



1334-MOD-N3

3-15 PSI Pressure Transducer

Description The 3-15 PSI Transducer option when connected to an Isolated Signal Conditioner Card — **Option N or N4** — enables the output frequency of a Bulletin 1334 or 1335 AC Drive to be varied linearly in proportion to a remote 3-15 PSI pressure signal.

The pressure transducer is mounted in a NEMA Type 1 enclosure along with an interconnection wiring terminal block. If required, a padlock latch is provided on the enclosure to restrict access to both the transducer and terminal block.

SPECIFICATIONS

Operating Temperature	-55°C to +125°C
Shock	MIL-STD 202, METHOD 213B — 100G, $\frac{1}{2}$ SINE
Vibration	MIL-STD 202, METHOD 204C — 10 to 2000 Hz at 10G
AIR CONNECTION	1/8" × 27 NPT CONNECTOR REQUIRED

Installation



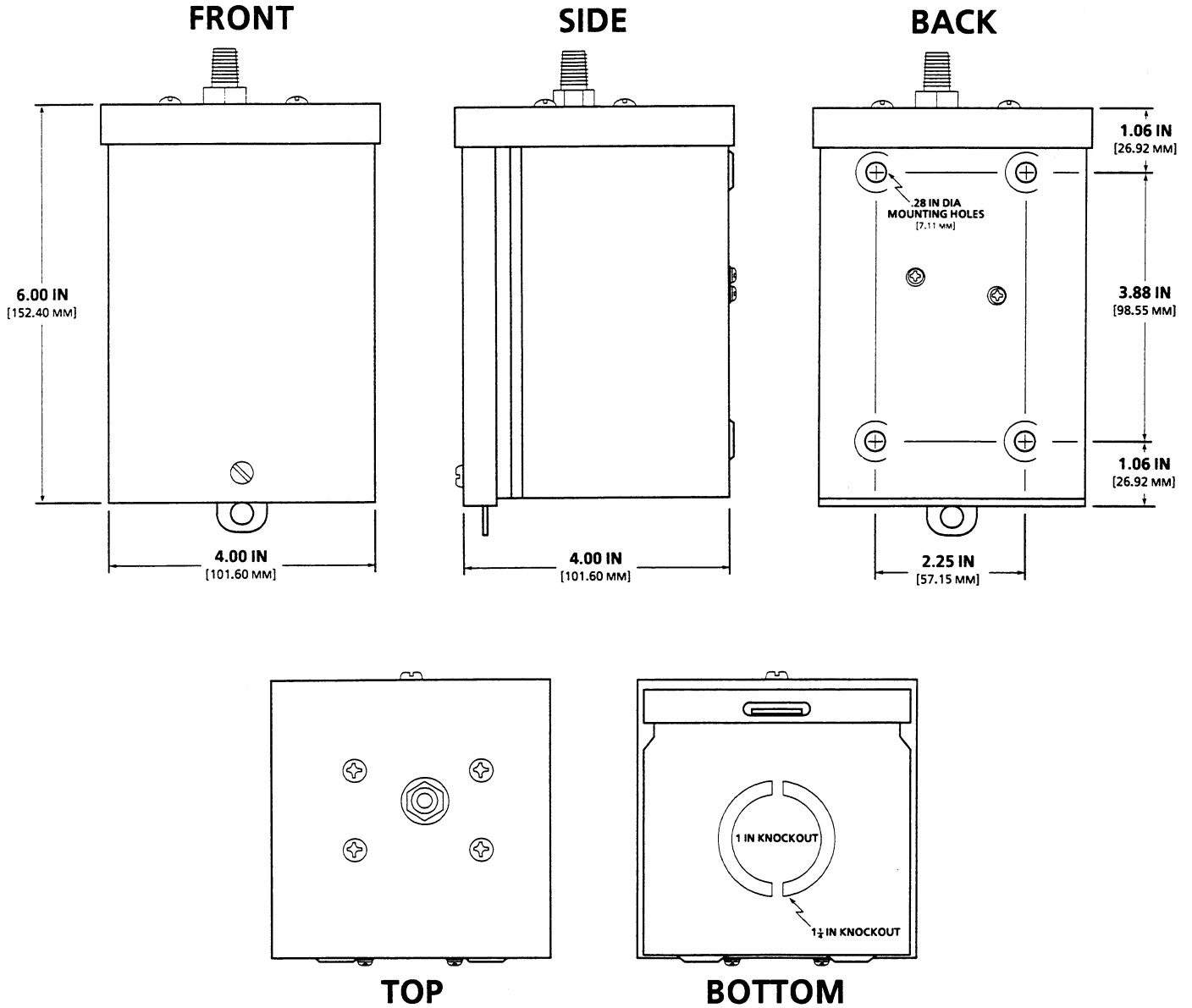
WARNING

Only personnel familiar with the Drive and its associated machinery should plan or implement the installation, startup, and adjustment of MOD kits. Failure to comply may result in personal injury and/or equipment damage.

To guard against personal injury, always remove & lock out power to the Drive at the main supply disconnect and all other power source disconnects. Ensure that DS1 is not lit when boards or wires are being installed or connected. Refer to the instruction manual for your Drive for LED location.

Transducer Installation

The 3-15 PSI transducer may be mounted remotely up to 200 feet from the Drive using the (4) mounting holes provided at the back of the enclosure. Use a 1/8" x 27 NPT connector to connect the air line to the transducer. The air source should be clean, dry, and regulated to a maximum of 15 PSI.

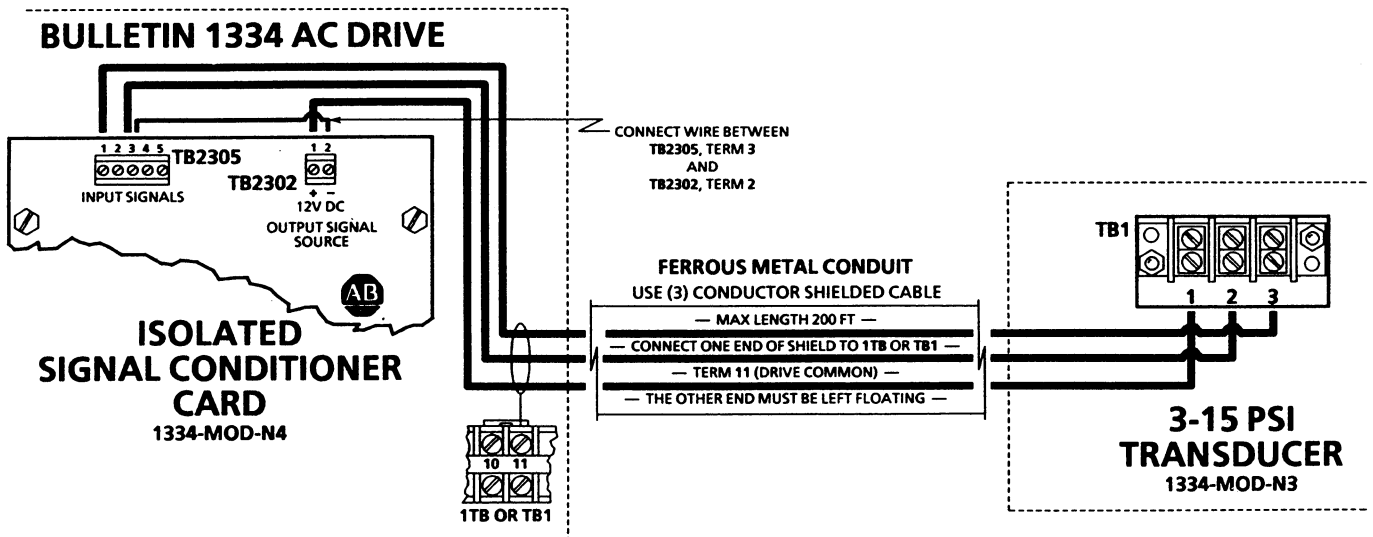
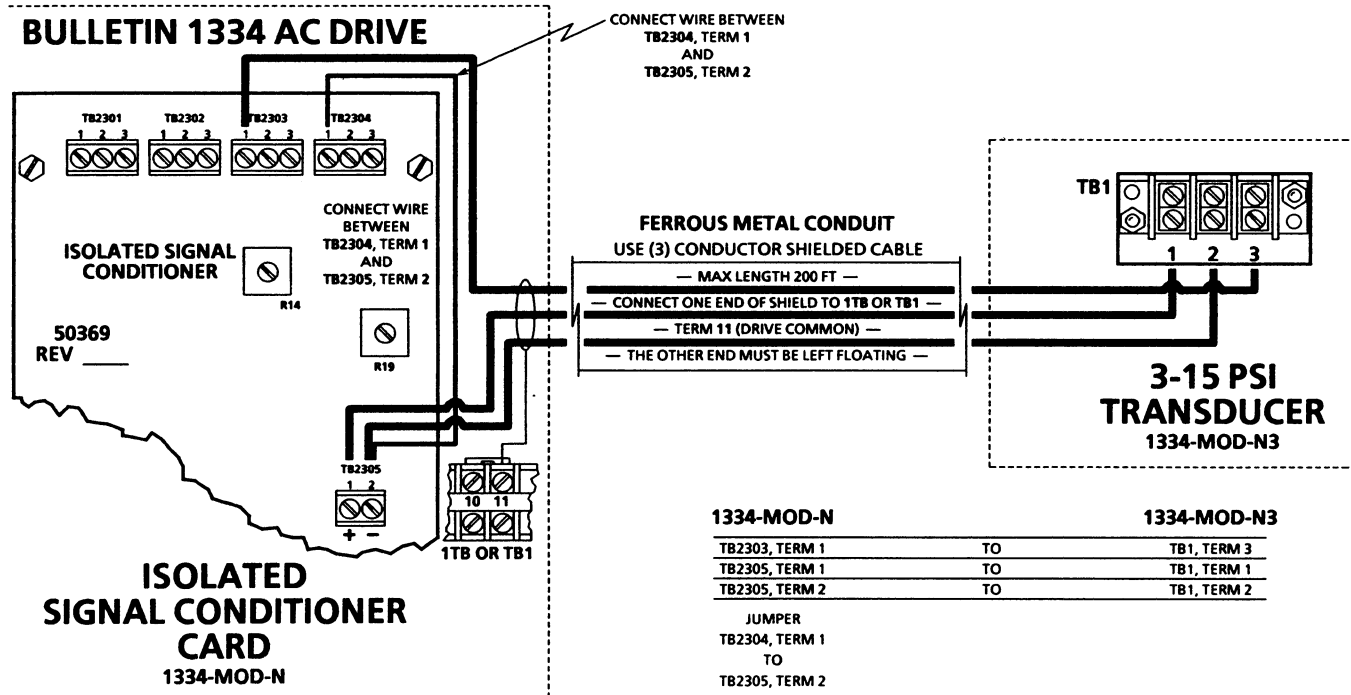


Interconnection Wiring

The maximum wire size that the Isolated Signal Conditioner Card will accept is 18 AWG stranded copper wire. Interconnection wiring is connected between **TB1** in the transducer enclosure and —

- Terminal Blocks **TB2303** & **TB2305** on the Bulletin 1334-MOD-N Isolated Signal Conditioner Card
- Terminal Blocks **TB2302** & **TB2305** on the Bulletin 1334-MOD-N4 Isolated Signal Conditioner Card.

Interconnection wiring must be run in its own separate ferrous metal conduit. An additional wire must be installed between the card's terminal blocks as shown below.



1334-MOD-N4		1334-MOD-N3
TB2305, TERM 1	TO	TB1, TERM 3
TB2305, TERM 3	TO	TB1, TERM 2
TB2302, TERM 1	TO	TB1, TERM 1
JUMPER		
TB2305, TERM 3	TO	
TB2302, TERM 2		

Adjustment Procedure

The Isolated Signal Conditioner Card in the Drive contains the adjustments that determine how the Drive will respond to the pressure transducer signal. Follow the setup and adjustment procedures detailed in the Isolated Signal Conditioner Card Instruction Sheet, then vary the pressure signal to the transducer to obtain the desired minimum and maximum speed values.

If the pressure signal cannot be easily varied, an approximate calibration can be performed by substituting a scaled voltage signal equivalent to what the transducer will generate by using the following formula —

$$V = P_{IN} \times [0.5 + 1.5]$$

WHERE V = THE TRANSDUCER OUTPUT VOLTAGE
 P_{IN} = THE APPLIED INPUT PRESSURE

Use this formula to determine the transducer output voltage at the desired pressures for minimum and maximum speed, then using a regulated DC voltage source that will duplicate these values —

- STEP 1** With input power removed from the Drive at the disconnect device, mark and disconnect the transducer leads at the Isolated Signal Conditioner Card.
- STEP 2** Apply the duplicate voltage source to the Isolated Signal Conditioner Card and follow the MIN & MAX Speed Adjustment Procedure as outlined in the Isolated Signal Conditioner Card instruction sheet.

— FOR 1334-MOD-N —

CONNECT (+) SOURCE VOLTAGE LEAD TO TB2303, TERM 1
CONNECT (-) SOURCE VOLTAGE LEAD TO TB2304, TERM 1

— FOR 1334-MOD-N3 —

CONNECT (+) SOURCE VOLTAGE LEAD TO TB2305, TERM 1
CONNECT (-) SOURCE VOLTAGE LEAD TO TB2305, TERM 3



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