Pressure Tranducer

LOW RANGE GAGE & ABSOLUTE PRESSURE

MODEL 244 / 344



Viatran's Models 244 and 344 add a low range gage pressure transducer to our extensive industrial test product line. The X44 Series features highly accurate pressure measurement in ranges from 5" W.C. to100 PSIG.

FEATURES

- 500 PSI overpressure protection
- All 316 SS wetted surfaces
- High accuracy ≤ ± 0.15%
- Very low ranges to 5" WC
- Internal shunt calibration circuit

TYPICAL APPLICATIONS

- Autoclave Systems
- Leak detection systems
- Engine test stands
- Environmental test chambers

The Model 244 provides a 0 to 5 VDC signal, while the Model 344 offers a 4 to 20 mA signal.Using our variable capacitance technology, the 244 and 344 transducers provide extreme overpressure protection up to 500 PSI.

This sensor design provides standard accuracy of ≤±0.15% FSO. The unit also offers standard temperature performance to ±2%/100° F with an improved option to ±1%/100° F.

All wetted surfaces of the X44 Series are constructed with 316 stainless steel, making them ideal for wet/wet applications. In environmental test chambers, these surfaces withstand contaminants such as water vapor, oil, exhaust or mists.Atmospheric reference is specially constructed to withstand the ingress of moisture, ensuring accurate pressure measurement.

Models 244 and 344 feature an internal calibration circuit for easy field set-up, a quick disconnect electrical connection and external zero and span controls. These features allow you to calibrate the transducer without an external pressure source and eliminate the need to send the unit to a metrology lab for calibration.

The small size enables a better fit into tight test applications. Viatran can also easily modify the X44 Series with optional outputs, electrical connectors and pressure ports to suit your application needs.

Viatran has developed a complete family of precision products designed specifically for industrial test and research applications. The X45 and X49 are our most accurate (2 to 100K PSI) gage and absolute units. Models X46 are designed to measure barometric pressure to within 0.01" Hg.For differential pressure measurement, our Models X74 and X76 maintain the same high quality and integrity as our gage and absolute products. You can depend on Viatran's pressure measurement products for the best results.

Viatran
A DYNISCO COMPANY

An ISO 9001: 2001 Certified Company

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Viatran Model 244 / 344 PRESSURE TRANSDUCER

SPECIFICATIONS

Performance

Full Scale Pressure Range (FSPR)	0-5, 10, 20, 50, 100, 300, 750" W.C. 0-15, 50, 100 PSIG
Non-Linearity (Best Fit Straight Line)	≤ ±0.15% FSO
Hysteresis & Repeatability	≤± 0.10% FSO
Full Scale Output (FSO)	
Model 244	5 VDC at 70° F
Model 344	16 mA at 70° F
Resolution	Infinite
Long Term Stability	≤ ± 0.2% FSO per 6 months
Zero Shift After 500 PSI Overload	≤ ± 0.1% FSO
Compensated Temperature Range	+70° F to +170° F
Operating Temperature Range	0° F to +250° F
Storage Temperature Range	-40° F to +250° F
Temperature Effect on Zero	≤± 2.0% FSO per 100° F
Temperature Effect on Span	≤ ± 2.0% FSO per 100° F

Electrical

Supply Voltage	10 to 42 VDC
Power Supply Regulation	≤ ± 0.1% FSO change over the supply voltage range
Output Signal	
Model 244	0 to 5 VDC standard (see option DM)
Model 344	4 to 20 mA
Output Loading (Model 244)	3000 Ohms minimum
Load Impedance (Model 344)	1600 Ohms with input voltage change from 10 to42 VDC
Zero Adjustment	
Model 244	± 10% FSO minimum
Model 344	± 5% FSO minimum
Span Adjustment	
Model 244	± 10% FSO minimum
Model 344	± 10% FSO minimum
Calibration Signal	80% of the FSPR, by shorting pins - see Electrical Connections
Calibration Signal Accuracy	≤ ± 0.5% FSO
Circuit Protection	Reverse polarity protected
Insulation Resistance	<1nS
Response Time	From 0.2 Sec for 5" W.C. range down to 0.008 Sec for 100 PSI range. Faster response available with NF option.
Electrical Connections	Bendix PT02E-10-6P, mates with PT06E-10-6S (SR)

	Model 244	Model 344
Pin A	+ Power	+ Power / Signal
Pin B	- Power	- Power / Signal
Pin C	+ Signal	Calibrate
Pin D	- Signal	Calibrate
Pin E	Calibrate	N/C
Pin F	Calibrate	N/C

Mechanical

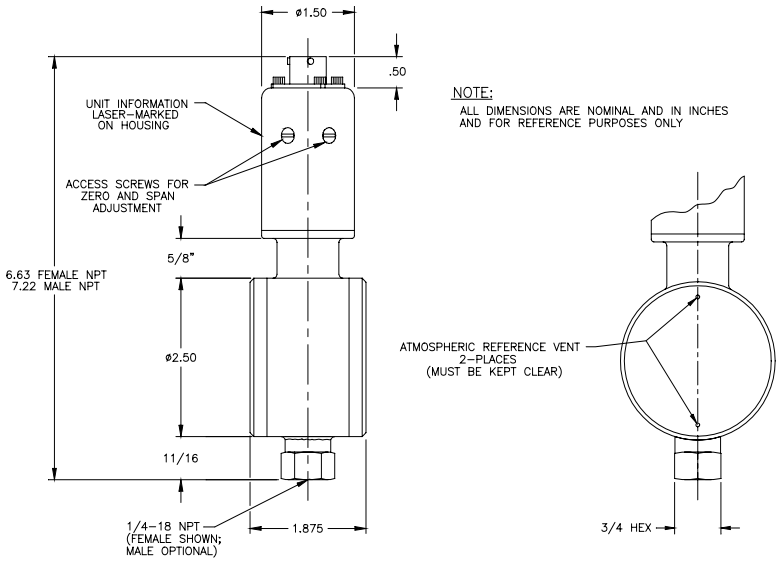
Pressure Connections	1/4" NPT Female
Proof Pressure	500 PSI
Burst Pressure	1000 PSI
Position Sensitivity	≤ ± 1.0" W.C. in any orientation
Shock & Vibration	≤ ± 1.0% FSO per G for 50 Hz to 200 Hz along any axis
Fill Fluid	Dow DC200 Silicone oil
Mounting	May be supported by process piping or by optional mounting bracket
Materials of Construction	
Housing	304 and 316 Stainless Steel with a Cadmium plated electrical connector
Wetted Parts	316 Stainless steel
Weight	3.6 lbs.
Identification	Laser etched onto body

Options

Code	*Alternate Electrical Connectors*
BA	(K)PTIH-12-8P
BF	(K)PTIH-10-6P
BG	DIN 43650 *344 Only*
BI	CF3102E-14S-2P *344 Only*
BK	WK4-32S *344 Only*
BL	WK6-32S
BM	WKA7-32S
BN	(K)PTIH-8-4P *344 Only*
BQ	(K)PTO2H-10-6P
BR	CF3102E-14S-6P
BS	CF3102E-14S-5P *344 Only*
ZS	(K)PTO2E-10-6P
ZV	C31-10-6P-20-OP1 (SS)
	Performance options
DG	Improved temperature compensation to ±1.0% FSO per 100°F
DH	Special ranging
DK	Special calibration setting
DM	Modified full scale output (Model 244 only)
DQ	Cleaning for Oxygen service
EA	Calibration run at specified temperature
NF	Fast response time
NH	Stainless steel identification tag
NM	Alternate output signal(3mV/V) (Model 244 only)
PW	1/8 DIN Digital Indicator
	Alternate Pressure Ports
YA	MS 33649-04
YH	1/8 NPT(M)
YI	1/8 NPT(F)
YK	1/4 NPT(M)
YN	3/8 NPT(F)

Accessories

Digital Indicator
Mating electrical assembly
Mounting bracket



Information is accurate to the best of Viatran's knowledge. We reserve the right to change specifications at any time.

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