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The technical information referred in this brochure comes from measurements and tests made in good faith and objectivity. This does not imply responsibility of the Company and may be subject to changes.



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## AM

## SPRING MOUNT FREE STANDING

Free standing, single spring mounts **Vibro-AM** are used for low frequency vibration control (slow speed rotation 400rpm upwards) such as compressors, two cycle engines, coolers, air handling units etc).

At their base, the spring mounts **Vibro-AM** have a galvanized metal plate with adequate thickness covered by a special rubber pad, resistant to outdoor conditions. The advanced design of the rubber profile offers better isolation efficiency at high frequencies, that can be transmitted through its metal structure. The oval base has two holes for fixing with M8 pass-through bolts. At the upper part there is a M8 bolt for fixing at the machinery. The spring complies with the ISO EN 10270 requirements.



### **Dynamic Characteristics**

Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load Available also with 50mm deflection

Available also with wire mesh internal damping

#### Selection Table

TYPE	MAXIMUM LOAD (daN)
Vibro-AM 25	25
Vibro-AM 50	50
Vibro-AM 100	100
Vibro-AM 150	150
Vibro-AM 200	200

Other load range available upon request



## AMR

## **RESTRAINED ANTI-VIBRATION SPRING MOUNT**

Spring mounts **Vibro - AMR** are a multidirectional anti-vibration restraint with relative limit stops. It can be used for low frequency vibration control (low speed rotation 400 rpm upwards) that also requires lateral and vertical restrain and protection from earthquakes and excess wind pressure, such as air compressors, two-cycle engines, chillers, water coolers, air handling units etc.All the metal parts of Vibro- AMR are constructed from metal plate with adequate thickness properly formed. The metal plates are protected from oxidation with polyester powder paint. It has two holes at its base for fixing with M8 pass-through bolts (not included). **Vibro - AMR** can be fixed with the use of M8 pass -through bolts. On the upper part is an M8 bolt in order for the **Vibro - AMR** to be fixed to the machinery. The spring complies with ISO EN 10270 "equirements.

### Selection Table

TYPE	MAXIMUM LOAD (daN)
Vibro-AMR 25	25
Vibro-AMR 50	50
Vibro-AMR 100	100
Vibro-AMR 150	150

Other load range available upon request



### Dynamic Characteristics

Deflection: 25 mm at maximum load. Natural Frequency: 3 Hz at maximum load. Available also with 50 mm deflection.

Available also with wire mesh internal damping



## MS

## MULTIPLE SPRING MOUNT FREE STANDING

**Vibro-MS** is an anti-vibration mount with multiple free standing springs. It is specially designed to have low height (type L) and is very effective in low frequency vibrations absorption. The rubber profile at its base acts as a sound break and increases the isolation efficiency in high frequencies, that could be transmitted through the springs. The springs are fixed with an innovative fastening system.

**Vibro-MS** can be upgraded to **Vibro-MS complex** with the addition of an antivibration pad **Vibro-EP** or the antivibration polyurethane sheet of material Regufoam© underneath its metal base. The combination of spring and rubber expands the natural frequency range for better antivibration results.

Dynamic Characteristics Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load Available also with 50mm deflection (Vibro-MSD).

TYPE	No. of SPRINGS	DIMENSIONS (A-B-H mm)	MAXIMUM LOAD (daN)
Vibro-MS 200	2	110 - 80 - 80	200
Vibro-MS 300	3	140 - 80 - 80	300
Vibro-MS 400	4	160 - 125 - 80	400
Vibro-MS 500	5	160 - 125 - 80	500
Vibro-MS 600	4	160 - 125 - 80	600
Vibro-MS 750	5	160 - 125 - 80	750
Vibro-MS 1000	10	200 - 125 - 80	1000
Vibro-MS 1500	10	200 - 125 - 80	1500

Other load range available upon request



## MSR

## **RESTRAINED SPRING MOUNT**

Spring mounts **Vibro- MSR** are a multi directional anti-vibration restraint system with special design limit stops devices. It can be used for low frequency vibration control (low speed rotation 400 rpm upwards) that also requires lateral and vertical restrain and protection from earthquakes and excess wind pressure, such as air compressors, two-cycle engines, chillers, water coolers, air handling units. The metal plates are protected from oxidation with polyester powder paint. On the bottom **Vibro - MSR** can be fixed with the use of M8 pass -through bolts. On the upper side, there is an M8 threaded rivet in order for the **Vibro - MSR** to be fixed to the machinery. The spring complies with ISO EN 10270 requirements.

### Vibro - MSR Selection Table

TYPE	No. of SPRINGS	DIMENSIONS (A-B-H mm)	MAXIMUM LOAD (daN)
Vibro-MSR 100.2	2	160 - 66 - 75	100
Vibro-MSR 100.4	4	170 - 120 - 75	100
Vibro-MSR 200.2	2	160 - 66 - 75	200
Vibro-MSR 200.4	4	170 - 120 - 75	200
Vibro-MSR 400.4	4	170 - 120 - 75	400
Vibro-MSR 500.5	5	170 - 120 - 75	500
Vibro-MSR 750.5	5	170 - 120 - 75	750

### Dynamic Characteristics

Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load Available also with 50mm deflection (Vibro-MSRD).

### **Selection Table**



## MSH

## HEAVY DUTY MULTI-SPRING MOUNT

**Vibro-MSH** is an anti-vibration mount with multiple springs for very heavy equipment. It is specially designed to absorb low frequency vibrations (i.e. reciprocating machines).

Additionally, the rubber part at its base, acts as a sound break and increases the isolation efficiency in high frequencies that could be transmitted through the springs. The springs are fixed with an innovative fastening system to the metal base.

### **Selection Table**

TYPE	No. of SPRINGS	DIMENSIONS (A-B-H mm)	MAXIMUM LOAD (daN)
Vibro-MSH 1000	4	250-200-155	1000
Vibro-MSH 1500	5	250-200-155	1250
Vibro-MSH 2000	4	250-200-155	2000
Vibro-MSH 2500	5	250-200-155	2500
Vibro-MSH 3000	4	250-200-155	3000
Vibro-MSH 3750	5	250-200-155	3750

### **Dynamic Characteristics**

Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load



# SeiSmicon



## SEISMIC RESTRAINT

Machines based on anti-vibration mounts such as springs, elastic pads etc., during external excitation (e.g. earthquake, wind, tornado etc.) can develop critical displacements. These displacements may stop the operation or even cause serious damage to the machine. Seismic restraints could resist the imposed forces and limit the movement of equipment to all three directions. The restraints also prevent the creation of sound bridge between the machine and its support base, due to their internal neoprene bushings, thus the vibrations during normal operation are not transmitted.

### Selection Table

TYPE	INTERNAL RUBBER COLOR	DIMENSIONS (AxBxC) (mm)	MAXIMUM LOAD (daN)
C-1	Rose	200-100-95	750
C-2	Turquoise	200-100-95	1000

Vibro - SMR.1



Vibro - SMR.2



Vibro - SMR.4



## SMR

### SPRING MOUNT WITH MULTI-DIRECTIONAL RESTRAIN & ADJUSTABLE HEIGHT

Spring mounts **Vibro-SMR** are a multi directional antivibration restraint system with adjustable height. They can be used for low frequency vibration control (low speed rotation 400 rpm upwards) that also requires lateral and vertical restrain and protection from earthquakes and excess wind pressure. The casing is made of steel and is protected from oxidation with a polyester powder paint (hot dip galvanized on request).

The antivibration springs comply with ISO.EN.10270 standards and have a color indication to define the maximum load capacity.

An adjustable height system is placed, in order to align the machine during the installation. At their base they have a special rubber profile, resistant to outdoor conditions, thus offering better vibration isolation efficiency also at high frequencies. (optional)

#### Selection Table

TYPE	No. of SPRINGS	DIMENSIONS (AxBxHmm)	MAXIMUM LOAD (daN)
Vibro-SMR 250.1	1	90-185-160	250
Vibro-SMR 500.1	1	90-185-160	500
Vibro-SMR 750.1	1	90-185-160	750
Vibro-SMR 500.2	2	95-260-180	500
Vibro-SMR 1000.2	2	95-260-180	1000
Vibro-SMR 1500.2	2	95-260-180	1500
Vibro-SMR 1000.4	4	160-260-180	1000
Vibro-SMR 2000.4	4	160-260-180	2000
Vibro-SMR 3000.4	4	160-260-180	3000

Other load range available upon request

### **Dynamic Characteristics**

Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load





## SMRD

### **SPRING MOUNT** WITH 50mm DEFLECTION, MULTI-DIRECTIONAL RESTRAIN & ADJUSTABLE HEIGHT

Spring mounts **Vibro - SMRD** are a multi directional restraint system with adjustable height. They can be used for very low frequency vibration control (low speed rotation 250 rpm upwards) that also requires lateral and vertical restrain and protection from earthquakes and excess wind pressure.

**Vibro - SMRD** is specially designed to offer double deflection with the same load, so it is highly effective in very low frequency vibrations excitations. The casing is made of steel and is protected from oxidation with a polyester powder paint (hot dip galvanized on request). The antivibration springs comply with ISO.EN.10270 standards and have a color indication to define the maximum load capacity requirements.

Selection Table

TYPE	No. of SPRINGS	DIMENSIONS (A-B-H mm)	MAXIMUM LOAD (daN)
Vibro-SMRD 500	4	280-185-310	500
Vibro-SMRD 1000	4	280-185-310	1000
Vibro-SMRD 1500	5	280-185-310	1500
Vibro-SMRD 2000	4	280-185-310	2000
Vibro-SMRD 2500	5	280-185-310	2500
Vibro-SMRD 3000	4	280-185-310	3000
Vibro-SMRD 3750	5	280-185-310	3750

Other load range available upon request





Vibro-Profi pad



## Profi

### ANTI-VIBRATION RUBBER MAT

**Vibro-Profi** is a cost effective anti-vibration mat, made from recycled PU bound rubber tire granules, in egg crate profile. Its dimple shaping offers a high vibration isolation in a wide range of load. This product can be supplied in strips of 100 mm width, 1.5 m length and can be easily individually cut in pads of 125 x 100 mm due to its adequate incisures. The material is environmental friendly since its produced by 100% recycled rubber and can be fully recyclable.





It remains stable when subjected to static and dynamic loads. It offers long term performance without collapse and is resistant to deformation.

Its excellent damping properties and long lifespan make this product a very good technoeconomical selection.

**Vibro-Profi** can be used under vibrating machines or metal structures, or under inertial mass for smoothing out structural forces. Typical examples are plant rooms, generators, boilers, guillotines, AHUs, refrigeration equipment, floating floors for room in room constructions, etc. Isolation strips can be installed around the perimeter in concrete floating floors to avoid sound flanking transitions.

Dynamic Characteristics Deflection: 50 mm at maximum load Natural Frequency: 2.2 Hz at maximum load



## EP

## ANTI-VIBRATION RUBBER PAD

Vibro-EP can be used for vibration absorption in the following applications:

- Antivibration mounts of aircompressors, pumps, fans, generator sets, cutting machines, etc.
- Floating supports: industrial floors, elevators, printing machines, testing machines.

Available in the following dimensions :

- 50 x 25 x 2.5 cm Slabs
- 12.5 x 12.5 x 2.5 cm
- 6 x 6 x 2.5 cm

**Vibro-EP** is the result of specialized research and is produced in this form since 1989, made from first-rate elastomeric material mixed with special substances for its further improvement.

Its longitudinal holes increase the provided compression/deflection and improve vibration absorption. They can be used in multiple layers with the use of steel plate in between, in order to reduce the natural frequency down to 4 Hz.

Selection Table			
COLOR CODE	DIMENSIONS (cm)	MAXIMUM STATIC LOAD (daN)	SPECIFIC LOAD (daN/cm²)
Crev er Deire	12.5 x 12.5 x 2.5	300	1.5 - 1.9
Grey or Beige	50 x 25 x 2.5	3000	1.6 - 2.4
Blue or Green	12.5 x 12.5 x 2.5	200	0.9 - 1.3
Blue of Green	50 x 25 x 2.5	2000	1.1 - 1.6
Red or Yellow	12.5 x 12.5 x 2.5	100	0.4 - 0.6
	50 x 25 x 2.5	1000	0.6 -0.8

## RUBBER TYPE (Color Code) Special rubber compound: (Grey - Blue - Red) Neoprene: (Beige - Green - Yellow)









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## Vibro



# EP - Metal

## ANTI-VIBRATION PAD WITH METAL COVER

**Vibro-EP** Metal consists of a rubber pad Vibro EP (dimensions  $12.5 \times 12.5 \times 2.5 \text{ cm}$ ) and a specially formed galvanised metal cover. The steel cover protects the rubber part of the mount from UV radiation and oil. At the same time, the load applied on the mount is equally distributed to the entire surface of the rubber element.

At the centre of the upper side of the cover an internal M12 thread is incorporated, which allows the corresponding fixing screw (not included) to attach the machine with the anti vibration mount. The beige green and yellow elastic pads are made of Neoprene type of rubber which is even more resistant to heat and UV radiation.

## Selection Table

RUBBER TYPE (Color Code)	MAX LOAD (daN)
Grey or Beige	300
Blue or Green	200
Red or Yellow	100

### **Dynamic Characteristics**

Deflection: 2.8 mm at maximum load Natural Frequency: 10 Hz at maximum load



## STRiP

## ANTI-VIBRATION RUBBER STRIP

**Vibro-Strip** is primarily used at the base of machinery to achieve vibration control. It can also be used as an elastic pad between the structural parts (columns, walls, bridges, tanks, e.t.c.) for smoothing out structural forces. It can be easily cut in any dimension (e.g. washers) according to the weight of the supported machine. It can also be easily cut in the middle due to its special V-shape form. It has various ways of installation according to the amount of vibration reduction required. For example it can be used in single or double layer to increase the thickness hence the deflection. There are several other applications combinations, which can be customly used.

Dimensions: Thickness (max) 10 mm, Width 108 mm. Available in rolls of 3m length.

### WAYS OF INSTALLATION

Single Layer



Double layer, one layer on the other



Double layer, one layer on the other (inverted)



Double layer, one layer inside the other





# mini & mini 2

## ANTI-VIBRATION RUBBER SUPPORT

The anti-vibration rubber support **Vibro-mini** is a low cost solution for vibration problems caused by low weight machines. It is a great solution for the antivibration support of low axial loads. Due to its pionner design, **Vibro-mini** provides a greater deflection with load. It can be screwed with an anchor into the floor, or it can be suspended on the ceiling through anchor rods or even be placed on a metal base with a passing through screw of M8 mm. These screws do not create any sound bridge due to their innovative design. The passing through screw prevents the machinery from falling in the event of elastic part destruction. (Fail Safe)

MAX

LOAD

(daN)

20

50

Natural

Frequency (Hz)

15

15









mini 2

mini section

M8 x 35





## Midi

## ANTI-VIBRATION RUBBER SUPPORT

### Description

**Selection Table** 

TYPE

(Color Code)

Vibro-mini.20

Vibro-mini.50

The rubber support **Vibro-Midi** is an ingenious low cost solution for vibration problems. Due to its innovative design, **Vibro-Midi** provides a greater deflection over load. It can be fit with an anchor on the floor, or it can be suspended from the ceiling through threaded rods or even be placed on a metal base with a passing through screw of M8 - M10 mm. The screw does not create any sound bridge due to its cylindrical, rubber neck. The passing through screw prevents the machinery from falling, in the event of rubber part destruction. (Fail Safe)

### Applications

Vibro-Midi can be used as machinery antivibration support, suspension of machinery, floating gypsumboard ceilings, wall brace etc.

#### Selection Table

TYPE (Color Code)	MAXIMUM LOAD (daN)
Vibro-Midi (Red)	90
Vibro-Midi (Blue)	180
Vibro-Midi (White)	270

Dynamic Characteristics Deflection (at maximum load): 8 mm Natural Frequency (at maximum load): 8 Hz

Typical application

## **Vibro**





# EM.2

## METAL-RUBBER MOUNT (Type 2)

**Vibro-EM.2** is a result of specialized research and it is made with a combination of rubber and metal bonded parts. The metal cap provides protection from various fluids, like oil and water. In addition, it protects the main body of the antivibration mount from sunbeams increasing its life time. The metal cover is made from galvanized metal sheet which protects the rubber mount from oxidation. The rest of the metal parts are covered by rubber for better oxidation protection, whilst the top and bottom surface has special lining that increases friction and reduces the surface slipping.

In order to determine the maximum load on the lower oval anti-vibration mount, there is a special marking (W•••: White, B••: Blue, R•: Red ) identifying the hardness of the rubber.

Selection Table	
TYPE (Color Code)	MAXIMUM LOAD (daN)
Vibro-EM.2 (R•)	40
Vibro-EM.2 (B••)	80
Vibro-EM.2 (W•••)	150

Dynamic Characteristics Deflection: 3 mm at maximum load Natural Frequency: 10 Hz at maximum load



# EM.3

## **RUBBER MOUNT (Type 3)**

**Vibro EM.3** is a vibration control mount and is made with a combination of rubber and metal bonded parts. It can be used to absorb vibration produced by air handling units, air conditioning units, pumps, air compressors, ventilators, transformers, motor generators, cutting machines, printing machines, lifts, etc., especially where machine fastening is necessary.

The top and bottom surface has special lining that increases friction and reduces the surface slipping.

### Selection Table

	-
-	

MAXIMUM LOAD (daN)
200
350

Dynamic Characteristics Deflection: 3 mm at maximum load Natural Frequency: 10 Hz at maximum load

Available also with more units for inreased maximum load (Vibro EM.3 Plus)

## 30

## MULTIDIRECTIONAL ANTI-VIBRATION MOUNT

MAX

DYNAMIC

LOAD (daN)

55

47

110

93

231

187

418

280

The new anti-vibration mount Vibro-3D is one of the few antivibration mounts that can offer vibration control in every direction. Vibro-3D is designed to sustain impulsive loads in all three axis (x, y, z), so it is able to receive high vertical or lateral shocks with minimum danger of destruction. The main internal elastic foam material is polyourethane foam with semi closed cells, which is produced in Germany with the trademark Regufoam® Vibration Plus. Full range of its mechanical behavior diagrams, conducted in the University of Dresden, are available on request.



MAX STATIC

LOAD (daN)

38

31

77

63

165

154

298

200

## **APPLICATIONS** MOUNTING (B) SUSPENSION (H) **ENDING TYPE** Male (M) Female (F) Special Female Fixing (SF)

Note: The max. load for the radial force shall be 15% of the mounting load.

APPLICATION

MOUNTING (B)

SUSPENSION (H)

MOUNTING (B)

SUSPENSION (H)

MOUNTING (B)

SUSPENSION (H)

MOUNTING (B)

**SUSPENSION** 



## Indicative order form: Vibro-3D Red / B-SF

Note: All the ending types (M,F,SF) can be applied in the above mounting positions.





COLOR CODE

Grey

Beige

Turquoise

Red

## VIBRATION MEASUREMENTS

This Vibration measurement equipment, contributes in improving our company's Research and Development activity in regards with new & innovative vibration isolation products. Also improves our accurate product customization and production, in order to offer vibration control solutions, which can cover the most complex requirements!

The measuring vibration equipment consists of highly specialized precision tri-axial accelerometers (1v/g), targeted specifically for measurements in building vibration.

Also, industrial type accelerometers for measuring vibration on machines such as: generators, chillers, air handling units, gen sets, boilers, HVAC etc.Being able to process vibration measurements, (acceleration, velocity, displacement) both recording in the time and frequency domain. (FFT analysis and waterfall graph)

### Some indicative applications for measuring vibrations:

• Measurement of machine vibration before and after the application of vibration control products.

• Vibration measurement in building (ground-borne and structureborne vibration) generated by mechanical sources, or traffic (train) excitations.

• Protection of sensitive appliances, measuring the machinery excitation frequency (i.e. sensitive electronic appliances on ships etc).

- Human response to Vibration (H.R.V.) assessment in work places.
- R&D for realisation of new vibration control products.
- · Quality control.





#### Dynamic Characteristics Maximum Load: 20 daN at maximum load Natural Frequency: 15 Hz Deflection: 3mm

# CH mini

## **MULTIFORM HANGER**

**Vibro-CH mini** consists of a galvanized heavy metal frame and the anti-vibration rubber support Vibro-mini. Usually, the metal frame is delivered in flattened form. The suspension can be transformed to any of the 3 forms shown in the figures.

- SHAPE (1) can be screwed on both sides of the metal suspension's profile
- SHAPE (2) is fixed with 2 anchors on the ceiling.
- SHAPE (3) is hanged with a hook.





SHAPE 1

SHAPE 2







# QH mini

## HANGER for GYPSUM BOARD CEILINGS

**Vibro-QH mini** can be combined with a suitable reinforced and modulated galvanized metal suspension hanger, offering vibration isolation on sound insulation gypsum board ceilings. The hole of the rubber of the **Vibro-QH mini**, is Ø8 mm for the pass-through bolt (not inlcuded). A long threaded rod could be used in order to adjust the height of the false ceiling.

The suspension hanger has grappling edges for quick and easy connection with the standard ceiling profiles 60 x 27mm, according to DIN 18182-1. These edges help the adaptation with standard metal profile of the false ceilings so that they can easily handled. Therefore, the working cost is decreased and it also facilitates the work of the installer.

Dynamic Characteristics Maximum Load: 20 daN Natural Frequency: 15 Hz





Dynamic Characteristics Maximum Load: 20 daN Natural Frequency: 15 Hz

## Pi mini

## **CEILING HANGER**

**VIBRO-Pi mini** is used to suspend sound insulating (gypsum board) ceilings, suspend air-ducts e.t.c. The design of the metal profile with its edges can be easily cut or bended in different lengths to achieve uneven levels of the floating ceiling when required.

Vibro-Pi mini consists of a metal frame of galvanized sheet properly formed.

A special antivibration rubber support (**Vibro-mini**) is placed on the upper part. Through the rubber support an M6 screw (not included) is used which can be anchored to the ceiling.

The rubber antivibration support **Vibro-mini** is the result of specialised research made of high quality rubber compound with very good deflection versus load ratio for excellent vibration control. The special design of the metal profile is perforated thus it can be cut easily at different length in order to cover the project needs.

#### Installation procedure for Vibro PI mini













## SPRING HANGER for FALSE CEILINGS

Antivibration hangers for false ceilings **Vibro-SH** concist of metal frame made of galvanized sheet, properly formed with lateral strength, steel spring, antivibration rubber element at the bottom of the spring which acts as a sound break and increases isolation efficiency. They can also be pre-loaded by tightening the nut.



Dynamic Characteristics Maximum Load: 25 daN and 50 daN Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load











SHAPE (2)



## CH.F

## ANTI-VIBRATION HANGER with REGUFOAM

The frame of **Vibro-CH.F** consists of a galvanized heavy metal frame and an anti-vibration elastic element. The elastic element of the hanger is a high quality polyurethane foam, with semi-closed cells, manufactured by the German company BSW under the trademark Regufoam®. Full range of its mechanical characteristics diagrams and certificates, conducted in the University of Dresden, are available upon request.

The precisely designed incisions of the metal sheet provide easy bending of its frame, at certain shapes. Thus, Vibro-CH.F can be easily transformed, into 4 different shapes in order to help the installer use it at the most favorable form.

- SHAPE (1) Screwed on both sides of the metal suspension's profile
- SHAPE (2) is fixed with 2 anchors on the ceiling
- SHAPE (3) Hanged up with a hook or other proper device.

**Vibro-CH.F** is available in 4 different thicknesses (12-25-37-50mm) and in 2 different stiffnesses, in order to achieve the desired natural frequency.





## ANTI-VIBRATION HANGERS For GYPSUM BOARDS CEILINGS

**Vibro-QH.F** consists of a specially design galvanized metal suspension hanger, which has grappling edges for QUICK AND EASY connection with the standard ceiling profiles with dimensions 60x27 mm (for false ceilings) according to DIN 18182-1.

Therefore, the labour cost decreases and it also facilitates the work of the installer. The elastic element of the **Vibro-QH.F** hanger is high quality polyurethane foam, with semi-closed cells.

It is available in 2 different thicknesses of its elastic pad:

12mm (economic solution)

25mm (better vibration control)

### **Selection Table**

TYPE (Thickness)	MAXIMUM LOAD (daN)
Vibro-QH.F 20.(12)	20
Vibro-QH.F 20.(25)	20







## CH

## HANGER with RUBBER + SPRING

**Vibro-CH** is a combination of special rubber with metal spring for better vibration isolation of wider range of frequencies heard by the human ear.

### It consists of:

- Steel frame with painted finish or galvanized metal
- · Steel spring in accordance with ISO EN 10270 with galvanized finish
- Steel cup to prevent spring movement
- Rubber element on the top for better isolation of audible frequency
- · Hanging Ring with safety nut
- Preloading capability by turning the bottom nut
- · Rubber spring cup with a projecting bushing to prevent sound bridge
- Different types of hanging (screw, eyes bold) / Not included.

They can also be pre-loaded by tightening the nut. The hanging bolt is not included.

### **Selection Table**

TYPE	MAXIMUM LOAD (daN)
Vibro-CH 25	25
Vibro-CH 50	50
Vibro-CH 100	100
Vibro-CH 150	150

Other load range available upon request

### **Dynamic Characteristics**

Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load Available also with 50 mm deflection (Vibro CHD)





## SH.F

## HANGER with SPRING + Regufoam

**Vibro-SH.F** is a combination of special polyure than erubber with metal spring for better vibration isolation of low and high frequency which can be heard by the human ear. It can be used in sound insulation of false ceiling with plasterboard or the vibration isolation of pipes, airducts, loudspeakers. It consists of a steel frame with painted finish or galvanised protection. They can also be pre-loaded by tightening the nut. The hanging bolt is not included.

### **Selection Table**

ТҮРЕ	MAXIMUM LOAD (daN)
Vibro-SH.F 25	25
Vibro-SH.F 50	50
Vibro-SH.F 100	100
Vibro-SH.F 150	150

#### Dynamic Characteristics Deflection: 25 mm at maximum load Natural Frequency: 3 Hz at maximum load Available also with 50 mm deflection (Vibro SHRD)

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MAXIMUM LOAD (daN)

10

25

## SILICONE VIBRATION ISOLATORS

The **Vibro.SiL** product series are anti-vibration products made of high quality silicone, applied in a wide operating temperature range (-40° to +200°C), providing stable vibration isolation performance. **Vibro.SiL** series provide an effective shock and vibration isolation protection, as well as structure-borne noise reduction. They are environmentally friendly as they do not contain harmful additives. They offer very good weathering properties in regards to ozone and UV resistivity.

The anti-vibration silicone is softer than traditional natural anti-vibration rubber and other thermoplastic compounds and does not have the characteristic odor of natural rubber. Silicon has very low compression set, which is a very critical parameter in vibration isolation. It is suitable for applications in food, marine, avionic, defense and medical applications



## SiL-mini

Dynamic Characteristics Deflection (at maximum load): 4 mm Natural Frequency: 8 Hz



# SiL-CH mini

Dynamic Characteristics Deflection (at maximum load): 4 mm Natural Frequency: 8 Hz

SiL-3D

Dynamic Characteristics Deflection (at maximum load): 4 mm Natural Frequency: 8 Hz



## SiL-EM.2

Dynamic Characteristics Deflection (at maximum load): 4 mm Natural Frequency: 8 Hz



## SiL-EM.3

Dynamic Characteristics Deflection (at maximum load): 4 mm Natural Frequency: 8 Hz

Se	lection	Table	1

Selection Table

Vibro.SiL - mini.10

Vibro.SiL - mini.25

TYPE	MAXIMUM LOAD (daN)
Vibro.SiL - CH mini.10	10
Vibro.SiL - CH mini.25	25



### Selection Table

ТҮРЕ	Color Code	Maximum Load (daN)
Vibro.SiL - EM.2	Natural	20
Vibro.SiL - EM.2	Red	50
Vibro.SiL - EM.2	Blue	100

### Selection Table

ТҮРЕ	Color Code	Maximum Load (daN)
Vibro.SiL - EM.3	Natural	50
Vibro.SiL - EM.3	Red	100
Vibro.SiL - EM.3	Blue	150

Other load range available upon request

For more indormation, please refer to the specific product prospectus.







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## ANTI-VIBRATION RUBBER SUPPORT for WOODEN FLOORS

**Vibro-FS**, is a specially designed homogeneous elastomeric support system that has been developed to reduce the impact noise of wooden floors.

Impact noise refers to sound produced when a short duration impulse, acts directly on a structure.

**Vibro-FS** pads, are useful for the impact noise reduction (for example footsteps) of upcoming noise from upstairs to the levels below.

The floor pads can also prevent the creation of thermal and acoustic bridges.

### QUANTITY

6 - 8 items per  $m^2$ 

MAXIMUM LOAD 80 Kg per mounting point







## FM

## WOODEN FLOOR MOUNT ISOLATORS

**Vibro-FM**, has been developed to reduce the impact noise of wooden parquet floors. Impact noise refers to sound produced when a short duration impulse, acts directly on a structure. **Vibro-FM** pads, are useful for the reduction of noise coming from the floor above the sound receiver. The floor pads consist of metallic and rubber parts which are connected accordingly and as a result they prevent the creation of acoustic bridges.

Weighted Normalised impact sound pressure level Ln'w = 53 dB was measured at the acoustic laboratory of National Technical University of Athens in accordance with international standards ISO 140- 6 and ISO 717- 2.

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6 - 8 items per m<sup>2</sup>

MAXIMUM LOAD 80 Kg per mounting point







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## WS ANTI-VIBRATION RUBBER SUPPORTS

### For GYPSUM BOARD PARTITIONS

**Vibro-WS** are specially designed homogeneous elastomeric support systems in order to create a floating gypsum board partitions. The semi-cylindrical modulation at their base (for WS.75 & WS.100) and the transversal holes (for WS.50), provide the necessary space for the rubber expansion, increase the deflection and consequently the vibration insulation.

The inclined latelar flaps of **Vibro-WS** cover the fixing bolts on the base and prevent possible sound and thermal bridge with the gypsum board.



**Vibro-WS** are installed on floor and ceiling metal profiles (U-runer with width, 50, 75 or 100mm) in correspondence to the C-studs. These rubber, wall supports must be applied on both the floor and the ceiling connection with the floating wall.

They can be fixed on the metal profiles with self drilling screws and on the floor or ceiling with expansion bolts.

The free spaces underneath the metal frame must be filled with sound absorption material (e.g. rockwool) and sealed with elastic mastic.

Part or all of base's lateral flaps, can be cut easily due to its incisions, for applications with smaller thickness (e.g. single gypsumboard) than the flap's length.





Vibro-WS support systems for a floating gypsum board partition





## JS

## ANTI-VIBRATION JACK-UP SPRING MOUNT for CONCRETE FLOATING FLOORS

Anti-vibration jack-up spring mount Vibro-JS is an advanced vibration control system for raised concrete floating floors. Vibro-JS consists of a metal shell. Inside the shell a spring is placed, to absorb the vibrations. The poured concrete does not touch the supporting floor and so the sound bridge between the floating and the supporting floor is avoided. Its very easy to install, allows regulation of height and helps to avoid the use of remaining plywood forms. It also creates an air gap, which is beneficial for the sound insulation and the vibration control.



### Selection Table

ТҮРЕ	DIMENSIONS (AxBmm)	MAXIMUM LOAD (daN)
Vibro-JS-300	Ø 85 - 100	300
Vibro-JS-500	Ø 85 - 150	500

Other load range available upon request



## JU

## ANTI-VIBRATION JACK-UP RUBBER MOUNT with REGUFOAM for CONCRETE FLOATING FLOORS

**Vibro-JU** is an advanced vibration control system for raised concrete floating floors. It consists of a metal shell that contains the antivibration polyurethane elastomer Regufoam Vibration Plus sheet which absorbs the vibrations. The poured concrete does not touch the supporting floor and so the sound bridge between the floating and the supporting floor is avoided. It's very easy to install, allows regulation of height and helps to avoid the use of remaining plywood forms. It also creates an air gap, which is beneficial for the sound insulation and the vibration control.

### **Selection Table**

ТҮРЕ	MAXIMUM LOAD (daN)
Vibro-JU.100	100
Vibro-JU.200	200
Vibro-JU.400	400





Installation procedure

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## SC

## ANTI-VIBRATION WALL CONNECTION

Anti-vibration wall connection **Vibro-SC** is used in order to add structural integrity of long and tall gypsum board walls, which are mounted on antivibration pads or based on floating floor. It prevents any direct connection between the double walls, and increases their stiffness.

Additionally it prevents wall backling during earthquakes. It is usefull when a secondary wall is applied for improved sound insulation where rigid connections will cause an unwanted sound bridge.



Selection Table		
ТҮРЕ	DIMENSIONS A x B x C x D (mm)	MAX AXIAL RESTRAINT (daN)
Vibro-SC.1	25 - 8 - 40 - 70	30
Vibro-SC.2	50 - 8 - 40 - 70	60



## WB

## **ANTI-VIBRATION WALL BRACE**

The anti-vibration wall braces **Vibro-WB** are used in order to add structural integrity of long and tall gypsum board walls, which are mounted on antivibration pads or based on floating floor. They avoid any direct connection between the double walls, and increase their stiffness. They prevent wall backling during earthquakes. It is usefull when a secondary wall is applied for improved sound insulation where rigid connections will cause unwanted sound bridge.

Selection Table	
TYPE (Color Code)	MAX AXIAL RESTRAINT (daN)
Vibro-WB.25 (Black)	25
Vibro-WB.50 (White)	50



VIBRO is a complete range of innovative and advanced vibration control systems designed and manufactured by ALPHA ACOUSTIKI Ltd.
 Our R&D department manned with engineers, with experience in the field of noise and vibration control since 1978, can create innovative sophisticated anti-vibration solutions for a wide range of applications.
 Advanced scientific measuring equipment and prediction software, are being used, for detailed vibration analysis and optimised product selection.
 All Vibration Control products are designed & manufactured under Quality Assurance System ISO 9001.2008
 & Environmental Management System ISO 14001.2004.
 More information on: www.vibro.gr / www.antivibration-systems.com



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