Model 1216VH Electrodynamic Shaker

12,000 to 24,000 Force Pounds



- ► 17.25" diameter, 120lb armature
- ▶ 12,000 pounds force (53.4kN) Sine & Random
- High g Level Capability
- ► 2" (50.8 mm) stroke
- ► Lin-E-AirTM Pneumatic Isolation system
- ► 1,500 (680.39kg) pounds vertical load support
- Air Cooled



The Ling Model 1216VH Shaker is designed as a performance, wide band air-cooled shaker for vibration testing of medium sized specimens over the frequency range up to 3000 Hz. The shake employs Ling's field proven metallic half-loop flexures and high stiffness linear recirculating ball bearings for armature guidance. Heavy duty/hexagonal head raised armature table inserts provide rigid, fettle-free attachment for test fixtures.

The 1216VH body suspension incorporates Ling's field proven Lin-E-AirTM pneumatic isolation system that suspends the body on air springs located at the trunnions. The system features linear bearings that restrain and guide the body motion in the thrust axis, simplifying rotation of the shaker and alignment with auxiliary horizontal tables. The low natural frequency of the body suspension system virtually eliminates the need for expensive reaction masses and bases.

The 1216 can also be ordered in a pedestal base (1216V) for combined environment testing (i.e. AGREE) or with a slip table assembly in a variety of stand alone and combined base options to suit your specific requirements.

The shaker is air-cooled and includes as standard equipment fifteen feet of flexible duct and a remotely located cooling blower. The remote blower serves to minimize heat rejection and noise in the area adjacent to the shaker.

Over 50 Years of Proven Reliability!

Model 1216vh Electrodynamic Shaker Specifications

12,000 to 24,000 Force Pounds



AXIAL STIFFNESS: 440 lbs. per inch (77 kN/m)

ARMATURE DIAMETER: 17.25" (438 mm) with 16" bolt

pattern

ARMATURE MASS: 120 lbs. (54.43 kg) nominal

ARMATURE SUSPENSION: Half-loop metallic flexures

STATIC LOAD SUPPORT: 1000 lbs (454 kg) standard

DISPLACEMENT: 1.5 in. p-p (38.1 mm) continuous,

2.0 in. p-p (50.8 mm) shock 2.2 in. p-p (55.9 mm) between

mechanical limits

FORCE RATING: 12,000 lbs (53.4 kN) Peak Sine

12,000 lbs (53.4 kN) RMS random 24,000 lbs (106.8 kN) Shock

MAXIMUM VELOCITY: 70 IPS (1.78 m/s), bare table as

limited by Amplifier voltage

FREQUENCY RANGE: 5 to 3000 Hz

MAXIMUM ACCELERATION: 100g sine vector

UTLITY POWER: 123 kVA

STRAY MAGNETIC FIELD: 12 gauss (1.2 mT) or less at

6" (152.4 mm) above table

HEAT REJECTED: 75,000 btu/HR at SCFM

COOLING Air-cooled by suction-type 20 Hp

blower; blower to shaker flexible air duct - 7 in. (178 mm) diameter,

15 ft. (4.6 m) long







