



Elastic bearing for compressors

Effective vibration isolation with
Getzner Isotop®

The exceptional vibration-isolating effect of Getzner products is based on the unique properties of the polyurethane materials Sylomer®, Sylodyn® and Sylodamp®. These materials also form the core of the Isotop® range of effective solutions for compressor bearings.

Key benefits

- Measurable reduction in vibrations in the audible frequency range and thus reduction in secondary airborne noise
- Devices can be installed even in difficult locations (e.g. roofs and walls)
- Easy and convenient installation
- Long service life and maintenance-free

Application

Compressors are used in various systems such as heat pumps, air conditioning units or refrigeration systems. No matter what the compressor - reciprocating, screw or scroll - vibrations are mainly caused by the refrigerant compression process. These vibrations are often perceived in the adjacent living or working areas as a deep 'hum' and are therefore seen as unpleasant. Tricky installation sites, such as rooftops or wall mounts, make it harder for the bearings to exert their full isolating effect.

Frequency-controlled compressors are also challenging for vibration decoupling, as they also operate in the low-frequency partial load range and thus come close to the natural frequencies of rubber-metal bearings. With conventional bearings, this leads to a reduction in isolation performance and even to an increase in vibrations in the resonance range.

The correct choice of bearings is therefore crucial for a good result and prevents unnecessary alterations or retrofitting.



Bearing concepts

There are two established concepts for elastic bearing compressors in refrigeration systems or heat pumps:

Concept 1 - Direct bearing of the compressor



The additional baseplate offers the advantage that bearings can be optimally selected, i.e. so they are closer to maximum capacity and therefore have a lower natural frequency. This is particularly advantageous for lighter scroll compressors in heat pumps or air handling units.

Concept 2 - Bearing with additional baseplate



An additional baseplate pad can reduce the mechanical loads on the refrigerant supply lines when several components are mounted on the same platform.

Products

The following compressor bearings from the Isotop® range have proven highly effective in various situations:

Isotop® MSN

- Low natural frequency from 3.5 Hz
- Low overall height of 57 mm
- Excellent corrosion protection - galvanised or with CDC coating
- Secure connection thanks to special bonding



Isotop® DMSN

- Sylodamp® inside - for more stability
- Low overall height of 57 mm
- Excellent corrosion protection thanks to CDC coating
- Secure connection thanks to special bonding



Isotop® DZE Mini

- Sylodyn® and Sylodamp® inside
- Resistant to compression and tension
- Reduces high amplitudes
- Designed for horizontal forces (e.g. high wind loads)
- Stainless steel housing and continuous stainless steel piping for ultimate corrosion protection
- Rapid installation thanks to pre-assembled elements



Isotop® MSN-DAMP

- 37.5 mm Sylomer® inside
- Excellent corrosion protection thanks to CDC coating
- Easy installation thanks to various attaching options
- Secure connection thanks to special bonding



Isotop® Compact

- Sylomer® or Sylodyn® inside
- Ultra-low overall height of 30 mm
- Easy installation thanks to various attaching options
- Secure connection thanks to special bonding





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You can obtain **measurement reports and further information** from your Getzner contact or at **getzner.com**.



Want to find out more about the best solution for your machine? The EquipCalc selection tool makes it easy to choose the right product for you: **www.getzner.com/equipcalc**

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