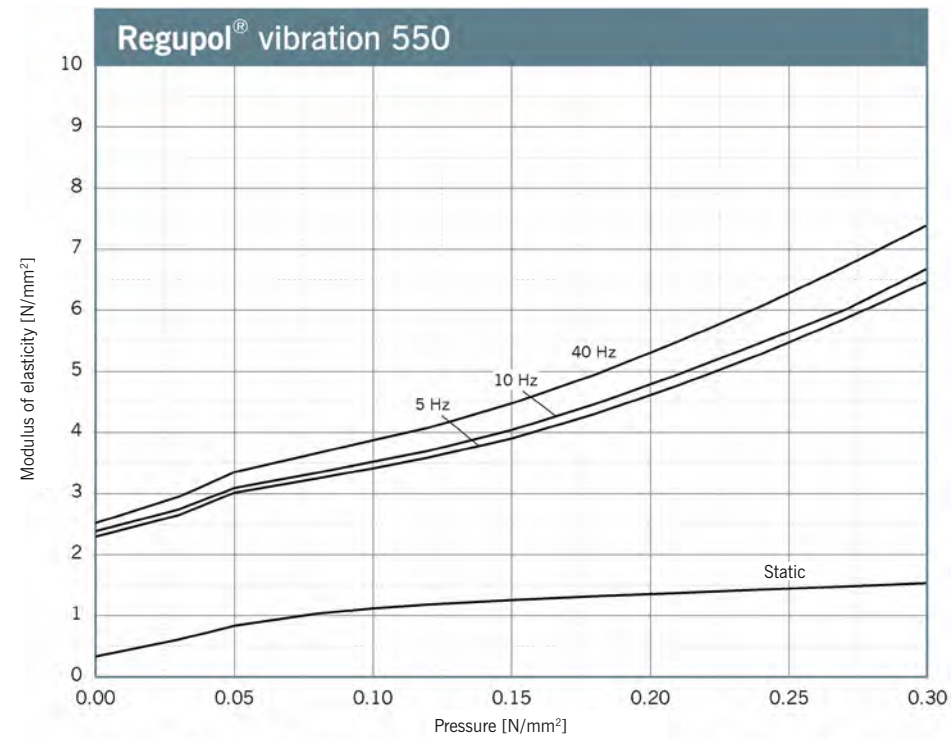


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

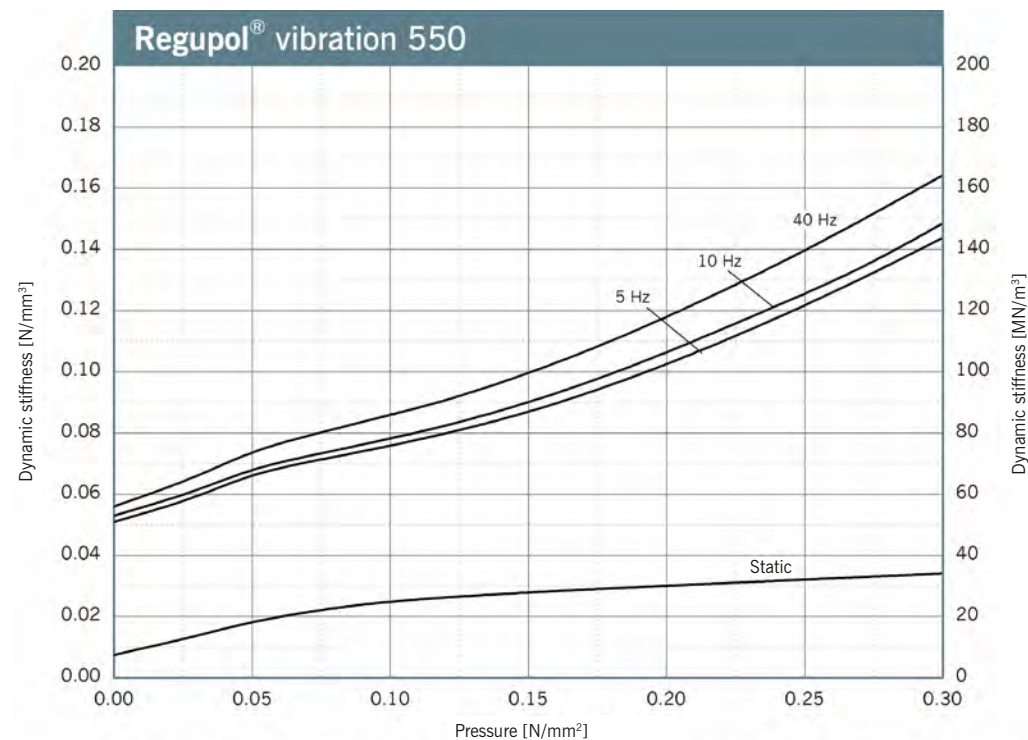
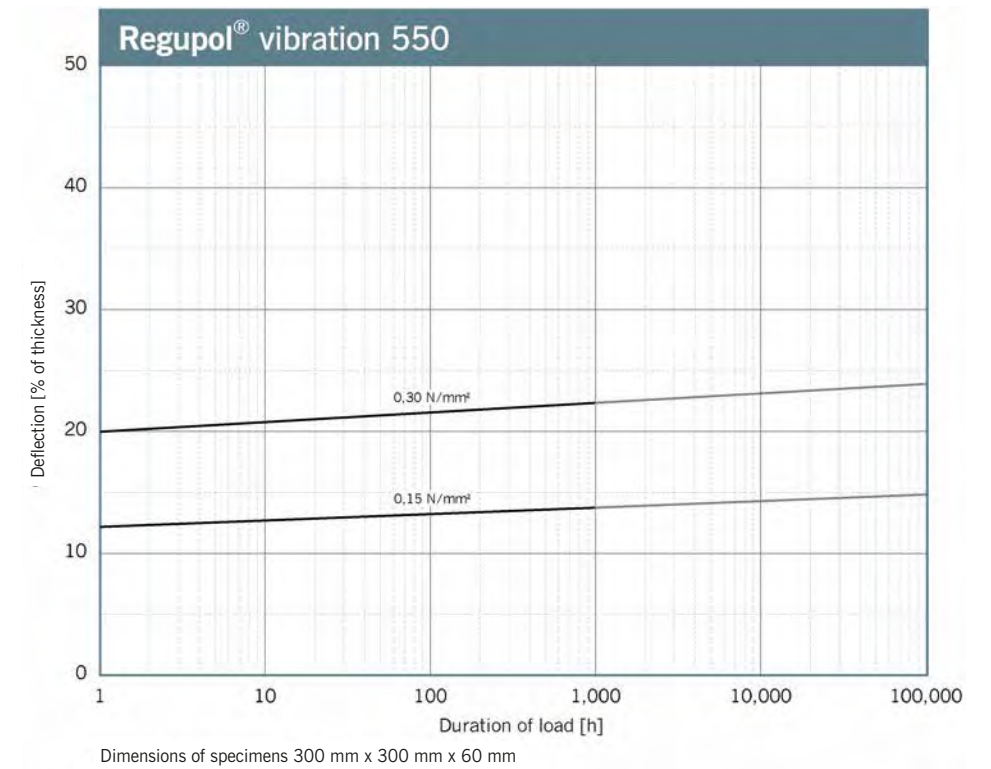


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm x 60 mm

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Standard forms of delivery, ex warehouse

Rolls

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

Stripping/Plates

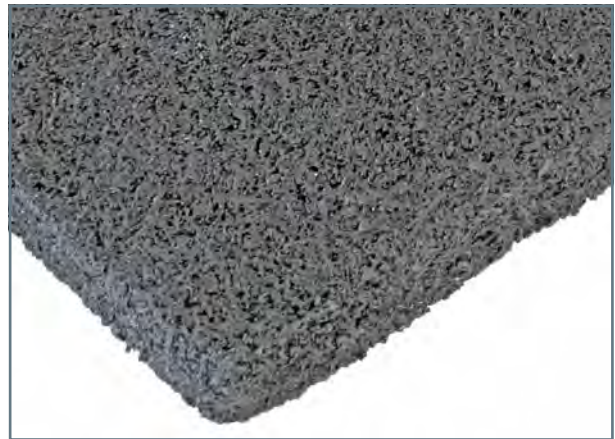
On request
 Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.80 N/mm²

Continuous and variable loads/operating load range

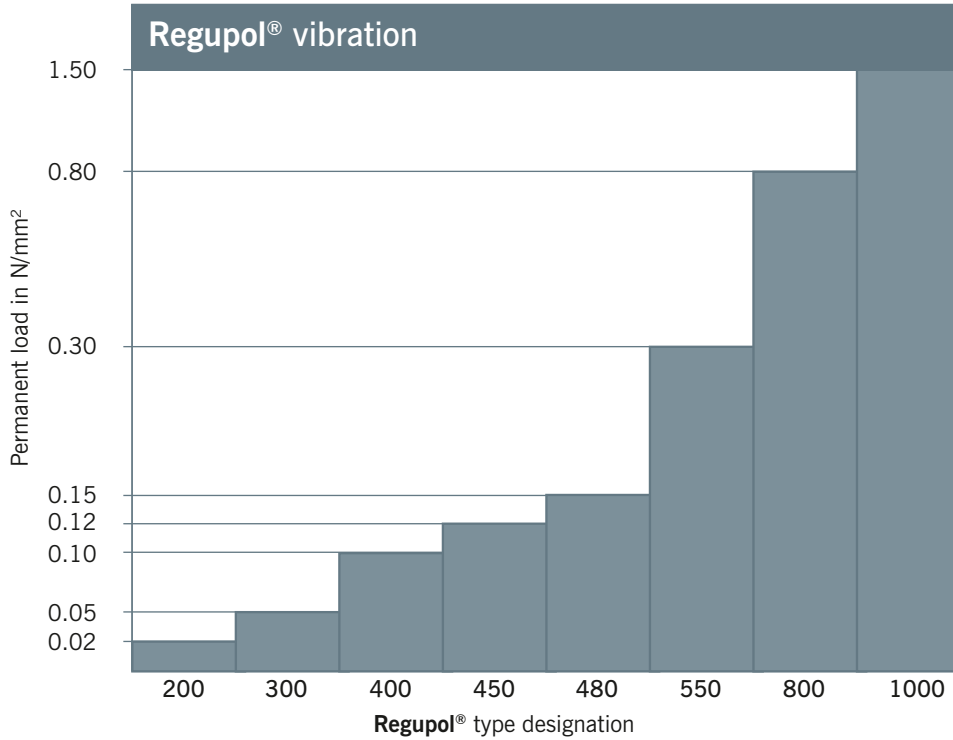
1.00 N/mm²



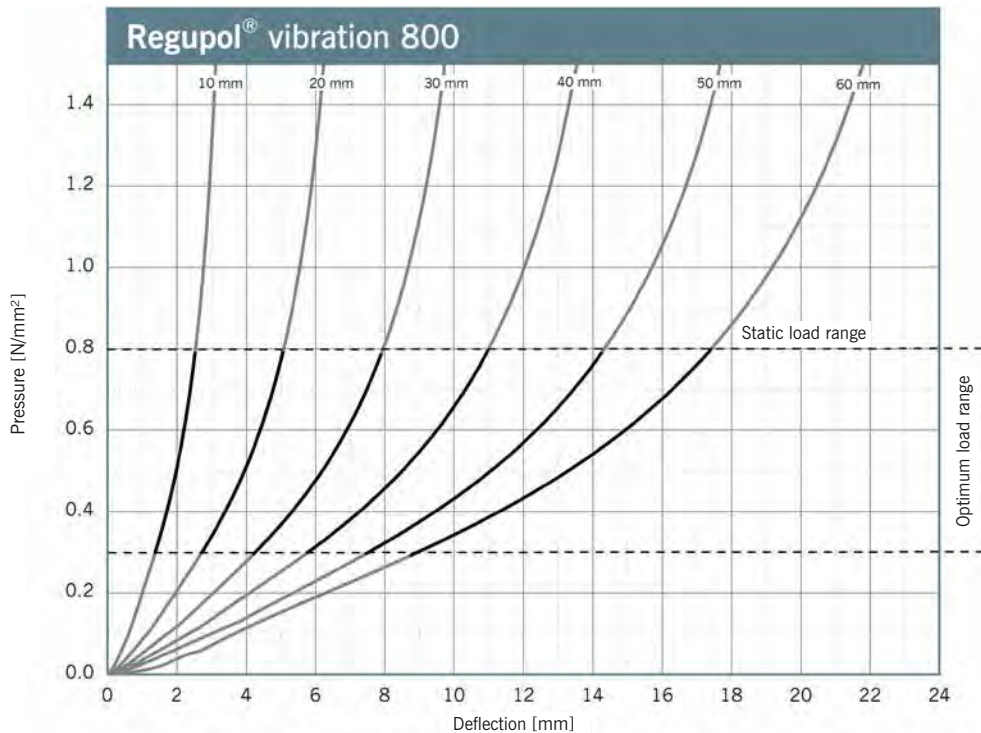
Static modulus of elasticity	Based on EN 826	1.2 - 2.9	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	3.6 - 18.2	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.18	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.7	%	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 ²	
Elongation at break	Based on DIN EN ISO 1798	70	%	
Tear resistance	Based on DIN ISO 34-1	8.0	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	[-]	



Load Ranges

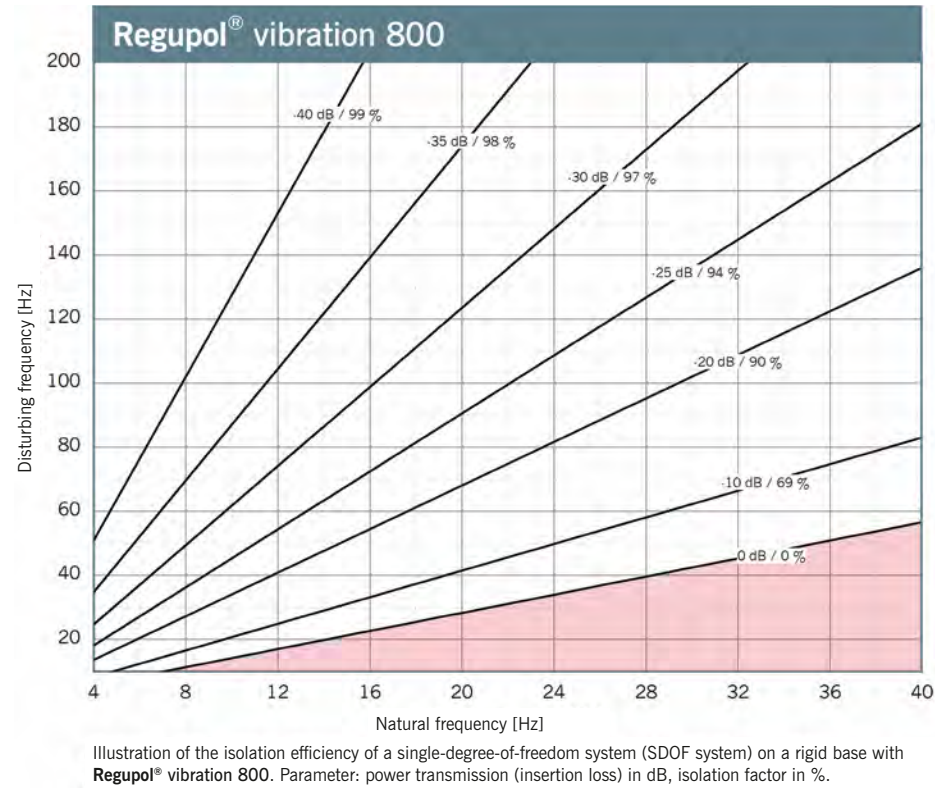


Load Deflection

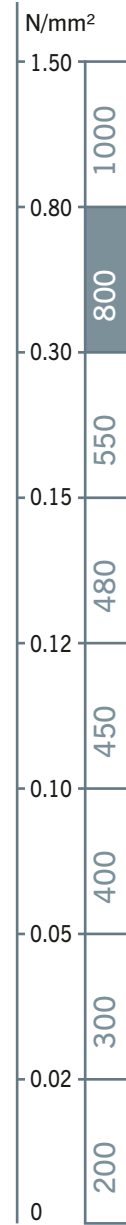
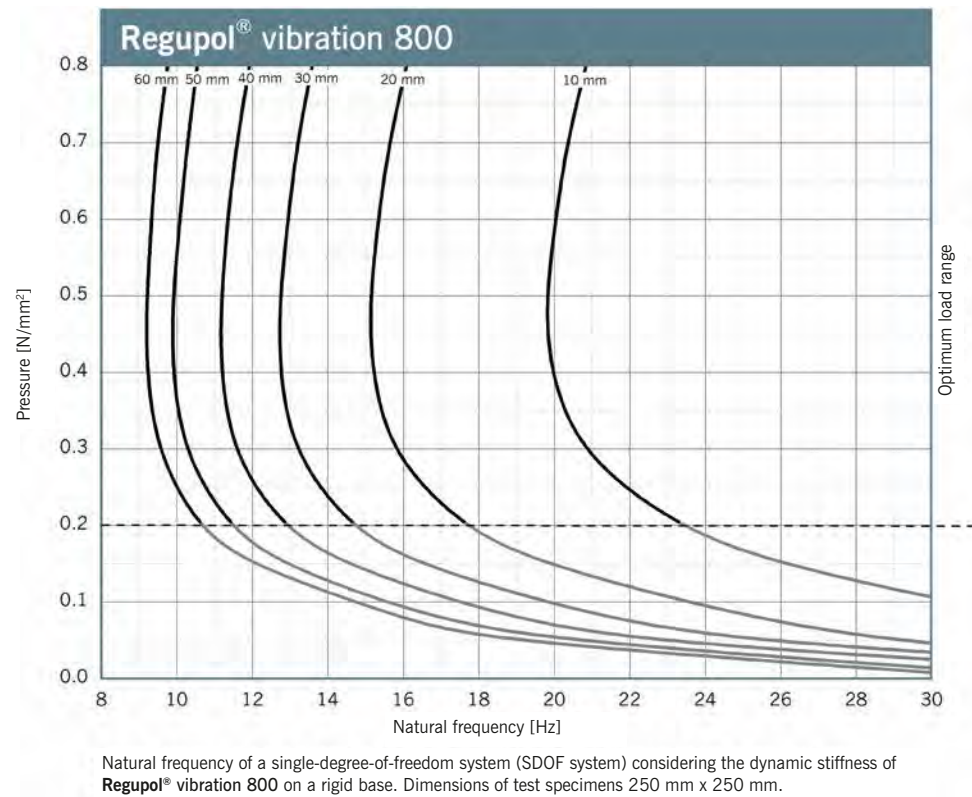


Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 mm x 250 mm.

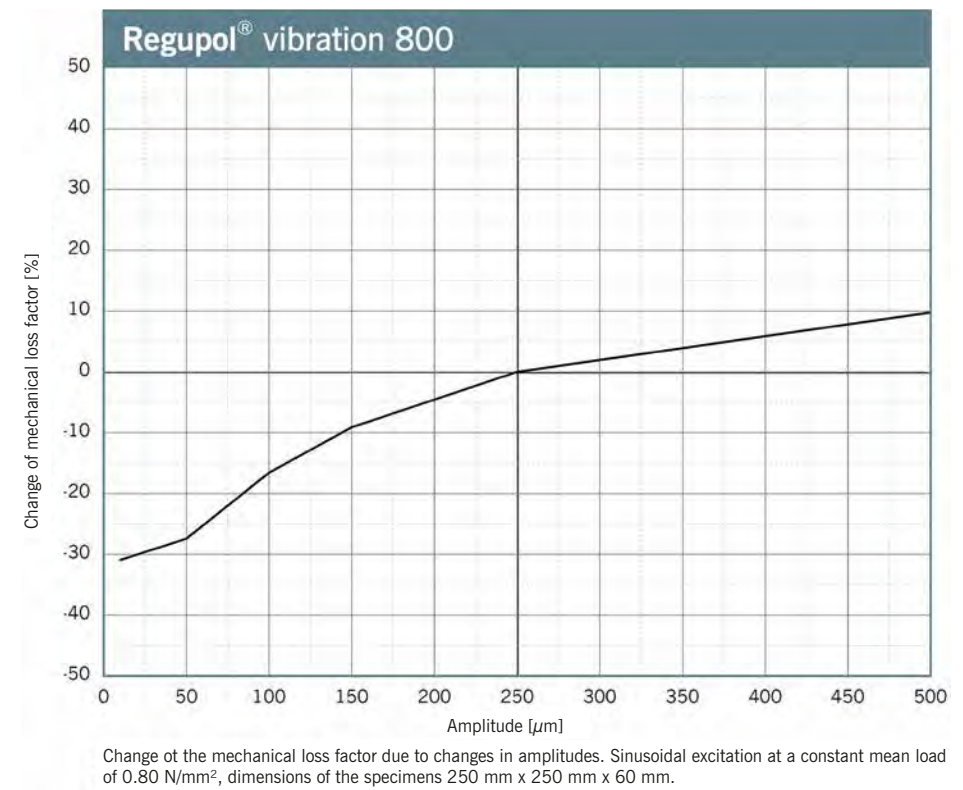
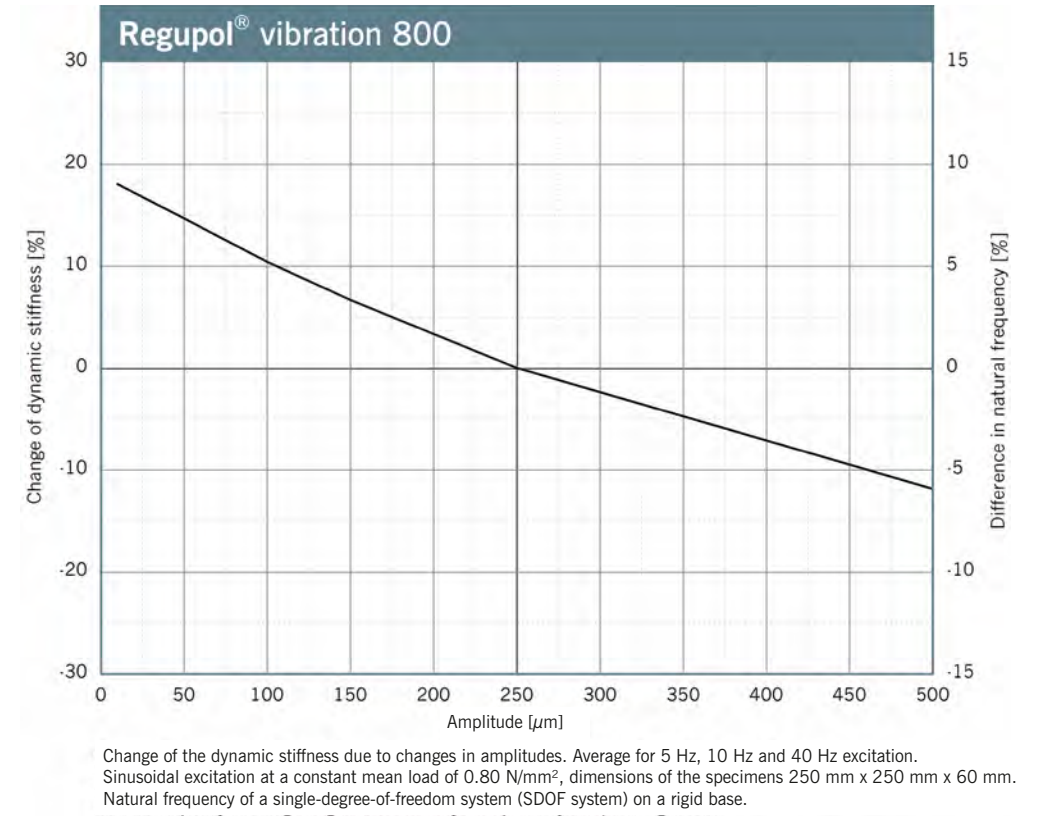
Vibration Isolation



Natural Frequency



Influence of Amplitude



Modulus of Elasticity

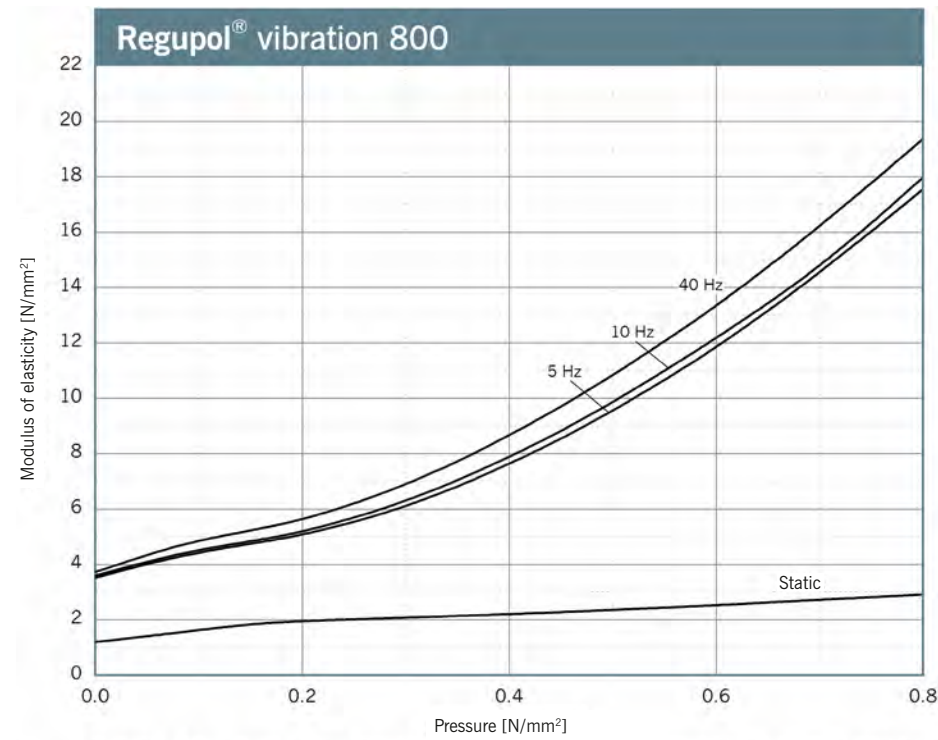


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

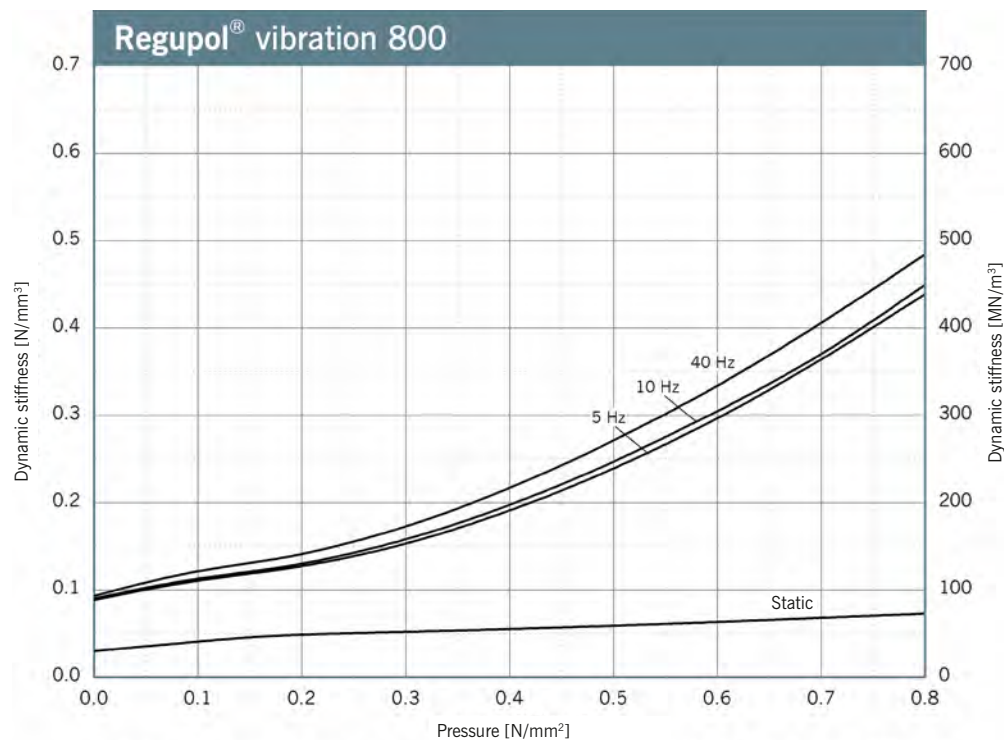
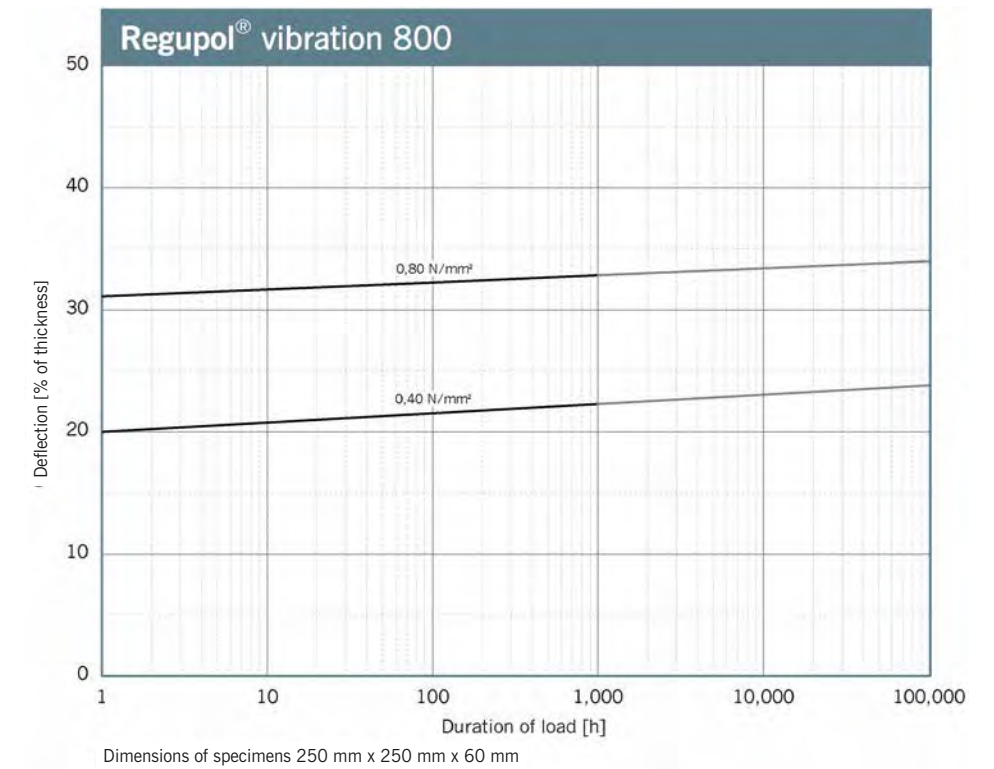


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Dimensions of specimens 250 mm x 250 mm x 60 mm

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Rolls

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 Width: 1,250 mm

Stripping/Plates

On request
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Continuous static load

1.50 N/mm²

Continuous and variable loads/operating load range

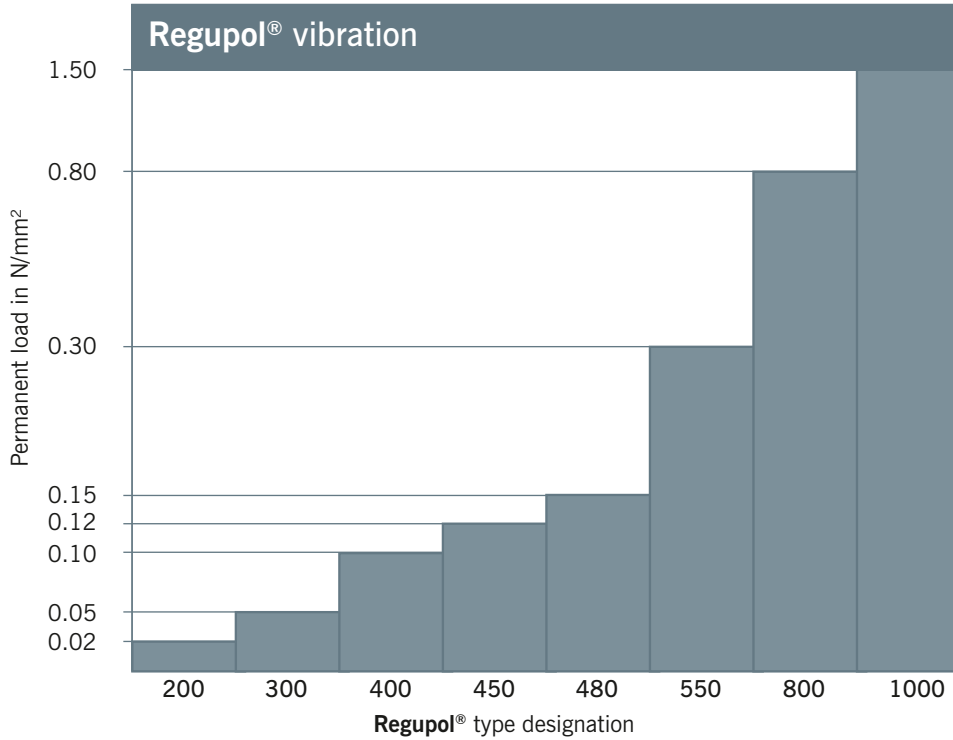
1.75 N/mm²



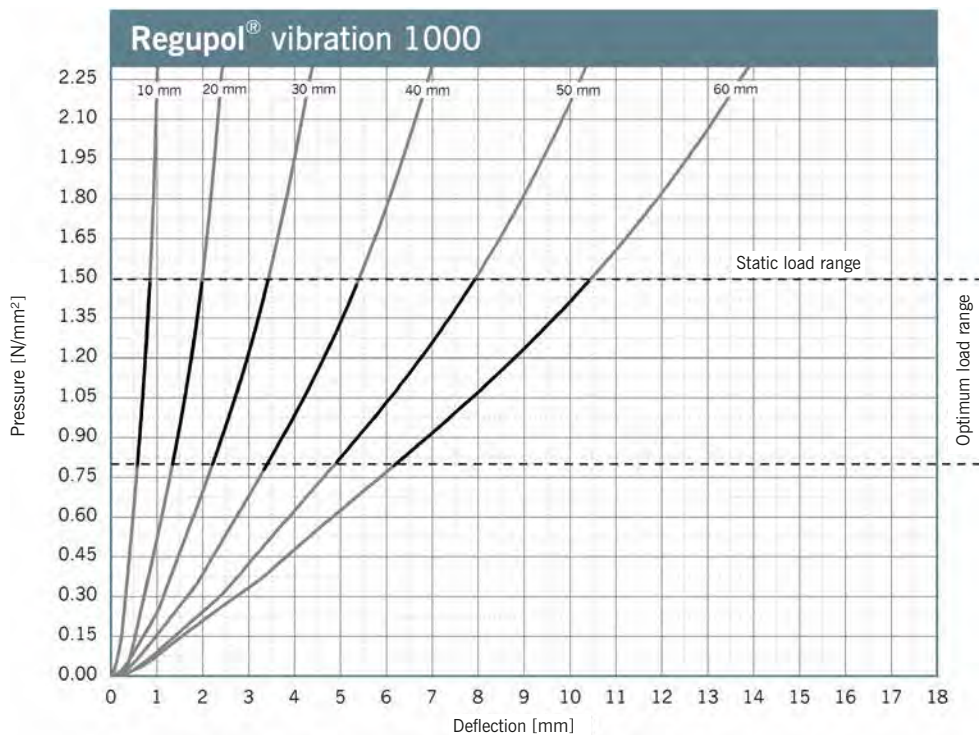
Static modulus of elasticity	Based on EN 826	4.0 - 11.0	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	15.0 - 45.0	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.16	[-]	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 ²	
Elongation at break	Based on DIN EN ISO 1798	110	%	
Tear resistance	Based on DIN ISO 34-1	15.0	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.7	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1650	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	[-]	



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 200 mm x 200 mm.

Vibration Isolation

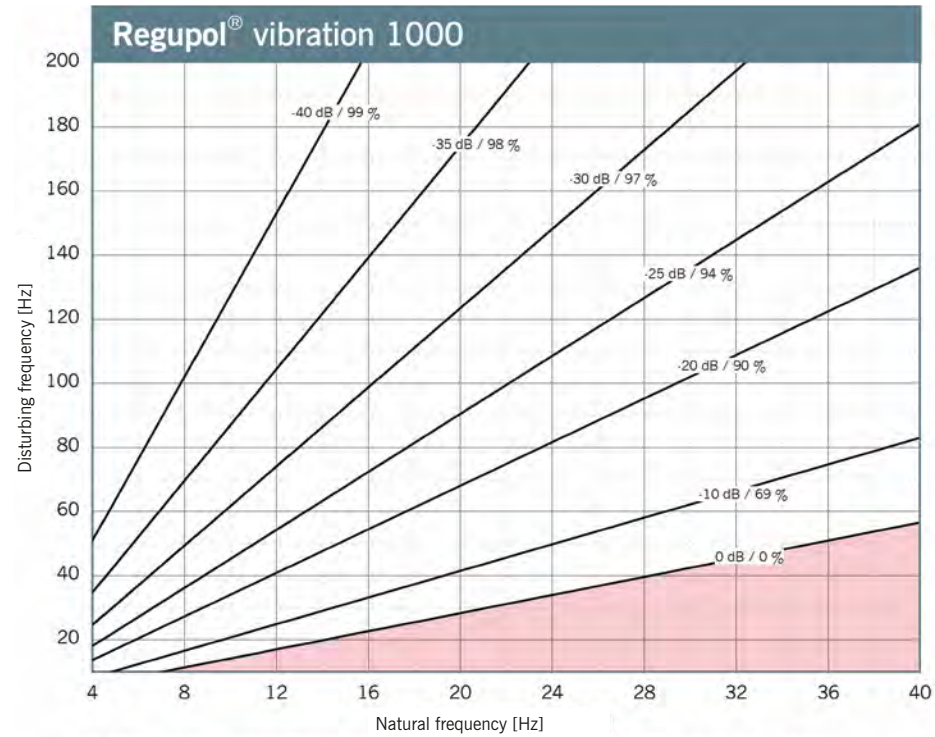
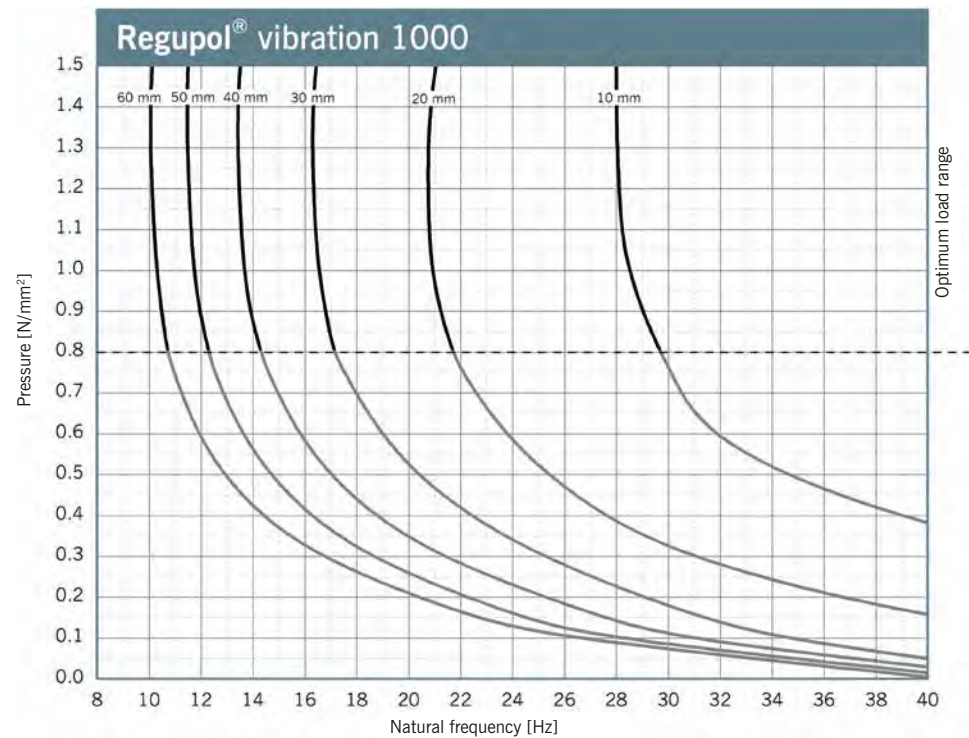


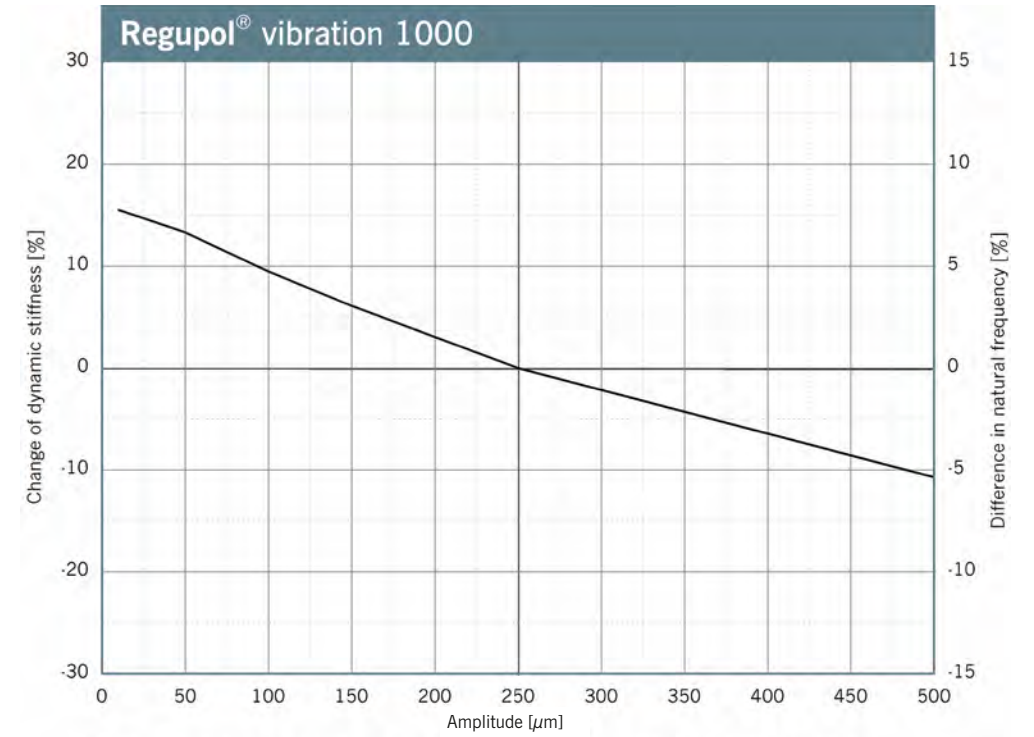
Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 1000. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

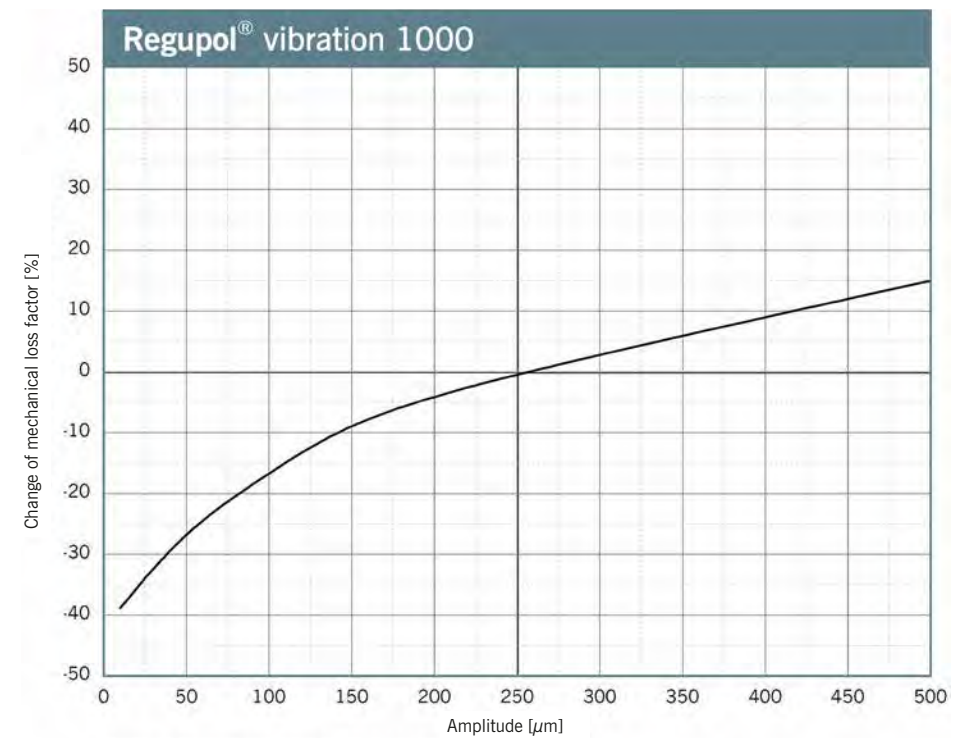


Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 1000 on a rigid base. Dimensions of test specimens 200 mm x 200 mm.

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 1.50 N/mm², dimensions of the specimens 200 mm x 200 mm x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



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

Modulus of Elasticity

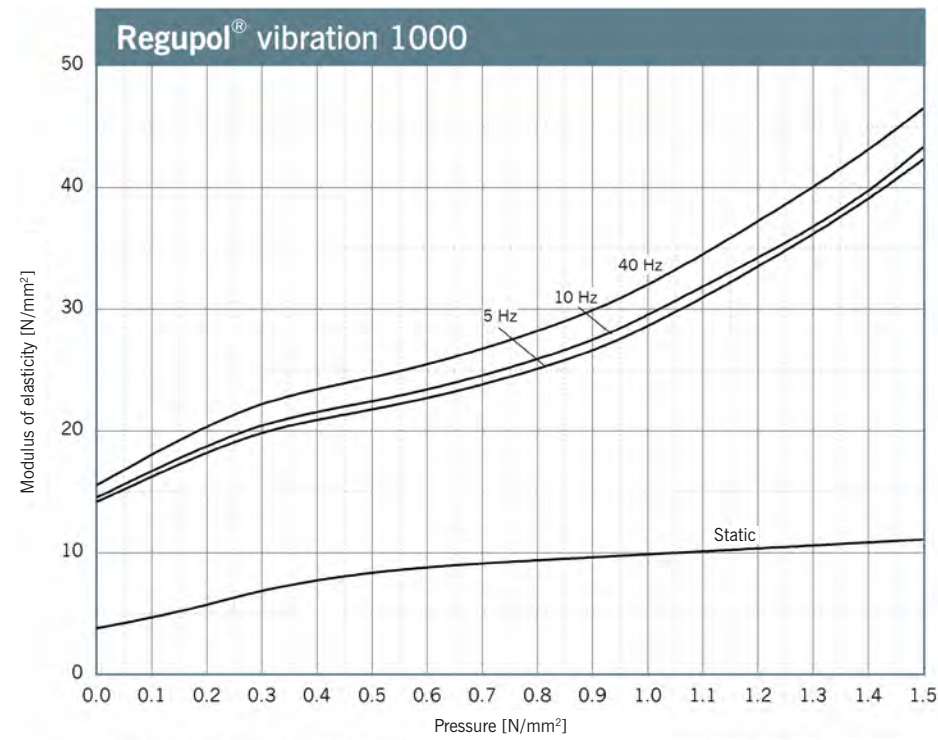


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 mm x 200 mm x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN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

Dynamic Stiffness

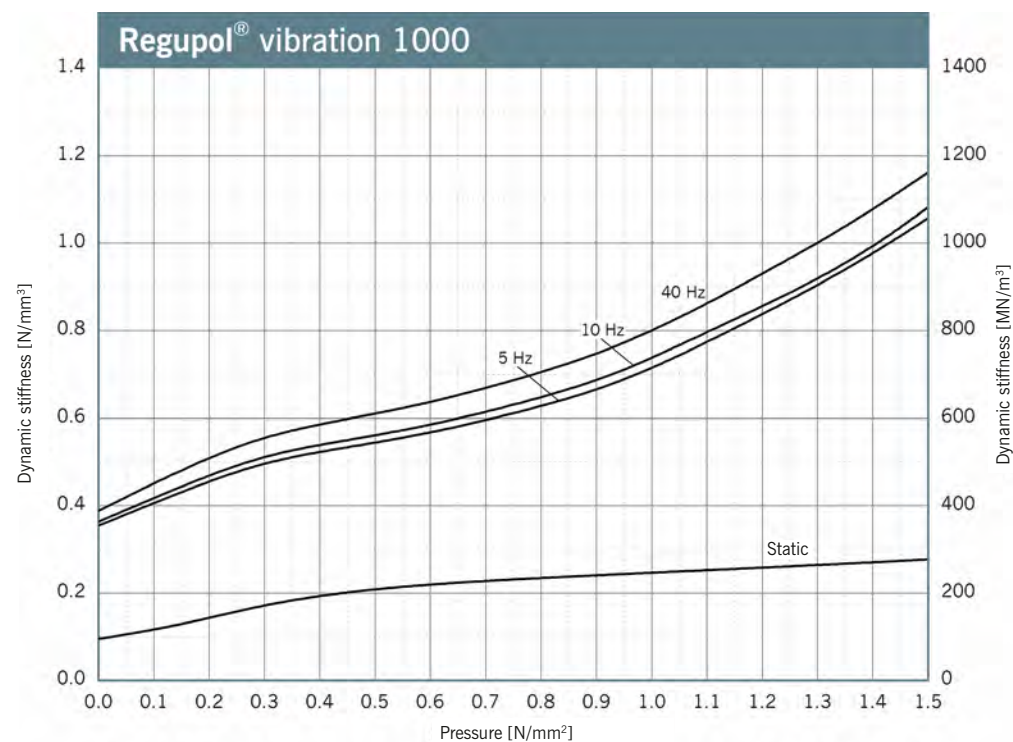
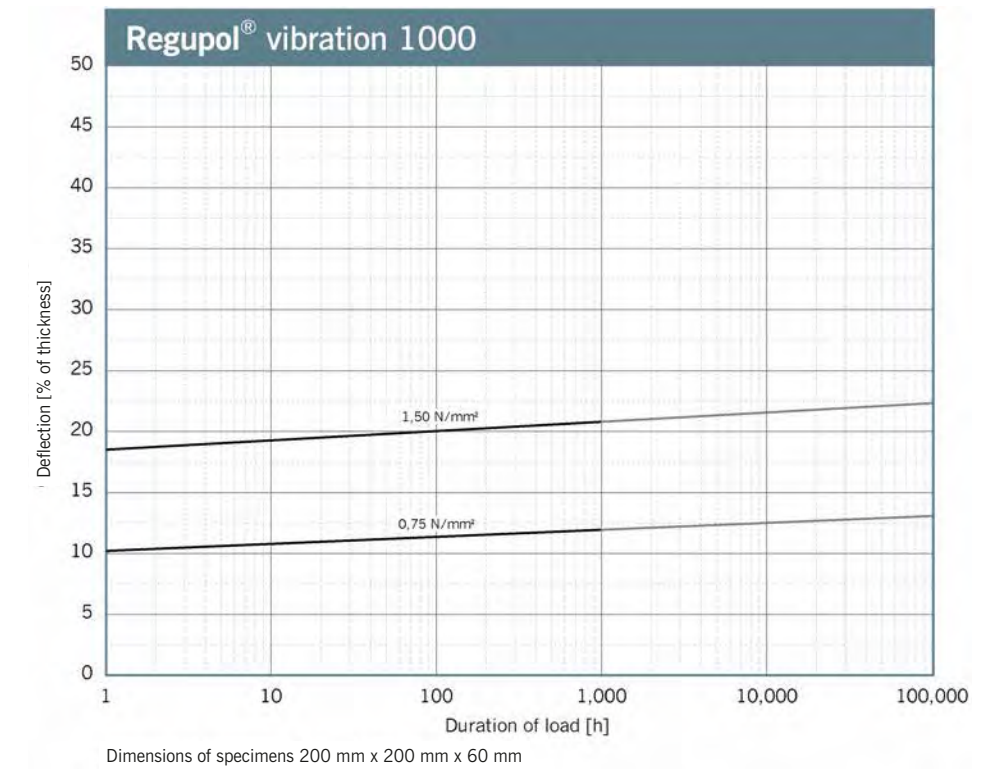


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 mm x 200 mm x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



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