

Features:

- Maximum force: 110 lbf. (500 N) peak forced-air cooled
- Maximum force: 55 lbf. (250 N) peak convection cooled
- Maximum stroke: 1.5" (38 mm) p-p
- Recommended maximum stroke for calibrations: 1.0" (25 mm) p-p
- Maximum velocity: 50 in/sec (1.3 m/s)
- Maximum acceleration, bare armature with test instrument mounting fixture (TIMF): 35 g's peak, cooled; 20 g's peak, uncooled
- Bandwidth: 1.0 Hz to 10,000 Hz
- Armature and TIMF weight: 2.8 lbs. (1.27 kg)
- Weight, including trunnion base: 75 lbs. (34 kg)
- Dimensions: 14" x 12" x 14.5" H (355 mm x 305 mm x 370 mm H)
- Maximum device under test (DUT) weight: <900 gm



**Calibration Vibration Exciter
MB Model CAL 110**

- Transverse acceleration, normal to driven-axis:

Below 20 Hz, 1" pk-pk or 10 g's	< 5%	20 – 2 kHz (10 g's), typ.	< 10%
100 & 160 Hz (10 g's)	< 5%	20 – 2 kHz (10 g's), max.	<25% @ 2 freq.

- Total Harmonic Distortion (THD):

5 Hz, 0.25 g's pk	< 25%	100 Hz, 10 g's	< 1%
10 Hz, 1 g	< 10%	200 Hz, 10 g's	< 1%
20 Hz, 10 g's	< 10%	500 Hz, 10 g's	< 1%
20 Hz, 1 g's	< 5%	≥ 1000 Hz, 10 g's	< 1%

- To reduce THD: add mass to armature; operate at smaller displacements and accelerations

Applications:

- Higher-volume calibration requirements
- Calibrates accelerometers and vibration sensors weighing <900 grams and with <70 mm diameters
- Ideal for accelerometers and vibration sensors with higher weights and offset loads, such as turbine and engine accelerometers with integral armored cable
- Available as a stand-alone product, or as part of a fully automated calibration test system
- Sensor manufacturing quality assurance testing
- In-laboratory R&D instrumentation verifications
- Optional note: use with MB500VI or MB1000VI power amplifiers