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LMI ™

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LINEAR MEASUREMENT INSTRUMENTS, Corp.

Research, Development and Manufacturing of Precision Measuring Systems

CALIBRATION/ MASTERING INSTRUCTIONS FOR LMI 300/370 TO INTERFACE WITH DATAMYTE 3053

REQUIRED EQUIPMENT FROM DATAMYTE: DataMyte 3053

REQUIRED EQUIPMENT FROM LMI: LMI 300 Transducer

LMI 3030 Master Block

LMI 6100 Interface which includes:

LMI 6009 4 pin to 4 pin cable

LMI 6007 Interface Control Unit

LMI 6011 6 pin to 8 pin cable

LMI 6002 DataMyte Adapter

SET UP FOR FLUSHNESS:

1. Connect the transducer to Gage Port 1 of the data collector.
2. Turn on the data collector.
3. Move the cursor to "Options".
4. Select "Configure Gages" and press "Enter".
5. From the list displayed use the arrow keys on the data collector to choose which gage designation to configure, (i.e., G1, G1A) and press "Enter".
6. Type the unique gage name, (i.e.: LMI-FLUSH) and press "Enter".
7. Move the cursor to "Configure" and set up as follows:
   - ➢ Type: Gap & Flush
   - ➢ Scale: 10
   - ➢ Zero Master: 0
   - ➢ Transducer: Low level gap gage
   - ➢ Switch: (Read)
   - ➢ Master Type: (Three point)
   - ➢ Show Additional Parameters: (No)
8. Press the right arrow key. The "Save Gage Configuration" window will pop-up. Select "Save to Current Gages" and press "Enter".
9. Move the cursor to 'Master".
10. Fully retract the transducer, select 'Master Lo", and press "Enter".
11. Fully extend the transducer, select "Master High", and press "Enter".

12. Position the transducer into the calibration block's flush master position. Select "Master Zero" and press "Enter". The value should read 0.000.

13. The Calibration/Mastering for flushness is now complete.

NOTE: This configuration produces negative readings when retracted beyond the nominal. To reverse the signs, change the scale value in the configuration screen to -10.

SET UP FOR GAP:

1. Connect the transducer to Gage Port 1 of the data collector.

2. Turn on the data collector.

3. Move the cursor to "Options".

4. Select the "Configure Gages" and press "Enter".

5. From the list displayed use the arrow keys on the data collector to choose which gage designation to configure, (i.e.: G1B G1C) and press "Enter".

6. Type the unique gage name, (i.e.: LMI-GAP) and press "Enter".

7. Move the cursor to "Configure" and setup as follows:

   ➢ Type: Gap & Flush
   ➢ Scale: 10mm (.394)
   ➢ Zero Master: 0
   ➢ Transducer: Low level gap gage
   ➢ Switch: (Read)
   ➢ Master Type: (Three Point)
   ➢ Show Additional Parameters: (No)

8. Press the right arrow key. a "Save Gage Configuration" window will pop-up. Select "Save to Current Gages" and press "Enter".

9. Move the cursor to "Master".

10. Fully extend the transducer, select "Master Hi", and press "Enter".

11. Fully retract the transducer, select "Master Lo", and press "Enter".

12. Place the transducer into the calibration block's gap mastering position. Select "Master Zero" and press "Enter".

NOTE: The current configuration produces a negative reading when retracted beyond the nominal. To reverse the signs change the scale value in the configuration screen to -10.00. To obtain actual gap readings, change the zero master value in the configuration screen to the actual gap of the Master Block.

   ➢ IE. Model 3015 1.5mm (.059)
   ➢ Model 3030 3.0mm (.118)
   ➢ Model 3715 1.5mm (.059)
   ➢ Model 3730 3.0mm (.118)

13. The calibration procedure for gap is now complete. This completes the calibration procedure on the LMI 300 Transducer.