Vibrabsorber
by getzner
+sylomer®
General Catalogue

AMC
MECANOCAUCHO

AMC
MECANOCAUCHO

48 h. | 24 h.

72 h. | 24 h.

USA DELIVERY

4 WEEKS

San Sebastián
Asteasu

Our stock is at your service.

50 YEARS OF EXPERIENCE ENDORSE US

Since 1969 AMC MECANOCAUCHO®, has pioneered the manufacture and design of products for the attenuation of vibrations and noise.

Factory 1 in Asteasu.

Factory 2 in Asteasu.

1969

1995

INDEX

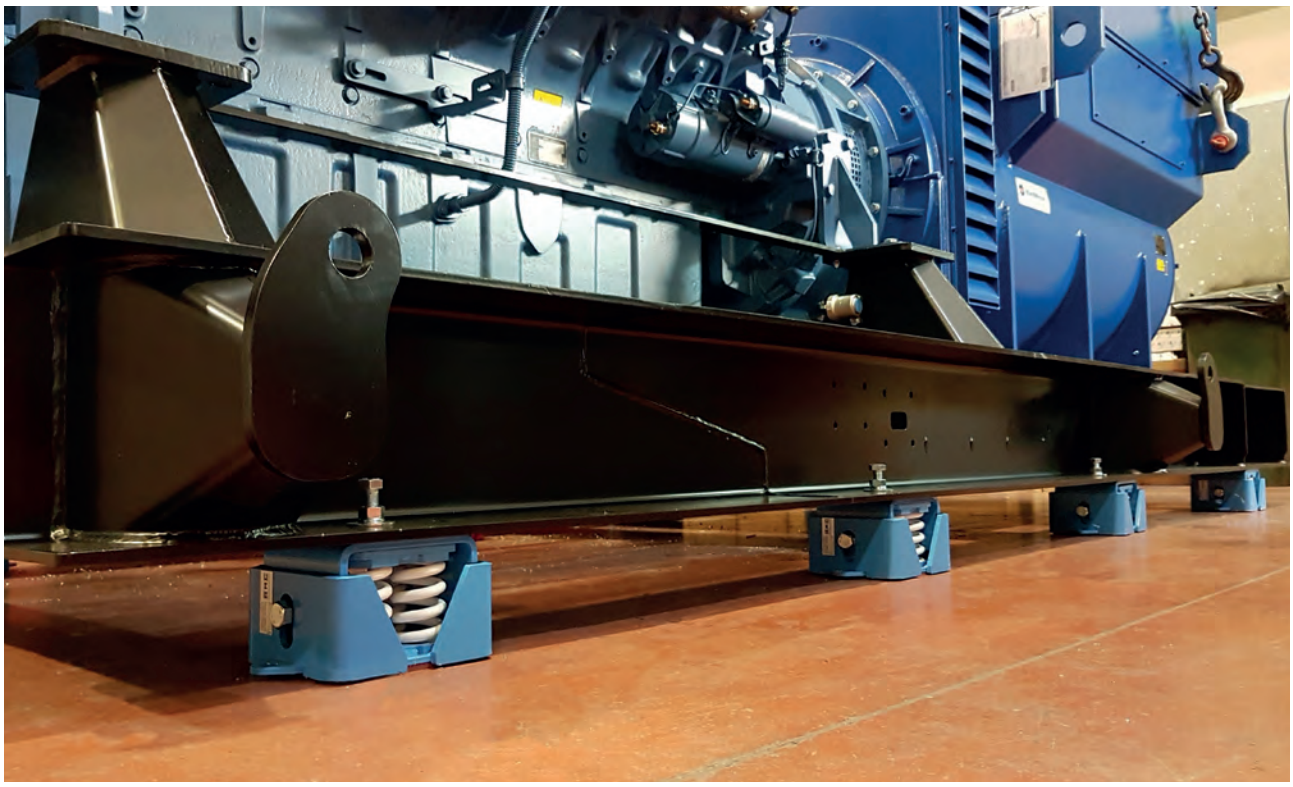
AREAS OF APPLICATION

Our products are used in sectors such as:

- Generation of electrical energy.
- Air compressors and Blowers.
- Pumps and Pumping equipment.
- Industrial vehicles.
- Machine Tools.
- Marine propulsion and auxiliary equipment.
- Agricultural and construction equipment machinery.
- Acoustic isolation of premises.

Compressor insulated with VIBRABSORBER +Sylomer®

Generator set insulated with VIBRABSORBER+Sylomer®



Generator set insulated with VIBRABSORBER+Sylomer®

Ventilation system insulated with VIBRABSORBER

QUALITY COMMITMENT

The products commercialised by AMC-MECANOCAUCHO® are all made in-house.

The stiffness and levels of mechanical fixations of all these products have been controlled so that they may be identified as "AMC MECANOCAUCHO®" products, whereby they can be traced. AMC MECANOCAUCHO® is officially approved by the NATO under the ID no. NCAGE 0230 B-compliant supplier.

ISO 9001:2014


DNV·GL

MANAGEMENT SYSTEM CERTIFICATE

APLICACIONES MECANICAS DEL CAUCHO, S.A. AMCSA

ISO 9001:2015

ISO 14001: 2014


DNV·GL

MANAGEMENT SYSTEM CERTIFICATE

APLICACIONES MECANICAS DEL CAUCHO, S.A. AMCSA

ISO 14001:2015

Marine type approval


DNV·GL

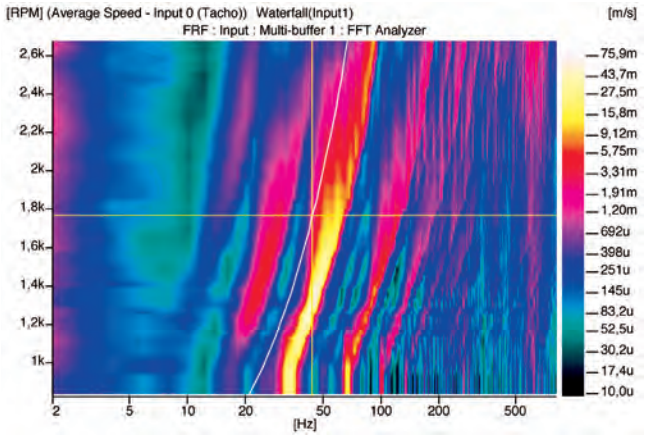
TYPE APPROVAL CERTIFICATE

NATO certificate

THE SOLUTION

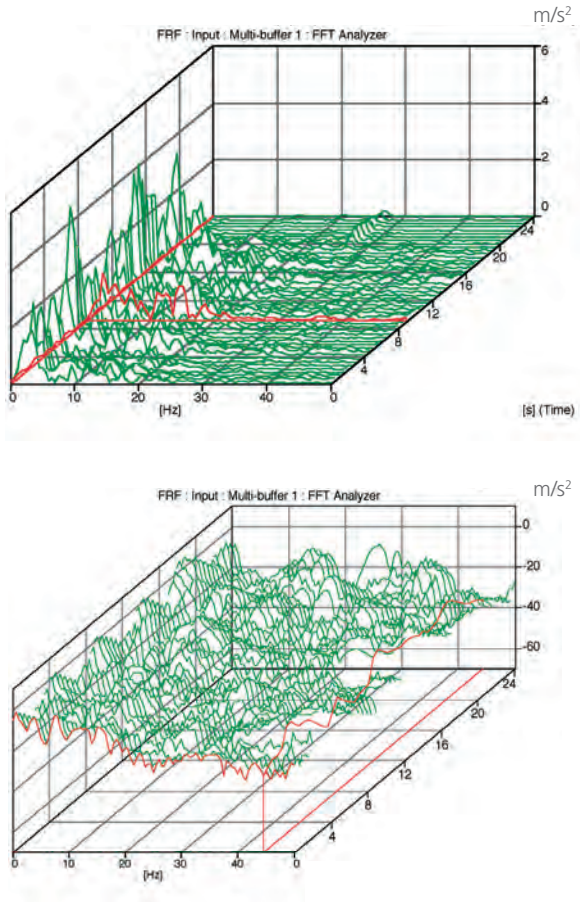
All machinery which by virtue of its design, has reciprocating or rotating parts, creates vibration to some degree through the imbalance of the moving parts.

This vibration produced by a machine leads to different problems, such as a reduction in the machine's useful life through part wear, plus the transmission of this vibration to other non-insulated adjacent structures, giving rise to problems of noise and vibration transmission.



FFT analysis of orders for a diesel engine

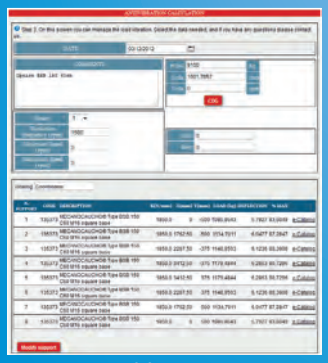
For over 45 years, AMC MECANOCAUCHO® has been developing the AMC MECANOCAUCHO® range of rubber-metal anti-vibration supports which can solve problems like the ones described above in all types of machinery, mobile or fixed. Thus protecting people and the environment from harmful effects of noise and vibration.

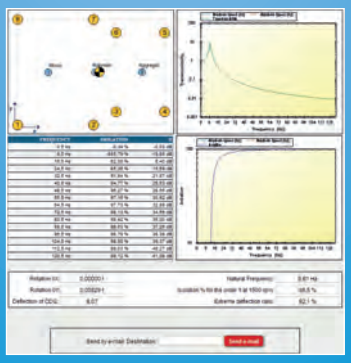


3D graphics of the vertical acceleration of a radiator

ENGINEERING

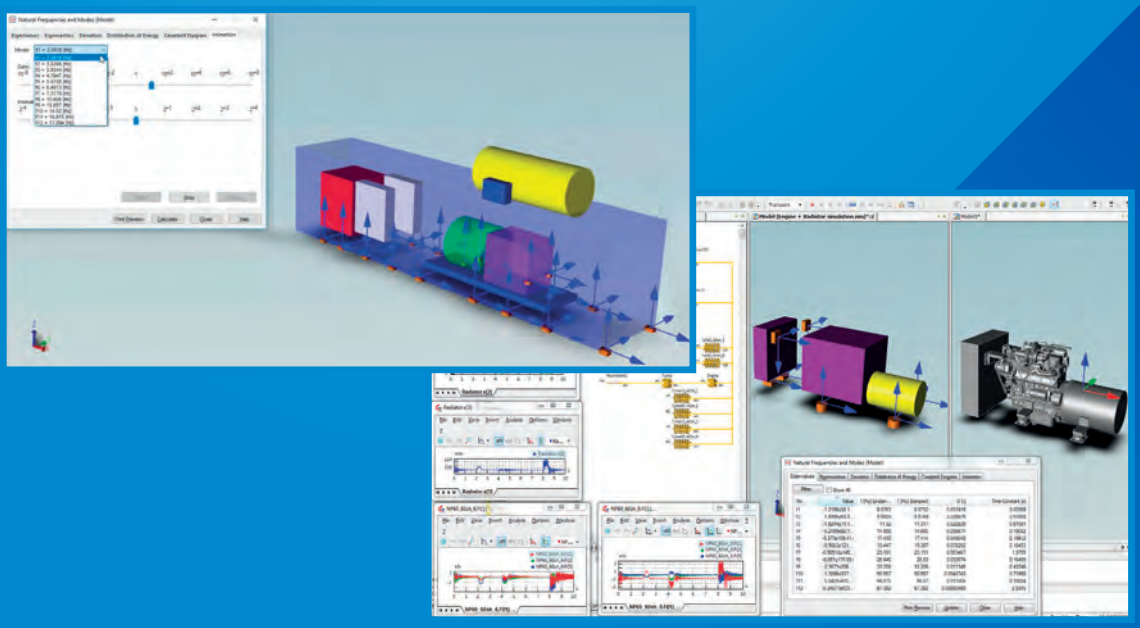
1. Calculation





One degree of freedom calculation

AMC MECANOCAUCHO® calculates anti-vibration solutions by taking into account data such as weight, mount positions, type of machine, Center of Gravity, frequency of excitation, etc...

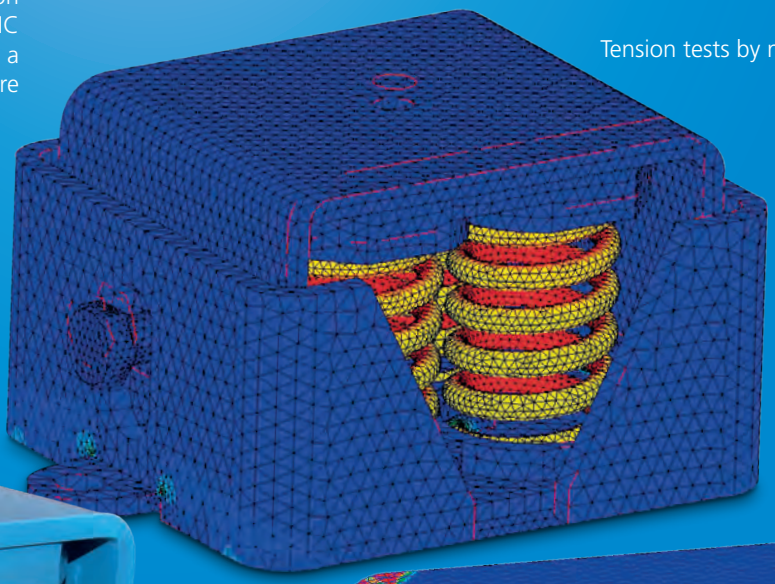


Anti-vibration calculation with more than one degree of freedom.

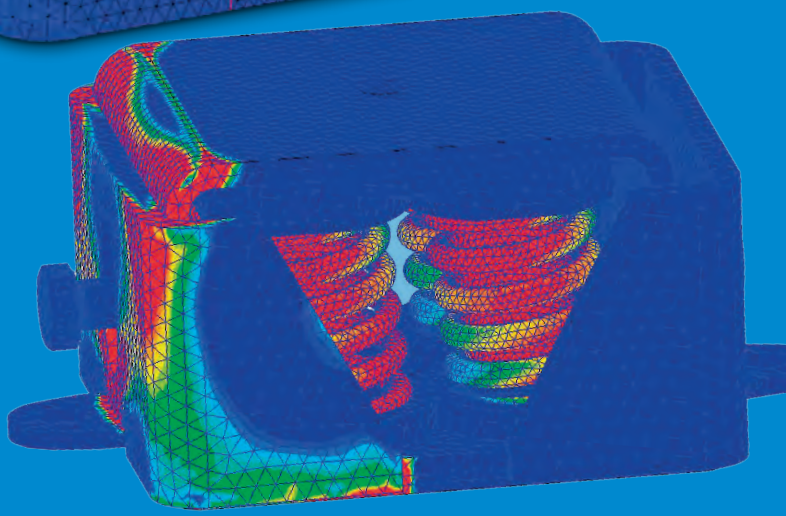
2. Design

After studying client specific needs for the application and the isolation performance required, AMC MECANOCAUCHO® can produce a new design if standard products are not suitable.

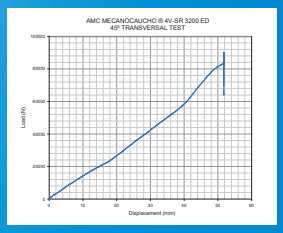
Tension tests by non linear FEM.



3D modelling of products

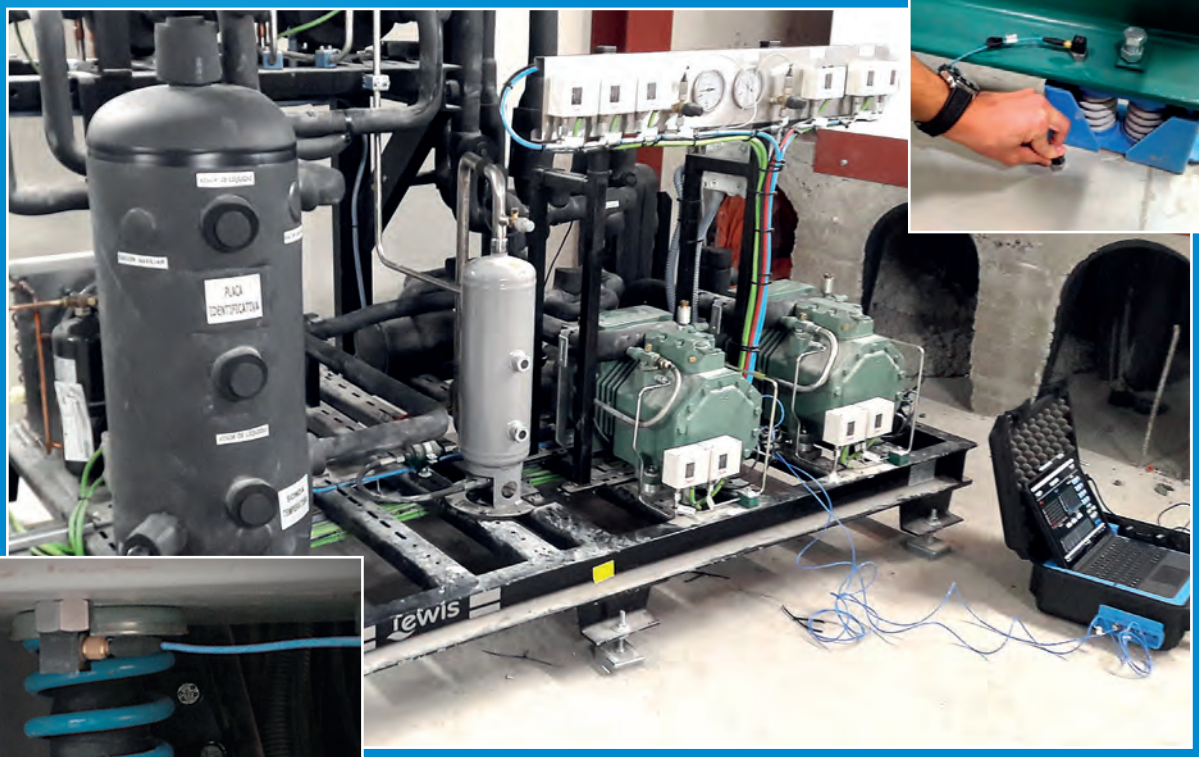


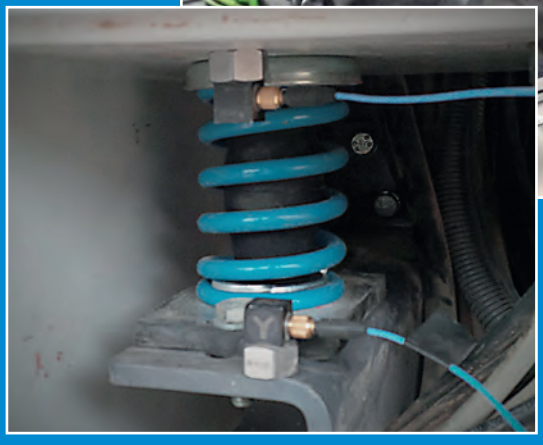
3. Test and dynamic characterisation



AMC MECANOCAUCHO® can offer customers a wealth of experience and know how in measuring noise and vibration to effect optimun solutions to those problems.

4. Measurements





AMC MECANOCAUCHO® provides its customers with all its experience and know-how in measuring vibrations and noise in the field so as to reduce machine-produced emissions of noise and vibrations.

AMC
ENGINEERING

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MECANOCAUCHO

THEORY OF VIBRATION ISOLATION

1.- ABC AT A GLANCE

MASS SPRING SYSTEM
A mass spring system may be represented by a mass "M", excited by a force "F" and supported on an elastic stiffness element "K" with a dampening factor "C".

The frequency of the mass spring system is equal to:

$$f_o = \frac{1}{2\cdot\pi}\sqrt{\frac{k}{M}}$$

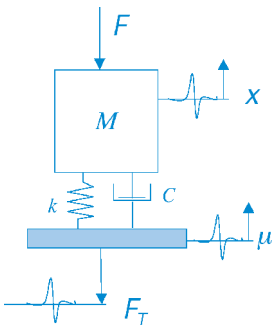


figure 3

K = N/m
M= in Kg
Fo in Hz
C in Ns/m

The effectiveness of the suspension may be measured by transmissibility, i.e. by the force which is transmitted by the machine to the ground or floor. It is defined as the ratio between the force transmitted to the ground, FOT, and the original force produced by the vibration FO.

Another practical term is often used to describe the efficacy of an anti-vibration mount, namely the degree of insulation, which is:

Transmissibility equation: $E = (1-T)\times 100\%$

Taking the following parameters into account:

Excitation
$$x = x_o \sin(\omega t + \vartheta)$$
$$F = F_{To} \sin(\omega t + \vartheta)$$

Response
$$\mu = \mu_o \sin\omega t$$
$$F = F_o \sin\omega t$$

Own Pulsation: $\omega_o = \sqrt{\frac{k}{M}}$ for $C \cong 0$

and natural frequency of $f_o = \frac{1}{2\cdot\pi}\sqrt{\frac{k}{M}}$

The damping parameters are: $C_C = 2\cdot\sqrt{kM}$

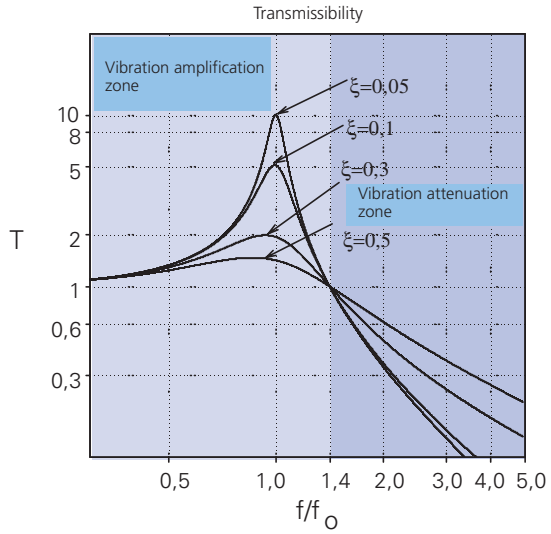
Where Cc is the critical damping and $\xi = \frac{C}{C_C}$ the damping coefficient.

For this system we obtain a transmissibility T and a magnification factor A:

$$T = \frac{x_o}{\mu_o} = \frac{F_{TO}}{F_O} = \sqrt{\frac{1+\left(2\cdot\xi\cdot\frac{\omega}{\omega_o}\right)^2}{\left(1-\frac{\omega^2}{\omega_o^2}\right)^2+\left(2\cdot\xi\cdot\frac{\omega}{\omega_o}\right)^2}}$$

For the case of active $T = \frac{F_{TO}}{F_O}$ and passive isolations, we will have to $T = \frac{x_o}{\mu_o}$

Figure 5 represents the transmissibility curve of the schematic mass spring system of figure 3.



Examining this curve allows us to reach basic conclusions for an effective isolation.

If the frequency of excitation is $\sqrt{2}$ times less the natural frequency, transmissibility is greater than one, then the force transmitted is greater than the excitation force, there is magnification of the vibrations. When we work in this area, the existing damping in the system is important. The greater the latter, the smaller the magnification of the vibrations will be.

If the frequency of excitation is $\sqrt{2}$ times greater than the natural frequency, transmissibility is less than one, or in other words the force transmitted is less than the force originated in the system, then we are in the damping area.

In order to achieve the greatest isolation, the lowest possible natural frequencies should be sought. There are two ways of doing this:

- By increasing the system mass.
- By reducing the stiffness of the anti-vibration mount.

To increase the efficacy of the isolation in the damping area, it is advisable to have low damping, although weak damping generates greater displacement when passing through the resonance, it is advisable to use a damping coefficient t so that passage through the resonance does not give rise to inadmissible displacement for the machine.

STATIC AND DYNAMIC STIFFNESS

All elastomers suffer dynamic stiffening but metallic springs have a very low dynamic stiffening due to the low internal friction of the metals.Therefore we can consider that the springs have identical static and dynamic stiffness.

DAMPING

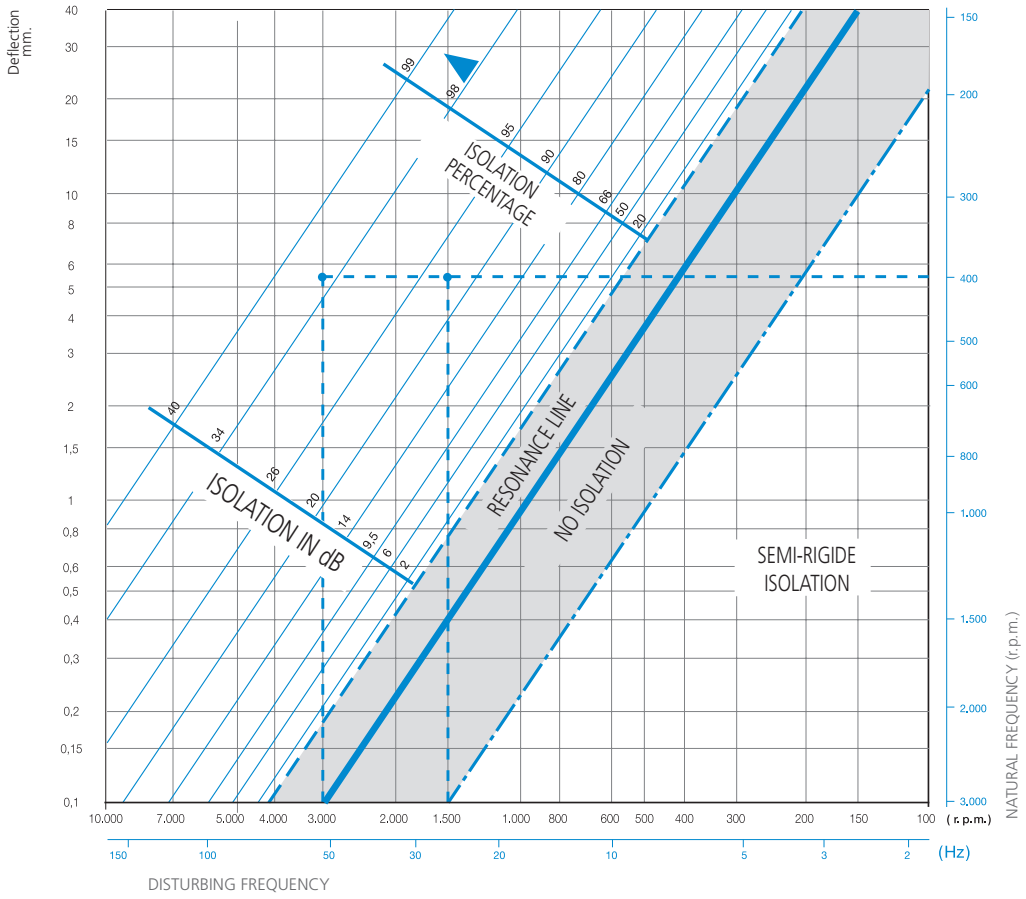
The metallic springs have very low damping. As we have mentioned previously, the metal spring coils, do not show any internal friction and therefore there is no energy dissipation through this phenomenon.

Dynamic laboratory tests have shown in practice that the damping for this kind of mounts is almost null and this is the reason why these mounts have been combined with viscous dampers for applications where more damping is demanded. For example genset suspensions.

CREEPING AND LONG-TERM BEHAVIOUR

The spring mounts do not have the creeping and continuous increase of deflection all elastomers have, but spring coils have also certain relaxation that depend on the applied load and the temperature. The higher the load and temperature are, the higher is the relaxation. Temperatures above 80ºC and high loads, may cause a small loss of height in the spring. This set is always lower than the usual values of elastomers.

VIBRATION ISOLATION GRAPH



THEORY OF VIBRATION ISOLATION

1.- DYNAMIC TESTING MACHINE

Dynamic stiffness can only be established by measurement on a dynamic test bench. Similarly, the damping coefficients of compounds are further values that can be measured with this type of machines.

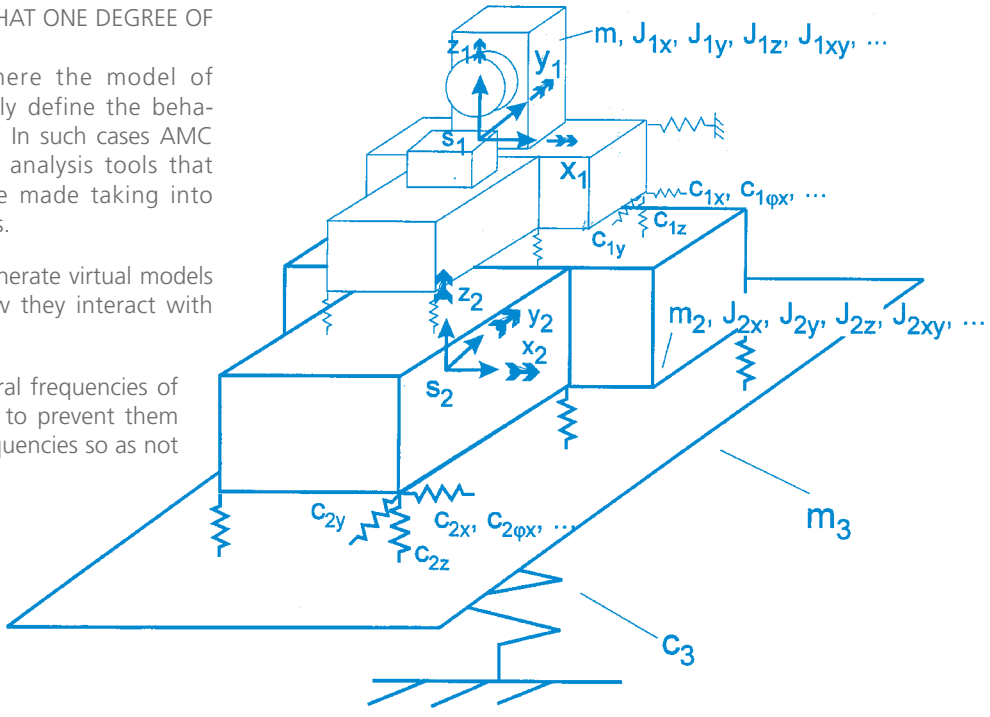
One concept that must be taken into account when designing an anti-vibration mount is its durability. A dynamic testing machine allows us to conduct fatigue tests that reproduce the real working conditions of the part so that its useful life can thus be predicted.

2.- ANALYSIS OF SYSTEMS OF MORE THAT ONE DEGREE OF FREEDOM

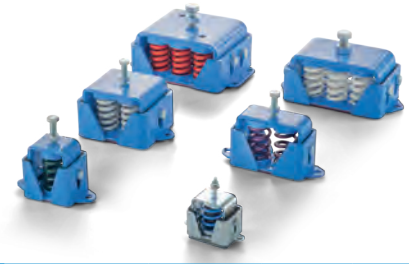
In actual fact, there are cases where the model of 1 degree of freedom cannot correctly define the behaviour of the equipment to be isolated. In such cases AMC MECANOCAUCHO® engineers have analysis tools that enable more elaborate models to be made taking into account the 6 Degrees of Freedom rules.

The latest computing tools can also generate virtual models of solid rigid multiples and study how they interact with each other and with the environment.

As a result, we can ascertain the natural frequencies of the system which are really important to prevent them from coinciding with the excitation frequencies so as not to have resonance problems.

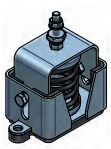
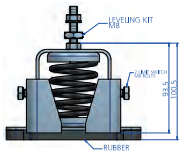


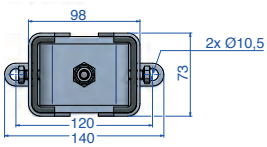
AMC ANTI-SEISMIC SUPPORTS



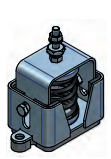
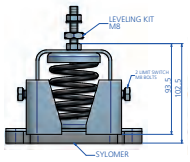
These spring mounts incorporate an ANTISEISMIC device to protect the spring from earthquakes.

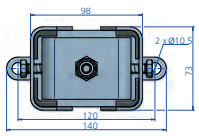
Natural Frequency 5 to 6 Hz

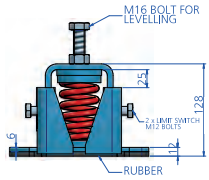


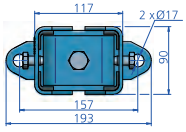
Type	Spring color	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
ANTI-SEISMIC MINI	BLACK	0	8	**21278**	3,3
	BLACK	1,12	15	**21270**	8,5
	BLACK	1,12	25	**21271**	12
	BLUE	1,13	50	**21272**	28
	GREY	1,15	75	**21273**	38
	BEIGE	1,17	100	**21274**	52
	WHITE	1,2	125	**21275**	58
	BLACK	1,23	150	**21276**	79
	RED	1,12	250	**21277**	130

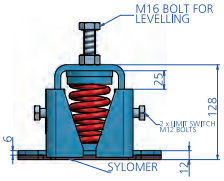


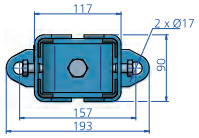
Type	Spring color	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
ANTI-SEISMIC MINI + SYLOMER	BLACK	1	8	**21224**	3,3
	BLACK	1,12	15	**21222**	8,5
	BLACK	1,12	25	**21261**	12
	BLUE	1,13	50	**21262**	28
	GREY	1,15	75	**21263**	38
	BEIGE	1,17	100	**21264**	52
	WHITE	1,2	125	**21265**	58
	BLACK	1,23	150	**21266**	79
	RED	1,12	250	**21267**	130

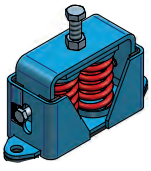
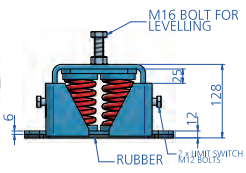


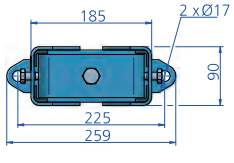
Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
1 AMC ANTI-SEISMIC	1	YELLOW	22	3,45	200	**20410**	92
	1	PURPLE	22	3,155	305	**20409**	146
	1	GREEN	22	3,204	405	**20381**	166
	1	GREY	22	3,318	540	**20382**	255
	1	WHITE	22	3,248	612	**20383**	278
	1	RED	22	3,414	803	**20384**	392

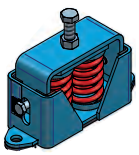
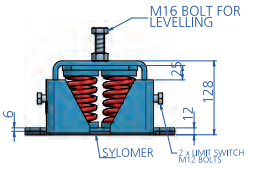


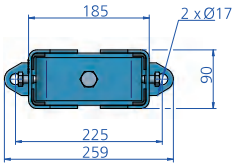
Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
1 AMC ANTI-SEISMIC + SYLOMER	1	YELLOW	22	3,191	200	**20338**	92
	1	PURPLE	22	3,191	305	**20413**	146
	1	GREEN	22	3,686	405	**20377**	166
	1	GREY	22	3,284	540	**20378**	255
	1	WHITE	22	3,284	612	**20379**	278
	1	RED	22	3,449	803	**20380**	392

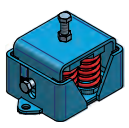
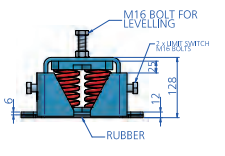


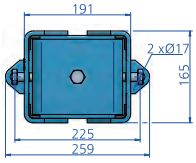
Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
2 AMC ANTI-SEISMIC	2	YELLOW	22	4,819	400	**20529**	185
	2	PURPLE	22	4,819	610	**20494**	291
	2	GREEN	22	4,919	810	**20496**	331
	2	GREY	22	5,011	1080	**20497**	509
	2	WHITE	22	5,142	1224	**20498**	567
	2	RED	22	5,337	1606	**20500**	784

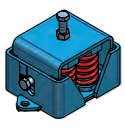
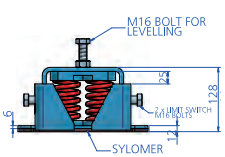


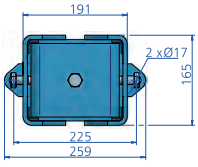
Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
2 AMC ANTI-SEISMIC + SYLOMER	2	YELLOW	22	4,869	400	**20528**	185
	2	PURPLE	22	4,869	610	**20480**	291
	2	GREEN	22	4,97	810	**20487**	331
	2	GREY	22	5,192	1080	**20488**	509
	2	WHITE	22	5,06	1224	**20489**	567
	2	RED	22	5,386	1606	**20490**	784



Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
4 AMC ANTI-SEISMIC	4	YELLOW	22	10,75	800	**20679**	369
	4	PURPLE	22	10,75	1220	**20700**	582
	4	GREEN	22	10,894	1620	**20696**	662
	4	GREY	22	10,75	2160	**20697**	1018
	4	WHITE	22	10,965	2448	**20698**	1134
	4	RED	22	11,69	3212	**20699**	1567



Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
4 AMC ANTI-SEISMIC + SYLOMER	4	YELLOW	22	10,54	800	**20680**	369
	4	PURPLE	22	10,54	1220	**20686**	582
	4	GREEN	22	10,84	1620	**20687**	662
	4	GREY	22	10,689	2160	**20688**	1018
	4	WHITE	22	10,689	2448	**20689**	1134
	4	RED	22	11,636	3212	**20690**	1567

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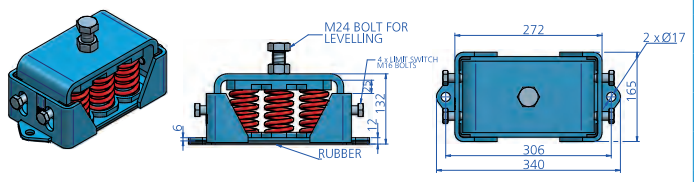
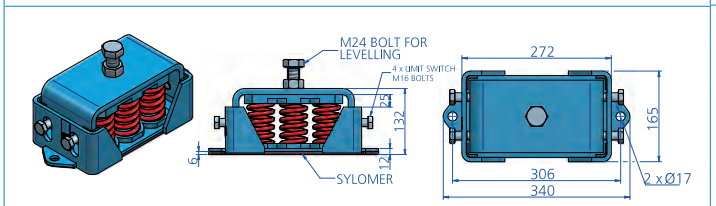
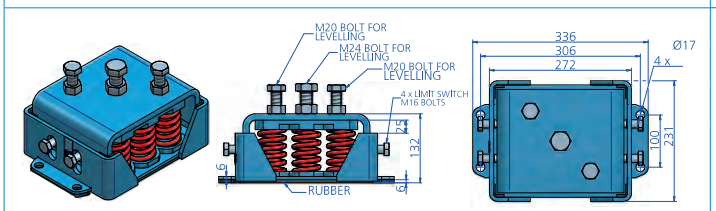
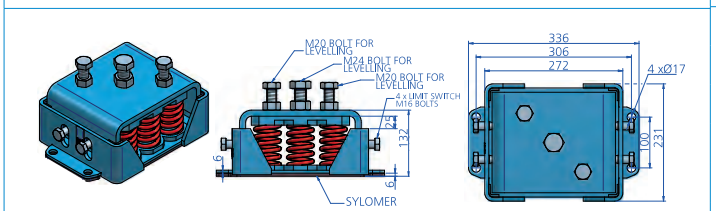
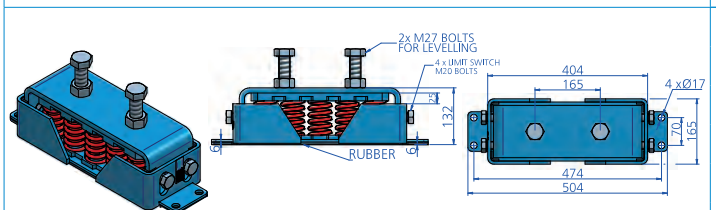
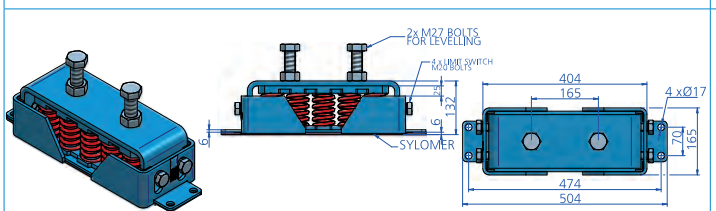
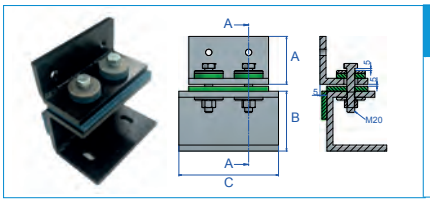
Brossard, Qc.
J4Y 0E4

Contrôle
Bruits
Vibrations
Vibrations
Noises
Control

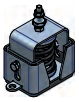
	Type	No. Springs	Spring color	Deflection mm	Weight (kg)	Max. Load (kg)	Code	K (N/mm)
	6 AMC ANTI-SEISMIC	6	YELLOW	22	15,45	1200	**20749**	554
		6	PURPLE	22	15,45	1830	**20761**	874
		6	GREEN	22	15,45	2430	**20762**	994
		6	GREY	22	15,45	3240	**20763**	1528
		6	WHITE	22	15,521	3672	**20764**	1702
		6	RED	22	16,553	4818	**20765**	2351
	6 AMC ANTI-SEISMIC + SYLOMER	6	YELLOW	22	14,829	1200	**20750**	554
		6	PURPLE	22	14,829	1830	**20766**	874
		6	GREEN	22	15,279	2430	**20767**	994
		6	GREY	22	15,957	3240	**20768**	1528
		6	WHITE	22	15	3672	**20769**	1702
		6	RED	22	16,473	4818	**20770**	2351
	9 AMC ANTI-SEISMIC	9	YELLOW	22	21,598	1800	**20959**	831
		9	PURPLE	22	21,598	2745	**20961**	1310
		9	GREEN	22	22,273	3645	**20962**	1490
		9	GREY	22	23,29	4860	**20963**	2291
		9	WHITE	22	22,516	5508	**20964**	2552
		9	RED	22	24,064	7227	**20965**	3526
	9 AMC ANTI-SEISMIC + SYLOMER	9	YELLOW	22	21,483	1800	**20990**	831
		9	PURPLE	22	21,483	2745	**20992**	1310
		9	GREEN	22	22,158	3645	**20993**	1490
		9	GREY	22	23,175	4860	**20994**	2291
		9	WHITE	22	22,401	5508	**20995**	2552
		9	RED	22	23,949	7227	**20996**	3526
	10 AMC ANTI-SEISMIC	10	YELLOW	22	24,228	2000	**20849**	923
		10	PURPLE	22	24,228	3050	**20894**	1456
		10	GREEN	22	24,978	4050	**20895**	1656
		10	GREY	22	26,108	5400	**20896**	2546
		10	WHITE	22	25,248	6120	**20897**	2836
		10	RED	22	26,968	8030	**20898**	3918
	10 AMC ANTI-SEISMIC + SYLOMER	10	YELLOW	22	24,089	2000	**20850**	923
		10	PURPLE	22	24,089	3050	**20852**	1456
		10	GREEN	22	24,839	4050	**20853**	1656
		10	GREY	22	25,969	5400	**20854**	2546
		10	WHITE	22	24,766	6120	**20855**	2836
		10	RED	22	26,829	8030	**20856**	3918

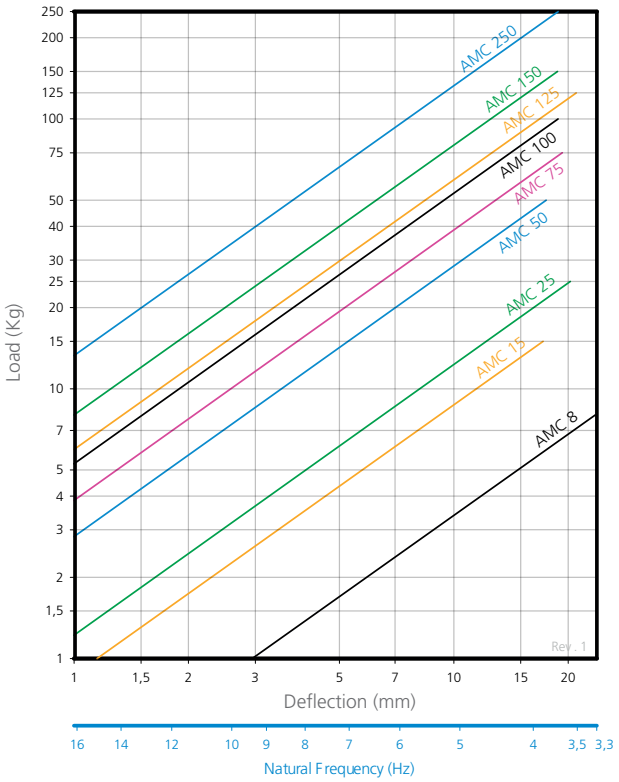


Type	SUMMARY	Code	Weight (kg)
SNUBBER 4 ANTI-SEISMIC	Dimensions A, B, C and D could vary according to the selected mount and the characteristics of the frame	**22000**	0

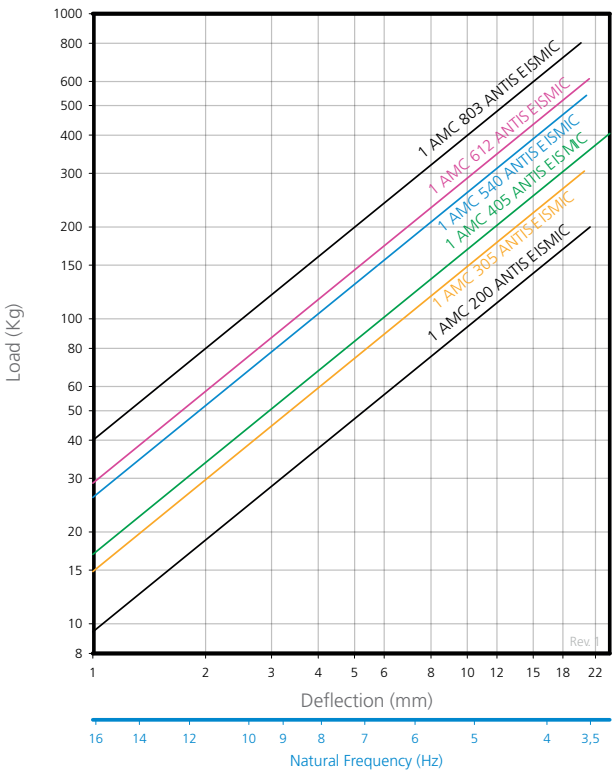
AMC ANTI-SEISMIC SUPPORTS. ELASTIC PROPERTIES

LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® Antiseismic mini

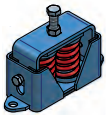


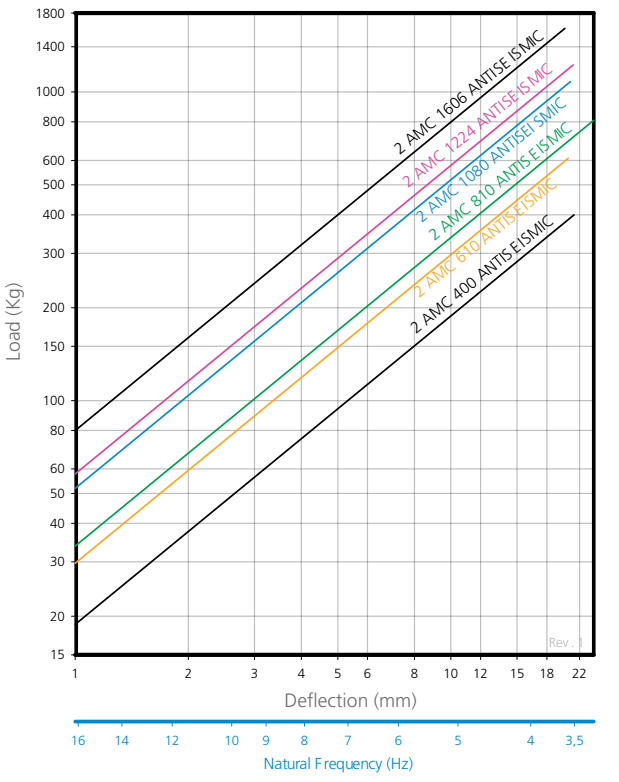


LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 1 AMC Antiseismic mount

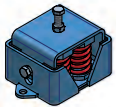


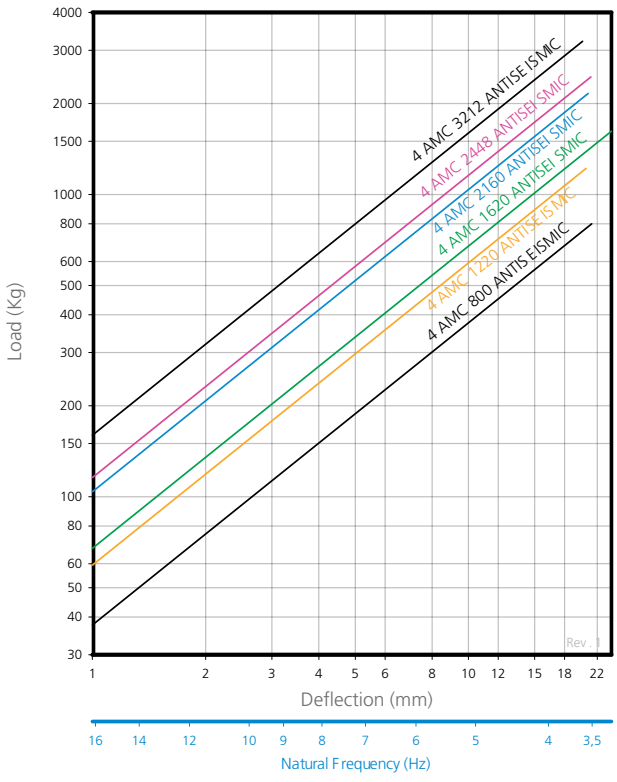
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 2 AMC Antiseismic mount





LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 4 AMC Antiseismic mount





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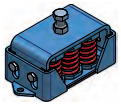
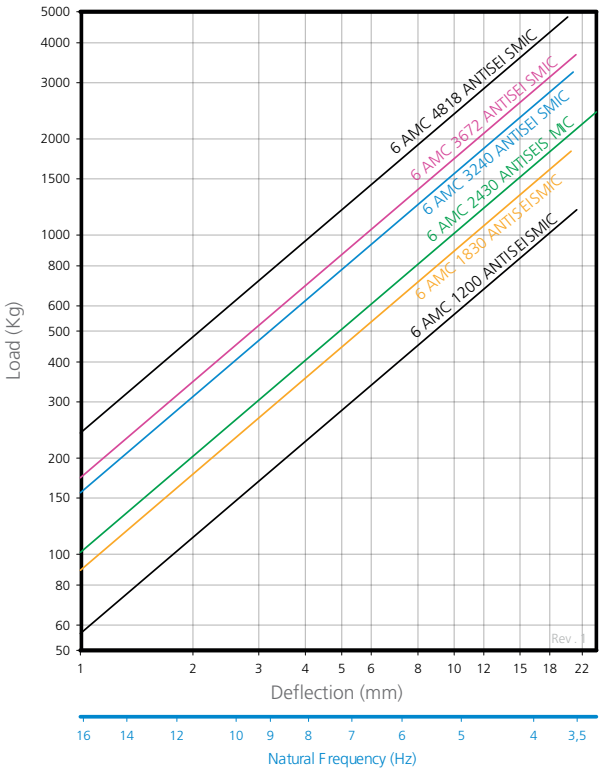
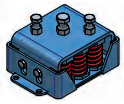
Brossard, Qc.
J4Y 0E4
Contrôle Bruits Vibrations
Vibrations Noises Control

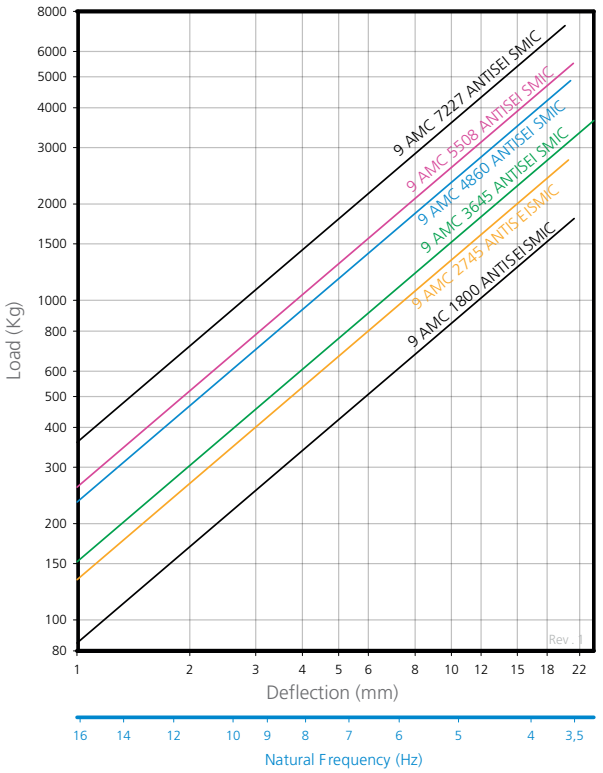
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 6 AMC Antiseismic mount



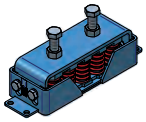


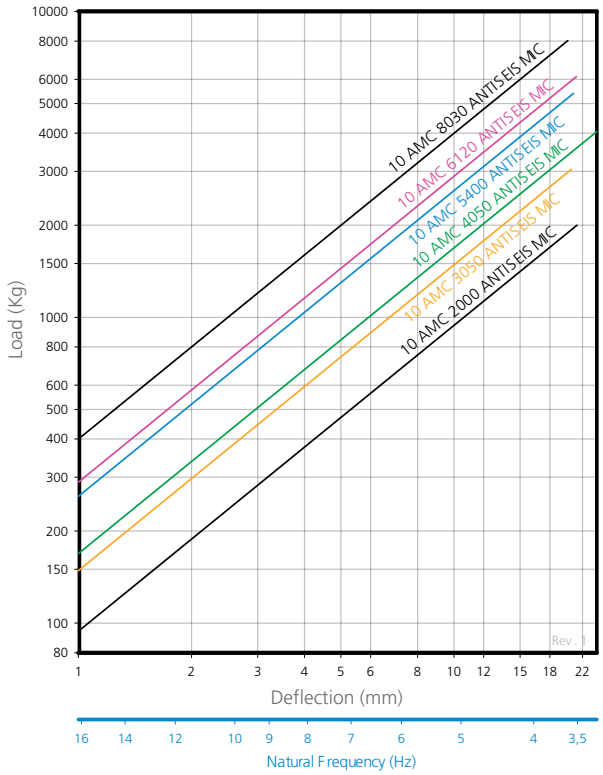
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 9 AMC Antiseismic mount





LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 10 AMC Antiseismic mount



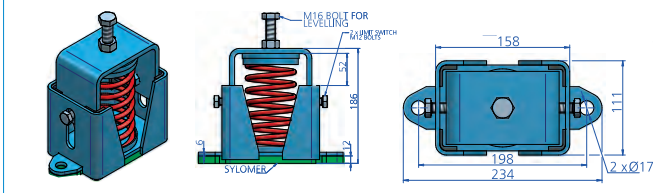


VSH ANTI-SEISMIC SUPPORTS

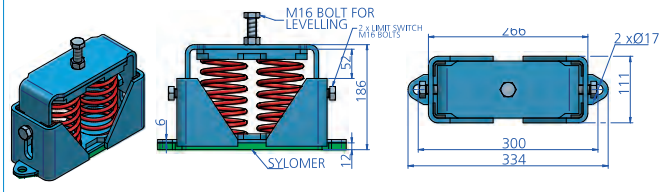
This range of mounts comprises:

- A spring high elasticity and very low natural frequency
- An incorporated levelling system
- A non-slip rubber base
- A spare Sylomer to isolate mid and high frequencies comes standard

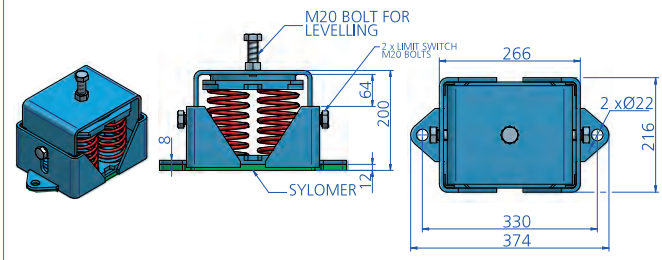
Natural Frequency 3 to 5 Hz



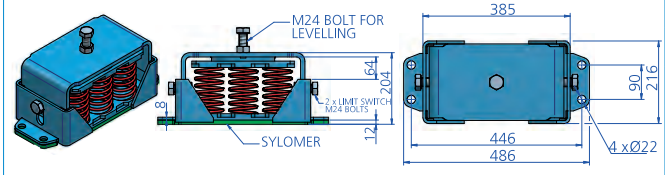
Type	Spring color	Load (kg)	Weight (kg)	Code	K (N/mm)
1V-SH-67 ANTI SEISMIC + SYLOMER	BLUE	67	5,759	**20653**	13
1V-SH-95 ANTI SEISMIC + SYLOMER	WHITE	95	5,816	**20654**	19
1V-SH-123 ANTI SEISMIC + SYLOMER	BLACK	123	5,84	**20655**	25
1V-SH-173 ANTI SEISMIC + SYLOMER	BEIGE	173	5,93	**20656**	35
1V-SH-223 ANTI SEISMIC + SYLOMER	RED	223	6,301	**20657**	43
1V-SH-335 ANTI SEISMIC + SYLOMER	GREY	335	6,502	**20658**	68
1V-SH-446 ANTI SEISMIC + SYLOMER	GREEN	446	6,768	**20659**	88
1V-SH-700 ANTI SEISMIC + SYLOMER	BROWN	700	6,768	**20661**	150



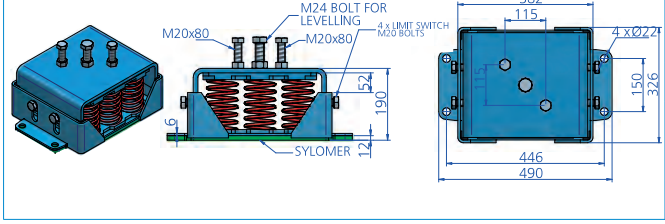
Type	Spring color	Load (kg)	Weight (kg)	Code	K (N/mm)
2V-SH-134 ANTI SEISMIC + SYLOMER	BLUE	134	10,423	**20587**	27
2V-SH-190 ANTI SEISMIC + SYLOMER	WHITE	190	10,537	**20588**	37
2V-SH-246 ANTI SEISMIC + SYLOMER	BLACK	246	10,648	**20589**	50
2V-SH-346 ANTI SEISMIC + SYLOMER	BEIGE	346	10,648	**20590**	69
2V-SH-446 ANTI SEISMIC + SYLOMER	RED	446	11,507	**20591**	86
2V-SH-670 ANTI SEISMIC + SYLOMER	GREY	670	11,909	**20592**	137
2V-SH-892 ANTI SEISMIC + SYLOMER	GREEN	892	12,441	**20593**	176
2V-SH-1400 ANTI SEISMIC + SYLOMER	BROWN	1400	12,441	**20594**	301



Type	Spring color	Load (kg)	Weight (kg)	Code	K (N/mm)
4V-SH-268 ANTI SEISMIC + SYLOMER	BLUE	268	19,909	**20752**	54
4V-SH-380 ANTI SEISMIC + SYLOMER	WHITE	380	20,137	**20753**	74
4V-SH-492 ANTI SEISMIC + SYLOMER	BLACK	492	20,233	**20754**	100
4V-SH-692 ANTI SEISMIC + SYLOMER	BEIGE	692	20,593	**20755**	138
4V-SH-892 ANTI SEISMIC + SYLOMER	RED	892	22,077	**20756**	172
4V-SH-1340 ANTI SEISMIC + SYLOMER	GREY	1340	22,881	**20757**	274
4V-SH-1784 ANTI SEISMIC + SYLOMER	GREEN	1784	23,945	**20758**	351
4V-SH-2800 ANTI SEISMIC + SYLOMER	BROWN	2800	29	**20759**	601



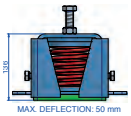
Type	Spring color	Load (kg)	Weight (kg)	Code	K (N/mm)
6V-SH-402 ANTI SEISMIC + SYLOMER	BLUE	402	30,076	**20861**	80
6V-SH-570 ANTI SEISMIC + SYLOMER	WHITE	570	30,418	**20862**	112
6V-SH-738 ANTI SEISMIC + SYLOMER	BLACK	738	30,562	**20863**	149
6V-SH-1038 ANTI SEISMIC + SYLOMER	BEIGE	1038	31,102	**20864**	208
6V-SH-1338 ANTI SEISMIC + SYLOMER	RED	1338	33,328	**20865**	258
6V-SH-2010 ANTI SEISMIC + SYLOMER	GREY	2010	34,534	**20866**	410
6V-SH-2676 ANTI SEISMIC + SYLOMER	GREEN	2676	36,13	**20867**	527
6V-SH-4200 ANTI SEISMIC + SYLOMER	BROWN	4200	36,13	**20868**	902

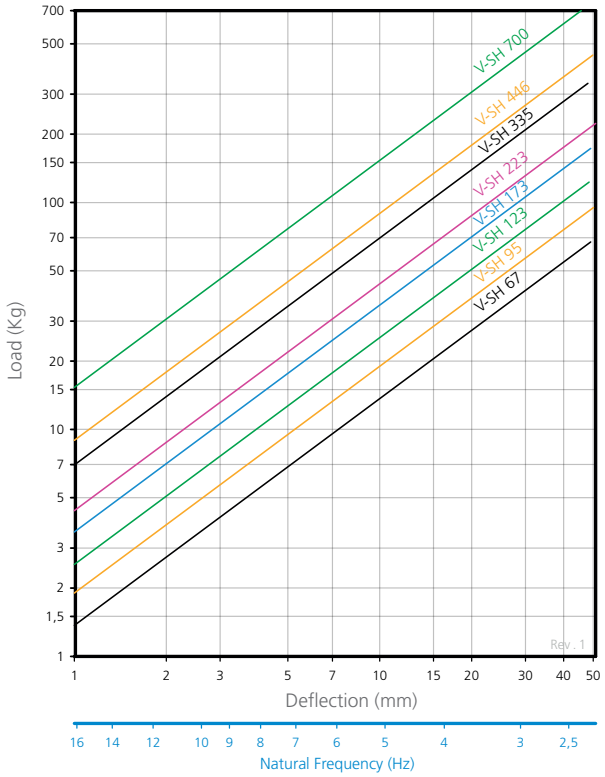


Type	Spring color	Load (kg)	Weight (kg)	Code	K (N/mm)
9V-SH-603 ANTI SEISMIC + SYLOMER	BLUE	603	46,273	**20887**	121
9V-SH-855 ANTI SEISMIC + SYLOMER	WHITE	855	46,786	**20888**	167
9V-SH-1107 ANTI SEISMIC + SYLOMER	BLACK	1107	47,002	**20889**	224
9V-SH-1557 ANTI SEISMIC + SYLOMER	BEIGE	1557	47,812	**20890**	311
9V-SH-2007 ANTI SEISMIC + SYLOMER	RED	2007	51,151	**20891**	387
9V-SH-3015 ANTI SEISMIC + SYLOMER	GREY	3015	52,96	**20892**	616
9V-SH-4014 ANTI SEISMIC + SYLOMER	GREEN	4014	55,354	**20893**	790
9V-SH-6300 ANTI SEISMIC + SYLOMER	BROWN	6300	55,354	**20900**	1353

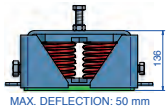
VSH ANTI-SEISMIC SUPPORTS. ELASTIC PROPERTIES

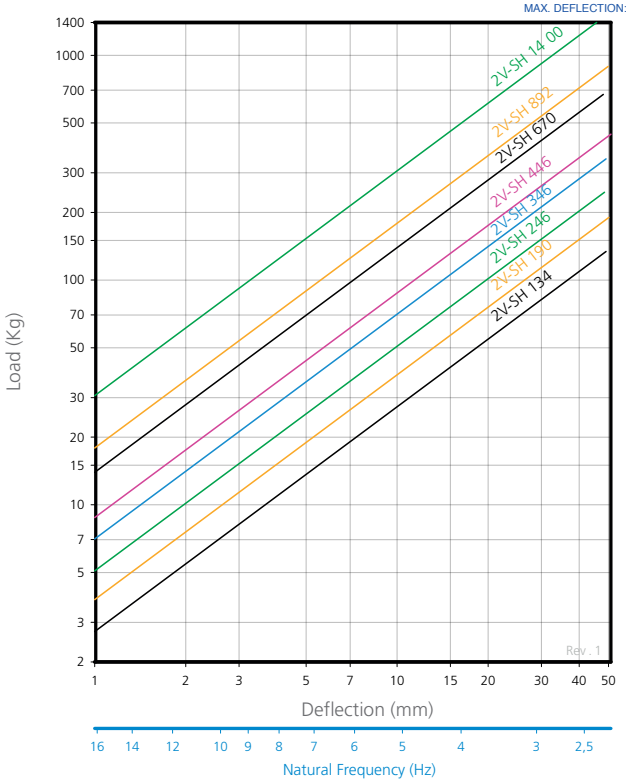
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 1 AMC Antiseismic V-SH



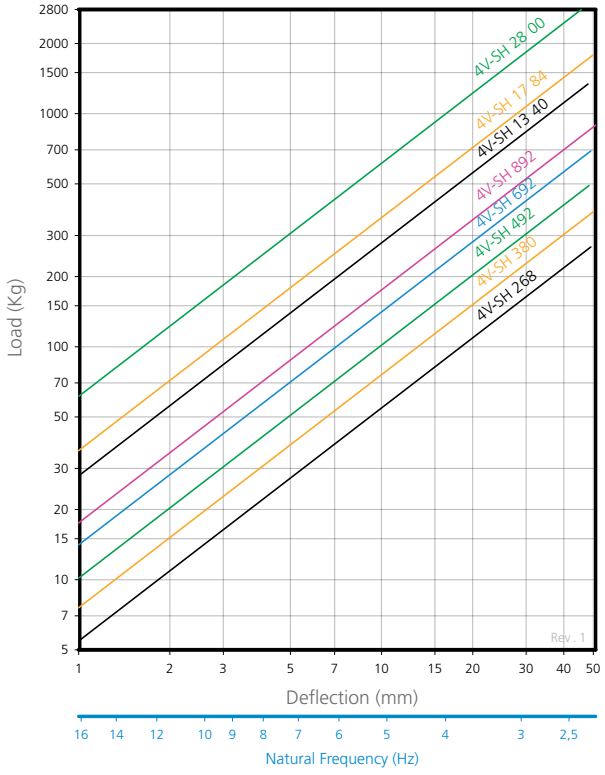


LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 2 AMC Antiseismic V-SH

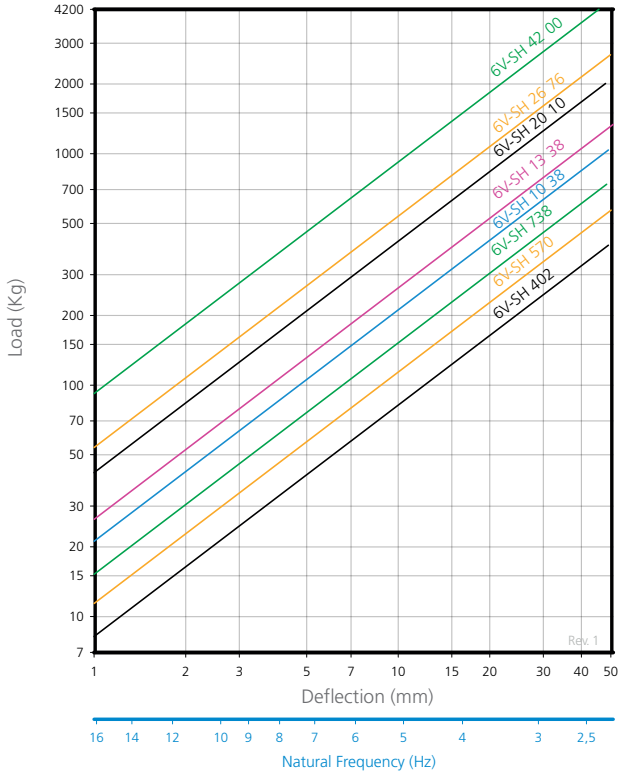




LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 4 AMC Antiseismic V-SH

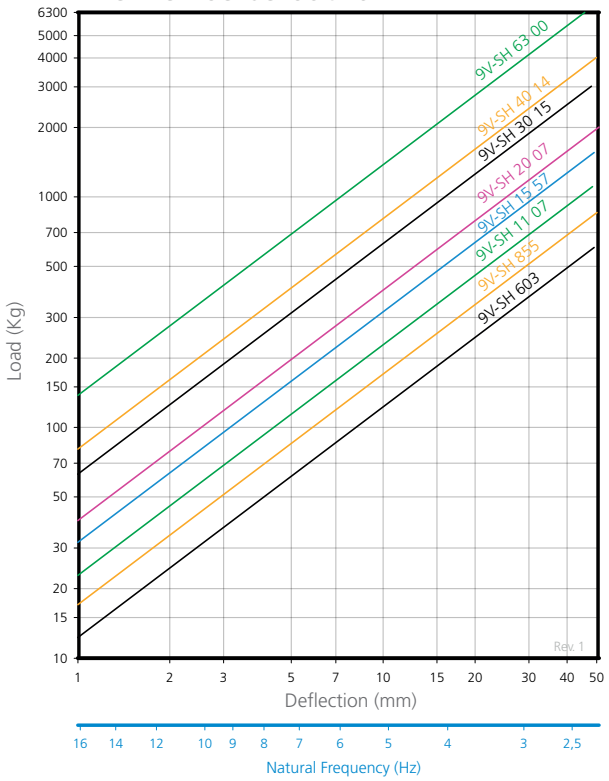


LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 6 AMC Antiseismic V-SH



LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 9 AMC Antiseismic V-SH

MAX. DEFLECTION: 50mm



VSR ANTI-SEISMIC SUPPORTS

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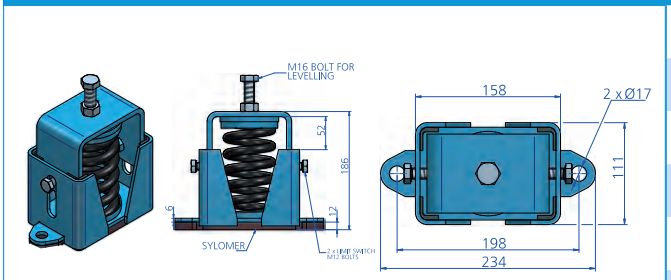
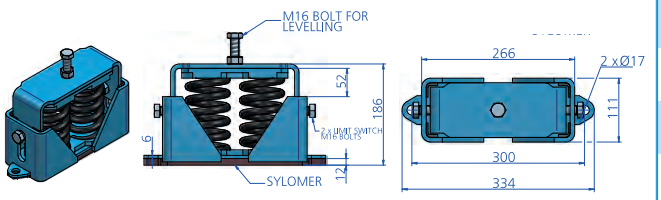
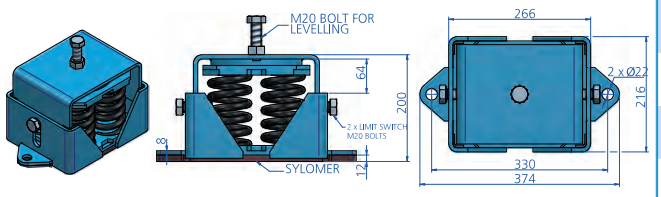
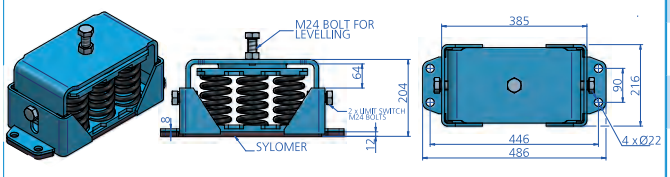
- An incorporated levelling system
- A non-slip rubber base
- A spare Sylomer to isolate mid and high frequencies comes standard

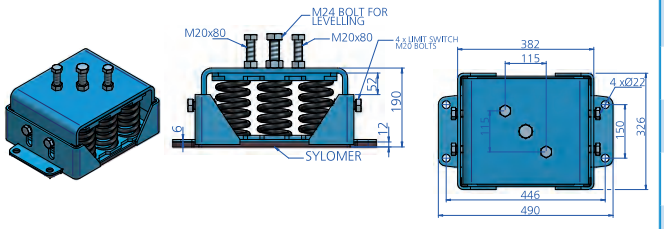
Natural Frequency 3 to 5 Hz







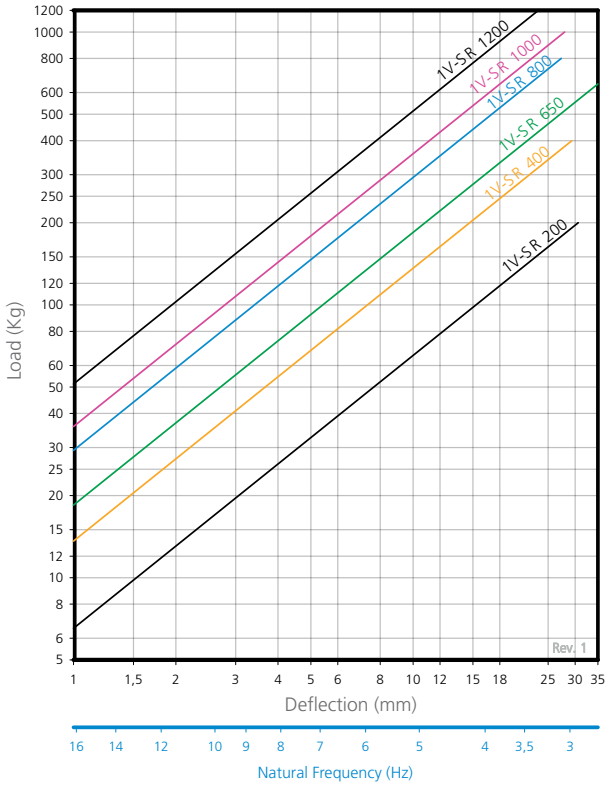




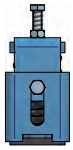
Type	Spring color	Load (kg)	Weight (kg)	Code	K (N/mm)
V-SR-200 ANTI SEISMIC + SYLOMER®	BLACK	200	5,72	**21340**	64
V-SR-400 ANTI SEISMIC + SYLOMER®	BLACK	400	0	**21341**	134
V-SR-650 ANTI SEISMIC + SYLOMER®	BLACK	650	6,715	**20502**	181
V-SR-800 ANTI SEISMIC + SYLOMER®	BLACK	800	6,74	**20503**	287
V-SR-1000 ANTI SEISMIC + SYLOMER®	BLACK	1000	7,045	**20504**	351
V-SR-1200 ANTI SEISMIC + SYLOMER®	BLACK	1200	7,119	**20505**	503
2V-SR-400 ANTI SEISMIC + SYLOMER®	BLACK	400	0	**21342**	128
2V-SR-800 ANTI SEISMIC + SYLOMER®	BLACK	800	0	**21343**	267
2V-SR-1300 ANTI SEISMIC + SYLOMER®	BLACK	1300	12,335	**20506**	362
2V-SR-1600 ANTI SEISMIC0 + SYLOMER®	BLACK	1600	12,385	**20507**	575
2V-SR-2000 ANTI SEISMIC + SYLOMER®	BLACK	2000	12,995	**20508**	702
2V-SR-2400 ANTI SEISMIC + SYLOMER®	BLACK	2400	13,143	**20509**	1007
4V-SR-800 ANTI SEISMIC + SYLOMER®	BLACK	800	23,4	**21344**	256
4V-SR-1600 ANTI SEISMIC + SYLOMER®	BLACK	1600	24,5	**21345**	535
4V-SR-2600 ANTI SEISMIC + SYLOMER®	BLACK	2600	23,733	**21141**	724
4V-SR-3200 ANTI SEISMIC + SYLOMER®	BLACK	3200	23,833	**21142**	1150
4V-SR-4000 ANTI SEISMIC + SYLOMER®	BLACK	4000	27,66	**21143**	1404
4V-SR-4800 ANTI SEISMIC + SYLOMER®	BLACK	4800	25,349	**21144**	2013
6V-SR-1200 ANTI SEISMIC + SYLOMER®	BLACK	1200	0	**21346**	384
6V-SR-2400 ANTI SEISMIC + SYLOMER®	BLACK	2400	0	**21347**	802
6V-SR-3900 ANTI SEISMIC + SYLOMER®	BLACK	3900	35,812	**20877**	1086
6V-SR-4800 ANTI SEISMIC + SYLOMER®	BLACK	4800	35,962	**20878**	1724
6V-SR-6000 ANTI SEISMIC + SYLOMER®	BLACK	6000	37,792	**20879**	2107
6V-SR-7200 ANTI SEISMIC + SYLOMER®	BLACK	7200	38,236	**20880**	3020
9V-SR-1800 ANTI SEISMIC + SYLOMER®	BLACK	1800	0	**21348**	576
9V-SR-3600 ANTI SEISMIC + SYLOMER®	BLACK	3600	54,877	**21349**	1203
9V-SR-5850 ANTI SEISMIC + SYLOMER®	BLACK	5850	54,877	**20952**	1629
9V-SR-7200 ANTI SEISMIC + SYLOMER®	BLACK	7200	55,102	**20953**	2587
9V-SR-9000 ANTI SEISMIC + SYLOMER®	BLACK	9000	57,847	**20954**	3160
9V-SR-10800 ANTI SEISMIC + SYLOMER®	BLACK	10800	58	**20955**	4530

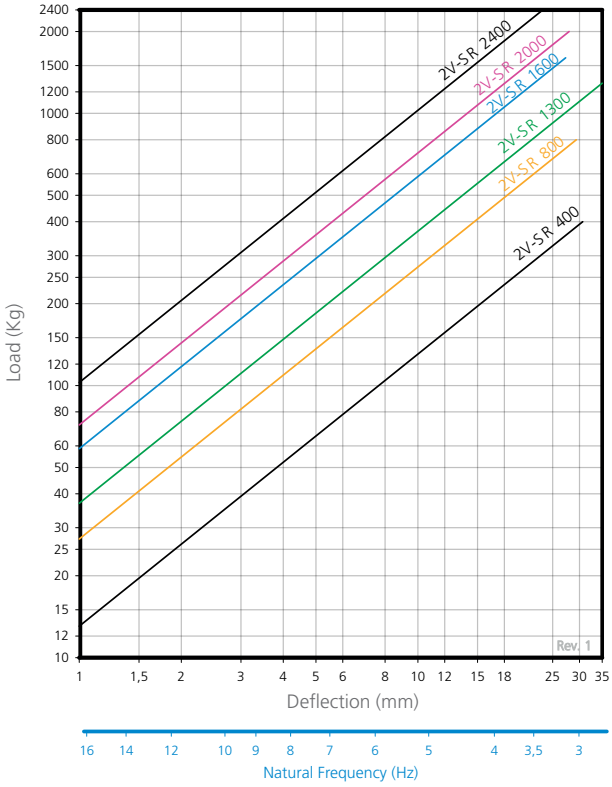
VSR ANTI-SEISMIC SUPPORTS. ELASTIC PROPERTIES

LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 1 AMC Antiseismic V-SR

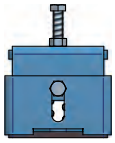


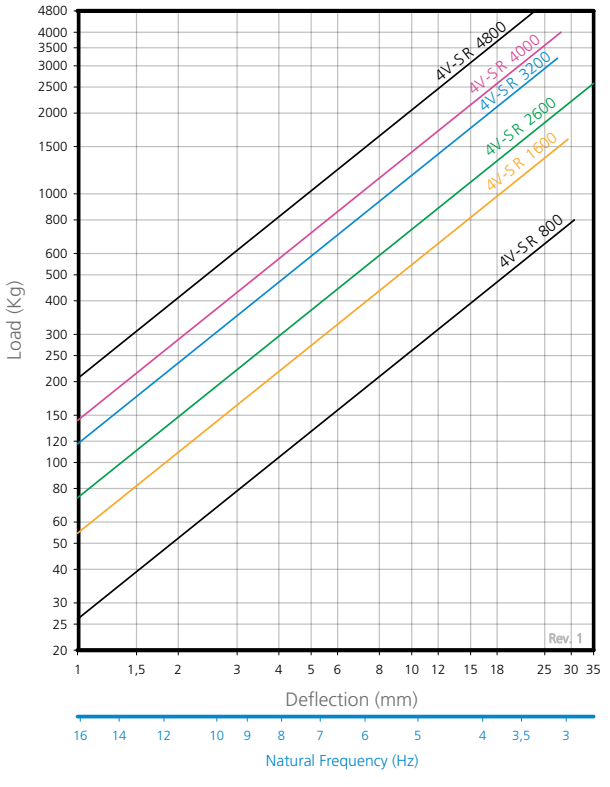
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 2 AMC Antiseismic V-SR



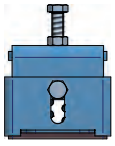


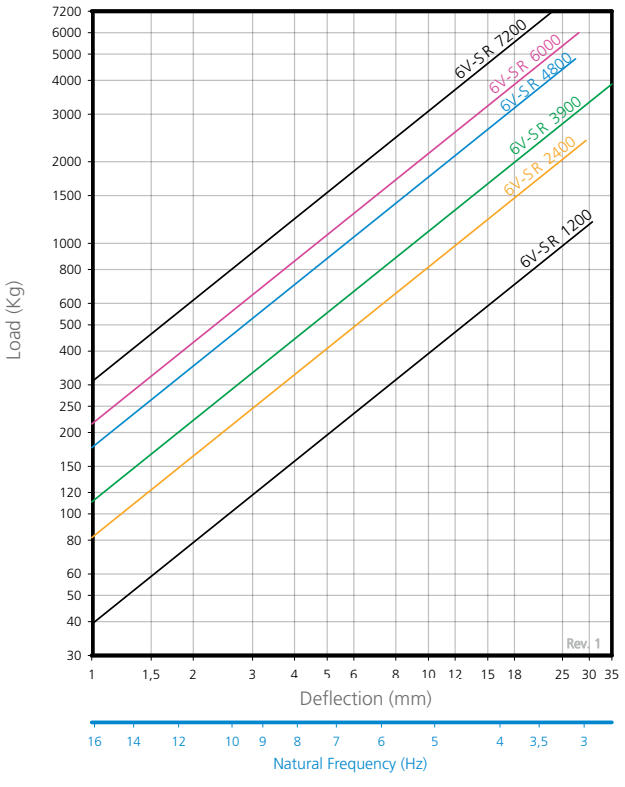
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 4 AMC Antiseismic V-SR



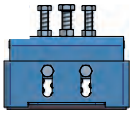


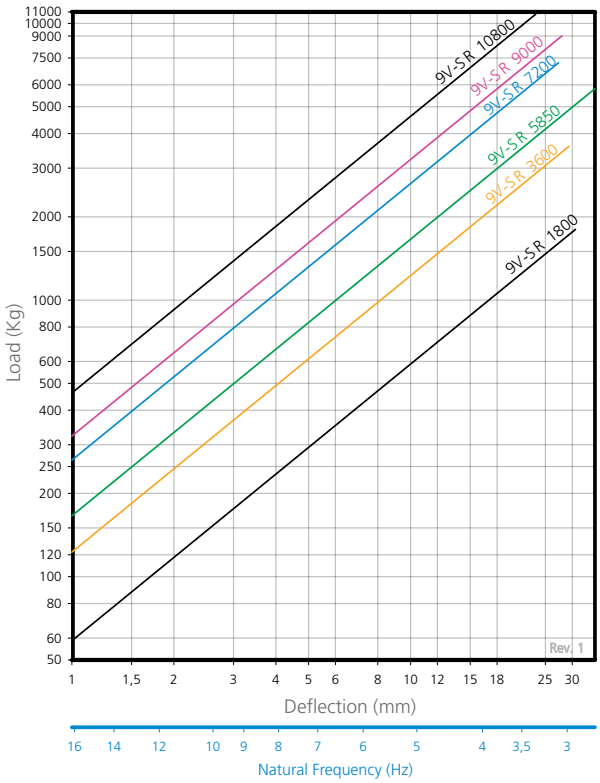
LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 6 AMC Antiseismic V-SR

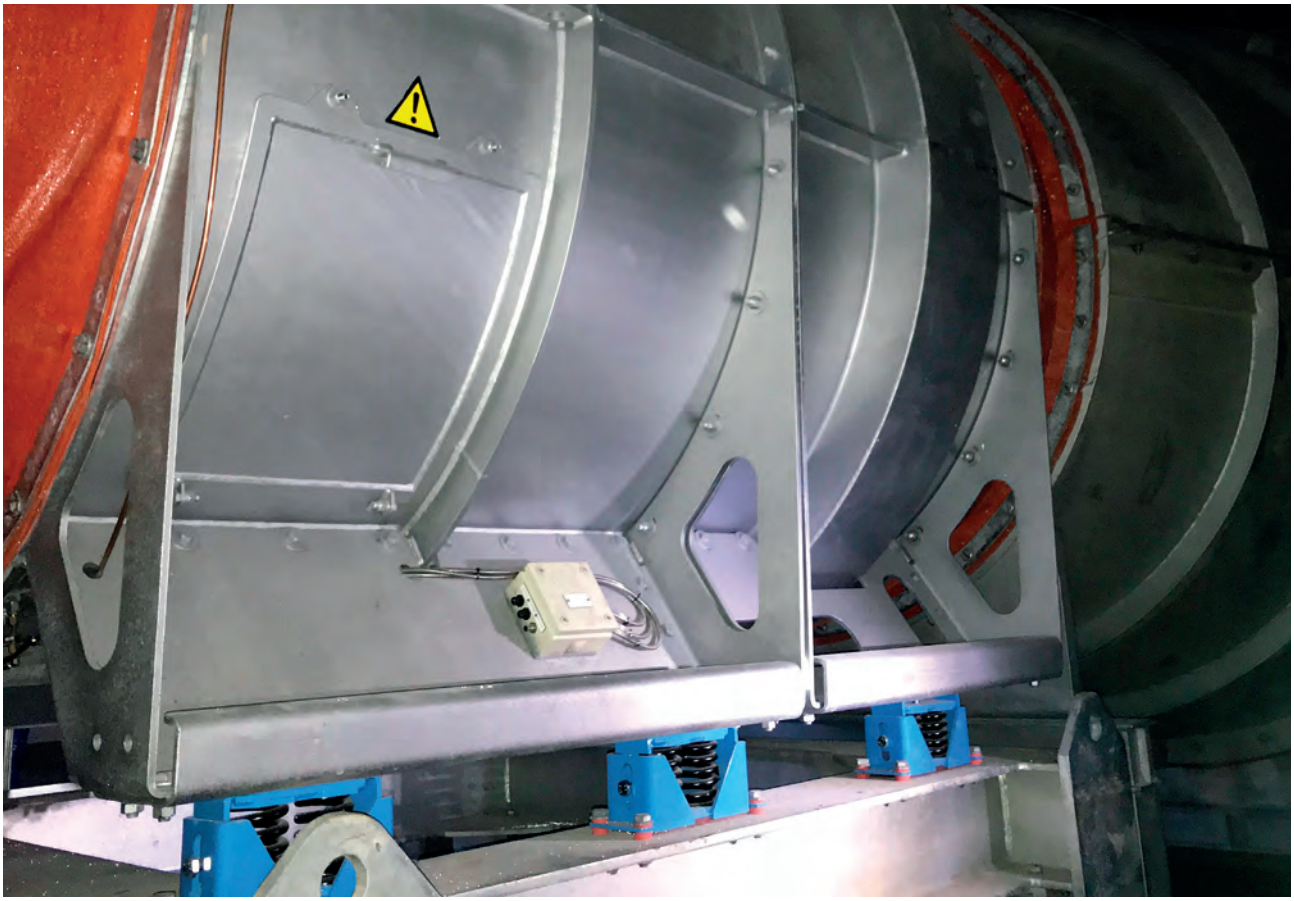




LOAD VS DEFLECTION DIAGRAM
AMC-MECANOCAUCHO® 9 AMC Antiseismic V-SR







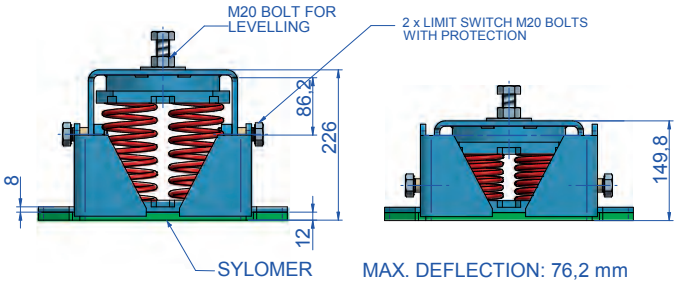
ANTI-SEISMIC SUPPORT PRELOADABLE 4V-SX

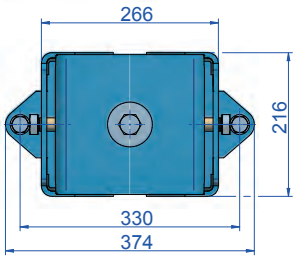
V-SX mounts are capable of reaching very low natural frequencies, from 2 to 3Hz. In addition, this mount incorporates a Sylomer® mat, also providing good isolation at mid-high frequencies. Thanks to this spring-Sylomer® combination, this mount can provide great isolation across the entire frequency range.

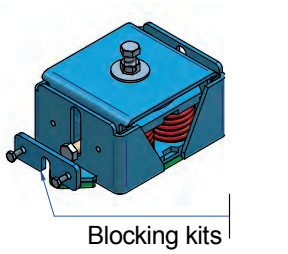
TECHNICAL CHARACTERISTICS

This range of supports consists of:

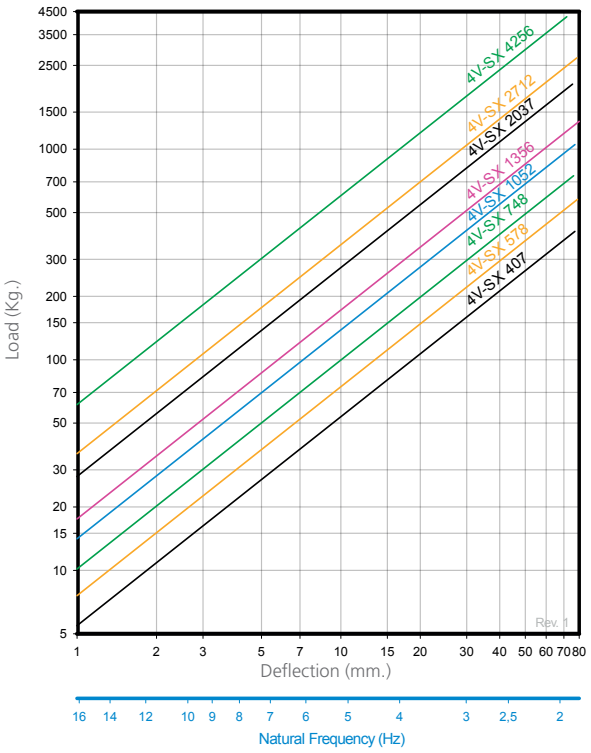
- A spring with high elasticity and very low natural frequency.
- An incorporated levelling system.
- An incorporated preload system.
- A Sylomer® pad under the mount base in order to isolate mid-high frequencies.







LOAD DEFLECTION CURVE
ANTI-SEISMIC SUPPORT PRELOADABLE 4V-SX

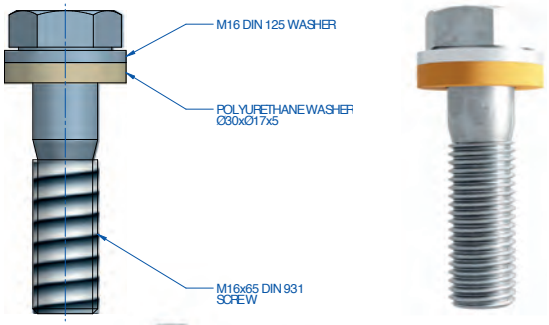


Type	Spring color	Load (kg)	Weight (kg)	K (N/mm)	Code
4V-SX 407 PRELOADABLE ANTI-SEISMIC + SYLOMER®	BLUE	407	32	53,6	**20802**
4V-SX 578 PRELOADABLE ANTI-SEISMIC + SYLOMER®	WHITE	578	32	74,4	**20803**
4V-SX 748 PRELOADABLE ANTI-SEISMIC + SYLOMER®	BLACK	748	32	99,6	**20804**
4V-SX 1052 PRELOADABLE ANTI-SEISMIC + SYLOMER®	BEIGE	1052	32	138,4	**20805**
4V-SX 1356 PRELOADABLE ANTI-SEISMIC + SYLOMER®	RED	1356	32	172	**20806**
4V-SX 2037 PRELOADABLE ANTI-SEISMIC + SYLOMER®	GREY	2037	32	273,6	**20800**
4V-SX 2712 PRELOADABLE ANTI-SEISMIC + SYLOMER®	GREEN	2712	32	351,2	**20807**
4V-SX 4256 PRELOADABLE ANTI-SEISMIC + SYLOMER®	BROWN	4256	32	601,2	**20808**

SYLOMER FIXATION KIT

The Sylomer washers allow a mechanical fixation avoiding structural borne noise.

Type	Code
1V-SR-SH/2V-SR-SH/4V-SX ANTI-SEISMIC	**708095**
4/6/9V-SR-SH ANTI-SEISMIC	**708096**
AMC ANTI-SEISMIC	**708097**
ANTI-SEISMIC MINI	**708098**
1 AMC/1V-SR/1V-SH + SYLOMER®	**708064**

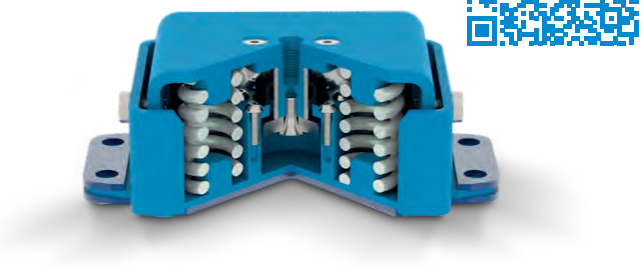


ANTI SEISMIC VISCO

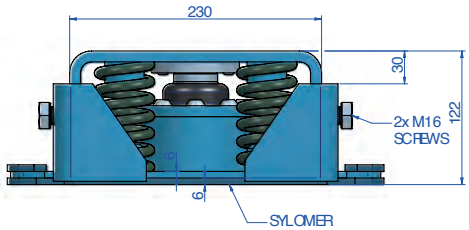
This spring mount is suitable for those applications that require greater vibration isolation and movement control, such as:

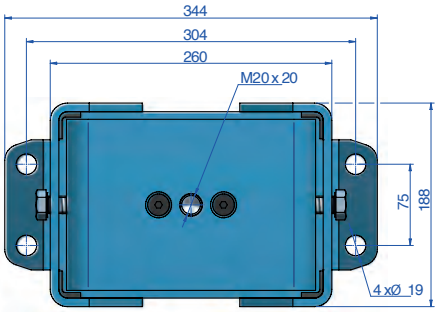
- Emergency generator sets on Hospitals, data bank organizations or residential areas.
- Pumps or piston compressors that have high eccentricity where a mass of inertia cannot be installed.
- HVAC equipment on Hospitals or residential areas.
- This mount is suitable for the isolation of static rotating machines which are exposed to axial and radial shocks, dripping oil or diesel or exposure to the weathering.

VIDEO TEST

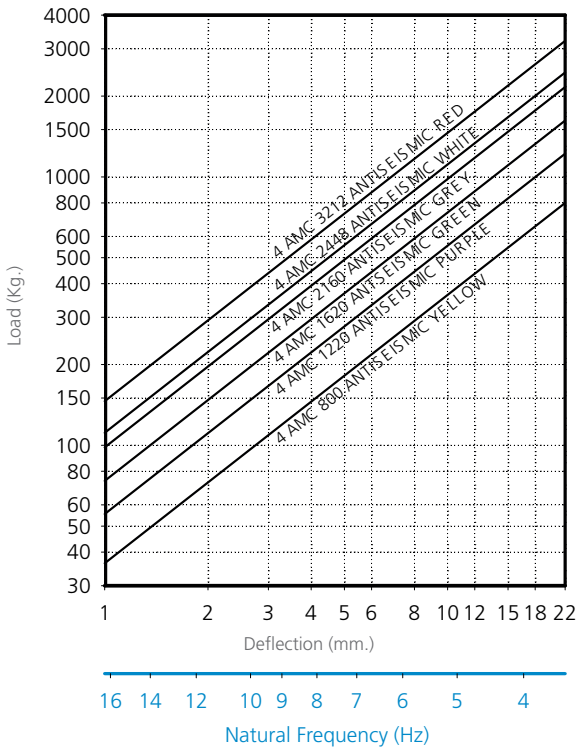


Type	No. Springs	Spring color	Deflection (mm)	Max. Load (kg)	Code	K (N/mm)
ANTI SEISMIC VISCO	4	YELLOW	22	800	**21269**	364
	4	PURPLE	22	1220	**21256**	556
	4	GREEN	22	1620	**21255**	736
	4	GREY	22	2160	**21257**	982
	4	WHITE	22	2448	**21258**	1113
	4	RED	22	3212	**21259**	1380



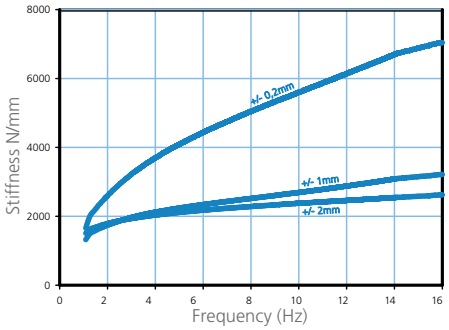


LOAD DEFLECTION CURVE
4 AMC ANTISEISMIC VISCO

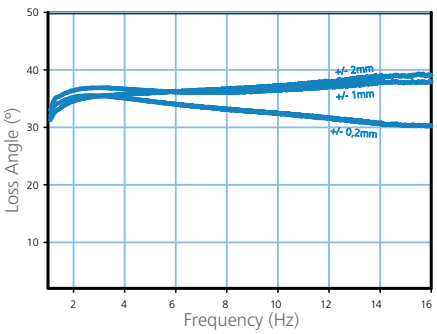


DYNAMIC BEHAVIOUR

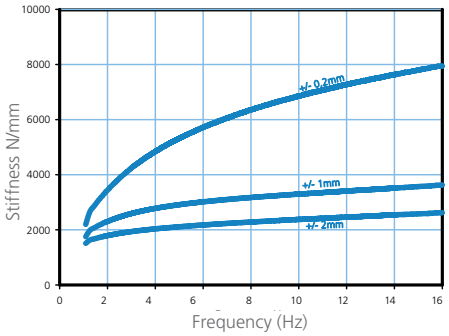
4 AMC 1220 ANTISEISMIC VISCO



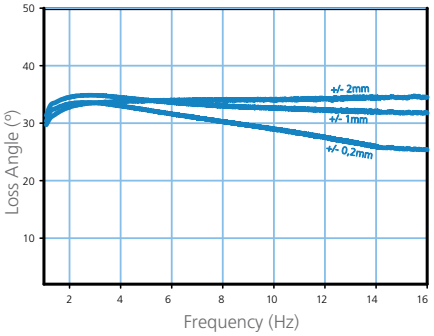
4 AMC 1220 ANTISEISMIC VISCO



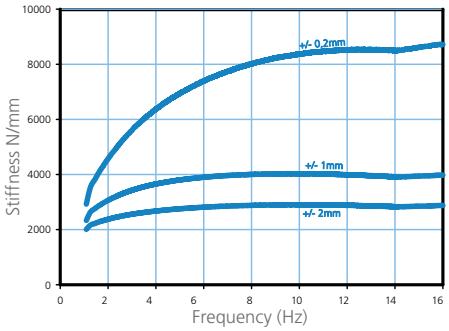
4 AMC 1620 ANTISEISMIC VISCO



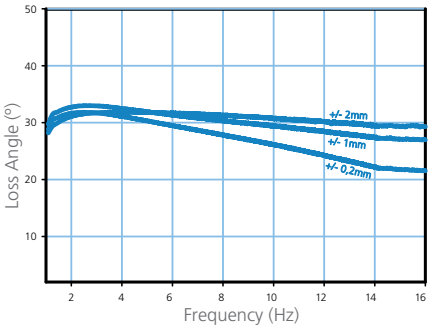
4 AMC 1620 ANTISEISMIC VISCO



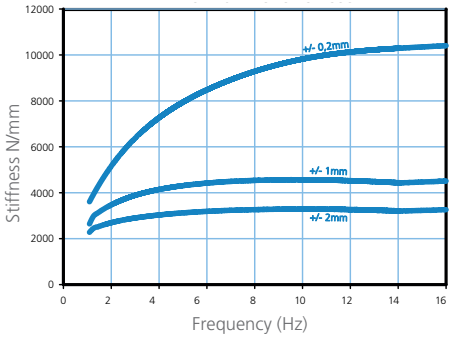
4 AMC 2160 ANTISEISMIC VISCO



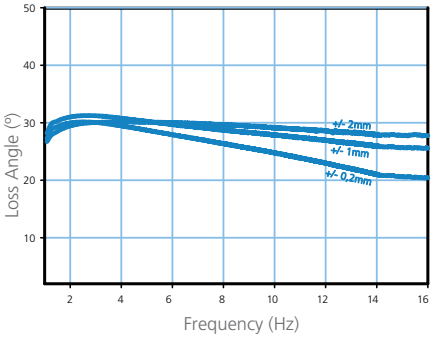
4 AMC 2160 ANTISEISMIC VISCO



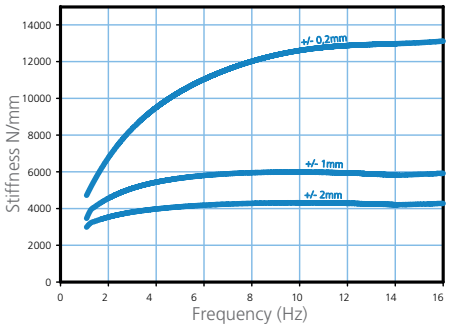
4 AMC 2448 ANTISEISMIC VISCO



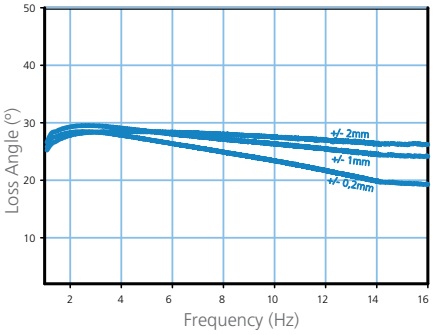
4 AMC 2448 ANTISEISMIC VISCO



4 AMC 3212 ANTISEISMIC VISCO

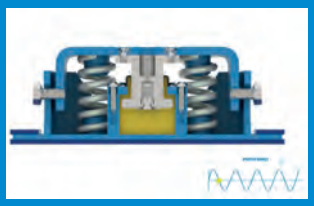


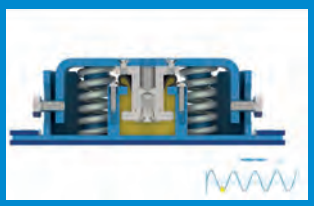
4 AMC 3212 ANTISEISMIC VISCO

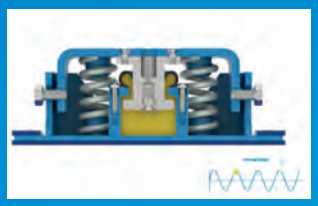


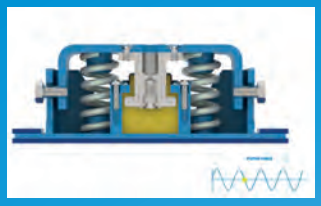
SEQUENCE OF THE ANTISEISMIC MOVEMENT

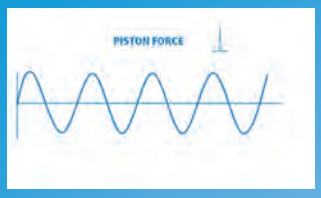
WATCH THIS MOVEMENT IN VIDEO

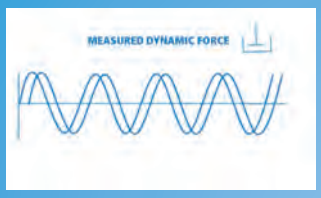


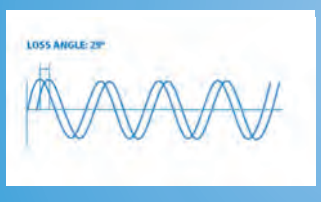












VIBRABSORBER + sylomer®

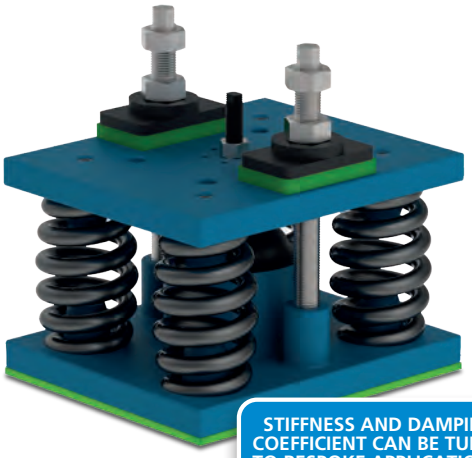
with adjustable damping & vertical displacement end stroke buffer

The Vibrabsorber+Sylomer® with adjustable damping system is composed of a damping chamber where the piston can allow more or less viscous fluid transmission. This anti vibration mount has incorporated anti traction buffers of Sylomer® to limit the vertical movement of the mount if needed.

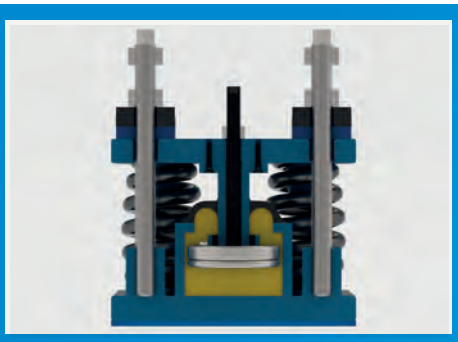
The base of the mount includes a layer of Sylomer® to reduce the transmission of high frequencies that could go through the coil springs.

The dynamic stiffness and angle loss depends on the amplitude and also on how open the piston orifices are. This can be adjusted by rotating the discs of the piston. This rotation is achieved by turning a central bolt from Minimum to Maximum.

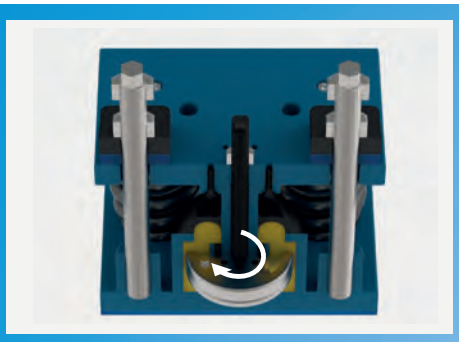
This product is tailored for each application.



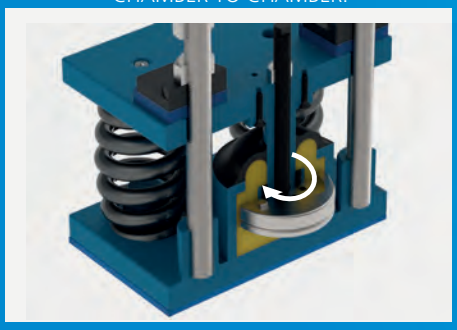
STIFFNESS AND DAMPING COEFFICIENT CAN BE TUNED TO BESPOKE APPLICATIONS.



THE DAMPING FLUID IS COMPOSED OF A VISCOUS THERMOSTABLE ELASTOMER. THE RUBBER MEMBRANE IS BONDED TO THE METAL TO AVOID LEAKAGES OF FLUID. THE MEMBRANE ALLOWS TRANSFER OF FLUID FROM CHAMBER TO CHAMBER.



THE DAMPING IS ADJUSTABLE BY A ROTATION OF A CENTRAL BOLD FROM MINIMUM TO MAXIMUM DAMPING.



VARIABLE DAMPING IS ACHIEVED BY A ROTATION OF DISCS.

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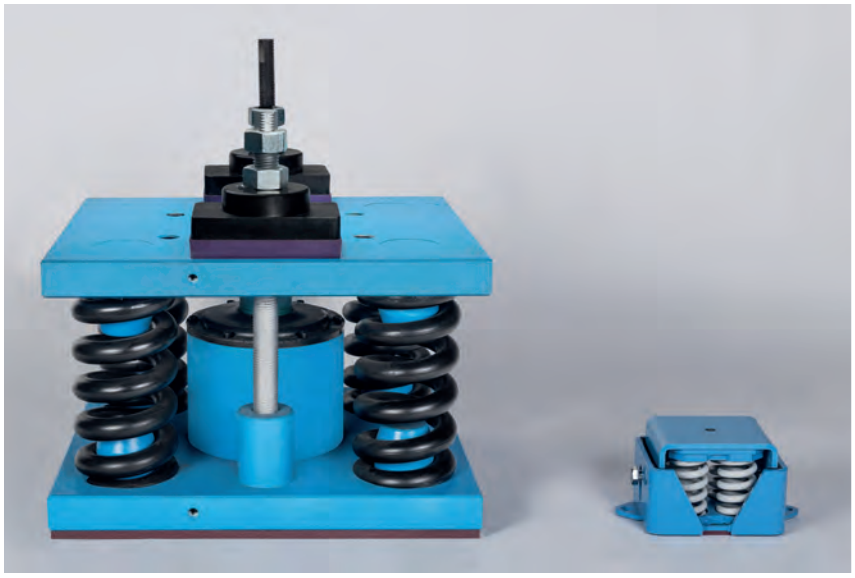
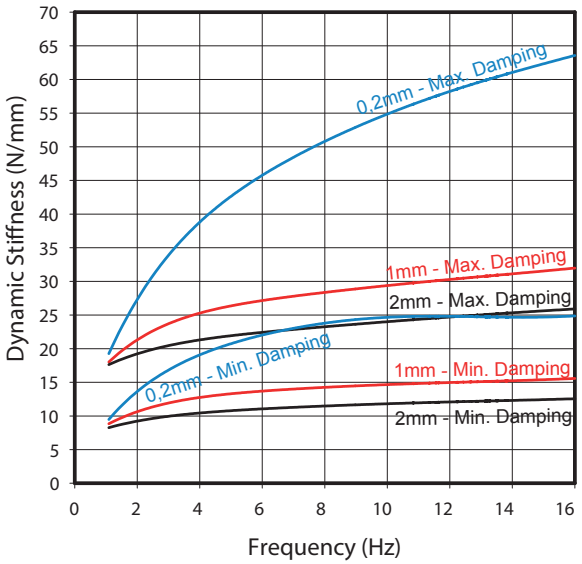
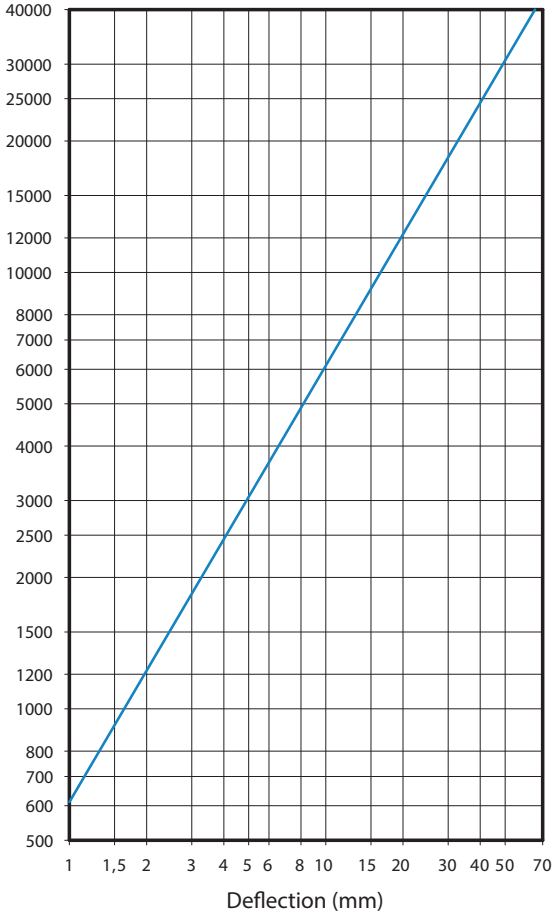


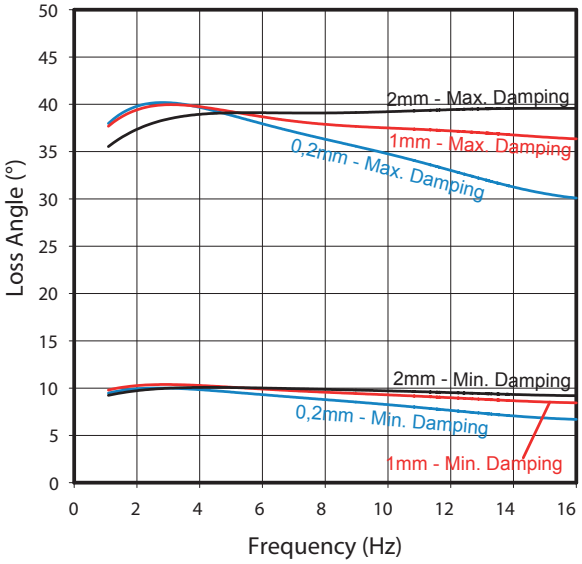
AMPLITUDE DEPENDANT DYNAMIC STIFFNESS
ADJUSTABLE VISCOELASTIC SPRING



LOAD DEFLECTION CURVE
ADJUSTABLE VISCOELASTIC SPRING



AMPLITUDE DEPENDANT LOSS ANGLE
ADJUSTABLE VISCOELASTIC SPRING



AMC MECANOCAUCHO®
ONLINE CALCULATION SOFTWARE

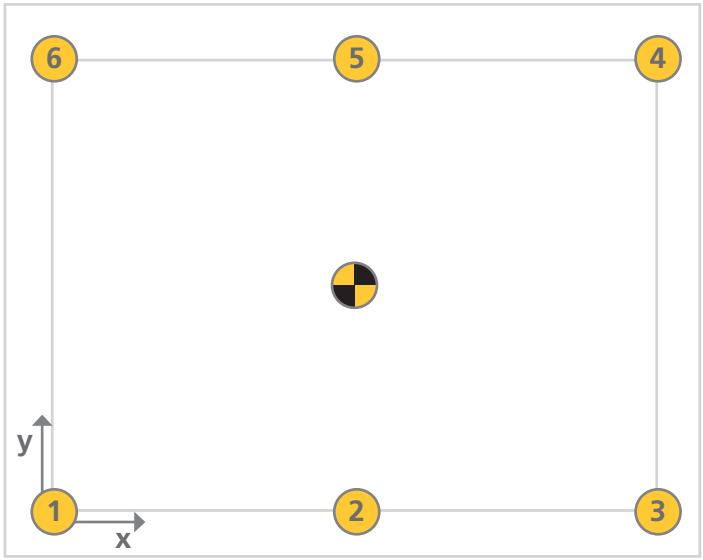
TRAINING WILL BE PROVIDED BY OUR APPLICATION ENGINEERS.

Total Center of Gravity

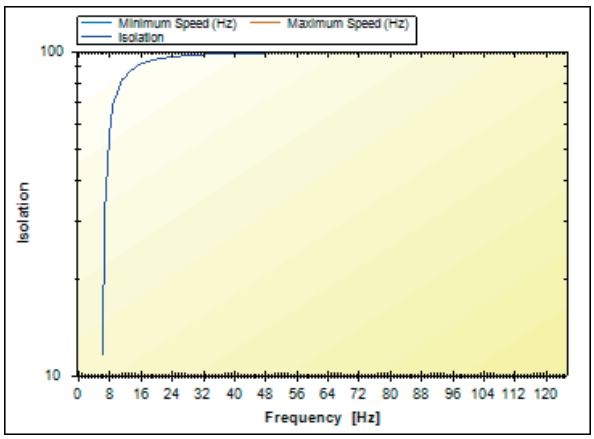
Xcdg (mm.)	Ycdg (mm.)	**Total Mass**
860,0000	500,0000	700,00 Kg.

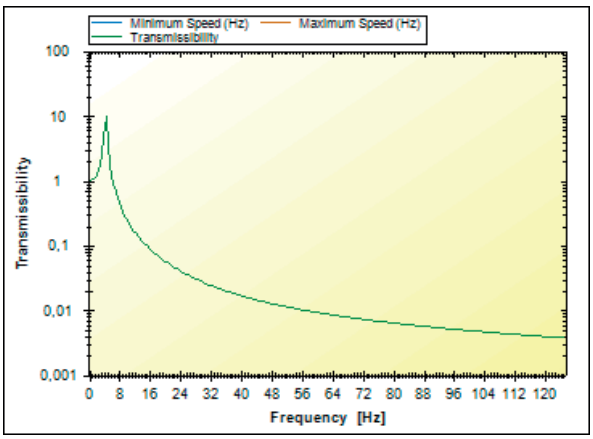
System Loads

Name	x	y	m



AMC MECANOCAUCHO® TECHNICAL SUPPORT								
N°	Code	Description	k (N/mm.)	X (mm.)	Y (mm.)	F (Kg.)	s (mm.)	% MAX.
1	20373	1 AMC 250+Sylomer®	84,60	0,00	0,00	116,67	13,60	46,67
2	20373	1 AMC 250+Sylomer®	84,60	860	0,00	116,67	13,60	46,67
3	20373	1 AMC 250+Sylomer®	84,60	1720,00	0,00	116,67	13,60	46,67
4	20373	1 AMC 250+Sylomer®	84,60	1720,00	1000,00	116,67	13,60	46,67
5	20373	1 AMC 250+Sylomer®	84,60	860	1000,00	116,67	13,60	46,67
6	20373	1 AMC 250+Sylomer®	84,60	00	1000,00	116,67	13,60	46,67





Isolation % for the order 1,00 **at** 1.500,00 **rpm** 96,25 %

Do not hesitate to ask us for login details at **sales@amcsa.es**

VIBRATION ISOLATOR PRO BLUETOOTH ACCELEROMETER

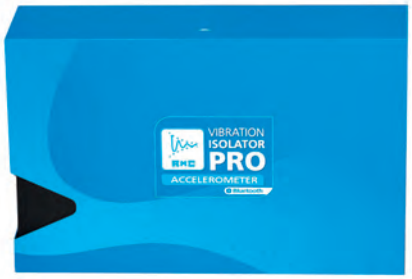
DESCRIPTION

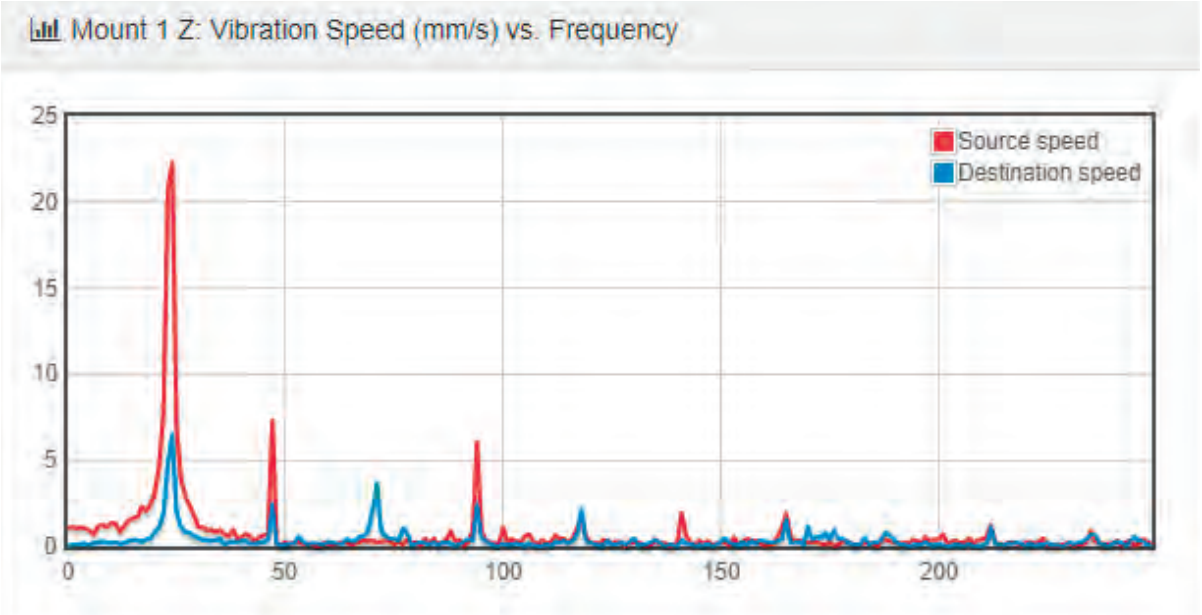
AMC MECANOCAUCHO® Bluetooth Accelerometer has been developed to work in conjunction with the AMC MECANOCAUCHO® free of cost app Vibration Isolator Pro for Android and iOS.
This equipment can provide an immediate vibratory analysis in the frequency domain, by connecting it to an Android or iOS mobile phone or tablet.

The application will guide the user along several steps in order to complete the analysis in an easy way.

ADVANTAGES

- Compact design
- 3 axis accelerometer
- DC to 500Hz useful bandwith
- Low noise
- iOS and Android compatible





* AMC S.A. reserves the right to modify the design and manufacture of the materials presented in this catalogue without prior notice.

SPECIFICATIONS

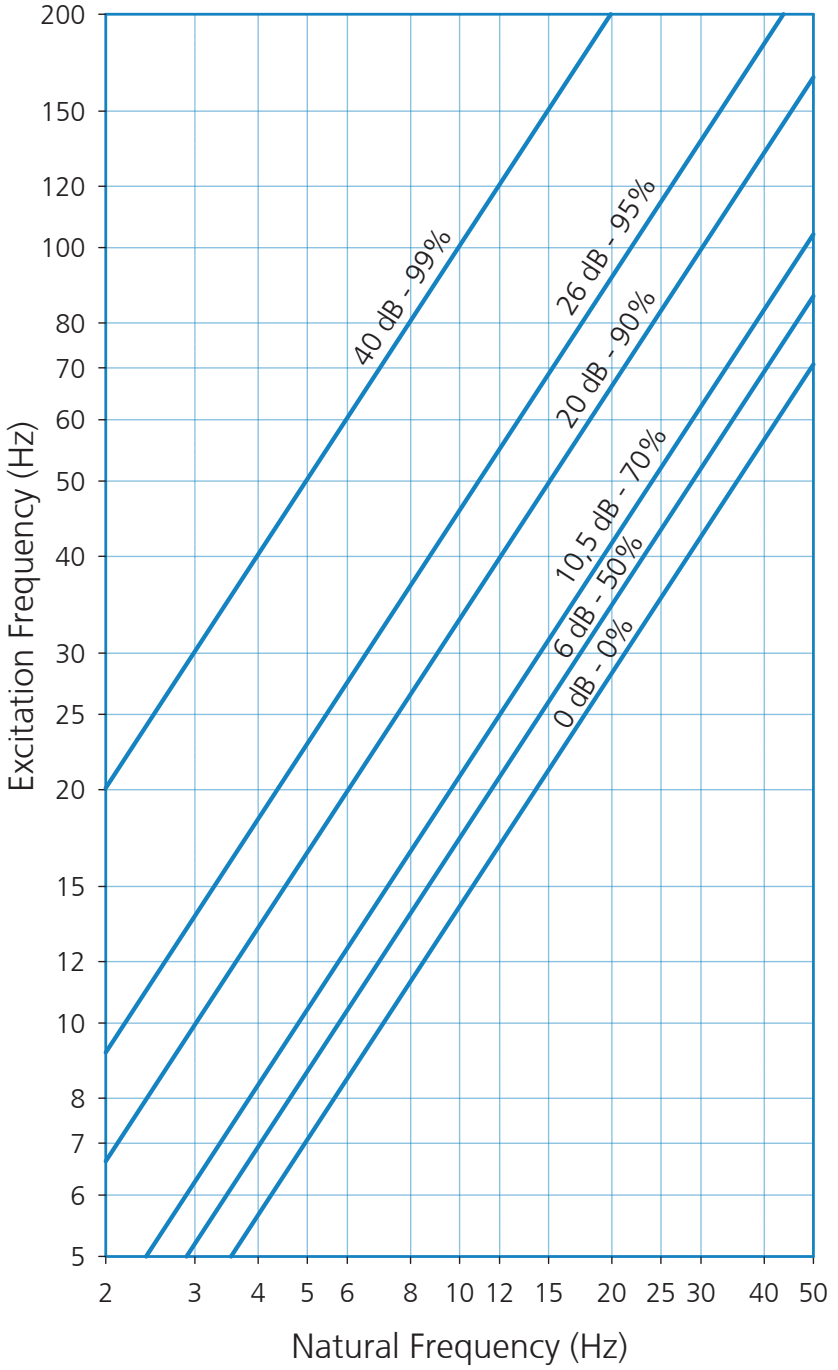
Acceleration Range	± 10g
Lower frequency limit	0Hz
Upper frequency limit	500Hz
Sensor technology	MEMS
Output Units	mm/s
Sampling rate	1024 kHz
Dimension	41 x 33 x 23 mm
Weigth	48 g
Housing material	Aluminium, plastic
Operating temperature range	-20 to 60ºC
Residual Noise density	80 µg/√Hz rms
Sensitivity	19 µg/LSB
ADC resolution	20 Bits
Cross Axis sensitivity	1,50%
Maximum supported acc.	500g
Wireless protocol	Bluetooth LE 4.2

Type	Code
Bluetooth VIP Accelerometer	**711062**

VIDEO TO KNOW THE NEW APPLICATION

MECANOCAUCHO

VIBRATION ISOLATION GRAPH



OTHER AMC PRODUCTS

AMC-MECANOCAUCHO® ANTIVIBRATION MOUNTINGS

Rubber to metal mounts for industrial applications.

AKUSTIK & AKUSTIK+sylomer®

Optimized acoustic hangers, floor mounts and wall ties for the structure borne noise isolation of buildings and machinery.

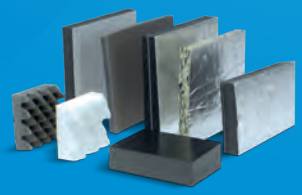
sylomer®

Micro-cellular polyurethane material specially conceived for vibration isolation.

Granab®

Golvregelsystem

Acoustic and technical floor for buildings.



AKUSTIKABSORBER

Soundproofing composites for industrial applications.

DISCOVER OUR **NEW APPLICATIONS**: available at Android and IOS.

VIBRATION ISOLATOR PRO

Let your phone discover **THE MAIN DISTURBING FREQUENCIES** of your application. The integrated accelerometers of your phone are capable of making an FFT measurement where you will be able to see the main frequencies that you need to isolate.

ACOUSTIC HANGER PRO

Discover the app that helps you **FIND THE CORRECT ACOUSTIC HANGER** for your application. Let your phone provide you a full report of isolation, datasheets and installation video.
SIMPLE, EASY & FREE.

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