Model LMI	Large Meter Interface	Installation Data

SUGGESTED TOOLS

59983-001	Crimping Tool
59987-001	VOM Multimeter (Analog)
59989-001	Coax Stripper
59991-001	Wire Cutting Pliers
59993-001	Wire Stripper
59995-001	Screw Driver

REQUIRED MATERIAL

LMI Kit includes:

(2)	59761-001	Gel-Connectors
(2)	60238-001	Cable Ties
(1)	62085-001	Splice Enclosure
(1)	60238-006	Cable Tie

Transmitter Wire (Belden 8450, 8451 or 9802)

IDENTIFICATION

Badger Meter Large Meter Interface (LMI) is available in four configurations clearly identified on the label with markings:

62372-001 LMI Badger BR/PR/TR - Used to interface Badger Compounds with ORION® Pit and Remote transmitters, TRACE® Pit transponders, and Itron® ERT® Pit and Remote transponders.

62372-003 LMI BR/TR - Used to interface Schlumberger, Sensus, Kent, Hersey self generating pulse systems with ORION Pit and Remote transmitters, TRACE Pit and Remote transponders, and Itron® ERT® Pit and Remote transponders.

Each LMI is identified clearly on the label with an assembly number. (See Figure 1) Before proceeding with installation, be certain that the proper LMI configuration has been supplied for the application.

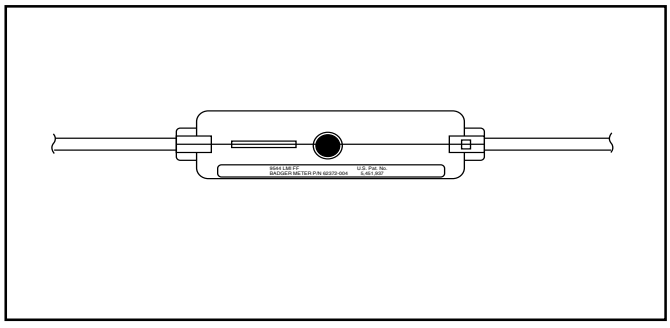

Figure 1. Identification

TRACE® is a registered trademark of American Meter Company. ORION® and Read-o-Matic ® are registered trademarks of Badger Meter, Inc. Itron® and ERT® are registered trademarks of Itron, Inc.

INSTALLATION

The LMI is available prewired to the remote or pit device or as a separate component. If the device is prewired, skip to section "Connecting LMI to the Generator".

CONNECTING LMI TO THE REMOTE CABLE

The black two conductor shielded cable is the output lead from the LMI for connection to remote modules.

Strip approximately 1 3/8" of outer insulation sheath from the remote cables using the 59989-001 Coax Stripping Tool. Use caution in removing the outer sheath so that the inner signal wire insulation is not damaged.

Unwind the outer foil shield from each cable and cut it off even with the outer sheath using the wire cutting pliers. Cut the un-insulated shield drain wire even with the outer sheath using the wire cutting pliers.

Cut the two insulated conductors from each cable to approximately 3/4" (See Figure 2).

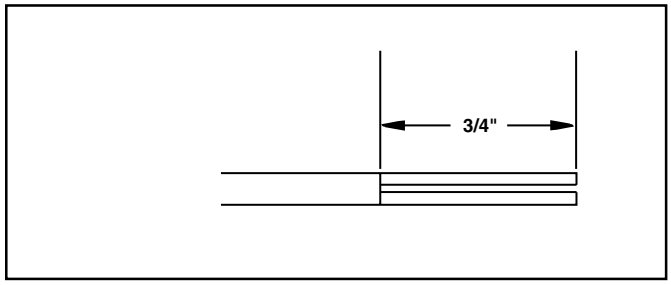

Figure 2. Wire Stripping Detail

Make sure any stripped wire length is trimmed off before inserting into insulation displacement splices. Connect the LMI conductors to the remote cable conductors using insulation displacement gel-filled splices P/N 59761-001 provided in the installation kit. Crimp the splices carefully and completely using a parallel jaw crimper such as Badger Meter P/N 59983-001. (See Figure 3) Polarity MUST be observed when connecting the LMI to the remote. Badger Meter wiring standards use the black conductor as the negative (-) conductor.

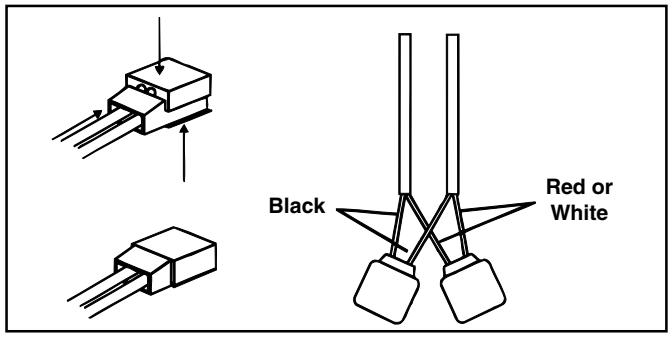

Figure 3. Splice Installation Detail

Place two plastic cable ties P/N 60238-001 on wires and tighten securely for strain relief. Remove excess cable tie with the wire cutting pliers (See Figure 4.)

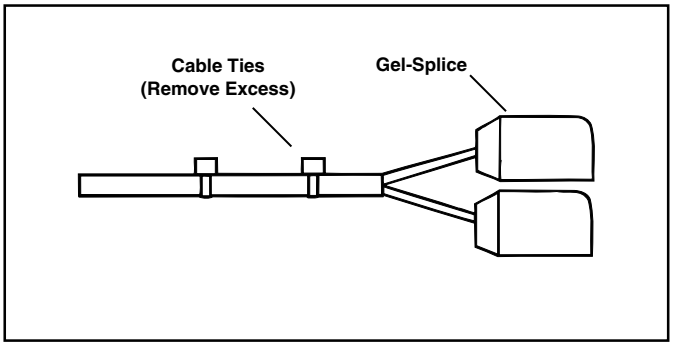

Figure 4. Strain Relief Detail

Insert the entire splice assembly into the silicone filled splice enclosure P/N 62085-001 as indicated in Figure 5. Close the cover with leads exiting alternate sides as indicated in the drawing.

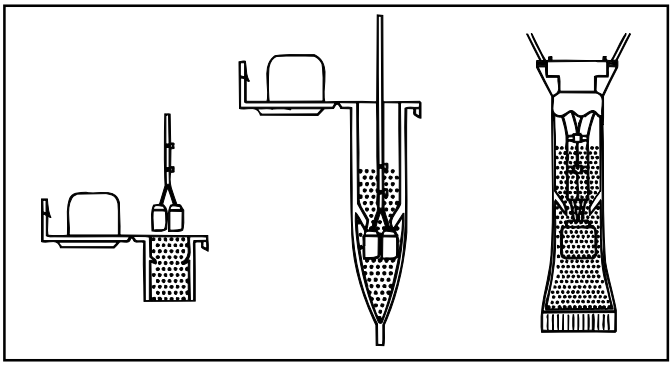

Figure 5. Splice Enclosure Assembly

CONNECTING LMI TO THE GENERATOR

The two conductor gray shielded cable is the input lead provided for connection from the LMI to the generator.

If not already stripped, strip approximately 1 3/8" of outer insulation sheath from the LMI input cable using the 59989-001 Coax Stripping Tool. Use caution in removing the outer sheath so that the inner signal wire insulation is not damaged.

Strip approximately 3/8" of insulation from each conductor. Loosen the generator terminal screws and wrap the bare conductor clockwise around the terminal screw. Overlap the conductor and tighten the terminal screw in accordance with the manufacturers' specification. Repeat this process for the second conductor. Polarity is not critical for the generator installation.

TESTING

After connections are complete, test the entire installation including Generator, LMI, and Remote Module in accordance with the instructions supplied with the module.

In pit, vault, or other installations subject to submergence, coat the generator terminals with a sealing compound recommended by the manufacturer. Read-O-Matic® installations should be potted in accordance with instructions included in ROM-I-3.

TROUBLESHOOTING

An analog ohm meter will indicate the approximate readings shown in Figure 6 when connected across the OUTPUT leads of the LMI. When the LMI is connected to the generator, the ohm meter should show a momentary deflection toward zero when the generator pulses. When connecting to the analog ohm meter, measure the impedance with the Red wire connected to + and Black to - to observe polarity.

62372-001 LMI Badger BR/PR/TR - Open

62372-003 LMI BR/PR/TR - Open

Figure 6. LMI Values

ISO 9001

Please see our website at
www.badgermeter.com
for specific contacts.

Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding bid obligation exists.

BadgerMeter,Inc.
P.O. Box 245036, Milwaukee, WI 53224-9536
(800) 876-3837 / Fax: (888) 371-5982
www.badgermeter.com