

PRESSURE TRANSMITTER

Models 548 / 748 / 848



FEATURES

- All welded construction
- 316L stainless steel wetted parts
- Ranges down to 20" WC full scale
- High accuracy
- Pressure up to 5000 PSI (1379 bar)

TYPICAL APPLICATIONS

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

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, electical connectors and various electrical ouotputs.

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.













PERFORMANCE		Full Scale Pressure	Range	0-3 thru 0-5000 PSIG, PSIS; 0-15 thru 0-500 PSIA; 0-15 PSIV
		Accuracy		≤±0.25% (optional ≤±0.1%)
			hysteresis & repeatbi	
		Hysteresis & Repeatability		
Full	Full Scale Output (FSO)	548		16 mA
		748		5 Vdc
		848		mV/V
				≤±0.25% FSO per 6 months
		Response Time		
		Temperature Effect on Zero		≤±1% FS0 per 100°F (37°C) 32°F to 180°F (0°C to 82°C)
		Compensated Temperature		
				40°F to 185°F (-40°C to 85°C)
		Storage Temperatur	re Limits	40°F to 250°F (-40°C to 121°C)
ELECTRICAL	Supply Voltage			
				±0.0001 FS0 per volt
	Output Signal			
				3 to 5 PSI: 5 mV/V. \geq 10 PSI: 10 mV/V
	Load Resistance			12 Vdc min with 150 ohm and 30 Vdc max with 1050 ohms
				Output may be short-circuited indefinitely. Input polarity may be
				reversed. Over voltage protected to 1000 volts. <1 mSec duration
				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	N/A	-Power/Signal	-Signal
	Brown	N/A	N/A	Case Ground
MECHANICAL				1/4" - 18 NPT female
		Proof Pressure		3 times rated range or 10K PSI whichever is less
		Burst Pressure		5 times rated range or 10K PSI whichever is les
		Diameter		1.5 in
		Weight		10 oz
MATERIALS OF CONSTRUCTION	DN	Enclosure Housing .		304 and 316 stainless steel
		Pressure Connection		
		Sensor		316 stainless steel
		Mounting		May be supported by pressure connection
		Identification		Laser etched onto body
ACCESSORIES		Mounting bracket		
		Conduit connection	box	
		Loop Powered Digit		
		Protective cover		





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 <u>Division 2:</u> (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: II 1 G EEx ia IIC, -20°C T4, Ta <50°C; Flameproof: II 2 G EEx d IIC, T5 (-20°C < Ta < 80°C) Type N: II 3 G EEx nL IIC T4

 $(-20^{\circ}\text{C} < \text{Ta} < 60^{\circ}\text{C})$

CE EMC Directive 89/336/EEC and Low Voltage Directive 72/23/EEC

EN61010-1 ('993) / Safety Requirement EN61326 - (2001) EMC requirements

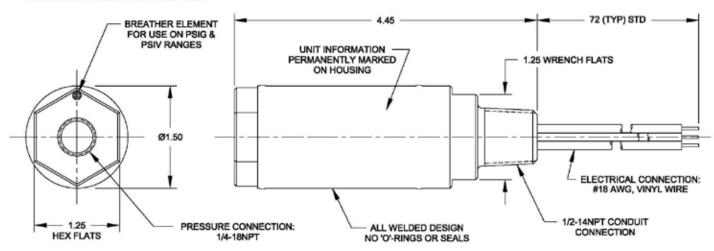
PED Directive 97/23/EC

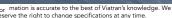
	OPTIONS
PERFORMANCE	OPTIONS

Y()	Alternate pressure ports			
DF	Bleed port			
DH	Special range			
DN	Improved accuracy ≤0.1% FS0			
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)			
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Note: For units equipped with a breather vent, consideration should be given to ensure that the breather element is kept clear and exposure to contamination is minimized. Applications of some available options may affect standard performance. Consult your Viatran Representative for details.

ALL DIMENSIONS ARE NOMINAL, IN INCHES AND FOR REFERENCE PURPOSES ONLY





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