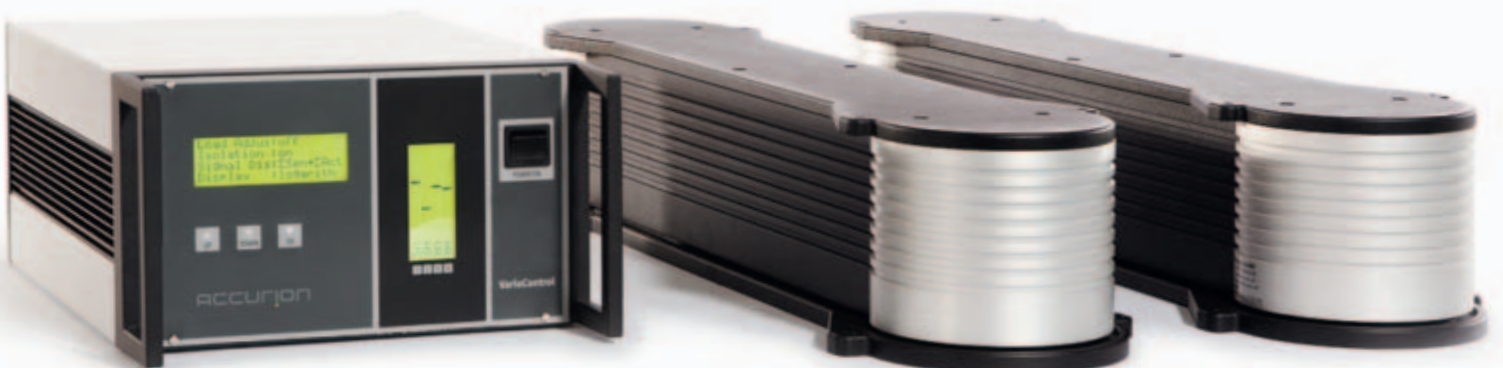


ACCURION

solutions for science

active vibration isolation elements
halcyonics_vario series



Active Vibration Isolation Elements

halcyonics_vario series

ABSTRACT

Accurion's modular and multi-functional Vario Series is based on the successful halcyonics_vario control Technology. It consists of pairs of individual active vibration isolation elements and an external controller. Combining two or more elements will exactly match the required load capacity for a given application. This and the powerful new designed actuators with its Neodymium magnets plus the rugged electronics make the Vario System the most versatile active vibration isolation system on the market.

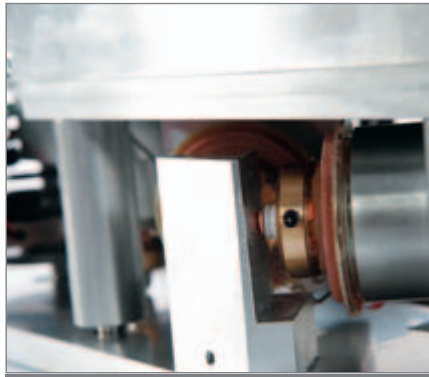


Nanofilm Ellipsometer on Vario_Basic Elements

APPLICATIONS

Applications for the Vario Active Vibration Isolation desktop Units

- Laser setups
- Patch-Clamp Applications
- Langmuir-Blodgett-Troughs
- Ellipsometer
- Small SEMs
- UHV-STMs
- Nano Intender
- ... and many more



The core element: electromagnetic actuator

FEATURES

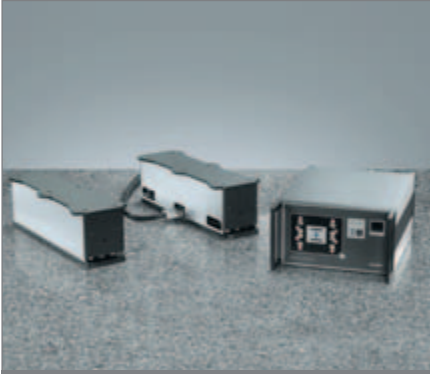
- Two models, with three sizes each and three load ranges - matching your instrument setup
- Isolation starts typically at 1.0 Hz - effectively isolating building vibrations
- Separate controller - no heat dissipation interferes with the experiment
- Active Control eliminates resonant amplification - settling time only 0.3 s
- Remote Control and monitor-function via USB port (Vario only)
- Up to 1,500 kg | 1,320 lbs max. load (Vario_Basic) realized

AVAILABLE VERSIONS

- halcyonics_vario - automatic load adjustment
- halcyonics_vario_basic - manual load adjustment

BENEFITS

- Supreme performance even under severe environmental conditions
- Active isolation starts from 1.0 Hz and is active until 200 Hz (and passive above 200 Hz) ideal to dampen building vibrations
- Setup the system within minutes and operate it by pushing just one button
- Qualified service: for standard and customized solutions factory trained personnel will support you in finding the optimal solution for your specific measurement task
- Reliable systems: after passing a specific quality control procedure
- Two year guarantee
- Low voltage electromagnetic actuators avoid high voltage used for many Piezo systems = no interference with your delicate instrumentation
- Off-the-Shelf availability and rapid delivery allow you to start your work right away and shorten the time to publish your results
- Service hubs in Europe, US and Asia for fast support



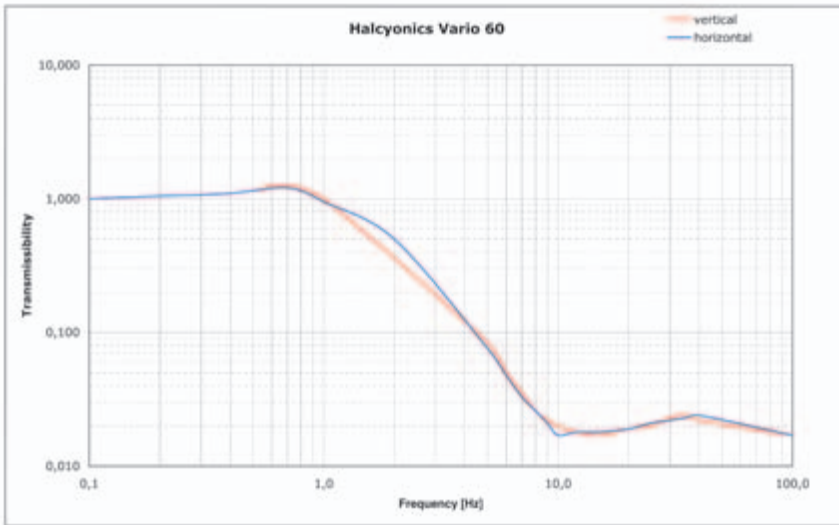
Vario_Basic_40



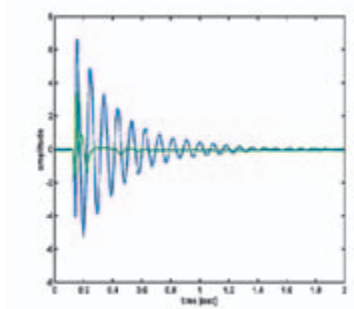
Breadboard on Vario_45



Vario_45



No resonant Eigenfrequencies between 1 and 5 Hz. Isolation better than 25 dB (94.4 %) above 5 Hz., better than 35 dB (98.2 %) above 10 Hz.
 Measured at a velocity of 100 $\mu\text{m/s}$, with a payload of 50 kg | 110 lbs



Typical settling time below 0.3 s



Vario_Basic_40 load adjustment

RECOMMENDED ACCESSORIES

- Various breadboards, plain or tapped ($\frac{1}{4}$ "-20 or M25)
- Top plate drilled and/or tapped to customer specifications
- OEM versions available
- Acoustic Enclosures
- Support Frames
- Rack integration mounted controller for system integration

