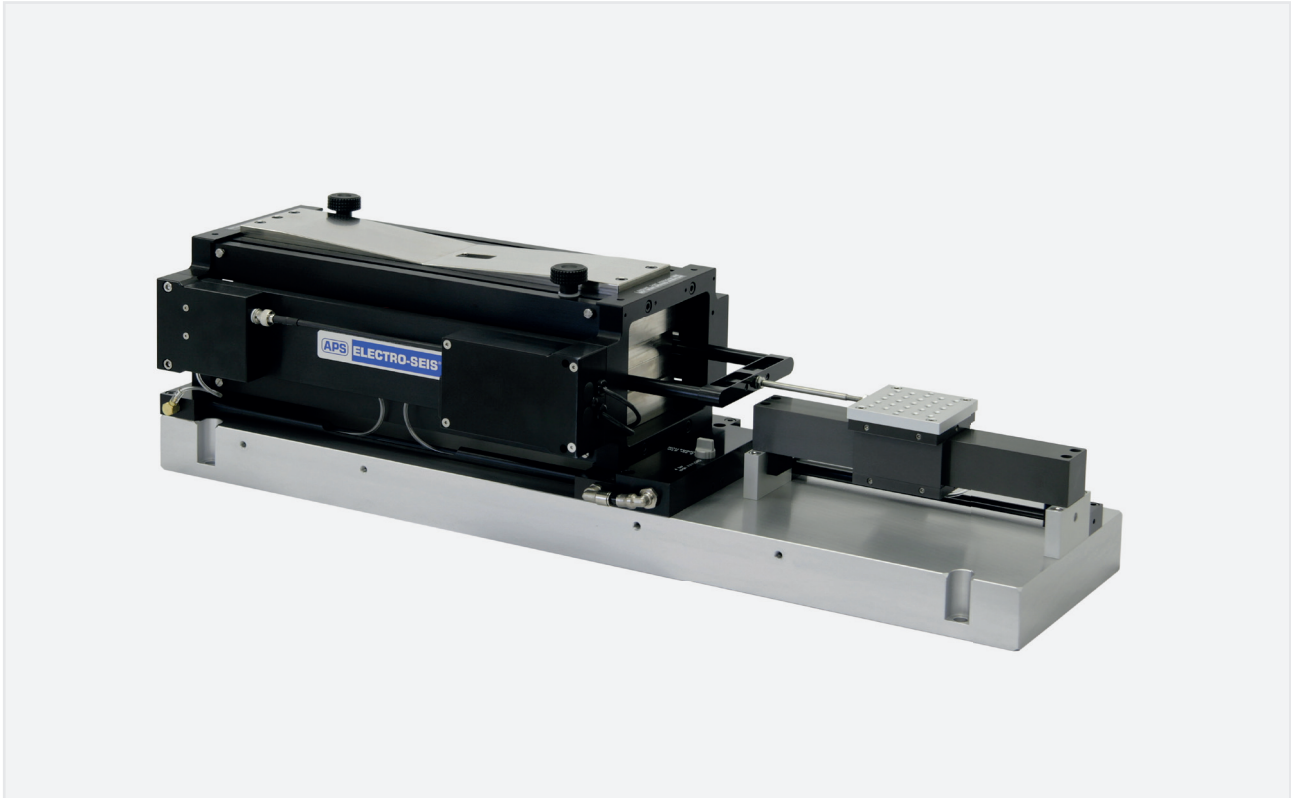


# APS 500 ELECTRO-SEIS®

## Long stroke shaker with air bearing load mounting table



### Applications

- ✓ calibration and test of position and acceleration sensors and other motion transducers



### Range of use

- ✓ designed for calibration and evaluation of seismic instruments with higher acceleration levels



### Features

- ✓ 95 N (21 lbf) vector force
- ✓ efficient electrodynamic driver produces sine, random or transient waveforms
- ✓ excellent waveform purity
- ✓ air bearing guidance and support system carries up to 3.0 kg (6.6 lb) test load with very low cross-axis motion
- ✓ 79.5 mm x 79.5 mm (3.1 in x 3.1 in) load mounting table



## Specifications

The APS 500 ELECTRO-SEIS® air bearing shaker is a long stroke, electrodynamic force generator specifically designed for calibration and evaluation of position and acceleration sensors or other motion transducers. It provides excellent properties for low-

frequency excitation of such devices. The model consists of an air bearing driver attached to an air bearing load mounting table that allows payloads up to 3.0 kg (6.6 lb).

### Technical data

Force rating <sup>1)2)</sup>	95 N (21 lbf)
Displacement (peak - peak)	152 mm (6.0 in)
Frequency range	DC...200 Hz
Direction of excitation	horizontal or vertical
Payload, max.	horizontal: 3.0 kg (6.6 lbs) vertical: 1.3 kg (2.9 lbs)
DC coil resistance	1.2 Ω
Air pressure (required)	4 bar...5 bar (58 psig...72 psig)
Air flow (required)	650 l/h (0.4 cfm)
Air quality	ISO 8573.1 Class 3
Weight (net weight)	64 kg (141 lbs)
Armature weight	1.5 kg (3.3 lb)
Dimensions L × W × H	813 mm x 219 mm x 210 mm (32 in x 8.6 in x 8.3 in)
Dimensions armature L × W × H	79.5 mm x 79.5 mm (3.1 in x 3.1 in)
Temperature range (in operation)	+5 °C...+40 °C, ±2 K (+41 °F...+104 °F, ±2 K)

1) Sine peak

2) Interval mode of operation



## Accessories (optional)

Power amplifier	PA 500 DM
System interconnect cable	APS 0082-6E
Zero position controller for vibration exciters	APS 0109
Vertical operation kit	APS 5002

Additional accessories available

## Description and characteristics

The APS 500 ELECTRO-SEIS® shaker 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.