vibrationmaster

Vibrationmaster ApS
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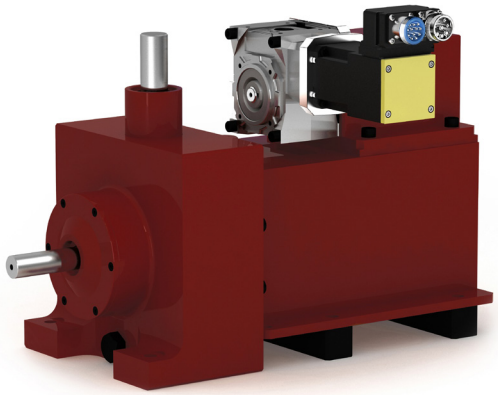
\ Datasheet: Variator



- Unique mechanical solution to varying amplitude [displacement] in test equipment
- Can be used to vary amplitude between 0 – 30mm and frequency from 3 to 100Hz in real-time
- Testing can be conducted to unprecedented levels of accuracy and speed

\ Description

The Variator is a unique patent protected mechanical solution to varying the amplitude of mechanical test equipment in real-time during operation. The Variator uses a mechanical arm mechanism to change the displacement on mechanical test equipment that applies vibration or shaking to a product or component, such as a Junker Test Bench or Vibration Table. It can change displacement at unprecedented levels of accuracy and speed. An electro-mechanical solution is used to vary the frequency.

Accuracy is maintained by a closed-loop system. Actual displacements during testing can vary considerably. The closed-loop system measures the effective displacement several times a second and adjusts the Variator so that the effective displacement is maintained at its correct level.

\ Features and benefits

- Varies amplitude [displacement] during testing by 0 – 30mm in real time
- Varies frequency from 0 to 100 Hz in real-time during testing
- Closed-loop system enables testing to unprecedented levels of accuracy
- Test subjects can be tested to previously unavailable tolerances
- Specifications can be customised according to specific requirements.

\ Applications

- For use in Junker Test Benches for transverse vibration testing of bolted joints
- Vibration Tables for testing products, components and packaging; to test products weighing up to 12,000 kg
- Earthquake simulation of buildings, bridges and other critical constructions
- As the vibrating component in a bulk handling system
- In test benches to test expansion joints, compensators and bellows of any material
- In dispenser and mixer systems in the food packaging industry

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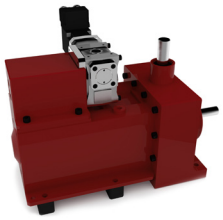
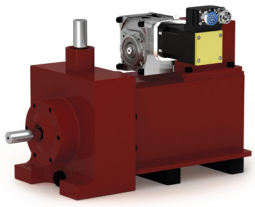
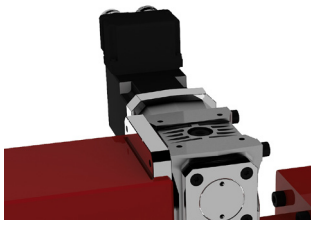
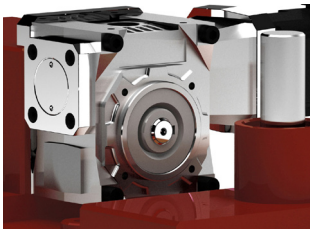

\ Technical specifications: Variator

Amplitude/displacement	0 – 30 mm in real time
Frequency	0 to 100 Hz variable during operation
Force output	Up to 120 Kn
Weight and dimension	Scalable to customer specification
Drive power	Electrical motor scalable to force output
Operational temperature	From -40 °C to 150 °C (-40 °F to 302 °F)
Voltage	Three-phase electrical mains supply for servo motor
Machine approval	CE
Servicing Schedule	Variator oil changes every 500 hours Bearing changes every 3,500 hours

\ To find out how you can benefit from our unique range of test equipment, contact us at:

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