

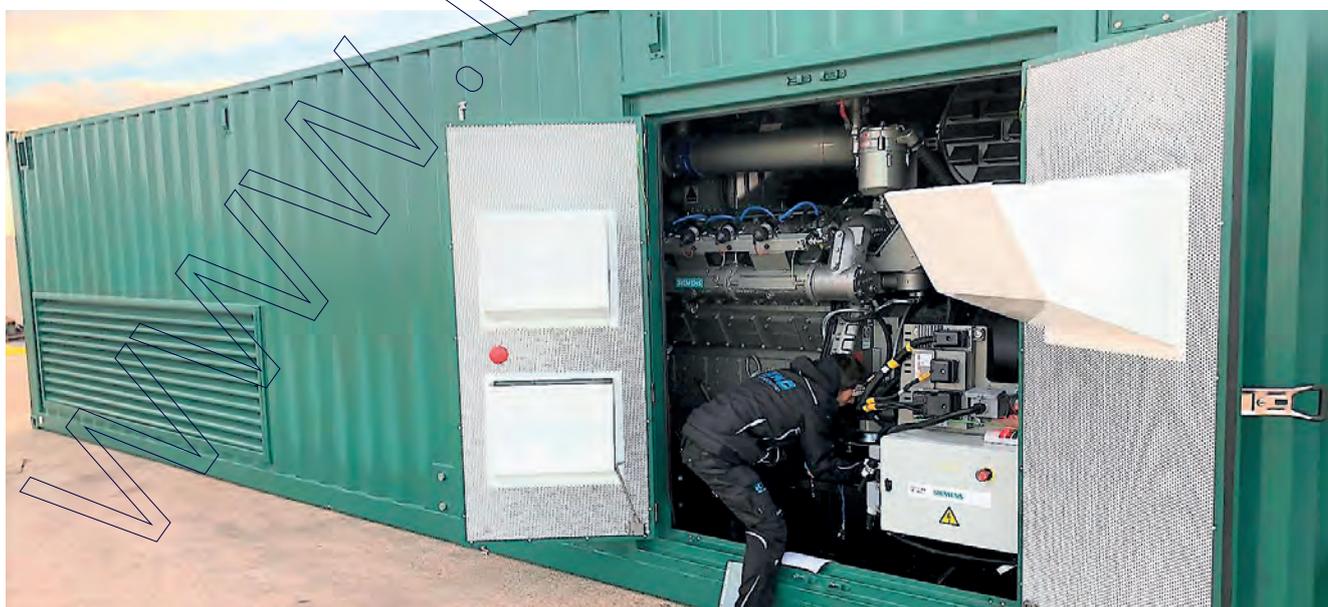
# RUBBER METAL

Anti vibration mounts  
**AMC MECANOCAUCHO®**

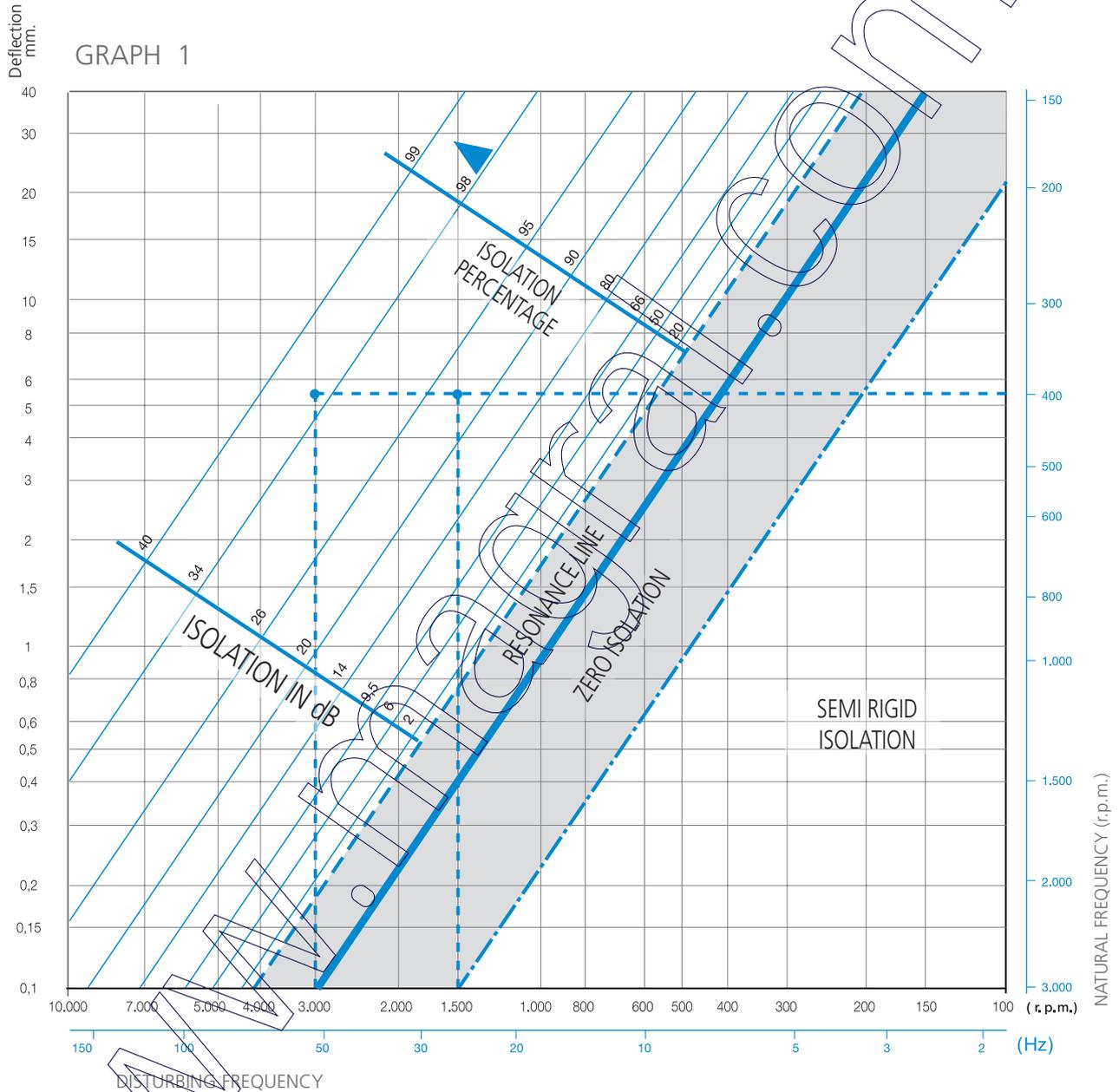
# APPLICATIONS

Our products are used in sectors such as:

- Generation of electrical energy
- Air compression
- Pumping of liquids
- Industrial vehicles
- Machine Tools
- Marine propulsion and auxiliary equipment
- Agricultural and construction equipment machinery
- Acoustic isolation of premises and sites
- Vibrating screens, Hoppers, Silos, Feeder screens



# VIBRATION ISOLATION EFFICIENCY GRAPH



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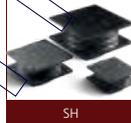
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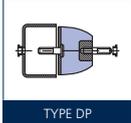
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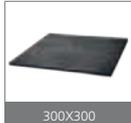
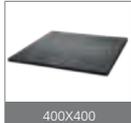
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# ELASTOMERIC SPRINGS



## DESCRIPTION

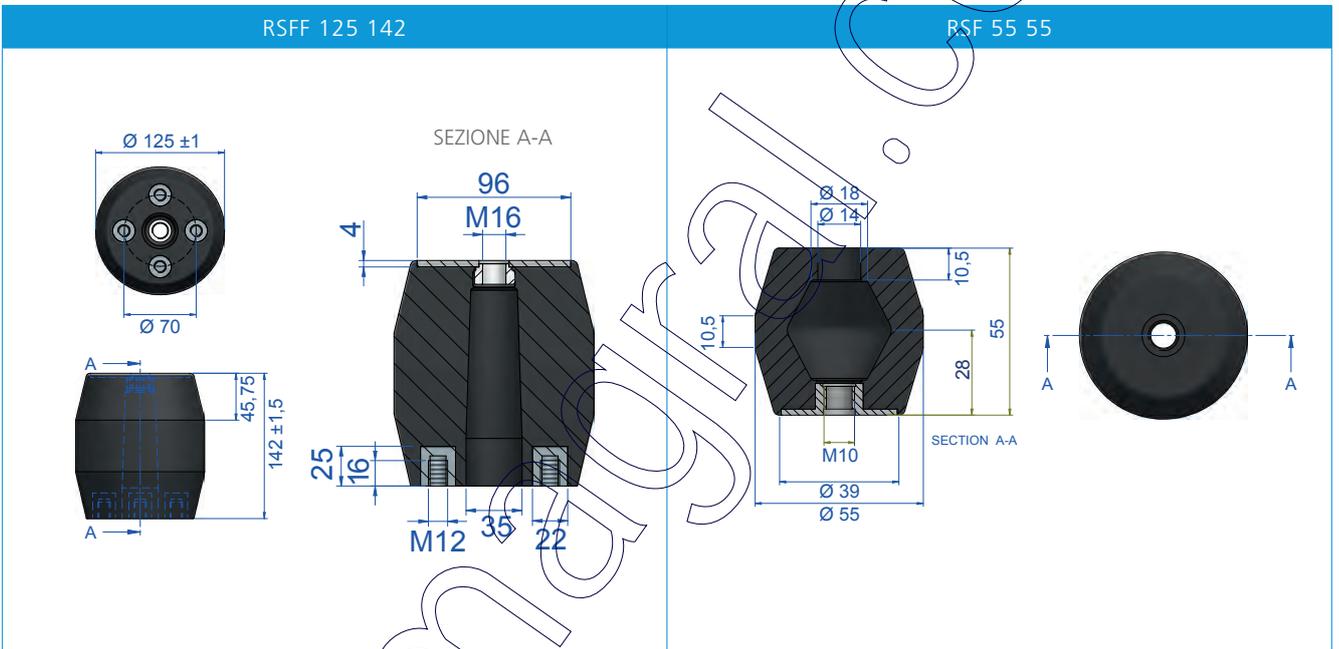
The AMC-MECANOCAUCHO® type Elastomeric Spring anti vibration mounts are ideal for those applications where high vibration isolation is required. Its specific design allows this mount to have high deflection. This feature is particularly useful on those applications where vibration in the vertical sense is predominant.

## TECHNICAL CHARACTERISTICS

The damping properties of the rubber allow to provide a higher motion control of the suspended element. The optimal corrosion properties allow this mount to resist to aggressive corrosion environments.

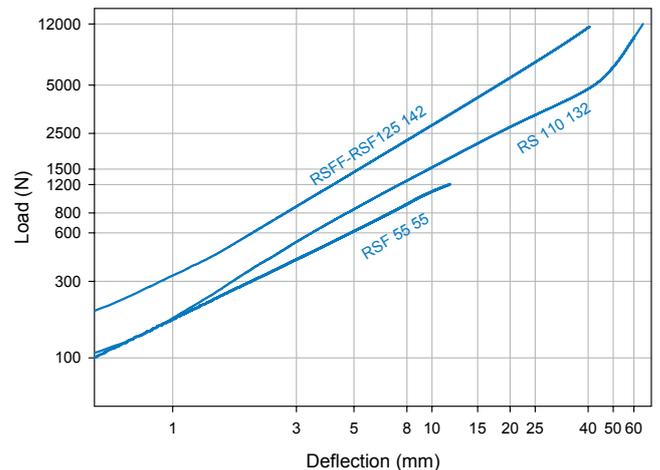
## APPLICATIONS

The AMC-MECANOCAUCHO® Elastomeric Spring anti vibration mounts are used in applications where a high degree of isolation is required and also motion control of the suspended element is required, such as : vibrating tables, vibration feeders or suspension of industrial vehicles.



Type	Code	Weight (kg)	Shore	Load max.	Max. Shock
RSFF 125 142	180251	1,953	55 Sh	1150 Kg	-
RSF 55 55	180177	0,123	65 Sh	60 Kg	120 Kg

Load vs Deflection

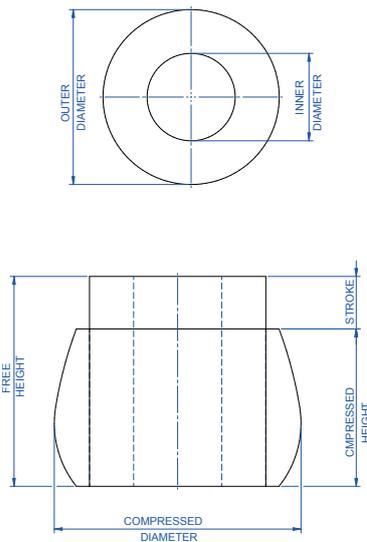


# REINFORCED ELASTOMERIC SPRINGS



These fabric and rubber springs will provide a long life, greater productivity, fast replacement time and virtually maintenance free operation.

They can be used as a replacement for steel coil springs or an additional anti-vibration device. Unlike coil springs they will not deteriorate in humid or corrosive environments.



Type	Øext (mm)	Øint (mm)	Free Height (mm)	Load Min (kg)	Compressed Height kg min. (mm)	Freq. Min Load (Hz)	Load Max (kg)	Compressed Height kg max (mm)	Freq. Max Load (Hz)	Code
Reinforced elastomeric springs	41,3	16	44,5	48	38	3,72	120	32	7	171322
	41,3	16	89	49	75	4,08	100	64	3,92	171323
	76	25	102	192	86	3,99	409	74	4,52	171300
	89	25	152	250	130	3,21	513	112	3,28	171303
	102	50	152	284	130	3,21	569	112	3,14	171302
	114	50	152	483	130	3,37	968	114	3,4	171304
	114	25	178	636	152	3,23	1253	133	3,34	171305
	127	25	178	663	152	3,87	1525	129	4,05	171306
	140	50	178	746	152	3,4	1714	129	3,07	171309
	152	76	152	745	130	3,42	1799	112	3,2	171307
	165	76	203	890	173	3,03	1883	152	3,14	171308
	152	25	152	1018	130	3,9	2489	112	3,77	171310
	191	89	203	1143	173	2,3	2815	147	3,24	171314
	191	89	254	1138	216	2,66	2668	184	2,96	171315
203	50	203	1407	173	3,56	3863	152	3,15	171316	
279	51	152	3718	130	3,66	9070	110	3,40	171320	

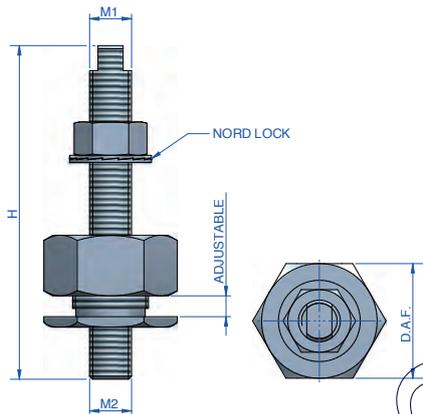
\* AMC S.A. reserves the right to modify the design and manufacture of the materials presented in this catalogue without prior notice.

# HEIGHT ADJUSTING SYSTEMS

The AMC Mecanocaucho® height adjusting systems can be used to retrofit current installations. Please take into consideration the following information:

It is recommendable to settle the mountings at least 48hours before the alignment of the engine installation, especially for close coupling tolerances.

The use of high performance glue between the bolt and the mounting is advisable in order to increase the security.



## Hi-Sec

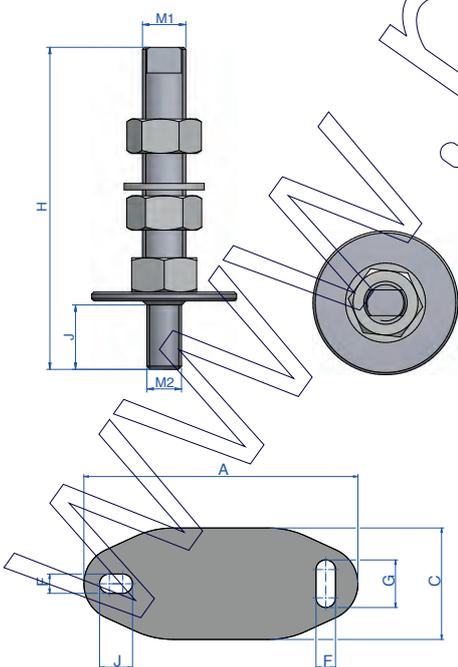
Type	Code	H (mm)	M1	M2	Adjustable (mm)	Machined head	D.A.F.	Weight (gr.)
HI-SEC	708077	110	M16	M12	± 5	Y	46	357
	708007	110	M16	M16	± 5	Y	46	514
	708094	130	M20	M20	± 5	N	46	775
	708079	110	M20	M16	± 10	Y	55	1095
	708029	160	M20	M20	± 10	Y	55	1011
	708005	160	M20	M20	± 10	N	55	1096
	708011	200	M24	M24	± 10	N	120	2234

## Standard height adjusters

Type	Code	H (mm)	M1	M2	J (mm)	Machined head	Weight (gr.)
STUD	708008	110	M16	M12	25	Y	215
	708003	110	M16	M16	-	Y	285
	708004	130	M20	M20	-	N	475
	708001	100	M12	M12	-	Y	174

## Shim

Type	Code	A (mm)	C (mm)	D (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	Weight (kg)
SMALL	136301	120	60	100	14	11	3	14	11	-
MEDIUM	136302	183	75	140	30	13	4	13	22	-
LARGE	136303	228	112	182	34	18	5	18	26	-

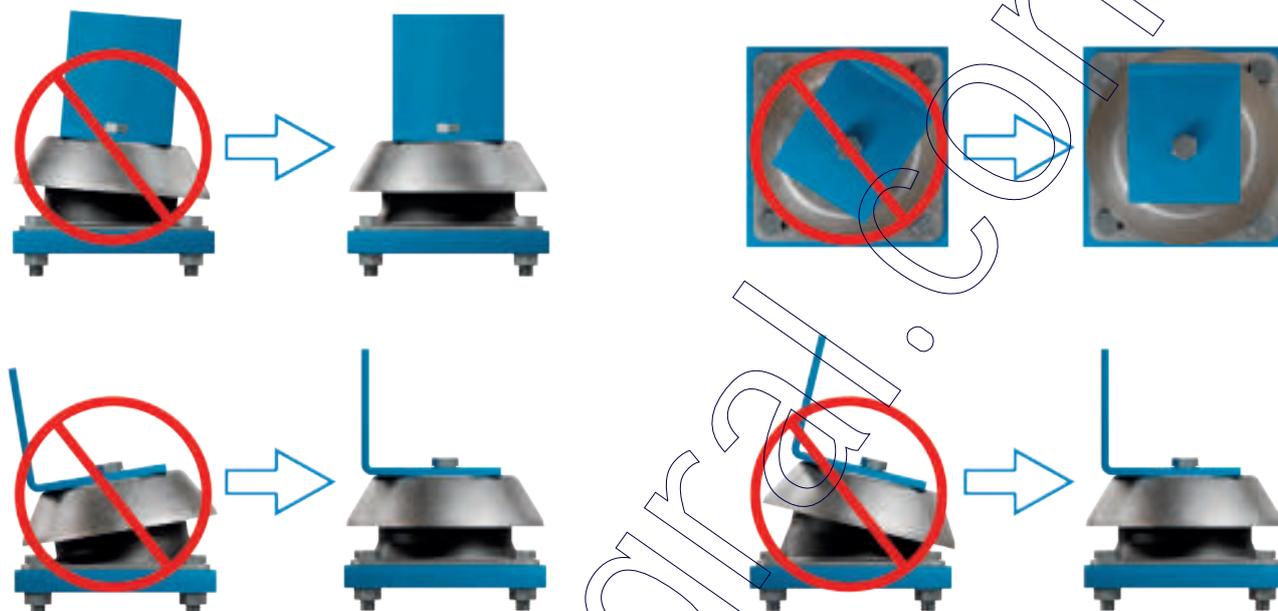


# INSTALLATION PRINCIPLES

## RECOMMENDATIONS FOR HOOD MOUNTS

The hood mounts should be installed between two parallel and perfectly flat surfaces. Mounts operating tilted or twisted do not work properly. This may be due to incorrect alignment, tolerances in the building of the chassis or over-tightened torque during the installation of the Antivibration mounts.

This applies to our marine-type, BSB, BRB or Mecnodamp mounts.

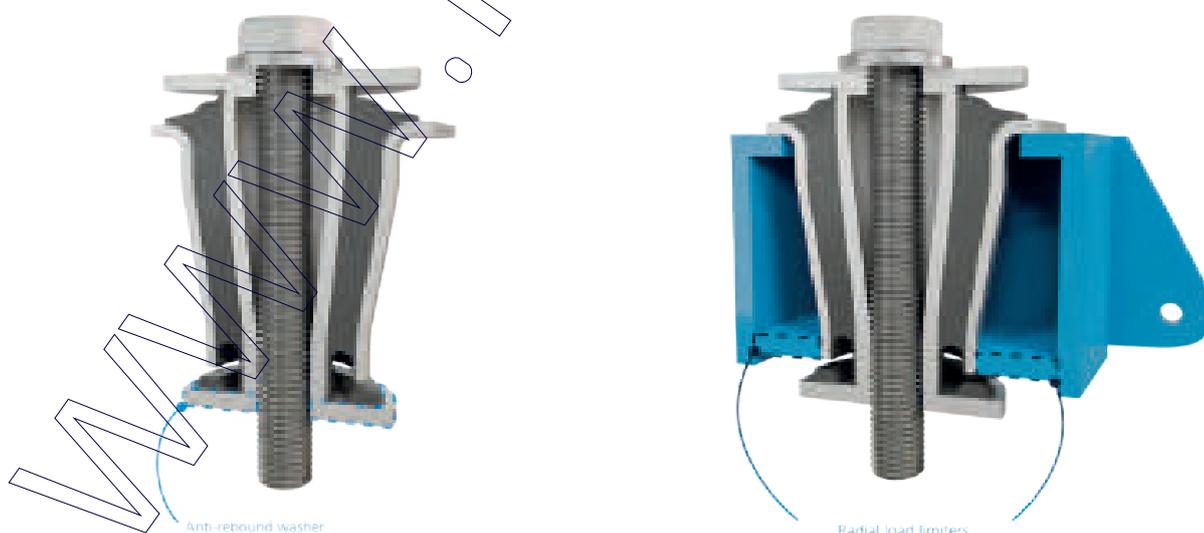


## RECOMMENDATIONS FOR THE CONICAL MOUNTS

The conical mounts should always use the washers indicated for each model.

Similarly, we recommend the use of lateral limiters for cases with high loads or radial impact.

This applies to our AT, SCB, SCH or Mecanotaucho® mounts.



**RECOMMENDATIONS FOR THE DSD AND DRD MOUNTS**

Although it is not absolutely necessary, the AMC MECANOCAUCHO® hoods should be used in the DSD and DRD hoods. This hood distributes the load evenly in the event of overloads, and also provides protection from possible oil splashes.

Care should be taken to make sure that the protective hood has the same or a greater diameter than that of the diameter of the rubber element.

We have a standard range of Mecanocaucho® protection hoods. Check them out.



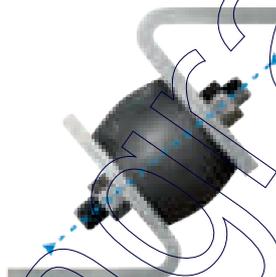
**RECOMMENDATIONS FOR THE CYLINDRICAL MOUNTS**

The cylindrical mounts should never work at traction. They should be used on a compression basis. To obtain greater deflection, use them at shear or shear /compression, although the maximum loads indicated in our catalogue for shear use should never be exceeded.

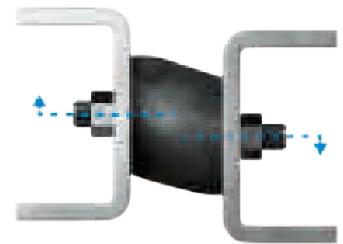
This applies to our bobbins, diabolos, trapezoidal or annular mounts.



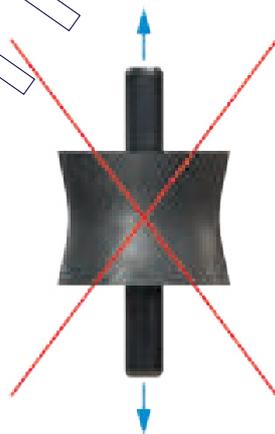
Compression



Compression-shear



Shear



**RECOMMENDATIONS FOR MACHINES THAT REQUIRE ALIGNMENT**

When an alignment is required between different mechanical elements of the machine, the creeping effect should be taken into account. The increased deformation produced by the creep of the elastomer leads to a "misalignment" between suspended and rigid elements, particularly during the first 48 hours of static load in the antivibration mounts.

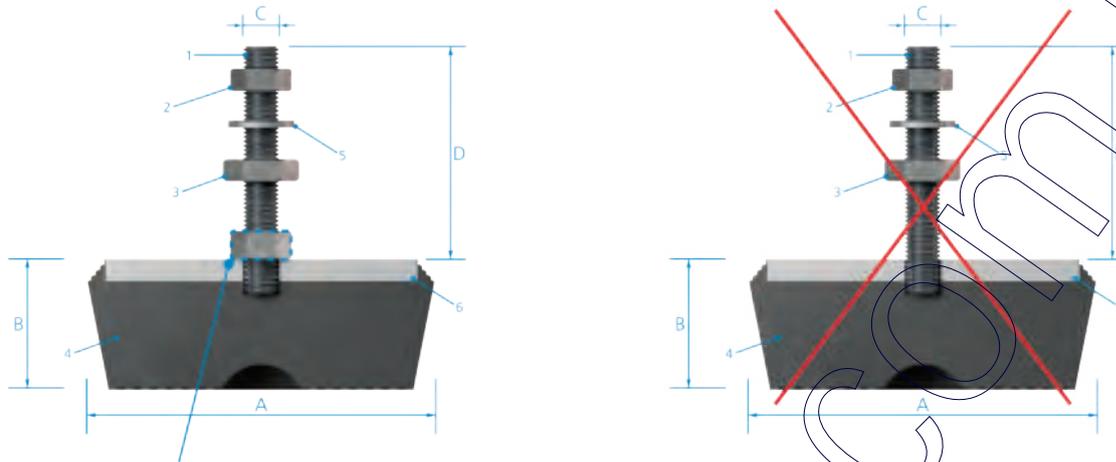
Alignment should therefore be checked 48 hours after the installation of the machine.

If this is not possible contact AMC's technical department and they will help you to ascertain the optimal alignment of your machine.

**RECOMMENDATIONS FOR AMC MECANOCAUCHO® MACHINE MOUNTS WITHOUT ADJUSTABLE HOOD**

On installing one of our AMC MECANOCAUCHO® machine mounts without adjustable hood, great care should be taken to ensure that the load of the machine does not rest on the screw, but on the hood.

This applies to our AMC MECANOCAUCHO® SV, SM and low SV series mounts.



This nut spreads the load on the bell and avoids tensioning the below welded insert.

**RECOMMENDATIONS FOR TORQUE TIGHTENING FOR THE BRB, BSB, MD AND MARINE MOUNTS**

Before installing, make sure that the support surfaces are sufficiently rigid flat and totally parallel. The main fixing screw should be tightened according to the torques recommended in the following chart:

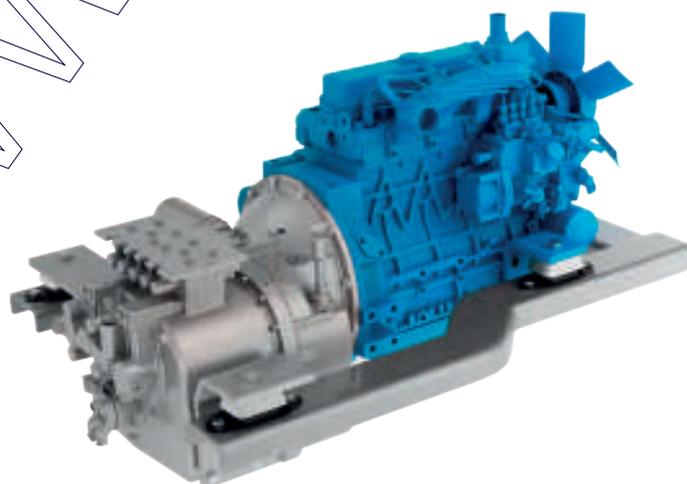
	M8	M10	M12	M16	M20	M24
Tightening torque Nm	16	32	55	125	190	285

**RECOMMENDATIONS FOR THE INSTALLATION OF ANTIVIBRATION MOUNTS**

The position of the antivibration mounts determines the vibration modes of the suspended ensemble. An even load distribution over all the mounts is advisable. One easy way of obtaining this is by installing the antivibration mounts equidistant from the CDG of the ensemble.

Mounts installed at the height of the crankshaft provide more stable suspensions and avoid over-movement of the suspended ensemble, particularly in mobile or moving applications.

The external connections to the suspended ensemble, such as cables, exhaust, hydraulic pipes, etc., must be elastic enough to prevent vibrations from being transmitted to the chassis through them.



# 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 bandwidth
- Low noise
- iOS and Android compatible

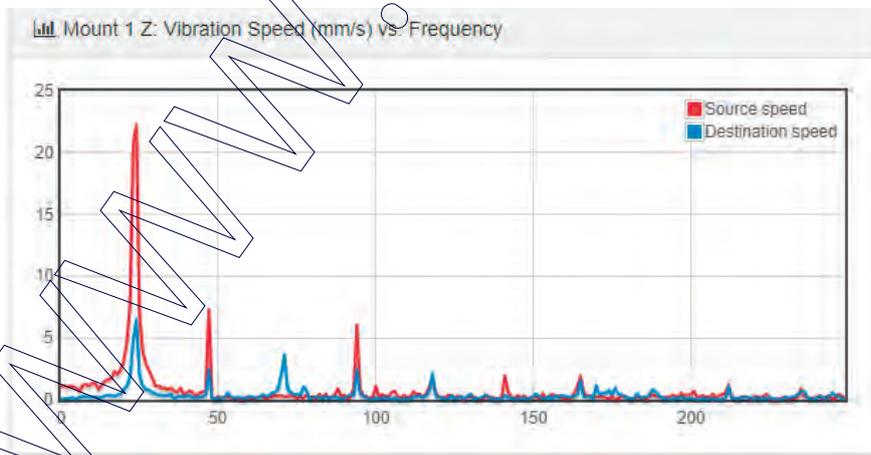


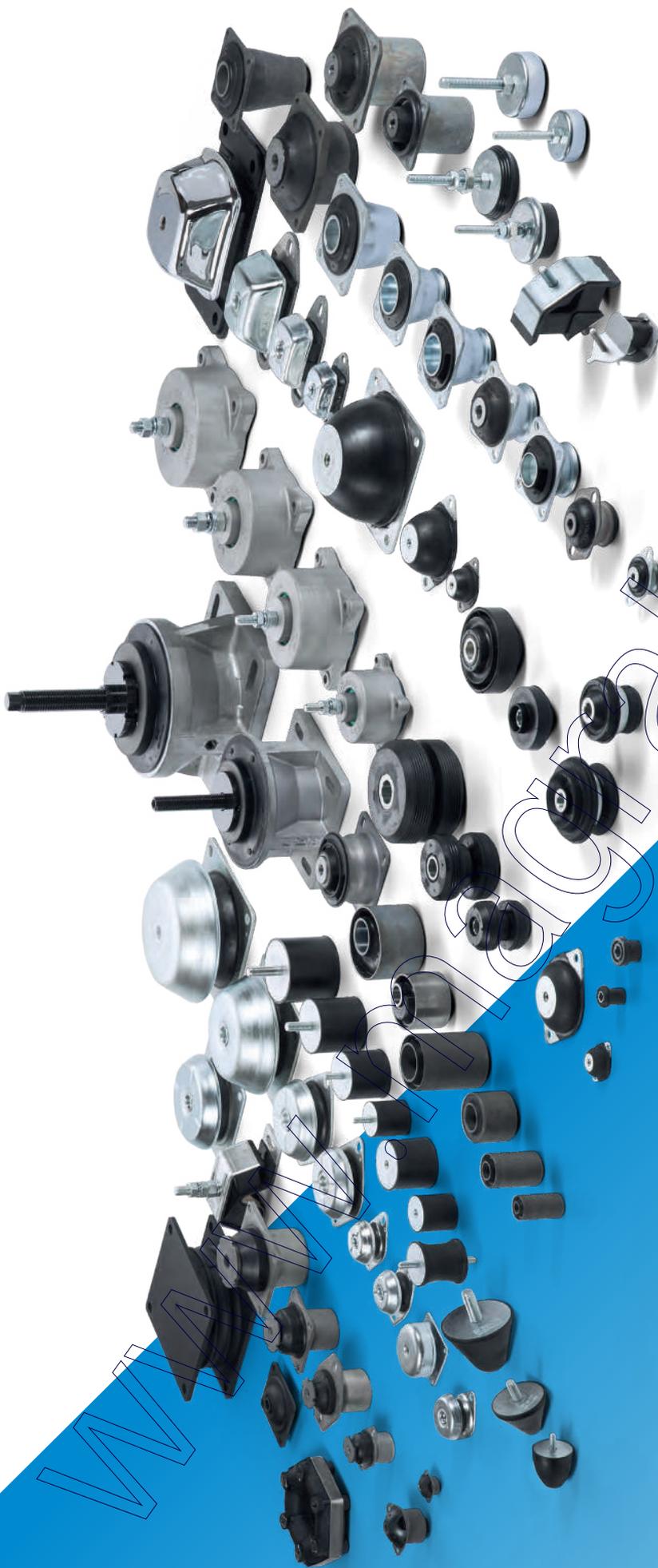
## QUICK GUIDE



## 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 60°C
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





The following graph shows the expected vibration isolation performance when two key factors are known:

#### **FREQUENCY OF EXCITATION**

This is the problematic frequency which is required to be isolated. For example the vibration frequency produced from a diesel engine.

#### **NATURAL FREQUENCY**

This is the frequency at which a system will naturally oscillate at if subjected to an external force.

This frequency is dependant on the mass of the suspended element and the stiffness of the mounting points. If in doubt an AMC engineer is available to assist with calculations to determine the natural frequency of your installation.