

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



An ISO 9001: 2001 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 Limits	-10° F to +220° F
Storage Temperature Limits	-65° F to +250° F

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
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	≥1000 MegOhms to case ground at 50 VDC and 70° F
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

