Pressure Transmitter

MODEL 350 351



SMART, CLEAN FREAK LEVEL TRANSMITTERS

CLEAN IN PLACE SYSTEMS

A flush diaphragm inhibits bacterial growth and facilitates Clean in Place (CIP) systems. The quick-disconnect Tri-clamp connections make these transmitters ideal for pharmaceutical, dairy and food processing applications where frequent cleaning is required.

ACCURATE PRESSURE MEASUREMENT

Viatran technology allows for accurate pressure measurement up to 1000 PSI. The transmitters also have no moving parts, isolation diaphragm, or oil fill to contaminate your process fluid.

The Model 351 has magnetically coupled external controls for precise adjustments of zero and span, without exposing the electronics to the environment. The span control can be adjusted for 5:1 ranging.

SHUNT CALIBRATION SYSTEM

The Model 351 is also equipped with a built-in shunt calibration signal for easy set-up and flexibility (one transmitter can be used in numerous applications). The Model 350 provides the same degree of accuracy and reliability for less money.

3A STANDARDS AND FM APPROVED

Viatran's Models 350 and 351 have approval options available. Consult your Viatran Rep for details.

Viatran's Models 350 and 351 with Tri-clamp connections are all welded stainless steel, providing maximum protection against corrosion and high humidity.

FEATURES

- Flush Diaphragm
- 316L SS wetted parts
- Three Tri-clamp sizes (1.5", 2", 2.5")
- Clean in Place (CIP)
- No oil fill
- Bonded Foil Strain Gage

TYPICAL APPLICATIONS

- Pharmaceutical
- Food Processing
- Dairy compressors
- Beverage processing
- Pasteurizers

Approval Options Available. Contact Viatran for details.



SPECIFICATIONS

PERFORMANCE

Full Scale Pressure Range (FSPR) Model 350 0-100, 150, 200, 250, 300, 400, 500, 750, 1K PSIS, PSIA

Full Scale Output (FSO)

16 mA at 70°F

Resolution

Infinite

Long Term Stability

\$\pm\$\delta\$0.5% FSO per 6 months

Pressure Connection Effect On Zero Balance ≤±1.0% FS0

Response Time

(mechanical and electrical combined)

Model 350 2 Sec (Electronically Damped)

 $\mathsf{Model\,351\,\ldots\,}\underline{\leq}\mathsf{50\,mSec}$

Temperature Effect on Zero $\leq \pm 2.0\%$ FSO per 100°F Temperature Effect on Span $\leq \pm 1.0\%$ FSO per 100°F

Temperature Effect on Calibration Signal

Model 350 Not applicable Model 351 $\leq \pm 2.0\%$ FSO per 100°F Operating Temperature Range 0° F − +180°F

Process Temperature Range . . .65°F to +250°F Non-Operating Temperature Range . .65°F to +250°F

ELECTRICAL

Sensor Technology Bonded Foil Strain Gage

Supply/Voltage

Model 350 8.5 - 36VDC

Output Signal 4 to 20 mA at 70°F

Load Impedance Model 350 1300 Ohms maximum at 36 VDC

Ripple ≤±0.08% FSO Zero Balance 4mA ±5% FSO at 70°F Zero Adjustment

Model 350 Not applicable

Model 351 -50% FSPR (elevation) to 100% FSPR (suppression)

Course and Fine Adjustments Standard

Span Adjustment

Model 350 Not applicable

Model 351 5:1 Turndown, Externally 30PSI min range Range Calibration Signal

Not applicable

to pressure correlation is provided with each unit.

above 38V and currents to 250amps peak with a pulse

width of 8-20 µsec. Reverse polarity protected.

Bridge Resistance 5,000 Ohms nominal

Insulation Resistance≤1000 Meg0hms at 50VDC

RFI/EMI Suppression <1.0% FSO output change at 30V-meter, 10-1000 mhz Electrical Connection 1/2" MPT Male Conduit, 3 wires, 18AWG, 36"

Red +Power/Signal Black -Power/Signal Green Case Ground

PROOF PRESSURE 1.5X Rated Range

BURST PRESSURE≤3 times rated range or maximum range of clamp

and tubing, whichever is less

Identification . . . Lases Etched on Body
Measured Fluids . . . Any Gas or Liquid compatible with 316 Stainless Steel

CERTIFICATIONS

Sanitary Authorized to display the 3A symbol for

Conformity to Sanitary standards for pressure

and level devices # 74-02.

FM Approved Intrinsically Safe for use in Class Intrinsically Safe ...

I,II,and III, DIV. 1,Groups A thru G indoor/outdoor.

FM Approved, suitable for use in Class I,II, and III, Suitable for use . . .

DIV. 1, Groups A thru G Hazardous Locations.

OPTIONS

Alternate Connector Codes BZ Mini-Change Connector Performance Options

Improved Temperature Compensation

DH Special Range (Model 350 Only)

EA Special Calibration JJ Direct Mount Indicator with Explosion

Proof Housing attached to Transmitter

JS Direct Mount Indicator

MD FM Label

NH ... Customer Specified Identification
NSR ... Non-Standard Range (Model 351 Only)

PW 1/8 DIN Digital Indicator ZP CIA-C814-10-6P-10-0A1

ACCESSORIES Tri-Clamp Clamp

Tri-Clamp Gasket Conduit Connection Box

NOTE: APPLICATION OF SOME AVAILABLE OPTIONS MAY AFFECT STANDARD PERFORMANCE. CONSULT YOUR VIATRAN REPRESENTATIVE FOR DETAILS

DIMENSIONS, MODEL 350

ALL DIMENSIONS ARE NOMINAL, IN INCHES
AL FOR REFERENCE PURPOSES ONLY



