ALIVIO R SERIES

- √ BENEFIT OF KNOWLEDGE AND EXPERTISE ACQUIRED OVER THE YEARS
- √ PHOENIX IS ALWAYS LOOKING FOR THE PERFECT SOLUTION, IS INVENTIVE AND DETERMINED
- √ CHALLENGE AND LET PHOENIX EXCEED YOUR EXPECTATIONS
- √ HELPFUL TEAM IN MAKING THE PERFECT CHOICE FROM OUR WIDE SELECTION

DESIGN

The design of the Alivio R-series is inspired by optimizing the isolation for Tier 4 emission standard engines. Nowadays due to all environmental requirements, the engines are downsized and running on much higher combustion pressure by installing larger high performance turbos.As a result higher vibration levels from the ignition frequency and the firing force, in relation to the total weight of the engine.

Our experience is that engine manufacturers have adapted their engines, but are still using the same engine mounts. Phoenix Vibration Controls has developed a new type of engine mount especially to isolate the ignition frequency for almost every new type of engine. As we know that the forces (and also the vibration) is caused by the ignition, these forces appear horizontally sideways seen from the crankshaft direction.

The Alivio R-series is especially designed to isolate the forces in this direction. Compared to the existing designs, the R-series mounts have much lower stiffness in longitudinal direction which results in a much better isolation of ignition forces. The Alivio R-series is also designed for a higher static deflection which improves overall vibration isolation. This will especially result in a better isolation at low rpm and idle running.

A lot of existing mounts will have good isolating results by higher RPM, but do not work by idle running. In practise, we have seen completely burned rubber which results in hardening of the rubber. Eventually the mount is too stiff to isolate on the higher rpm (aging).

RUBBER

During the development of the Alivio R-series, we have paid our full attention to the lifetime of the rubber. By larger deflection capabilities in our configuration, we are able to use a lower hardness rubber with excellent creep properties. We have developed an unique creep test which simulates the practice and we have tested the Alivio R-series also on higher temperatures to guarantee the creep factor of our Alivio R-series.

TYPE APPROVAL

The Alivio R3 series has a Bureau Veritas type approval.

SUPPORT

We have the expertise and capability to advise in vibration isolating solutions, basic isolation calculations, gravity distribution calculations and offering 6 degrees of freedom calculations. Therefore we require at least a dimensional drawing of the application, (total) weight, centre of gravity of all parts, position of mounting points and idle and working rpm. After receiving the above information, we will provide a technical proposal for your application.

Questions or more information on this product? Call +31(0)187 49 37 44 or send an e-mail to info@phoenixvc.nl