

#### PRESSURE TRANSDUCER / TRANSMITTER

# Models 24A / 34A



#### **FEATURES**

- 34 unique standard ranges
- Compact and lightweight
- Gage, sealed gage, absolute and vacuum
- High accuracy to ±0.10% FSO (BFSL)
- All stainless steel construction
- 3 to 5000 PSI (0.2 to 345 bar)
- Shunt calibration circuit option
- Zero adjustment option

#### TYPICAL APPLICATIONS

- Engine test stands
- Turbine rocket
- Diesel internal combustion
- Emission testing
- Production test stands
- Transmission testing
- Off-road vehicles
- Compressors and pumps
- Stamping presses
- Rolling mills
- Hydraulics



#### STATE-OF-THE-ART DESIGN DELIVERS NEEDED ACCURACY

Viatran's 24A and 34A are one of our most versatile pressure transducers / transmitters for industrial applications. The 24A / 34A measures from 3 PSI to 5000 PSI (0.2 to 345 bar) with standard linearity of  $\leq \pm 0.25\%$  FSO.

Improved linearity of  $\pm 0.15\%$  or  $\pm 0.10\%$  FSO are available as options.

#### **ISOLATED SHUNT CALIBRATION OPTION**

Also available is an isolated calibration signal circuit. This option allows calibration of the transmitter without an external pressure source and minimizes the need to send the transmitter to a metrology lab.

#### **CIRCUIT PROTECTION**

To maintain excellent performance and ensure immunity in electrically noisy environments, both mechanical and electrical designs are optimized for EMI handling. Sample devices were extensively tested in a simulated environment allowing for the development of a more reliable and robust product.

#### **OUR COMMITTMENT TO QUALITY**

The "X4A" series design will perform and maintain on site durability in the most severe applications. To satisfy your unique application requirements, Viatran will also modify our standard products to meet your needs.

Viatran's vision is to be your fastest, easiest and most trusted solution.

Call us today to explore the solutions we have to offer.

1.800.688.0030

Your local applications specialist:

## Models 24A/34A

ACCESSORIES	•	Direct Mount Digital Indicator/Power Supply Mating Electrical Assembly Ruggedized Connectors & Cable Assemblies	
MATERIALS OF CONSTRUC	CTION	Wetted Parts Housing Weight Identification	300 Series Stainless Steel
	Shell	Ground	Ground
	Pin F	No Connection	No connection
	Pin E	No Connection	No connection
	Pin C Pin D	+Signal -Signal	No Connection No Connection
	Pin B	-Power	-Power/Signal
	Pin A	+Power	+Power/Signal
	Model 24A		Model 34A
		Licenteal Confidential	Doliuix 1 102L-10-01, Iliates 1 100L-10-03 (5n)
			CE EMC compliant per IEC EN 61326. CE marked. Bendix PT02E-10-6P, mates PT06E-10-6S (SR)
			<2 mSec to reach 90% of full scale
		Insulation Resistance	
			EN61000-4-5
		Circuit Protection	Reverse polarity protected. Output may be short circuited indefinitely. Over voltage protection to 1000 volts according to
		Model 34A	
	Output Signal	Model 24A	
		Model 34A	
ELECTRICAL	Supply Voltage	Model 24A	8 to 30 Vdc at 3.5 mA nominal, 5 mA max (12 to 30 Vdc for 10 Vdc output option)
TI FOTDIONI	0 1 1 1 1		
		Temperature Effect on Span	
		Storage Temperature Limits Temperature Effect on Zero	
		Olemen Terrende III "	-40°F to 185°F (-40°C to 85°C) - ambient
	•		40°F to 250°F (-40°C to 121°C) - process
	Temperature Shift	Compensated Temperature	
		Long Term Stability	
		Zero and Span Balance	
		Model 34A	
	Full Scale Output (FSO)		5 Vdc at 70°F (21°C) ±1.0% FSO standard
		Hysteresis & Repeatability	
		Nonlinearity (Best Fit Straight Line)	
			0-5 thru 0-15 PSIV (034 thru 1.03 BarV)
			0-15 thru 0-5000 PSIA (0-1.0 thru 0-345 bar)

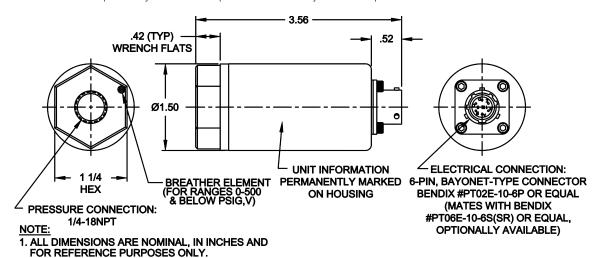


### Models 24A/34A

MECHANICAL	Pressure Connection	Pressure Connection		
	Proof Pressure			
	Burst Pressure	≤500 PSI (35 bar)	5 times range or 2,400 PSI (170 bar) max	
		>500 PSI (35 bar)	5 times range or 10,000 PSI (700 bar) max	
	Pressure Cavity Volume	≤500 PSI (35 bar)	1.5 ml	
		>500 PSI (35 bar)	1.5 ml	
		Mounting	May be supported by process piping	
OPTIONS		BF	(K)PTIH-10-6P	
		BG	DIN 43650	
		BL	WK6-32S	
		BN		
		BQ	(K)PTO2H-10-6P	
		BR		
		DA		
		DC	Extended Compensated Temperature Range (Cold) -40°F to 170°F (-40°C to 77°C)	
		DG	Improved temperature compensation (≤±1.0%FSO per 100°F, zero and span shift)	
		DH		
		DK	Special calibration setting	
		DM		
		DN	Improved linearity (±0.15% FS0)	
		DQ	Cleaning for oxygen service	
		EA		
		ED		
		EH	Extended Compensated Temperature Range (Hot) +70°F to 185°F (21°C to 85°C)	
			Externally powered, Optically Isolated Shunt Cal	
		NH		
		NW		
		PW	1/8 DIN digital indicator	

ZU......Direct cable (175°F Max Temp) (79°C)

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





2. STANDARD PRESSURE CAVITY MATERIAL: 316L SST