



TVIB 1.000

Metal Spring Steel Isolators

Index



Information.....1



Description and dimensions.....1



Physical analysis.....2



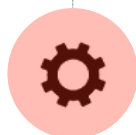
Graph: Dynamic (Natural frequency).....3



Graph: Statics.....3



Insulation Grade Graph.....4



Uses.....5



Information

This series avoid the transmission of vibrations to the building when hanging machinery and structures from ceilings, with the same properties as VIB 1.000 Series.

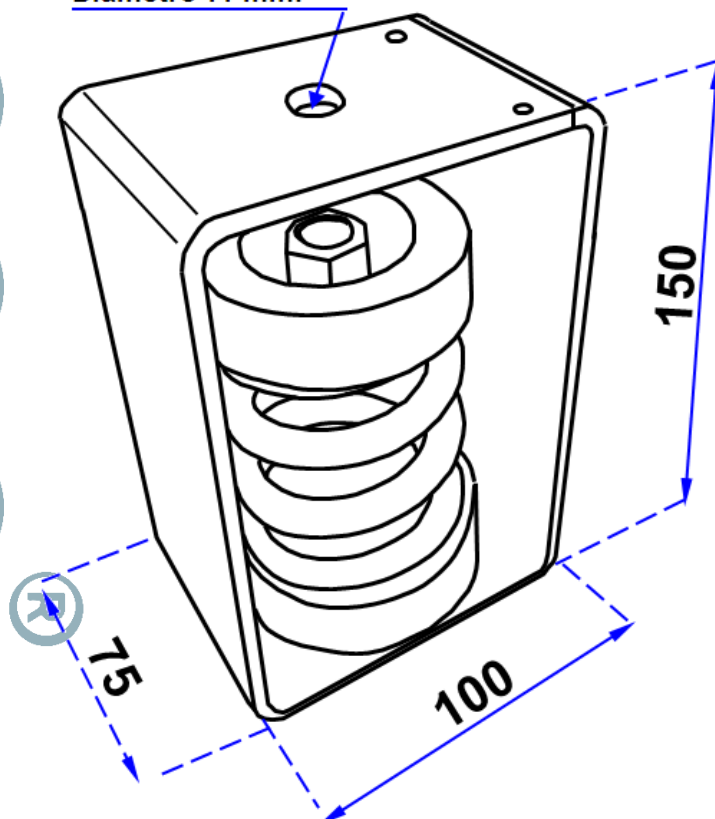
Although they hang from the ceiling, the springs are compressed thanks to its outer casing which is stiffly anchored to the slab.

Highly recommended for insulating machinery operating at low working cycles (above 600 rpm).



Description and Dimensions

Diámetro 11 mm.



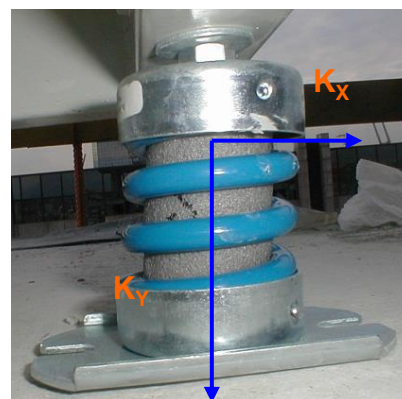


Physical Analysis

Vibcon Model	Minimum and maximum static compression load daN ⁽¹⁾					Isolator's weight [kg]
	MINIMUM load	MINIMUM load	MAXIMUM load	MAXIMUM deflection	OPTIMUM load [daN]	
TVIB 1.100	10	2,5 mm [±5%]	100	25 mm [±5%]	20-92	1,6
TVIB 1.125	13		125		25-115	1,7
TVIB 1.150	15		150		30-138	1,7
TVIB 1.200	20		200		40-184	1,8
TVIB 1.250	25		250		50-230	1,9
TVIB 1.300	30		300		60-276	1,9
TVIB 1.400	40		400		80-368	2,0

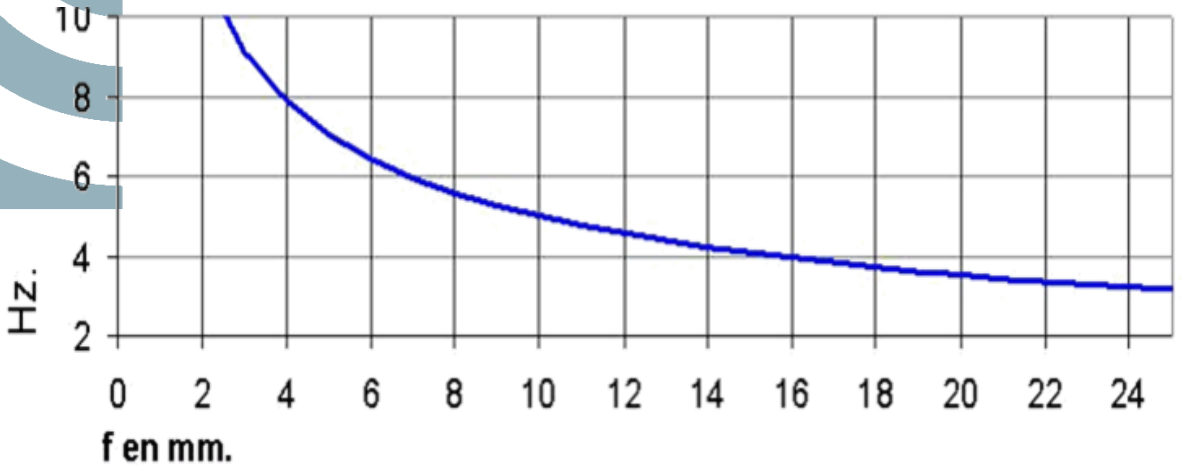
Note: 1 daN = 10 kp = 1 kgf

- Working temperature range: -90°C to 150°C
- Stiffness ratio $K_X / K_Y = 1$
- Admissible overload: 50% of its maximum load

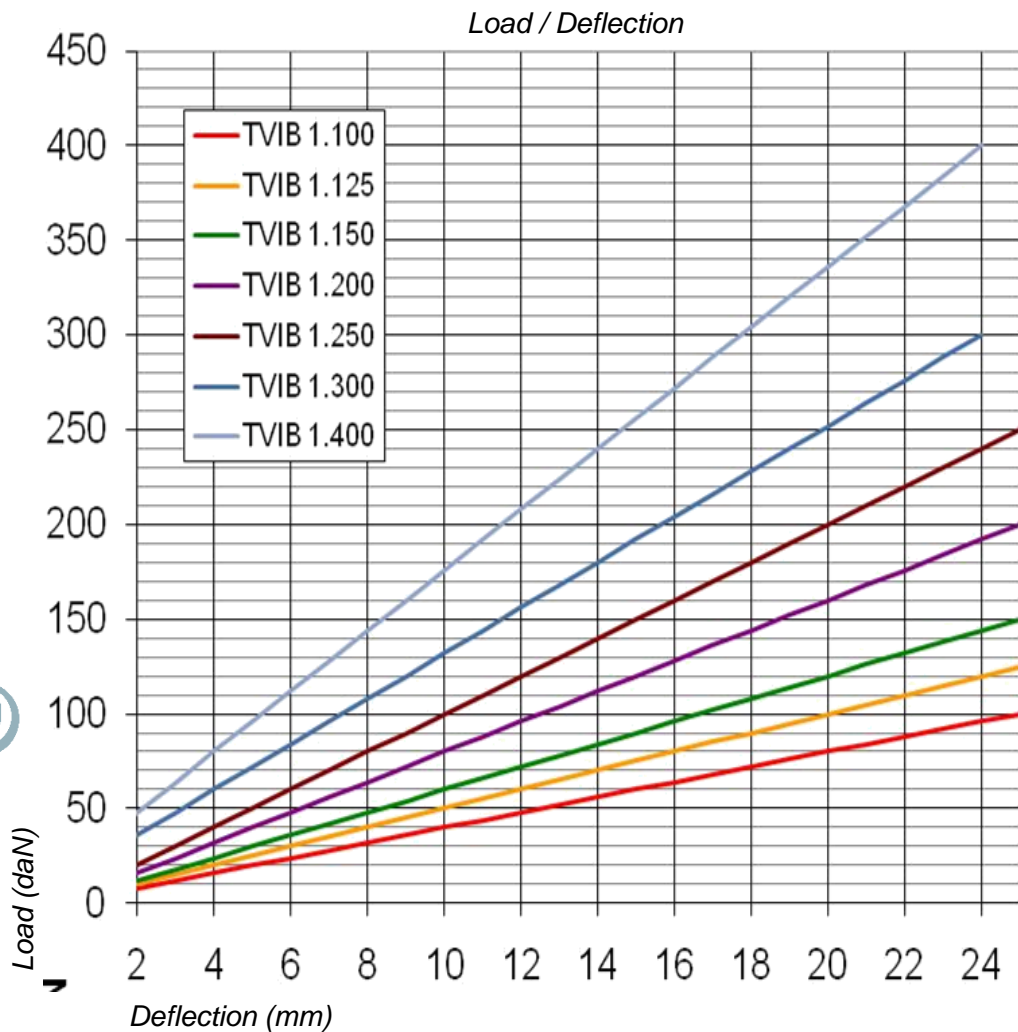




Graph: Dynamics (Natural Frequency)



Graph: Statics



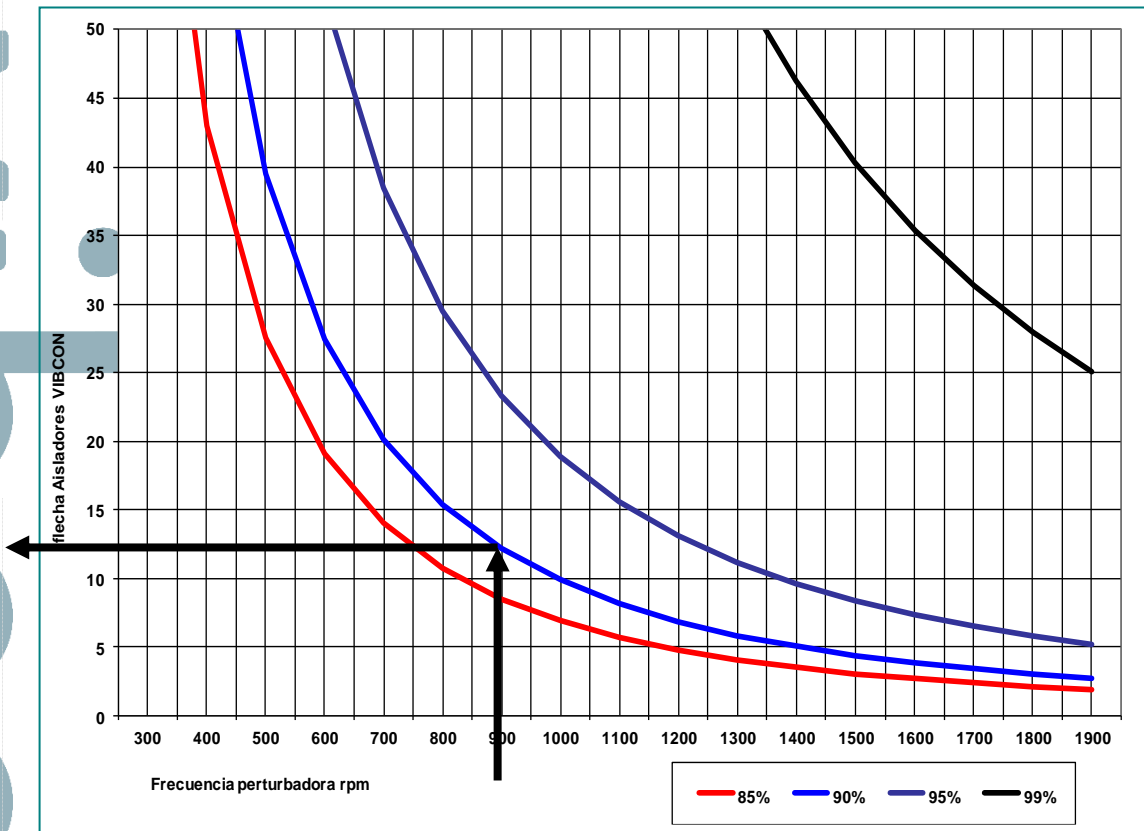


Insulation Grade Graph

This graph is used to select the precise compression deflection for obtaining an Insulation Grade, expressed in %, depending on the minimum revolutions of the equipment.

This graph is only valid for **Vibcon** metal spring insulators and is not applicable for any other countertype on the market.

X AXIS: rpm machine **Y AXIS:** TVIB 100 deflection in mm



EXAMPLE: Air-water cooling plant: fans at 900 rpm and compressors at 1500 rpm.

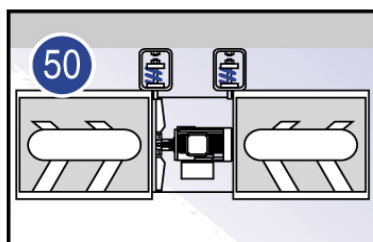
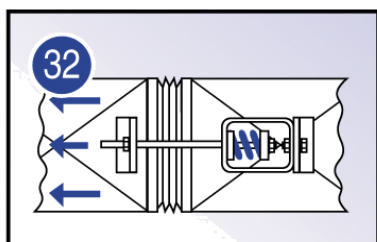
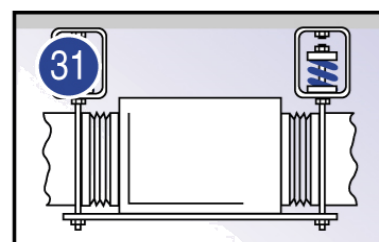
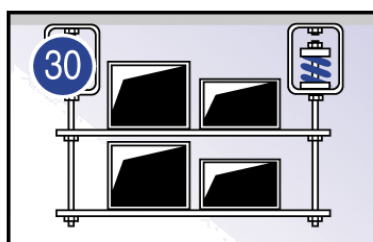
- The TURBULENCE FREQUENCY is taken as the minimum revolutions, i.e., the rpm of the fans= 900 rpm.
- For compliance with the RITE an insulation of \geq 90% is required
- A vertical line is drawn on axis x in 900 until it intersects with the curve of 90%
- Then a horizontal line is drawn from the intersection point obtained to the axis, to OBTAIN THE MINIMUM DEFLECTION (12 mm) the load insulator must comply with the insulation conditions based on RITE.
- If once under load the insulator is compressed to obtain a deflection of $>$ 12mm, it will be compliant with RITE.

CRITERION SELECTING THE INSULATION GRADE

ZONE	Description	GRADE IN %
NON-CRITICAL ZONE	Industrial warehouses on industrial estates Basements. Areas far from places that are sensitive to structural noise and vibrations.	85%
CRITICAL ZONE	Roofs of apartment blocks, offices or public buildings. Zones that are sensitive to the transmission of structural noise and vibrations.	90-95 %
VERY CRITICAL ZONE	Auditoriums, theatres, cinemas, congress halls, hospitals, etc. Zones in which very low levels of noise and vibrations are required.	>95%



Uses



- Acoustic ceilings
- Hanging ventilation boxes
- Hanging ducts and pipes
- Hanging fancoils and air conditioners
- Turbo smoke extractors
- Etc.



The logo consists of a stylized white graphic on the left, composed of several curved, overlapping lines that resemble a sound wave or a fan. To the right of this graphic is the word "vibcon" in a bold, lowercase, sans-serif font. A registered trademark symbol (®) is located at the top right of the word.

vibcon[®]

Vibroacústica Control y Aislamiento S.L.