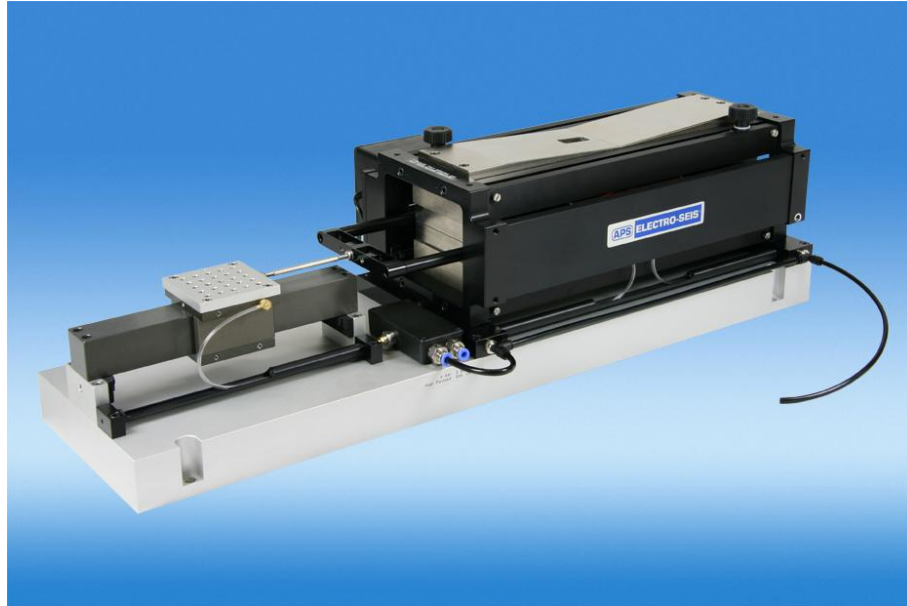


APS 500 ELECTRO-SEIS®

Long Stroke Shaker with Air Bearing Load Mounting Table



The **APS 500 ELECTRO-SEIS®** Long Stroke Shaker is a force generator specifically designed to be used for calibration and evaluation of accelerometers and other motion transducers. It provides excellent properties for low frequency excitation of such devices. This model has a horizontal air bearing table coupled to the vibration that allows payloads up to 3.0 kg (6.0 lb).

Applications

- Calibration and test for seismic instruments like geophones and heavy seismic sensors
- Seismic simulation for components

Features

- Designed for calibration and evaluation of seismic instruments with higher acceleration levels
- 21 lb, 95 N vector force
- 3.13 x 3.13-in, 79.5 x 79.5 mm load mounting table
- Air bearing guidance and support system carries up to 6.6 lb, 3.0 kg test load with very low cross-axis motion
- Efficient electrodynamic driver produces sine, random or transient waveforms
- Excellent waveform purity, typically less than 1 % THD

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Description and Characteristics

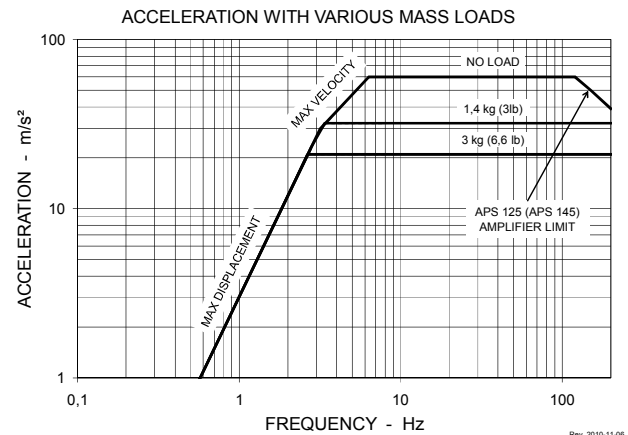
The APS 500 ELECTRO-SEIS® consists of a load mounting table and air bearing assembly driven by an APS 113-AB-LA ELECTRO-SEIS® long stroke air bearing shaker. The shaker imparts transverse base excitation to items mounted on the table.

Static and dynamic transverse loads are transferred through a large area precision air bearing to a rigid guide bar of square cross section. The driver unit and guide bar are mounted on a common rigid base, ensuring correct alignment of all moving parts. The standard hole pattern consists of 25 threaded holes in a 5 x 5 array. Optional metric threads and spacing are available.

The APS 113-AB-LA driver unit uses permanent magnets and is configured such that the armature

coil remains in a uniform magnetic field over the entire stroke range ensuring a high degree of linearity. The self-cooled armature coil requires power from a matching electronic power amplifier.

Performance



Specifications

Shaker	APS 500
Force (Sine Peak)	95 N (21 lbf)
Stroke (Peak - Peak)	152 mm (6.0 inch)
Frequency Range	DC ... 200 Hz
Operation	horizontal or vertical
Armature Weight	1.5 kg (3.3 lb)
Max. Payload	Horizontal Vertical
	3.0 kg (6.6 lb) 1.3 kg (2.9 lb)
Impedance	1.2 Ω
Air Pressure Required	4 bar ... 5 bar (60 psig ... 70 psig)
Air Flow Required	650 l/h (0.4 cfm)
Total Shaker Weight	64.0 kg (141.1 lb)
Overall Dimension L x W x H	813 x 219 x 210 mm (32 x 8.6 x 8.3 inch)
Load Table Size L x W	79.5 x 79.5 mm (3.1 x 3.1 inch)
Operating Temperature	5 ... 40 degrees C
Storage Temperature	-25 ... 55 degrees C

Accessories (optional)

Shaker	APS 500
Power Amplifier	APS 125
System Cable for Connection Shaker to Amplifier	APS 0082-6E
Zero Position Controller for Vibration Exciters	APS 0109
Vertical Mounting Kit / Vertical Operation Kit	APS 5002

Additional accessories available

All data are subject to change without notice

November 2010