

Derritron VP70



Features:

- **700 lbf Sinewave**
- **LINK-ARM Suspension**
- **High Lateral Stiffness**
- **Low Stray Magnetic Load**
- **Optional Internal Load Support**
- **Optional Low Frequency Trunnion**

LINK-ARM flexures permitting full 0.7" peak to peak stroke

6" diameter mounting table

Replaceable internally threaded stainless steel attachment points

Designed for standard vertical or rotated 90° to interface with horizontal tables

Applications:

- **Production Screening**
- **Reliability Acceptance Testing**
- **Engineering Evaluation**
- **Structural Fatigue**
- **Transportation Vibration**

The Derritron VP 70 is a High Performance 700 pound peak force electrodynamic shaker designed for general purpose vibration testing of small components and stress screening of electronic sub-assemblies.



Specifications

Parameter

Rated output force

Sine force	700 lbf pk (3113 N)
Random force	400 lbf rms (1779 N)
Shock force	1000 lbf pk, 11 msec pulse
Displacement	0.7" pk-pk (17.8mm), continuous, 0.75" pk-pk (19mm), between stops
Velocity	60 inches (1.52m/s) p/sec pk
Acceleration	100 g pk, bare table 200 g pk, shock pulse, bare table

Frequency Range DC- 4 kHz, bare table

Physical Characteristics

Moving element weight	5.5 (2.5 Kg) pounds
Fundamental resonance	3800-3900 Hz
Rated armature current	80 A rms, max
Specimen mounting	9 internally threaded, replaceable stainless steel inserts (1/4-20 or M6) 4 ea on a 5.0" & 2.5" bolt circle and one on center

Armature guidance and suspension system

Six LINK-ARM flexures incorporating twelve "metallastic" bushings for lateral and rotational restraint

Axial suspension stiffness

450 lb/in.(8.5 Kgf /mm) nominal

Stray Magnetic Field

<10 gauss @ 4" above table, stray field adjustable

Shaker weight

390 lbs (234 kg) Shaker only
780 lbs (355 kg) w/ Low
Frequency Isolation Base
535 lbs (243 kg)w/Solid Mount
Base

Shaker cooling

Air cooled by suction type
remote centrifugal blower w/
10 ft hose

Heat dissipation

10000 BTU/hr @ 300 CFM
max.

Environmental conditions

Ambient temperature

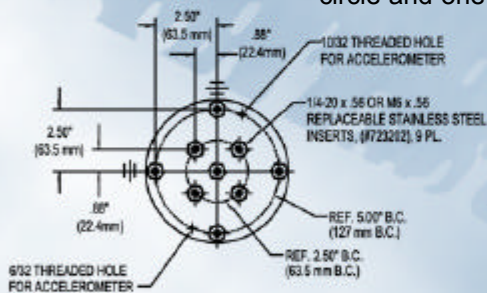
40° f to 100° F @ 85% RH
max.

Force derating

Reduce 1% per 4° F

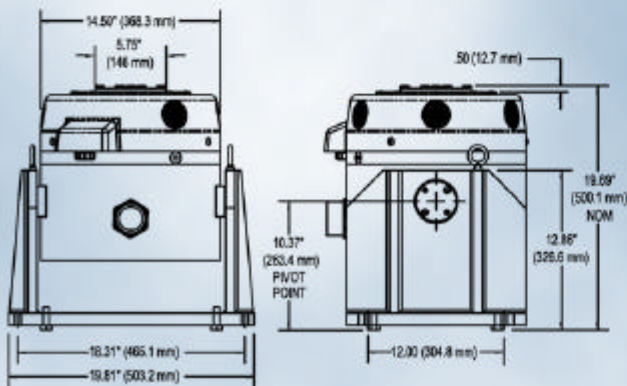
Options

- ☞ Low Frequency Trunnion
- ☞ Internal Load Support
- ☞ Solid mount base w/ air mounts
- ☞ Optional M6 inserts

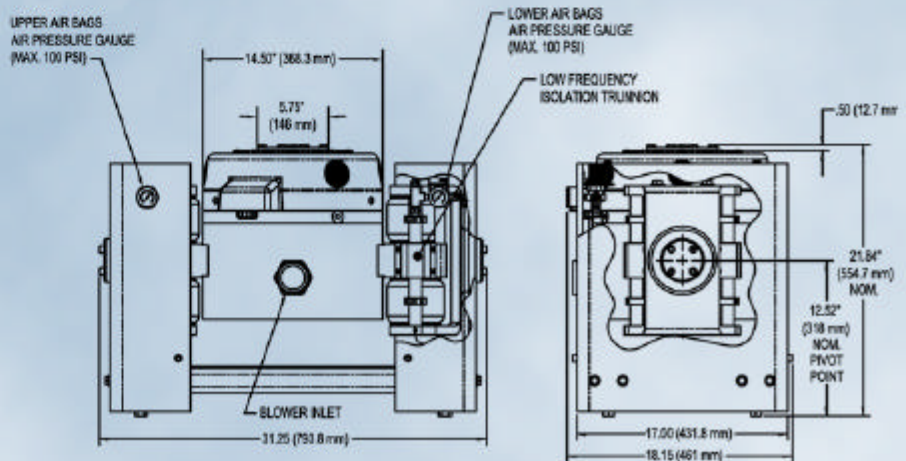


ARMATURE PATTERN

"Give us a challenge, we will exceed your expectations."



SOLID MOUNT BASE



LOW FREQUENCY ISOLATION BASE