



Vibration Testing

Pambry Electronics Vibration Testing



Pambry Electronics research and development division is the newest but fastest growing in the Pambry portfolio. Pambry offers an impressive level of experience and expertise in the acoustics field. All Pambry Electronics Research and development equipment and facilities are available to in house testing, customer funded testing & 3rd party hire at Pambry's facility.

Vibration Testing

Introduction

Pambry have a fully equipped vibration testing facility which as well as being used to test Pambry products is available for use by our customers.

The test facility consists of a Derritron VP30 Electromagnetic Vibrator, LDS DVC48 Control System and Power amplifier. The LDS control system can be programmed with a wide variety of random, sine and shock profiles from our PC based profile control software.

The facility can run a wide variety of well known test profiles including profiles from Mil Std 810 and RTCA DO 160-D. Custom profiles can also be created to investigate performance in specific or unusual conditions.

Pambry Services

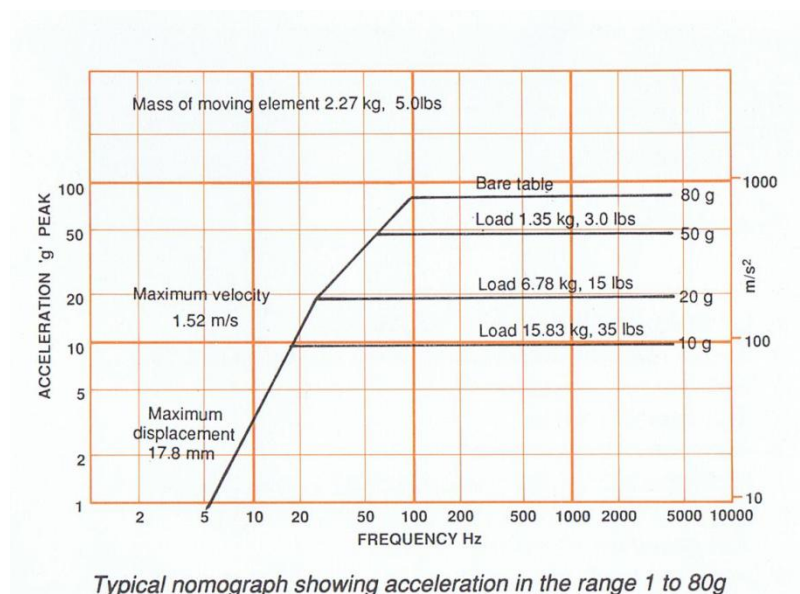
Pambry can assist in the use of the equipment for design proving, confidence and life testing. Pambry can also advise on the design of fixtures required to mount test units on the vibrator.

System Capabilities

Sine force Peak:	1780N
Maximum acceleration:	80g
Maximum Velocity:	1.52 m/sec
Maximum Peak displacement:	17.8mm
Random force rms:	1000N

Mass of test object & Capabilities

The capabilities of the system vary with the mass of the object to be tested and mass of the test fixture. The graph on the right can be used as a guide.



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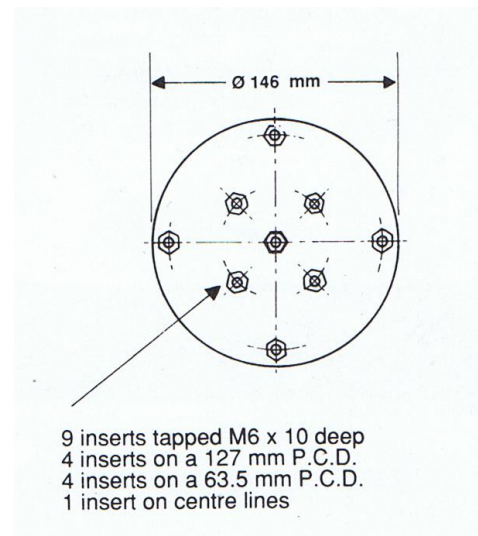
Vibrator Table Fixing Options

The dimensions of the vibrator table fixings are shown on the right. The table has 9 M6 inserts in M12x1.75 holes in the pattern displayed.

For improved accuracy the test fixture should place the centre of gravity of the unit and fixture as close to the centre of the table as possible.

The accuracy of the vibration profile will also be improved if the inserts are not used.

If possible the test unit can be fastened directly to the table.



Information Needed For Testing

1. Test object fixing or fixture details (Pambry can advise on the design of this and design and manufacture fixtures)
2. Test object and fixture mass
3. Test profile or profiles.

Contact Pambry Electronics at

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