

The Tekneka VBC390 Vibration Calibrator is a versatile and compact device that delivers high-precision vibration calibration. Using potentiometers, it generates standard sine signals from 10Hz to 1280Hz with adjustable amplitude for acceleration, velocity, and displacement. The calibrator features digital displays for easy monitoring and supports both horizontal and vertical vibration generation. Combining a sine signal generator, power amplifier, standard transducer, vibration meter, and shaker in a single unit, the VBC390 is ideal for laboratory and on-site applications. Its high accuracy and user-friendly operation make it indispensable for vibration analysis and equipment maintenance professionals.

Features

- Wide Frequency Range: Define sine signal vibrations at selectable frequencies
- Digital Displays: Accurate and clear readings of acceleration, velocity, and displacement
- Dual Vibration Modes: Supports both horizontal and vertical vibration generation
- Integrated Design: Combines multiple functionalities in one compact unit
- User-Friendly Operation: Easy controls for seamless calibration processes

Applications

- Machine Maintenance: Ensures vibration sensors on industrial machinery are accurately calibrated
- Research Laboratories: Validates the performance of vibration analysis instruments
- On-Site Equipment Testing: Performs quick calibrations during field inspections
- Sensor Manufacturing: Calibrates and tests vibration sensors for accuracy and reliability
- Quality Assurance: Supports product testing in industries such as automotive, aerospace, and electronics



Maximum Vibration Amplitude and Maximum Load

| | ≤100g | | | ≤250g | | | ≤650g | | |
|--------|---------|---------|-------|---------|---------|-------|---------|---------|-------|
| | a(m/s2) | v(mm/S) | d(μm) | a(m/s2) | v(mm/S) | d(μm) | a(m/s2) | v(mm/S) | d(μm) |
| 10Hz | 2.5 | 28 | 1300 | 3.5 | 40 | 1800 | 4 | 45 | 2000 |
| 20Hz | 15 | 85 | 1900 | 10 | 60 | 1300 | 5 | 28 | 640 |
| 40Hz | 60 | 170 | 2000 | 35 | 100 | 1100 | 12 | 35 | 380 |
| 80Hz | 100 | 141 | 800 | 40 | 60 | 320 | 14 | 20 | 110 |
| 160Hz | 75 | 53 | 150 | 35 | 25 | 70 | 12 | 8.5 | 24 |
| 320Hz | 50 | 18 | 25 | 30 | 10 | 15 | 10 | 3.5 | 5 |
| 640Hz | 30 | 5 | 3 | 20 | 3.5 | 2 | 6 | 1 | * |
| 1280Hz | 23 | 2 | * | 10 | 0.9 | * | 5 | 0.4 | * |

| Description | Ranges | Accuracy |
|-----------------------------|---|--------------|
| Frequency | 10Hz to 1280Hz | ±0.01% |
| Acceleration (100m/s2 pk) | 40Hz to 320Hz | ±3% + 1digit |
| | 320Hz to 1280Hz | ±5% + 1digit |
| Velocity (170mm/sec RMS) | 40Hz to 640Hz | ±5% + 1digit |
| Displacement (2000μm pk-pk) | 40Hz to 320Hz | ±5% + 1digit |
| Proximity Probe Linearity | 0 to 2.0mm (5mm and 8mm probes) | |
| Display | 3½ digit (Acceleration, Velocity or Displacement) | |
| Operating Temperature | 0 to 50°C (32 to 122°F) | |
| Storage Temperature | -20 to 70°C (-4 to 158°F) | |
| Dimensions | 300 x 250 x 210mm | |
| Weight | 5.5kg | |

Packing Includes

- Proximity Probe Linearity Calibration Kit
- Power Cable
- Test Report



Ordering Info

VBC390..... Vibration Calibrator