

Model Number
K9140D10

PORTABLE VIBRATION CALIBRATION SYSTEM

Revision: D
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

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%
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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 is not included. However, they are supported in software.
 [4] See TMS document QS-P014 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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 In the interest of constant product improvement, specifications may change without notice.



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Date: 3/18/25	Date: 18 MAR 25	Date: 3/26/25	Page 1 of 1

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SAM-F020 revC 10/20/20