

## DIFFERENTIAL PRESSURE TRANSMITTER

# Models 276 / 376



### FEATURES

- **Extremely small size**
- **High overpressure protection**
- **External adjustments**
- **316 stainless steel wetted surfaces**
- **Internal calibration circuit**
- **Fast response**

### Typical Applications

- **Automotive test stands**
- **Aerospace test stands**
- **Production test stands**
- **Leak testing**
- **Laboratory / Research**
- **Shipboard / Marine**
- **Energy management**

### Designed for Harsh Conditions

To accommodate vigorous test applications, the X76 has a static line pressure rating and standard overpressure of 500 PSI (34 bar). With a response time as low as 6 milliseconds (depending on range), the "76" Series is one of the fastest differential units on the market.

### Capacitance Sensing

Viatran's proprietary technology provides an accuracy of better than  $\pm 0.15\%$  FSO. Wetted surfaces are manufactured from 316 stainless steel allowing for better corrosion resistance.



Viatran designed the "76" Series to be easily accessible in confined spaces. The X76 is supported by the process connection or by an adaptable L-shaped mounting bracket.

### Quick Electrical Disconnect

A quick disconnect electrical connection allows for easy setup and removal. Top-mounted zero and span adjustments and an internal calibration circuit simplify field setup and provide a quick two-point calibration check.

### Exceeds Most Requirements

With over twenty different electrical connections and pressure ports, as well as optional improved temperature performance and modified outputs, the 276 / 376 exceeds the most demanding application requirements.

Viatran offers a full line of pressure transmitters for industrial test applications.

*For more information, contact Viatran.*

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<b>Performance</b>		Full Scale Pressure Range (FSPR) .....0-5, 10, 20, 50, 100, 300, 750" WCD .....0-15, 50, 100 PSID (0-1, 3.4, 6.8 bar)
		Linearity, Best Fit .....≤0.15% FSO
		Hysteresis .....≤0.10% FSO
		Repeatability.....≤0.10% FSO
	Full Scale Output (FSO)	276 .....5 Vdc
		376 .....16 mA
		Resolution .....Infinite
		Drift .....≤±0.2% FSO per 6 months
		Pressure Connection Effect Zero Balance .....≤±1% FSO
	Response time	Thermal Shift.....≤±2% FSO per 100°F (37°C)
		Thermal Sensitivity Shift.....≤±2% FSO per 100°F (37°C)
		Compensated Temperature Range .....70°F to 170°F (21°C to 77°C)
		Operating Temperature Range .....-40°F to 185°F (-40°C to 121°C)
<b>Electrical</b>		Supply Voltage.....10 to 45 Vdc
		Power Supply Regulation.....≤±0.10% FSO change over supply voltage range
	Output Signal	276 .....0 to 5 Vdc
		376 .....4 to 20 mA
		Zero and Span Adjustment .....±10% FSO min, ±20% FSO max
		Calibration Signal.....80% FSO
		Calibration Signal Accuracy .....Within ±0.2% FSO
		Circuit Protection .....Reverse polarity protected
		Insulation Resistance .....200 MegOhms
		Standard Electric Connection.....Bendix PT02E-10-6P
		276 .....376
	Pin A	+Power
	Pin B	+Power/Signal
	Pin C	-Power
	Pin D	-Power/Signal
	Pin E	+Signal
	Pin F	-Signal
		Calibrate
		Calibrate
		Open
		Open
<b>Mechanical</b>		Pressure Connection.....1/4" NPT female
		Line Pressure .....500 PSI (34 bar)
		Proof Pressure.....500 PSI (34 bar)
		Burst Pressure.....1000 PSI (68.9 bar)
		Pressure Cavity Volume.....Approximately 2 mL each side
		Volume Displacement at FSPR.....Approximately 0.1 mL
		Fill Fluid .....Approximately 1.5 mL
		Mounting Position Effect.....<1" WC, any direction
		Mounting.....May be supported by process or optional mounting bracket
		Weight .....2 lbs
<b>Materials of Construction</b>		Wetted Materials .....316 SS
		Housing .....Powder coated cast alloy
		Identification.....Laser etched onto body

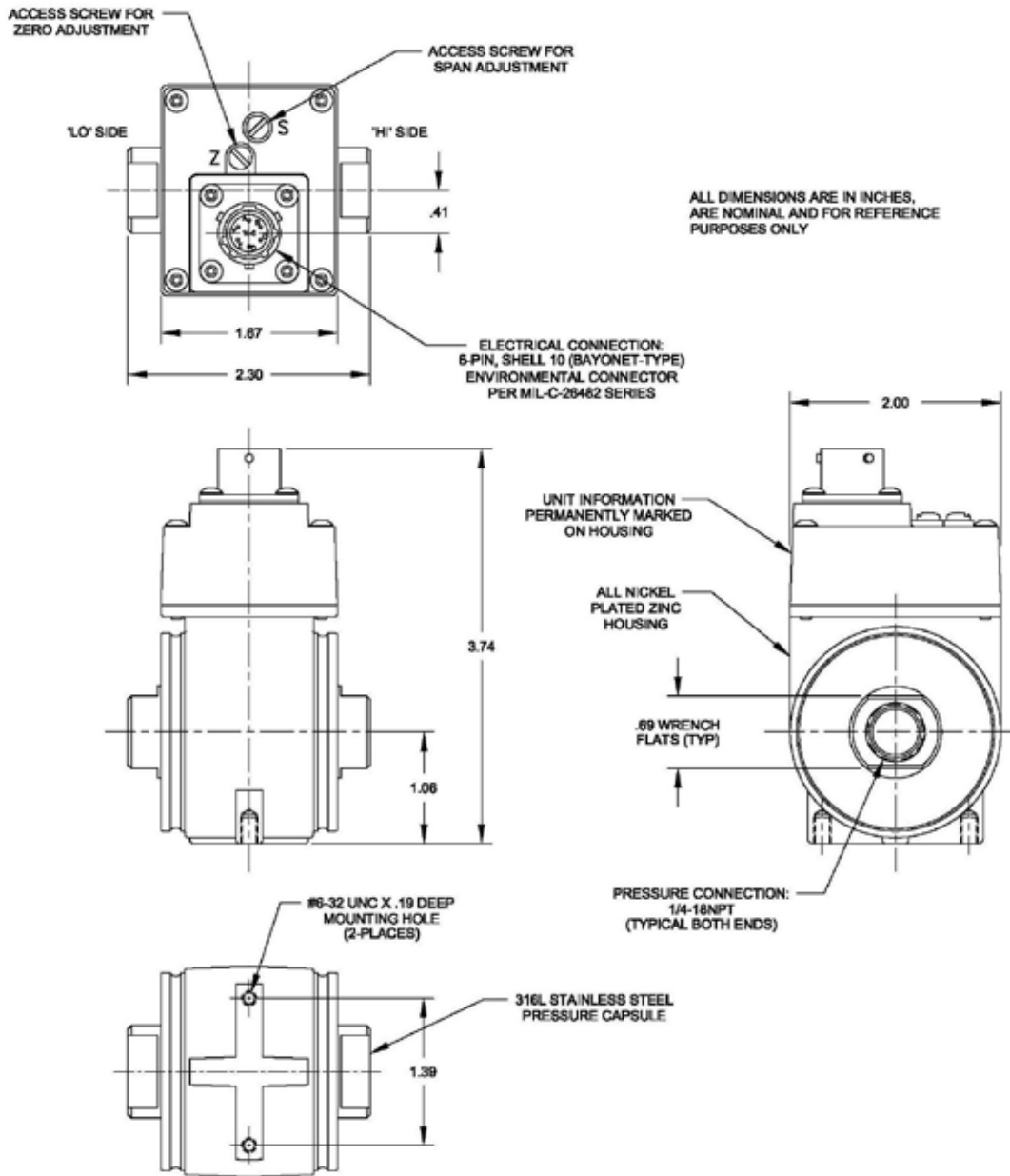
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Options	Codes	B().....Alternate connectors
		Y().....Alternate ports
Performance Options	DG.....Improved temperature performance	
	DH.....Special range	
	DK.....Special calibration shunt setting	
	DM.....Modified output	
	EA.....Special calibration run	
	NH.....Customer specified identification	
	PW.....1/8 DIN digital indicator	

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

Accessories

- Digital indicator
- Mating electrical assembly
- Mating electrical connector
- Protective cover



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.