PRESSURE TRANSMITTER

Models 247 / 347

CE

FEATURES

- Economical
- Adjustable zero
- Resistant to pressure spikes
- Standard DIN connector
- Welded stainless steel construction

TYPICAL APPLICATIONS

- Hydraulic systems
- Injection molding
- Die casting
- Off road vehicles
- Compressors and pumps
- High volume usage

DESIGNED FOR HARSH CONDITIONS

Viatran's Model X47 uses bonded foil sensing technology to offer a rugged but inexpensive solution that is small and fits into hard-to-access areas.

INSPIRED BY DIVERSE NEEDS

Hydraulic systems in test and control applications generate several "spikes" that overpressure many sensors. To combat spikes, Viatran employs a bonded foil strain gage on a hardened stainless steel diaphragm. This higher mass diaphragm withstands short-term overpressure conditions inherent in hydraulic applications. For measuring low pressure (3 to 200 PSI or 0.34 to 13.7 bar), Viatran uses a piezoresistive silicon sensor.

EASILY ADAPTABLE

The X47 series utilizes several features to fit the widest possible applications. The standard DIN 43650 connector is an industrial standard with excellent weather resistance.

The X47 can be fitted with a 6-pin bayonet or a direct coupled cable. The X47 has a 1/4" NPT or SAE female pressure port. A standard zero adjustment control makes setup simple.

For more information, contact Viatran.

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PERFORMANCE

Full Scale Pressure Range (FSPR)	0-3, 5, 10, 15, 30, 50, 75, 100, 200, PSIG, PSIA
	0-300, 400, 500, 750, 1K, 1.5K, 2K, 3K, 4K, 5K, 7.5, 10K, 15K,
	20K PSIG
	0-15 PSIV*
Non-linearity (Best Fit Straight Line)	≤±0.50% FSO
Hysteresis	<0.25% FSO
Non-Repeatability	±0.1% FSO
Full Scale Output (FSO) 247	5 Vdc ±2% at 70°F (21°C)
347	16 mA ±2% at 70°F (21°C)
Resolution	Infinite
Long Term Stability	≤±0.5% FSO per 6 months
Compensated Temperature Range	70°F to 170°F (21°C to 76°C)
Maximum Operating Temperature	200°F (93°C)
Minimum Operating Temperature	-20°F (-28°C)
Storage Temperature Limits	-40°F to 250°F (-40°C to 121°C)
Thermal Effect on Zero	≤±2% FSO per 100°F Typical
Thermal Effect on Span	≤±2% FSO per 100°F Typical
Zero Adjust	±5% of FSO (nominal)

ELECTRICAL

Supply Voltage	8 to 30 Vdc	
Power Supply Regulation 247	≤±0.05% FSO per Volt	
347	≤±0.08% FSO per Volt	
Output Signal 247	0-5 Vdc	
247 w/DM option	0 to 10 Vdc (requires 12 Vdc supply min)	
347	4 to 20 mA	
Load Impedance (347 only)	1050 Ohms max at 30 Vdc	
Load Impedance (247 only)	≥50K Ohm resistive	
Circuit Protection	Reverse polarity protected. CE marked	
RFI/EMI	CE EMC compliant as per IEC EN 61326-1 and EN 61326-2-3	
	Annex BB	
Voltage Spike	Withstand 1000 volt spike per EN 61000-4-5	
Insulation Resistance	<5 nS conductance	
Input current 247	≤4 mA	
347	4-20 mA	
Response Time	<2 mSec for 10-90% change in output	
Electrical Connections	DIN Plug 43650	
	247	347
Pin 1	+Power	+Power/Signal
Pin 2	+Signal	-Power/Signal
Pin 3	Common	No connection
Ground Spade	Case ground	Case ground

MECHANICAL

Pressure Connection	1/4" NPT female
Proof Pressure	≤200 PSI 3x
	≥ 300 PSI 1.5 times FSPR or 25K PSI (1723 bar), whichever is less
Burst Pressure	5 times FSPR or 30K PSI (2068 bar), whichever is less
Pressure Cavity Volume	0.06 cubic inches, nominal

MATERIALS OF CONSTRUCTION

Wetted Parts 0-3 thru 200 PSI (0-1.0 thru 13.7 bar)	316L stainless steel
0-300 PSI (20.6 bar) and above	15-5PH stainless steel
Weight	8 oz nominal silicon sensor, 10.5 oz nominal (strain gage)
Identification	Synthetic label
Mounting	May be supported by process piping

* For PSIV and Compound Range units, thermal effect on zero is ≤±3.0% per 100°F.

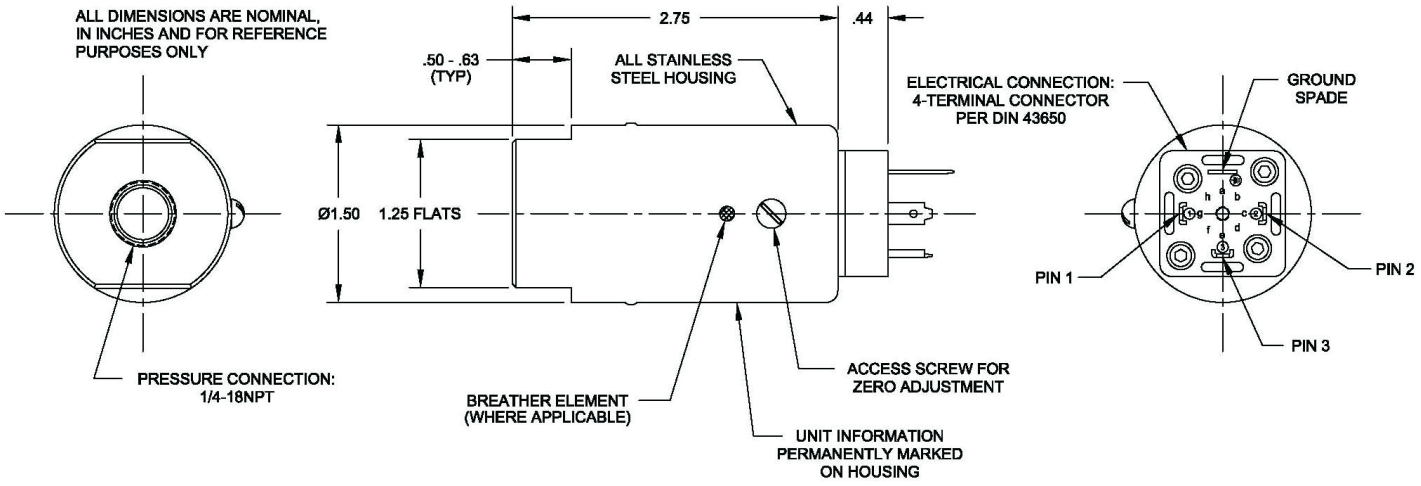
OPTIONS

Codes DH.....Special range
DX .....Modified output

Note: Vented gage units should only be installed in environments that allow the breather to remain dry and free from contamination. 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.

Viatran
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