

MODEL 612VH ELECTRODYNAMIC SHAKER

6,000 TO 18,000 FORCE POUNDS



- ▶ Continuous Duty Operation
- ▶ 6,000 pounds force (26.7 kN)
- ▶ 3000 Hz Frequency Range
- ▶ 2" (50.8 mm) stroke
- ▶ Air Cooled
- ▶ Lin-E-Air™ Vibration Isolation System

LING
ELECTRONICS
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The Model 612VH is a wide frequency band air cooled, electrodynamic shaker, designed for conducting vibration and shock test on small to medium sized test items. It is ideally suited for product development, qualification, reliability, and stress screening test programs.

Superior armature axial centering and vertical load support are obtained from Ling's unique high-performance flexures. Ling's small to medium payload pneumatic load support system supports vertical loads up to 550 lbs or our heavy payload option supports up to 1500 lbs – both without requiring external support. A rugged lower bearing acts together with the flexures to provide high stiffness, cross-axis guidance, ensuring maximum axial linearity and minimum cross-axis motion.

The 612VH is air cooled by a remotely located blower that removes the heated air from the plenum via a flexible duct, thereby minimizing heat and blower noise for personnel in the area adjacent to the shaker.

Ling's exclusive Lin-E-Air Isolation System Suspends the shaker body on air springs that act at the trunnions to provide excellent frequency isolation of dynamic reaction forces from the ground. Linear bearings guide the body reaction motion, constrain it to remain parallel to the thrust axis at all angles of operation, and simplify alignment of the shaker with auxiliary horizontal slip tables.

The trunnion base includes leveling screws for stable, secure mounting to the floor. Optionally, various caster configurations, including air casters, are available for maximum flexibility in the shaker's location. For most applications,

Over 50 Years of Proven Reliability!

MODEL 612VH ELECTRODYNAMIC SHAKER SPECIFICATIONS

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AXIAL STIFFNESS:	1000 lbs. per inch (175 kN/m)
ARMATURE DIAMETER:	13.25" (336.55 mm) with 12" Bolt Pattern
ARMATURE MASS:	49 lbs. (22.22 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, 2.2 in. p-p (55.8 mm) between mechanical limits
FORCE RATING:	6,000 lbs (26.6 kN) Peak Sine 6,000 lbs (26.6 kN) RMS random 18,000 lbs (80.06 kN) Shock
FREQUENCY RANGE:	5 to 3000 Hz
MAXIMUM VELOCITY:	70 IPS (1.78 m/s), bare table as limited by Amplifier voltage
UTILITY POWER:	49 kVA
MAXIMUM ACCELERATION:	120g sine vector
STRAY MAGNETIC FIELD:	3 gauss (0.3 mT) or less at 6" (152.4 mm) above table
COOLING METHOD:	Air induced by remote electric blower. 7.5 Hp blower recom- mended. Blower to Shaker flexible air duct - 7inch(178 mm) Dia, 10ft (3m) long.

