HYDROMOUNTS
HYDRAULIC DAMPING
FOR BEST COMFORT
Rubber springs are well-established solutions for vibration control and widely used in many applications. In some demanding agriculture and construction equipment applications where ride comfort and vibration control are the highest priority, hydraulically damped rubber springs (called Hydromounts) are used to mount cabins and engines. This is done to reduce undesired oscillations and vibrations and to minimize noise load to operator and environment as well as to improve the ride comfort of the vehicle.

During the operation of such equipment, high loads can often be experienced by the mounts, e.g. shock loading. Consequently the target, i.e. finding the right balance of stiffness for shock compliance and isolation performance, can be difficult. This trade-off can be solved with Hydromounts by using hydraulic damping in conjunction with rubber springs to tune ride and vibration isolation separately. Thus, inconvenient vibrations and heavy loads to the human body and equipment from resonances and shock loads are avoided.

Hydromounts have proved themselves in cab applications of agriculture and construction equipment vehicles. Their damping capability ranges between 5 and 15 Hz and therefore the operator is protected from shock impacts, which are commonplace in these types of applications. Furthermore, excessive cabin motions and shaking are remedied. Due to their robust and closed design, our hydromounts are well prepared for hard use and rough environmental conditions.

**Vibration reduction and best comfort**

**Unique selling propositions at a glance**
- long-life, galvanized surface protection (Gr-VI free)
- all materials are conform to environmental regulations, e.g. RoHS or REACH
- high damping for a wide frequency range
- optional choice between rubber mount and Hydromount within unique connecting design
- excellent acoustic isolation by means of installed diaphragm in the bottom (at Premium Version)
- natural rubber with best mechanical properties
- large range of catalog product portfolio with short delivery times
- customer specific designs available on demand

**Installation remarks and service conditions**
- temperature range for permanent use: -45 to 60 °C
- temperature for short use: up to 80°C
- permanent contact with mineral oils should be avoided
- large torsional rotation of rubber during bolting should be avoided
- full-faced support at flat flange area is recommended

**Technical data**

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<td>none</td>
<td>none</td>
<td>none</td>
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</table>

* depending on application additional features are required, e.g. flange reinforcement.
** Max. radial forces and deflections represent the sum of static and dynamic loads.
*** Hydromount compact

**Hydromount: Premium vs. Compact Version**

- Premium
  - rubber spring, compound: W, 40-70
  - max. radial load: 2000-3000 N
  - max. axial deflection: 3.5 mm
  - damping level: high
  - capability for bearing high dynamic forces: none

- Compact
  - rubber spring, compound: W, 40-60
  - max. radial load: 2000-3000 N
  - max. axial deflection: 3.5 mm
  - damping level: high
  - capability for bearing high dynamic forces: none

*Should be avoided, a change of material after occurrence of such things is recommended.*