PRESSURE TRANSMITTER

Models 350 / 351



FEATURES

- Flush Diaphragm
- 316 Stainless Steel 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
- Beverage Processing
- Pasteurizers

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 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 for 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.

For more information, contact Viatran.

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PERFORMANCE

Full Scale Pressure Range	350	0-100, 150. 200, 250, 300, 400, 500, 750, 1K PSIS, PSIA
	351	0-100, 400, 1K PSIS, PSIA
	Non-linearity (Best Fit Straight Line)	≤0.4% FSO
	Hysteresis	≤0.25% FSO
	Repeatability	≤±0.1% FSO
	Full Scale Output (FSO)	16 mA at 70°F (21°C)
	Resolution	Infinite
	Long Term Stability	≤±0.25% FSO per 6 months
	Pressure Connection Effect Zero Balance	≤±0.1%
Response Time (mechanical & electrical combined)	350	2 Sec (electronically damped)
	351	≤50 mSec
	Temperature Effect on Zero	≤±2% FSO per 100°F (37°C)
	Temperature Effect on Span	≤±1% FSO per 100°F (37°C)
Temperature Effect on Calibrated Signal	350	Not applicable
	351	≤±2% FSO per 100°F (37°C)
	Operating Temperature Range	0°F to 180°F (-17°C to 82°C)
	Process Temperature Range	-65°F to 250°F (-53°C to 121°C)
	Storage Temperature Limits	-65°F to 250°F (-53°C to 121°C)

ELECTRICAL

	Sensor Technology	Bonded foil strain gage
Supply Voltage	350	10 to 36 Vdc
	351	9 to 40 Vdc
	Power Supply Regulation	≤±0.04% FSO per Volt
	Output Signal	4 - 20 mA at 70°F (21°C)
Load Impedance	350	1300 Ohms max at 36 Vdc
	351	1925 Ohms max at 40 Vdc
	Ripple	≤±0.08% FSO
	Zero Balance	4 mA ±5% FSO at 70°F (21°C)
Zero Adjustment	350	Not applicable
	351	5:1 turndown, externally 30 PSI min range
Range Calibration Signal	350	Not applicable
	351	20% of ±1.0% of FSPR, externally switched. Exact signal to pressure correlation is provided with each unit
	Circuit Protection	Varistor protected across the input leads for surges above 38 V and currents to 250 Amps peak with a pulse width of 8-20 µSecs. Reverse polarity protected
	Bridge Resistance	5000 Ohms nominal
	Insulation Resistance	≤100 MegOhms at 50 Vdc
	RFI/EMI Suppression	≤1% FSO output change at 30 V meter, 10-1000 mhz
	Electrical Connection	1/2" NPT male conduit, 3 wires, 18 AWG, 36"
	Red	+Power/Signal
	Black	-Power/Signal
	Green	Case Ground

MECHANICAL

	Pressure Connection	1 1/2", 2", 2 1/2" Tri-clamp
	Proof Pressure	1.5 times rated range
	Burst Pressure	≤3 times rated range or max orange of clamp and tubing, whichever is less
Weight	350	16 oz
	351	30 oz

MATERIALS OF CONSTRUCTION

Enclosure Materials	15-5, 304, and 316 stainless steel
Wetted Materials	316 stainless steel
Identification	Laser etched onto body
Measured Fluids	Any gas or liquid compatible with 316 stainless steel

CERTIFICATIONS (Consult Factory for Available Options)

Sanitary	Authorized to display the 3A symbol for Conformity to Sanitary standards for pressure and level devices # 74-02
Intrinsically Safe	FM Approved Intrinsically Safe for use in Class I,II and III DIV 1, Groups A thru G indoor/outdoor
Suitable for Use	FM Approved, suitable for use in Class I,II, and III, DIV. 1, Groups A thru G Hazardous Locations

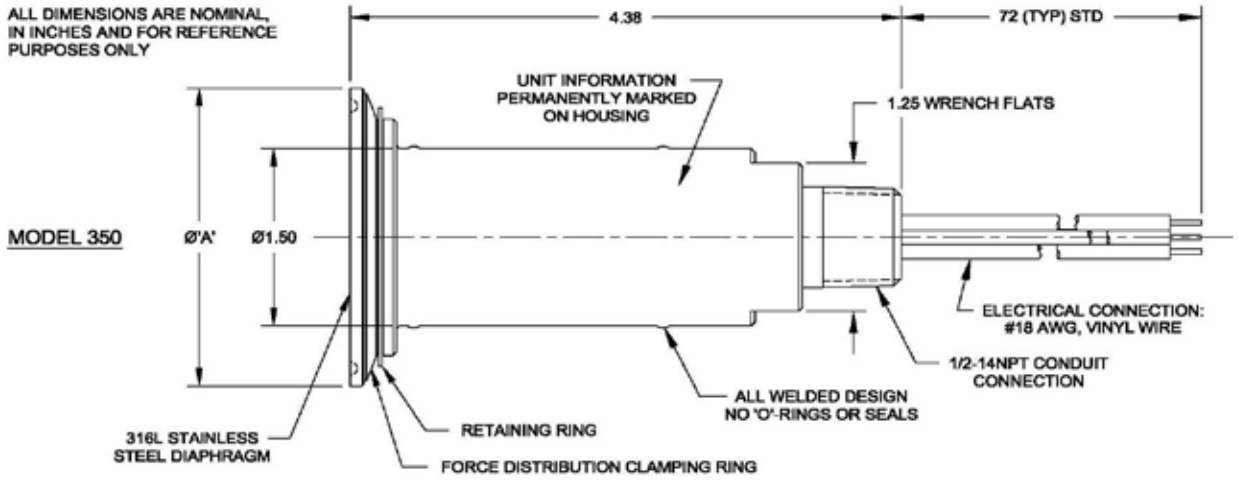
OPTIONS

BZ.....Mini change connector
DG.....Improved temperature compensation
DH.....Special range (350 only)
EA .....Special calibration
JJ.....Direct mount indicator with Explosion Proof housing attached to
.....transmitter
MD .....FM Label
NH.....Customer specified identification
NSR.....Non-standard range (350 only)
PW .....1/8 DIN digital indicator
ZP CIA-C814-10-6P-10-0A1

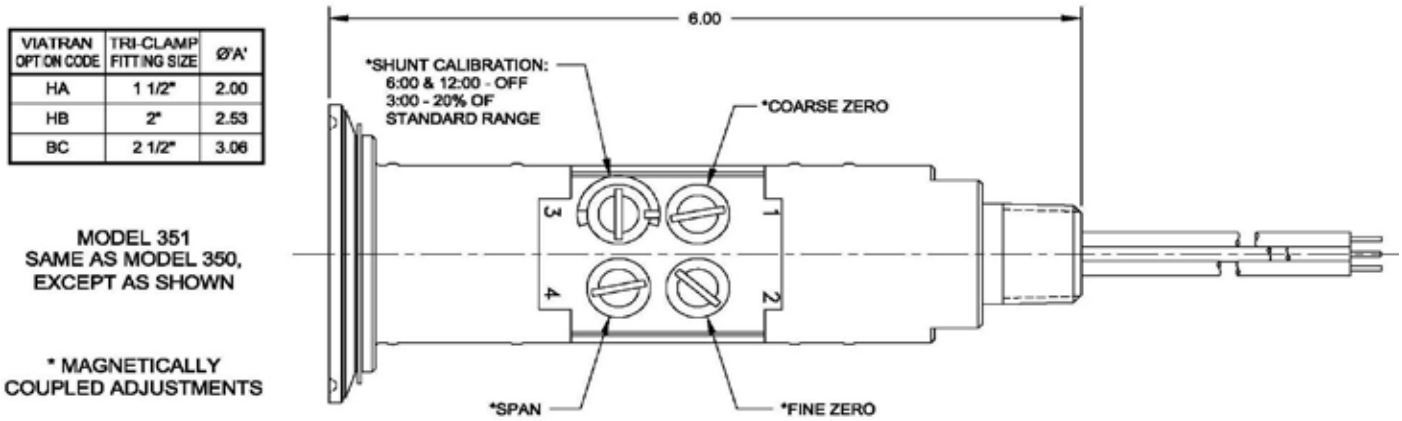
Note: Application of some available options may affect standard performance. Consult your Viatran Representative for details.

ACCESSORIES

Tri-clamp clamp
Tri-clamp gasket
Conduit connector



VIATRAN OPTION CODE	TRI-CLAMP FITTING SIZE	Ø'A'
HA	1 1/2"	2.00
HB	2"	2.53
BC	2 1/2"	3.06



Information is accurate to the best of Viatran's knowledge. We reserve the right to change specifications at any time. Please contact Viatran for specific order inquiries.

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