VB290 Vibration Meter

текпека

Product Datasheet

The Tekneka VB290 vibration meter is a professional tool for measuring industrial vibrations and its frequency ranges from 10Hz to 1kHz. The VB290 offers acceleration, velocity, and displacement measurements, including a data hold button, memory functions, a separate vibration probe with a magnetic base, and an RS232 computer interface. It helps to analyze machine conditions by measuring vibration levels, which can identify problems including poor balance, misalignment, structural looseness, and demanding maintenance.

Features

- Frequency Range: 10Hz to 1kHz range provides for precise detection of normal machinery vibrations
- Velocity, displacement, and acceleration are measuring modes for versatile diagnostics
- User can pause the readings using the HOLD feature for further examination
- Maximum and minimum vibration levels can be saved using the REC & Memory feature
- Magnetic base of the vibration probe allows for a stable attachment for accurate measurements
- Computer connectivity for data processing and transfer is made easier by the RS232 port (optional)
- A bar graph on the LCD makes it possible to see measurements clearly
- It has a sturdy housing that can handle industrial settings and a compact design

Applications

The VB290 Vibration Meter is used for monitoring and recognizing machine problems in a variety of industrial settings. Identifying problems such as imbalance and misalignment facilitates predictive maintenance by minimizing downtime and enabling prompt repairs. The meter is also utilized in research to evaluate novel designs, in quality control to guarantee that equipment functions properly, and during installation to confirm the correct setup. To make sure everything runs safely and effectively, it is also helpful for monitoring buildings, HVAC systems, rotating machinery, power plants, and even marine and aerospace applications.



Technical Specifications

| Description | Ranges | Resolution | Accuracy |
|--|--------------------------|---------------------|--|
| Acceleration (RMS, Peak, Max Hold) | 0.5 ~ 199.9m/s² | 0.1m/s ² | ±(5% + 5dgt.) @ 160Hz, 80Hz, 23 ±5°C |
| | 0.05 ~ 20.39G | 0.01G | |
| | 2 ~ 656ft/s ² | 1 ft/s ² | |
| Calibration Point | 50m/s² (@ 160Hz) | | |
| Velocity (RMS, Peak, Max Hold) | 0.5 ~ 199.9mm/s | 0.1mm/s | ±(5% + 5dgt.) @ 160Hz, 80Hz, 23 ±5°C |
| | 0.05 ~ 19.99cm/s | 0.01cm/s | |
| | 0.02 ~ 7.87inch/s | 0.01inch/s | |
| Calibration Point | 50mm (@ 160Hz) | | |
| Displacement P-P (RMS, Max Hold) | 0 ~ 1.999mm | 0.001mm | ±(5% + 5dgt.) @ 160Hz, 80Hz, 23 ±5°C |
| | 0.002 ~ 0.078inch | 0.001inch | |
| Calibration Point | 0.141mm (@ 160Hz) | | |

| General Specifications | | |
|------------------------|--|--|
| Measurement | Velocity, Acceleration, Displacement | |
| Frequency Range | 10Hz ~ 1kHz (as per ISO 2954) | |
| Functions Menu | RMS, Peak, Maximum, Hold | |
| Unit Button | Metric: m/s², g, mm/s, cm/s, mm | |
| | Imperial: ft/s², inch/s, inch | |
| Display | LCD with bar-graph, 52mm x 38mm | |
| Max. Hold Measurement | To measure and update the max. peak value | |
| REC. Sampling | 0, 1, 2, 10, 30, 60, 600, 1800, 3600 sec. | |
| Data Storage | 500 data | |
| Data Output Interface | RS232 & software (optional) | |
| Data Hold | \checkmark | |
| Auto Power Off | √(10 min) | |
| Built Material | ABS | |
| Operating Condition | 0 ~ 50°C, <80%RH | |
| Battery | 9V DC | |
| Packing Dimension | 280 x 250 x 75mm | |
| Device Dimension | 180 x 72 x 32mm | |
| Weight | Net: 317g/Gross: 972g | |
| | | |

Packing Includes:

- Vibration Sensor
- Magnetic Mount
- 9V Battery
- P0890643_Data Acquisition Software

- P0890641_RS-232 Cable (COM port)

- P0890642_Vibration Sensor (USB port)

Optional Accessories

- P0890643_Vibration Meter + RS-232 + Software Kit
- User Manual
 Hard Carrying Case

Specifications subject to change without notice. Copyright © 2024 Tekneka-Canada. All rights reserved including the right of reproduction in whole or in part in any form. Ref.D22_R01

Ordering Info

VB290..... Vibration Meter Kit P0890645..... Vibration Sensor with Magnetic Mount