# **PressureTransmitter**



### A LOW COST, HIGH PERFORMANCE SOLUTION

#### 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 severe "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 pressures (5 to 200 PSI), Viatran uses a corrosion resistant ceramic diaphragm 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 no oil fill or isolation diaphragms and has a 1/4" NPT or SAE female pressure port. A standard zero adjustment control makes setup simple.

If your application requires a large quantity of rugged pressure transmitters, call 1-800-688-0030, ext 512 for product availability or to order.

# MODEL X47

The Model X47 is a low-cost, rugged pressure measurement solution. Viatran products come with a standard of ruggedness that was born from the Oil Fields.

#### **FEATURES**

- Low price
- Adjustable zero
- Resistant to pressure spikes
- Cost effective DIN connector
- Welded stainless steel construction

#### TYPICAL APPLICATIONS

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



### Viatran Model X47

### RUGGED PRESSURETRANSMITTER

## SPECIFICATIONS

#### PERFORMANCE

Full Scale Pressure Range ..... (FSPR) 0-5, 0-10, 0-15, 30, 50, 75, 100, 200,

PSIG, PSIA. 0-300, 400, 500, 750, 1K,1500,

2K, 3K, 4K, 5K, 7500, 10K, 15K, 20K, PSIG

Non-Linearity (Best Fit Straight Line) . . . ≤ ± 0.5% FSO Hysteresis & Repeatability ..... < 0.25% FSO

Full Scale Output (FSO)

Model 247 ..... 4 VDC ± 2% at 70° F Model 347 ...... 16 mA ± 2% at 70° F

Resolution ...... Infinite

Long Term Stability  $\dots \le \pm 0.5\%$  FSO per 6 months

Compensated Temperature Range .... 70° F to 170° F Maximum Operating Temperature ..... 200° F

Minimum Operating Temperature ..... -20° F

Non-Operating Temperature Range .... -60° F to +250° F

Thermal Effect on Zero  $\ldots \le \pm 3\%$  FSO per 100° F Typical Thermal Effect on Span . . . . . . . . . ≤ ± 2% FSO per 100° F Typical

#### **ELECTRICAL**

Supply Voltage ..... 9 to 30 VDC

Power Supply Regulation

Model 247 . . . . . . . . . . .  $\leq$  ± 0.05% FSO per Volt Model 347 .....  $\leq \pm 0.08\%$  FSO per Volt

Current consumption . . . . . . . . ≤1.1mA

Model 247 ... ..... 0.25 to 4.25 VDC

Model 247 w/ DM option . . . . . . . . 0 to 10 VDC (requires 15 VDC supply minimum)

Model 347 . . . . . . . . . . . . 4 to 20 mA

Load Resistance (Model 347 only) . . . . . 1500 Ohms maximum at 40 VDC

Circuit Protection ...... Reverse polarity protected. Varistor protected across input leads for surges above 40 VDC and

currents to 8 A peak with a pulse width of 10 x

1000 µSec

Insulation Resistance .................. 1000 MegOhms at 50 VDC

Response Time ..... ≤ 5 mSec for 90% change in output

Electrical Connections ...... DIN plug 43650

Model 247 Model 347

+Power / +Signal Pin 1 +Power Pin 2 +Signal -Power / -Signal No connection Pin 3 Common Ground Spade Case Ground Case Ground

### THE INDUSTRIAL TEST AND CONTROL FAMILY.



CALL 1-800-688-0030, EXT 512 FOR DETAILS ABOUT THE ENTIRE PRESSURE MEASUREMENT FAMILY

#### MECHANICAL

Pressure Connections . . . . . . 1/4" NPT Female

Proof Pressure .............1.5 times FSPR or 25K PSI, whichever is less 

Pressure Cavity Volume .....0.07 cubic inches

Materials of Construction

Wetted Parts

0-15 thru 200 PSI .........316 stainless steel, Buna-N O-Ring,

Alumina ceramic

0-300 PSI and above ......15-5PH stainless steel 

Weight ......10 oz

Identification . . . . . . . . . Laser etched onto body

#### **OPTIONS**

Codes

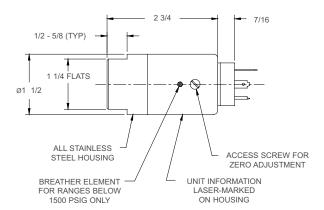
DΗ .....Special range 

**ACCESSORIES** Digital indicator

> Mating electrical assembly Mating electrical connector

Protective cover

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 stan-dard performance. Consult your Vi



ALL DIMENSIONS ARE NOMINAL, IN INCHES AND FOR REFERENCE PURPOSES ONLY

