HYDRAULIC MOUNTS

DESCRIPTION

The AMC MECANOCAUCHO® Hydraulic mounts combine a spring and a hydraulic damper in a single compact unit that allows tuning of the spring and damper independently.

This provides flexibility in matching the dynamic characteristics of the isolator to the requirements of the application.

The internal architecture of the mount is composed of a new system that bonds the rubber to the metal parts in order to eliminate any leakage of the dampening fluid when the mount is submitted to high magnitude shocks.

For good isolation, low damping is required. For motion control, high dampening is required. The MECANOCAUCHO® hydraulic mounts accommodate these conflicting requirements. The fluid cavity is divided into two chambers with an orifice in between, so that motion of the elastomeric element causes fluid to flow from one chamber to the other, dissipating energy and thus creating damping in the system.

These mounts are particularly interesting for those installations that require a soft isolator for good isolation but still require motion control under transient (shock) inputs or when operating close to the isolation system’s resonant frequency.

TECHNICAL CHARACTERISTICS

• The AMC MECANOCAUCHO® Hydraulic mounts have an interlocking metal component that provides a fail-safe protection for mobile applications. This device limits the ascending vertical movement when the mounting is submitted to shocks at traction.

• The thickness of the metal parts make this mount robust and suitable for off-road applications. The metal parts have a suitable anticorrosive treatment for outdoor applications. RoHs compliant.

APPLICATIONS

The AMC MECANOCAUCHO® Hydraulic mounts have been primarily designed as engine and operator cab isolator in vehicular off highway and agricultural applications.

It is particularly interesting for those engines that operate on a variable rotating speed that must pass the natural frequency of the system during its normal functioning. Examples of this may be engines of 1,2,3 or 4 cylinders used on construction or agricultural equipment.

It is also interesting for cabins where vibration isolation is required for operator comfort purposes but as well stability when the cabin is submitted to transient shocks.

* In order to adapt its products to the state of the art, AMC A. reserves the right to modify the conception and manufacture of the materials presented in this catalogue without prior notice.
HYDRAULIC MINI

HYDRAULIC SMALL

HYDRAULIC MEDIUM

HYDRAULIC LARGE

HYDRAULIC SMALL SQUARE

HYDRAULIC MEDIUM SQUARE

HYDRAULIC LARGE SQUARE

For the installation look on the Page 29 OPERATION AND ASSEMBLY.

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### Load Deflection

**AMC MECANOCAUCHO® Hydraulic Mount**

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<th>Load (Kg)</th>
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<th>SMALL</th>
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<th>Deflection (mm)</th>
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**Dynamics**

- Frequency (Hz)
- Loss angle (º)

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OPERATION AND ASSEMBLY

A hook wrench should be used in the slots to avoid the rotation movement of the rubber.

TECHNICAL ADVICE FOR FOPS ROPS APPROVAL

AMC-MECANOCAUCHO’s technical department will be pleased to offer you advice on correct installation procedures to achieve FOPS/ROPS tests approvals.

These pictures show a typical traction test on rectangular hydraulic medium mount subjected to loads up to 4 Tonnes without destruction of the part. For more information on this topic, please contact our technical department.

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