VIATRAN

MODEL 277

Low Range (0-3" to 0-8" W.C.D)
Wet/Wet Differential Pressure Transmitter

CE

MODEL 277 (0-3"WC to 0-8" WC)
WET/WET DIFFERENTIAL PRESSURE TRANSMITTER

Features

- Single Diaphragm for Precision
- Fast response
- External Zero & Span Adjustments
- 500 PSI Line Pressure
- Shunt calibration circuit

Applications

- Leak testing
- Flow measurement
- Engine test stands
- Research
- High speed testing
- Unidirectional or Bidirectional

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PERFORMANCE

Full Scale Pressure Ranges (FSPR)	0 -3, 0-8" WC
Combined Accuracy (Non-Linearity(BFSL),Hysteresis & Repeatability)	≤±0.6% RSS
Full Scale Output (FSO)	5Vdc
Resolution	Infinite
Zero Shift w/Line Pressure (%FSO/500 PSI)	≤±2%
Zero Shift After 500 PSI Overload	Single Side ≤±0.5% FSO Alternate Sides ≤ ±0.5% FSO
Compensated Temperature Range	70°F to +170°F (21°C to 77°C)
Operating Temperature Range	0°F to +185°F (-20°C to 85°C)
Storage Temperature Range	-40°F to +185°F (-40°C to 85°C)
Thermal Effect on Zero	≤ 2.0% FSO per 100°F
Thermal Effect on Span	≤ 2.0% FSO per 100°F

ELECTRICAL

Supply Voltage	9-30 Vdc	
Power Supply Regulation	± .02% FSO per volt (Typical)	
Output Signal	0-5 Vdc	
Output Loading	3,000 ohms minimum	
Current Draw	3.8 mAdc	
Zero Adjustment	±5% FSO min./ ±50% FSO max.	
Span Adjustment	±5% FSO min./ ±50% FSO max.	
Range Calibration Signal	80% FSO ±10% by shorting pins E&F	
Calibration Signal Accuracy	≤±1.0%	
Circuit Protection	Reverse polarity protected	
Insulation Resistance	< 5 nS to case ground	
Standard Electrical Connection	Mates with 6 pin, Hermetic, Box Mount, Shell Size 10, MIL-C-26482 bendix type connector	
Pin Outs	Pin A	+ Power
	Pin B	- Power
	Pin C	+ Signal
	Pin D	- Signal
	Pin E	Shunt Cal
	Pin F	Shunt Cal

MODEL 277 Differential Pressure Transmitter

The Value of Viatran to Your Operation

- Viatran value is measured in maximum reliability and minimal repair, unlike products that result in less durability and more downtime for replacement. Viatran value is worth your investment for the long run:

PRODUCTS

50 years of proven solutions

TECHNICAL SUPPORT

Expert problem solvers

CUSTOMER SERVICE

Fast, friendly and honest

VIATRAN

MECHANICAL

Standard Pressure Port	1/4" NPT Female
Line Pressure	500 PSI maximum
Proof Pressure	500 PSI single sided
Burst Pressure	1100 PSI
Diaphragm Displacement	≈0.1 mL at FSPR
Pressure Cavity Volume	<0.4 cubic inches, each side
Mounting	May be supported by process piping or by optional mounting bracket.
Response Time	Consult Engineering

MATERIALS OF CONSTRUCTION

Wetted Materials	316 Stainless Steel and Viton O-Ring
Enclosure Material	304 and 316 Stainless Steel
Identification	Laser marked on body of unit
Weight	3.5 lbs.

OPTIONS

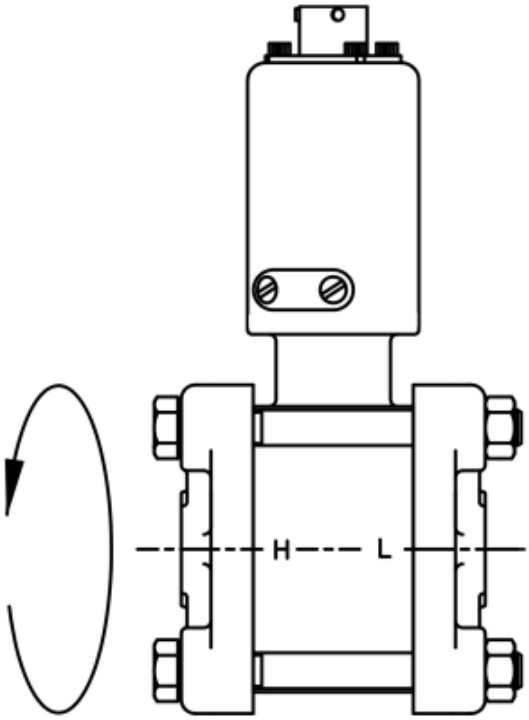
B( )	Alternate electrical connector
DG	Improved temperature compensation
DH	Special Range
DK	Special calibration setting
DW	No external adjustments
EA	Special Calibration Run
GE	Buna 'N' O-Rings
NH	Customer specific identification
PW	Calibration of Meter w/Viatran unit
Y( )	Alternate pressure ports
Z( )	Alternate electrical connector

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

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.

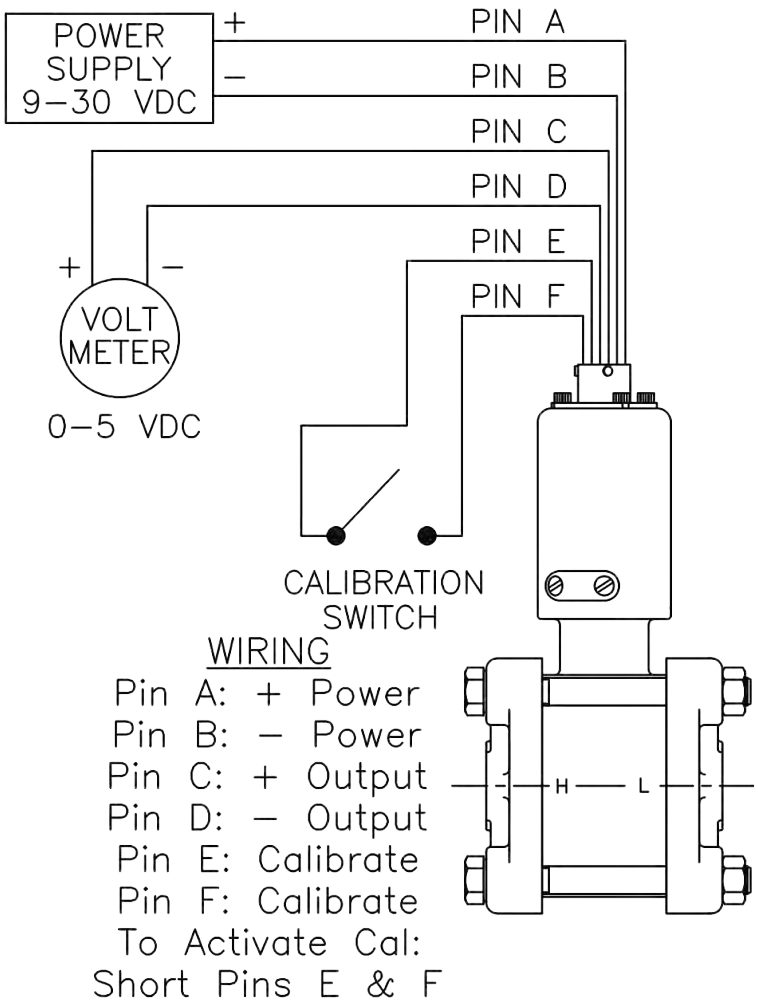
MOUNTING

Example of Model 277 mounted in spray booth application.



Due to the effects of gravity on the oil fill of the sensor, it's recommended that the product be mounted as shown

WIRING CONNECTIONS



WIRING

Pin A: + Power
Pin B: – Power
Pin C: + Output
Pin D: – Output
Pin E: Calibrate
Pin F: Calibrate
To Activate Cal:
Short Pins E & F

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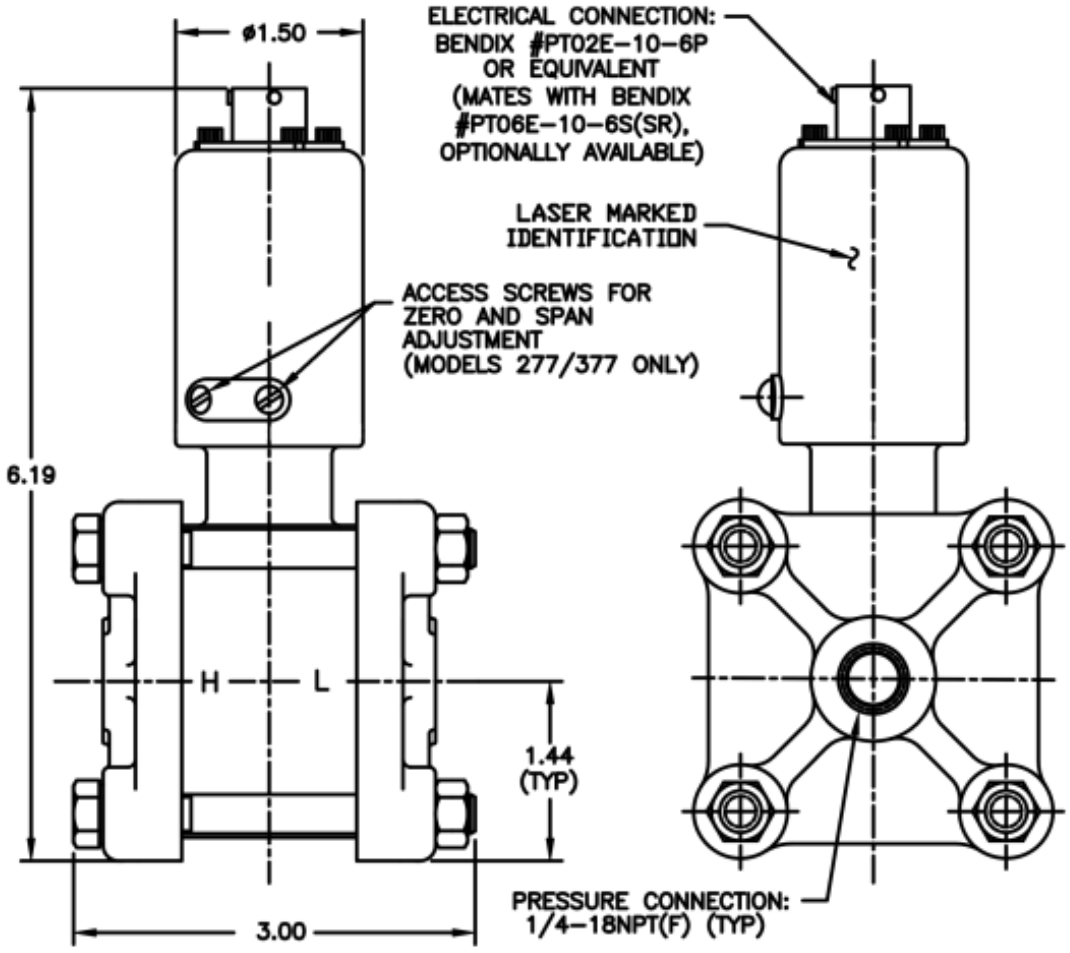
DIMENSIONAL DATA



ACCESSORIES

TBD Mounting Bracket
TBD Digital Indicator
TBD Mating Electrical Cable Assembly

CE RoHS 2011 / 65 / EU

VIATRAN

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