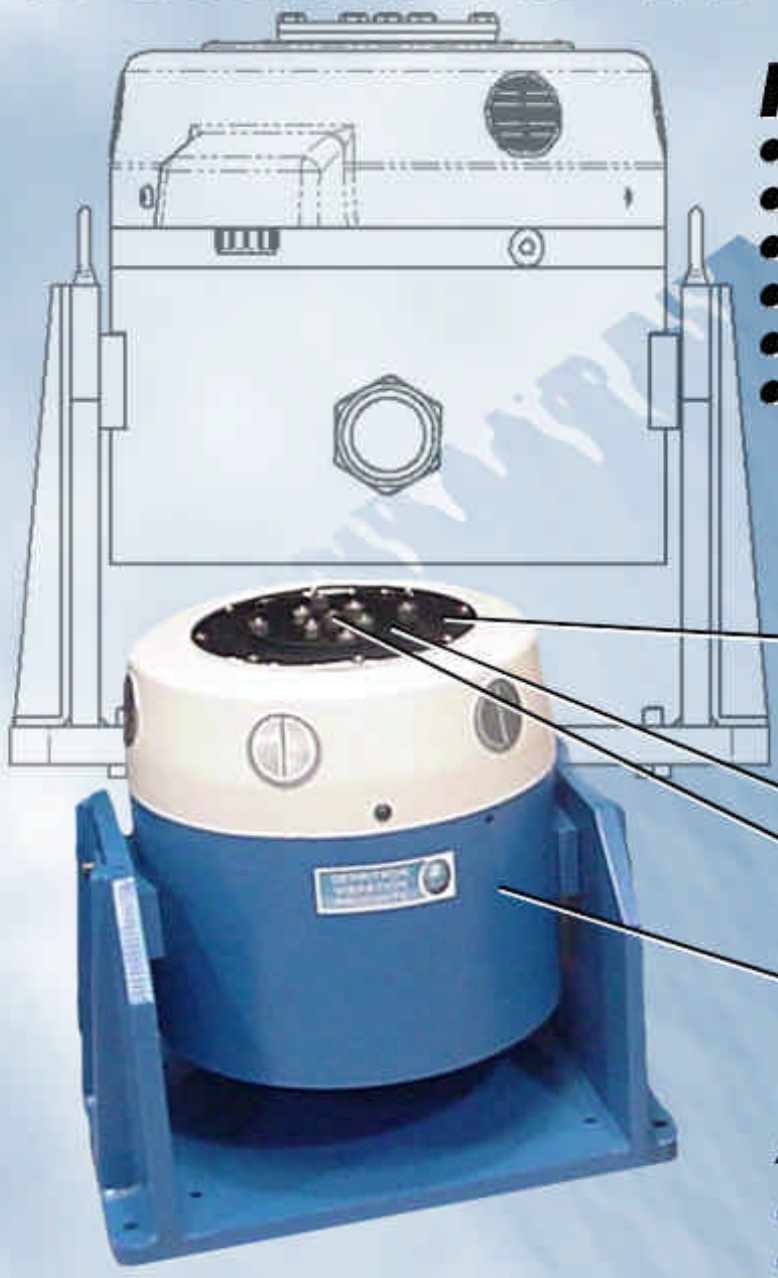
Derritron VP50



Features:

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

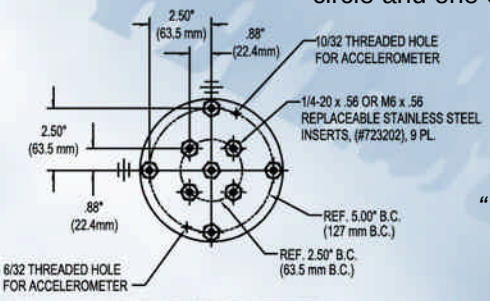
Applications:

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

The Derritron VP 50 is a 500 pound peak force electrodynamic shaker designed for general purpose vibration testing of small components and stress screening of electronic sub-assemblies.

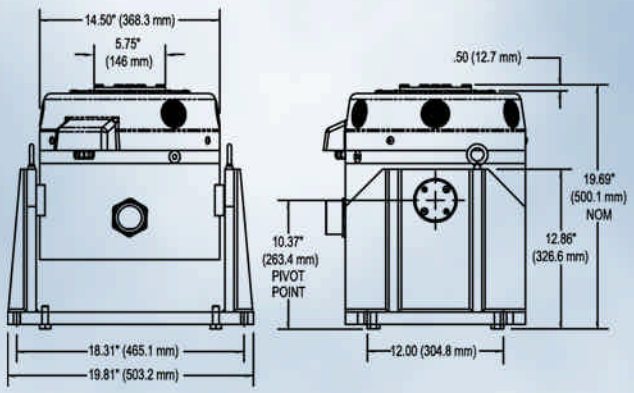
Specifications

Parameter	
Rated output force	
Sine force	500 lbf pk (2224 N)
Random force	300 lbf rms (1338 N)
Shock force	1000 lbdf 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	40º f to 100º F @ 85% RH max.
Force derating	Reduce 1% per 4º F
Options	✍✍ Low Frequency Trunnion ✍✍ Internal Load Support ✍✍ Solid mount base w/ air mounts ✍✍ Optional M6 inserts

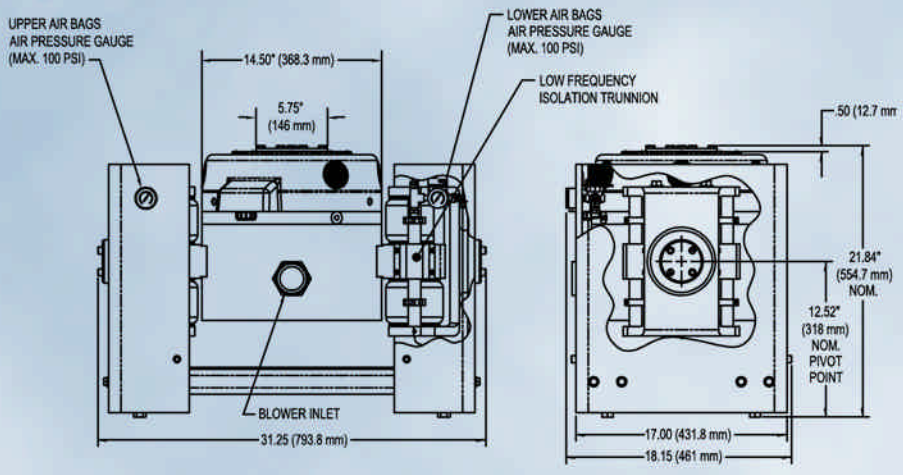


ARMATURE PATTERN

“Give us a challenge, we will exceed your expectations.”



SOLID MOUNT BASE



LOW FREQUENCY ISOLATION BASE

DERRITRON VIBRATION PRODUCTS

Derritron Vibration Products ✍ 12383 Doherty Street Riverside, CA 92503 ✍ (909) 549-8521 Fax (909) 736-7852

Specifications subject to change withough notice