dm3.1 / dm3.2 repetitive shock exciter

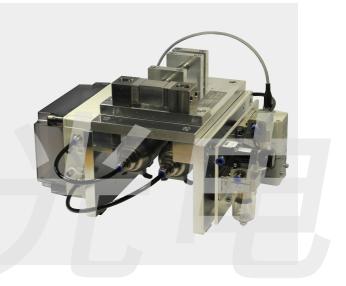


Application

dm3.1 and dm3.2 are specially designed for the demands of high shock cycle (i.e. repetitive shock) vibration testing. The shock exciter makes use of the hammer-anvil principle with a pneumatic drive. Due to the unique design high shock repetition rates up to 10 shocks / second together with lowest maintenenance requirements lead to a high throughput for repetitive shock testing. By changing fixture assembly and projectile the user can switch in between dm3.1 to dm3.2.

Features

- Acceleration ampltitude up to 5000 g *
- Pulse duration 30 µs ... 550 µs *
- Repetition rate up to 10 shocks / second
- Typical maintenenance cycle 500.000 shocks
- Closed loop amplitude control
- In plane / out of plane DUT orientation



General Technical Data

- Size: 40 cm x 40 cm x 25 cm (length x width x height)
- Weight: 12 kg
- Power requirement: 24 V DC; 2,5 A
- DUT mounting: glueing / double sided tape
- Media requirements: pressurized air (3 bar), vacuum (< -0,9 bar)
- Option: control software

* For detailed spec refer to performance diagram next page

dm3.1 / dm3.2 repetitive shock exciter

DYNAMIC MECHANICS

dm3.1

- Short pulses 30 µs ... 50 µs
- repetition rate: max. 10 shocks / second
- fixture size: 34 mm x 27 mm



dm3.2

- Long pulses 60 μs ... 550 μs
- repetition rate: max. 4 shocks / second
- fixture size: 40 mm x 35 mm



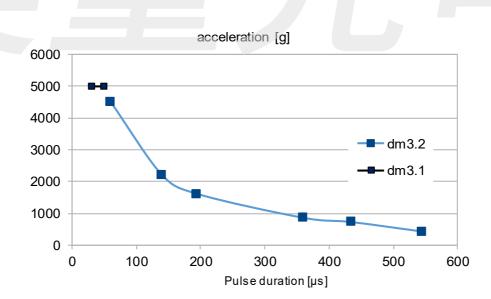


Figure 1: Performance Diagram