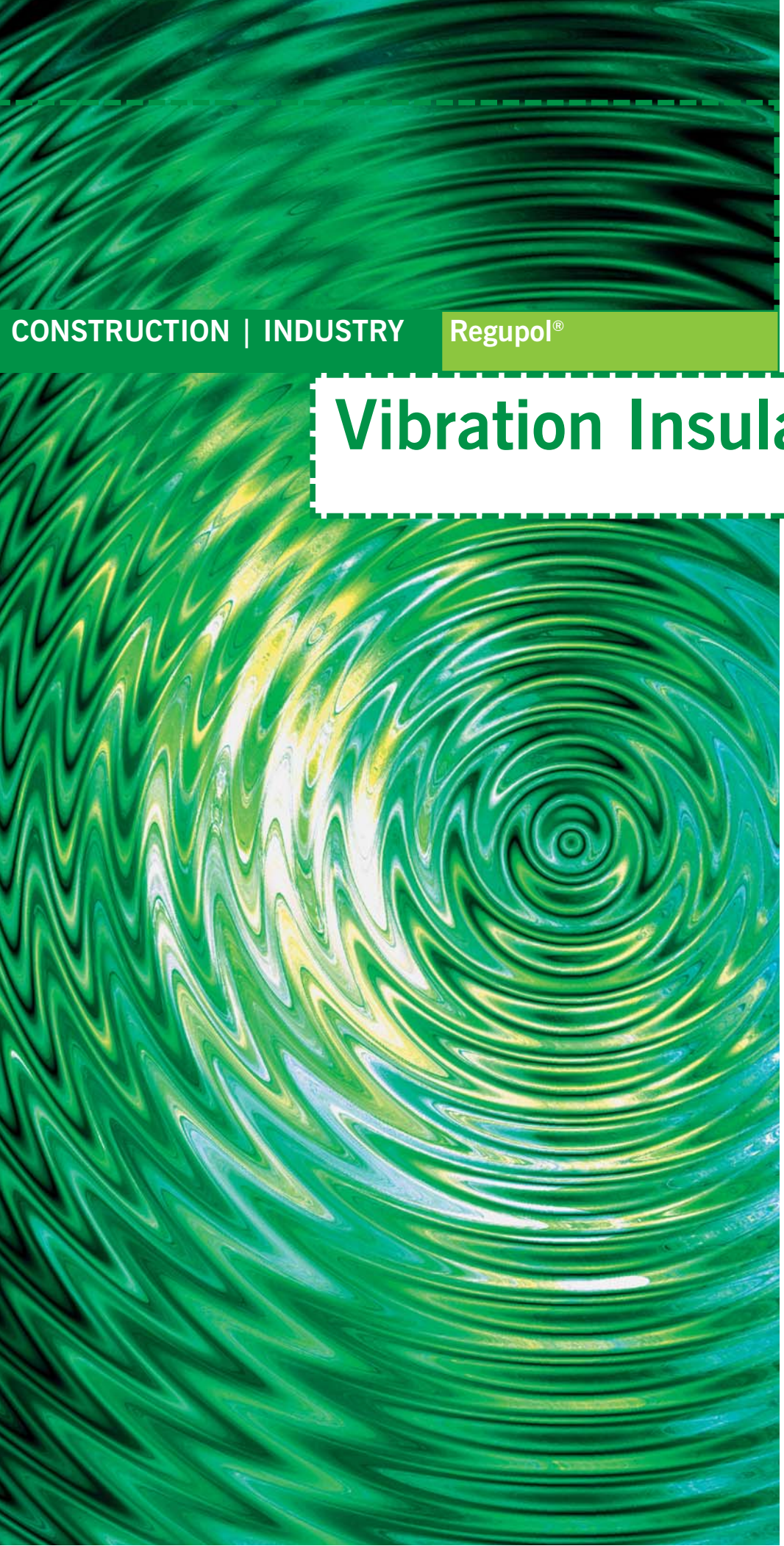


CONSTRUCTION | INDUSTRY

Regupol®

Vibration Insulation

Technical Data for Regupol®

BA, SH, PL,
HT, XHT, MF

BSW

www.berleburger.de

CONSTRUCTION | INDUSTRY

Vibration Absorption and Structure Borne Sound Insulation

The expanded product spectrum for vibration damping with Regupol® includes Regupol® types characterized by different load bearing characteristics. Regupol® vibration insulation consists of a number of different polyurethane-bound rubber granulates that effectively cover load ranges from 0.01 to 1.50 N/mm² in six different material types. The Institute for Structural Dynamics at Dresden Technical University has carried out extensive studies of these material types.
Regupol® has been known for many years for its homogeneity and as a reliable product in the field of vibration insulation. With the expanded product spectrum and coverage of higher load ranges, BSW is now upgrading its competence in the area of vibration technology.

Fields of application

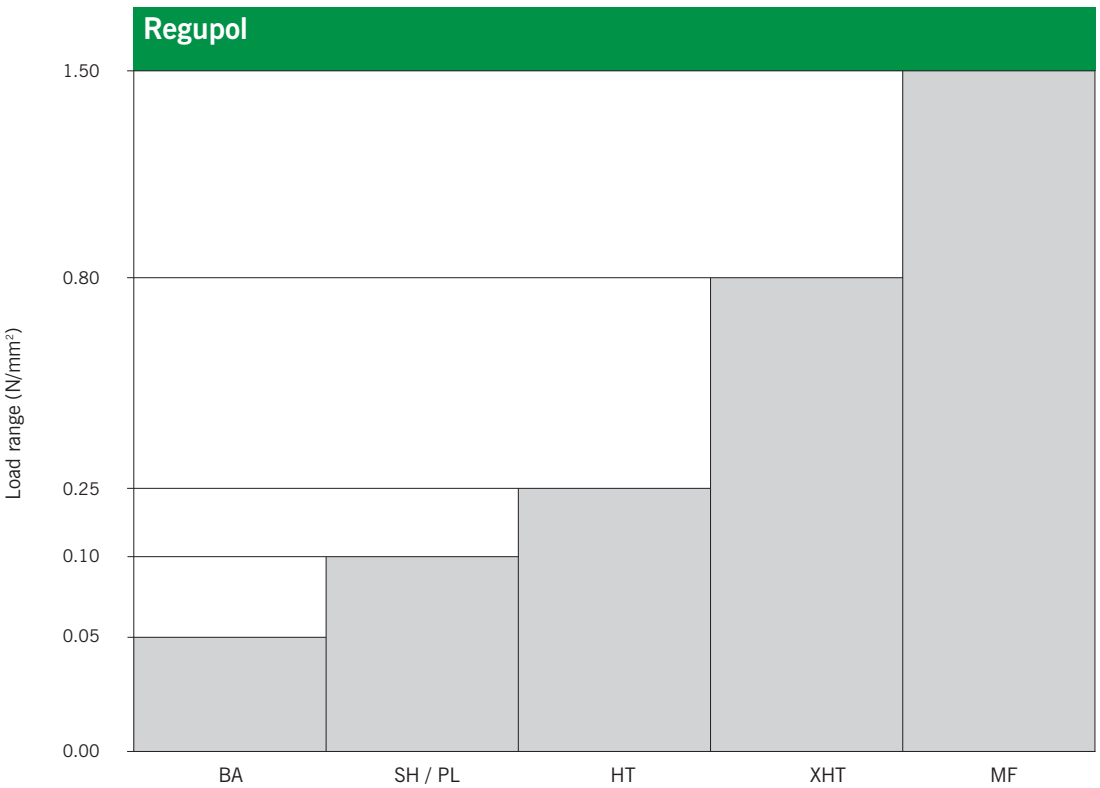
Road construction

In track-laying and tunnel construction, as well as in road and bridge construction, BSW materials are used to damp vibrations and to protect structures form damaging vibrations.

Foundations

Buildings with load distribution plates rest on Regupol® to protect them against ground vibrations.

Load Ranges



Structural engineering

Whether in lift motors, pumps, ventilation systems or block-type thermal power stations, Regupol® is easy to install and has a long useful life.

Industry

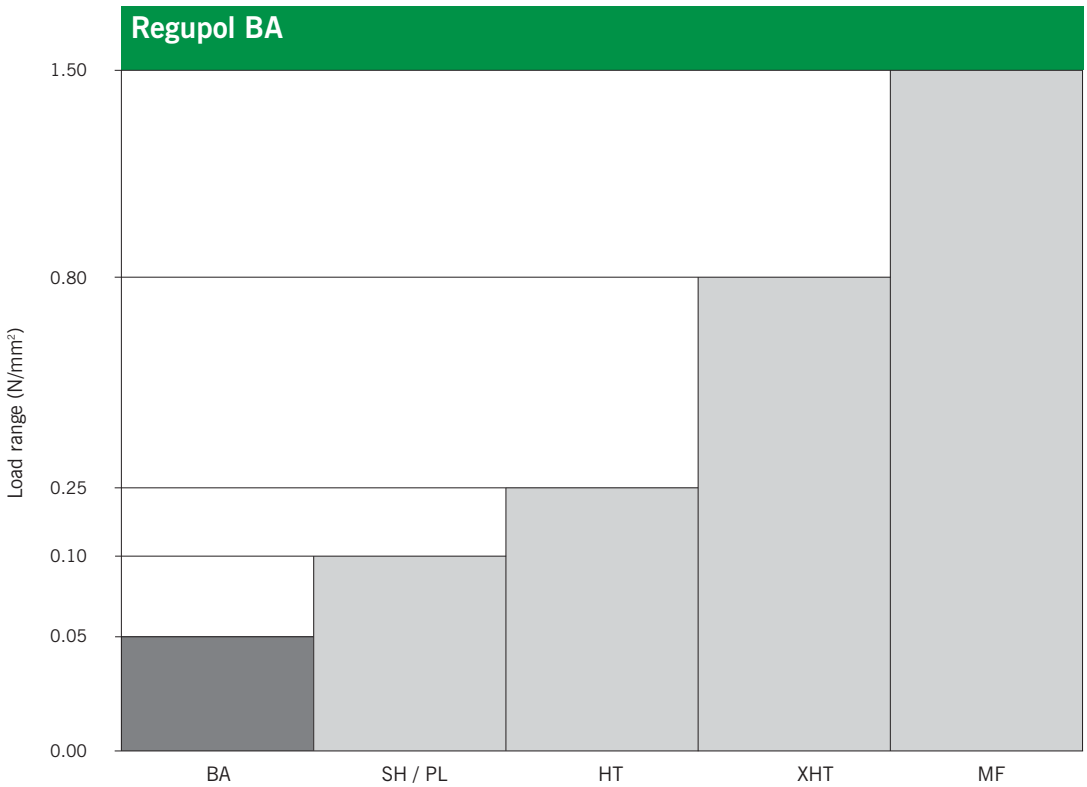
In industrial applications, Regupol® is used for active insulation of machines and passive insulation of floor plates on which fine measuring equipment is installed, in laboratory rooms and in measuring booths. Both sub-critical amd hyper-critical mounts are possible.

Standard sizes, on stock:

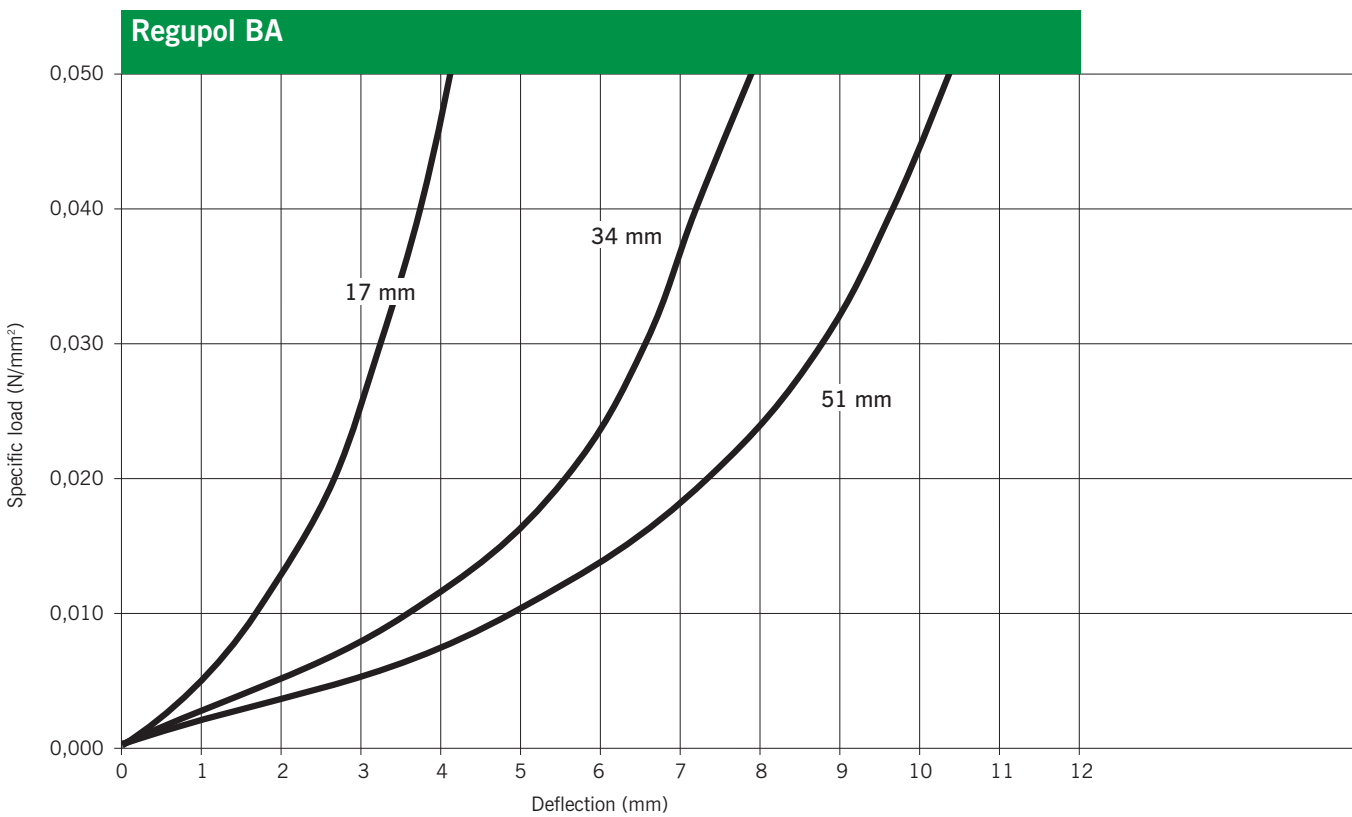
Thickness:
Thicknesses vary according to type.
Special thicknesses available on request.

Rolls:
width 1,250 mm
length 10,000 mm
Special lengths possible
die-cutting, water-jet cutting,
self adhesive possible

Load Ranges



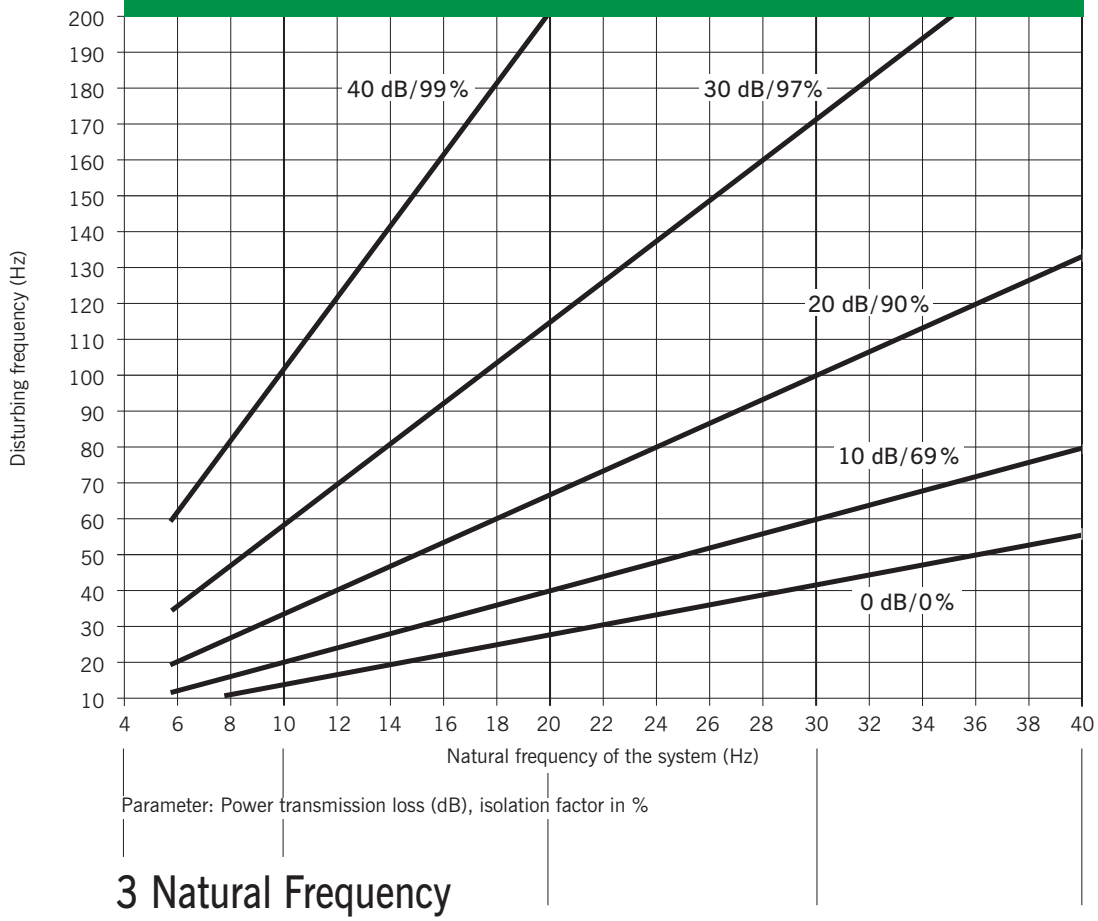
1 Load Deflection



Samples: 300 mm x 300 mm

2 Vibration Insulation

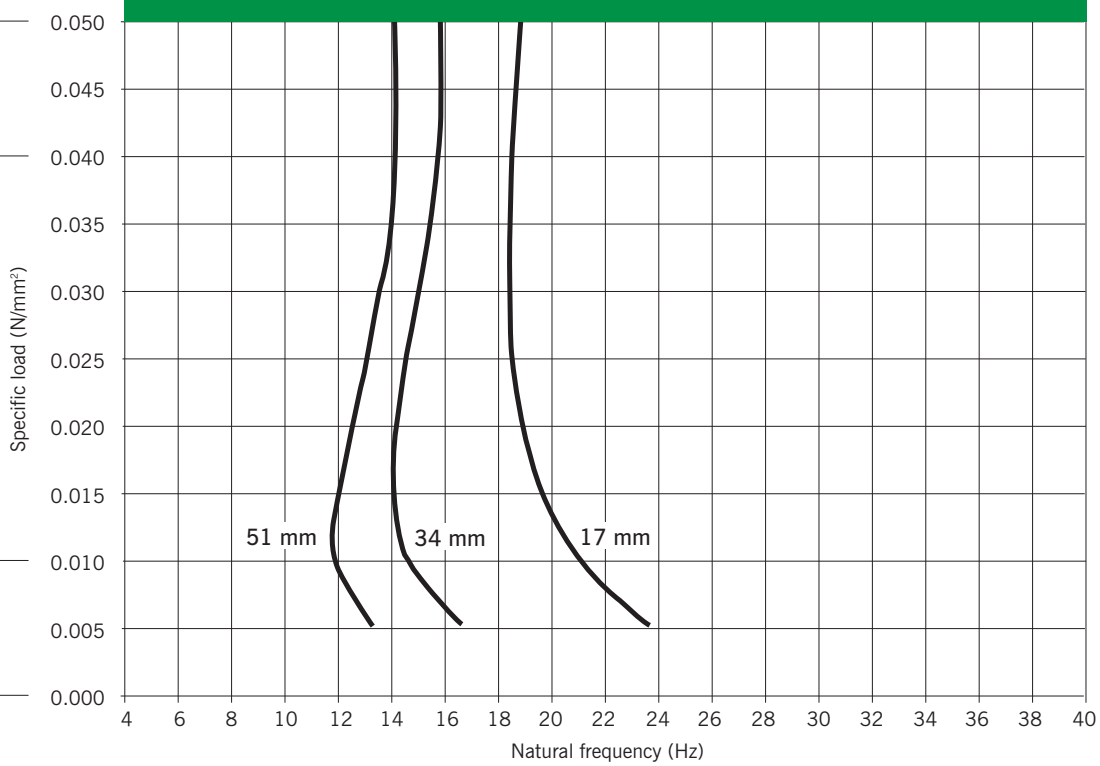
Regupol BA



Parameter: Power transmission loss (dB), isolation factor in %

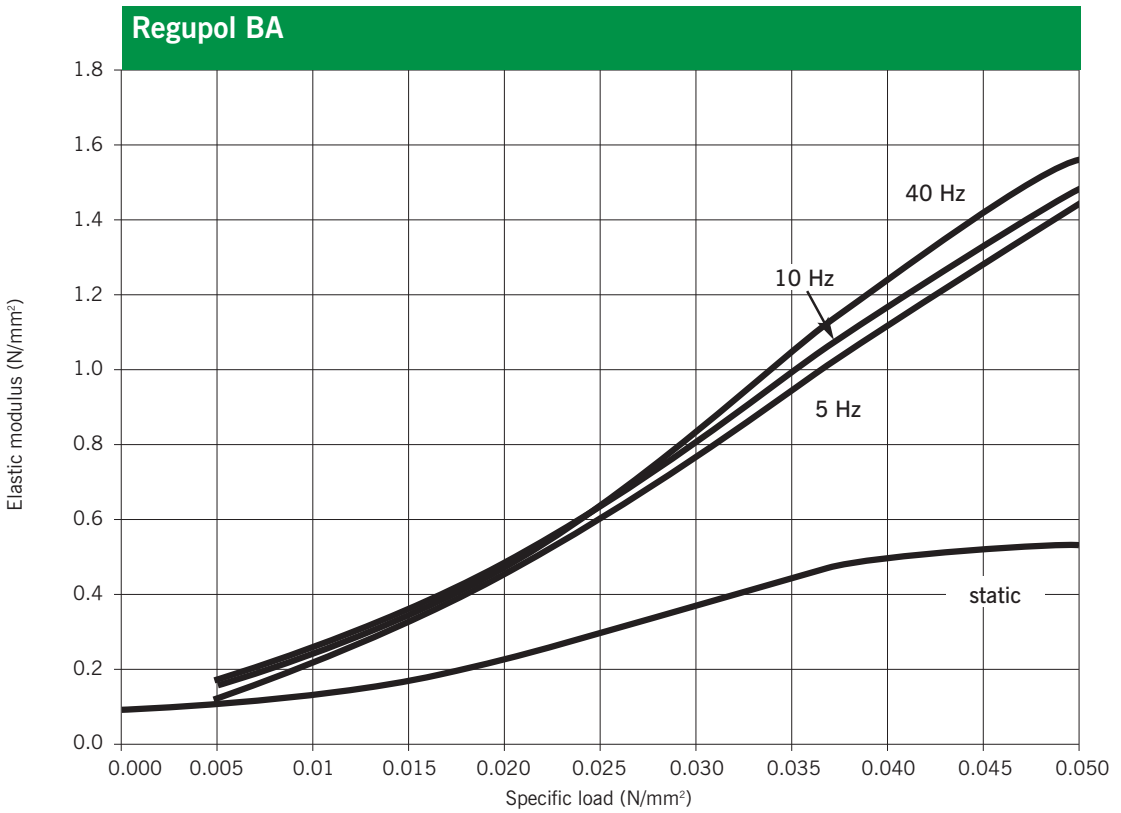
3 Natural Frequency

Regupol BA



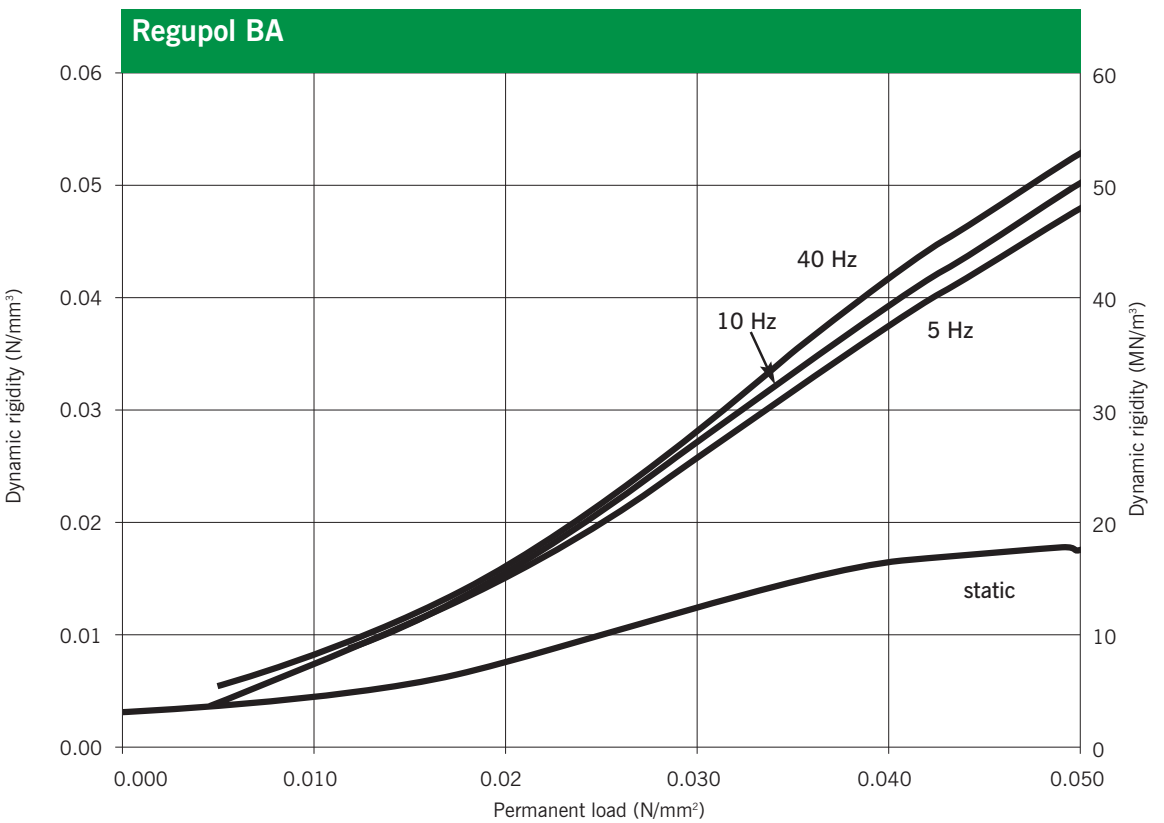
Samples: 300 mm x 300 mm

4 Modulus of Elasticity



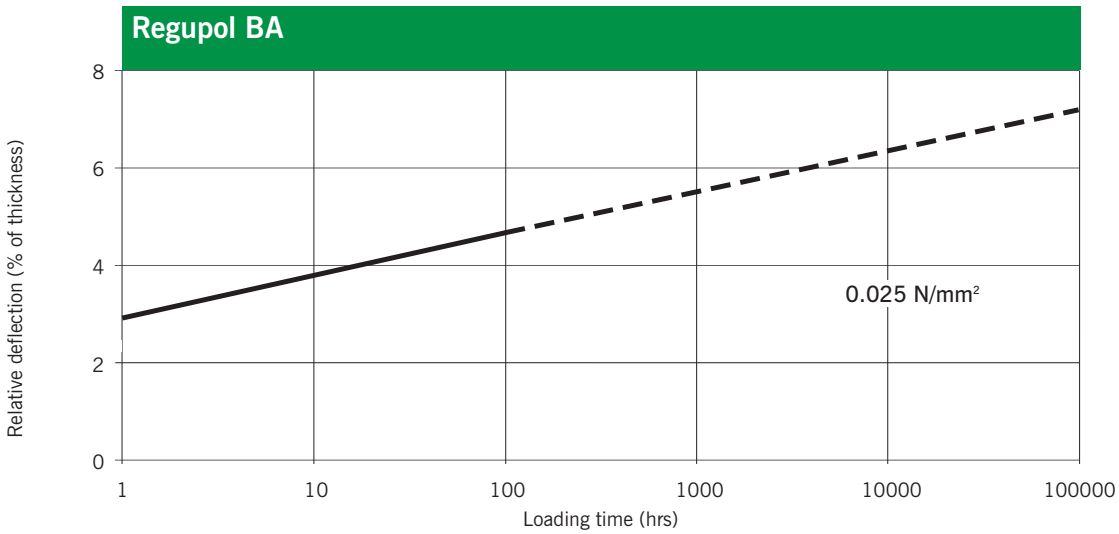
Samples: 300 mm x 300 mm x 34 mm

5 Dynamic Rigidity



Samples: 300 mm x 300 mm x 34 mm

6 Long-term Creep Test



Samples: 300 mm x 300 mm x 34 mm

Technical Data

Regupol® is made of polyurethane-bound rubber-granulate.

Standard supply forms ex warehouse:

Thickness: 17 mm, profiled — Width: 1,250 mm

Rolls: — Length: 10,000 mm

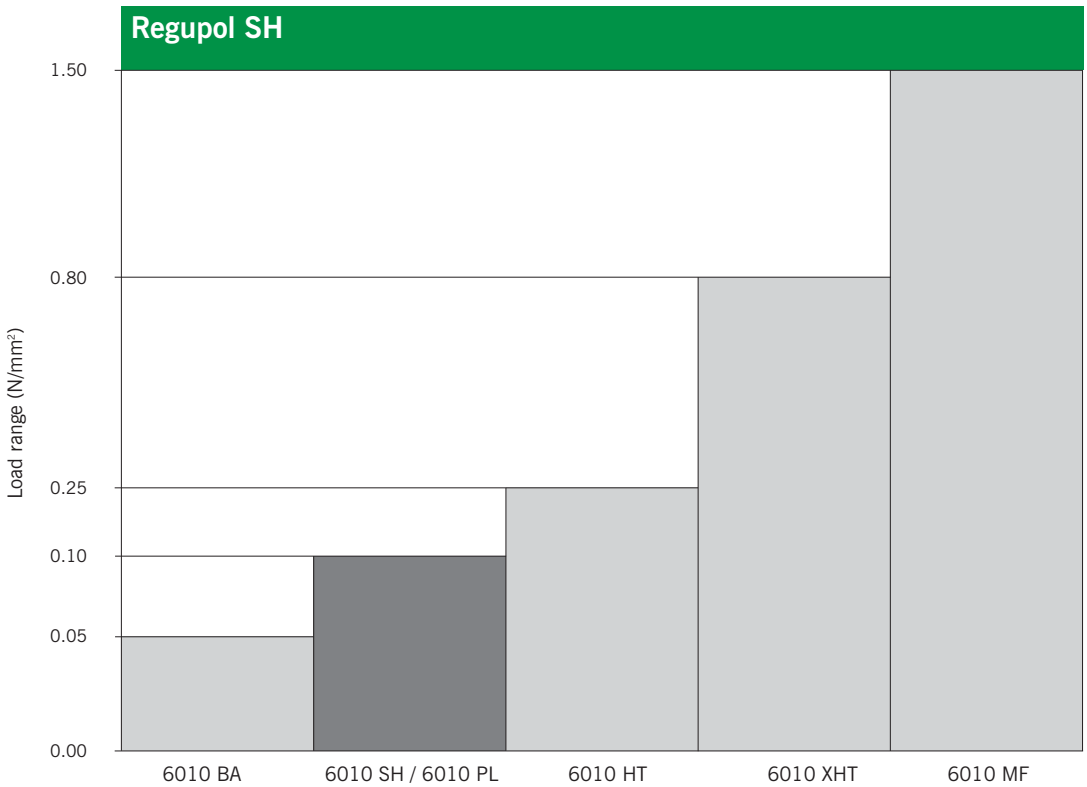
Stripping/plates: — On request

Permanent static load range:
0.05 N/mm²

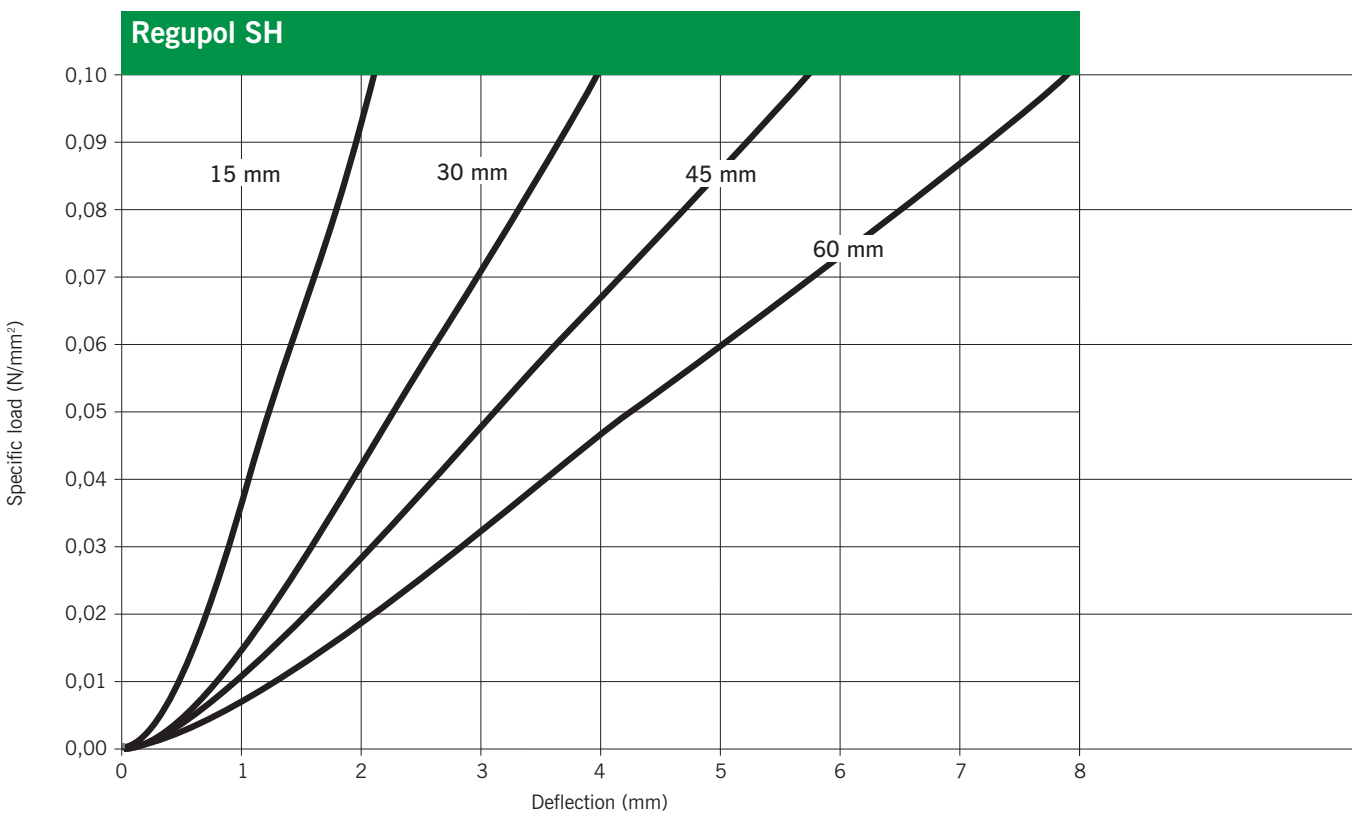
Static Modulus of Elasticity	Similar to EN 826	0.10-0.44	N/mm²	Tantgential modulus see fig. 4
Dynamic Modulus of Elasticity	Similar to DIN 53513	0.15-1.10	N/mm²	Depending on load and frequency, see fig. 4
Compression Set	DIN 53572	approx. 4.10	%	measured 30 minutes after decompression with 50% deformation/23 °C after 72 hrs.
Tensile Strength	DIN 53571	0.30	N/mm²	Minimum
Elongation at Break	DIN 53571	60	%	Minimum
Tear-Resistance	DIN 53515	3.0	N/mm	Minimum
Inflammability	DIN 4102	B 2	-	Normal inflammable

The information on this data sheet is based on the current state of our knowledge and experience and is subject to changes and production-related variations without notice.

Load Ranges



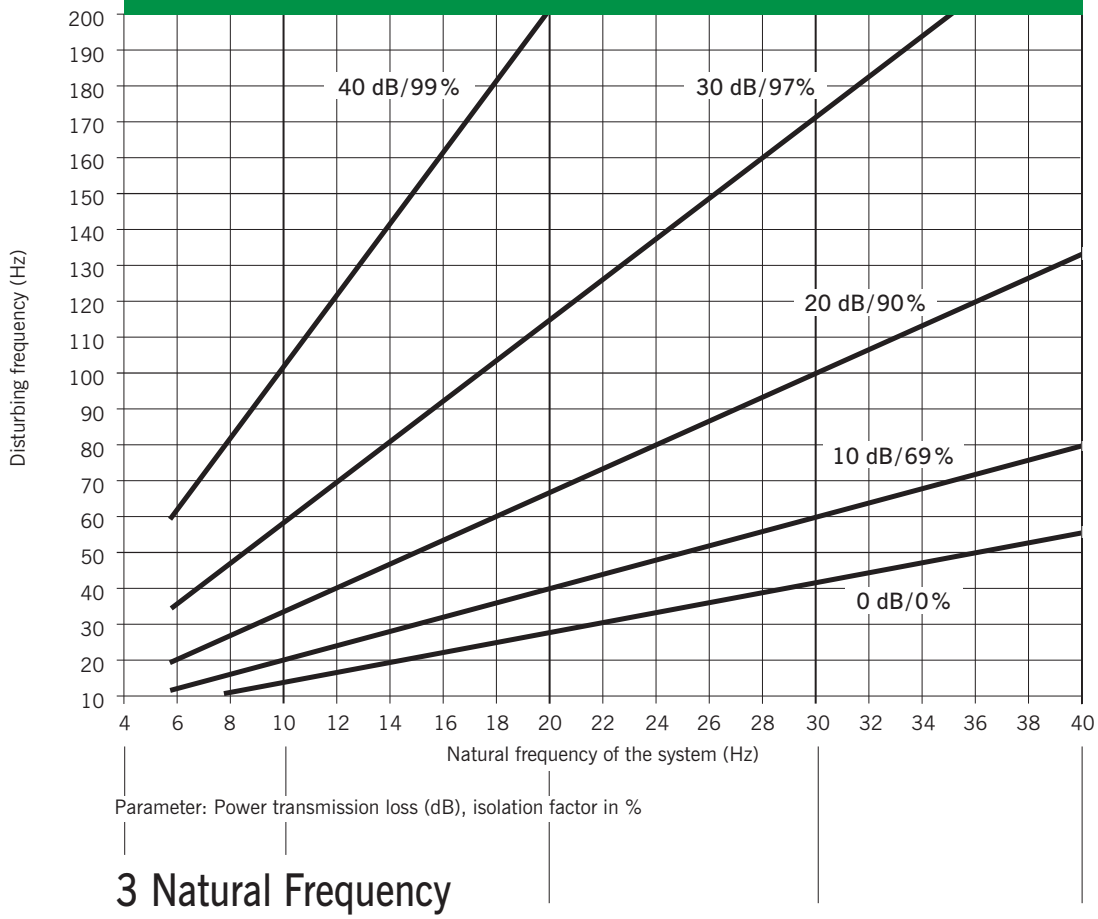
1 Load Deflection



Samples: 300 mm x 300 mm

2 Vibration Insulation

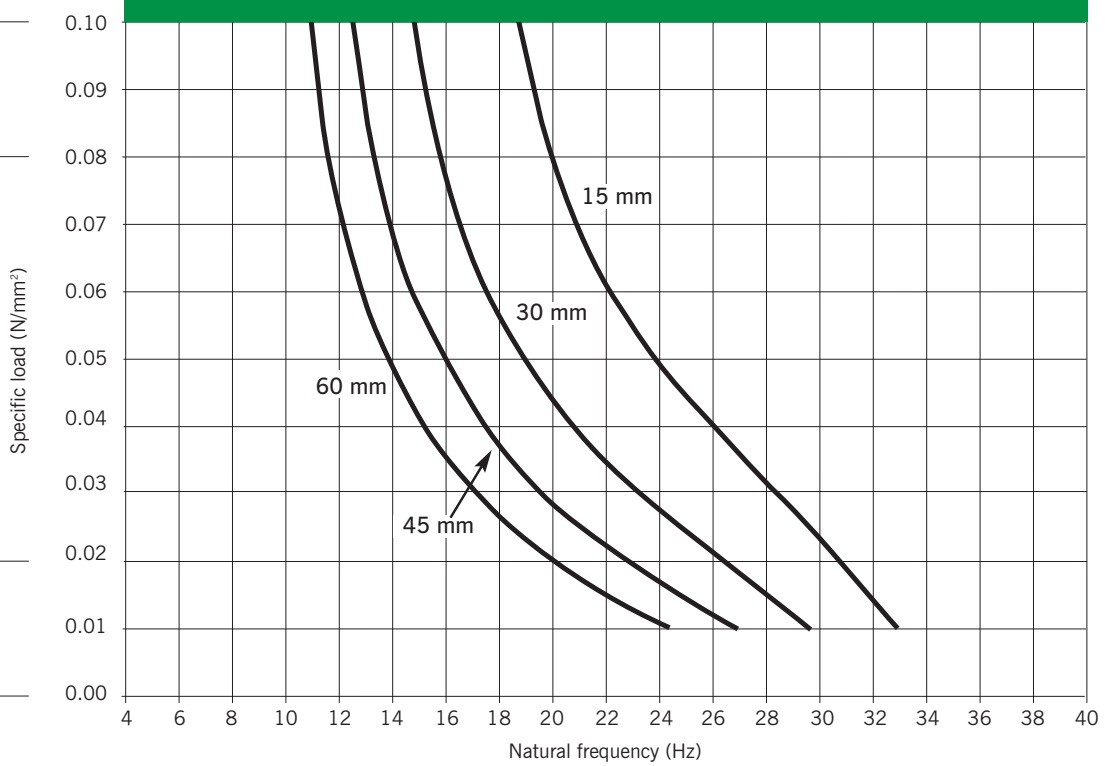
Regupol SH



Parameter: Power transmission loss (dB), isolation factor in %

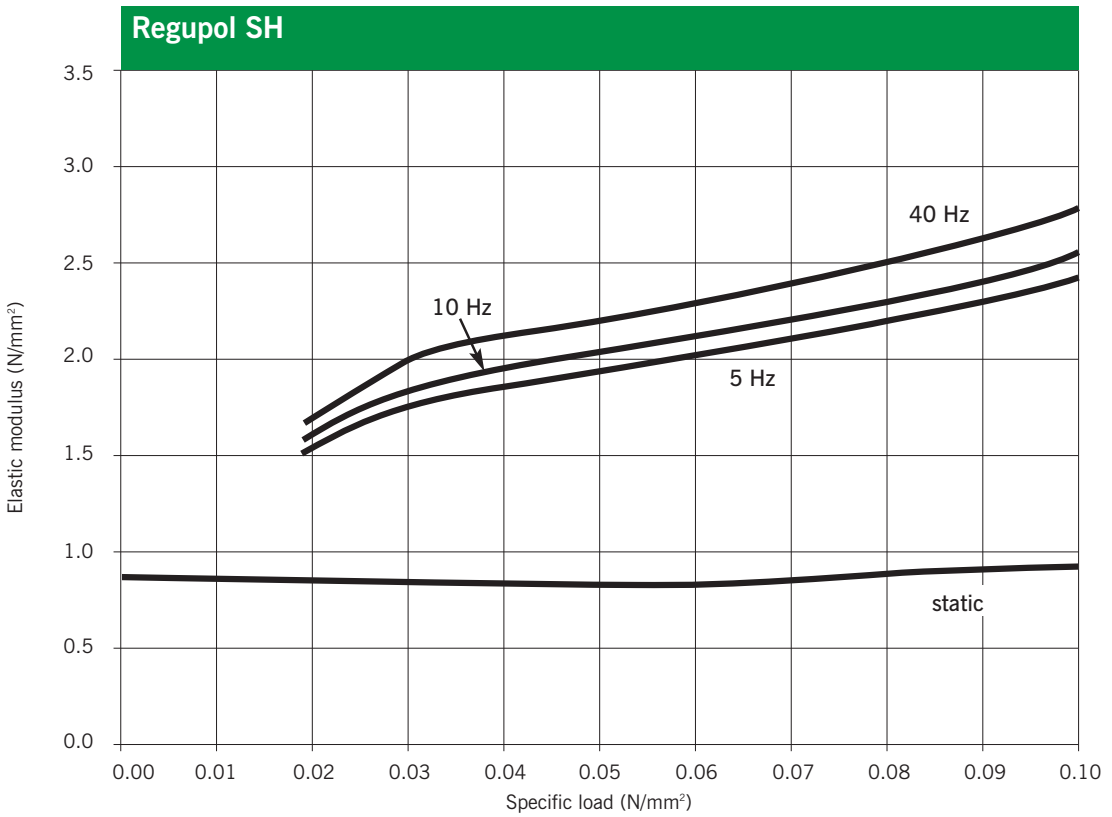
3 Natural Frequency

Regupol SH



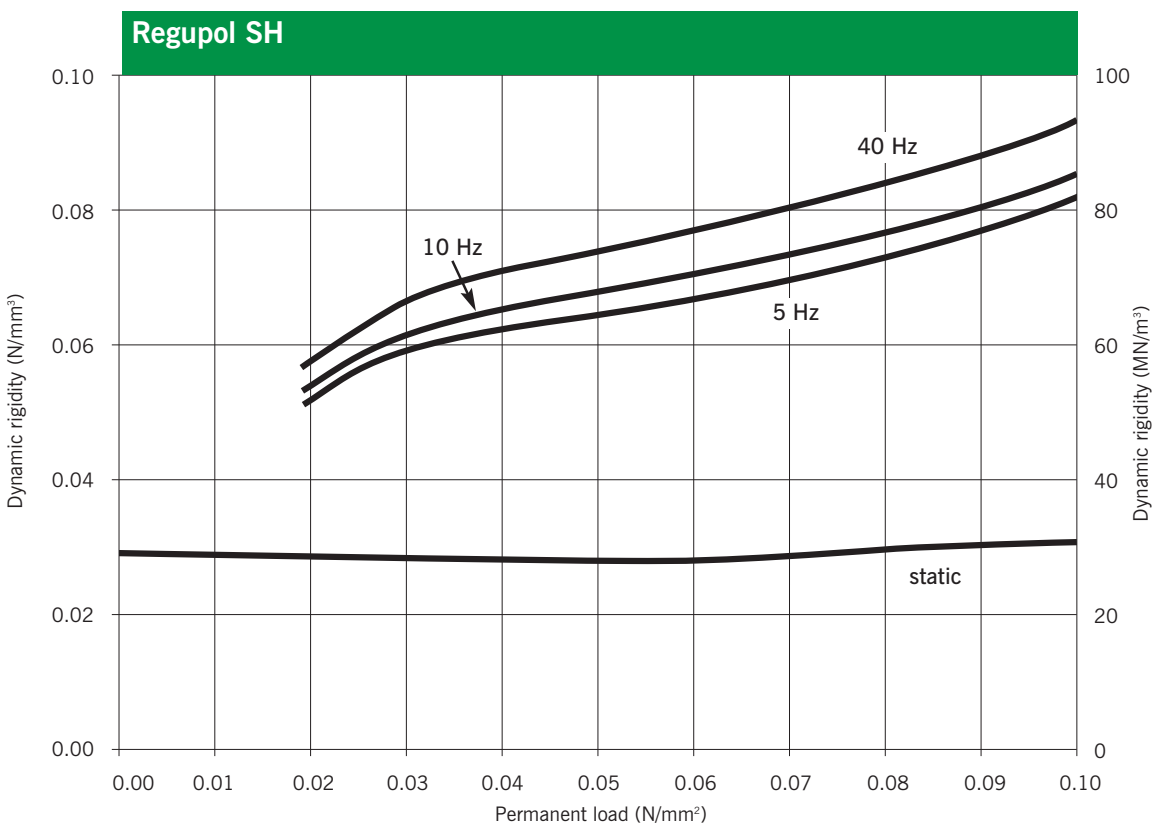
Samples: 300 mm x 300 mm

4 Modulus of Elasticity



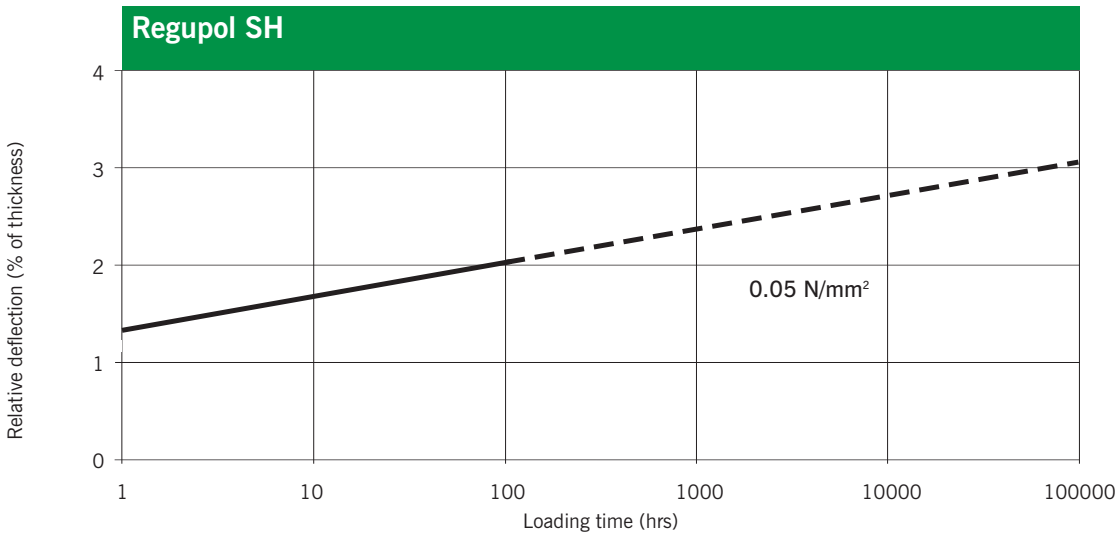
Samples: 300 mm x 300 mm x 30 mm

5 Dynamic Rigidity



Samples: 300 mm x 300 mm x 30 mm

6 Long-term Creep Test



Samples: 300 mm x 300 mm x 30 mm

Technical Data

Regupol® is made of polyurethane-bound rubber-granulate.

Standard supply forms ex warehouse:

Thickness: 15 mm — Width: 1,250 mm

Rolls: — Length: 10,000 mm

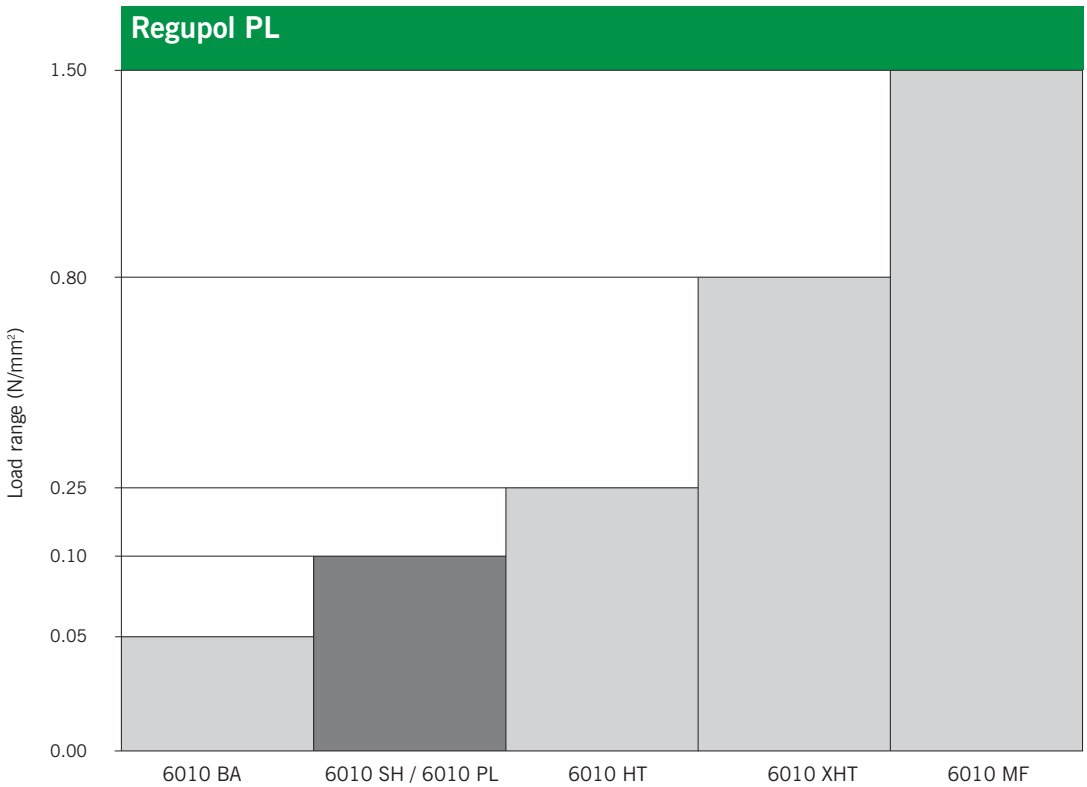
Stripping/plates: — On request

Permanent static load range:
0.1 N/mm²

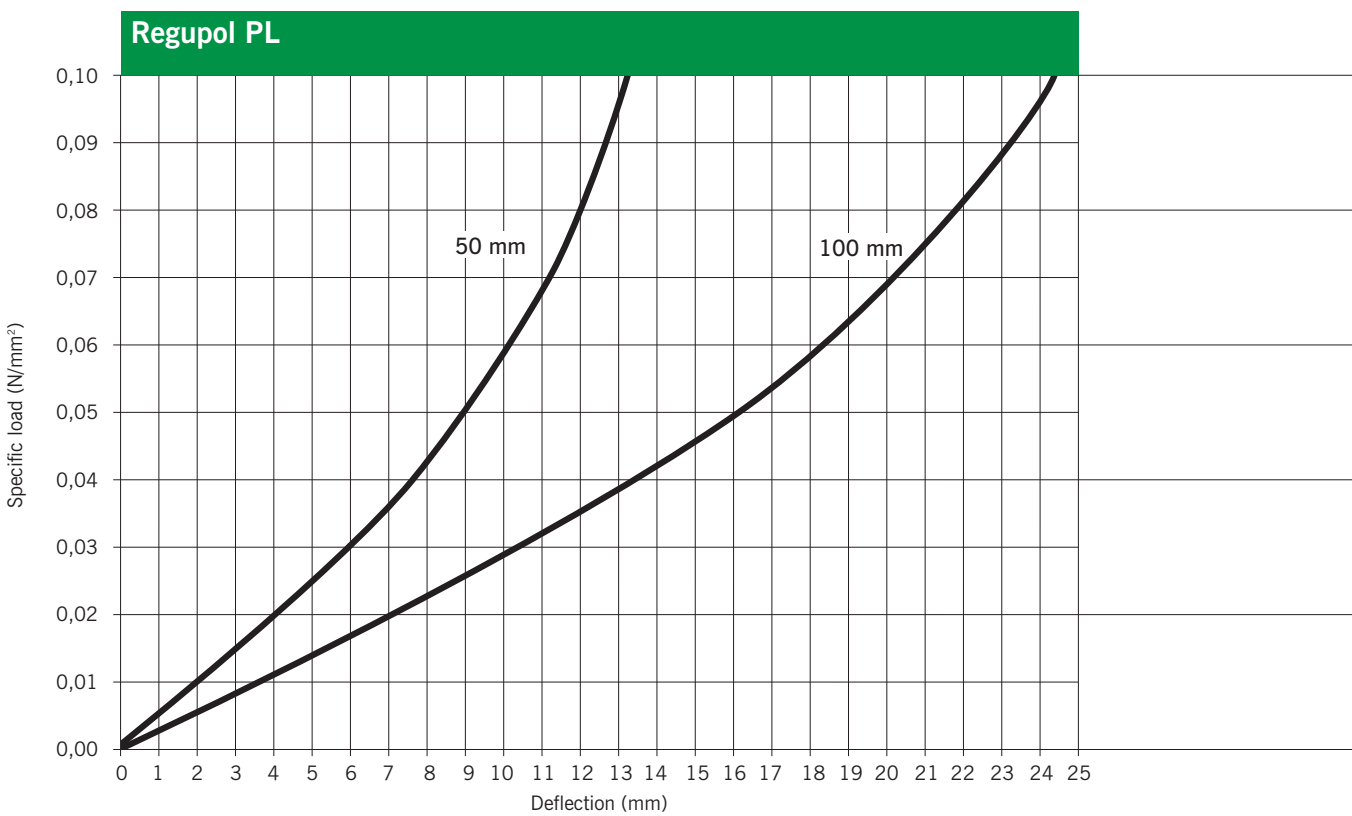
Static Modulus of Elasticity	Similar to DIN 53513	0.8 -0.90	N/mm²	Tangential modulus see fig. 4
Dynamic Modulus of Elasticity	Similar to DIN 53513	0.6 -2.20	N/mm²	Depending on load and frequency, see fig. 4
Mechanical Loss Factor	DIN 53513	-	-	
Compression Set	DIN 53572	approx. 4.0	%	measured 30 minutes after decompression with 50 % deformation/23 °C after 72 hrs.
Tensile Strength	DIN 53571	0.40	N/mm²	Minimum
Elongation at Break	DIN 53571	70	%	Minimum
Tear-Resistence	DIN 53515	3.40	N/mm	Minimum
Inflammability	DIN 4102	B 2	-	Normal inflammable

The information on this data sheet is based on the current state of our knowledge and experience and is subject to changes and production-related variations without notice.

Load Ranges



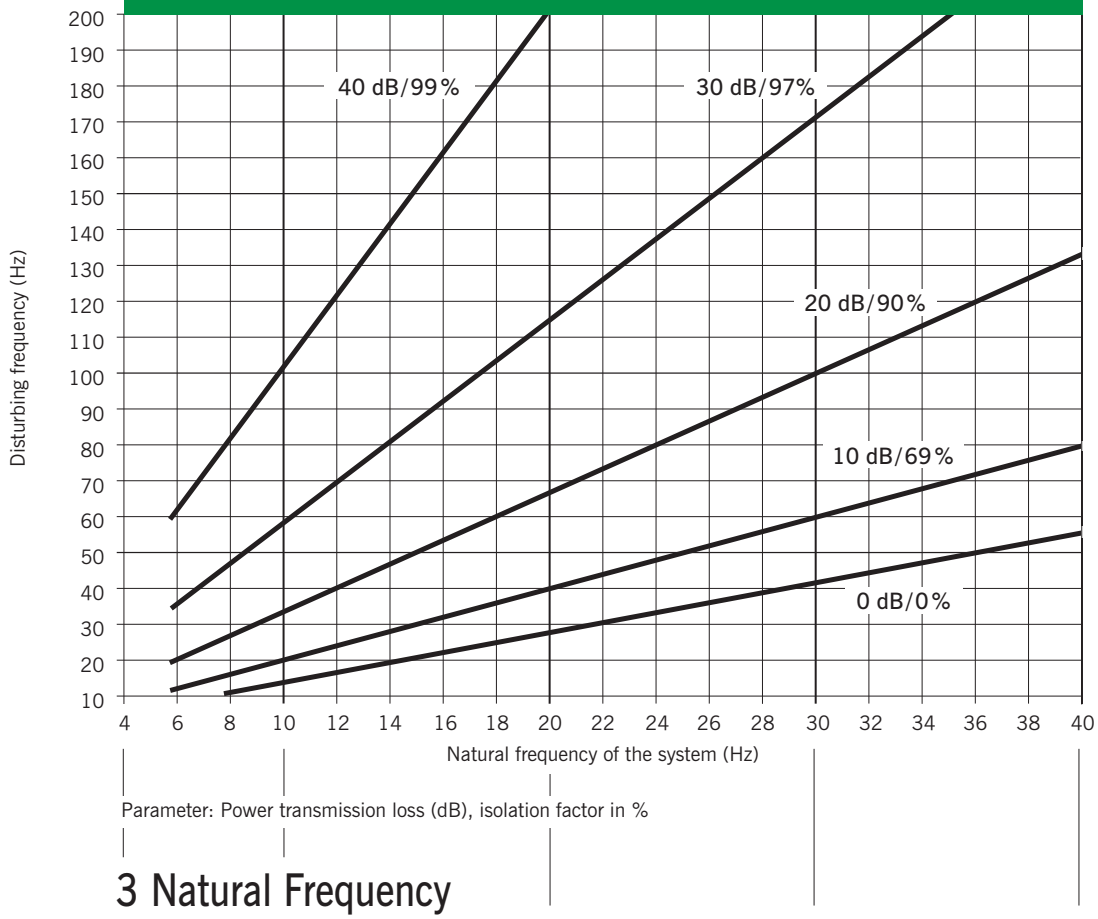
1 Load Deflection



Samples: 300 mm x 300 mm

2 Vibration Insulation

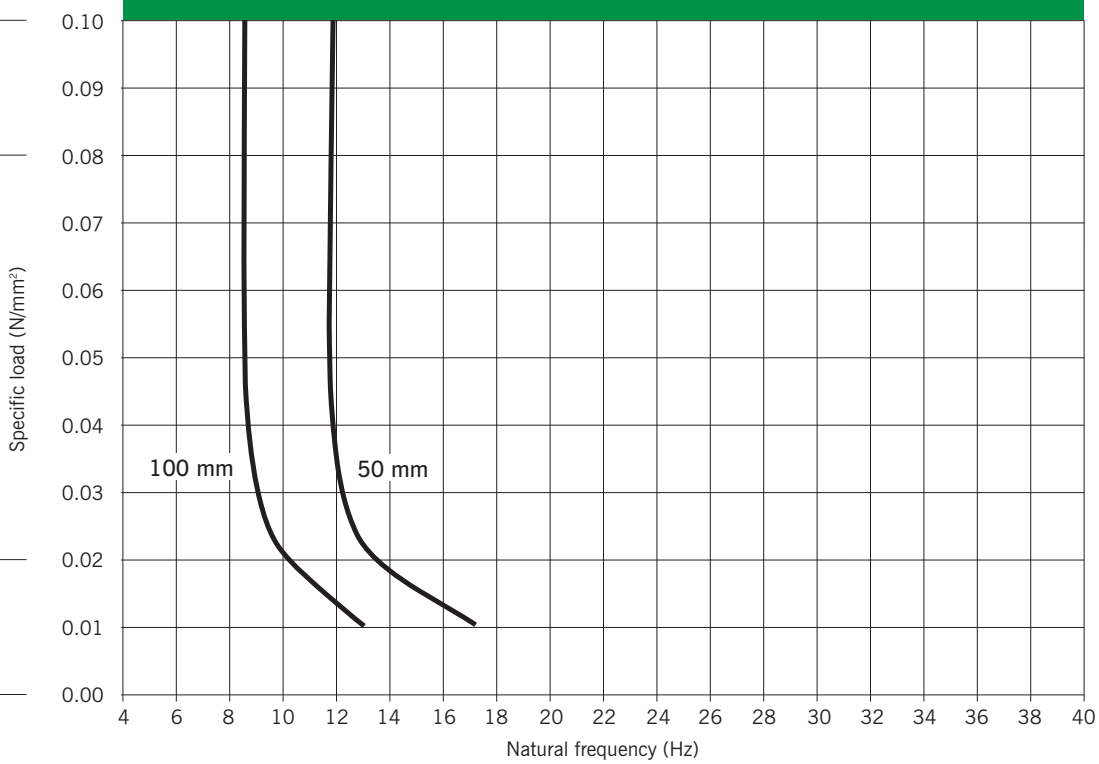
Regupol PL



Parameter: Power transmission loss (dB), isolation factor in %

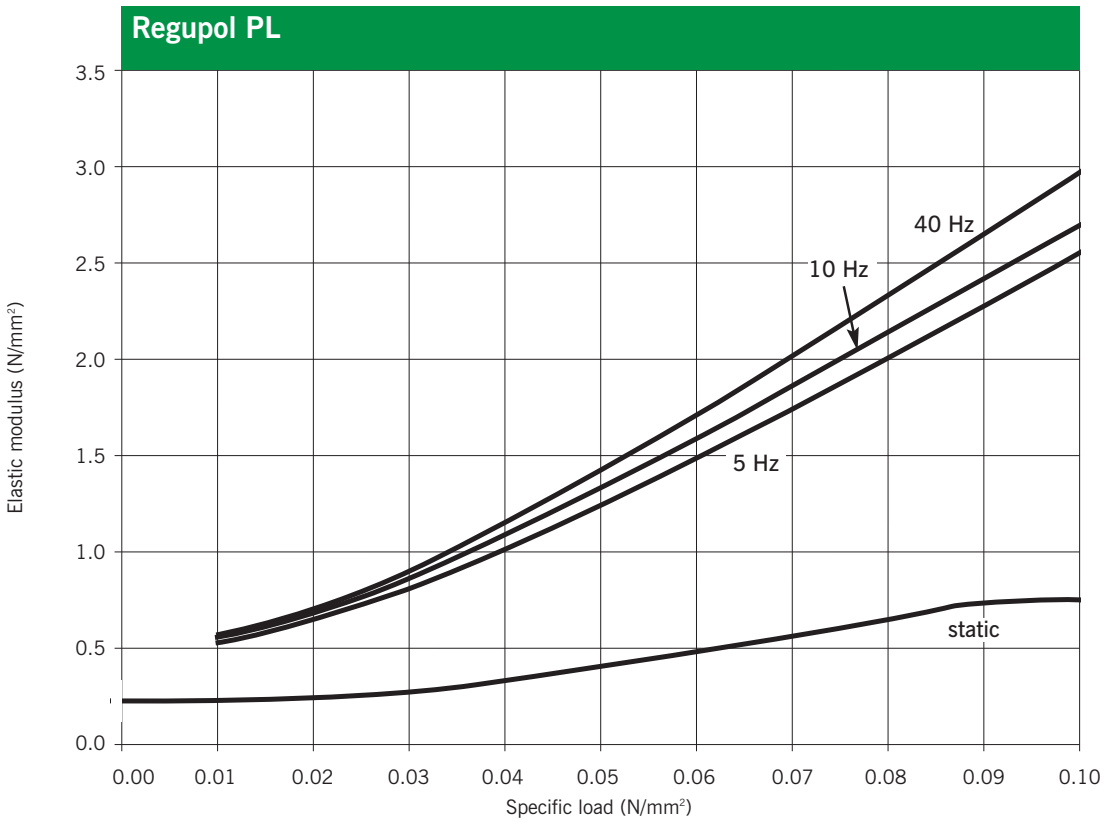
3 Natural Frequency

Regupol PL



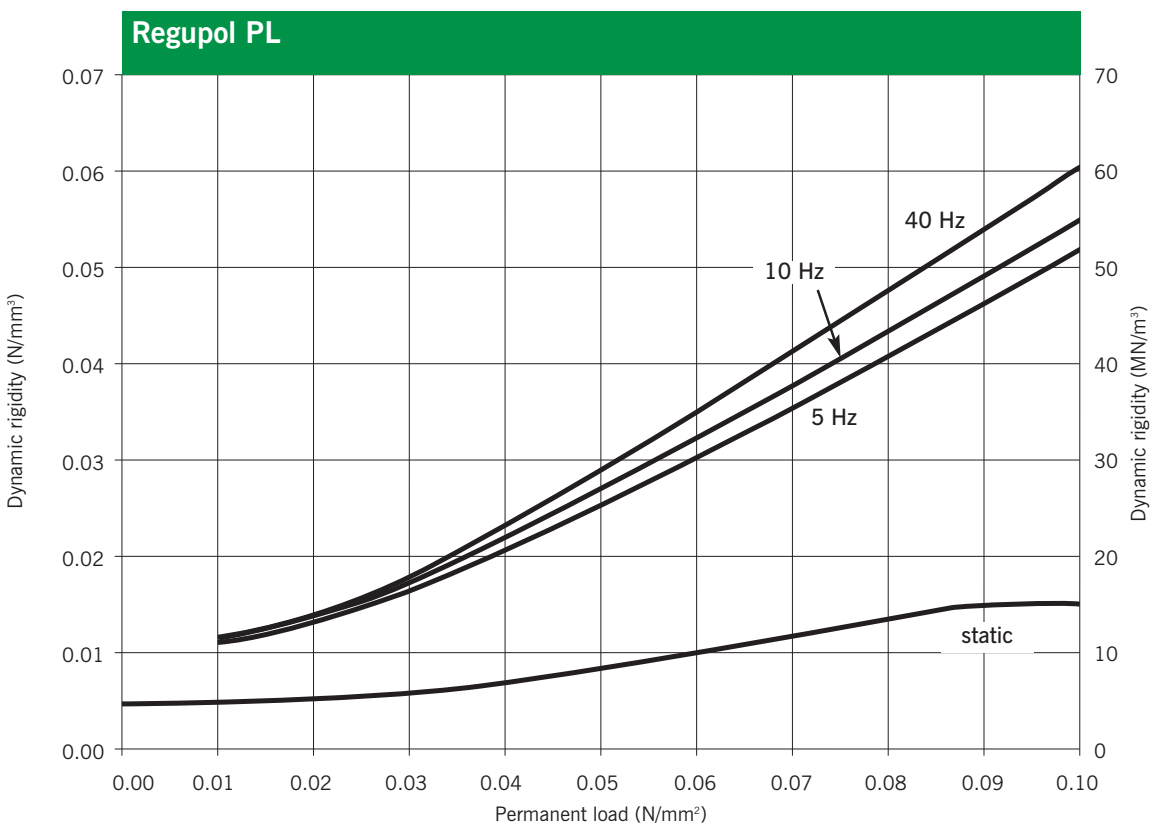
Samples: 300 mm x 300 mm

4 Modulus of Elasticity



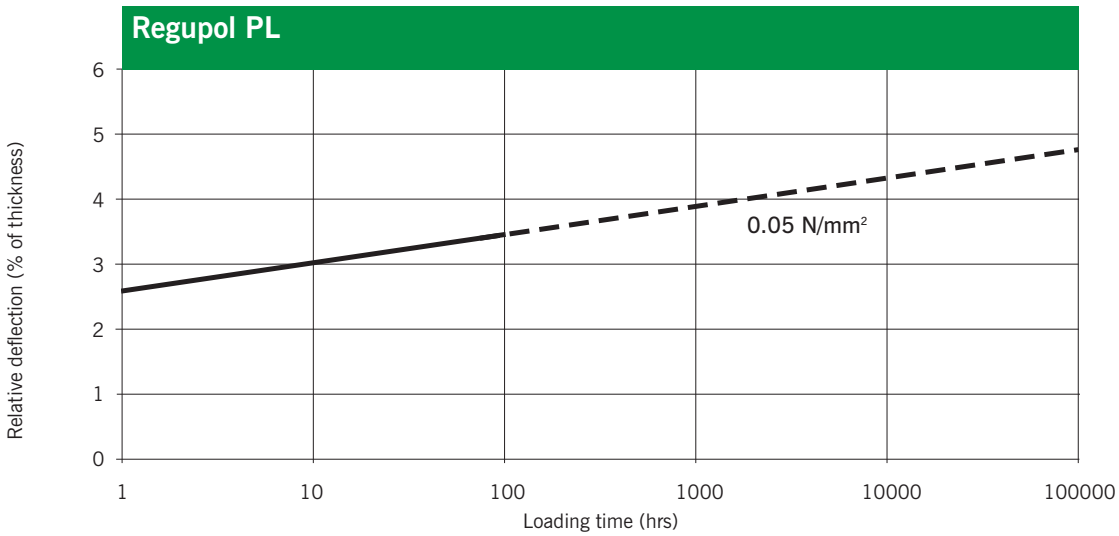
Samples: 300 mm x 300 mm x 50 mm

5 Dynamic Rigidity



Samples: 300 mm x 300 mm x 50 mm

6 Long-term Creep Test



Samples: 300 mm x 300 mm x 50 mm

Technical Data

Regupol® is made of polyurethane-bound rubber-granulate.

Standard supply forms ex warehouse:

Thickness: 50 mm — Width: 500 mm

Rolls: — Length: 1,000 mm

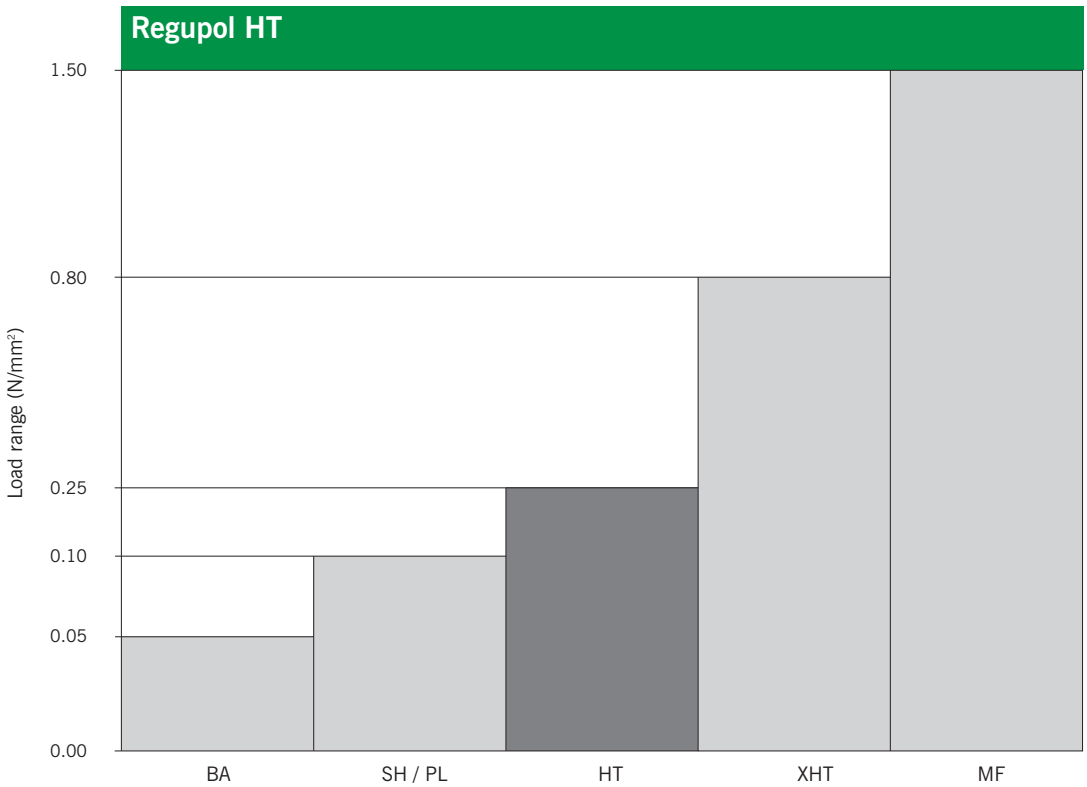
Stripping: — On request

Permanent static load range:
0.1 N/mm²

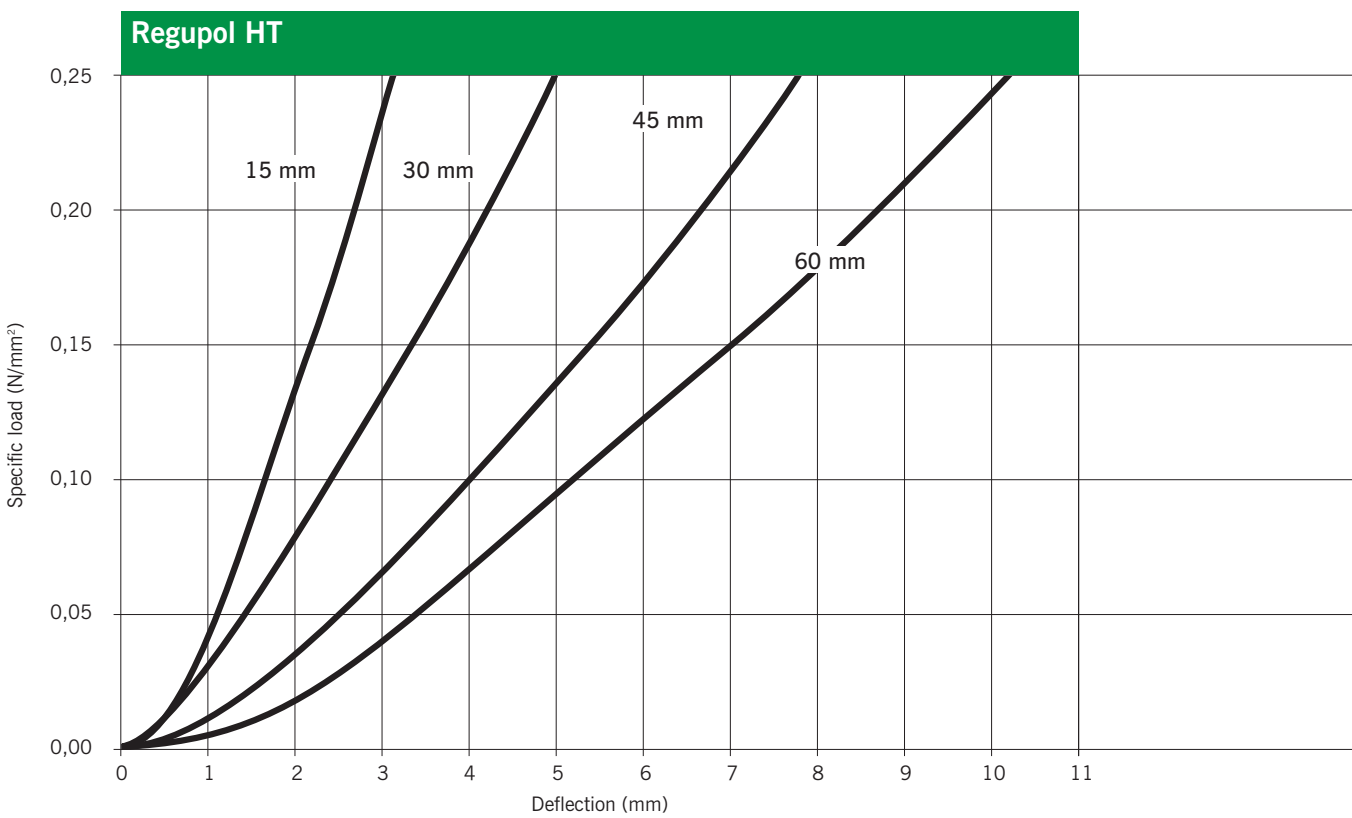
Static Modulus of Elasticity	Similar to DIN 53513	0.25-0.75	N/mm²	Tangential modulus see fig. 4
Dynamic Modulus of Elasticity	Similar to DIN 53513	0.60-2.90	N/mm²	Depending on load and frequency, see fig. 4
Compression Set	DIN 53572	approx. 5.40	%	measured 30 minutes after decompression with 50 % deformation/23 °C after 72 hrs.
Tensile Strength	DIN 53571	0.33	N/mm²	Minimum (measured on a 10-cm-layer)
Elongation at Break	DIN 53571	50	%	Minimum (measured on a 10-cm-layer)
Tear-Resistance	DIN 53515	2.30	N/mm	Minimum (measured on a 10-cm-layer)
Inflammability	DIN 4102	B 2	-	Normal inflammable

The information on this data sheet is based on the current state of our knowledge and experience and is subject to changes and production-related variations without notice.

Load Ranges



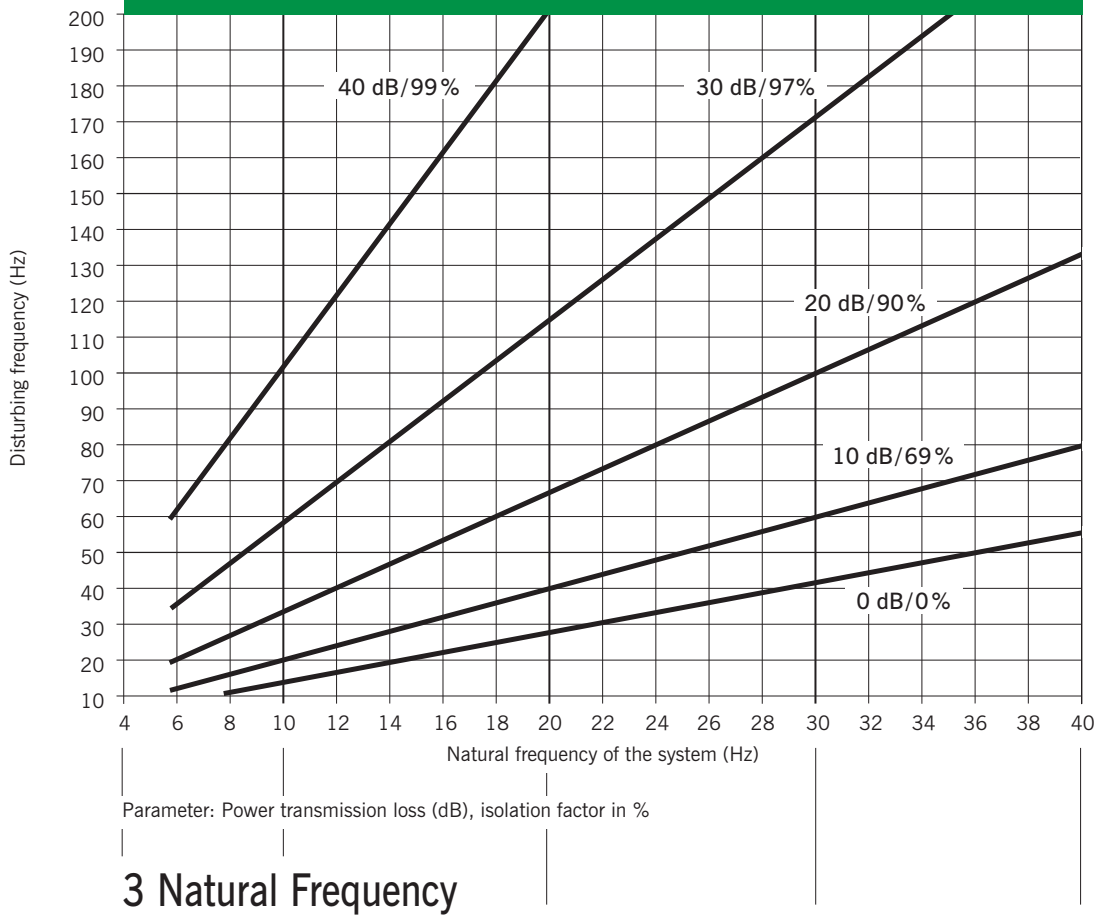
1 Load Deflection



Samples: 300 mm x 300 mm

2 Vibration Insulation

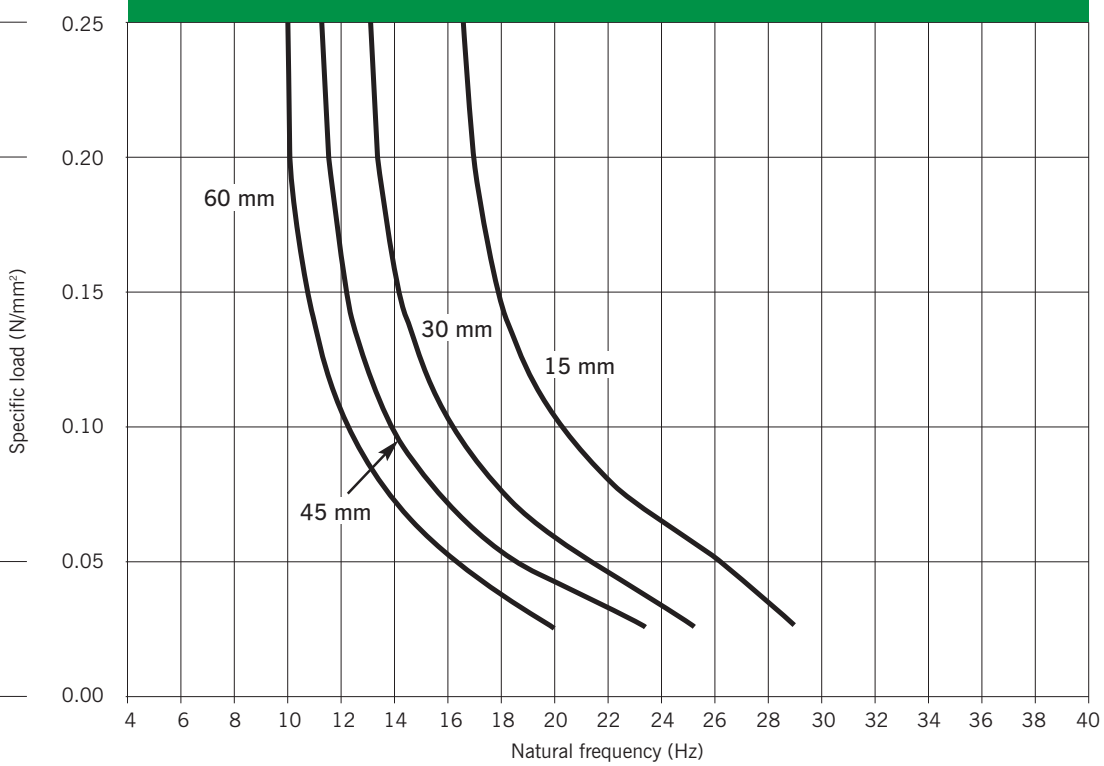
Regupol HT



Parameter: Power transmission loss (dB), isolation factor in %

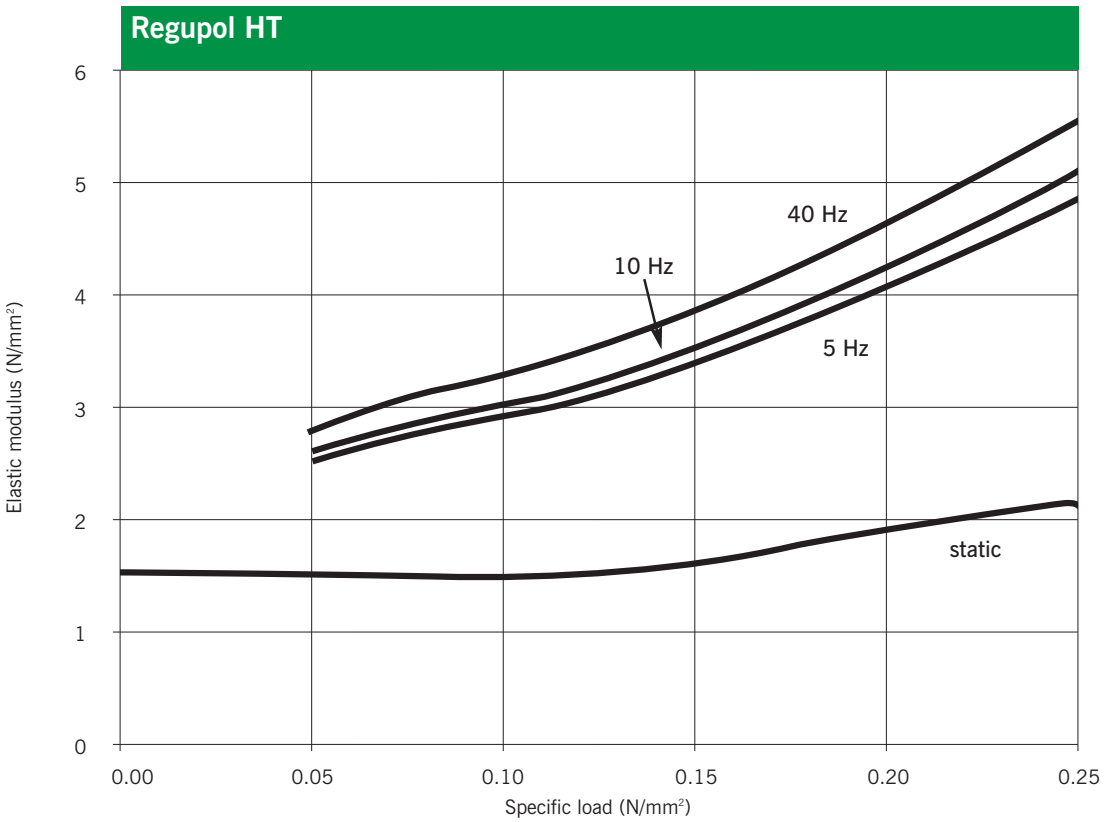
3 Natural Frequency

Regupol HT



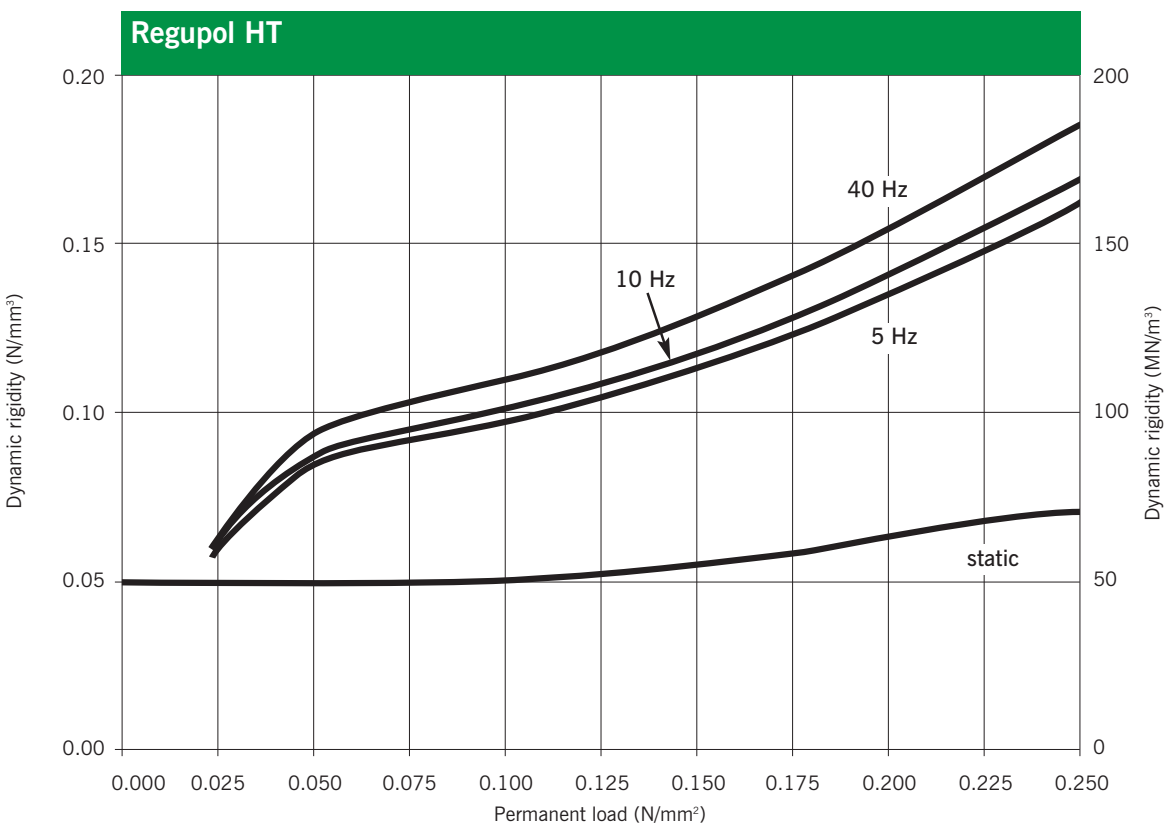
Samples: 300 mm x 300 mm

4 Modulus of Elasticity



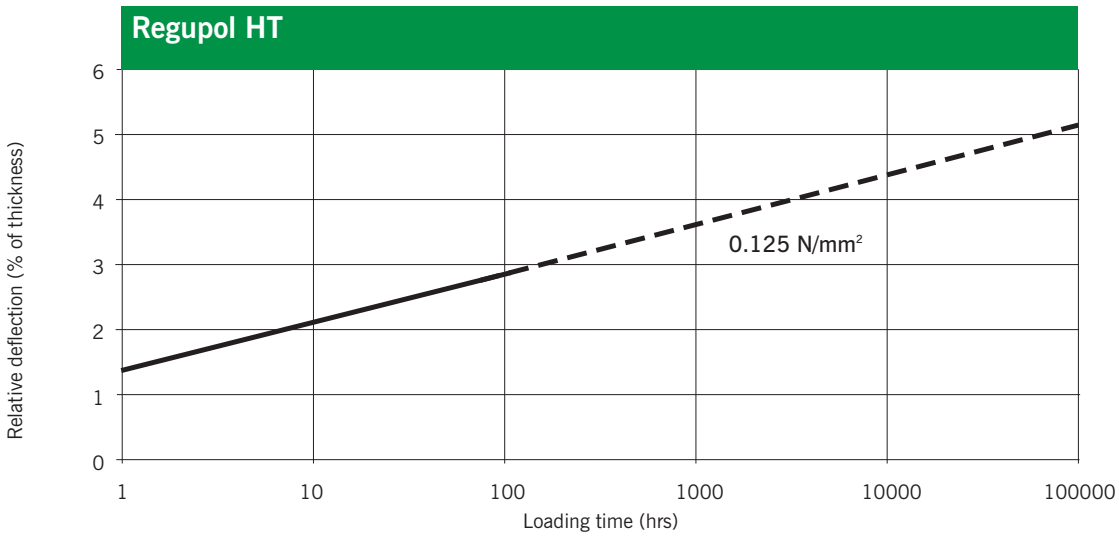
Samples: 300 mm x 300 mm x 30 mm

5 Dynamic Rigidity



Samples: 300 mm x 300 mm x 30 mm

6 Long-term Creep Test



Samples: 300 mm x 300 mm x 30 mm

Technical Data

Regupol® is made of polyurethane-bound rubber-granulate.

Standard supply forms ex warehouse:

Thickness: 15 mm

Width: 1,250 mm

Rolls:

Length: 10,000 mm

Stripping/plates:

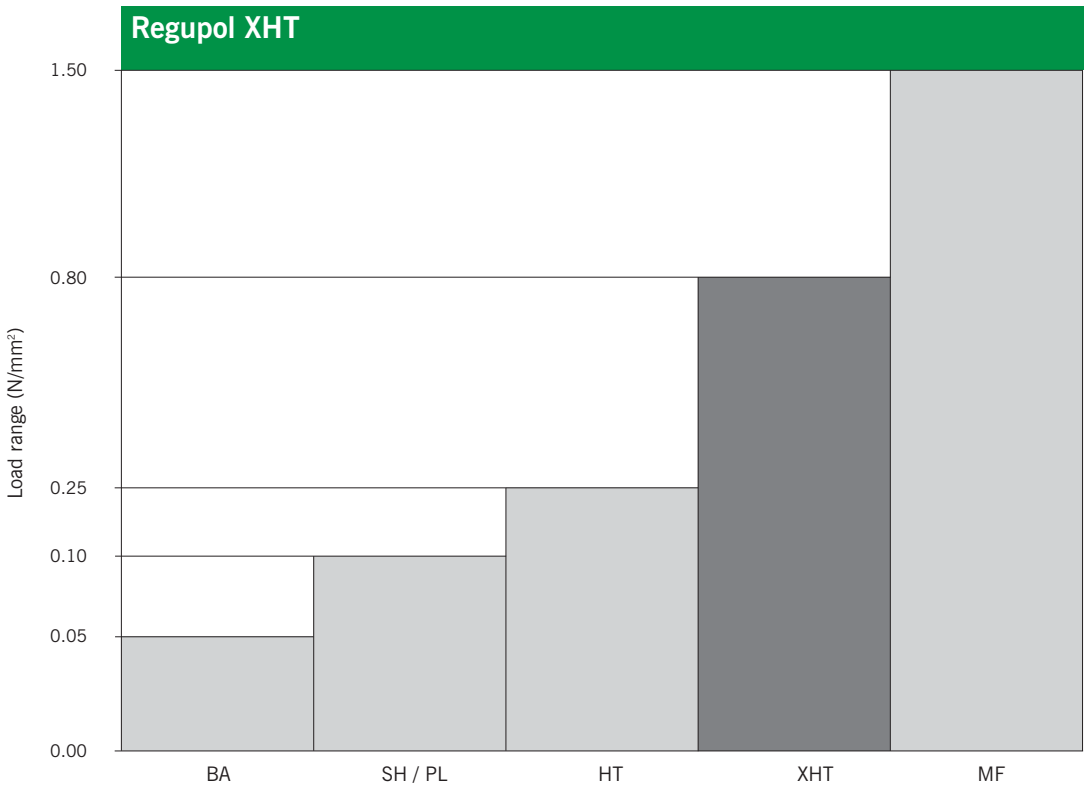
On request

Permanent static load range:
0.25 N/mm²

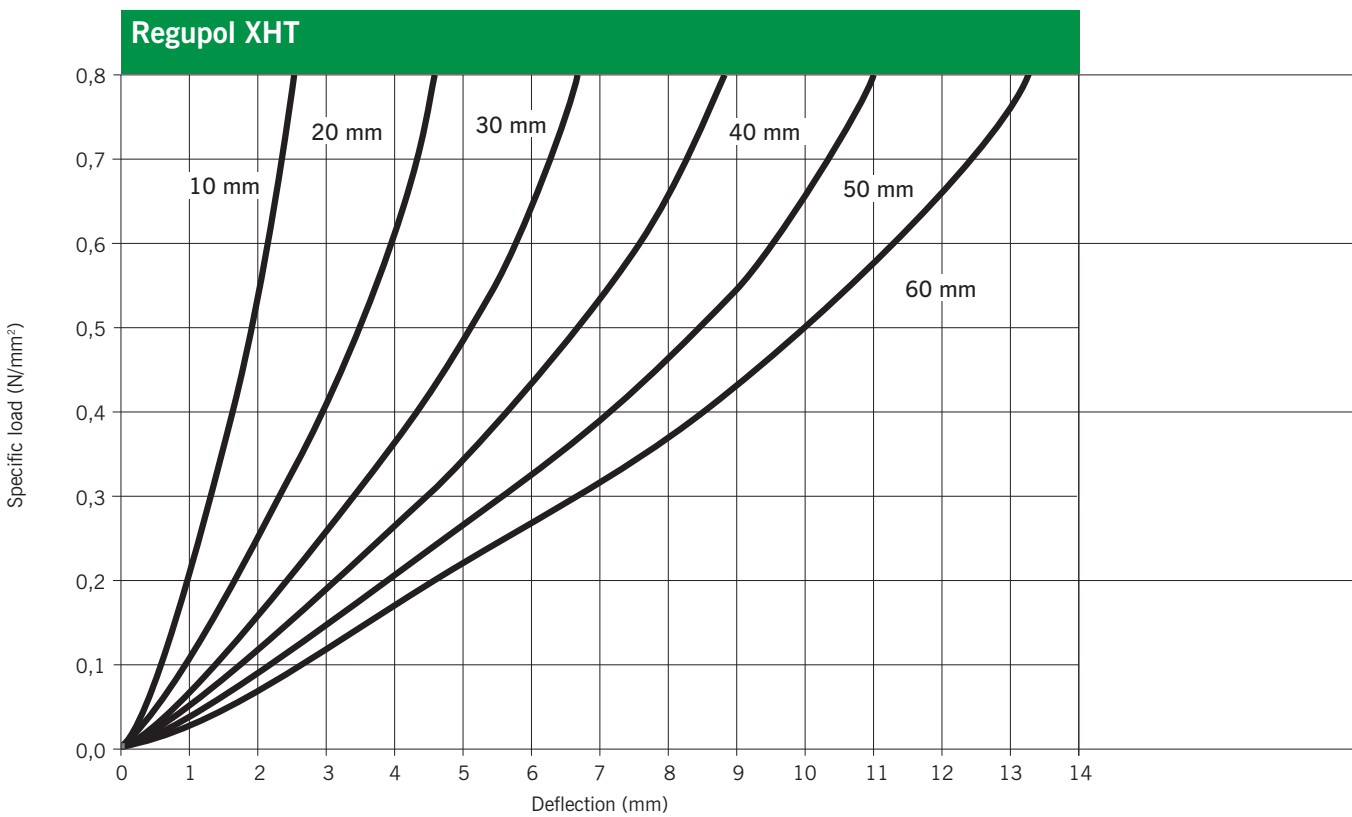
Static Modulus of Elasticity	Similar to DIN 53513	1.20-1.90	N/mm²	Tangential modulus see fig. 4
Dynamic Modulus of Elasticity	Similar to DIN 53513	1.10-4.40	N/mm²	Depending on load and frequency, see fig. 4
Compression Set	DIN 53572	approx. 4.60	%	measured 30 minutes after decompression with 50 % deformation/23 °C after 72 hrs.
Tensile Strength	DIN 53571	0.65	N/mm²	Minimum
Elongation at Break	DIN 53571	65	%	Minimum
Tear-Resistance	DIN 53515	6.0	N/mm	Minimum
Inflammability	DIN 4102	B 2	-	Normal inflammable

The information on this data sheet is based on the current state of our knowledge and experience and is subject to changes and production-related variations without notice.

Load Ranges

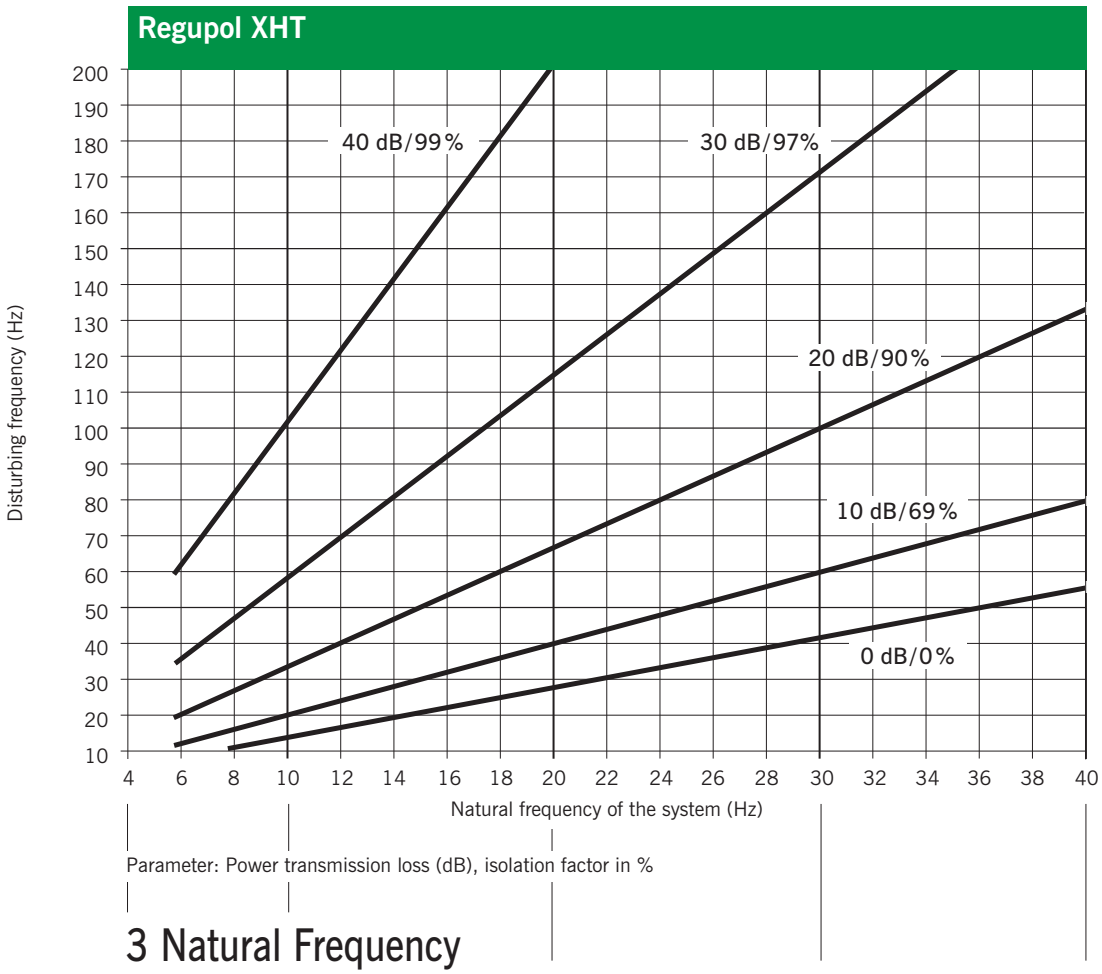


1 Load Deflection

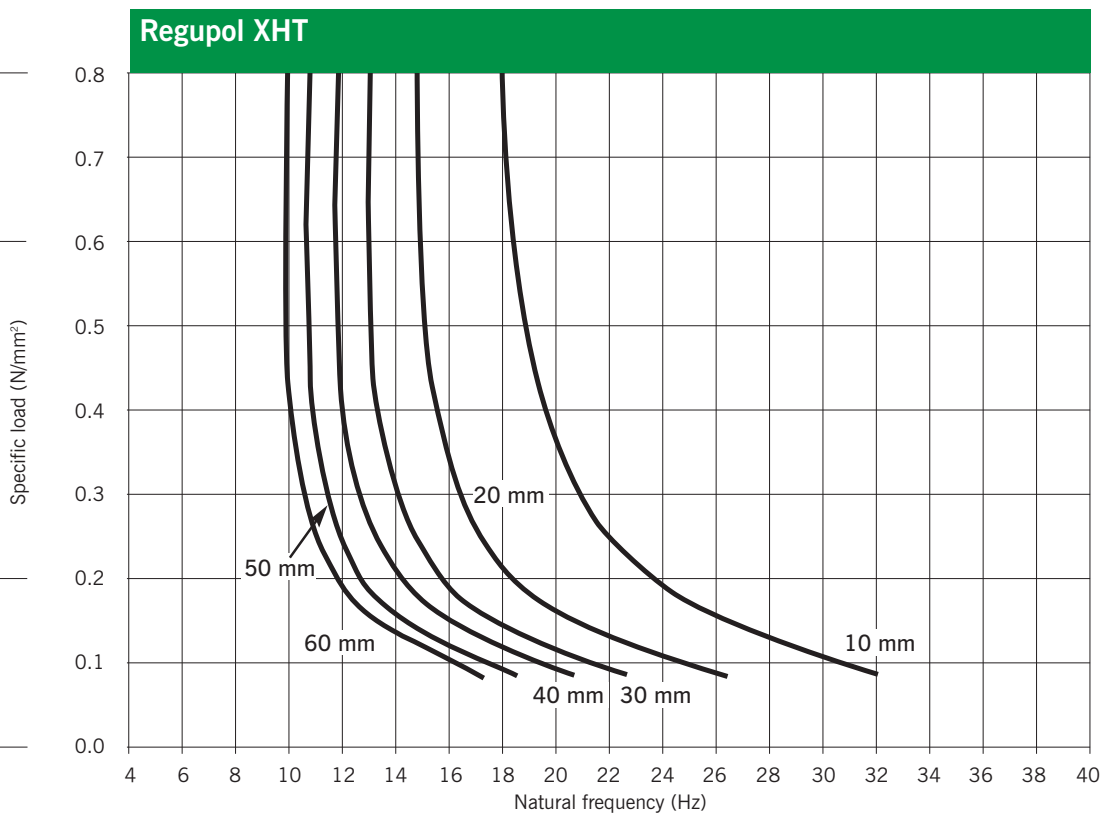


Samples: 270 mm x 270 mm

2 Vibration Insulation

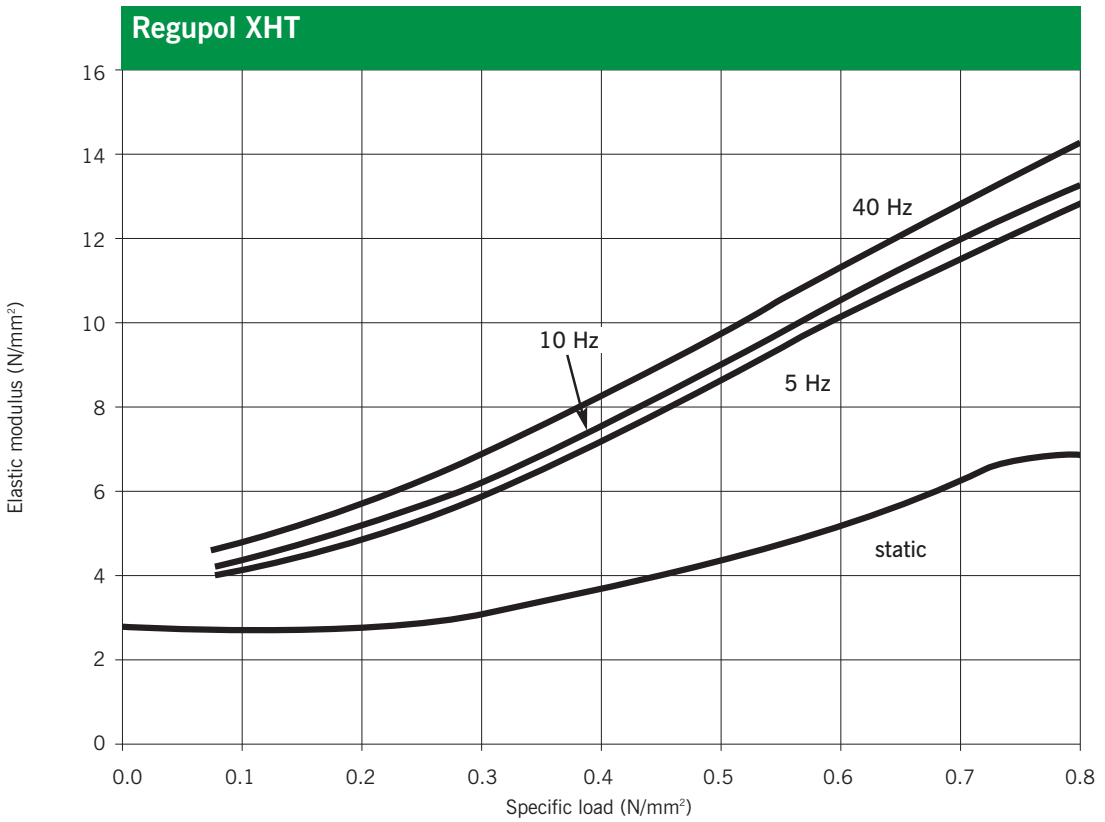


3 Natural Frequency



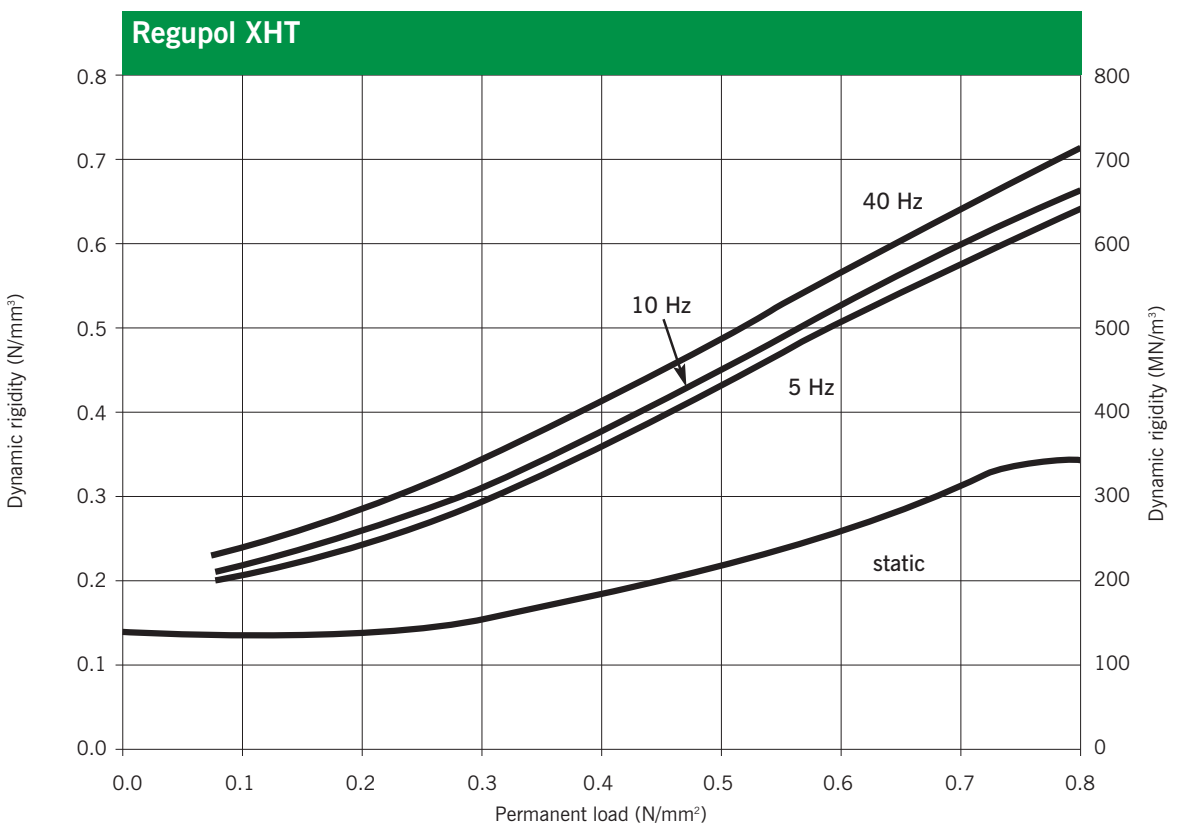
Samples: 270 mm x 270 mm

4 Modulus of Elasticity



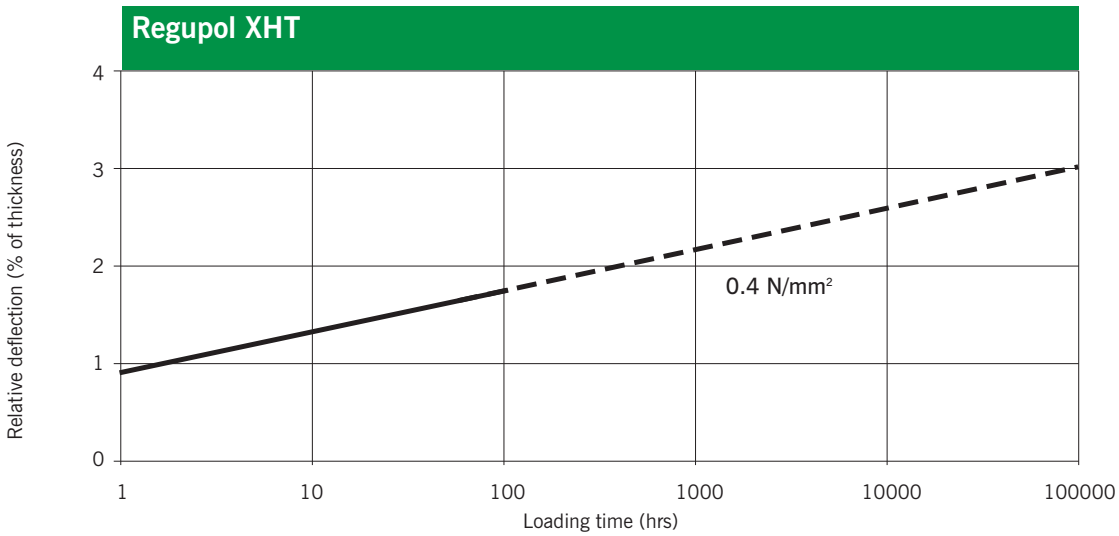
Samples: 270 mm x 270 mm x 20 mm

5 Dynamic Rigidity



Samples: 270 mm x 270 mm x 20 mm

6 Long-term Creep Test



Samples: 270 mm x 270 mm x 30 mm

Technical Data

Regupol® is made of polyurethane-bound rubber-granulate.

Standard supply forms ex warehouse:

Thickness: 10 mm — Width: 1,250 mm

Rolls: — Length: 8,000 mm

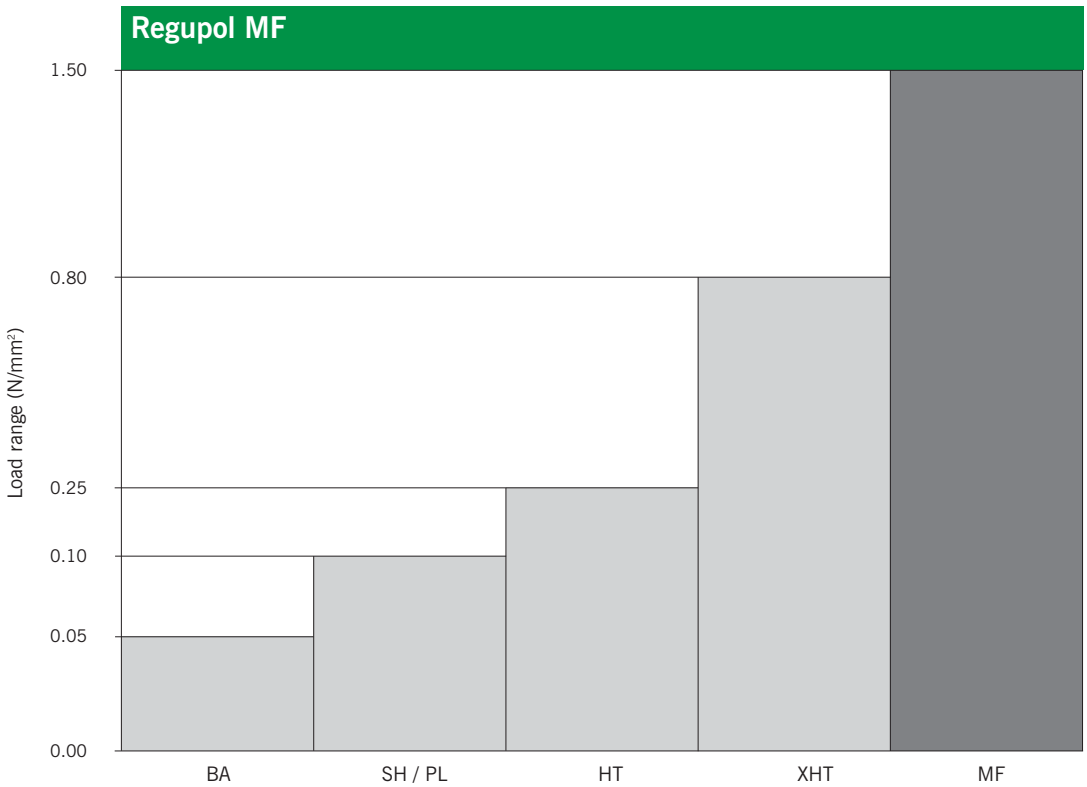
Stripping/plates: — On request

Permanent static load range:
0.8 N/mm²

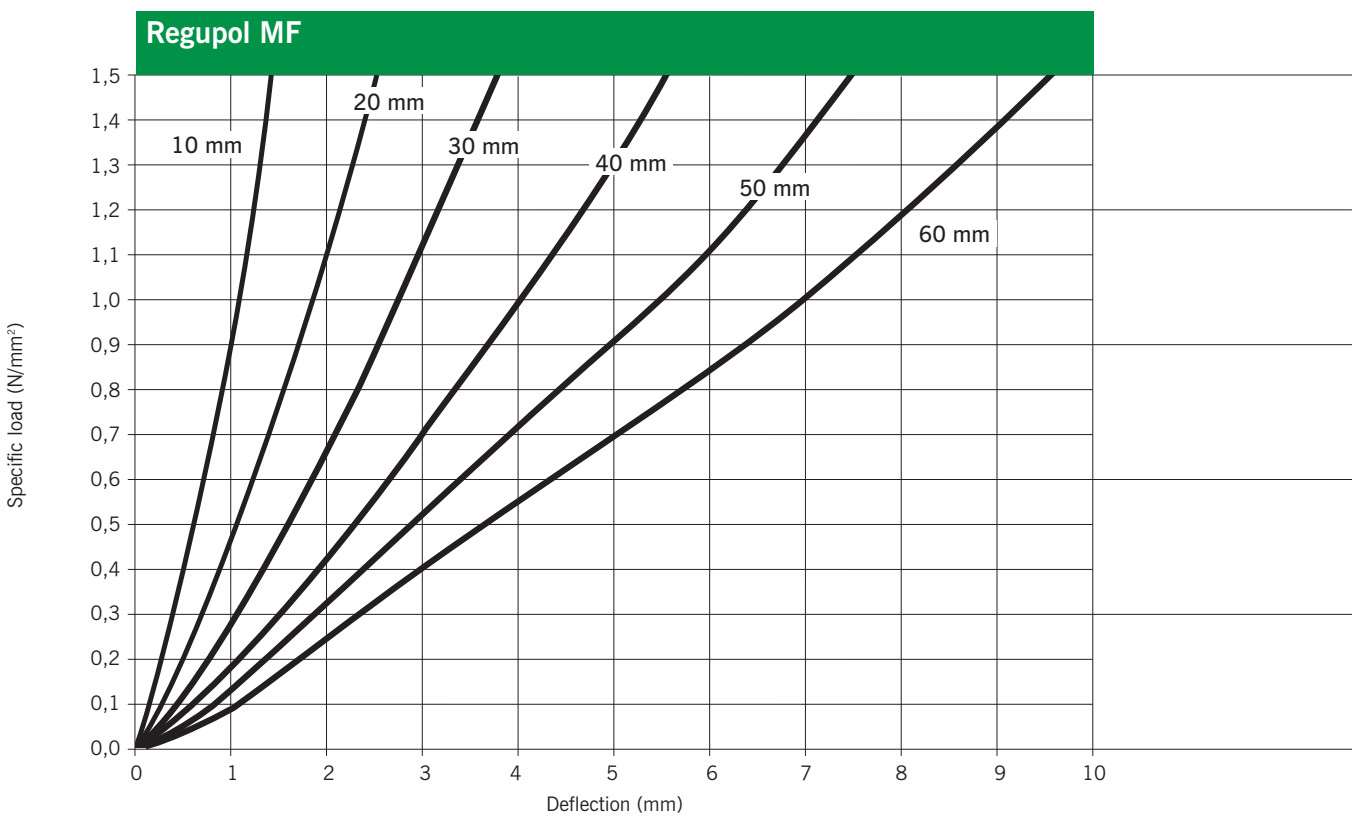
Static Modulus of Elasticity	Similar to EN 826	2.50-5.50	N/mm²	Tangential modulus see fig. 4
Dynamic Modulus of Elasticity	Similar to DIN 53513	3.0-8.80	N/mm²	Depending on load and frequency, see fig. 4
Mechanical Loss Factor	DIN 53513	-	-	
Compression Set	DIN 53572	approx. 5.90	%	measured 30 minutes after decompression with 50 % deformation/23 °C after 72 hrs.
Tensile Strength	DIN 53571	0.90	N/mm²	Minimum
Elongation at Break	DIN 53571	85	%	Minimum
Tear-Resistance	DIN 53515	8.0	N/mm	Minimum
Inflammability	DIN 4102	B 2	-	Normal inflammable

The information on this data sheet is based on the current state of our knowledge and experience and is subject to changes and production-related variations without notice.

Load Ranges



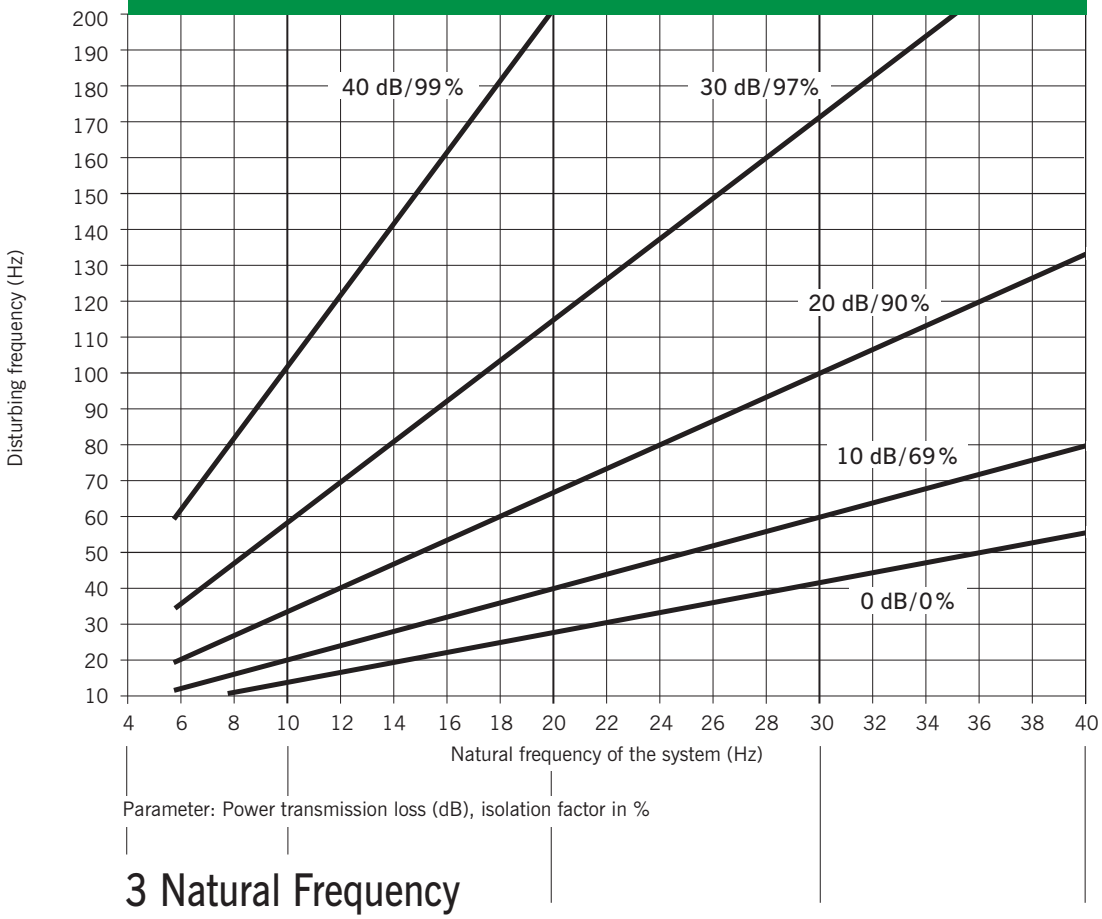
1 Load Deflection



Samples: 200 mm x 200 mm

2 Vibration Insulation

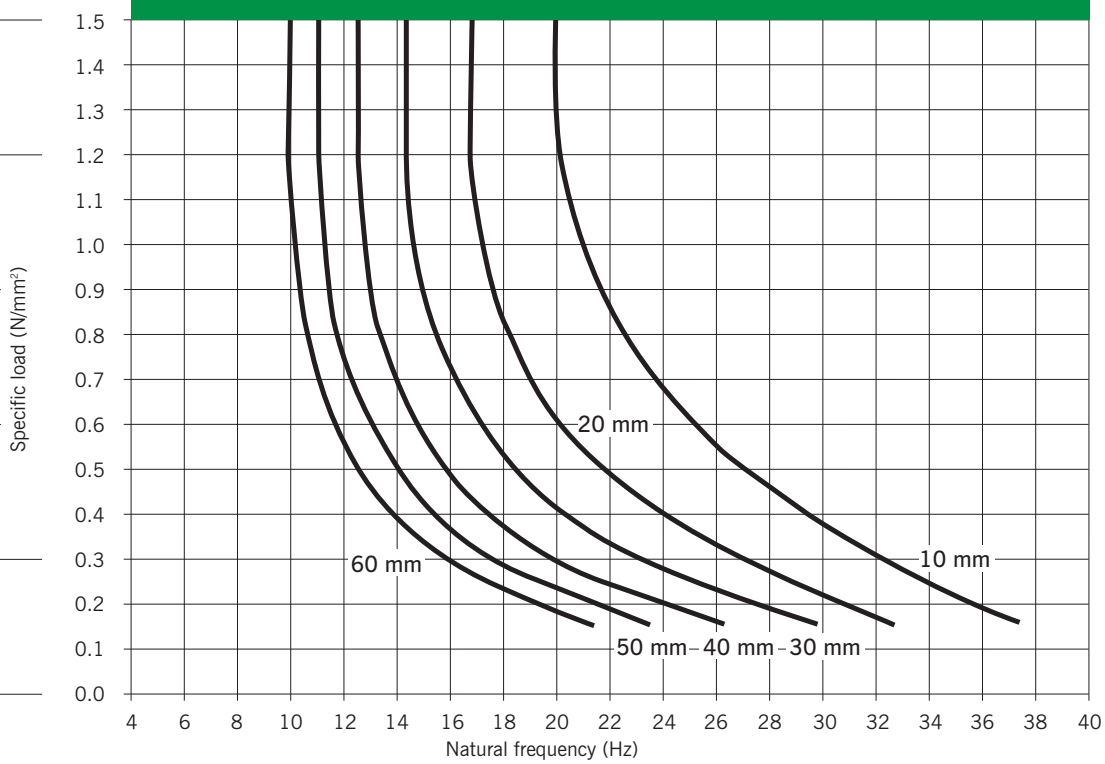
Regupol MF



Parameter: Power transmission loss (dB), isolation factor in %

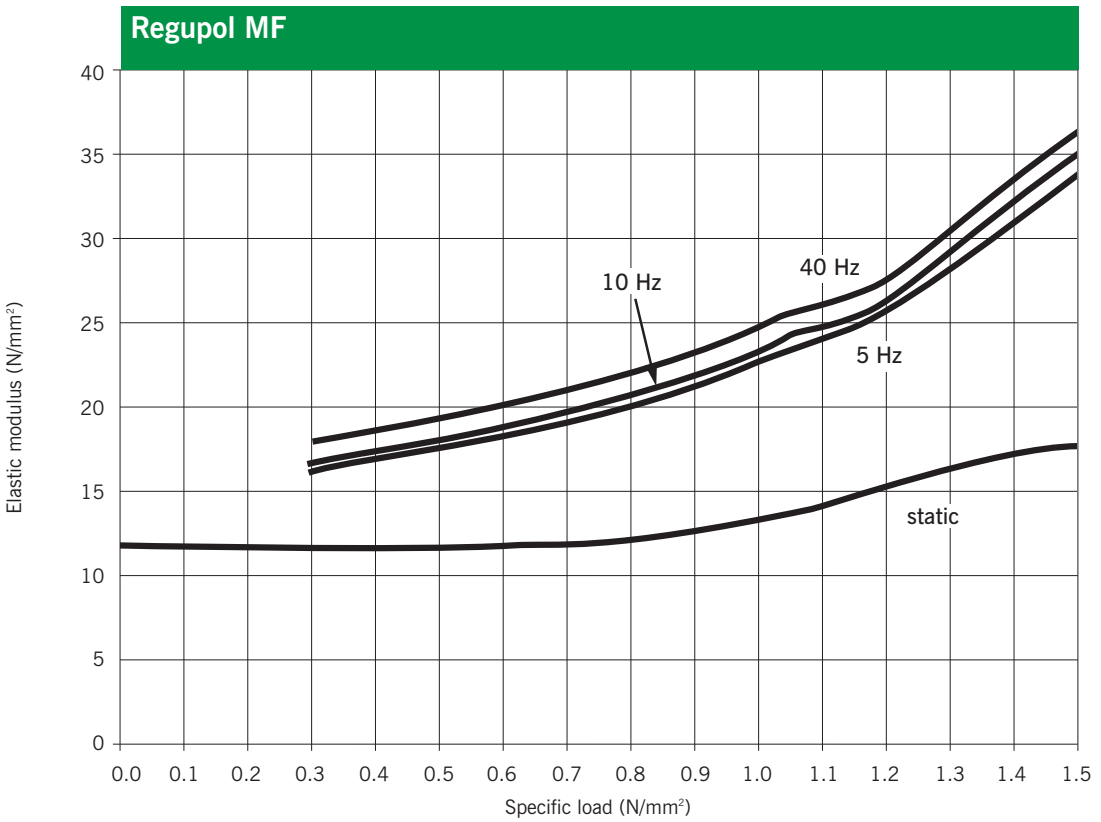
3 Natural Frequency

Regupol MF



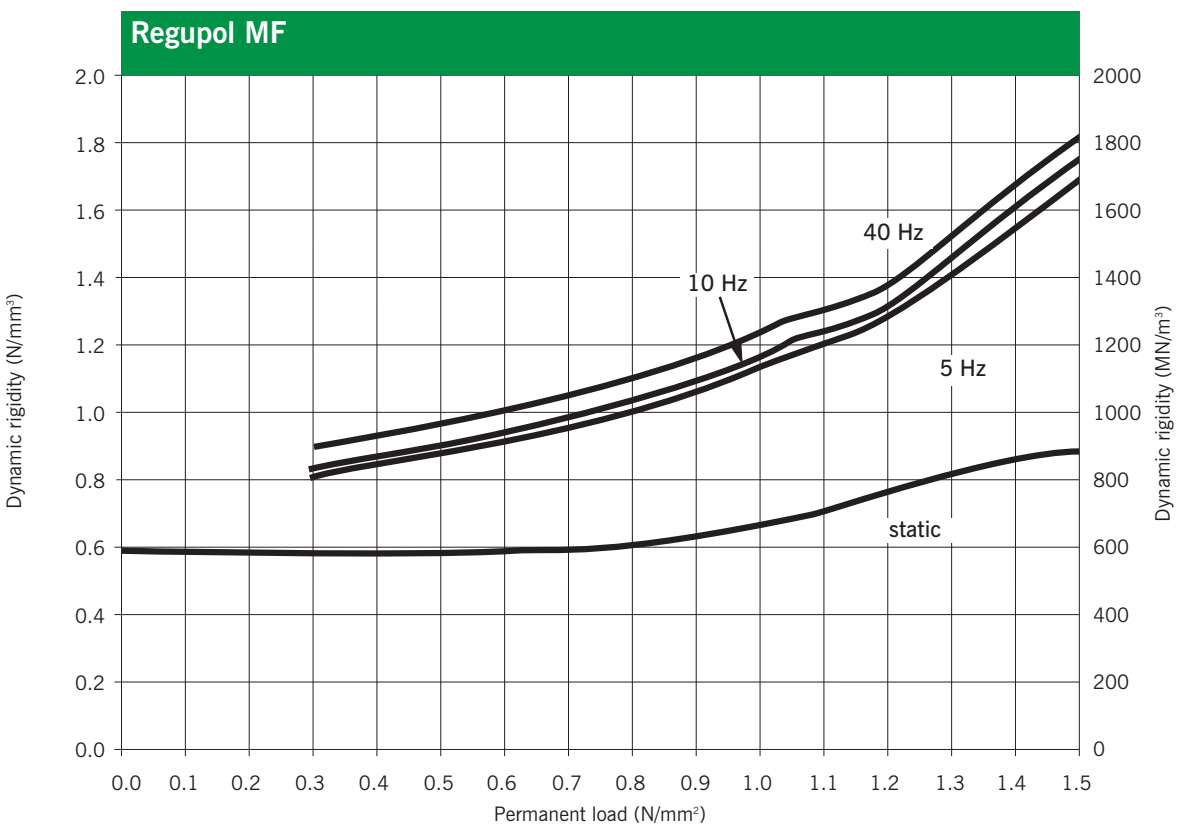
Samples: 200 mm x 200 mm

4 Modulus of Elasticity



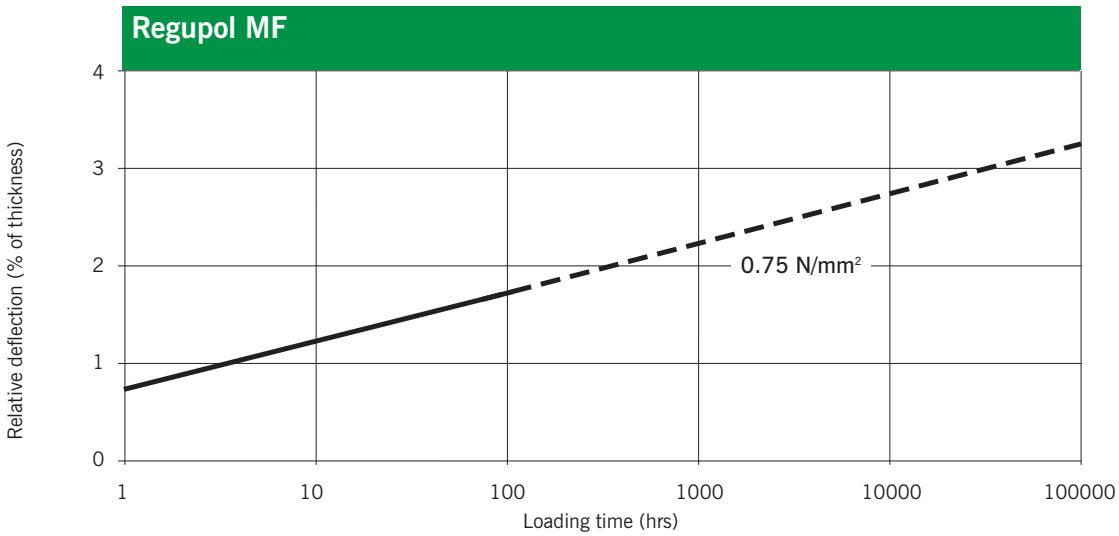
Samples: 200 mm x 200 mm x 20 mm

5 Dynamic Rigidity



Samples: 200 mm x 200 mm x 20 mm

6 Long-term Creep Test



Samples: 200 mm x 200 mm x 30 mm

Technical Data

Regupol® is made of polyurethane-bound rubber-granulate.

Standard supply forms ex warehouse:

Thickness: 10 mm — Width: 1,250 mm

Rolls: — Length: 8,000 mm

Stripping/plates: — On request

Permanent static load range:
1.5 N/mm²

Static Modulus of Elasticity	Similar to EN 826	9.80-14.0	N/mm²	Tangential modulus see fig. 4
Dynamic Modulus of Elasticity	Similar to DIN 53513	4.0-18.50	N/mm²	Depending on load and frequency, see fig. 4
Compression Set	DIN 53572	approx. 5.0	%	measured 30 minutes after decompression with 50 % deformation/23 °C after 72 hrs.
Tensile Strength	DIN 53571	2.20	N/mm²	Minimum
Elongation at Break	DIN 53571	120	%	Minimum
Tear-Resistance	DIN 53515	16.0	N/mm	Minimum
Inflammability	DIN 4102	B 2	-	Normal inflammable

The information on this data sheet is based on the current state of our knowledge and experience and is subject to changes and production-related variations without notice.

Regupol®

Regufoam®

Regupol® is the material from which BSW GmbH manufactures a wide variety of materials for vibration insulation as well as insulation and protection stripping for the construction industry. Regupol® consists of a number of different polyurethane-bound rubber granulates. Regupol® products are highly adaptable, have a long useful life, can bear high-level loads and are 100% recyclable. Object-specific, individual production as well as customer-specific finishing, packaging and storage ensure rapid, application-specific solutions.

Also in the BSW product programme: Regufoam®

The material Regufoam® achieves top levels in vibration absorption and insulation of structure-borne noise. This material is a hydrolysis-proof and rot-proof polyurethane foam that is manufactured in six different grades according to firmness. These different degrees of hardness are colour-labelled to prevent confusion. Selection form amongst the different types depends on the load involved. They are available in standard thicknesses of 12 and 25 mm and combinations thereof. Regufoam® shows very low intrinsic frequency levels within the relevant load ranges, resulting in high noise insulation values. Another advantage of this insulation material is its relatively low compression ratio, combined with enormous resilience. Regufoam® can be used in a wide variety of applications. The material is used wherever structure-borne sound and vibrations require highly effective insulation. This includes the fields of structural and civil engineering and track-laying. Regufoam® also plays an important role in mechanical engineering and shipbuilding. The standard supply form for this material is in rolls. Stamped parts, cutouts produced with a water jet and mould-formed articles are also available on request.

Worldwide consulting and sales:

Germany	BSW GmbH
Australia	Regupol Australia Pty.

www.berleburger.de

See our website for further information on our products. At the website, you can also order product samples online and communicate directly with your contact person at BSW.

BSW

Certified according to
DIN EN ISO 9001
DIN EN ISO 14001
OHSAS 18001

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