

PRESSURE TRANSMITTER

# Models 24B / 34B



#### **FEATURES**

- Many options available
- Small size and weight
- High accuracy options
- All stainless steel construction
- 0-100 to 15,000 PSI (7 to 1000 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
- Die casting
- Hydraulic usage

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

Viatran's 24B and 34B are our most versatile pressure transducers for industrial applications. The 24B/34B measures from 100 PSI to 15,000 PSI (7 to 1000 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.

Viatran

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DSPM Industria\*

### Models 24B / 34B

PERFORMANCE		Full Scale Pressure Range	. 0-100 thru 15,000 PSIG (PSIS FOR ≥ 1500 PSI) (7 thru 1000 bar)
		Nonlinearity (Best Fit Straight Line)	
		Hysteresis & Repeatability	
Full Scale Output (FSO)		Model 24B	5 Vdc at 70°F (21°C) ±1% FSO
		Model 34B	16 mA at 70°F (21°C) ±1% FSO
		Resolution	
		Long Term Stability	•
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	
		Temperature Effect on Zero	·
		Temperature Effect on Span	\$\delta 2.0\% FSO per 100\cdot 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
		Power Supply Regulation	≤±0.01% FSO per volt change over the supply voltage range
	Output Signal	Model 24B	0 - 5 Vdc standard (see options)
		Model 34B	
		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
		Response Time	<2 mSec to reach 90% of full scale
		RFI/EMI Suppression	CE EMC compliant per IEC EN 61326. CE marked.
		Electrical Connection	Bendix PT02E-10-6P, mates PT06E-10-6S (SR)
		Model 24B	Model 34B
	Pin A	+Power	+ Power/Signal
	Pin B	-Power	- Power/Signal
	Pin C	+Signal	No connection
	Pin D	-Signal	No connection
	Pin E	No connection	No connection
	Pin F Shell	No connection Ground	No connection
	Sileii	Ground	Ground
MATERIALS OF CONSTRUCTION		Wetted Parts	
		Housing	
		Weight	•
		Identification	Pressure sensitive label
ACCESSORIES		<ul> <li>Direct Mount Digital Indicator/Power Su</li> <li>Mating Electrical Assembly</li> </ul>	pply
		<ul> <li>Ruggedized Connectors &amp; Cable Assen</li> </ul>	nblies

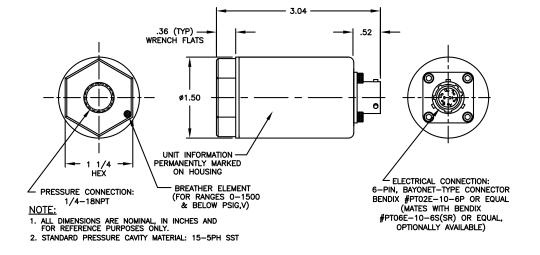




## Models 24B / 34B

Proof Pressure	MECHANICAL	Pressure Connection	1/4" - 18 NPT female
Pressure Cavity Volume  Mounting  May be supported by process piping  BF		Proof Pressure	
Mounting May be supported by process piping  BF		Burst Pressure	
DPTIONS  BF		Pressure Cavity Volume	4.5 ml
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 cold temperature operation (-40°F to 170°F) DG Improved temperature compensation (≤±1.0% FSO per 100°F zero and span shift) DH Special ranging DK Special ranging 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 Extra improved linearity (±0.10% FSO) EXTRA EXPENSION CONCENTION CONCE		Mounting	May be supported by process piping
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NW		NH	Customer specified identification
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TW			
Y() Multiple pressure ports available. Consult factory		TH	External zero and span adjustment
		TW	GOST-R approval
ZU Direct cable (175°F max temp) (79°C)		Y()	Multiple pressure ports available. Consult factory
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Note: Application of some available options may affect standard performance. Consult your Viatran representative for details.



Information is accurate to the best of Viatran's knowledge. We reserve the right

to change specifications at any time.

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