

DATA SHEET

STAINLESS STEEL FLEXIBLE ANTI-VIBRATORS

DESCRIPTION

Our anti-vibrators or vibration absorbers are built on the basis of a corrugated tube that is the basic absorbent of vibration, a braided mesh applied to the outside of the tube itself to give it greater protection and strength and some terminals or accessories that serve as a connection to join all the parts of the product. These terminals or connection accessories also serve as a connection system to the pipe we wish to protect from vibrations.



CONSTRUCTION MATERIALS

All welds between the various components, including copper and stainless-steel connections, are welded with the TIG system. This solution makes these anti-vibrators or vibration absorbers particularly resistant to overheating during their welding to the pipe, when it is installed.

The main parts of these vibration dampers are manufactured with the following materials.

- Copper tube according to EN-12449 (Cu-DHP for copper terminations)
- Stainless Steel according to EN-10088-1 AISI 303 (1.4305 for the connection accessories)
- Stainless Steel according to EN-10088-1 AISI 316L (1.4404 / 1.4307 for corrugated flexible)
- Stainless Steel according to EN-10088-1 AISI 304 (1.4301 for external braiding)

TEMPERATURE RANGE

The working temperature range of this product is -70°C to 200°C

APPLICATIONS

These anti-vibrators or vibration absorbers are intended to be installed in commercial refrigeration systems and in air conditioning plants, both civil and industrial. The function of this element is to avoid the transmission of the vibrations of the compressor to the pipes of the cooling system, reducing the risk of damage and the level of noise. These anti-vibrators can also compensate for small thermal expansions of the pipe.

AVAILABLE MEASURES

See our catalog in www.hecapo.es

Compatibility by Refrigerant Families

1. HFC/HFO Refrigerants (Fluorinated) – Examples: R134a, R404A, R407C, R410A, R32, R1234yf/ze, etc.

Compatibility: **No restrictions** (in general). Standard metallic flexible antivibration hoses – with corrugated stainless steel inner hose, external braid, and copper or steel end fittings – **are designed for use with all fluorinated refrigerants** from the CFC, HCFC, HFC series, as well as the more recent HFOs.

2. Hydrocarbons (R290, R600a) – “Natural” refrigerants (propane, isobutane) widely used in small refrigeration systems and portable air conditioning. A3 classification (highly flammable). Compatibility: **Similar to HFC/HFO (no material restrictions), with safety considerations.** Chemically, hydrocarbons do not corrode common metals (copper, stainless steel) nor do they, by themselves, damage synthetic elastomers. **Standard metallic antivibration hoses are compatible with propane and isobutane.**

ASSEMBLY INSTRUCTION

These anti-vibrators can be installed in the suction and discharge lines of a refrigeration system, as close as possible to the compressor. They must always be installed perpendicular to the direction of the vibrations.

When there are vibrations in two planes, two anti-vibrators must be used, as shown in figures 1 and 2. For maximum absorption of vibrations, the refrigerant line must be anchored at the end of the vibration damper, such as is shown in figures 1 and 2. These anti-vibrators can also be installed vertically because they are designed to prevent the retention of condensed water.

Make sure that there is no leakage in any of the connection parts of this accessory with the pipe and the connected element or equipment.

Verify that all the connections are free of tension, whether in tension, torsion, bending, compression or shearing. If the installation can suffer contractions and expansions, incorporate the necessary elements to compensate them.

Choose the optimal measure of the anti-vibrator, according to the dimensioning of the pipe of the installation, its flow and its working conditions.

In case of any doubt or special application, please get in touch with our technical department.

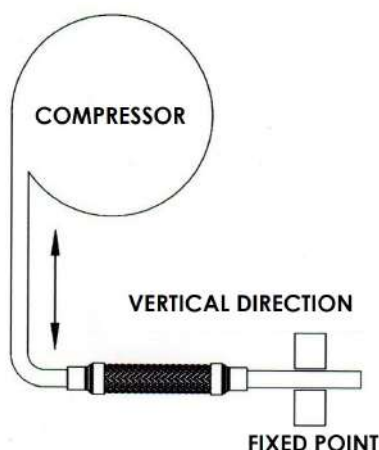


FIGURE 1

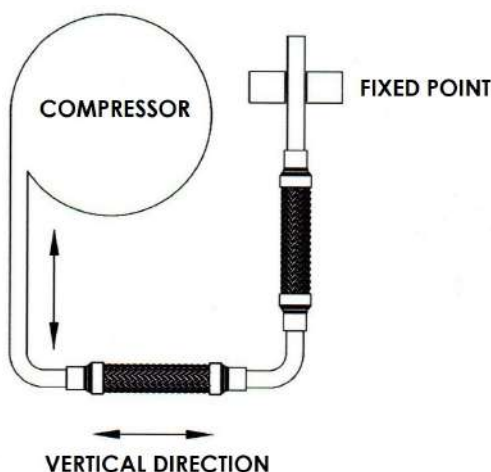


FIGURE 2