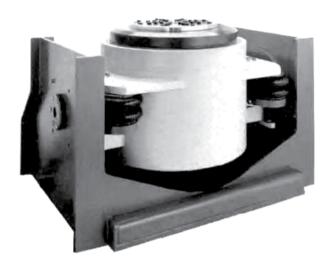
Model 4022VH Electrodynamic Shaker

40,000 to 80,000 Force Pounds



- ▶ 2.5" diameter; 275 lb. armature
- ▶ 40,000 pounds force (178 kN) Sine.
- 34,000 pounds force (160 kN) Random.
- 2" (50.8 mm) stroke
- Dual hydrostatic bearings for lateral restraint.
- Lin-E-Air[™] Isolation
- 3000 pounds force (13.4 kN) payload support



The ling Model 4022VH Shaker is a wideband, electrodynamic shaker designed for continuous testing of large and heavy specimens at high levels of acceleration for product qualification, reliability acceptance, and production stress screening applications.

The shaker employs Ling's field-proven metallic loop flexures and dual high stiffness hydrostatic bearings for armature guidance. Heavy-duty hexagonal head raised armature table inserts afford rigid, rattle-free attachment to test fixtures.

The 4022VH body suspension employs the exclusive Lin-E-Air pneumatic isolation system that suspends the body on air springs located at the trunnions. This system incorporates linear bearings, which restrain and guide the body in motion in the thrust axis, simplifying alignment with auxiliary horizontal tables. The low natural frequency of this body suspension system virtually eliminates the need for expensive large reaction masses for most applications.

A unique, dual closed-loop water-to-water cooling system is a standard feature of the Model 4022, providing the efficient cooling required for reliable long duration tests. The hermetically sealed system is ideal for combined environmental testing.

Over 50 Years of Proven Reliability!

Model 4022VH Electrodynamic Shaker Specifications

40,000 to 80,000 Force Pounds



AXIAL STIFFNESS: 800 lbs. per inch (140 kN/m)

ARMATURE DIAMETER: 23.25" (590.55 mm) with 22 in.

bolt pattern

ARMATURE MASS: 275 lbs. (124.7 Kg)

ARMATURE SUSPENSION: 4 loop metallic flexures and

two hydnostatic oil bearings

STATIC LOAD SUPPORT: 3000 lbs. (1360 kg)

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

2.0 in. p-p (50.8 mm) shock 2.1 in. p-p (53.3 mm) between

mechanical limits

FORCE RATING: 40,000 lbs (178 kN) Peak Sine

34,000 lbs (151.2 kN) RMS random

80,000 lbs (356 kN) Shock

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

limited by Amplifier voltage

MAXIMUM ACCELERATION: 100g sine vector

FREQUENCY RANGE: 5 to 2000 Hz

UTLITY POWER: 310 max.kVA

STRAY MAGNETIC FIELD: 10 gauss (0.1 mT) at

6" (152 mm) above table

COOLING METHOD: Closed-loop system circulates

distilled water through armature and field coils. Heat is

transferred through a water-towater heat exchanger. Standard cooling units provided for cooling

tower or chilled.

