Model DTI	Digital Transmitter 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

DTI Kit includes:

59761-001	Gel-Connectors
60238-001	Cable Ties
62085-001	Splice Enclosure
60238-006	Cable Tie

Input Transmitter Wire (Belden 8486)

IDENTIFICATION

Badger Meter Digital Transmitter Interface (DTI) is available in three configurations clearly identified on the label with markings:

B Interface DTI - Used to interface the Badger® Fire Service transmitter with ORION® Pit and Remote transponders and TRACE® Pits and Remotes.

K Interface DTI - Used to interface Kent RS Pulser and Schlumberger Tricon S transmitters with ORION Pit and Remote transmitters and TRACE Pit and Remote transponders.

H Interface DTI - Used to interface Hersey ERI transmitters with ORION Pit and Remote transmitters, TRACE Pit and Remote transponders, and Itron® Pit and Remote transponders.

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

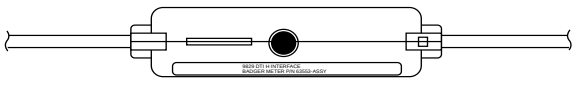

Figure 1 Identification

INSTALLATION

CONNECTING DTI TO THE TRANSMITTER

In some cases, the DTI will be purchased prewired to the transmitters. Once transmitter is attached to meter, the product is ready for test.

When transmitter is not supplied prewired, proceed with steps outlined below.

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.

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

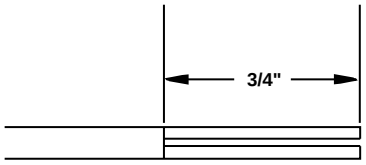

Figure 2 Wire Stripping Detail

If the transmitter has screw terminals, strip approximately 3/8" of insulation from each conductor. Loosen the terminal screws and wrap the bare conductors clockwise around the screw terminals. The brown wire should be connected to the positive terminal and the tan wire should be connected to the negative terminal. Once transmitter is attached to meter, the product is ready for test.

If splicing to an existing transmitter wire, perform the following:

Make sure the input wire is as short as practical.

Make sure any stripped wire length is trimmed off before inserting into insulation displacement splices. Connect the DTI conductors to the input 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 DTI to the transmitter. Badger Meter wiring standards use the tan conductor as the negative (-) conductor and brown for the positive (+) conductor.

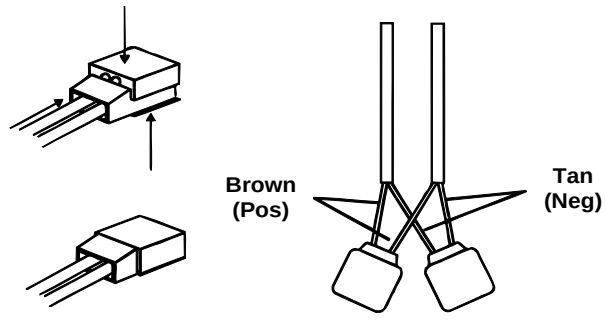

Figure 3 Splice Installation Detail

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.)

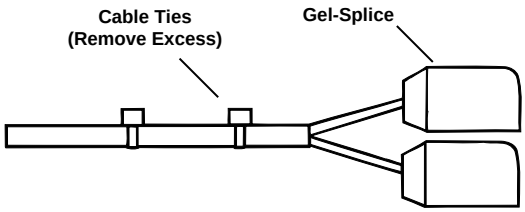

Figure 4 Strain Relief Detail

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.

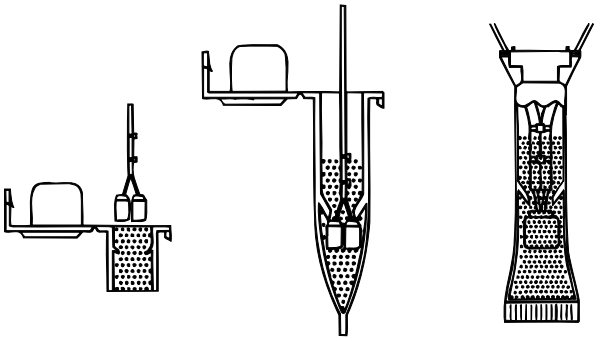

Figure 5 Splice Enclosure Assembly

TESTING

After connections are complete, test the entire installation including transmitter, DTI and remote or pit module in accordance with the instructions supplied with the module.

In pit, vault or other installations subject to submergence, coat the transmitter terminals with a sealing compound recommended by the manufacturer.

ISO 9001

Please see our website at
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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.

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