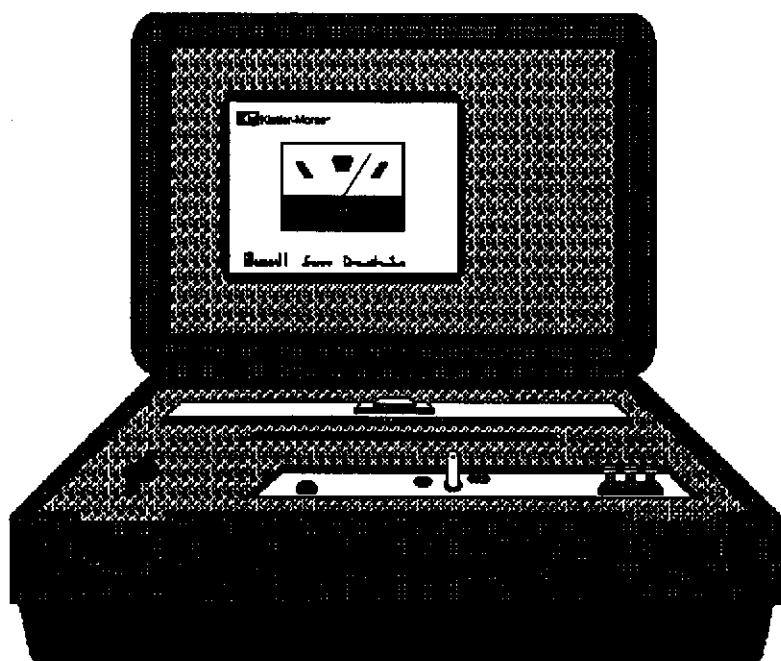


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 Kistler-Morse®

Microcell Sensor Demonstration Kit Manual



Microcell Sensor Demonstration Kit Manual

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INTRODUCTION

The purpose of the Microcell Sensor Demonstration Kit is to allow you to demonstrate to a customer the sensitivity of the Microcell sensor. Ease of sensor installation and wiring, applications, features, and benefits can also be discussed during your presentation.

DEMONSTRATION KIT CONTROLS AND INDICATORS

Refer to **Figure 1** to cross-reference the definitions in this section with the items in the demonstration kit.

1. Display - Indicates tension (TENS) and compression (COMP) when force is

applied to the Microcell Sensor Assembly.

2. Microcell Sensor Assembly - Microcell sensor attached to a steel bar used for demonstrating sensor's sensitivity.

3. Screw Driver - The screw driver used to 'zero' the Microcell sensor is kept in this slot.

4. Zero Microcell - Use the slotted screw driver in the kit to 'zero' the Microcell sensor when the meter indicates tension or compression at a time when no force is applied to the Microcell Sensor Assembly. A zero reading on the meter is indicated when the needle is in the center of the green area.

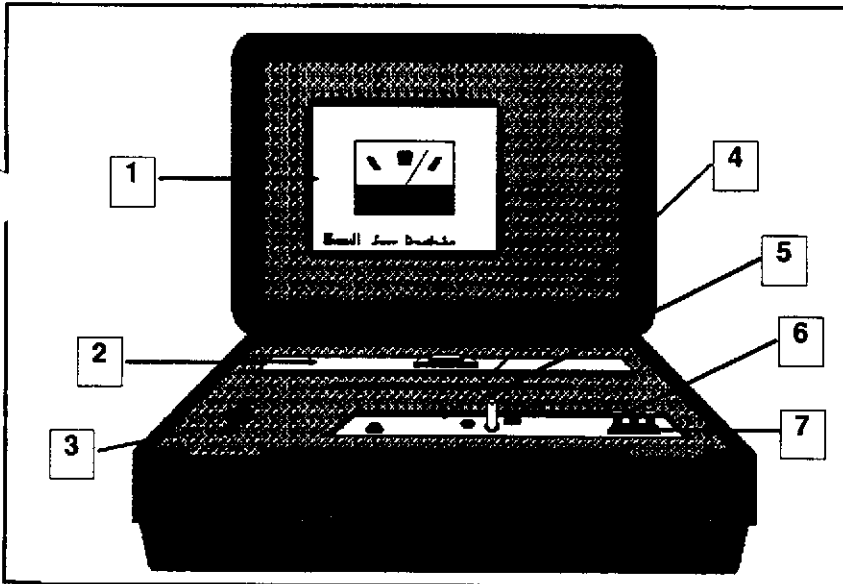


Figure 1. The Kistler-Morse Microcell Sensor Demonstration Kit.

5. On/Off/Test Switch - This switch turns the test meter on and off. Also, the 9 volt battery is tested when the switch is put in the test position. The test meter needle will move completely to the right to indicate a good battery.

Note

Be sure to put this switch in the off (0) position when the kit is not in use so as not to drain the battery.

6. Terminal Posts - Used to connect the Microcell sensor cable to the display. Connect the cable by pressing the terminals down, sliding the cable wires through the holes, and releasing the terminals. The terminals are color coded to match the colors of the cable wires.

7. Battery Compartment - The 9 volt battery is housed in this compartment. Lift the top to access the battery.

USING THE DEMONSTRATION KIT

1. Before getting started, test the battery as described in no. 5 above and leave the switch in the on (1) position. Replace the battery if it is weak or dead.

Note

Keeping a spare battery in the kit will ensure that your kit will always be operational when you are ready to use it.

2. Connect the Microcell sensor cable to the terminal posts as described in no. 6 above.

3. 'Zero' the Microcell sensor as described in no. 4 above if the needle is not in the center of the green area once the sensor wiring is complete.

4. Bend (Figure 2), compress (Figure 3), and pull (Figure 4) the Microcell Sensor Assembly to demonstrate the sensitivity of the sensor.

5. Features and benefits of the Microcell sensor are listed below for reference during your demonstration.

FEATURES AND BENEFITS OF THE MICROCELL SENSOR

Sensor Output 900 mV at 10,000 psi - Highly sensitive, can be used with common voltmeters, data acquisition, and signal conditioners.

Half Bridge Design - Three-conc. cable reduces wiring costs

Bolt-On Installation - Simple installation that needs no special tools. Sensor is reusable.

Linearity 0.1%, Nonrepeatability and Hysteresis 0.05% - Accurate enough to provide a 1% weighing system. Also useful for laboratory and industrial use.

Temperature Compensated 0° to 100°
F - Will perform within specification over
broad temperature range.

**Nickel plated AISI 1018 Carbon Steel
Base** - For use on a broad range of
applications made of steel. (Aluminum
sensor is available on request for
aluminum applications.)

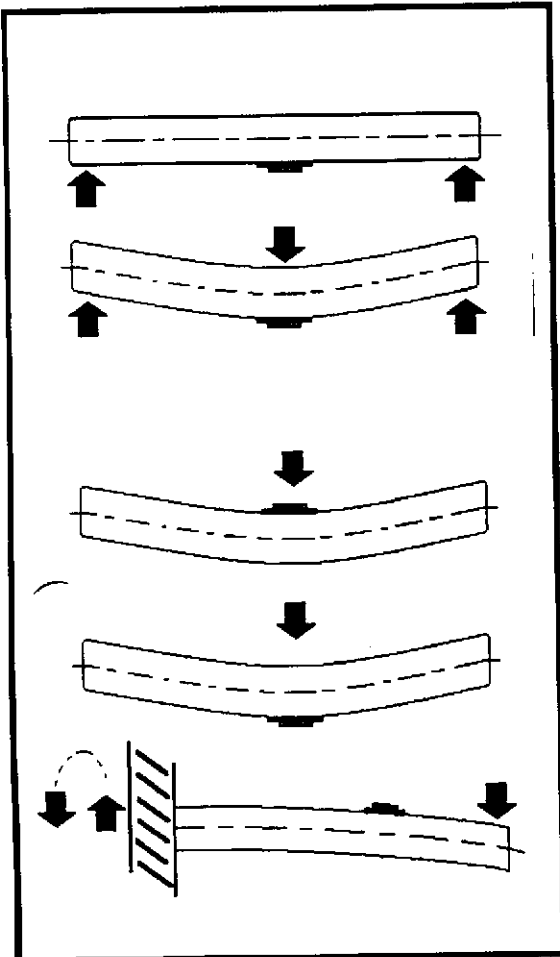


Figure 2. Bending.

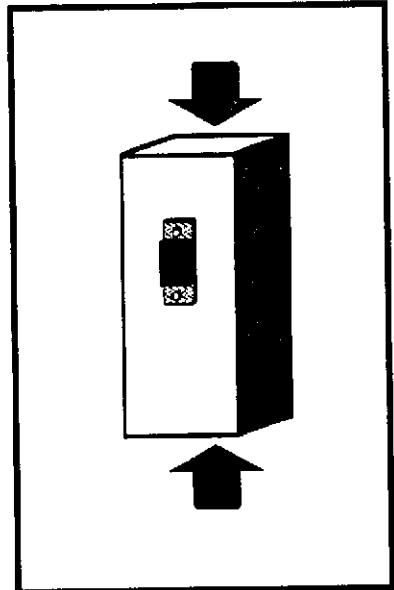


Figure 3. Compression.

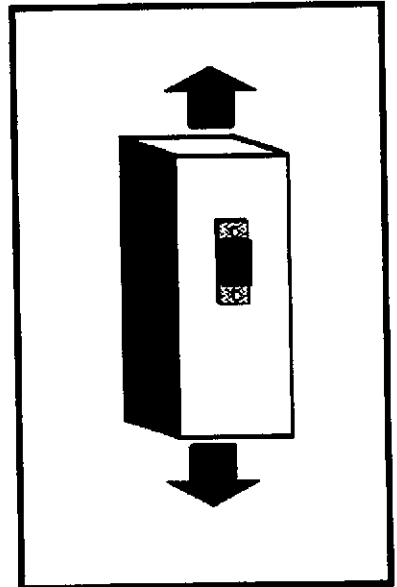


Figure 4. Tension.