



Viatran's Models 548, 748 and 848 are rugged pressure transmitters designed for the industrial process environment. With ranges down to 20" WC, the "x48" Series provides accurate, cost-effective, and reliable transmitters for harsh process applications.

#### FEATURES

- All welded construction
- 316L SS wetted parts
- Ranges down to 20" WC full scale
- High accuracy

#### TYPICAL APPLICATIONS

- Fuel tank level
- Chemical tank level
- Gas compressors
- Chemical processing

Approval Options Available.  
Contact Viatran for details.

## DURABLE. DEPENDABLE. ACCURATE.

#### FOR CORROSIVE ENVIRONMENTS

The "X48" Series features all welded stainless steel construction with 316L stainless steel wetted parts. Combined accuracy is 0.25% or better with an optional improved accuracy of better than 0.1%. Standard ranges are from 3 PSI to 5,000 PSI with outputs of mV/V, 4-20 mA and 0-5 VDC. Also available is an optional zero and span adjustment.

#### A FULL LINE OF APPROVALS

The "X48" Series has the approvals necessary for use in hazardous areas. Viatran offers a variety of standard options and our ability to modify our products provides flexibility to meet

your specific application needs. Options include alternate pressure ports, electrical connectors and various electrical outputs.

#### VIATRAN'S FULL LINE

To compliment this series is a full line of pressure measurement products for the process control industry. Our Model 570 and 571 provide mid to high ranges up to 100K PSI and the IDP10 can measure differential pressures as low as 0.5" WC full scale.

#### YOUR SOLUTION

We have the solution to your pressure or level measurement application.



For product availability, or to order please call 1-800-688-0030, ext 506.

Grand Island, NY • 1-800-688-0030 • [www.viatran.com](http://www.viatran.com) • [solutions@viatran.com](mailto:solutions@viatran.com)

An ISO 9001:2000 Certified Company

## SPECIFICATIONS

### PERFORMANCE

Full Scale Pressure Range	0-3 thru 0-5000 PSIG/PSIS
(FSPR)	0-15 thru 0-500 PSIA, 0-15 PSIV
Accuracy (combined linearity, hysteresis and repeatability)	$\leq \pm 0.25\%$ (optional $\leq \pm 0.1\%$ )
Hysteresis & Repeatability	$\pm 0.1\%$ FSO
Full Scale Output (FSO)	
548	16 mA
748	5 VDC
848	mV/V
Zero Balance	$\leq \pm 1\%$ FSO
Long Term Stability	$\pm 0.25\%$ FSO per 6 months
Response Time	$\leq 1$ mSec for 10% to 90% FSO
Temperature Effect on Zero	$\pm 1.0\%$ per 100°F
Temperature Effect on Span	$\pm 1.0\%$ per 100°F
Compensated Temperature Range	32°F to +180°F
Operating Temperature Limits	-40°F to +185°F
Storage Temperature Limits	-40°F to +250°F

### ELECTRICAL

Supply/Voltage			
548/748	9.0 to 30 VDC		
848	15 VDC max		
Power Supply Regulation Effect	±0.0001% FSO per Volt		
Output Signal			
548	4 to 20 mA		
748	0 to 5 VDC		
848	3 to 5 PSI: 5 mV/V		
	≥10 PSI: 10 mV/V		
Load Resistance: 548	12 VDC min with 150 ohm/and		
	30 VDC max with 1050 ohms		
Circuit Protection	Output may be short-circuited indefinitely. Input polarity may be reversed. Over-voltage protected to 1000 volts. < 1 mSec duration.		
Electrical Connection	1/2" NPT (M), 18 AWG wire		
	548	748	848
Red	+Power/Signal	+Power	+Power
Black	-Power/Signal	+Signal	+Signal
Green	Case Ground	Case Ground	-Power
White	NA	-Power/Signal	-Signal
Brown	NA	NA	Case Ground

### MECHANICAL

<b>PRESSURE CONNECTION</b>	1/4"-18 NPT female
<b>PROOF PRESSURE</b>	3 times rated range or 10K PSI whichever is less
<b>BURST PRESSURE</b>	5 times rated range or 10K PSI whichever is less
Diameter	1.5 inches
Weight	10 oz.

### MATERIALS OF CONSTRUCTION

Enclosure Housing	304 and 316 stainless steel
Pressure Connection	316 stainless steel
Sensor	316 stainless steel
Mounting	May be supported by pressure connection
Identification	Laser etched onto body

### CERTIFICATIONS

Consult factory for available Options

FM	Explosion Proof: Class I, Div. 1, Groups A, B, C, D, Class II/III, Div. 1, Groups E, F, G, T5 at Ta=88°C NEMA 4X, Hazardous Locations Intrinsic Safety: (model dependent) Class I, II, III, Div 1, Groups A thru G, AEx ia IIC T4 NEMA/Type 4X Hazardous Locations Nonincendive: (model dependent) Class I, Div 2, Groups A-D, Class II, Groups F, G, Class III and Class I, Zone 2, Group IIC, T4 Type 4X Hazardous Locations
CSA	Division 2: (model dependent) Class I, Div 2, Groups A-D, Class II, Groups F, G, Class III T4 Type 4X Hazardous Locations. Intrinsic Safety: (model dependent) Class I, II, III, Div. 1, Groups A-G, Ex ia IIC T4 ) Type 4X Hazardous Locations
ATEX	Intrinsic Safety: (model dependent) $\text{Ex II 1 G}$ EEx ia IIC, (-20°C T4, Ta $\leq$ 80°C) Flameproof: $\text{Ex II 2 G}$ EEx d IIC, T5 (-20°C $\leq$ Ta $\leq$ 80°C) Type N: (model dependent) $\text{Ex II 3 G}$ EEx nL IIC T4 (-20°C $\leq$ Ta $\leq$ 80°C)
CE	EMC Directive 89/336/EEC and Low Voltage Directive 72/23/EEC EN 61010-1 (1993)/ Safety Requirements EN 61326-(2001) - EMC Requirements PED Directive 97/23/EC

### OPTIONS

Y()	Alternate Pressure Ports
	Performance Options
DF	Bleed Port
DH	Special Range
DN	Improved Accuracy $\leq 0.1\%$ FSO
DM	Modified output (0 to 10 VDC, 748 only)
DQ	Cleaning for Oxygen Service
DX	Modified output (0 to 4.5 VDC, 748 only)
EA	Special Calibration Run
NG	ATEX Flameproof label
NH	Customer specified identification
NJ	CE design and label (consult factory)
NK	ATEX Intrinsic Safety label (consult factory)
NX	CSA Intrinsic Safety label (consult factory)
NY	FM Explosion Proof label
NZ	FM Nonincendive label (consult factory)
PW	1/8 DIN digital indicator (consult factory)
TF	FM Intrinsic Safety label (consult factory)
TJ	CSA Division 2 label (consult factory)
TK	ATEX Type n label (consult factory)

NOTE: FOR UNITS EQUIPPED WITH A BREATHING VENT, CONSIDERATION SHOULD BE GIVEN TO ENSURE THAT THE BREATHING ELEMENT IS KEPT CLEAR AND EXPOSURE TO CONTAMINATION IS MINIMIZED. APPLICATION OF SOME AVAILABLE OPTIONS MAY AFFECT STANDARD PERFORMANCE. CONSULT YOUR VIATRAN REPRESENTATIVE FOR DETAILS.

### ACCESSORIES

Mounting Bracket  
Conduit Connection Box  
Loop Powered Digital Indicator  
Protective Cover

This information is accurate to the best of the manufacturer's knowledge, however, we reserve the right to change specifications at any time. Please contact your sales representative for specific order inquiries.

