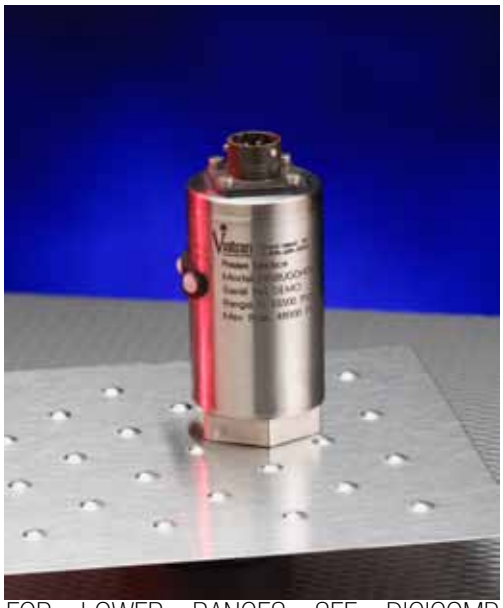
PRESSURE TRANSMITTER

Models 245 / 345 High Range



FOR LOWER RANGES SEE DIGICOMP 202/302

FEATURES

- High accuracy
- Small size and weight
- Many options available
- All stainless steel construction
- 7.5K to 100K PSI (600 to 6900 bar)
- Shunt calibration circuit

TYPICAL APPLICATIONS

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

COMPACT SIZE WITH STATE-OF-THE-ART CIRCUITRY

The compact size means more transmitters fit into a small space meaning more pressure points can be measured. An internal calibration signal circuit is also included allowing calibration of the transmitter without an external pressure source. This minimizes the need to send the 245 / 345 to a metrology lab.

Surface mount technology (SMT) allows the 245 / 345 to be equipped with electronic linearization, a compensation circuit that corrects for non-linearities in the sensor.

OPTIONAL OUTPUTS, PROOF PRESSURES AND MORE

Spikes and over pressures are a problem. To combat spikes, Viatran employs a bonded foil strain gage on a hardened stainless steel diaphragm. This solution withstands overpressure conditions inherent in your toughest applications.

EASILY ADAPTABLE

Viatran has been making Pressure Transducers for the Test and Control industry for the last 40 years, and we have the technical expertise and the proven track record to go along with it.

If your application requires the reliability and endurance of a rugged pressure transducer, Viatran's 245 / 345 is the answer. Keep in mind, if you need improved temperature compensation or lower pressure ranges, ask for the Viatran Digicomp 245 / 345.

MECO MEASUREMENTS & CONTROLS
Via Paolo Uccello, 4 20148 Milano
Tel. +39 02 4 692 680 Fax +39 02 4 694 602 info@mecoitalia.it www.mecoitalia.it

Models 245 / 345 High Range

PERFORMANCE

Full Scale Pressure Range	7500, 10K, 15K, 20K, 25K, 30K, 40K, 50K, 60K, 75K, 100K PSIA, PSIG (500, 700, 1000, 1400, 1700, 2000, 2700, 3500, 4000, 5000, 6900 barA, barG)
Nonlinearity (Best Fit Straight Line)	≤±0.1% FSO (see options)
Hysteresis & Repeatability	≤±0.1% FSO
Full Scale Output (FSO)	
245	5 Vdc at 70°F (21°C) - standard (see options)
345	16 mA at 70°F (21°C)
Long Term Stability	≤±0.2% FSO per 6 months
Temperature shift (Zero Repeat after 38°C)	≤±0.1% FSO
Compensated Temperature	70°F to 170°F (21°C to 76°C), Ranges ≤150 PSI (≤10 bar) (lower temperatures available, consult factory)
	0°F to 185°F (-17°C to 85°C), ranges 200 PSI
Operating Temperature	-40°F to 250°F (-40°C to 121°) - process
	-40°F to 185°F (-40°C to 85°) - ambient
Storage Temperature Limits	-40°F to 250°F (-40°C to 121°C)
Temperature Effect on Zero	≤±0.01% FSO per 1°F (-17°C) - see options
Temperature Effect on Span	≤±0.01% FSO per 1°F (-17°C) - see options

ELECTRICAL

Supply Voltage	
245	9.5 to 40 Vdc at 3.5 mA nominal, 5 mA max (13 to 40 Vdc for 10 Vdc output option)
345	9.5 to 40 Vdc
Power Supply Regulation	≤±0.001% FSO per volt change over the supply voltage range
Output Signal	
245	0 - 5 Vdc standard
345	4 to 20 mA
Load Resistance	
245	100K Ohms min
345	1500 Ohms max at 40 Vdc
Zero Adjustment	±10% FSO min
Span Adjustment	±10% FSO min
Calibration Signal	80% of FSPR, by shorting pins
Calibration Signal Accuracy	≤±0.1% of the stated value
Circuit Protection	Input polarity may be reversed. Output may be short circuited indefinitely. Over voltage protection to 1000 volts for ≤1 mSec
Insulation Resistance	≥200 MegOhms to case ground
Response Time	≤4.0 mSec
Electrical Connection	Bendix PT02E-10-6P, mates PT06E-10-6S (SR)

	245	345
Pin A	+Power	+Power/Signal
Pin B	-Power	-Power/Signal
Pin C	+Signal	Calibrate
Pin D	-Signal	Calibrate
Pin E	Calibrate	No connection
Pin F	Calibrate	No connection

MATERIALS OF CONSTRUCTION

Wetted Parts	
7.5K to 15K PSI (500 to 1000 bar)	15-5 PH stainless steel
20K to 100K PSI (1400 to 6900 bar)	PH 13-8 MO SST
Housing	304 SS with a Cadmium plated electrical connector
Weight	15 oz (425 g)
Identification	Laser etched onto body

ACCESSORIES

Direct Mount digital Indicator/Power Supply
Mating Electrical Assembly

Models 245 / 345 High Range

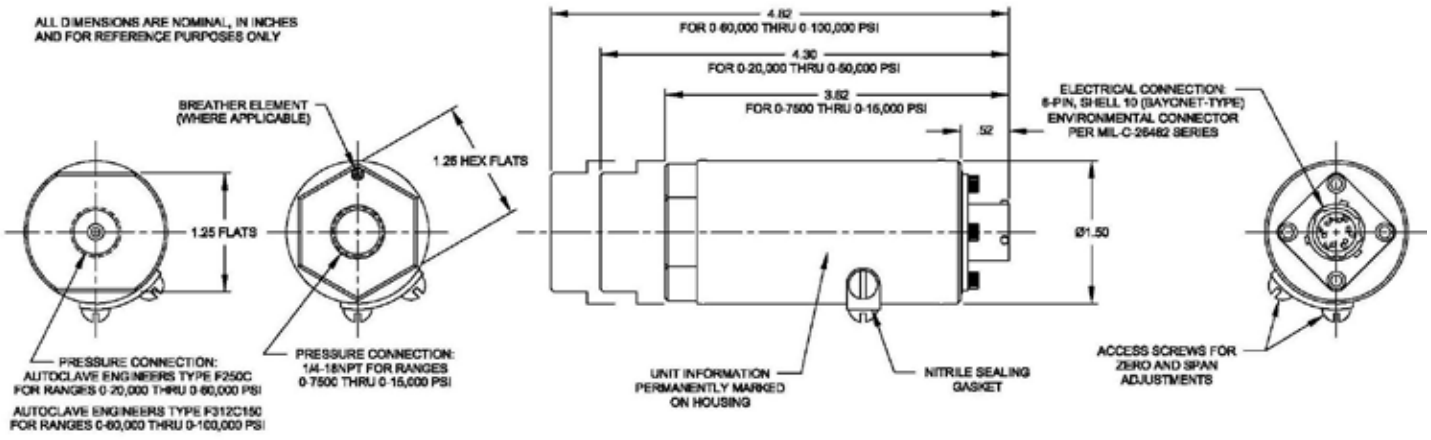
MECHANICAL

Pressure Connection	
7.5K to 15K PSI (500 to 1000 bar)	1/4" - 18 NPT female
20K to 50K PSI (1400 to 3500 bar)	1/4" F250-C high pressure tube
60K to 100K PSI (4000 to 6900 bar)	5/16" F312-C high pressure tube
Proof Pressure	
7.5K to 15K PSI (500 to 1000 bar)	3 to 10 times range, sensor dependent
20K to 100K PSI (1400 to 6900 bar)	1.2 times range
Burst Pressure	
7.5K to 15K PSI (500 to 1000 bar)	5 times range or 30K PSI (2000 bar) whichever is less
20K to 100K PSI (1400 to 6900 bar)	1.5 times range or 125K PSI (8600 bar) whichever is less
Pressure Cavity Volume	
7.5K to 15K PSI (500 to 1000 bar)	0.32 cubic in (5.2 ml)
10K to 100K PSI (1400 to 6900 bar)	0.10 cubic in (1.6 ml)
Mounting	May be supported by process piping

OPTIONS

Codes	
BF	(K)PTIH-10-6P
BG	DIN 43650
BL	WK6-32S
BN	(K)PTIH-8-4P
BQ	(K)PT02H-10-6P
BR	CF3102E-14S-6P
BY	(K)PTO2E-10-6P (multiple connectors available
ZU	Direct Cable (175°F max temperature) (79°C)
Y()	Multiple pressure ports available. Consult factory
Improved Performance	
DG	Improved temp performance to 0.005% FSO per 1°F (-17°C)
DH	Special ranging
DK	Special shunt calibration setting
DM	Modified full scale output
DN	Improved non-linearity to 0.05% FSO (BFSL)
DQ	Cleaning for oxygen service
EA	Special calibration run
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.



Information is accurate to the best of Viatran's knowledge. We reserve the right to change specifications at any time.

98PB510X45HR 05/10

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Viatran A Dynisco Company