

Sanitary Level Transmitter

MODEL 360



A SMART, CLEAN FREAK TANK LEVEL TRANSMITTER

FAST ACCURATE READINGS

During a CIP process, temperatures exceed 180° F. Sensors generally require four to six minutes to recover before maintaining accurate readings. The Model 360 recovers in less than one minute, minimizing costly down time and wasted process media due to inaccurate readings.

The Model 360 fits tank receivers or fittings in use on most sanitary equipment. The transmitter also comes in three different lengths for varying tank wall thickness. There's also an optional display for units that are side mounted.

UNMATCHED FEATURES

The Model 360 has features unmatched in the marketplace. Standard Hastelloy wetted

parts allows for use in acidic and caustic medias found in the Sanitary market.

UNIQUE BREATHER SYSTEM

Viatran's unique solution eliminates contamination from condensation in the electronics.

3A APPROVED SANITARY TRANSMITTER

The Model 360 meets USDA guidelines for meat and poultry processing equipment.

The NEMA 4X enclosure has internal adjustments for zero, span and calibration. The Model 360 features an internal calibration circuit with 3:1 span ranging for easy field set-up.

Viatran manufactures a complete line of 'clean freak' pressure transmitters for all your sanitary applications.

The Model 360 tank level transmitter has been designed to dramatically improve CIP/SIP recovery time. Using hydrostatic pressure to determine liquid level, the 360 ensures accurate and reliable measurement in ranges from 30" WC to 900" WC.

FEATURES

- <1 minute CIP/SIP recovery time
- Flush Hastelloy diaphragm
- All stainless steel construction
- NEMA 4X enclosure
- 3:1 ranging
- Internal zero and span adjust
- Optional display (pictured)

TYPICAL APPLICATIONS

- Dairy
- Food/Beverage
- Pharmaceutical
- Biotechnology

Approval Options Available
Contact Viatran for details.



For product availability, or to order please call 1-800-688-0030, ext 506.

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An ISO 9001:2000 Certified Company

SPECIFICATIONS

PERFORMANCE

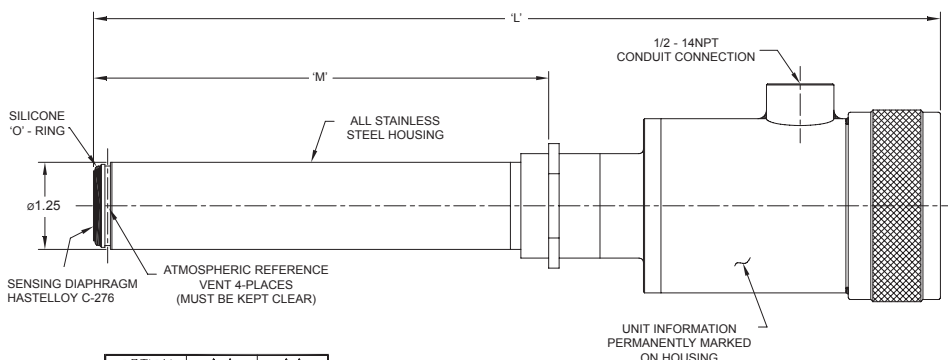
Full Scale Pressure Range (FSPR)	0-100", 300", 750", 900" WC
Non-linearity (best fit straight line)	$\leq \pm 0.15\%$ FSO
Hysteresis and repeatability	$\leq \pm 0.10\%$ FSO
Full Scale Output (FSO)	16 mA
Resolution	Infinite
Long Term Stability	$\leq \pm 0.25\%$ FSO per 6 months
Response Time (mechanical and electrical combined)	≤ 10 mSec to reach 90% FSO
Thermal recovery time	50 Sec to reach 90% FSO
Temperature Effect on Zero	$\leq \pm 1.5\%$ FSO per 100°F
Temperature Effect on Span	$\leq \pm 1.5\%$ FSO per 100°F
Compensated Temperature Range	30°F to +185°F
Process Temperature Limits	-20°F to +220°F
Ambient Temperature Limits	-40°F to +185°F
Storage Temperature Limits	-40°F to +250°F

ELECTRICAL

Sensor Technology	Silicon Piezoresistive
Supply Voltage	9 to 30 VDC (12 to 30 VDC with display)
Power Supply Regulation	$\leq \pm 0.01\%$ FSO per volt
Output Signal	4 to 20 mA
Load Impedance	1050 Ohms max at 30 VDC
Zero Balance	4 mA $\pm 0.5\%$ FSO (no effect with zero adjust)
Zero Adjustment	-100% FSPR (elevation) to 80% FSPR (suppression).
Span	20 mA $\pm 0.5\%$ FSO
Span Adjustment	3:1 Ranging
Range Calibration Signal	30% of FSPR, internally switched
Calibration Signal Accuracy	$\leq \pm 0.2\%$ FSO. The exact signal to pressure correlation is provided with each unit.
Circuit Protection	Varistor protected across the input leads for surges above 55V and currents to 250 Amps peak with a pulse width of 8 to 20 μ sec. Reverse polarity protected.
Insulation Resistance	≥ 200 MegOhms to case ground
RFI/EMI Suppression	Negligible effect to 500 Mhz at 5 watts direct contact
Electrical Connection	1/2" NPT (F) Internal terminal block
Terminal 4	+Signal
Terminal 3	-Signal
Terminal 1	Case Ground

MECHANICAL

Pressure Connection	Flush mount sensor mates with King Engineer tank shell #1777. Other adapters available.
Proof Pressure	3x rated range
Burst Pressure	5x rated range
Oil Fill	Less than 0.66 ml of silicone oil
Measured Fluids	Any gas or liquid compatible with Hastelloy and silicone O-Ring
Weight	4 lbs. nominal
Enclosure Materials	316L stainless steel
Wetted Materials	Hastelloy, C-276
Identification	Laser etched onto body



PTI: N	'M'	'L'
AA (ST)	6 53	12 13
H	2 13	7 73
HE	1 7	14 3

Shown without installation nut

CERTIFICATIONS

Consult Factory for Availability
Enclosure Classification NEMA 4X, 5, 6, 12
Sanitary Standards
Council

Authorized to display the 3A symbol for conformity to sanitary standards for sensor, sensor fittings and connections used on milk and milk product equipment (#74-00)

OPTIONS

Codes	Descriptions
NSR	Non Standard Ranging
HD	Short length for single wall tanks
HE	Extra long length for King Receiver #1777-3
GA	Viton O-Ring
GB	Teflon O-Ring
GE	Buna-N O-Ring
TQ30	LCD Display - 3 1/2 digits

ADAPTERS

Codes	Descriptions
HB	2" Tri Clover
HC	2 1/2" Tri Clover
HG	3" Tri Clover
HI	2" NPT
HJ	Cherry-Burrell (standard shell)
HK	Tank Mate (long shell)
HL	2" Cherry-Burrell I-Line
HM	2 1/2" Cherry-Burrell I-Line
HN	Anderson (standard shell)
HP	Anderson (long shell)
HS	1/4" NPT
HT	Cherry-Burrell (short shell)
HU	1/2" NPT
HV	Taylor

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

ACCESSORIES

Tri-Clover clamps
Digital indicators
Spare Silicone O-Ring
Spare Teflon O-Ring
Tank gage receiver
Spanner wrench

