Barometric Pressure Transmitter Model 38H

BAROMETRIC PRESSURE TRANSMITTER MODEL 38H

4-20 MA, HIGH ACCURACY, 25" THRU 32" HGA

Viatran's Model 38H pressure sensor is among our most accurate pressure transmitters for industrial test and research applications. The 38H measures barometric pressure from 25" to 32" HgA with Improved Accuracy of ≤±0.06% FSO available.

PERFORMANCE

Full Scale Pressure Ranges (FSPR)	25" to 32" HgA (Optional ranges can be factory set from 0" to 32" HgA with a minimum 7" HgA span)
Accuracy (RSS*)	≤±0.21% FSO**
Nonlinearity (Best Fit Straight Line)	≤±0.1% FSO (≤±0.06% FSO with DN option)
Hysteresis & Repeatability	≤±0.13% FSO each
Full Scale Output (FSO)	16 mA ≤±0.5% FSO at 70°F (21°C)
Resolution	Infinite
Long Term Stability	≤±0.5% FSO per 6 months (typical)
Compensated Temperature Range	32°F to 170°F (0° to 77° C)
Process Media Temperature Range	-40°F to 250°F (-40°C to 121°C)
Ambient Operating Temperature Range	-40°F to 185°F (-40°C to 85°C)
Storage Temperature Limits	-40°F to 185°F (-40°C to 85°C)
Temperature Effect on Zero	≤±0.01% FSO per 1°F (.556°C)
Temperature Effect on Span	≤±0.01% FSO per 1°F (.556°C)

ELECTRICAL

Supply Voltage	8 to 30 Vdc
Power Supply Regulation	≤±0.01% FSO per volt change over the supply voltage range
Output Signal	4 - 20 mA
Load Resistance	1050 Ohms max at 30 Vdc
Circuit Protection	Input polarity may be reversed. Output may be short-circuited indefinitely Over voltage protection to 1000 volts according to EN61000-4-5
Insulation Resistance	<5 nS to case ground
Response Time	<2 mSec to reach 90% of full scale
RFI / EMI Suppression	CE EMC compliant per IEC EN 61326-1 & 61326-2-3 Annex BB, CE marked
Electrical Connection	Bendix / Amphenol PT02E-10-6P, mates PT06E-10-6S (SR)
Pin Outs	Pin A + Power / Signal Pin B - Power / Signal Pin C No Connection Pin D No Connection Pin E No Connection Pin F No Connection
Shell	Ground

199 Fire Tower Drive, Tonawanda, New York 14150 USA USA Phone: 716.629.3800 Toll Free: 800.688.0030 Fax: 716.693.9162 Email: solutions@viatran.com

Barometric Pressure Transmitter Model 38H

- High Accuracy
- Many Options available
- All Stainless Steel construction
- Low Pressure Applications

MATERIALS OF CONSTRUCTION

Wetted Parts	316 stainless steel
Housing	304 SS with an Aluminum alloy, black zinc-cobalt plated electrical connector
Weight	10 oz (283 g)

MECHANICAL

Pressure Connection	1/4" - 18 NPT female
Proof Pressure	45 PSI (92 HgA)
Burst Pressure	75 PSI (153 HgA)
Pressure Cavity Volume	1.5 mL
Mounting	May be supported by process piping
Identification	Laser etched onto body

OPTIONS

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
ZU	Direct Cable: 175°F (79°C) max temperature
Y( )	Multiple pressure ports available. Consult factory
DC	Extended temperature operation: -40°F to 170°F (-40°C to 77°C)]
DG	Improved temperature compensation (± 0.5% FSO per 100°F (55.5°C) zero and span shift)
DH	Special ranging
DM	Modified full scale output
DN	Improved Accuracy (Non Linearity) ≤ ±0.06% FSO
DQ	Cleaning for oxygen service
EA	Special calibration run
NH	Customer specified identification
PW	Scaled with Process Meter
Note:	Application of some available options may affect standard performance. Consult your Viatran representative for details.
VU	1/8" Barbed (Male) Port

NOTES

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*RSS	Root Sum Squared for Non-Linearity, Hysteresis, Repeatability
**FSO	The algebraic difference between full scale pressure output value and the maximum pressure output value.
***Calibration	Calibration is performed at ambient temperature of 70°F (21°C). Maximum thermal error was calculated from this datum.

Pressure reference temperature = 32°F (0°C)

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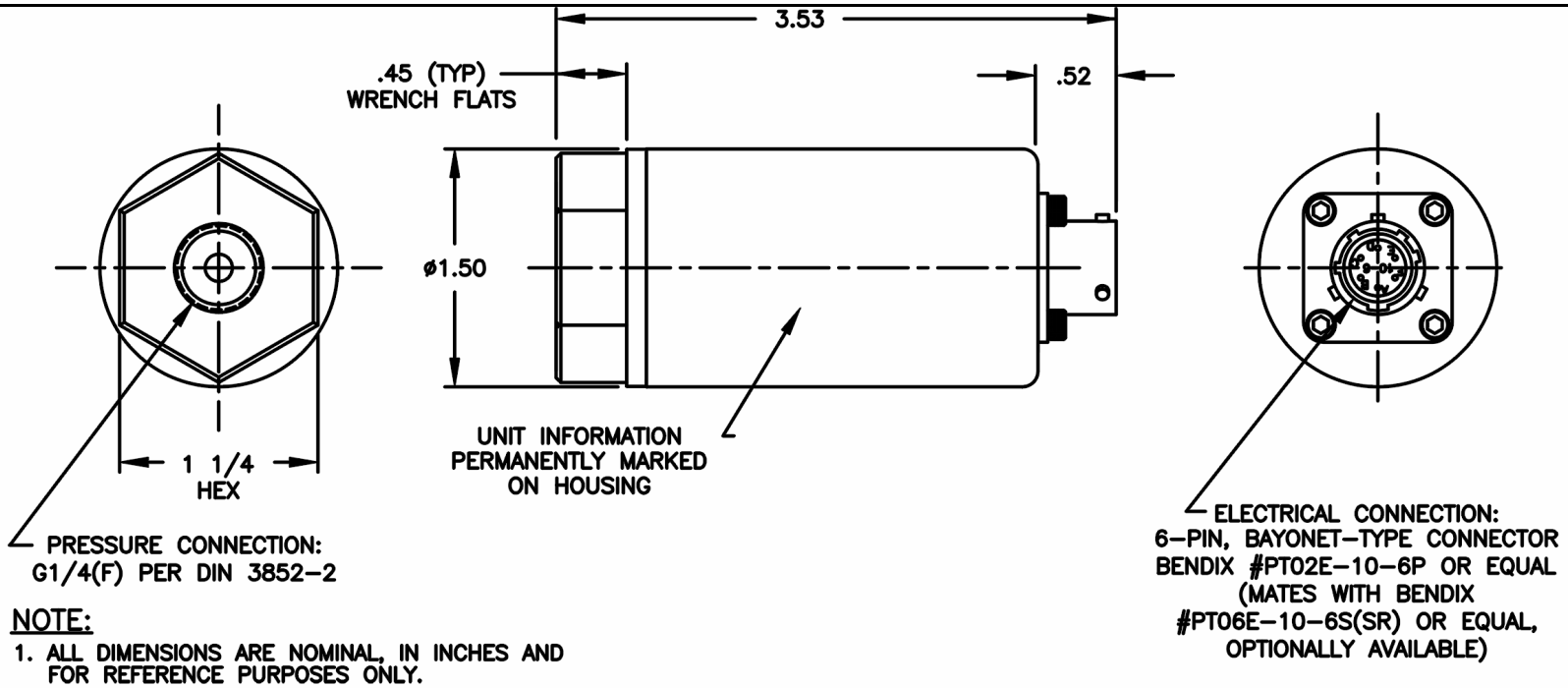

NOTE:

1. ALL DIMENSIONS ARE NOMINAL, IN INCHES AND FOR REFERENCE PURPOSES ONLY.

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