

Pressure Transmitter

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.

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.

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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



For product availability, or to order please call 1-800-688-0030

Tonawanda, NY USA • 1-800-688-0030 • www.viatran.com • solutions@viatran.com

An ISO 9001:2015 Certified Company

SPECIFICATIONS

Performance

| | | |
|--|---------------------------------------|--------------------|
| Full Scale Pressure Range (FSPR) | 0-5", 10", 20", 50", 100", 300", 750" | |
| | WCG; 0-15, 50, 100 PSIG, 0-15 PSIV | |
| Non-Linearity (Best Fit Straight Line) | ±0.15% FSO | |
| Hysteresis & Repeatability | ±0.1% FSO | |
| Full Scale Output (FSO) | 16 mA at 70° F | |
| Resolution | Infinite | |
| Long Term Stability | ±0.2% FSO per 6 months | |
| Temperature Effect on Zero | ±1.0% FSO per 100° F | |
| Temperature Effect on Span | ±1.0% FSO per 100° F | |
| Compensated Temperature Limits | +70° F to +170° F | |
| Operating Temperature Range | 5"W C to 50"W C | 100"W C to 100 PSI |
| | 0° F to +170° F | -40° F to +170° F |
| Storage Temperature Limits | 5"W C to 50"W C | 100"W C to 100 PSI |
| | 0° F to +170° F | -40° F to +170° F |

Electrical

| | |
|-----------------------------|--|
| Supply Voltage | 10-40 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 |
| Zero Adjustment | |
| Elevation | -100% of FSO |
| 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. |
| Insulation Resistance | < 5 nS |
| RFI/EMI Suppression | <1.0% FSO from 0 to 15 MHz at 2V peak to peak direct contact |
| Electrical Connections | 1/2" NPT Male, 3 Wires, 18 AWG, 36" |
| Red | + Power / Signal |
| Black | - Power / Signal |
| Green | Case Ground |

Mechanical

| | |
|---------------------------|------------------------|
| Pressure Connections | 1/4" NPT(F) |
| Proof Pressure | 500 PSI |
| Burst Pressure | 1000 PSI |
| Materials of Construction | |
| Wetted Parts | 316 stainless steel |
| Housing | 316 stainless steel |
| Shock Limitation | 5 Gs |
| Weight | 3.5 lbs. nominal |
| 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 |
| Explosion Proof | FM approved as suitable for use in Class I, II, & III, Div. 1, Groups A thru G, hazardous locations |

Options

| Code | Description |
|------|---|
| YA | MS33649-04 |
| YH | 1/8" NPT (M) |
| YI | 1/8" NPT (F) |
| YK | 1/4" NPT (M) |
| YN | 3/8" NPT (F) |
| DK | Calibration at specified range |
| DQ | Cleaning for oxygen source |
| EA | 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 identification |
| 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

