

Model Number

K9140D10

PORTABLE VIBRATION CALIBRATION SYSTEM

Revision: B

ECN#:

Components

| | |
|--------------|---|
| C9110D | Portable Vibration Calibrator ^[1] |
| 9155D-Laptop | Windows Laptop PC with pre-installed TMS 9155-PVC software, and MS Office. |
| 9140-SW | TMS 9155 software dedicated for direct connection to C9110D via USB |
| 9100-CBL00 | TMS Data Transfer Cable. USB-A connector to USB-A connector. ^[2] |
| 353B04 | Verification Accelerometer |
| 003C03 | 10-32 to BNC cable |
| 9101C | Mounting Accessories Kit |

Functionality

| | |
|------------------------------------|---|
| Sensor Types | Acceleration, Velocity, Displacement |
| Sensor Operation Types | ICP (IEPE), Charge |
| Additional Sensor Operation Types | Voltage ^[3] , Differential Charge ^[3] , Piezoresistive ^[3] , Capacitive ^[3] |
| Frequency Range | 5 to 10,000 Hz [Note: 100-gram payload] |
| Test Types | Frequency Sweep, Amplitude Sweep (aka linearity), Sensitivity @ Reference Frequency |
| Calibration Data Management | Microsoft Access |
| Calibration Certificate Management | Microsoft Excel |
| Measurement Units Supported | Metric, English |
| Standards Compliance | ISO 16063-21 (2003) |
| Max Frequency Points | 200 |
| Max Pass/Fail Criteria (per Axis) | 8: 6 Frequency Response 1 Sensitivity @ Reference Frequency 1 non-linearity |

Performance

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|---|--|
| Measurement Uncertainty (k=2) ^[4] ^[5] | 5 Hz ≤ f ≤ 10 Hz; ±4% 10 Hz < f ≤ 30 Hz; ±3% 30 Hz < f < 100 Hz; ±1.5% f = 100 Hz; 1.5% 100 Hz < f ≤ 2 kHz; 1.5% 2 kHz < f ≤ 10 kHz; 4% |
|---|--|

NOTES:

- [1] Requires firmware 7.0 or higher for compatibility.
- [2] Non-TMS cables that may be available from retail suppliers present a danger that could result in hardware level damage to the USB port on PC and/or PVC. Always use TMS 9100-USB00.
- [3] Signal conditioning for these Sensor Operation Types are not included. However, they are supported in software.
- [4] See TMS document QS-P015 for most current values.
- [5] f denotes test frequency.

Optional Accessories

| | |
|--------------|---|
| 9100-PS01 | Power supply / charger for Portable Vibration Calibrator, universal 100-240 V, 50/60 Hz. |
| 9100-PPCBL01 | Cabling for connection of Bently Nevada 3300 XL proximitors to portable vibration calibrator or volt meter. |
| 9100-MPPA01 | Proximity probe adaptor kit, supports probes with common case threads ranging from M6 to 3/8". Includes metric micrometer and 9100-PPA02 nickel plated 4140 steel targets. |
| 9100-PPA01 | Proximity probe adaptor kit, supports common case threads from 5 mm to 10 mm size probes, including common imperial threads. Includes brackets for securing common probes. Includes micrometer scaled in mils and 9100-PPA02. |
| 9100-PPASH | Proximity probe mounting adaptor kit for probes installed inside a 1/2" diameter housing, including all 8 mm designs. |

Supplied Accessories (Included in 9101C)

| | |
|---|---|
| 081A08 | 10-32 UNF Mounting Stud |
| 081B20 | 1/4-28 UNF Mounting Stud |
| PVC-HTMNT01 | Used with 3- and 4-hole high temperature sensors (Imperial Threads) |
| PVC-HTMNT02 | Used with 3- and 4-hole high temperature sensors (Metric Threads) |
| PVC-MNT01 | M8 x 1.25 Female Mounting Pad |
| PVC-MNT02 | M8 x 1.0 Female Mounting Pad |
| 081M165 | M8 x 1.0 Mounting Stud |
| 080A109 | Petro Wax |
| 080A80 | Cyanoacrylate Adhesive |
| 080A90 | Quick Bond Adhesive Gel |
| 081A27 | 5-40 Mounting Stud |
| 9155-MNT32 | 10-32 UNF Female Mounting Stud |
| 9155-MNT05 | 5-40 UNF Female Mounting Pad |
| 9155-MNT07 | Adhesive Mounting Pad |
| Silicone Gap Filling Mounting Grease, and Syringe | |
| Strain Relief Cable Adhesive | |
| Screwdriver | |

All specifications are at room temperature unless otherwise specified.
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Project Engineer:

Product Manager:

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Spec Number:

Date:

Date:

Date:

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