Regutoam® Vibration 990 Plus





akustikprodukter

www.vibratec.se



Standard forms of delivery, ex warehouse Plates

Thickness:12.5 and 25 mm, special thicknesses on requestLength:1,500 mm, special lengths availableWidth:1,000 mm

Stripping/smaller sizes

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

Continuous static load

2.5 N/mm² Continuous and variable loads/operating load range 0 to 3.5 N/mm² Peak loads (rare, short-term loads) up to 8.0 N/mm²



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810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150plus

Colour: Orange

Static modulus of elasticity	Based on EN 826	20.0 - 78.0	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.30 -
Dynamic modulus of elasticity	Based on DIN 53513	41.0 - 160.0	N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.22 -
Mechanical loss factor	DIN 53513	0.09		Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	8.6	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.11 -
Tensile strength	Based on DIN EN ISO 1798	6.9	N/mm ²		-0.055
Elongation at break	Based on DIN EN ISO 1798	190	%		-0.042
Tear resistance	Based on DIN ISO 34-1	34.5	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.028
Sliding friction	BSW-laboratory BSW-laboratory	0.5 0.6	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	3640	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0.018
Rebound elasticity	Based on DIN EN ISO 8307	55		dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.011
Force reduction	DIN EN 14904	20	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	



Load Ranges



Load Deflection



Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 125 mm x 125 mm.





Vibration Isolation

Natural Frequency



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



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





Influence of Amplitude

In order to get information of changes in mechanical loss or dynamic stiffness due to changes in amplitudes please ask technical staff of Vibratec.





Modulus of Elasticity



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

Dynamic Stiffness



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





Long-Term Creep Test



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We are continuously developing and improving our products and therefore design and specifications in our datasheets may be changed without prior notice

