



MODEL 350

SANITARY PRESSURE TRANSMITTER INSTALLATION MANUAL

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PRODUCT OVERVIEW

All information contained in this document is representative of a standard Model 350. If the product you ordered has special requirements or modifications, refer to the Laser Marked information on the product and your purchase order for possible alteration to the product's configuration. Failure to verify product configuration before installation may cause permanent product damage and in most cases, void the manufacturer's product warranty. If you are unsure or have questions about your product, please contact our Application Engineers for assistance.

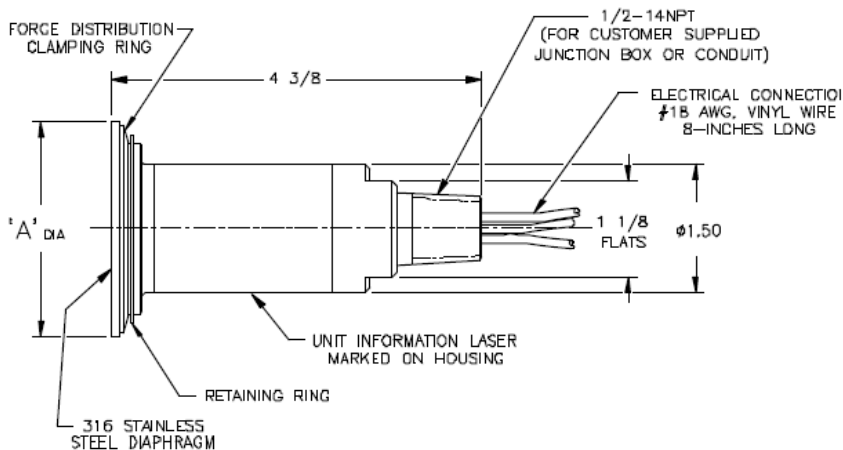
Remove and retain all instruction manuals and performance certificates that are shipped with the product. These documents provide important information on the product's calibration, operation, safety precautions, recommended maintenance, re-calibration requirements, repair service instructions and warranty information. These documents are updated from time to time as changes to the product occur and should be reviewed at receipt so that proper and safe installation can occur.

BASIC OPERATION

The Model 350 has been pre-set at the factory for the required output and is referenced to absolute zero (full vacuum). Once factory set, the product should perform as indicated by the performance certificate and product labeling. In all cases the zero and span cannot be externally adjusted, hence any deviation from the factory settings would indicate damage to the sensor, electronics (model dependent), or both. On sealed units, output will go positive with positive pressure applied to the pressure port. For absolutes, the pressure port must have a full vacuum applied to reach the absolute zero point. After the full vacuum is applied, the unit will begin to read positive pressure changes as less and less of a vacuum is evident at the pressure port.

INSTALLATION DATA - VIATRAN MODEL 350

Note: The drawing below is for informational purposes only and is not to scale. All dimensions are nominal, in inches and for reference purposes only.



Output:
4-20 mA

Sensor Construction:
Bonded Foil Strain Gage

Wetted Parts:
316SS Cladded or Non-Cladded

Electrical Mating Connection:
Acceptable 18AWG wire termination
connection 1/2" NPT (M)

Tri-Clover Fitting Size

1 1/2"
2"
2 1/2"

"A" Dia.

2.00
2.53
3.06

Viatran Size Code

HA
HB
HC

Cherry Burrell "I" Line

1 1/2"
2"
2 1/2"

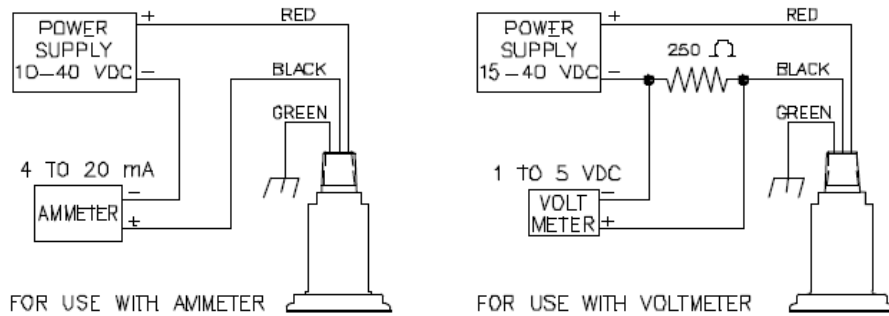
"A" Dia.

2.00
2.64
3.31

Viatran Size Code

SB
HL
HM

Connection Diagram:



Electrical Connections:

Red: + Signal
 Black: - Signal
 Green Wire: Case Ground

Note: If the unit is certified for hazardous locations as *Intrinsically Safe*, use the enclosed connection diagram.

INSTALLATION REQUIREMENTS & CAUTIONS

- Care should be taken when removing the product with a packing knife or other sharp instrument. Functional damage will occur if the knife slices the connection wiring or sensing diaphragm.
- Each transmitter is supplied with a protective cover that should be on the sensing area at all times when the transmitter is not installed.
- Internal damage may occur if the transmitter receives a serious shock due to being dropped or struck by a foreign object.
- Never stand the Model 350 Transmitter up or place it on a rough surface without a protective cover on the sensing area (cap, boot, clean rubber mat, soft cloth, or foam).
- Cleaning in place is the recommended process that should be performed as the system or process permits.
- When shipped in quantities, units should be packaged individually to eliminate possible damage.
- All electrical & pressure connections should be compatible with the model specifications as outlined in the product installation datasheet.
- Installation should occur only after electrical (input power) and line pressure is verified as being off and at zero.
- The product's internal electrical circuitry is isolated from case ground. It is not recommended that the case or ground of the unit be connected to the input, output or calibrate pins of the product or wiring system. Ground loops and line noise will affect the product's performance.
- At no time should an object be pressed against the sensing area to deflect the sensor (to test or simulate pressure), as on some models permanent damage to the sensing diaphragm may occur.
- This product cannot be used in sterilization systems as described in the 3A Sanitary Standard 74 – 06, Section E1.9
- During product installation, the customer shall supply and verify that all o-rings, gaskets, or seals meet or exceed the requirements of the 3A Sanitary Standard 74-06.

ACCESSORIES - OPTIONAL EQUIPMENT

White Polypropylene Conduit Connection Box	004033.002
Polypropylene Conduit Connection Box with 8 Ft Cable Assy.	003667.003
Hinged Tri-Clamp - Size - 1.5 "	041513MHHM
Gasket (Buna-N) - Size - 1.5 "	04140MP-U0
Gasket(Teflon) - Size - 1.5 "	04140MP-GI
Hinged Tri-Clamp - Size - 2.0 "	042013MHHM
Gasket (Buna-N) - Size - 2.0 "	04240MP-U0
Gasket (Teflon) - Size - 2.0 "	04240MP-GI
Hinged Tri-Clamp - Size - 2.5 "	042513MHHM
Gasket (Buna-N) - Size- 2.5 "	04340MP-U0
Gasket(Teflon) - Size - 2.5 "	04340MP-GI
Digital Indicator (Direct Mount)	Consult Factory

MAINTENANCE AND REPAIR

All Viatran transmitters have been designed to function free from routine or scheduled maintenance. Simple cleaning of the electrical connector, pressure port threads and pressure cavity on an as needed basis will provide many years of satisfactory performance. Protecting the product from continued exposure to moisture or fluids at the electrical connection, breather area (model dependent) will eliminate premature internal failure of the product. Generally any time the product is removed from service the connector and pressure port threads should be cleaned and the pressure cavity flushed with a 316SS compatible cleaner to prevent media buildup. During the cleaning process only a soft, lint-free cloth is recommended. Never use a coarse or stiff bristle brush to clean media from the diaphragm surface.

It is suggested that the calibration be verified on a usage dependent schedule. If the product is in continuous service 7 days a week, then calibration verification may be necessary every 6 to 8 months. If the product is in a lab test environment a more lenient verification schedule would be appropriate. In all instances the performance of the product will depend on the individual application or process in which it is installed. More continued usage would require a shorter period between calibration verification and product maintenance.

If a product is perceived to be exhibiting problems, it can be returned to Viatran for analysis and/or repair. It is suggested that only Viatran personnel attempt repair of the product. Any damage resulting from customer disassembly would result in a loss of coverage under the warranty policy. All Viatran products are able to be repaired at minimal cost if simple cleaning and precautions are taken in the handling and application of the product.

Older products returned for repair are updated to current specifications unless the repair cost would outweigh the cost of a new replacement model. Products returned for repair should include information on the person to contact for repair quote approval, the individual to contact if Viatran's technical staff requires additional information during analysis, and a brief description of the problem associated with the product's failure.

WARRANTY

Viatran Corporation warrants that its products shall be free from defective workmanship and/or material for a period of twelve (12) months from the date of shipment, provided that Viatran's obligation hereunder shall be limited to correcting any defective workmanship and/or replacing any defective material f.o.b. factory. No allowance will be made for any expense incurred for correcting any defective workmanship and/or material without written consent by Viatran. This warranty is in lieu of all other warranties expressed or implied.

REPAIR INSTRUCTIONS

Viatran's Transmitters are designed to be easily repaired and recalibrated if necessary. If a failure occurs, the transmitter should be returned to the factory for inspection and testing. Please contact the Customer Support Department at 1-800-688-0030, for a return tracking number and/or a repair cost estimate. A nominal inspection fee is charged on all units returned to the factory which are not subsequently repaired.

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