

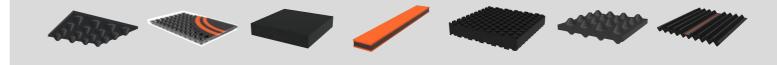
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Product overview VIBRATION ISOLATING BEARINGS

Vibration isolation

Elastomeric bearings for protection against vibration and structureborne noise

The isolating properties of elastomeric bearings are a tried-and-tested solution in all situations where buildings have to be protected against vibration emissions. Vibrating machinery and road or rail traffic can severely affect people in buildings. Bearings for machines and buildings can be punctiform, strip-shaped or planar.

Calenberg elastomeric bearings are highly effective over a wide load range with almost constant low natural frequencies. In addition to the resulting vibration isolation, Calenberg's elastomeric bearings also feature material-based damping.

Advantages

- Reduction of noise and vibration
- Decrease of air-borne and structure-borne noises
- Increased housing and working conditions
- Enhancement of the value of real estate through elastomeric support
- Maintenance-free (visual inspections have to be carried out)

ELASTIOMERIC SOLUTIONS FOR SUPPORTING BUILDINGS AND MACHINES					
Bearing type	Description, field of application	Bearing thickness [mm]	Technical data		
Cibatur®	The profiled mat consists of a fibre reinforced elastomeric plate with elastic, truncated cone-shaped studs on the underside. It possesses a constant natural frequency over a wide loading range. The top layer is not only resistant to abrasion, oil and ozone but also insensitive to weather. Very high quality natural rubber mix is used for the elastic studs. The bearing is particularly suitable for large areas under buildings. Approval no. Z-16.32-495, issued by DIBt Berlin	63	Effective compression stress σ_{eff} : 0,05 – 0,5 N/mm ² Max. compression stress $\sigma_{m,k}$: 1,2 N/mm ² Lowest natural frequency: 9 Hz single-layer 6,5 Hz multilayer		
Cimax®	The patented waterproof, encased bearing is a variant of the proven Cibatur® mat. Cimax® was developed specifically for use under water. The bearing is particularly suitable for support of structures below ground water level.	35	Effective compression stress $\sigma_{\rm eff}$: 0,05 – 0,5 N/mm ² Max. compression stress $\sigma_{\rm m,k}$: 1,2 N/mm ² Lowest natural frequency: 9 Hz single-layer		

Product overview

ELASTIOMERIC SOLUTIONS FOR SUPPORTING BUILDINGS AND MACHINES				
Bearing type	Description, field of application	Bearing thickness [mm]	Technical data	
Cisador®	Consists of microcellular EPDM material and is always placed in 2 layers of 15 mm thickness each. There are three types of Cisador® which are used for different compression stress ranges. The bearing is particularly suitable for the support of structures and machines.	30	Effective compression stress $\sigma_{\rm eff}$: 0,05 – 0,6 N/mm ² Max. compression stress $\sigma_{\rm m,k}$: 0,6 N/mm ² Lowest natural frequency: 10 Hz at 30 mm thickness	
Civerso	The mat is made of closed cellular rubber that may be used also in ground water. Civerso comes in three types that me be used for different compressive stress ranges. The bearing is used for vertical vibration isolation of walls below ground level.	20 - 84	Effective compression stress $\sigma_{\rm eff}$: 0,01 – 0,05 N/mm ² Max. compression stress $\sigma_{\rm m,k}$: 0,05 N/mm ² Lowest natural frequency: 7 Hz	
Cipremont®	A profiled heavy-duty unreinforced elastomeric bearing with little creep and constant natural frequency for a wide load range. The bearing is particularly suitable for support of machines and structures with high compression stress.	15	Effective compression stress σ_{eff} : 0,5 – 4,0 N/mm ²	
		25	Max. compression stress $\sigma_{m,k}$: 5,0 N/mm ²	
		35	Lowest natural frequency: 8 Hz	
Cires®	A highly elastic bearing, fibre-reinforced and profiled, for vibration isolation at low frequencies. The bearing is particularly suitable for support of ventilation systems or similar.	60	Standard dimensions: 250 mm x 250 mm Load range:	
		125	2-6 kN/element Lowest natural frequency: 5 Hz	
Ciditan®	This elastomeric bearing has high stiffness which depending on the requirement is achieved by several fabric layers thereby restricting lateral strain considerably. The bearing is especially suited for support of structural elements subject to considerable impact load.	50	Available upon request Calculations are made project related as per technical requirements.	
bi-Trapezlager®	A high degree of vibration isolation and a high insulation index against structure-borne noise are achieved due to a low compression modulus for a load of up to 1 N/mm². The bearing is particularly suitable for impact sound insulation in staircases.	10	Effective compression stress σ_{eff} : 0,3 – 0,7 N/mm ²	
		15	Max. compression stress $\sigma_{m,k}$: 1 N/mm ²	
		20	Lowest natural frequency: 18 Hz	