

# APS 600 ELECTRO-SEIS®

### Very Long Stroke Shaker with Air Bearing Load Mounting Table





### **S** Applications

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

### Range of use

- Vibration testing in the very low frequency range
- Calibration of heavy sensors (Seismometers)

### **Features**

- 215 N (48 lbf) force (sine peak)
- 450 mm stroke (peak peak)
- $254 \times 254$  mm ( $10 \times 10$ -in) load mounting table
- Vertical operation (optional extra on request)
- Up to 25 kg (55 lb) test load with very low crossaxis motion
- Efficient electrodynamic driver produces sine, random or transient waveforms
- Excellent waveform purity



## **Specification**

The APS 600 ELECTRO-SEIS® Air Bearing shaker is a very long strong force generator specifically designed to be used for calibration and evaluation of accelerometers and other motion transducers. It provides excellent properties for very low frequency

excitation of such devices. This model consists of an air bearing table that allows high payloads up to 25 kg (55 lb) e.g. for the calibration of geophones and heavy seismic sensors.

Technical Data	
Force (Sine Peak) <sup>1) 2)</sup>	215 N (48 lbf)
Stroke (Peak - Peak) <sup>3)</sup>	400 mm (15.75 inch)
Frequency Range	DC50 Hz
Operation	vertical
Armature Weight	9.3 kg (20.5 lb)
Payload, max.	8 kg (18 lb)
DC Coil Resistance	1.7 Ohm
Air Pressure Required, horizontal	2 bar3 bar (30 psig45 psig)
Air Pressure Required, vertical	3 bar ± 0.2 bar (43.5 psi ± 2.9 psi)
Air Flow Required	650 l/h (0.4 cfm)
Air Quality	ISO 8573.1 Class 3
Total Shaker Weight	250 kg (550 lb)
Overall Dimensions L × W × H	905 mm × 440 mm × 360 mm (35.6 inch × 17.4 inch × 14.2 inch)
Load Table Size L × W	254 mm × 254 mm (10 inch × 10 inch)
Operation Temperature	23 °C (± 2 K)
Storage Temperature	−2555 °C

<sup>1)</sup> Peak sine

<sup>3)</sup> Recommended operation range peak-peak; mechanical stops at 450 mm (17.5 inch)

Accessories (optional)	
Power Amplifier	APS 125
System Cable for Shaker & Amplifier	APS 0082-6E
Zero Position Controller	APS 0109

<sup>2)</sup> Intervall mode of operation



### **Performance**

Test loads of up to 25 kg (55 lb) can be driven to acceleration levels typical of those found in seismic specifications. Performance envelopes of the APS 600 shaker with the APS 125 Power Amplifier are given in the graph. These envelopes represent the maximum acceleration for various test loads that can be achieved on the table.

#### ACCELERATION WITH VARIOUS MASS LOADS

