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ANDERSON-NEGELE

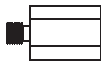# Technical Bulletin

## IZMS HART Installation
### Kit Part# 56705A0001

## SPECIFICATIONS

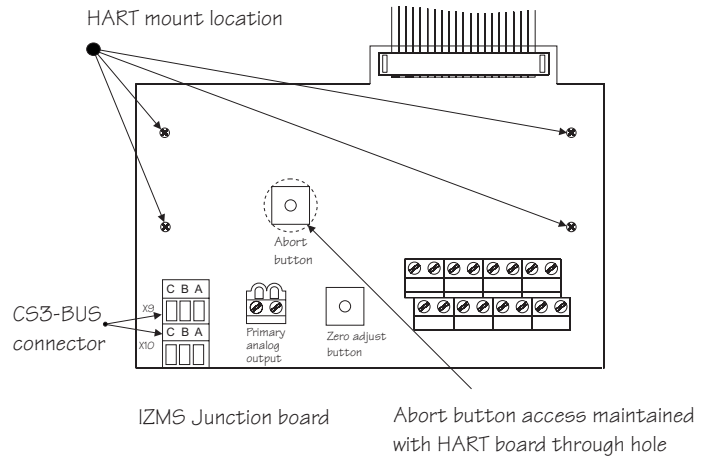| | |
|---|---|
| Communication: | HART version 6 |
| Loop Power (excitation): | 24 vdc |
| Output: | 4-20mA dc, 2-wire |
| Loop Resistance: | 500 ohms (max) at 24 vdc |
| Cable Recommended: | 2 conductor; stranded, 18-24 AWG, shielded with ground |

## INSTALLATION

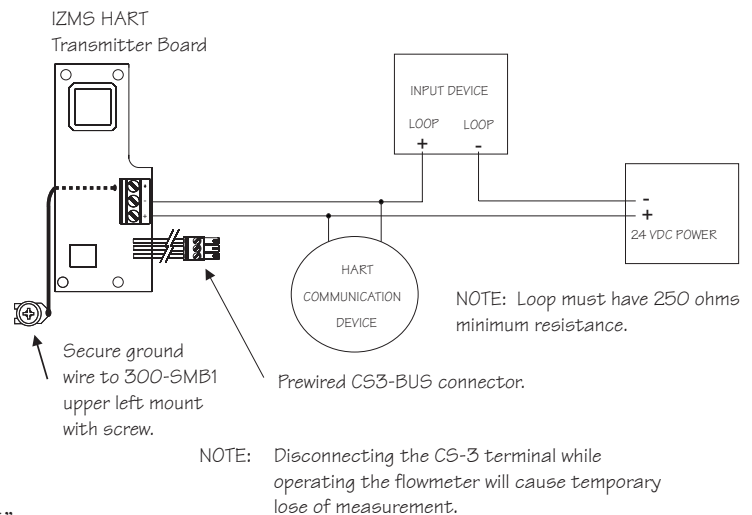### HART board hardware for installation to an IZMS flowmeter

Qty: 4 – M3 x 10mm standoffs
(Included in kit)

1.) Remove the X9 terminal block from the Junction board indicated to the right.
2.) Remove the 4 indicated screws holding the Junction board to the Main circuit board (see manual AIC2040 page 1-5, Figure 1-5).
3.) Place the screws and washers to the side for reuse when installing the HART board.
4.) Install M3 x 10mm standoffs to the 4 HART mount location indicated on the Junction circuit board positions indicated to the right.
5.) Fasten the HART board to the Junction board using the screws removed in step 2.
6.) Connect prewired CS3-BUS connector to corresponding X9 socket located on the Junction board.



HART mount location

Abort button

CS3-BUS connector

X9

X10

Primary analog output

Zero adjust button

IZMS Junction board

Abort button access maintained with HART board through hole

### Zero Trim

1.) Apply loop power to the HART transmitter board after applying power to the IZMS converter.
2.) Connect the HART communication device across the transmitter terminals. The signal loop must have at least 250 ohms resistance for HART communication device function.
3.) Turn on the HART communication device. Wait until communications are established and the Home Menu is displayed.
4.) If the Process Value is not within specification after stabilization:
    1. Select Calibration
    2. Select D/A trim
    3. Select "OK" to acknowledge WARN-LOOP remove from auto control
    4. Select "OK" to acknowledge connection of mA indicator
    5. Select "OK" to acknowledge setting field deviation output to 4mA.
    6. Enter indicated mA value and acknowledge with selecting "OK"
    7. Acknowledge indicated mA adjustment with "YES/NO" then select "OK"
    8. Select "OK" to acknowledge setting field deviation output to 20mA.
    9. Enter indicated mA value and acknowledge with selecting "OK"
    10. Acknowledge indicated mA adjustment with "YES/NO" then select "OK
    11. Select "OK" to acknowledge loop returning to original output
    12. Select "OK" to acknowledge NOTE return to auto control



IZMS HART Transmitter Board

INPUT DEVICE
LOOP + LOOP -

HART COMMUNICATION DEVICE

24 VDC POWER

NOTE: Loop must have 250 ohms minimum resistance.

Secure ground wire to 300-SMB1 upper left mount with screw.

Prewired CS3-BUS connector.

NOTE: Disconnecting the CS-3 terminal while operating the flowmeter will cause temporary lose of measurement.

NOTE: HART output will fault at 3.85mA with loss of IZMS signal.

# IZM HART Flowchart

**Units**
- Flow Rate Units
- Q-Typ
- Units
- mdim

**Meter Output**
- Current Mode
- Meter Out Damp(Tp3)

**Ranging**
- PV URV
- USL
- LSL
- Average
- Damping
- Vmin
- LFS

**Pulse Outputs**
- Output Mode
- pv1
- Tp1
- pv2
- tp2

**Digital Input Debounce**
- it1
- it2
- it3
- it4

**Factory Cal Parameters**
- Span
- Offset

**System Cal Parameters**
- m.spe
- p.spe
- n.spe
- b.spe

**Loop Current Cal**
- D/A Trim
- Loop Test
- Dac Zero
- Dac Full

**Input/Output Setup**
**Calibration**
**Meter Info**
**HART Info**

**Meter Setup**
- DN
- Pipe Detect
- Standby Mode
- Parameter Mode
- Switch Position

**Display Setup**
- V1 Format
- V2 Format
- Decimal Pt.
- Display Mode

**Meter Versions**
- User C2:
- System SS:
- Appli SA:

**Checksums**
- erpsum
- eparasum
- nparasum

**Fixed Info**
- Manufacturer
- Model
- Dev id
- Num req preams

**User Info**
- Message
- Tag
- Descriptor
- Date
- Poll addr
- Final assembly num

**Revision Data**
- Universal rev
- Fld dev rev
- Software rev
- Hardware rev