



## FEATURES

- High accuracy
- Small size and weight
- Many options available
- All stainless steel construction
- 3 to 5000 PSI (0.2 to 345 bar)
- Isolated Shunt calibration circuit
- Zero and Span adjustments

## TYPICAL APPLICATIONS

- Engine test stand
- Turbine-rocket
- Diesel-internal combustion
- Emission testing
- Production test stand
- Transmission testing
- Break Strength testing



## STATE-OF-THE-ART CIRCUITRY DELIVERS HIGH ACCURACY

Viatran's 245 and 345 are our most accurate pressure transducers for industrial test and research applications. The 245/345 measures from 3 PSI to 5000 PSI (0.2 to 345 bar) with standard linearity of  $\leq \pm 0.06\%$  FSO.

To achieve high static accuracy and low temperature errors, Viatran uses ASIC technology with integrated EEPROM to store corrective coefficients. Digital connection allows Viatran to offer optional temperature compensation in the range of  $-40^{\circ}\text{F}$  to  $170^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $77^{\circ}\text{C}$ ) and linearize the signal down to 0.06% FSO or less without sacrificing the  $< 2\text{ms}$  response time of the unit.

## COMPACT SIZE FOR LIMITED SPACE APPLICATIONS

The compact size of the 245/345 allows more transmitters to fit into a smaller space so that more pressure points can be measured. The use of surface mount technology (SMT) allows this complex circuitry to be incorporated into a small package. Also included is an isolated internal calibration signal circuit. This feature 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 "X45" 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 245 / 345 DIGICOMP

## PERFORMANCE

	Full Scale Pressure Range .....	0-3 thru 5000 PSIG (PSIS FOR >500 PSI) (0.2 thru 345 bar)
		0-15 thru 0-5000 PSIA (0-1.0 thru 0-345 bar)
		0-15 PSIV (0-1.03 BarV)
Full Scale Output (FSO)	Nonlinearity (Best Fit Straight Line) .....	≤±0.06% FSO
	Hysteresis & Repeatability .....	≤±0.06% FSO each
	245 .....	5 Vdc at 70°F (21°C) ≤±0.10% FSO standard
Temperature Shift	345 .....	16 mA at 70°F (21°C) ≤±0.10% FSO
	Resolution .....	Infinite
	Long Term Stability .....	≤±0.3% FSO per 6 months
	Compensated Temperature .....	32°F to 170°F (0° 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 .....	≤±1.0% FSO per 100°F
	Temperature Effect on Span .....	≤±1.0% FSO per 100°F

## ELECTRICAL

Supply Voltage	245 .....	8 to 30 Vdc at 3.5 mA nominal, 5 mA max (12 to 30 Vdc for 10 Vdc output option)
	345 .....	8 to 30 Vdc
Output Signal	Power Supply Regulation .....	≤±0.01% FSO per volt change over the supply voltage range
	245 .....	0 - 5 Vdc standard (see options)
Load Resistance	345 .....	4 to 20 mA
	245 .....	100K Ohms min
Calibration Signal	345 .....	1050 Ohms max at 30 Vdc
	Zero Adjustment .....	±5% FSO min
	Span Adjustment .....	±5% FSO min
	245 .....	80% of FSPR, by shorting calibration pins
	345 .....	100% of FSPR, by shorting calibration pins
	Calibration Signal Accuracy .....	≤±0.1% of the stated value
	Circuit Protection .....	Reverse polarity protected. Output may be short circuited indefinitely. Over voltage protection to 1000 volts according to EN61000-4-5
	Insulation Resistance .....	≥200 MegOhms 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)
	245	345
	Pin A	+Power/Signal
	Pin B	-Power/Signal
	Pin C	Calibrate
	Pin D	Calibrate
	Pin E	No connection
	Pin F	No connection
	Shell	Ground

## MATERIALS OF CONSTRUCTION

Wetted Parts .....	316 stainless steel
Housing .....	304 SS with a Cadmium plated electrical connector
Weight .....	10 oz (283 g)
Identification .....	Laser etched onto body

## ACCESSORIES

Direct Mount Digital Indicator/Power Supply
Mating Electrical Assembly

## Models 245 / 345 DIGICOMP

MECHANICAL	Pressure Connection	1/4" - 18 NPT female
	Proof Pressure	≤500 PSI (35 bar).....3 times range or 1,200 PSI (80 bar) max
		>500 PSI (35 bar).....3 times range or 9,000 PSI (620 bar) max
	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).....3.3 ml
		>500 PSI (35 bar).....4.2 ml
	Mounting	May be supported by process piping
	Identification	Laser etched onto body
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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
	ZU.....	Direct cable (175°F Max Temp) (79°C)
	Y().....	Multiple pressure ports available. Consult factory
	DC.....	Extended Compensated Temperature Range (Cold) -40°F to 170°F (-40°C to 77°C)
	DG.....	Improved temperature compensation (≤±0.5% FSO per 100°F zero span and shift)
	DH.....	Special ranging
	DK.....	Special calibration setting
	DM.....	Modified full scale output
	DN.....	Improved linearity
	DQ.....	Cleaning for oxygen service
	EA.....	Special calibration run
	FA.....	Russian Metrology Certificate
	EH.....	Extended Compensated Temperature Range (Hot) +70°F to 185°F (21°C to 85°C)
	NH.....	Customer specified identification
	PW.....	1/8 DIN digital indicator

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

