# **Pressure Transmitter**



Viatran's Model 544 is a gage pressure transmitter designed for precise measurement in harsh environments. Its all welded 316 stainless steel construction ensures durability and corrosion resistance, and it offers overpressure protection to 500 PSI.

The 544 features a special internal calibration signal that allows users to calibrate the transmitter without an external pressure source. The 544 provides a 4 to 20 mA output signal measuring pressures from 0 to 5" WC thru 0-100 PSIG.

External zero, span, and calibration controls are hermetically sealed for protection against harsh environments. These controls are externally adjustable with Viatran's unique magnetically coupled drive system.

Model 544 also has a signal conditioner that allows for 5:1 ranging of the transmitter's standard pressure range (FSPR).

Designed to meet FM explosion proof and intrinsically safe standards, the 544 provides reliable and safe pressure measurement in harsh process applications.

Viatran offers a full line of pressure transmitters for the process control industry. Model 570/770/870 is our basic, low cost pressure transmitter, while Model 584 has similar features and includes external zero and span controls. Model 571 measures pressure in ranges from 0-100 thru 0-100,000 PSI with the same advanced features as the 544. Viatran's Model 573 is a flange-mounted electronic transmitter for tank liquid level measurement, and the 574 is our differential pressure unit.

## MODEL 544

Viatran's Model 544 is a gage pressure transmitter designed for precise measurement in harsh environments. Its all welded 316 stainless steel construction ensures durability and corrosion resistance, and it offers overpressure protection to 500 PSI.

#### **FEATURES**

- · Magnetically coupled external controls
- 500 PSI overpressure
- · Internal calibration signal
- 5:1 ranging
- Rugged design

## TYPICAL APPLICATIONS

- · Leak testing
  - valves
  - refrigeration systems
- · Level measurement
- · Chemical processing

Contact Viatran for approval options







## **SPECIFICATIONS**

#### Performance

Full Scale Pressure Range (FSPR)

Non-Linearity (Best Fit Straight Line) Hysteresis & Repeatability Full Scale Output (FSO) Resolution

Long Term Stability Temperature Effect on Zero Temperature Effect on Span ±1.0% FSO per 100° F Compensated Temperature Limits +70° F to +170° F

Operating Temperature Range

Storage Temperature Limits

0-5", 10", 20", 50", 100", 300", 750" WCG; 0-15, 50, 100 PSIG, 0-15 PSIV ±0.15% FSO

±0.1% FSO 16 mA at 70° F Infinite

±0.2% FSO per 6 months ±1.0% FSO per 100° F

5"WC to 50"WC 100"WC to 100 PSI 0° F to +170° F -40° F to +170° F

5"WC to 50"WC 100"WC to 100 PSI -40° F to +170° F

### Mechanical

Pressure Connections 1/4" NPT(F) Proof Pressure 500 PSI **Burst Pressure** 1000 PSI

Materials of Construction

Wetted Parts 316 stainless steel 316 stainless steel Housing

**Shock Limitation** 

3.5 lbs. nominal Weight Fill Fluid Silicone oil **Enclosure Classification** NEMA 4X

> Identification Laser etched onto body

#### Certifications

Intrinsically Safe FM approved for use in Class I, II, & III,

Div. 1, Groups A thru G,

indoor and outdoor

FM approved as suitable for use in **Explosion Proof** Class I, II, & III, Div. 1, Groups A thru G,

hazardous locations

#### Electrical

Supply Voltage 8.5-40 VDC Power Supply Regulation

±0.02% FSO per volt **Output Signal** 4-20 mA at 70° F

Load Impedance 1500 Ohms maximum at 40 VDC

0° F to +170° F

Zero Adjustment

-100% of FSO Elevation Suppression +50% of FSO

Span Adjustment Rangeable down 5:1 from

standard range

Calibration Signal 20% of FSPR, externally switched

Calibration Signal Accuracy The exact signal to pressure correlation

is provided with each unit.

Circuit Protection Varistor protected across the input leads for surges above 40V and currents to

250 Amps peak with a pulse width of 8x20 μ Sec. Reverse polarity protected.

1/2" NPT Male, 3 Wires, 18 AWG, 36"

Insulation Resistance < 5 nS

RFI/EMI Suppression <1.0% FSO from 0 to 15 MHz at 2V

peak to peak direct contact

**Electrical Connections** 

+ Power / Signal Red - Power / Signal

Black Green

Case Ground

### **Options**

Code Description MS33649-04 YA YΗ 1/8" NPT (M) 1/8" NPT (F) ΥI YK 1/4" NPT (M) ΥN 3/8" NPT (F)

> DK Calibration at specified range DΩ Cleaning for oxygen source EΑ Special calibration run GE Buna-N "O"-Ring

JJ Direct mount indicator w/ explosion proof housing

JS Direct mount indicator

MD FM label

NH Customer specified indentificatiom

NF fast response time PW 1/8 DIN digital indicator

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

#### Accessories

Mounting bracket Conduit connection box Digital indicator

#### **Dimensions**

