



### FEATURES

- Many options available
- Small size and weight
- High accuracy options
- All stainless steel construction
- 0-100 to 0-30,000 PSI ranges
- 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
- Die casting



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

Viatran's 24B and 34B are one of our most versatile pressure transducers / transmitters for industrial applications.

The 24B/34B measures from 100 PSI to 30,000 PSI 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 COMMITMENT TO QUALITY

The "X4B" 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**

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**Your local applications specialist:**

# Models 24B / 34B

## PERFORMANCE

	Full Scale Pressure Range .....	0-100 thru 30,000 PSIG (PSIS FOR > 1500 PSI)
	Nonlinearity (Best Fit Straight Line) .....	$\leq \pm 0.25\%$ FSO
	Hysteresis & Repeatability .....	$\leq \pm 0.10\%$ FSO each
Full Scale Output (FSO)	Model 24B .....	5 Vdc at 70°F (21°C) $\pm 1\%$ FSO
	Model 34B .....	16 mA at 70°F (21°C) $\pm 1\%$ FSO
	Zero and span balance .....	$\pm 1\%$ FSO
	Resolution .....	Infinite
	Long Term Stability .....	$\leq \pm 0.3\%$ FSO per 6 months
Temperature Shift	Compensated Temperature .....	70°F to 170°F (21°C to 77°C)
	Operating Temperature .....	-40°F to 250°F (-40°C to 121°C) - process -40°F to 185°F (-40°C to 85°C) - ambient
	Storage Temperature Limits .....	-40°F to 250°F (-40°C to 121°C)
	Temperature Effect on Zero .....	$\leq \pm 2.0\%$ FSO per 100°F
	Temperature Effect on Span .....	$\leq \pm 2.0\%$ FSO per 100°F

## ELECTRICAL

Supply Voltage	Model 24B .....	8 to 30 Vdc at 3.5 mA nominal, 5 mA max (12 to 30 Vdc for 10 Vdc output option)
	Model 34B .....	8 to 30 Vdc
Output Signal	Power Supply Regulation .....	$\leq \pm 0.01\%$ FSO per volt change over the supply voltage range
	Model 24B .....	0 - 5 Vdc standard (see options)
	Model 34B .....	4 to 20 mA
	Circuit Protection .....	Reverse polarity protected. Output may be short circuited indefinitely. Over voltage protection to 1000 volts according to EN61000-4-5
	Insulation Resistance .....	<5 nSec to case ground
		<b><math>\leq 15K</math> PSI</b> <b>0-20K and 0-30K PSI</b>
	Response Time .....	<2 mSec to reach 90% of full scale      <3 mSec to reach 90% of full scale
	RFI/EMI Suppression .....	CE EMC compliant per IEC EN 61326. CE marked.
	Electrical Connection .....	Amphenol PT02E-10-6P, mates PT06E-10-6S (SR)
Pin Outs	<b>Model 24B</b>	<b>Model 34B</b>
	<b>Pin A</b> +Power	+ Power/Signal
	<b>Pin B</b> -Power	- Power/Signal
	<b>Pin C</b> +Signal	No connection
	<b>Pin D</b> -Signal	No connection
	<b>Pin E</b> No connection	No connection
	<b>Pin F</b> No connection	No connection
	<b>Shell</b> Ground	Ground

## MATERIALS OF CONSTRUCTION

	<b><math>\leq 15K</math> PSI</b>	<b>0-20K and 0-30K PSI</b>
Wetted Parts .....	15-5 PH Stainless steel	13-8 Mo Stainless steel
Housing .....	300 Series Stainless steel	300 Series Stainless steel
Identification .....	Permanently marked on body of unit	Permanently marked on body of unit
Weight .....	10 oz (283 g) nominal	14 oz (397 g) nominal

## ACCESSORIES

- Direct Mount Digital Indicator/Power Supply
- Mating Electrical Assembly
- Ruggedized Connectors & Cable Assemblies

# Models 24B / 34B

## MECHANICAL

	≤ 15K PSI	0-20K and 0-30K PSI
Pressure Connection .....	1/4" - 18 NPT female	Autoclave F250C female
Proof Pressure .....	1.5X range or 21,500 PSI max	1.2X Range
Burst Pressure .....	3X range or 35,000 PSI max	1.5X Range
Pressure Cavity Volume .....	4.5 ml	1.6 mL
Mounting .....	May be supported by process piping	May be supported by process piping

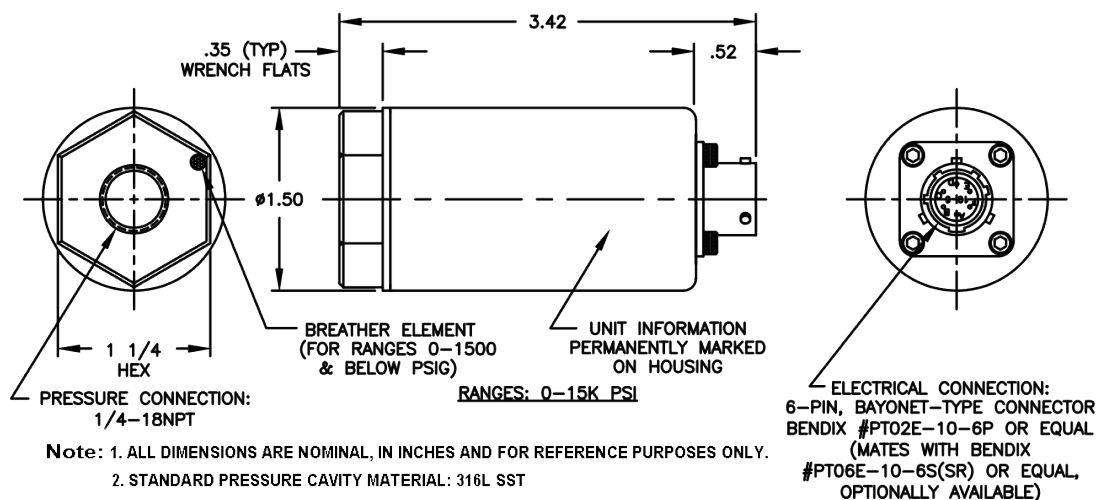
## OPTIONS

BF .....	(K)PTIH-10-6P
BG .....	DIN 43650
BL .....	WK6-32S
BN .....	(K)PTIH-8-4P
BQ .....	(K)PTO2H-10-6P
BR .....	CF3102E-14S-6P
DA .....	Isolated shunt calibration circuit
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 .....	Special ranging
DK .....	Special calibration setting
DM .....	Modified full scale output
DN .....	Improved linearity (±0.15% FSO)
DQ .....	Cleaning for oxygen service
EA .....	Special calibration run
ED .....	Extra improved linearity (±0.10% FSO)
EH .....	Extended Compensated Temperature Range (Hot) +70°F to 185°F (21°C to 85°C)
LV .....	Externally powered, optically isolated shunt cal
NH .....	Customer specified identification
NW .....	External zero adjustment
PW .....	1/8 DIN digital indicator
TH .....	External zero and span adjustment
Y( ) .....	Multiple pressure ports available. Consult factory
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.

## DIMENSIONAL DATA

### FOR RANGES 0-15,000 PSI



FOR RANGES 0-20,000 and 0-30,000 PSI



### INSTALLATION NOTES:

