



## MODEL 574 PRESSURE TRANSMITTER

### LOW RANGE DIFFERENTIAL PRESSURE, HAZARDOUS LOCATION APPROVAL

Viatran's 574 Series differential pressure transmitters are extremely accurate and durable units, designed specifically for test applications.

The model 574 comes with hazardous location option and has sealed external zero and span adjustments. The variable capacitance sensing technology provides extremely high overpressure protection, and long range stability, as well as high accuracy of 0.15%BFSL.



### PERFORMANCE

Full Scale Pressure Ranges	0-5, 10, 20, 50, 100, 300, 750" WCD 0-15, 50, 100 PSID	
Nonlinearity (Best Fit Straight Line)	≤±0.15% FSO	
Hysteresis	≤±0.1% FSO	
Repeatability	≤ ±0.1% FSO	
Full Scale Output (FSO)	16 mA at 70° F (21°C)	
Resolution	Infinite	
Long Term Stability	≤±0.1% FSO per 6 months	
Zero Shift with Base Pressure	≤±2.0% FSO per 1000 PSI	
Span Shift with Base Pressure	≤±1.0% FSO per 1000 PSI	
Zero Shift After 3000 PSI Overload	Side Angle: ≤± 0.1% FSO Alternate Angle: ≤±0.5% FSO	
Compensated Temperature Range	70°F to 170°F	
Operating Temperature Range	5"WC to 50"WC 0° F to +170° F	100"WC to 100 PSI -40° F to +170° F
Storage Temperature Limits	5"WC to 50"WC 0°F to +170° F	100"WC to 100 PSI -40° F to +170° F
Temperature Effect on Zero	≤± 1.0% FSO per 100° F	
Temperature Effect on Span	≤± 1.0% FSO per 100° F	

### ELECTRICAL

Supply Voltage	10 to 40 Vdc	
Power Supply Regulation	≤±0.02% FSO per volt over supply voltage range	
Output Signal	4 to 20 mA	
Load Impedance	1500 Ohms maximum at 40 Vdc	
Zero Adjustment	-100% FSO elevation to +50% FSO suppression of the standard range	
Span Adjustment	Rangeable down, 5:1 from standard range	
Calibration Signal	20% of FSPR externally switched	
Calibration Signal Accuracy	≤±1% of the stated value	
Circuit Protection	Varistor protected across the input leads for surges above 40V and currents to 250 Amps peak with a pulse width of 8 x 20 μSec. Reverse polarity protected	
Insulation Resistance	>1000 MegOhms to case ground at 40 Vdc and 70° F	
Response Time	10% to 90% FS Faster response available with NF option.	
Electrical Connection	1/2" NPT male, 3 wires, 18 AWG	
Wire Codes	RED: + Signal / Power BLACK: - Signal / Power GREEN: Case Ground	

# Model 574 Pressure Transmitter



**High Accuracy**



**Many Options available**



**ShuntCal**



**Low Pressure Applications**

Viatran's Model 574 differential pressure transmitter employs variable capacitance sensing technology for extreme reliability and high accuracy.

The 574 measures pressures from 5" WC to 100 PSI with over pressure protection to 3000 PSI.

The all welded 316 stainless steel construction allows the airtight and watertight 574 to be in corrosive environments, including salt air or caustic solutions.

External zero, span and calibration controls are hermetically sealed, yet are easily adjusted with Viatran's magnetically coupled drive system. The signal conditioner in the 574 allows for 5:1 ranging of the transmitter's standard pressure range.



**CSA Explosion Proof  
Certificate of Compliance**



**US Intrinsic Safety Certificate  
of Compliance**



**Russian Metrology Certificate**

## MECHANICAL

Pressure Connection	1/4" NPT female on 2-1/8" centers on flanges 1/2" NPT female on 2", 2-1/8" or 2-1/4" centers with optional adapters
Static Pressure	3000 PSI (maximum)
Proof Pressure	3000 PSID (Single sided)
Burst Pressure	4500 PSID or 4500 PSI base pressure
Diaphragm Displacement	0.002 cubic inches at FSPR
Fill Fluid	Dow DC200 Silicone oil
Mounting	May be supported by process piping or by optional mounting bracket

## MATERIALS OF CONSTRUCTION

Housing	316 Stainless Steel
Wetted Parts	316 Stainless steel and Viton O-Ring
Weight	7 lbs.
Identification	Laser etched onto body

## OPTIONS

### PERFORMANCE OPTIONS

DG	Improved temperature compensation to $\pm 1.0\%$ FSO per 100°F
DJ	Submersible connector w/8' cable
DK	Special shunt calibration setting
DQ	Cleaning for oxygen service
EA	Special calibration run
FA	Russian Metrology Certificate
GE	Buna 'N' O-Rings
JJ	Loop powered direct mount indicator with explosion proof housing
MD	FM Intrinsic Safety Label
ME	CSA Explosion Proof Label
NF	Fast response time
NH	Customer specified identification
PW	1/8 DIN digital indicator
NSR	Non standard range

### ALTERNATE PRESSURE PORTS

YL	1/4" NPT (F) square flange
YQ	1/8" NPT (F) square flange

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



**VIATRAN**

# Model 574 Pressure Transmitter

## DIMENSIONAL DATA:



