

Vibration Calibration Exciter System

Model CAL50, Reference Accelerometer (REF)
and Model MB500VI Amplifier

Specifications: Model CAL50

- Available as a stand-alone model, or as part of a complete MB Dynamics WIN475 turnkey automated calibration system
- Stroke: 1" (25 mm) pk-to-pk
- Force: 42 lbf pk (185 N pk)
- Sine acceleration: 38 g's pk
- Shock accelerations on 100 gm accelerometer: 60 g's pk with optional controller
- Can be operated without forced air cooling to achieve 50% of above output
- Moving element dynamic weight, including Test Instrument Mounting Fixture (TIMF): 1.13 lbs (0.51 kg)
- Bare table moving element resonance: Above 8 kHz
- Frequency response: 1 Hz to 10 kHz
- Stray magnetic field: <5.0 gauss 1" (25 mm) above table
- Includes TIMF (shown in picture) for calibrating transducers with different mounting threads, as well as large or heavy accelerometers and vibration transducers ≤ 1 kg
- 10 foot (3 m) of drive cable
- Mounted in trunnion base for vertical and horizontal excitation
- CE marked



Vibration Calibration Exciter System
Model CAL50, REF and MB500VI Amplifier

Specifications: Reference Accelerometer (REF) (IEPE/ICP)

- Frequency response: 0.5 Hz to 10 kHz, $\pm 5\%$
- Sensitivity: 100 mV/g, $\pm 10\%$
- Measurement range: ± 50 g pk
- Resonant frequency: > 40 kHz
- Temperature coefficient of sensitivity: 0.002 %/°F
- Transverse sensitivity: $\leq 3.0\%$
- Weight: 7.6 gm

MB500VI Amplifier to Power CAL50; REF Exciter to Rated Performance

Specification	MB500VI Amplifier
Frequency range, Hz:	DC to 20 kHz; usable to > 60 kHz
Coupling:	AC or DC
Amplifier feedback mode:	Voltage or current, switch-selectable
Input power, voltage and line frequency:	100, 120, 200, 220, 240 V; 48-62 Hz
Input power, VA:	1,000
Output, volts & amps RMS	25 V RMS and 25 A RMS
Total harmonic distortion, %:	$< 0.5\%$ @ 1 ohm (voltage mode)
Signal-to-noise ratio:	> 100 dB
Dimensions, rack mount:	19" W (482 mm); 14 1/4" D (362 mm); 3.5" H (2 HE)
Weight, kg	15

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